03-08-2019 LETTING ITEM 121

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	1
	ILLINOIS	CONTRACT NO. 78662		

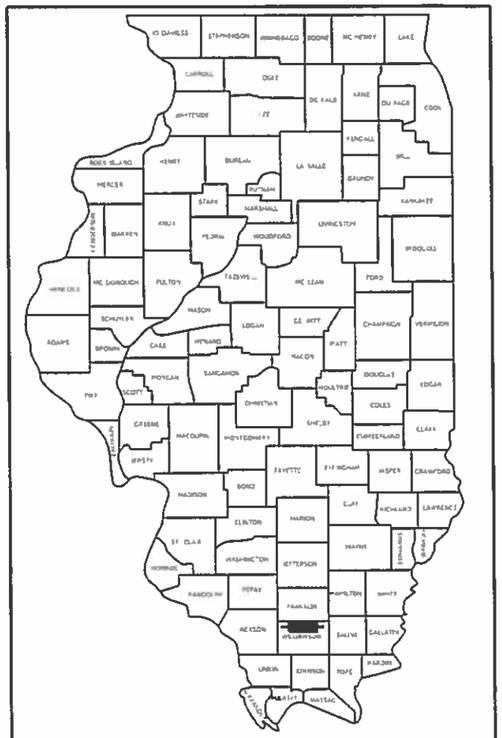
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED
HIGHWAY PLANS

FAP ROUTE 726 (IL 148) OVER
BIG MUDDY AND POND CREEK
SECTION D9 BRIDGE REPAIR 2019–6
WILLIAMSON COUNTY
BRIDGE REPAIRS

C–99–092–18

D–99–059–18



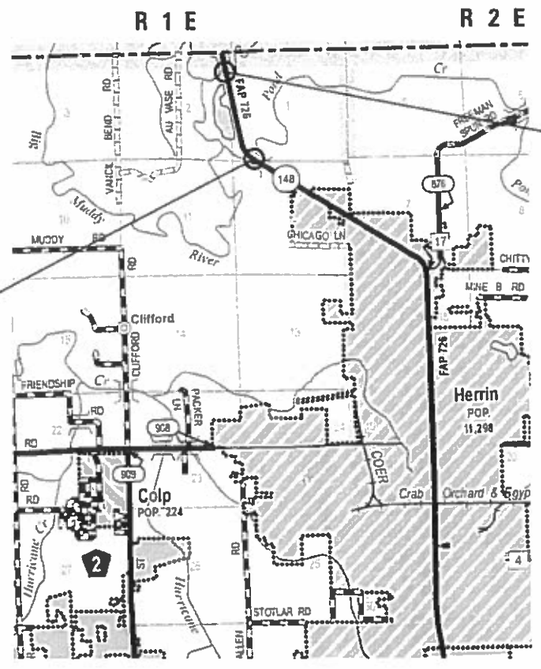
LOCATION OF SECTION INDICATED THUS: –

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3–5

TRAFFIC DATA
2018 ADT: 4900
SPEED LIMIT: 55 MPH

TOWNSHIPS
BLAIRSVILLE



DESIGN DESIGNATION : N/A

COORDINATE SYSTEM : ILLINOIS COORDINATE SYSTEM, EAST ZONE

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: CHRIS LAMPORT

CONTRACT NO. 78662

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Dec 12 20 18

Jeffrey L Keirn
REGION FIVE ENGINEER

Feb 1 20 19

ENGINEER OF DESIGN AND ENVIRONMENT

Feb 1 20 19

DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

GENERAL NOTES

1) 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.

2) AT ALL LOCATIONS WHERE THE PROPOSED HOT MIX ASPHALT OR CONCRETE PAVEMENT JOINS AN EXISTING HOT MIX ASPHALT OR CONCRETE PAVEMENT, A FULL DEPTH SAWED JOINT SHALL BE CONSTRUCTED. THE COST OF THIS JOINT WILL BE INCLUDED IN THE COST OF THE TYPE OF PAVEMENT BEING CONSTRUCTED.

3) THE CENTERLINE PAVEMENT MARKING SHALL BE REMOVED FROM THE STOP BAR TO THE SAND ATTENUATORS OR DRUMS. EDGE LINE PAVEMENT MARKING SHOULD BE REMOVED IF A 10 FT LANE WIDTH CANNOT BE MAINTAINED. TEMPORARY EDGE LINES SHOULD BE INSTALLED WHEN THE EDGE LINES ARE REMOVED.

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) THE ADVANCE DETECTOR LOOPS ARE TYPICALLY LOCATED 275 FEET IN ADVANCE OF THE STOP BAR. THE BUREAU OF OPERATIONS SHOULD APPROVE THE LOOP LOCATIONS PRIOR TO INSTALLATION.

6) TRIM EDGES OF EXISTING HOT MIX ASPHALT SURFACE FLUSH WITH EXISTING PAVEMENT PRIOR TO CONSTRUCTION NEW HMA SHOULDERS.

7) ANY TIME THE CONCRETE BARRIER IS NOT IN THE PROPER POSITION, FLAGGER SHALL BE IN PLACE TO CONTROL TRAFFIC. THE TEMPORARY TRAFFIC SIGNALS SHALL BE SET TO FLASH ALL RED.

COMMITMENTS: NONE AS OF DEC 14, 2018.

INDEX OF SHEETS

MIXTURE REQUIREMENTS

LOCATION(S):	HMA SURFACE COURSE
MIXTURE USE(S):	HMA SURFACE CSE, MIX E, N70 FINE GRADED
AC/PG GRADE:	PG64-22
ABR % (MAX.):	SEE BDE SPECIAL PROVISIONS
DESIGN AIR VOIDS:	4.0% @ NDES 70
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL-9.5mm FINE GRADED
FRICTION AGGREGATE:	E SURFACE
MIXTURE WEIGHT:	112 LBS/SQ YD/IN
QUALITY MANAGEMENT PROGRAM:	QCQA
SUBLOT SIZE:	NA

LOCATION(S):	HMA SHOULDERS
MIXTURE USE(S):	HMA BINDER COURSE, N70, IL-19.0
AC/PG GRADE:	PG64-22
ABR % (MAX.):	SEE BDE SPECIAL PROVISIONS
DESIGN AIR VOIDS:	4.0% @ NDES 70
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL-19.0mm
FRICTION AGGREGATE:	NONE
MIXTURE WEIGHT:	112 LBS/SQ YD/IN
QUALITY MANAGEMENT PROGRAM:	QCQA
SUBLOT SIZE:	NA

STANDARDS

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
701001-02	OFF-ROAD, 2L2W MORE THAN 15' FROM PAVEMENT EDGE
701006-05	OFF-ROAD, 2L2W 15' TO 24" FROM PAVEMENT EDGE
701201-05	LANE CLOSURE, 2L2W DAY ONLY, FOR SPEEDS > 45 MPH
701316-12	LANE CLOSURE, 2L2W BRIDGE REPAIR FOR SPEEDS > 45 MPH
701321-17	LANE CLOSURE, 2L2W BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L2W PAVEMENT WIDENING FOR SPEEDS > 45 MPH
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
862001-01	UNINTERRUPTABLE POWER SUPPLY

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

MDOT1 Default
FILE NAME: pw:\\IL084FBIDMTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 9\Projects\78662\CAD\Data\Design\D978662 Design.dgn

USER NAME = LamportCP	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 12/11/2018	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNATURES, GENERAL NOTES, STANDARDS, & INDEX OF SHEETS

SCALE: | SHEET ___ OF ___ SHEETS | STA. _____ | TO STA. _____

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	2
		CONTRACT NO. 78662		
	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	COUNTY: WILLIAMSON CO ROUTE: FAP 726 (IL 148) FUNDING: 100% STATE LOCATION: SN 100-0032 CONSTRUCTION CODE 0013	COUNTY: WILLIAMSON CO ROUTE: FAP 726 (IL 148) FUNDING: 100% STATE LOCATION: SN 100-0033 CONSTRUCTION CODE 0013
20200100	EARTH EXCAVATION	CU YD	95	35	60
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	247	146	101
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	117	68	49
44004250	PAVED SHOULDER REMOVAL	SQ YD	429	178	251
48203037	HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	445	178	267
50102400	CONCRETE REMOVAL	CU YD	10.6	2.5	8.1
50300255	CONCRETE SUPERSTRUCTURE	CU YD	11.9	2.8	9.1
50300300	PROTECTIVE COAT	SQ YD	45	18	27
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1,590	540	1,050
50800515	BAR SPLICERS	EACH	30	8	22
52000110	PREFORMED JOINT STRIP SEAL	FOOT	136	68	68
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	2,221	1,602	619
59000200	EPOXY CRACK INJECTION	FOOT	83	83	0
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	4	4

MODEL: Default
FILE NAME: pw:\\IL084EBIDINTEG.illinois.gov:PWIDOTDocuments\IDOT Offices\DistrictSIProjects\78662\CADData\Design\D978662-Destim.dgn

USER NAME = LamportCP	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 12/13/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: 50 | SHEET OF SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	3
		CONTRACT NO. 78662		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES - CONT

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	COUNTY: WILLIAMSON CO ROUTE: FAP 726 (IL 148) FUNDING: 100% STATE LOCATION: SN 100-0032 CONSTRUCTION CODE 0013	COUNTY: WILLIAMSON CO ROUTE: FAP 726 (IL 148) FUNDING: 100% STATE LOCATION: SN 100-0033 CONSTRUCTION CODE 0013
67100100	MOBILIZATION	L SUM	1	0.5	0.5
70100100	TRAFFIC CONTROL AND PROTECTION, STANDARD 701316	EACH	1	1	0
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	0	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	0.5	0.5
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	0.5	0.5
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	30	28	2
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	2	1	1
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	56	28	28
70300100	SHORT TERM PAVEMENT MARKING	FOOT	345	195	150
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	115	65	50
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	3,247	2,037	1,210
70400100	TEMPORARY CONCRETE BARRIER	FOOT	512.5	0.0	512.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	512.5	0.0	512.5
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	0	2

USER NAME = LamportCP	DESIGNED - _____	REVISED - _____
	DRAWN - _____	REVISED - _____
PLOT SCALE = 100.0000 ' / in.	CHECKED - _____	REVISED - _____
PLOT DATE = 12/13/2018	DATE - _____	REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: 50 | SHEET __ OF __ SHEETS | STA. _____ | TO STA. _____

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	4
		CONTRACT NO. 78662		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES - CONT

	CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	COUNTY: WILLIAMSON CO ROUTE: FAP 726 (IL 148) FUNDING: 100% STATE LOCATION: SN 100-0032 CONSTRUCTION CODE 0013	COUNTY: WILLIAMSON CO ROUTE: FAP 726 (IL 148) FUNDING: 100% STATE LOCATION: SN 100-0033 CONSTRUCTION CODE 0013
	70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	0	2
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	3,247	2,037	1,210
*	78100300	REPLACEMENT REFLECTOR	EACH	10	2	8
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	20	8	12
*	86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	2	1	1
	X0300002	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, N70	TON	235	158	77
	X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	2,137	1,249	888
	X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	1,082	679	403
	Z0001700	APPROACH SLAB REPAIR (FULL DEPTH)	SQ YD	4	0	4
	Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	6	2	4
	Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	66	66	0
	Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	55	0	55
	Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	5	1	4

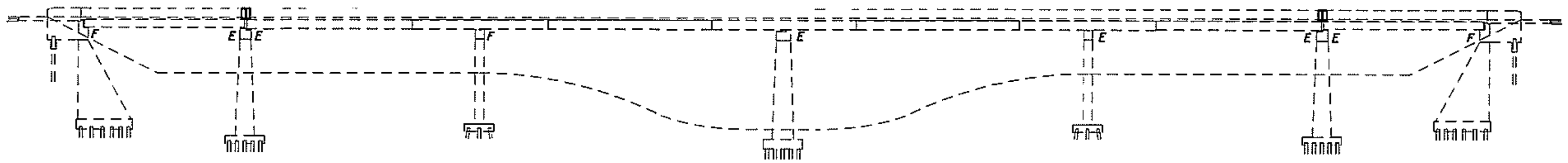
* SPECIALTY ITEM

USER NAME = LamportCP	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN - _____	REVISED - _____	
PLOT SCALE = 100.0000 ' / in.	CHECKED - _____	REVISED - _____	
PLOT DATE = 12/13/2018	DATE - _____	REVISED - _____	

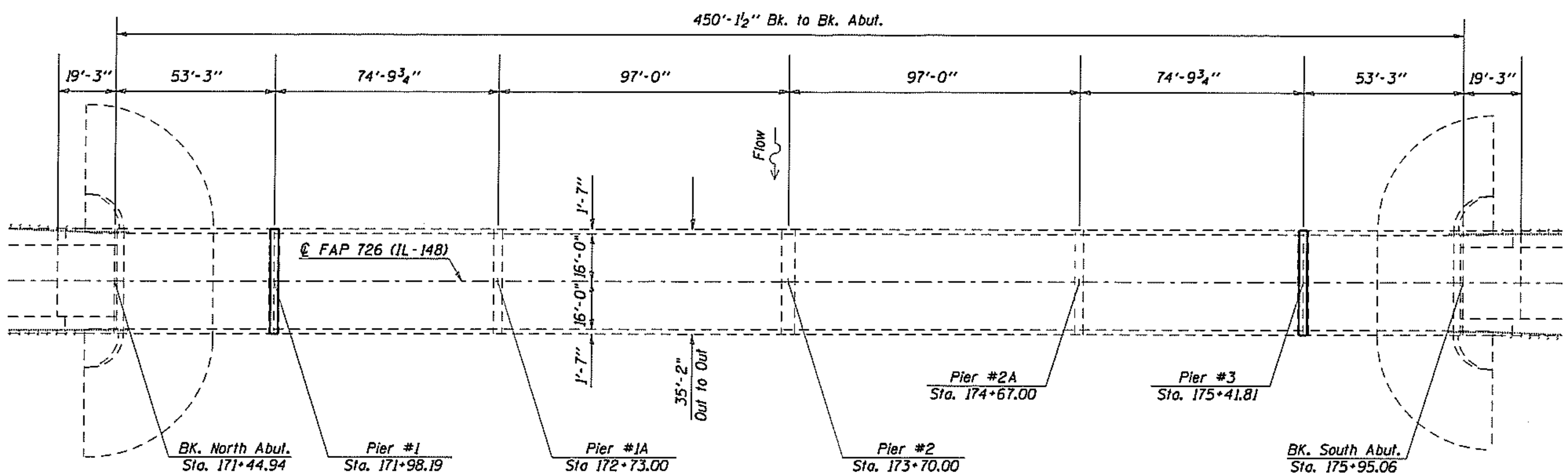
SUMMARY OF QUANTITIES

SCALE: 50 | SHEET __ OF __ SHEETS | STA. _____ | TO STA. _____

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	5
		CONTRACT NO. 78662		
	ILLINOIS FED. AID PROJECT			



ELEVATION



PLAN

GENERAL NOTES

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.

Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. 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 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 the existing concrete.

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 with Concrete Removal.

Reinforcement bars designated (E) shall be epoxy coated.

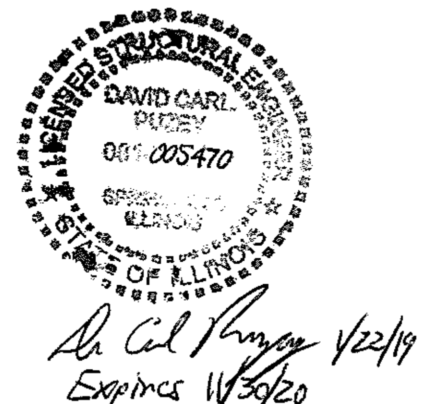
No field welding is permitted except as specified in the contract documents.

The deck surface final finish shall be tined according to Article 420.09(e)(1) of the Standard Specifications, cost included with Concrete Superstructure.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
HMA Surface Removal - Butt Joint	Sq. Yd.	146
PCC Surface Removal - Butt Joint	Sq. Yd.	68
Concrete Removal	Cu. Yd.	2.5
Concrete Superstructure	Cu. Yd.	2.8
Reinforcement Bars, Epoxy Coated	Pound	540
Bar Splicers	Each	8
Preformed Joint Strip Seal	Foot	68
Waterproofing Membrane System	Sq. Yd.	1,602
Epoxy Crack Injection	Foot	83
Hot-Mix Asphalt Surface Course	Ton	158
Approach Slab Repair (Partial Depth)	Sq. Yd.	2
Structural Repair of Concrete (Depth < 5 Inches)	Sq. Ft.	66
Deck Slab Repair (Partial)	Sq. Yd.	1
• Protective Coat	Sq. Yd.	18

• Apply to new concrete only



Scope of Work

1) Setup Traffic Control Std 701326 for Pre Stage I Work in Southbound Lane

2) Setup Traffic Control Std 701316 for Stage I Work in Northbound Lane

3) Remove Existing Bridge Joints and Replace with Preformed Joint Strip Seal

4) Perform Approach Slab and Deck Slab Repairs

5) Install WMS and HMA Overlay

6) Switch Stages and Repeat Steps 2 Thru 5

7) Substructure Repairs

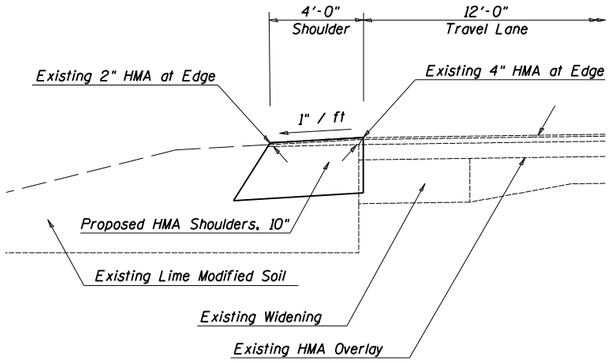
BRIDGE REPAIR
IL-148 (FAP 726)
OVER BIG MUDDY RIVER
WILLIAMSON COUNTY
D9 BRIDGE REPAIR 2019-6
STA. 173+70
SN 100-0032

USER NAME = LamportCP	DESIGNED - CPL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 50.0000 ' / in.	CHECKED - DSP	REVISED -	
PLOT DATE = 12/13/2018	DATE -	REVISED -	

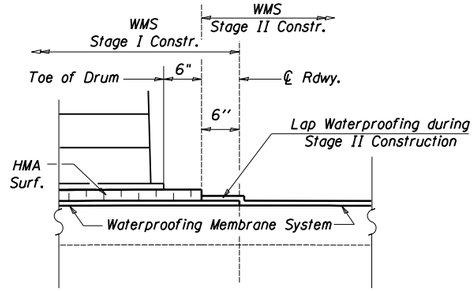
GENERAL PLAN AND ELEVATION
SN 100-0032

SCALE: | SHEET ___ OF ___ SHEETS | STA. ______ TO STA. ______

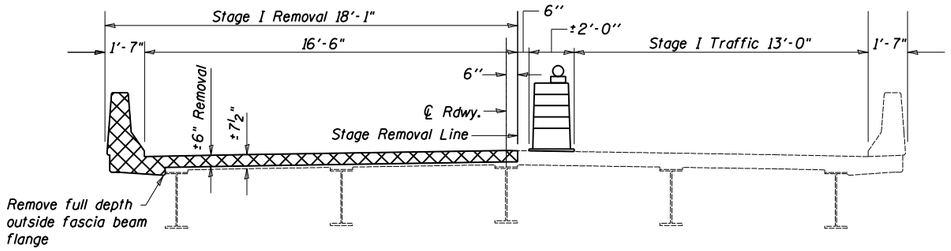
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	6
		CONTRACT NO. 78662		
		ILLINOIS FED. AID PROJECT		



