STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

SECTION COUNTY SHEETS NO. 907 D9 BRIDGE REPAIR 2019-5 WILLIAMSON | 16 | 1 ILLINOIS CONTRACT NO. 78667

D-99-046-18

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

LOCATION OF SECTION INDICATED THUS: - -

REGION FIVE ENGINEER

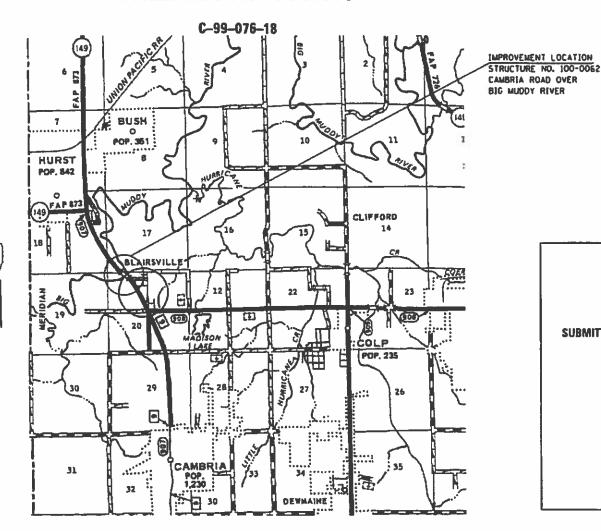
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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# **PROPOSED** HIGHWAY PLANS

F.A.S. ROUTE 907 (CAMBRIA RD.) **SECTION D9 BRIDGE REPAIR 2019-5** 

#### **BRIDGE REPAIRS WILLIAMSON COUNTY**



GROSS LENGTH = 593,00 FT. = 0.112 MILES NET LENGTH = 474,00 FT. = 0.090 MILES

POSTED 55 MPH

TRAFFIC DATA

2015 ADT = 6.400

WITH 3% TRUCKS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4 - 6

POSTED SPEED: 55 MPH

J.U.L.I.E.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

OR 811

PROJECT ENGINEER: DAVID PICHE **PROJECT DESIGNER: ADRIAN ADAMS** 

**CONTRACT NO. 78667** 

0

0

0

0

#### **GENERAL NOTES**

- 1) THE THICKNESS OF HOT-MIX ASPHALT MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS.

  DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HOT-MIX ASPHALT MIXTURE IS PLACED.
- 2) FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

ALL HOT MIX ASPHALT 2.016 TONS/CU YD
ALL AGGREGATE 2.05 TONS/CU YD

BITUMINOUS MATERIALS:

(TACK COAT) ON PAVEMENT 0.05 LBS/SQ FT

HMA LIFTS 0.025 LBS/SQ FT

(PRIME COAT) AGGREGATE BASES 0.25 LBS/SQ FT

RIPRAP 1.50 TONS/CU YD

EARTH 110 LBS/CU FT

- 3) PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKINGS THE RESIDENT ENGINEER SHALL CONTACT THE BUREAU OF OPERATIONS AND ARRANGE FOR INSPECTION AND APPROVAL OF THE PAVEMENT MARKING LAYOUT.
- 4) AFTER A LIFT OF HOT-MIX ASPHALT HAS BEEN PLACED, THE LANE SHALL REMAIN CLOSED TO TRAFFIC UNTIL THE NEW MAT HAS COOLED TO 150 DEGREES FAHRENHEIT.
- 5) THERE ARE NO AVAILABLE WASTE SITES ON THE EXISTING RIGHT OF WAY WITHIN THE PROJECT LIMITS. DISPOSAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND WASTE MUST BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.
- 6) REMOVAL OF EXISTING AGGREGATE SHOULDERS SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION..
- 7) REMOVAL OF EXISTING AGGREGATE SHOULDERS SHALL BE INCLUDED IN TEH COST OF EARTH EXCAVATION..
- 8) COMMITMENTS: LETTER OF UNDERSTANDING WITH WILLIAMSON COUNTY SIGNED SEPTEMBER 12, 2018 TO CLOSE PULLTIGHT DRIVE UP TO 40 CONTINUOUS CALENDAR DAYS.

#### **STANDARDS**

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
643001-02	SAND MODULE IMPACT ATTENUATORS
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS $\geq$ 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701321-17	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING FOR SPEEDS $\geq$ 45 MPH
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
862001-01	UNINTERRUPTIBLE POWER SUPPLY
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

#### **INDEX OF SHEETS**

1	COVER SHEET
2	GENERAL NOTES, INDEX OF SHEETS, STANDARDS, AND MIXTURE REQUIREMENTS
3	SIGNATURE SHEET
4-6	SUMMARY OF QUANTITIES
7	GENERAL PLAN AND ELEVATION
8	STAGING DETAILS AND TYPICAL SECTION
9	STAGING DETAILS
10	JOINT RECONSTRUCTION DETAILS AT ABUTMENTS
11-12	PARTIAL DECK SLAB REPAIRS
13	BAR SPLICER ASSEMBLY DETAILS
14	PREFORMED JOINT STRIP SEAL DETAILS
15	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
16	BUTT JOINT DETAIL

#### MIXTURE REQUIREMENTS

SCALE:

LOCATIONS	HOT-MIX ASPHALT SURFACE COURSE
MIXTURE USE(S):	HOT-MIX ASPHALT SURFACE COURSE, MIX E, N70, FINE GRADED
AC/PG:	PG64-22
ABR % (MAX):	SEE SPECIAL PROVISION
DESIGN AIR VOIDS:	4.0%, 70 GYRATION DESIGN
MIXTURE COMPOSITION:	IL-9.5MM FINE GRADED
(GRADATION MIXTURE)	
FRICTION AGGREGATE:	E SURFACE
MIXTURE WEIGHT:	112 LBS/SQ YD/IN
QUALITY MANAGEMENT	QC/QA
PROGRAM:	
SUBLOT SIZE:	N/A
SUBLOT SIZE:	N/A

LOCATIONS	LIGT MAY ACRUALT BACE COURSE WIREAUNG	
LOCATIONS	HOT-MIX ASPHALT BASE COURSE WIDENING	
MIXTURE USE(S):	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	
AC/PG:	PG64-22	
ABR % (MAX):	SEE SPECIAL PROVISION	
DESIGN AIR VOIDS:	4.0%, 70 GYRATION DESIGN	
MIXTURE COMPOSITION:	IL-9.5MM	
(GRADATION MIXTURE)		
FRICTION AGGREGATE:	NONE	
MIXTURE WEIGHT:	112 LBS/SQ YD/IN	
QUALITY MANAGEMENT	QC/QA	
PROGRAM:		
SUBLOT SIZE:	N/A	
SUBLOT SIZE:	N/A	

USER NAME = adamsam	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 94.4444 ' / in.	CHECKED -	REVISED -
PLOT DATE = 10/17/2018	DATE -	REVISED -

	.A.S. SECT	TON	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARDS, AND MIXTURE REQUIREMENTS	907   D9 BRIDGE RE	EPAIR 2019-5	WILLIAMSON	16	2
STANDANDS, AND MIXTONE NEGONIEMENTS			CONTRACT	NO. 78	3667
SHEET OF SHEETS STA. TO STA.		ILLINOIS FED. A	AID PROJECT		

Prepared By:

DISTRICT STUDIES & PLANS ENGINEER

Examined By:

DISTRICT LAND ACQUISITION ENGINEER

Examined By:

DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By:

DISTRICT OPERATIONS ENGINEER

Examined By:

DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By:

DISTRICT CONSTRUCTION ENGINEER

Examined By:

DISTRICT MATERIALS ENGINEER

DESIGNED -REVISED SIGNATURE SHEET DRAWN -REVISED STATE OF ILLINOIS CHECKED -**DEPARTMENT OF TRANSPORTATION** REVISED PLOT SCALE = 100.0000 17 in. CONTRACT NO. 78667 SHEET \_\_ OF \_\_\_\_ SHEETS STA. TO STA. REVISED

# SUMMARY OF QUANTITIES

ITEM DESCRIPTION

COUNTY:	WILLIAMSON CO	
ROUTE:	FAS 907	
FUNDING:	100% STATE	
LOCATION:	RURAL	
UNIT		
	0013	
CU YD	61	
SQ YD	220	
POUND	189	
SQ YD	214	
TON	182	
CU YD	9. 1	
CU YD	10.2	
SQ YD	27	
POUND	1, 200	
EACH	22	
FOOT	68	
SQ YD	1,663	
	2,	
FACH		

BITUMINOUS MATERIALS (TACK COAT)	POUND	189
HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	214
HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70	TON	182
CONCRETE REMOVAL	CU YD	9. 1
CONCRETE SUPERSTRUCTURE	CU YD	10.2
PROTECTIVE COAT	SO YD	27
REINFORCEMENT BARS, EPOXY COATED	POUND	1, 200
BAR SPLICERS	EACH	22
PREFORMED JOINT STRIP SEAL	FOOT	68
WATERPROOFING MEMBRANE SYSTEM	SQ YD	1,663
FRAMES AND GRATES TO BE ADJUSTED	EACH	1
	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70  CONCRETE REMOVAL  CONCRETE SUPERSTRUCTURE  PROTECTIVE COAT  REINFORCEMENT BARS, EPOXY COATED  BAR SPLICERS  PREFORMED JOINT STRIP SEAL	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  SO YD  HOT-MIX ASPHALT SURFACE COURSE, MIX "E", NTO  CONCRETE REMOVAL  CU YD  CONCRETE SUPERSTRUCTURE  CU YD  PROTECTIVE COAT  SO YD  REINFORCEMENT BARS, EPOXY COATED  POUND  BAR SPLICERS  EACH  PREFORMED JOINT STRIP SEAL  FOOT

USER NAME = adamsam DESIGNED -REVISED -DRAWN -REVISED -CHECKED REVISED PLOT DATE = 10/17/2018 DATE REVISED

CODE

NUMBER

20200100

35600716

EARTH EXCAVATION

HOT-MIX ASPHALT BASE COURSE WIDENING, 10"

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SUMMARY OF QUANTITES SCALE: SHEET OF SHEETS STA. TO STA.

 
 F.A.S. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS NO.

 907
 D9 BRIDGE REPAIR 2019-5
 WILLIAMSON
 16
 4
 CONTRACT NO. 78667

## SUMMARY OF QUANTITIES - CONT

ITEM DESCRIPTION

_			
COUNTY:	WILLIAMSON CO		
ROUTE:	FAS 907		
FUNDING:	100% STATE		
LOCATION:	RURAL		
UNIT			
	0013		
CAL MO	3		
L SUM	1		
EACH	1		
L SUM	1		
L SUM	1		
2 33.11	·		
L SUM	1		
L SUM	1		
CAL DA	4		
EACH	1		
EACH	6		
FOOT	60		
SQ FT	20		
FOOT	838		
	030		
F00T	200		
FOOT	800		

USER NAME = adamsam	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 94.4444 ' / in.	CHECKED -	REVISED -
PLOT DATE = 10/17/2018	DATE -	REVISED -

CODE

NUMBER

67000400

67100100

70100405

70100450

70100500

70101830

70103815

70106500

70106700

70300100

70300150

70400100

70400200

ENGINEER'S FIELD OFFICE, TYPE A

TRAFFIC CONTROL SURVEILLANCE

TEMPORARY RUMBLE STRIPS

SHORT TERM PAVEMENT MARKING

TEMPORARY CONCRETE BARRIER

SHORT TERM PAVEMENT MARKING REMOVAL

RELOCATE TEMPORARY CONCRETE BARRIER

TEMPORARY BRIDGE TRAFFIC SIGNALS

TRAFFIC CONTROL AND PROTECTION, STANDARD 701321

TRAFFIC CONTROL AND PROTECTION, STANDARD 701201

TRAFFIC CONTROL AND PROTECTION, STANDARD 701326

TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21

MOBILIZATION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

A.S. SECTION COUNTY TOTAL SHEET NO. 907 D9 BRIDGE REPAIR 2019-5 WILLIAMSON 16 5

CONTRACT NO. 78667

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# SUMMARY OF QUANTITIES - CONT

SUMMANT OF QUANTITIES CONT	ROUTE:	FAS 907
	FUNDING:	100% STATE
	LOCATION:	RURAL
ITEM DESCRIPTION	UNIT	0013
IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2
IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2
PAINT PAVEMENT MARKING - LINE 4"	FOOT	1, 336
RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	8
 UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	62
PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	427
CHANGEABLE MESSAGE SIGN	CAL DA	28
DECK SLAB REPAIR (PARTIAL)	SQ YD	56

COUNTY:

WILLIAMSON CO

\* SPECIALTY ITEM

CODE NUMBER

70600250

70600350

78001110

78300200

86200300

X0327979

X0327980

70107025

Z0016200

USER NAME = adamsam	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 94.4444 ' / in.	CHECKED -	REVISED -
PLOT DATE = 10/17/2018	DATE -	REVISED -

	SUMMARY OF QUANTITES							COUNTY	TOTAL SHEETS	SI
		SUMMARY	OF QU	ANTITES		907	D9 BRIDGE REPAIR 2019-5	WILLIAMSON	16	
	,		,					CONTRACT	NO. 78	36
ALE:	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

nents\IDOT Offices\District 9\Projects\78667\CADData\CADsheets\D9-78

# 

ELEVATION

#### <u>GENERAL NOTES</u>

Reinforcement pars designated (E) shall be epoxy coated.

No field welding is permitted except as specified in the contract documents. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included in Concrete Removal.

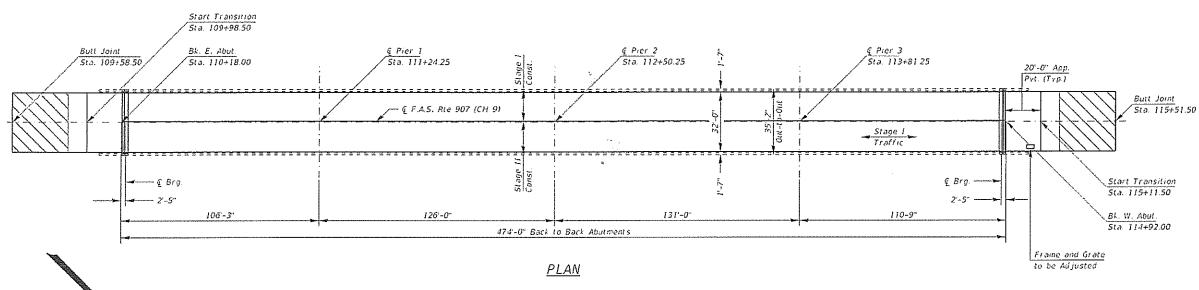
The work, material, and equipment involved in saw cutting shall be considered included in the price bid for Concrete Removal

The existing structural steel coating contains load. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

Prior to pouring the new concrete deck section, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with the concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of existing structures.