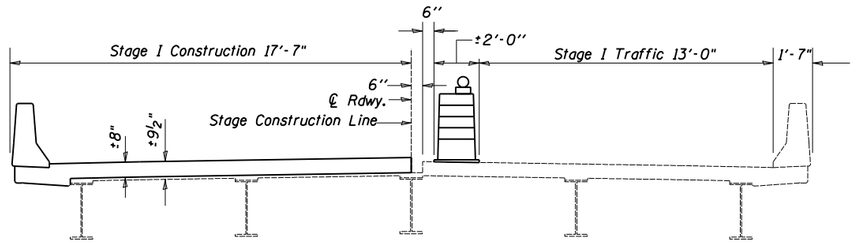
HMA SHOULDER TYPICAL SECTION



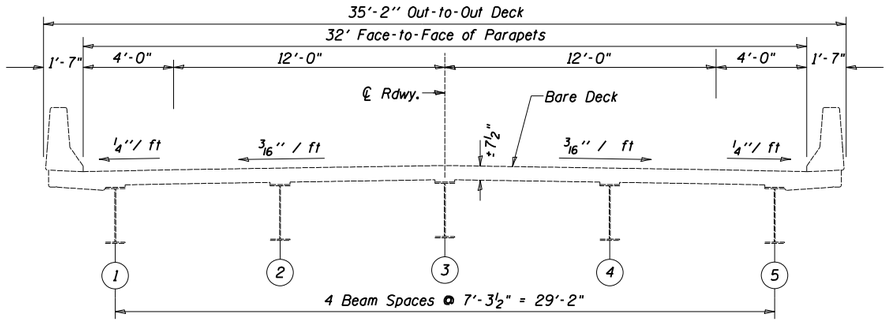
WATERPROOFING TREATMENT AT STAGE CONSTRUCTION



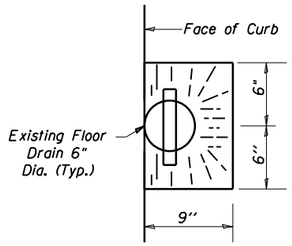
STAGE I REMOVAL



STAGE I CONSTRUCTION

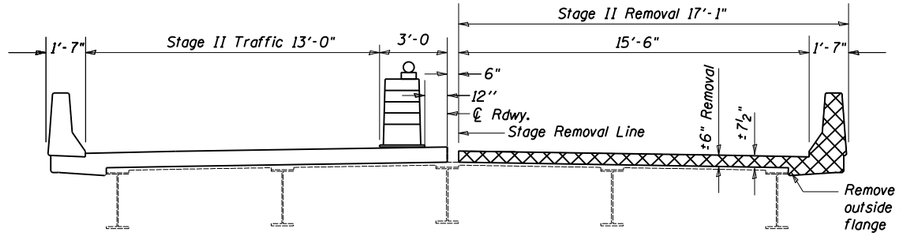


TYPICAL BRIDGE SECTION - EXISTING

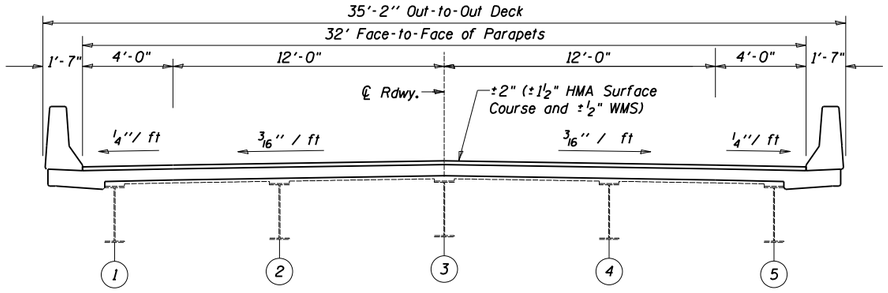


FLOOR DRAIN - TOP PLAN

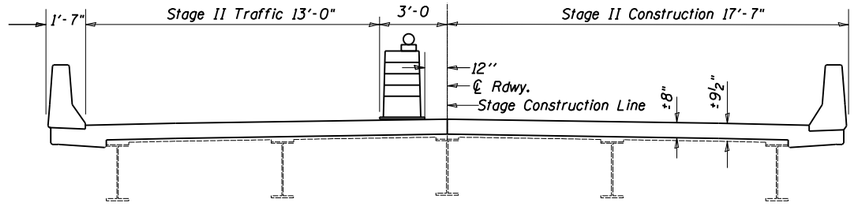
Slope HMA at Drains



STAGE II REMOVAL



TYPICAL BRIDGE SECTION - PROPOSED



STAGE II CONSTRUCTION

Concrete Removal (Shown at Joint Locations)

Notes: All Sections looking South

MODEL: Default
FILE NAME: pw:\\IL084EBIDINTEG.Illinois.gov:PWIDOT\Documents\IDOT Offices\District 9\Projects\78662\CADData\Design\D978662-Design.dgn

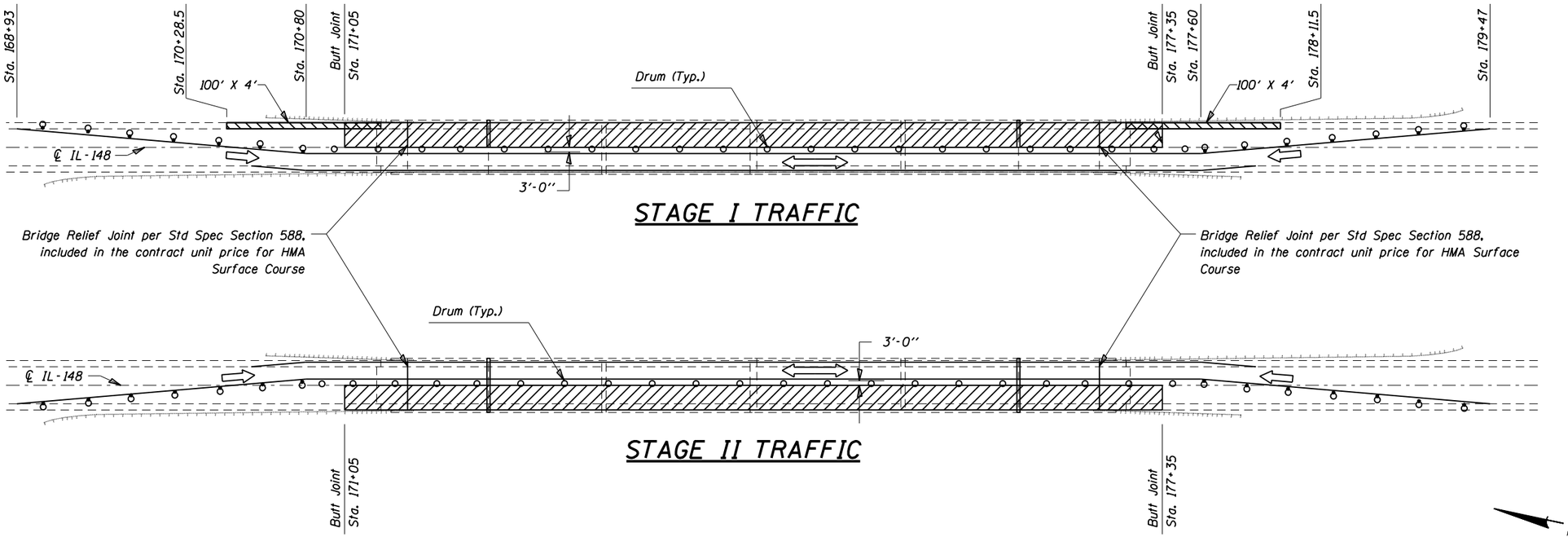
USER NAME = LamportCP	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 6.7000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 12/13/2018	DATE -	REVISED -	

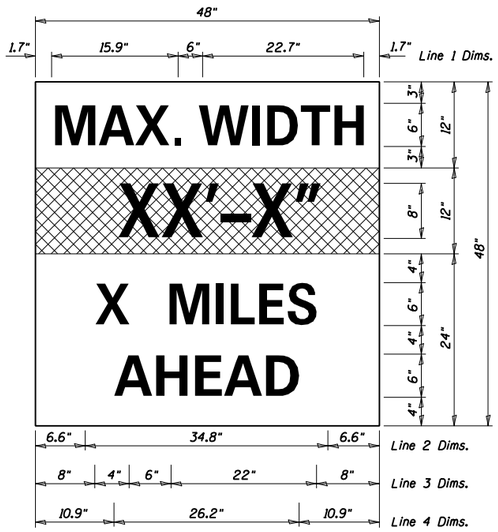
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS AND STAGING
SN 100-0032

SCALE: _____ | SHEET __ OF __ SHEETS | STA. _____ | TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	7
		CONTRACT NO. 78662		
	ILLINOIS	FED. AID PROJECT		





W12-I103

W12-1103, 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

PRE STAGE I

Notes for Max Width Sign:

1. Install a Max Width Sign each direction on IL 148 to give traffic approaching work zone enough advance notice to change routes if needed. Exact locations as directed by 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.

3. The noted work, including signs, posts, hardware and labor shall be included in the contract unit price, each, for Traffic Control and Protection, Std. 701316, no other compensation will be allowed.

4. The width shown on the W12-1103 sign shall be 11'-6" for both Stage I and Stage II.

5. The "X" MILES AHEAD will be determined by the engineer.

Notes: See Standard 701316 for additional details.

HMA Surface Course

Paved Shoulder Removal & HMA Shoulders, 10"

USER NAME = LamportCP	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 80.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 12/13/2018	DATE -	REVISED -	

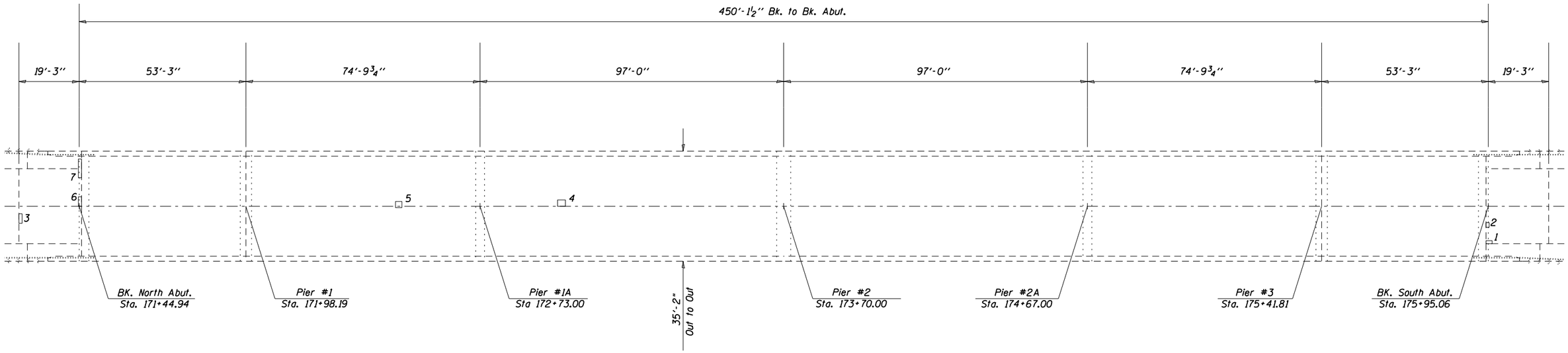
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING DETAILS
SN 100-0032

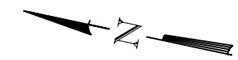
SCALE: _____ SHEET __ OF __ SHEETS STA. _____ TO STA. _____

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	8
		CONTRACT NO. 78662		
		ILLINOIS FED. AID PROJECT		

MODEL: Default
FILE NAME: pw:\\IL084EBIINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 9\Projects\78662\CAD\Data\Design\D978662-Destin.dgn



PLAN



NUMBER	WIDTH (FT)	LENGTH (FT)	AREA (SQ YD)
1	1	2	0.2
2	1.5	1	0.2
3	3	1	0.3
4	2	2.5	0.6
5	2	2	0.4
6	3	1	0.3
7	6	1	0.7

BILL OF MATERIAL

Item	Unit	Total
Approach Slab Repair (Partial Depth)	Sq Yd	2
Deck Slab Repair (Partial)	Sq Yd	1

Notes: Deck sounding was performed in February 2018. The Resident Engineer will determine final patch locations and quantities in the field before bridge deck patching operations begin.