The seck surface shall have its final finish timed according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.



SCOPE OF WORK

HMA overlay in the EB lane.

HMA overlay in the WB lane.

5) Remove TC&P 701321.

1) Setup TC&P 701321 with barrier for work in the EB lane of Cambria Road.

3) Adjust TC&P 701321 with barrier for work in the WB lane of Cambria Road.

2) Perform joint reconstruction, deck repairs, waterproofing membrane system, and

4) Perform joint reconstruction, deck repairs, waterproofing membrane system, and

#### TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	9.1
Concrete Superstructure	Cu Yd.	10.2
Reinforcement Bars, Epoxy Coated	Pound	1,200
Bar Splicers	Each	22
Preformed Joint Strip Seal	Foot	<i>បីតិ</i>
Viater proofing Membrane System	5g. Yd.	1.663
HMA Surface Course, Mix "E", N70	Ton	182
Deck Slab Repair (Partial)	Sg. Yd.	56
Protective Coat	Sq. Yd.	27

<sup>\*</sup> New Concrete Areas Only

BRIDGE REPAIRS

CAMBRIA ROAD OVER BIG MUDDY RIVER

F.A.S. RTE 907 - D9 BRIDGE REPAIR 2019-5

WILLIAMSON COUNTY

STATION 112+50.25

STRUCTURE NO. 100-0062

#### 

HMA Surface Removal -

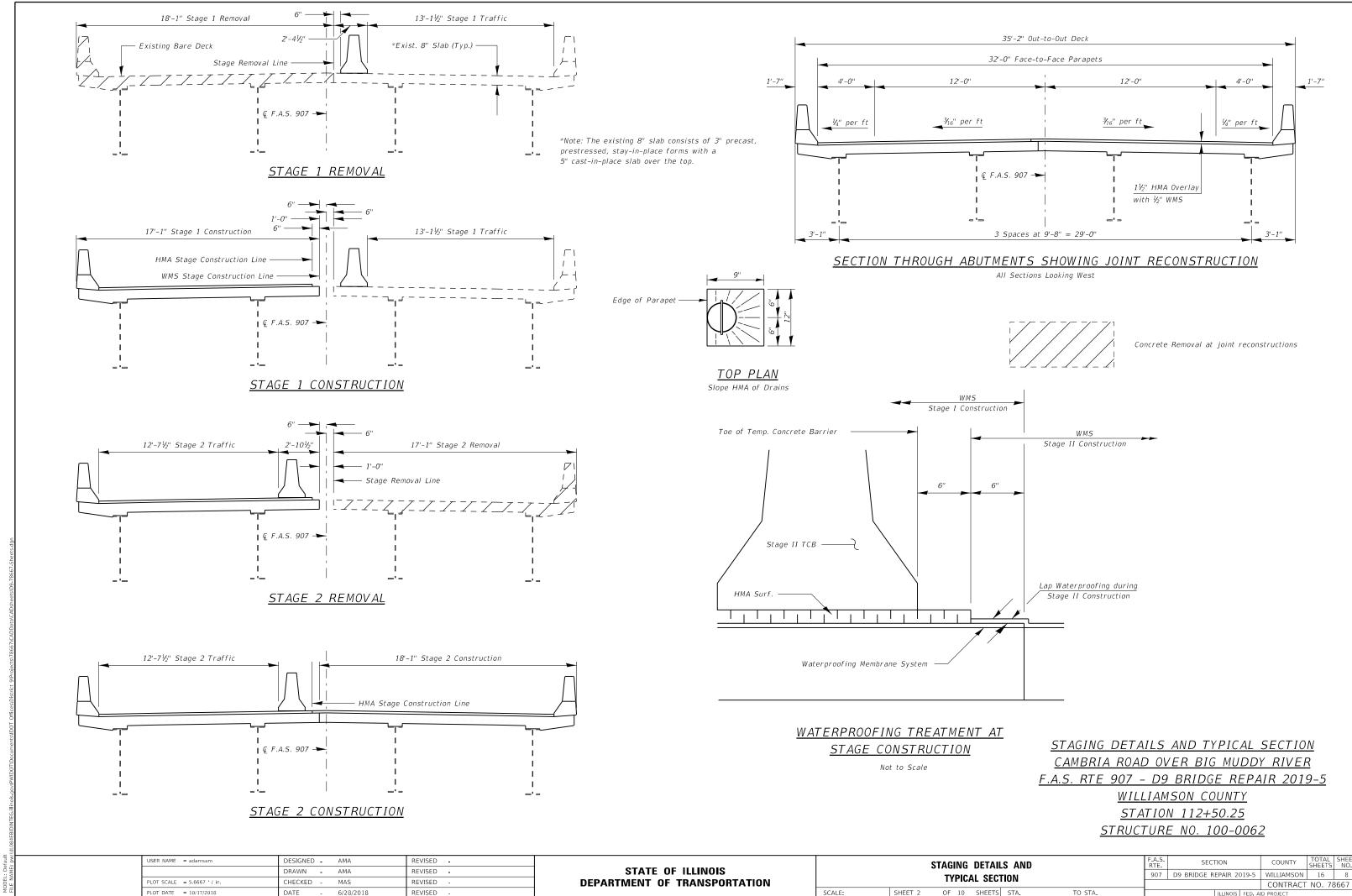
Butt Joint

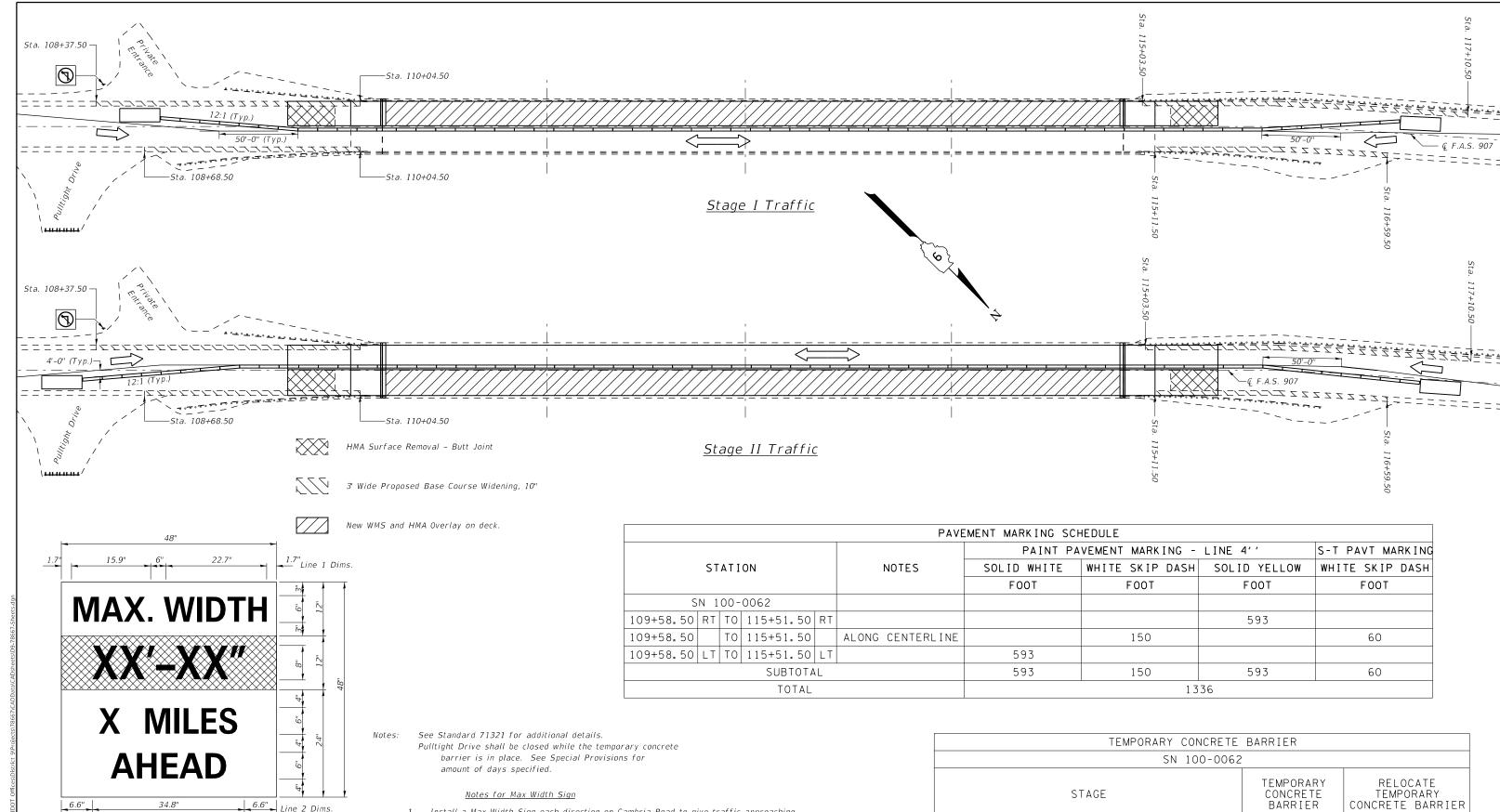
PUZEY

001-005470

ELLIVO:8

GENERAL PLAN AND ELEVATION							<u> </u>	RTE 907	SECTION D9 BRIDGE REPAIR 2019-S	COUNTY WILLIAMSON		NO 7
SCALE:	SHEET 1	OF	10	SHEETS	STA.	TO STA			LUVOS   FED #	CONTRACT D PROJECT	NO. 78	667





W12-I103

10.9"

line 4 Dims

W12-I103, No Border "MAX WIDTH" 6D, No Border, Black on White "XX'-XX"" 8D, No Border, Black on Orange "X MILES" 6D, No Border, Black on White "AHEAD" 6D, No Border, Black on White

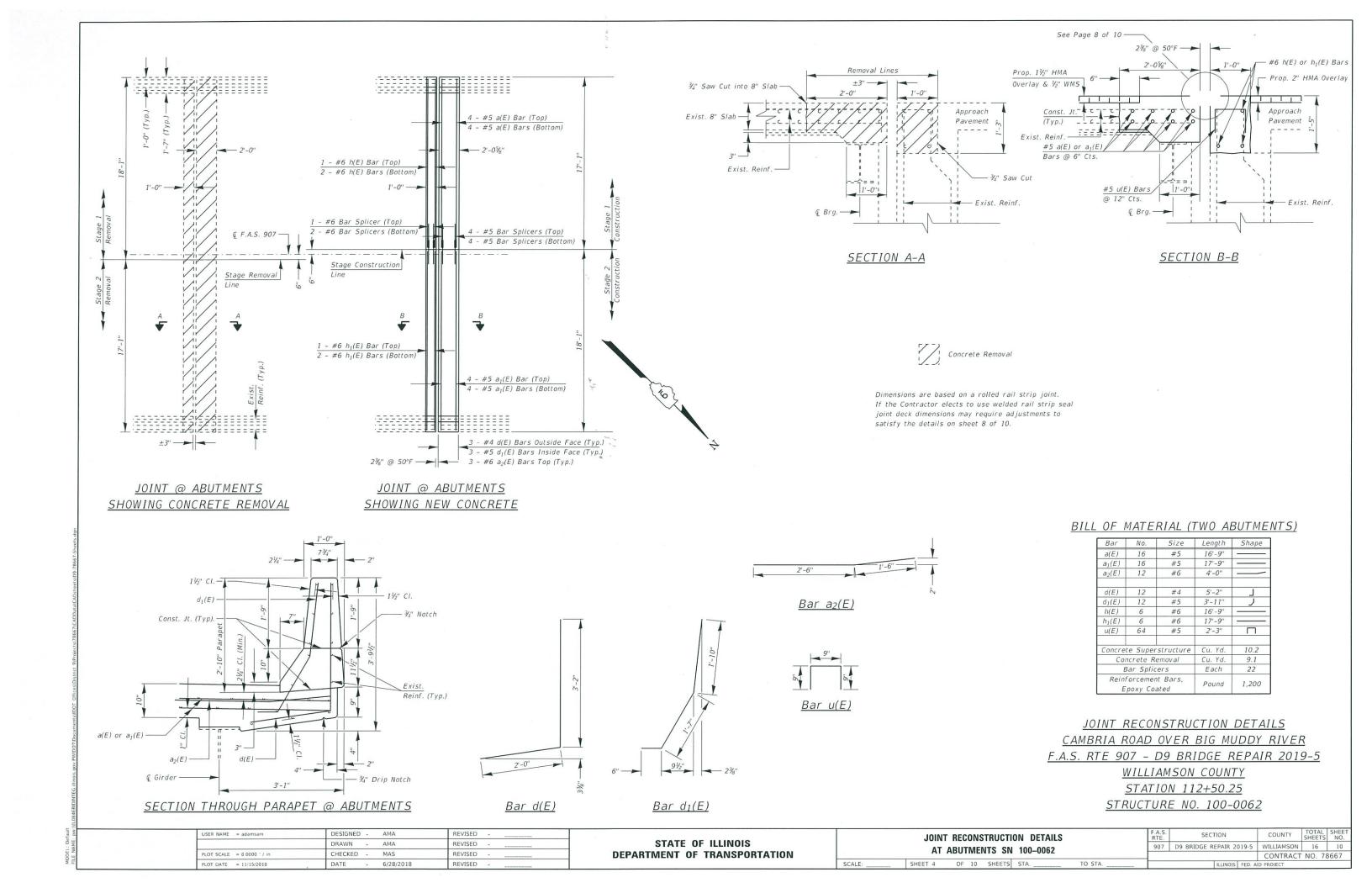
- Install a Max Width Sign each direction on Cambria Road to give traffic approaching work zone enough advance notice to change routes if needed. Exact locations as directed by the Engineer.
- 2. The Contractor shall furnish the posts and erect the signs at the locations directed by the Engineer. All signs shall be post mounted.
- The noted work, including signs, posts, hardware and labor shall be included in the contract unit price, each, for Traffic Control and Protection Standard 701321. No other compensation will be allowed.
- 4. The width shown on the W12-I103 sign shall be 11'-7" for Stage I and 11'-1" for Stage II.
- 5. The "X" MILES AHEAD will be determined by the Engineer.