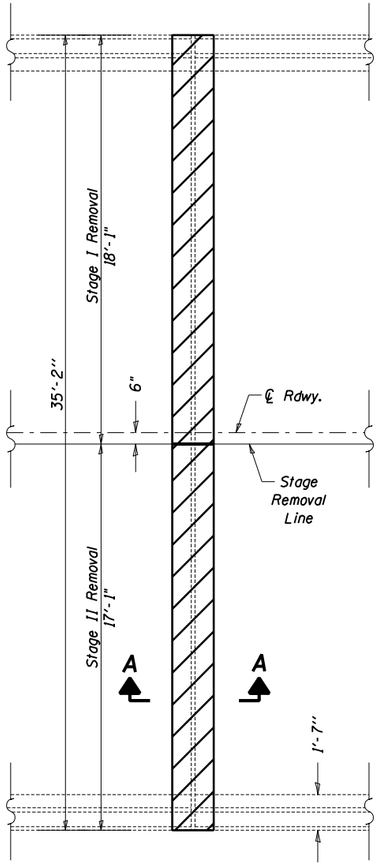
FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 9\Projects\78662 Data\Design\D978662-Design.dgn	USER NAME = LamportCP	DESIGNED - ___	REVISED - ___
		DRAWN - ___	REVISED - ___
	PLOT SCALE = 32.0000 ' / in.	CHECKED - ___	REVISED - ___
	PLOT DATE = 12/13/2018	DATE - _____	REVISED - ___

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PATCHING
SN 100-0032

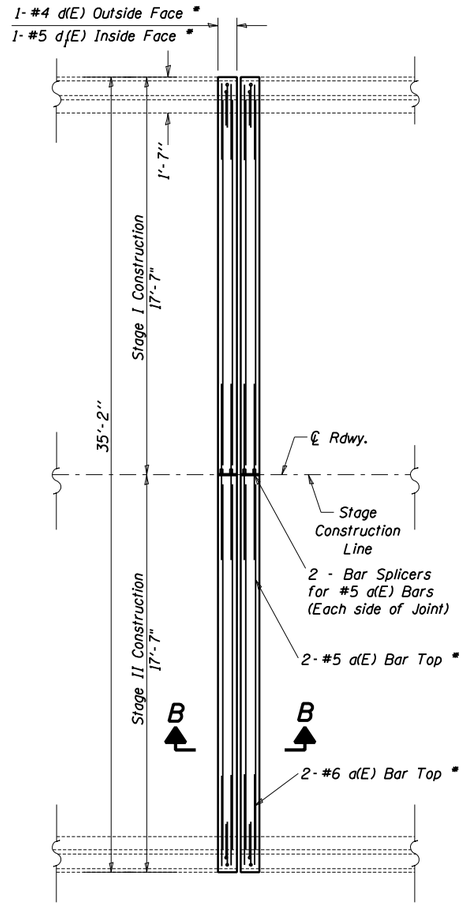
SCALE: _____ | SHEET NO. __ OF ___ SHEETS | STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	9
		CONTRACT NO. 78662		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



PIER #1 PLAN SHOWING CONCRETE REMOVAL

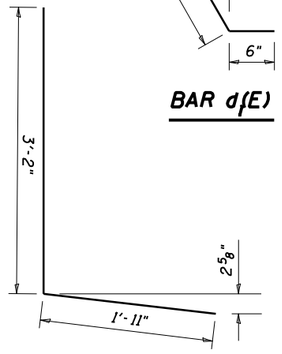
Pier #3 similar by 180° rotation



* Each side of Joint, Each Stage

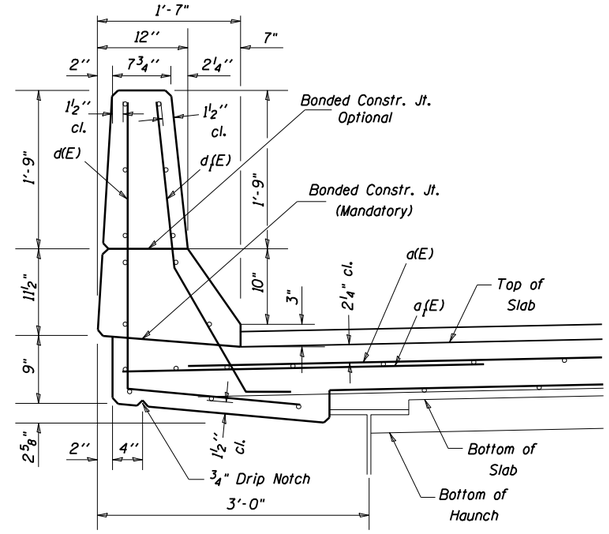
PIER #1 PLAN SHOWING NEW CONCRETE

Pier #3 similar by 180° rotation

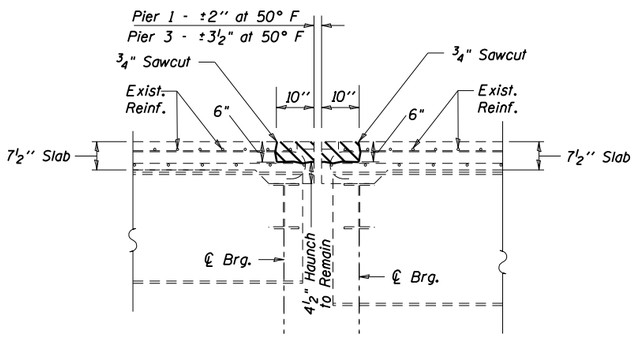


BAR d1(E)

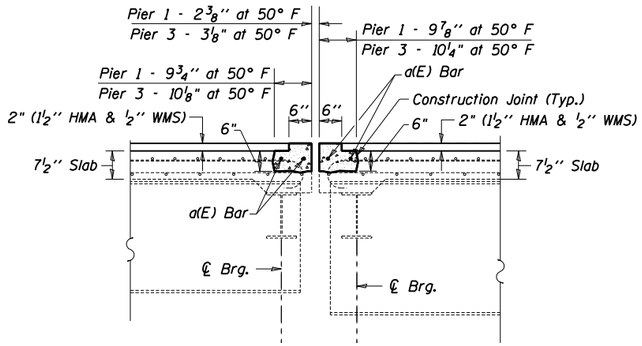
BAR d(E)



SECTION THRU PARAPET



SECTION A-A



SECTION B-B

BILL OF MATERIAL (PIERS #1 & #3)

Bar	No.	Size	Length	Shape
d(E)	16	#5	17'-0"	———
d_1(E)	16	#6	4'-0"	———
d(E)	8	#4	5'-1"	L
d_1(E)	8	#5	3'-11"	\
Bar Splicers #5		Each	8	
Concrete Superstructure		Cu Yd	2.8	
Concrete Removal **		Cu Yd	2.5	
Reinforcement Bars, Epoxy Coated		Pound	540	

** Removal of polymer concrete nosing within joint removal sawcuts paid for as concrete removal

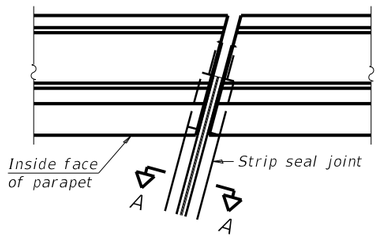
MODEL: Default
FILE NAME: w:\IL084EBUILDINTEG.Illinois.gov\PWIDOT\Documents\IDOT Offices\District 9\Projects\78662\CADData\Design\D978662-Design.dgn

USER NAME = LamportCP	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN - _____	REVISED - _____	
PLOT SCALE = 6.7000 ' / in.	CHECKED - _____	REVISED - _____	
PLOT DATE = 12/13/2018	DATE - _____	REVISED - _____	

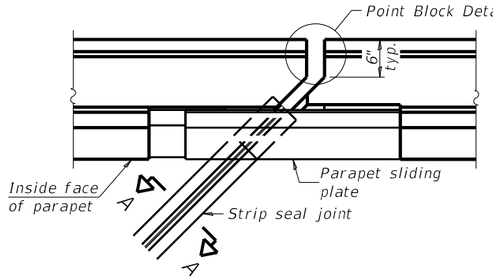
JOINT DETAILS
SN 100-0032

SCALE: _____ | SHEET __ OF __ SHEETS | STA. _____ | TO STA. _____

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	10
		CONTRACT NO. 78662		
	ILLINOIS FED. AID PROJECT			

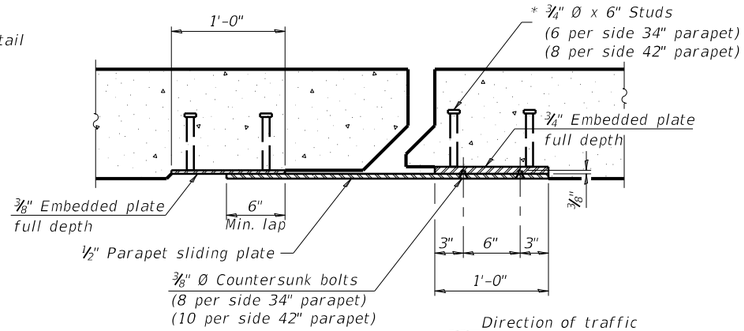


FOR SKEWS ≤ 30°



FOR SKEWS > 30°

PLAN AT PARAPET



SECTION B-B

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.

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.

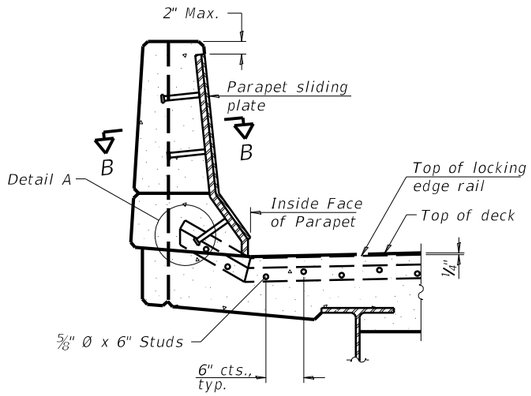
The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.

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

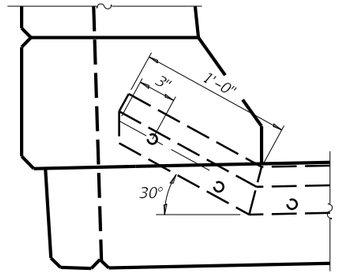
34" F-shape barrier shown, 42" F-shape similar as noted.

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.

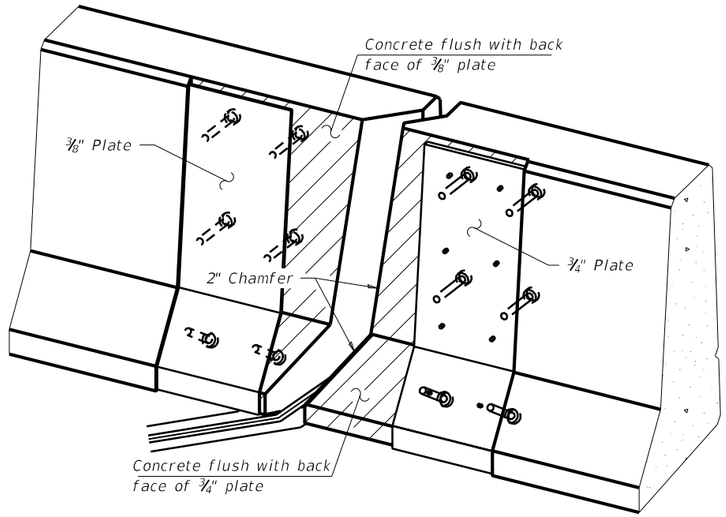


ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

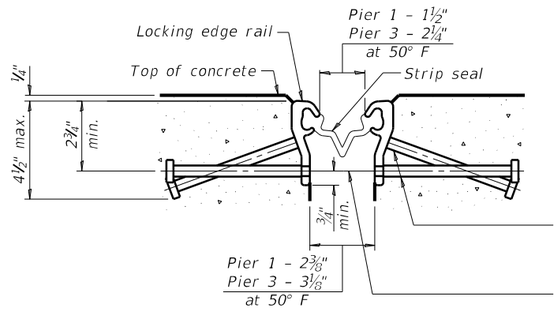


DETAIL A

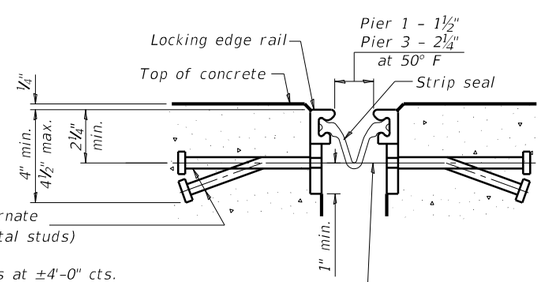


TRIMETRIC VIEW

(Showing embedded plates only)



SHOWING ROLLED RAIL JOINT



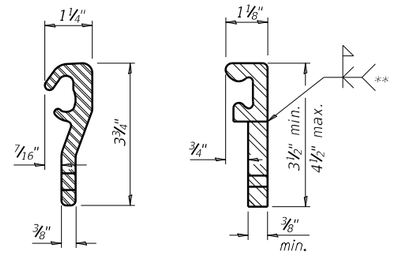
* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

⅜" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SHOWING WELDED RAIL JOINT

SECTION A-A

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

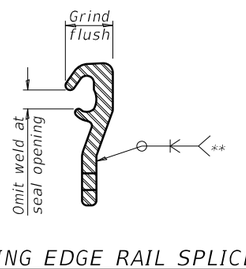


ROLLED (EXTRUDED) RAIL

WELDED RAIL

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

EJ-SS

8-11-17

USER NAME = LamportCP	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 55.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 12/13/2018	DATE -	REVISED -	

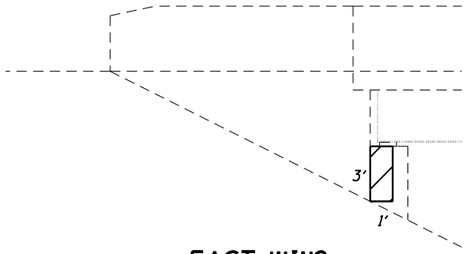
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
SN 100-0032

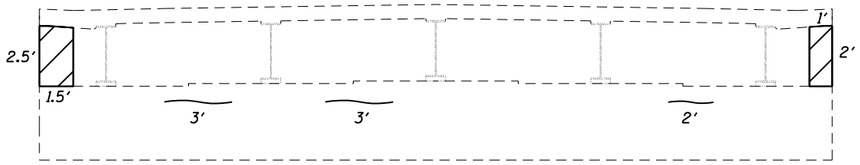
SCALE: _____ SHEET __ OF __ SHEETS STA. _____ TO STA. _____

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	11
		CONTRACT NO. 78662		
		ILLINOIS	FED. AID PROJECT	

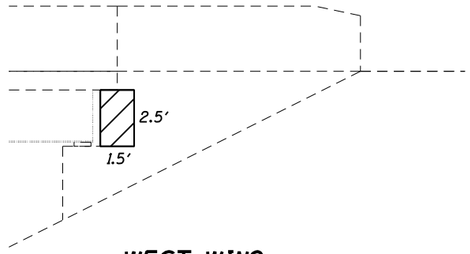
MODEL: Default
FILE NAME: pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT1Documents\IDOT Offices\District 9\Projects\78662\CADData\Design\D978662-Design.dgn



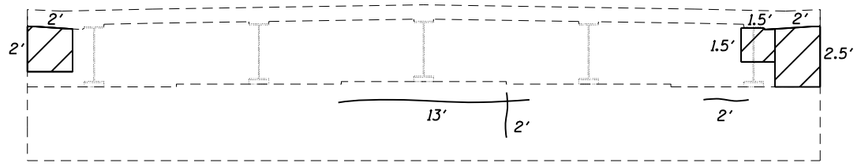
EAST WING
LOOKING WEST



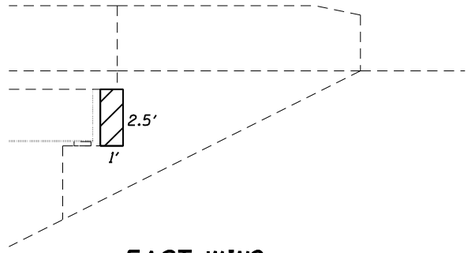
SOUTH ABUTMENT
LOOKING SOUTH



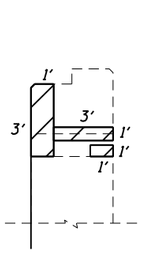
WEST WING
LOOKING EAST



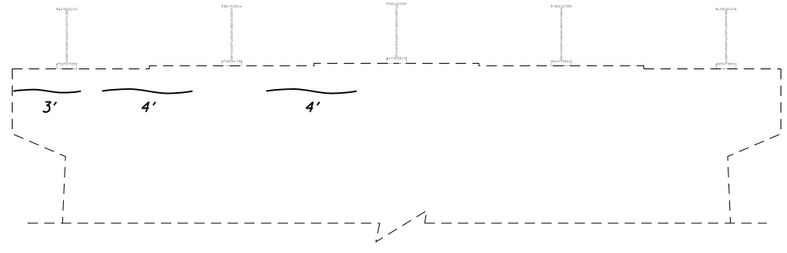
NORTH ABUTMENT
LOOKING NORTH



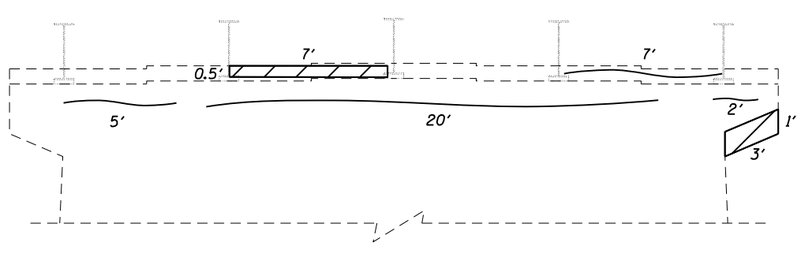
EAST WING
LOOKING WEST



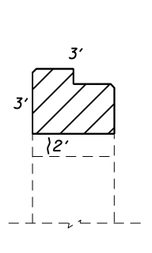
PIER #3 (SOUTH PIER)
LOOKING EAST



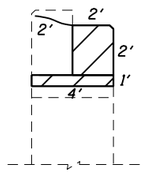
PIER #3 (SOUTH PIER)
LOOKING NORTH



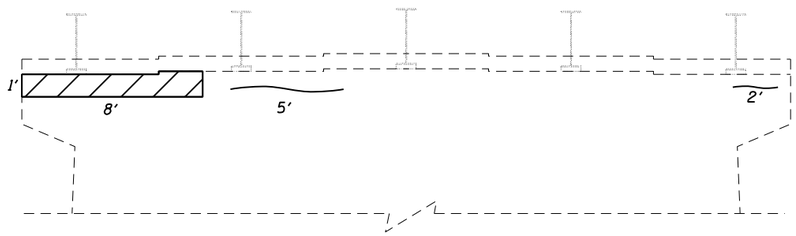
PIER #3 (SOUTH PIER)
LOOKING SOUTH



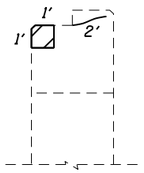
PIER #3 (SOUTH PIER)
LOOKING WEST



PIER #1 (NORTH PIER)
LOOKING EAST



PIER #1 (NORTH PIER)
LOOKING NORTH



PIER #3 (SOUTH PIER)
LOOKING WEST

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth ≤ 5 Inches)	Sq. Ft.	66
Epoxy Crack Injection	Foot	83

Structural Repair of Concrete ≤ 5''

Epoxy Crack Injection

Notes: Subsurface inspection was performed in April 2018. Locations and dimensions are approximate, the Resident Engineer will determine final locations and quantities in the field before subsurface repair operations begin.

MODEL: Default
FILE NAME: ww\IL084EBIDNTEG.illinois.gov\PWIDOT\Documents\IDOT Offices\DistNet 9\Projects\78662\CADData\Design\D978662-Destrn.dgn

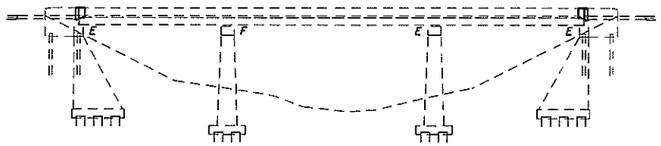
USER NAME = LamportCP	DESIGNED - _____	REVISED - _____
	DRAWN - _____	REVISED - _____
PLOT SCALE = 6.7000 ' / in.	CHECKED - _____	REVISED - _____
PLOT DATE = 12/13/2018	DATE - _____	REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

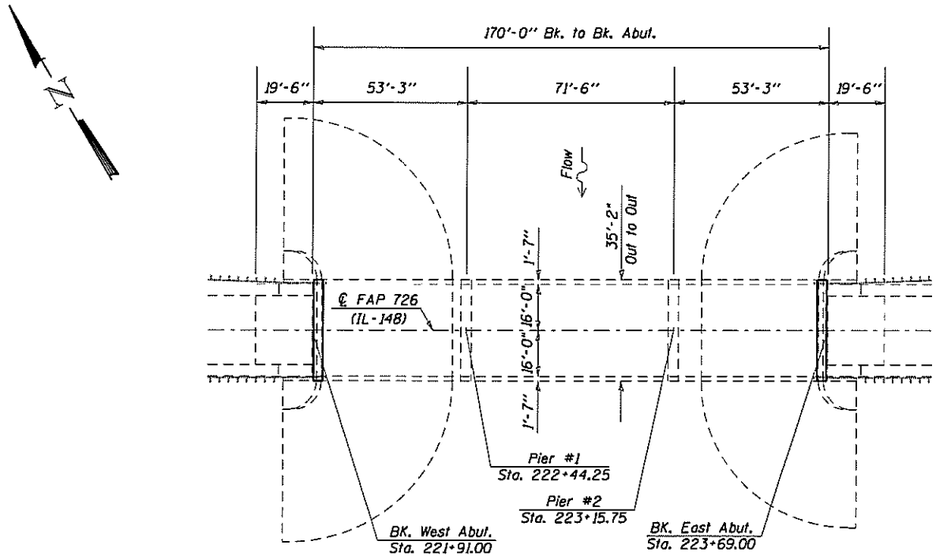
SUBSTRUCTURE REPAIRS
SN 100-0032

SCALE: _____ | SHEET __ OF __ SHEETS | STA. _____ | TO STA. _____

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	12
		CONTRACT NO. 78662		
	ILLINOIS FED. AID PROJECT			



ELEVATION



PLAN

GENERAL NOTES

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.

Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. 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 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 the existing concrete.

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 with Concrete Removal.

Reinforcement bars designated (E) shall be epoxy coated.

No field welding is permitted except as specified in the contract documents.

The deck surface final finish shall be tined according to Article 420.09(e)(1) of the Standard Specifications, cost included with Concrete Superstructure.

TOTAL BILL OF MATERIAL

	ITEM	UNIT	QUANTITY
	HMA Surface Removal - Butt Joint	Sq. Yd.	101
	PCC Surface Removal - Butt Joint	Sq. Yd.	49
	Concrete Removal	Cu. Yd.	8.1
	Concrete Superstructure	Cu. Yd.	9.1
	Reinforcement Bars, Epoxy Coated	Pound	1,050
	Bar Splicers	Each	22
	Preformed Joint Strip Seal	Foot	68
	Waterproofing Membrane System	Sq. Yd.	619
	Hot-Mix Asphalt Surface Course	Ton	77
	Approach Slab Repair (Full Depth)	Sq. Yd.	4
	Approach Slab Repair (Partial Depth)	Sq. Yd.	4
	Deck Slab Repair (Full Depth, Type 1)	Sq. Yd.	55
	Deck Slab Repair (Partial)	Sq. Yd.	4
*	Protective Coat	Sq. Yd.	27

* Apply to new concrete only

1/22/19

Expires 11/30/20

Scope of Work

1) Setup Traffic Control Std 701326 for Pre Stage 1 Work in Southbound Lane
2) Setup Traffic Control Std 701321 for Stage 1 Work in Northbound Lane
3) Remove Existing Bridge Joints and Replace with Preformed Joint Strip Seal
4) Perform Approach Slab and Deck Slab Repairs
5) Install WMS and HMA Overlay
6) Switch Stages and Repeat Steps 2 Thru 5

BRIDGE REPAIR
IL-148 (FAP 726)
OVER POND CREEK
WILLIAMSON COUNTY
D9 BRIDGE REPAIR 2019-6
STA. 222+80
SN 100-0033

MicroStation Default
FILE NAME: pw:\\IDOT-ENGINEERING.illinois.gov:PWIDOTDocuments\IDOT Offices\District 9\Projects\78662\Data\Design\D278-62-Design.dgn

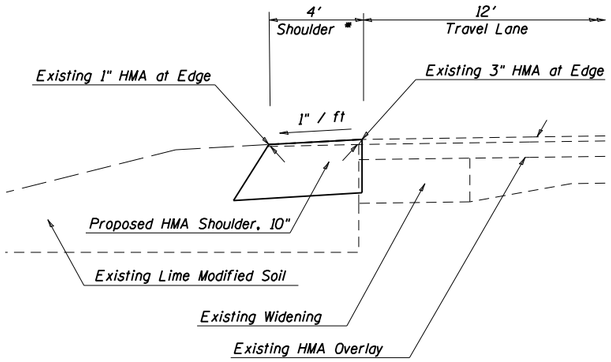
USER NAME = LampertCP	DESIGNED - CPL	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 60.0000 ' / in.	CHECKED - DSP	REVISED -	
PLOT DATE = 12/13/2018	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
SN 100-0033

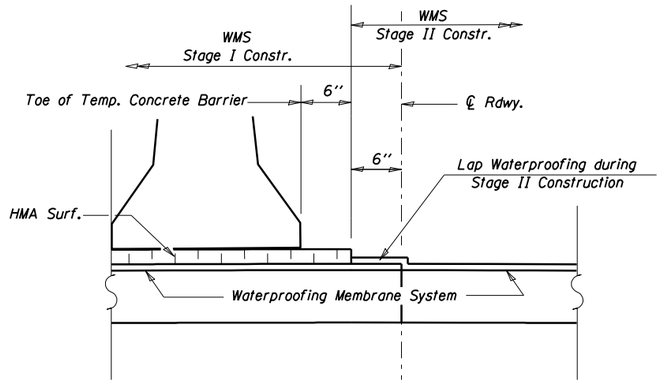
SCALE: ____ | SHEET __ OF __ SHEETS | STA. ____ | TO STA. ____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	13
		CONTRACT NO. 78662		
	ILLINOIS FED. AID PROJECT			

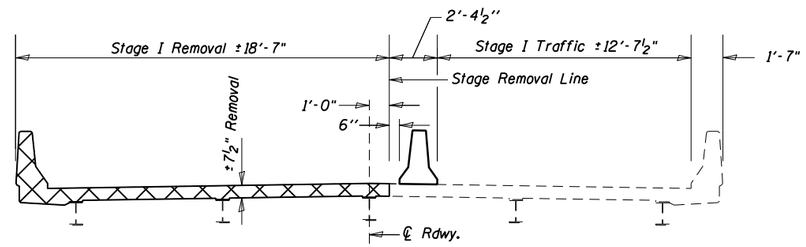


* Existing Shoulder varies from 3' to 4'

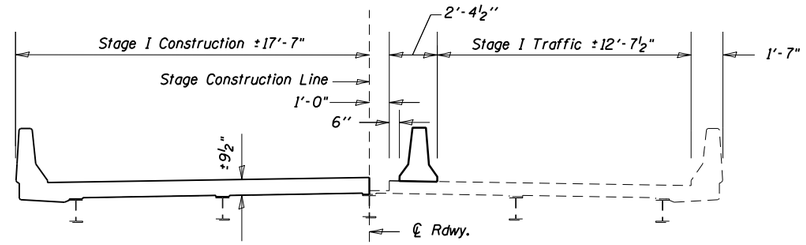
HMA SHOULDER TYPICAL SECTION



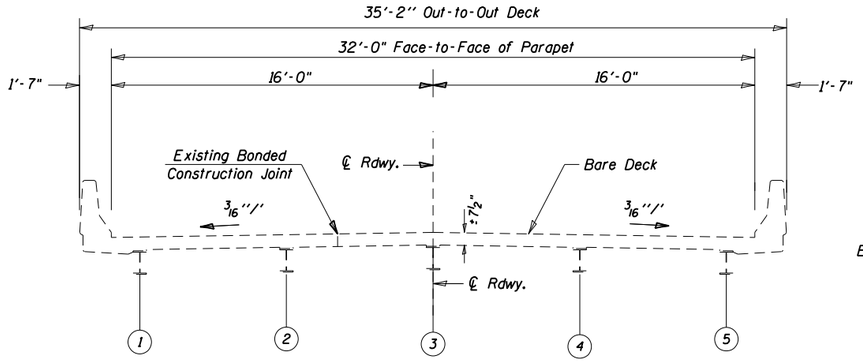
WATERPROOFING TREATMENT AT STAGE CONSTRUCTION



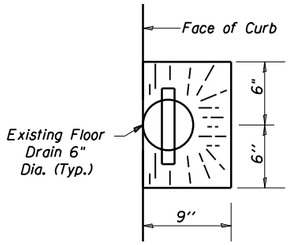
STAGE I REMOVAL



STAGE I CONSTRUCTION

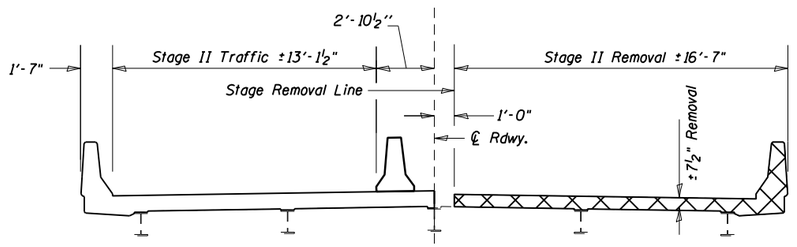


TYPICAL BRIDGE SECTION - EXISTING

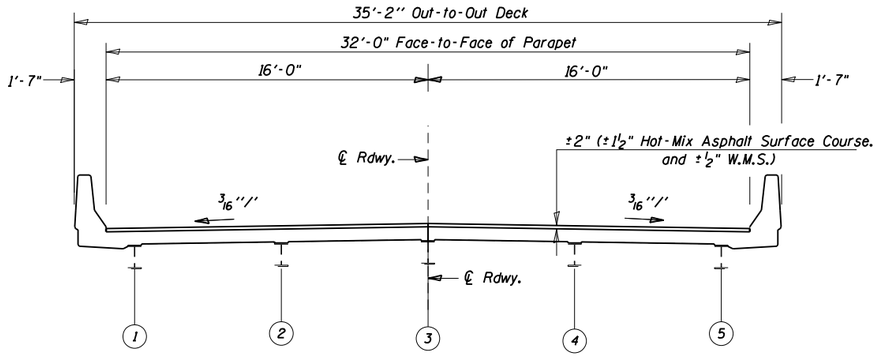


FLOOR DRAIN - TOP PLAN

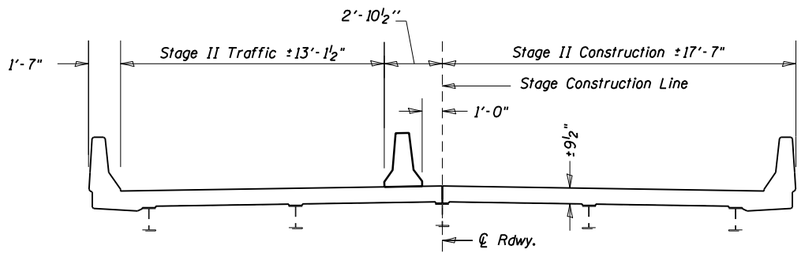
Slope HMA at Drains



STAGE II REMOVAL



TYPICAL BRIDGE SECTION - PROPOSED



STAGE II CONSTRUCTION

Concrete Removal (at Joint Locations)

Notes: All Sections looking Southeast

MODEL: Default
FILE NAME: pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 9\Projects\78662\CADData\Design\D978662-Design.dgn