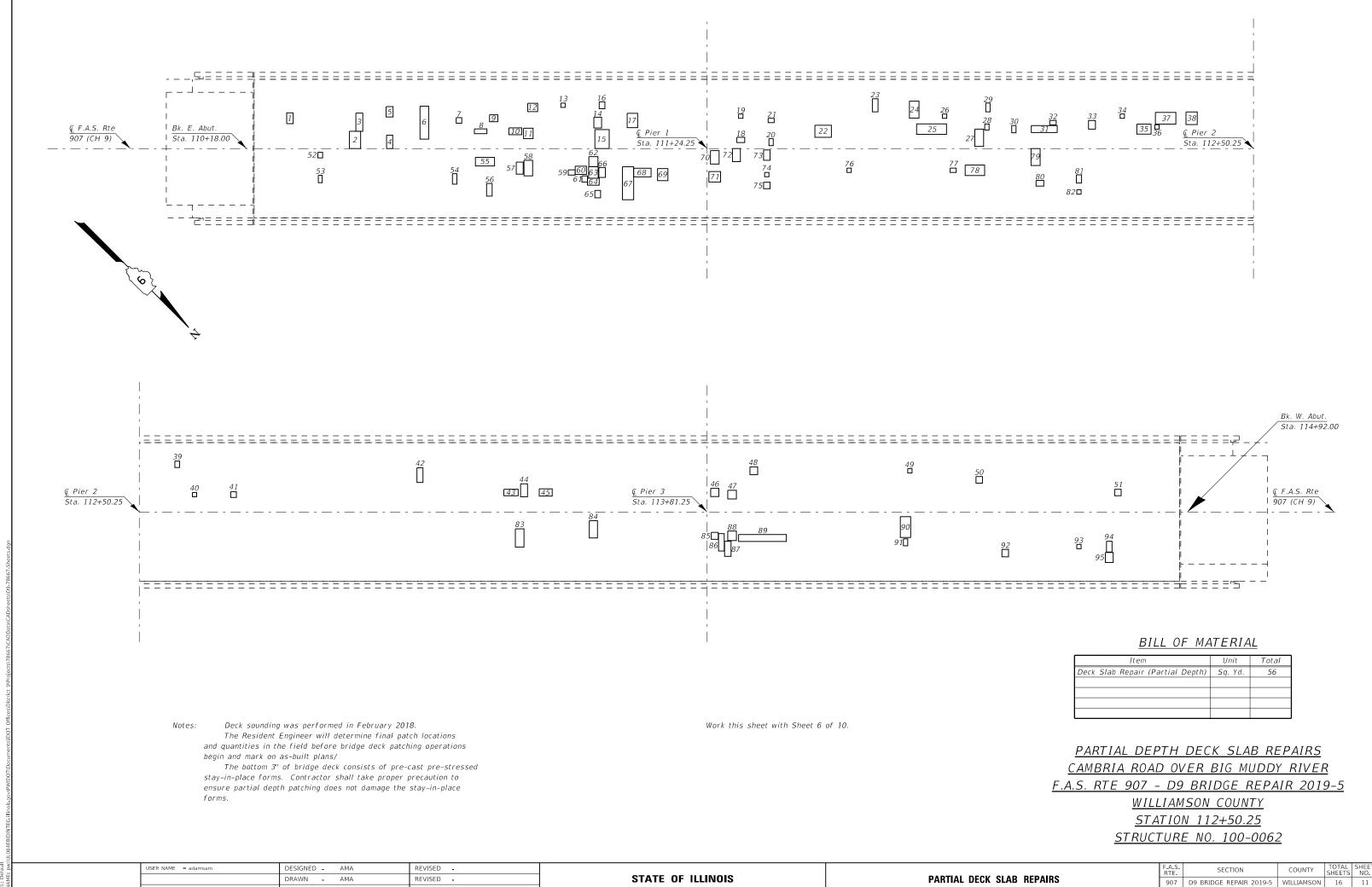
TEMPORARY CONCRETE	BARKIEK	
SN 100-0062	2	
STAGE	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER
	FOOT	FOOT
STAGE 1 - STA 108+69 TO STA 116+65	787.5	
STAGE 2 - STA 108+57 TO STA 116+79	50	800
TOTAL	838	800

USER NAME = adamsam	DESIGNED	-	AMA	REVISED -
	DRAWN	-	AMA	REVISED -
PLOT SCALE = 56.6667 / in.	CHECKED	-	MAS	REVISED -
PLOT DATE = 10/17/2018	DATE	-	6/28/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

			ING DET	F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
STAGING DETAILS						907	D9 BRIDGE REPAIR 2019	9-5 WILLIAMSON	16	9
								CONTRACT	NO. 78	3667
SCALE:	SHEET 3	OF 10	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				





STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

**PARTIAL DECK SLAB REPAIRS** 

TO STA.

SHEET 5 OF 10 SHEETS STA.

907 D9 BRIDGE REPAIR 2019-5 WILLIAMSON

CONTRACT NO. 78667

DRAWN -

DATE

LOT DATE = 10/17/2018

AMA

MAS

6/28/2018

REVISED -

REVISED

REVISED

STATION	OFFSET FROM CENTERLINE	WIDTH	LENGTH	AREA (SQ FT)	AREA (SQ YD)
110+18	S0	UTHBOUND	- SOUTH A	BUTMENT	
110+28	7.0	2.5	1.5	3.8	0.5
110+43	2.0	4.0	2.6	10.4	1.2
110+44	6.0	4.2	1.6	6.8	0.8
110+51	1.5	3. 1	1.4	4.4	0.5
110+51	8.5	2.4	1.6	3. 9	0.5
110+59	6.0	7.6	2.0	15.2	1.7
110+67	6.5	1.3	1.3	1.7	0.2
110+72	4.0	1.1	2.9	3. 2	0.4
110+75	7.0	1.6	1.9	3. 1	0.4
110+80	4.0	1.6	3.0	4.8	0.6
110+83	3.5	2.4	2.2	5.3	0.6
110+84	9.5	1.9	2.3	4.4	0.5
110+91	10.0	1.0	1.0	1.0	0.2
110+99	6.0	2.5	1.8	4.5	0.5
111+00	2.0	4.4	3.3	14.6	1.7
111+00	10.0	1.6	1.3	2.1	0.3
111+07	6.5	3. 3	2.4	8.0	0.9
HBOUND -	SOUTH ABUTMEN	TO SOU	TH PIER TO	JATC	11.5
	110+18 110+28 110+43 110+44 110+51 110+51 110+59 110+67 110+75 110+80 110+83 110+84 110+91 110+99 111+00 111+00 111+07	STATION         CENTERLINE           110+18         SO           110+28         7.0           110+43         2.0           110+44         6.0           110+51         1.5           110+51         8.5           110+59         6.0           110+72         4.0           110+75         7.0           110+80         4.0           110+83         3.5           110+91         10.0           110+99         6.0           111+00         2.0           111+07         6.5	STATION         CENTERLINE         WIDTH           110+18         SOUTHBOUND           110+28         7.0         2.5           110+43         2.0         4.0           110+44         6.0         4.2           110+51         1.5         3.1           110+51         8.5         2.4           110+59         6.0         7.6           110+67         6.5         1.3           110+72         4.0         1.1           110+75         7.0         1.6           110+80         4.0         1.6           110+83         3.5         2.4           110+84         9.5         1.9           110+91         10.0         1.0           110+99         6.0         2.5           111+00         2.0         4.4           111+07         6.5         3.3	STATION         CENTERLINE         WIDTH         LENGTH           110+18         SOUTHBOUND - SOUTH A           110+28         7.0         2.5         1.5           110+43         2.0         4.0         2.6           110+44         6.0         4.2         1.6           110+51         1.5         3.1         1.4           110+51         8.5         2.4         1.6           110+59         6.0         7.6         2.0           110+67         6.5         1.3         1.3           110+72         4.0         1.1         2.9           110+75         7.0         1.6         1.9           110+80         4.0         1.6         3.0           110+83         3.5         2.4         2.2           110+84         9.5         1.9         2.3           110+91         10.0         1.0         1.0           110+99         6.0         2.5         1.8           111+00         1.0         1.6         1.3           111+07         6.5         3.3         2.4	STATION         CENTERLINE         WIDTH         LENGTH         (SO FT)           110+18         SOUTHBOUND - SOUTH ABUTMENT           110+28         7.0         2.5         1.5         3.8           110+43         2.0         4.0         2.6         10.4           110+44         6.0         4.2         1.6         6.8           110+51         1.5         3.1         1.4         4.4           110+51         8.5         2.4         1.6         3.9           110+59         6.0         7.6         2.0         15.2           110+67         6.5         1.3         1.3         1.7           110+72         4.0         1.1         2.9         3.2           110+75         7.0         1.6         1.9         3.1           110+80         4.0         1.6         3.0         4.8           110+83         3.5         2.4         2.2         5.3           110+84         9.5         1.9         2.3         4.4           110+91         10.0         1.0         1.0         1.0           11+00         2.0         4.4         3.3         14.6           111+00

PATCH NUMBER	STATION	OFFSET FROM CENTERLINE	WIDTH	LENGTH	AREA (SQ FT)	AREA (SQ YD)
	111+24.25	ı	SOUTHBOUN	D - SOUTH	PIER	
18	111+32	2.0	1.2	1.8	2.2	0.3
19	111+32	7.5	1.0	1.0	1.0	0.2
20	111+39	1.5	1.6	1.0	1.6	0.2
21	111+39	6.5	1.0	1.4	1.4	0.2
22	111+51	4.0	2.8	3.8	10.7	1.2
23	111+63	10.0	3.0	1.3	3.9	0.5
24	111+72	9.0	3. 9	2.2	8.6	1.0
25	111+76	4.5	2.4	6.9	16.6	1.9
26	111+79	7.5	1.0	1.0	1.0	0.2
27	111+86	2.5	4.0	2.0	8.0	0.9
28	111+88	4.5	1.4	1.0	1.4	0.2
29	111+89	9.5	2.0	1.0	2.0	0.3
30	111+95	4.5	1.7	1.0	1.7	0.2
31	112+02	4.5	1.6	6.0	9.6	1.1
32	112+04	6.0	1.0	1.5	1.5	0.2
33	112+13	5.5	2.0	1.6	3. 2	0.4
34	112+20	7.5	1.0	1.0	1.0	0.2
35	112+25	4.5	2.3	3. 3	7.6	0.9
36	112+28	5.0	1.0	1.0	1.0	0.2
37	112+30	7.0	2.7	4.7	12.7	1.5
38	112+36	7.0	2.9	2.6	7. 6	0.9
SO	UTHBOUND	- SOUTH PIER	TO MIDDLE	PIER TOT	AL	12.7

PATCH NUMBER	STATION	OFFSET FROM CENTERLINE	WIDTH	LENGTH	AREA (SQ FT)	AREA (SQ YD)			
	112+50.25		SOUTHBOUND - MIDDLE PIER						
39	112+59	11.0	1.5	1.1	1.7	0.2			
40	112+63	4.0	1.0	1.0	1.0	0.2			
41	112+72	4.0	1.3	1.3	1.7	0.2			
42	113+15	8.5	3.4	1.4	4.8	0.6			
43	113+36	4.5	1.5	3. 3	5.0	0.6			
44	113+39	5.0	3.0	1.6	4.8	0.6			
45	113+44	4.5	1.7	3.0	5.1	0.6			
SC	UTHBOUND	- MIDDLE PIER	TO NORTH	PIER TOT	AL	3.0			

PATCH NUMBER	STATION	OFFSET FROM CENTERLINE	WIDTH	LENGTH	AREA (SQ FT)	AREA (SQ YD)				
	113+81.25		SOUTHBOUND - NORTH PIER							
46	113+83	4.5	1.9	1.9	3. 7	0.5				
47	113+87	4.0	2.0	2.0	4.0	0.5				
48	113+92	9.5	1.8	1.8	3.3	0.4				
49	114+28	9.5	1.0	1.0	1.0	0.2				
50	114+44	7.5	1.5	1.5	2.3	0.3				
51	114+76	4.5	1.5	1.5	2.3	0.3				
SOUT	SOUTH BOUND - NORTH PIER TO NORTH ABUTMENT TOTAL									

PATCH NUMBER	STATION	OFFSET FROM CENTERLINE	WIDTH	LENGTH	AREA (SQ FT)	AREA (SQ YD)
	110+18	NO	RTHBOUND	- SOUTH A	BUTMENT	
52	110+35	1.5	1.3	1.1	1.5	0.2
53	110+35	7.0	1.7	0.9	1.6	0.2
54	110+66	7.0	2.4	1.0	2.4	0.3
55	110+73	3.0	2.0	4.4	8.8	1.0
56	110+74	9.5	2.9	1.3	3.8	0.5
57	110+81	4.5	2.8	1.6	4.5	0.5
58	110+83	4.5	3.6	2.0	7. 2	0.8
59	110+93	5.5	1.2	1.6	2.0	0.3
60	110+95	5.0	1.9	2.6	5.0	0.6
61	110+96	7.0	1.4	1.3	1.9	0.3
62	110+98	3.0	2.3	2.1	4.9	0.6
63	110+98	5.5	2.7	2.2	6.0	0.7
64	110+98	7.5	1.6	2.7	4.4	0.5
65	110+99	10.5	1.7	1.3	2.3	0.3
66	111+00	5.5	2.3	1.5	3.5	0.4
67	111+06	8.0	7.6	2.6	19.8	2.2
68	111+09	5.5	2.0	4.0	8.0	0.9
69	111+14	6.0	2.8	2.4	6.8	0.8
NOR T	THBOUND -	SOUTH ABUTMEN	NT TO SOU	TH PIER TO	JATC	11.1

PATCH NUMBER	STATION	OFFSET FROM CENTERLINE	WIDTH	LENGTH	AREA (SQ FT)	AREA (SQ YD)
	111+24.25	)	NORTHBOUN	D - SOUTH	PIER	
70	111+26	2.0	3. 1	2.0	6.2	0.7
71	111+26	6.5	2.4	2.7	6.5	0.8
72	111+31	1.5	3.0	1.8	5.4	0.6
73	111+38	1.5	2.4	1.5	3.6	0.4
74	111+38	6.0	1.0	1.0	1.0	0.2
75	111+38	8.5	1.5	1.5	2.3	0.3
76	111+57	5.0	1.0	1.0	1.0	0.2
77	111+81	5.0	1.0	1.4	1.4	0.2
78	111+86	5.0	2.4	4.5	10.8	1.2
79	112+00	1.5	3.9	2.1	8.2	1.0
80	112+01	8.0	1.3	1.8	2.4	0.3
81	112+10	7.0	1.9	1.2	2.3	0.3
82	112+10	10.0	1.0	1.0	1.0	0.2
NO	RTHBOUND	- SOUTH PIER	TO MIDDLE	PIER TOT	AL	6.4