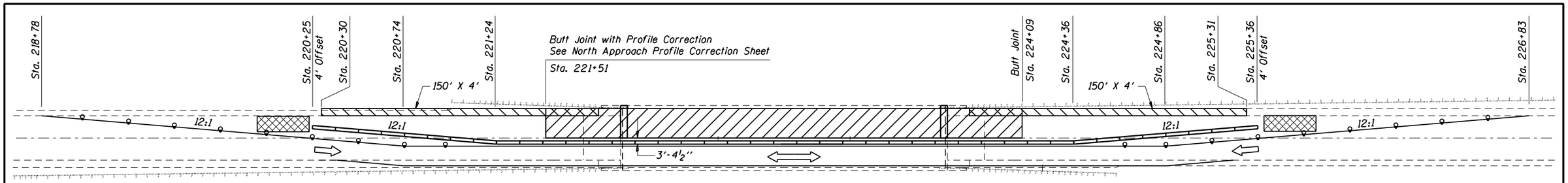
USER NAME = LamportCP	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7.5318 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 12/13/2018	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

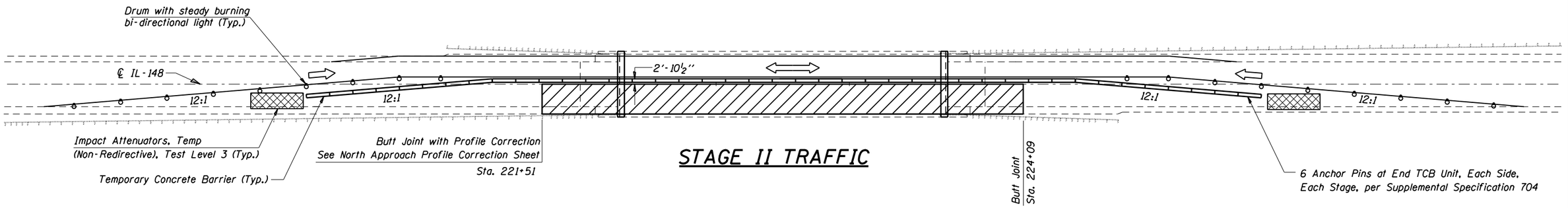
TYPICAL SECTIONS AND STAGING
SN 100-0033

SCALE: _____ | SHEET __ OF __ SHEETS | STA. _____ | TO STA. _____

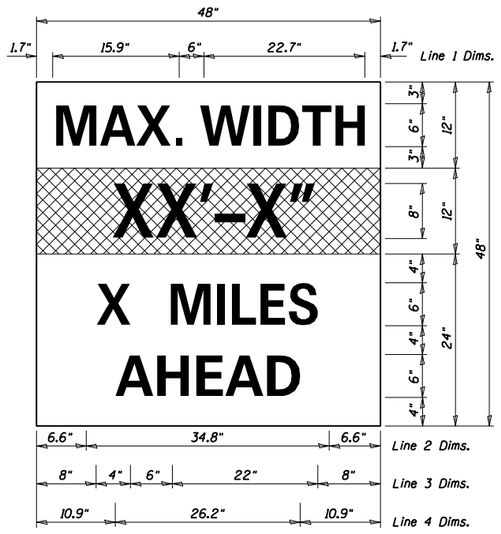
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	14
		CONTRACT NO. 78662		
		ILLINOIS	FED. AID PROJECT	



STAGE I TRAFFIC



STAGE II TRAFFIC



W12-1103

W12-1103, 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

PRE STAGE I

Notes for Max Width Sign:

1. Install a Max Width Sign each direction on IL 148 to give traffic approaching work zone enough advance notice to change routes if needed. Exact locations as directed by 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.

3. The noted work, including signs, posts, hardware and labor shall be included in the contract unit price, each, for Traffic Control and Protection, Std. 701321, no other compensation will be allowed.

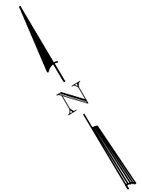
4. The width shown on the W12-1103 sign shall be 11'-1" for Stage I and 11'-7" for Stage II.

5. The "X" MILES AHEAD will be determined by the engineer.

Notes: See Standard 701321 for additional details.

HMA Surface Course

HMA Shoulder, 10"



USER NAME = LamportCP	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 53.6000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 12/13/2018	DATE -	REVISED -	

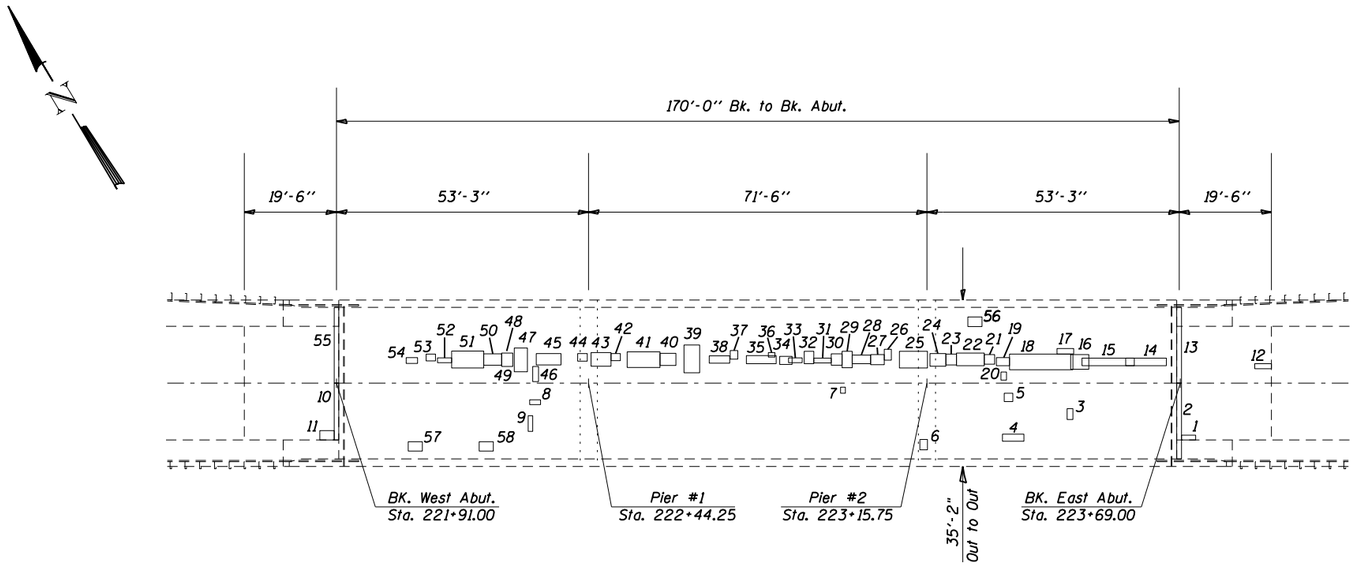
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING DETAILS
SN 100-0033

SCALE: _____ SHEET __ OF __ SHEETS STA. _____ TO STA. _____

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	15
		CONTRACT NO. 78662		
		ILLINOIS FED. AID PROJECT		

MODEL: Default
FILE NAME: pw:\\IL684EBIINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\Distrct 9\Projects\78662\CAD\Data\Design\D978662-Destiny.dgn



PLAN

BILL OF MATERIAL

Item	Unit	Total
Approach Slab Repair (Full Depth)	Sq Yd	4
Approach Slab Repair (Partial Depth)	Sq Yd	4
Deck Slab Repair (Full Depth, Type I)	Sq Yd	55
Deck Slab Repair (Partial)	Sq Yd	4

Notes: Deck sounding was performed in February 2018. The Resident Engineer will determine final patch locations and quantities in the field before bridge deck patching operations begin.

	NUMBER	WIDTH (FT)	LENGTH (FT)	AREA (SQ YD)
	1	1.0	3.0	0.3
	2	16.0	1.0	1.8
	3	2.3	1.2	0.3
	4	4.5	1.5	0.8
	5	1.8	1.8	0.4
	6	2.2	1.6	0.4
	7	1.3	1.0	0.1
	8	2.3	1.0	0.3
	9	3.3	1.0	0.4
	10	12.0	1.0	1.3
	11	2.0	3.0	0.7
**	12	1.8	3.5	0.7
**	13	16.0	1.0	1.8
*	14	1.6	8.6	1.5
*	15	1.6	11.0	2.0
*	16	3.1	3.8	1.3
*	17	1.2	3.5	0.5
*	18	3.3	13.4	4.9
	19	1.7	2.8	0.5
*	20	1.7	1.2	0.2
*	21	2.0	2.2	0.5
*	22	2.7	5.9	1.8
*	23	2.3	2.2	0.6
*	24	2.7	3.4	1.0
*	25	3.5	5.9	2.3
*	26	1.6	1.5	0.3
*	27	2.1	2.9	0.7
*	28	1.8	3.9	0.8
*	29	3.5	2.1	0.8
*	30	2.4	2.3	0.6
*	31	1.0	3.7	0.4
*	32	2.6	2.0	0.6
*	33	1.0	2.9	0.3
*	34	1.7	2.6	0.5
*	35	1.7	6.3	1.2
*	36	1.0	1.4	0.2
*	37	1.8	1.6	0.3
*	38	1.5	4.3	0.7
*	39	3.3	5.9	2.2
*	40	2.6	3.4	1.0
*	41	3.3	6.9	2.5
*	42	1.5	2.0	0.3
*	43	2.9	4.2	1.4
*	44	1.6	2.0	0.4
*	45	2.4	5.2	1.4
	46	3.2	1.2	0.4
*	47	2.8	5.0	1.6
	48	1.9	1.4	0.3
*	49	2.8	2.3	0.7
*	50	2.4	3.8	1.0
*	51	3.6	6.8	2.7
*	52	1.0	3.0	0.3
*	53	1.4	2.0	0.3
*	54	1.0	3.3	0.4
**	55	16.0	1.0	1.8
*	56	2.0	3.0	0.7
*	57	2.0	3.0	0.7
*	58	2.0	3.0	0.7

* denotes Deck Slab Repair (Full Depth, Type I).

** denotes Approach Slab Repair (Full Depth).

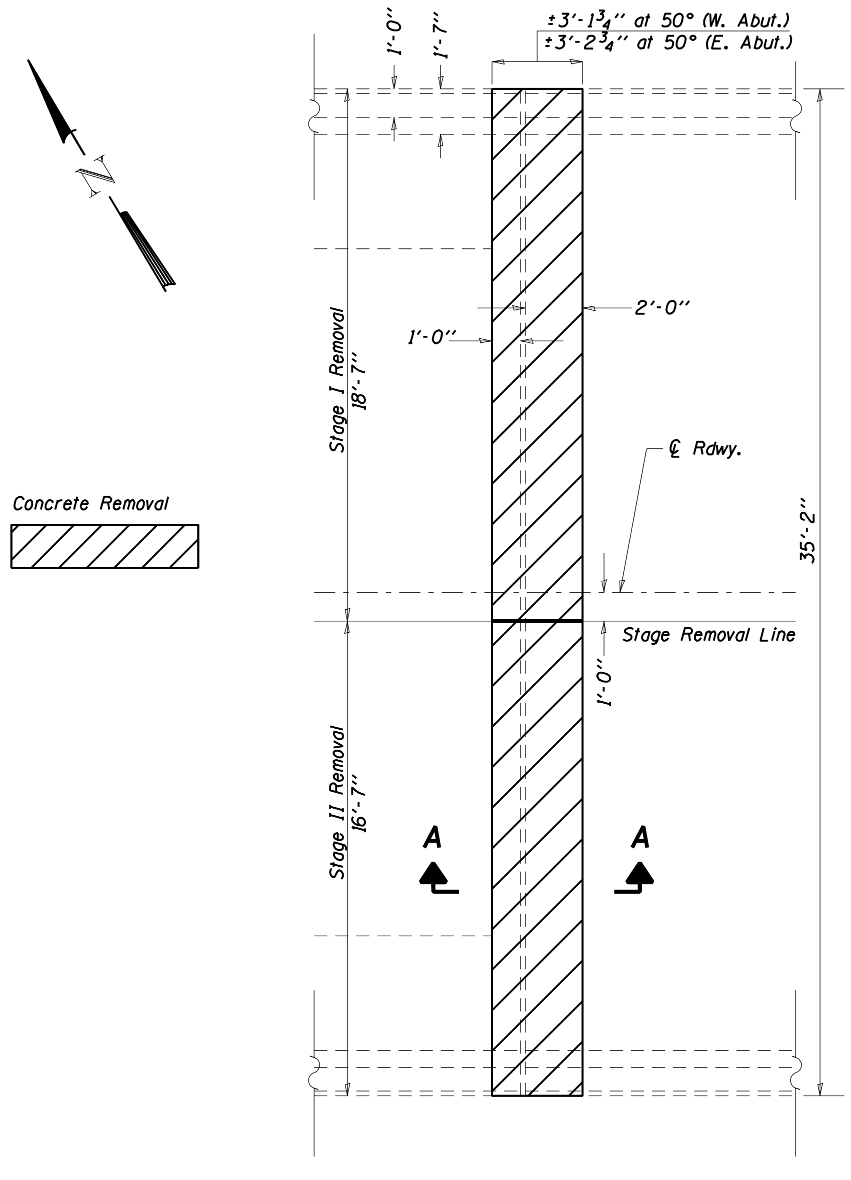
FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 9\Projects\78662\Data\Design\D978662-Design.dgn	USER NAME = LamportCP	DESIGNED - ___	REVISED - ___
	PLOT SCALE = 32.0000 ' / in.	DRAWN - ___	REVISED - ___
	PLOT DATE = 12/13/2018	CHECKED - ___	REVISED - ___
		DATE - _____	REVISED - ___

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PATCHING
SN 100-0033

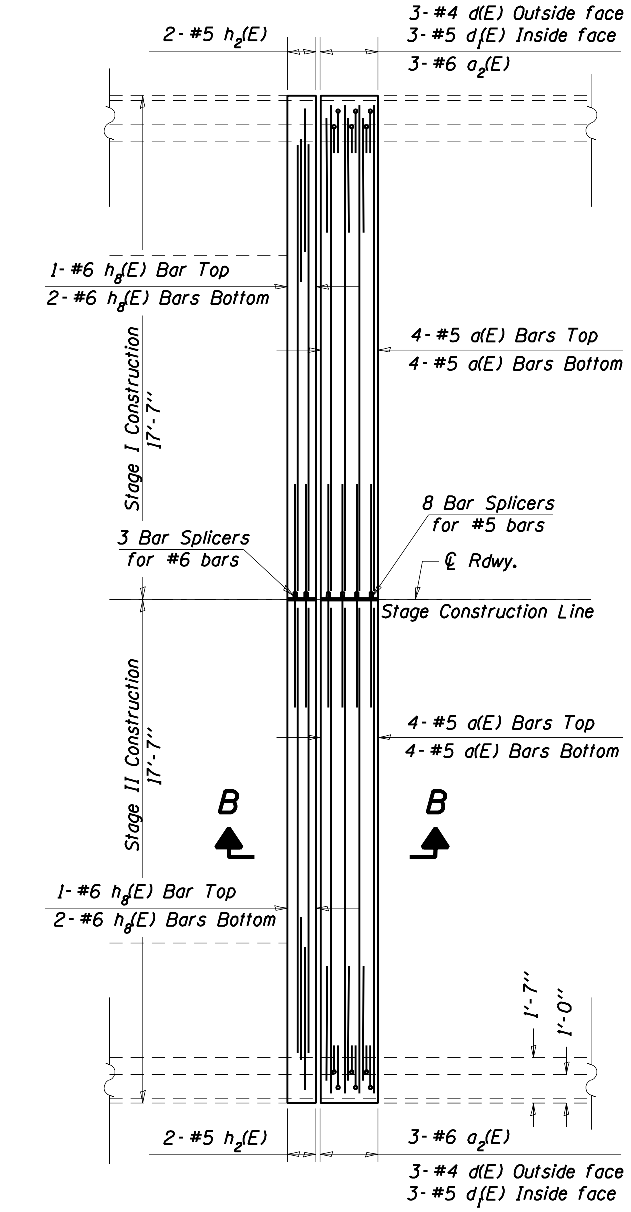
SCALE: _____ | SHEET NO. __ OF ___ SHEETS | STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	16
		CONTRACT NO. 78662		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



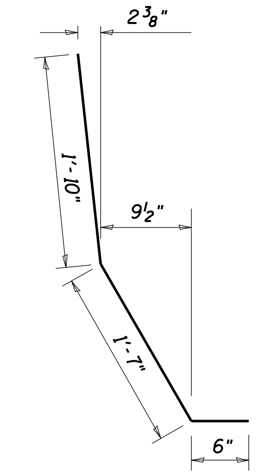
WEST ABUT. PLAN SHOWING CONCRETE REMOVAL

East Abut. similar by 180° rotation

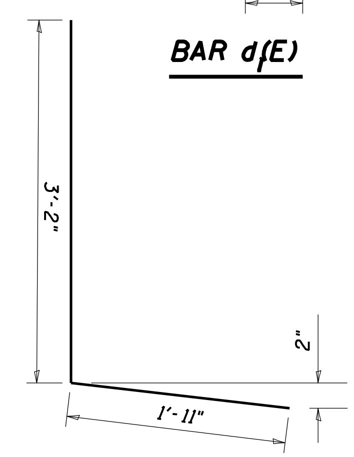


WEST ABUT. PLAN SHOWING NEW CONCRETE

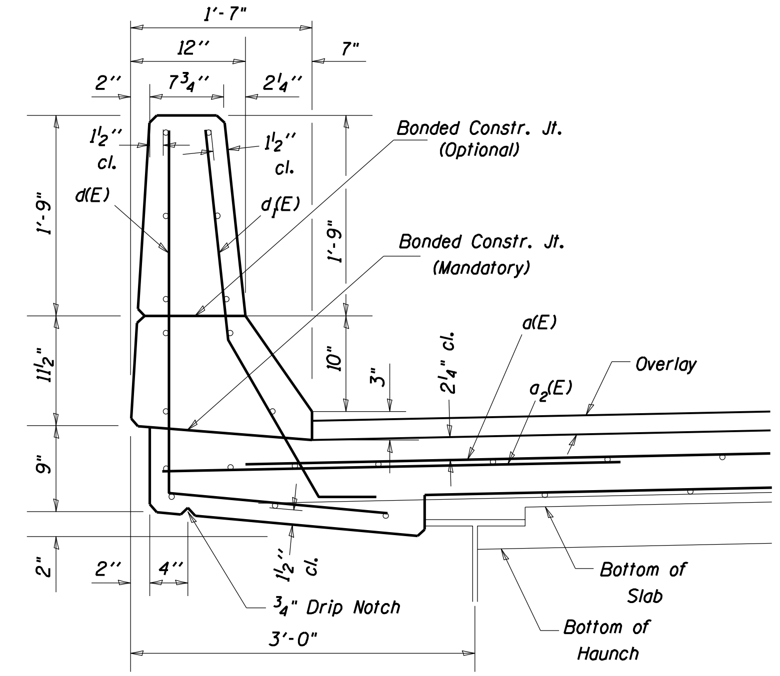
East Abut. similar by 180° rotation



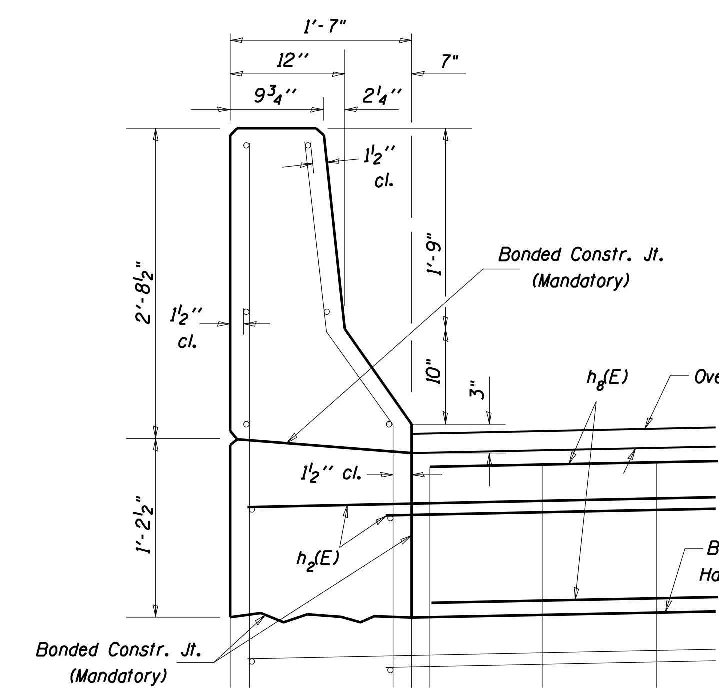
BAR df(E)



BAR a(E)



SECTION THRU PARAPET

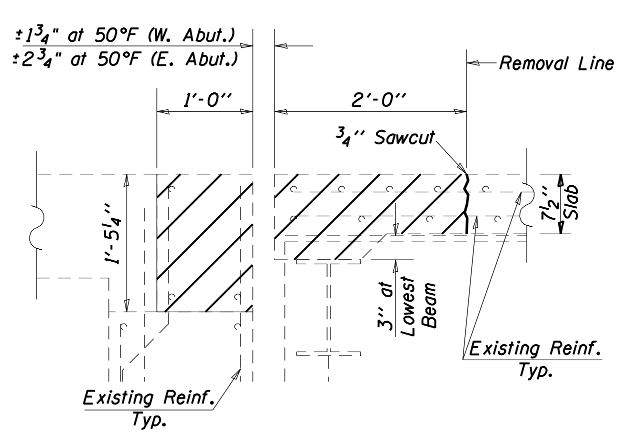


SECTION THRU WING WALL