PATCH NUMBER	STATION	OFFSET FROM CENTERLINE	WIDTH	LENGTH	AREA (SQ FT)	AREA (SQ YD)			
	112+50.25	N	NORTHBOUND - MIDDLE PIER						
83	113+38	6.0	4.2	2.0	8.4	1.0			
84	113+55	4.0	4.0	1.9	7. 6	0.9			
NORTHBOUND - MIDDLE PIER TO NORTH PIER TOTAL									

PATCH NUMBER	STATION	OFFSET FROM CENTERLINE	WIDTH	LENGTH	AREA (SQ FT)	AREA (SQ YD)		
	113+81.25		NORTHBOUN	NORTHBOUND - NORTH PIER				
85	113+83	5.5	1.6	1.6	2.6	0.3		
86	113+78	7.0	4.0	1.3	5.2	0.6		
87	113+86	8.5	3.5	1.5	5.3	0.6		
88	113+87	5.5	2.2	2.0	4.4	0.5		
89	113+94	6.0	1.6	11.0	17.6	2.0		
90	114+27	3.5	4.8	2.4	11.6	1.3		
91	114+27	7.0	1.6	1.0	1.6	0.2		
92	114+50	9.5	1.7	1.5	2.6	0.3		
93	114+67	8.0	1.0	1.0	1.0	0.2		
94	114+74	8.0	2.5	1.3	3. 3	0.4		
95	114+74	10.5	2.3	1.8	4.2	0.5		
NOR	THBOUND -	NORTH PIER TO	NORTH A	BUTMENT TO	OTAL	7.0		

Work this sheet with Sheet 5 of 10.

PARTIAL DEPTH DECK SLAB REPAIRS CAMBRIA ROAD OVER BIG MUDDY RIVER F.A.S. RTE 907 - D9 BRIDGE REPAIR 2019-5 WILLIAMSON COUNTY

STATION 112+50.25 STRUCTURE NO. 100-0062

USER NAME = adamsam	DESIGNED	-	AMA	REVISED	-
	DRAWN	-	AMA	REVISED	-
PLOT SCALE = 94.4444 ' / in.	CHECKED	-	MAS	REVISED	-
PLOT DATE = 10/17/2018	DATE	-	6/28/2018	REVISED	-

STATE	OF ILLINOIS	
DEPARTMENT (	OF TRANSPORTAT	ION

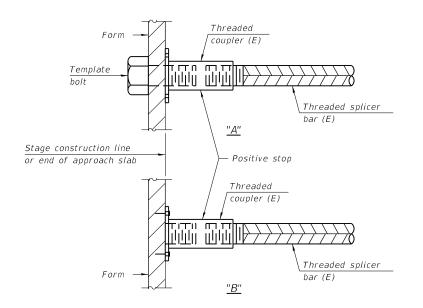
							F.A.S. RTE	SECTIO	N	COUNTY	TOTAL SHEETS	SHEET NO.
PARTIAL DECK SLAB REPAIRS								D9 BRIDGE REPA	AIR 2019-5	WILLIAMSON	16	12
										CONTRACT	NO. 78	3667
SCALE:	SHEET 6	OF	10	SHEETS	STA.	TO STA.		ILL	LINOIS FED. AI	D PROJECT		

#### STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length +  $1\frac{1}{2}$ " + thread length

\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

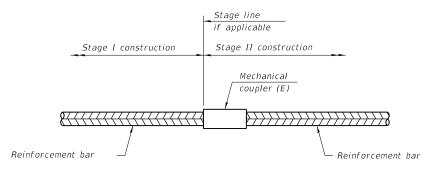
Location	Bar	No. assemblies	Minimum
LUCALIUII	size	required	lap length
Deck	#5	16	3'-0''
Hatch Block	#6	6	4'-0''



#### INSTALLATION AND SETTING METHODS

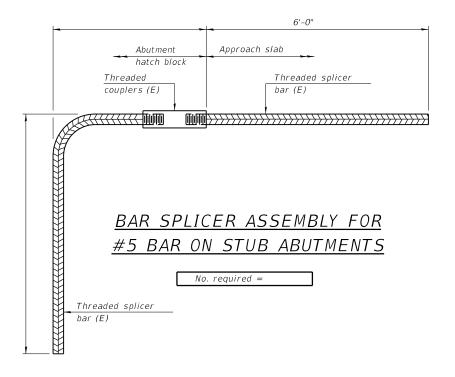
"A": Set bar splicer assembly by means of a template bolt.
"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E): Indicates epoxy coating.



#### STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



#### NOTES

Splicer bars shall be deformed with threaded ends and have a minimum  $60\ ksi$  yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BAR SPLICER ASSEMBLY DETAILS

CAMBRIA ROAD OVER BIG MUDDY RIVER

F.A.S. RTE 907 - D9 BRIDGE REPAIR 2019-5

WILLIAMSON COUNTY

STATION 112+50.25

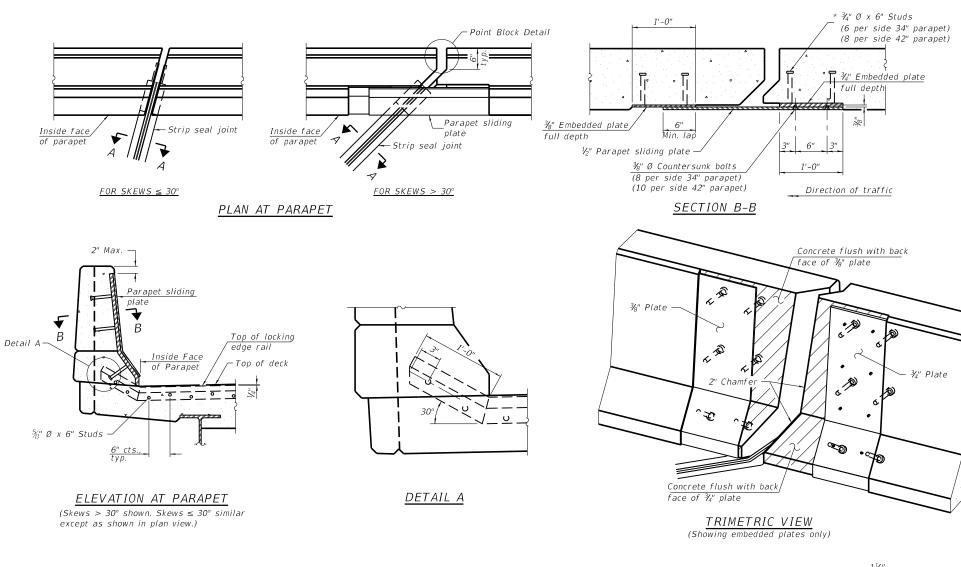
STRUCTURE NO. 100-0062

BSD-1 2-17-2017

USER NAME = adamsam	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 94.4444 ' / in.	CHECKED -	REVISED -
PLOT DATE = 10/17/2018	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

									F.A.S. SECTION		TOTAL SHEETS	SHEET NO.
									19-5	WILLIAMSON	16	13
										CONTRACT	NO. 78	3667
ALE: SHEET 7 OF 10 SHEETS STA. TO STA.								ILLINOIS	FED. AI	D PROJECT		



#### Notes

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4½ maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

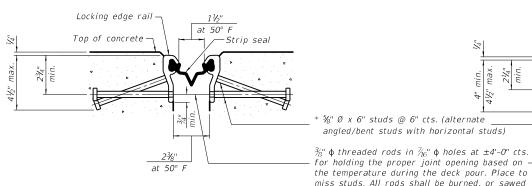
The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

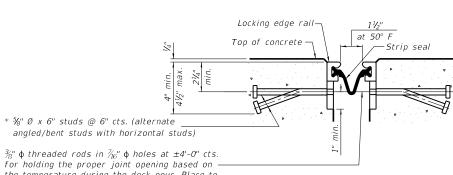
The Maximum space between locking edge rail segments shall be  $\frac{3}{16}$ " and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of parapet sliding plates, embedded plates, and anchorage stude included with Preformed Joint Strip Seal.

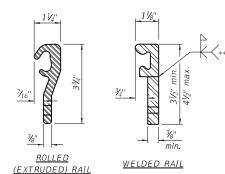
34" F-shape barrier shown, 42" F-shape similar as noted. The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.



SHOWING ROLLED RAIL JOINT

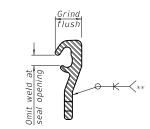


SHOWING WELDED RAIL JOINT



#### LOCKING EDGE RAILS

\*\* Back gouge not required if complete joint penetration is verified by mock-up.



#### LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

#### BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	68

#### <u>SECTION A-A</u>

off flush with the plates after concrete is set.

\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

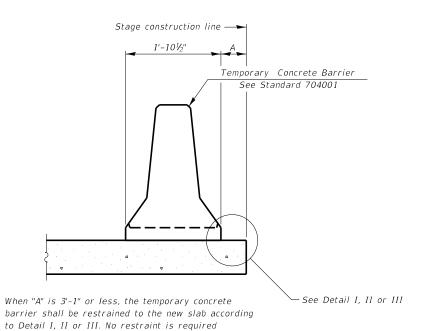
EJ-SS

8-11-17

USER NAME = adamsam	DESIGNED -	REVISED - 1 AMA 4/25/18
	DRAWN -	REVISED -
PLOT SCALE = 94.4444 ' / in.	CHECKED -	REVISED -
PLOT DATE = 10/17/2018	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DDEEODA	4ED 1	OINT OTDI	DOEAL DE		F.A.S. RTE	
PREFORM	/IED J	OINI SIRI	P SEAL DET	AILS	907	D9 BRIDG
SHEET 8	OF 1	10 SHEETS	STA.	TO STA.		



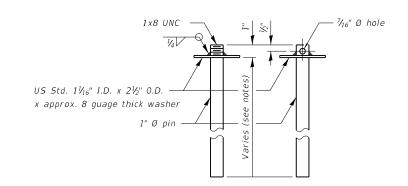
#### NEW SLAB OR NEW DECK BEAM

when "A" is greater than 3'-1".

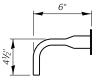
# → Stage removal line ✓ Stage removal line 1'-101/5" 1'-101/2" Temporary Concrete Barrier See Standard 704001 Drill 3-1 $\frac{1}{4}$ " Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint

\* When hot-mix asphalt wearng surface is present, embedment is required when "A" is greater than 3'-1". shall be 3" plus the wearing surface depth. EXISTING SLAB

#### EXISTING DECK BEAM

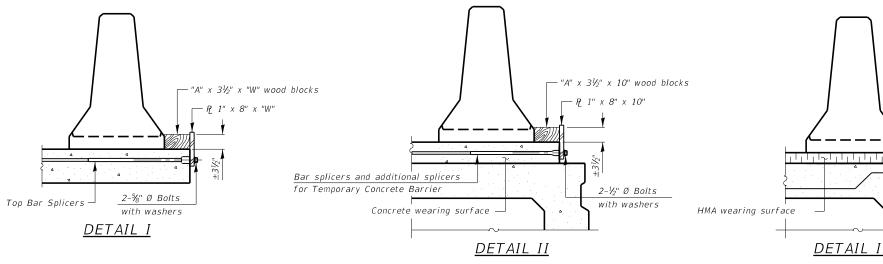


#### RESTRAINING PIN



#### BAR SPLICER FOR #4 BAR - DETAIL III





Detail I

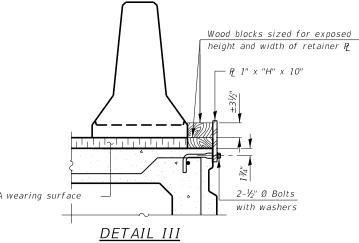
Detail II

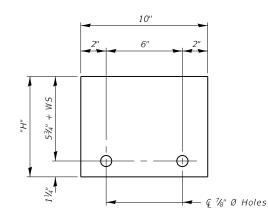
Detail I

Detail II

**←** @ ¾" Ø Holes

SECTIONS THRU SLAB OR DECK BEAM





#### STEEL RETAINER P 1" x "H" x 10"

(Detail III)

Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate & of each temporary concrete barrier.

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than  $1\frac{1}{2}$ ", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.

Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.

Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION CAMBRIA ROAD OVER BIG MUDDY RIVER F.A.S. RTE 907 - D9 BRIDGE REPAIR 2019-5 **WILLIAMSON COUNTY** STATION 112+50.25

STRUCTURE NO. 100-0062

R-27 8-11-2017

USER NAME = adamsam	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 94.4444 ' / in.	CHECKED -	REVISED -
PLOT DATE = 10/17/2018	DATE -	REVISED -

Top bars Spa.

STEEL RETAINER P 1" x 8" x "W"

(Detail I and II)

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION					F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.				
					907	D9 BRIDGE REPAIR 2019-5	WILLIAMSON	16	15				
I	TON STAGE CONSTRUCTION								CONTRACT	CONTRACT NO. 78667			
	SCALE:	SHEET 9	OF 10	SHEETS	STA.	TO STA.		ILLINOIS FED. AID PROJECT					

# **BUTT JOINT** FRAME AND GRATE TO BE ADJUSTED ON WEST APPROACH IN WB LANE € F.A.S 907 – EXISTING APPROACH PAVEMENT <u>PLAN</u> — STA 109+98.50 & STA 115+11.50 40' TRANSITION SAW CUT INCLUDED IN THE COST OF OF HMA SURFACE REMOVAL - BUTT JOINT EXISTING APPROACH PAVEMENT WITH NEW HMA OVERLAY HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT EXIST PCC APPROACH PVMT EXIST HMA PVMT HOT-MIX ASPHALT SURF CSE/ MIX IL-9.5FG, N70

### **SECTION A-A**

USER NAME = adamsam	DESIGNED - AMA	REVISED -		BUTT JOINT DETAIL			F.A.S.	SECTION	COUNTY TOTAL SHEET SHEETS NO.		
	DRAWN - AMA	REVISED -	STATE OF ILLINOIS					907 D9 BRIDGE REPAIR 2019-5 WILLIAMSON 16 16			
PLOT SCALE = 94.4444 / in.	CHECKED - MAS	REVISED -	DEPARTMENT OF TRANSPORTATION			CONTRACT NO. 78667					
PLOT DATE = 10/17/2018	DATE - 6/28/2018	REVISED -		SCALE:	SHEET 10 OF 1	10 SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT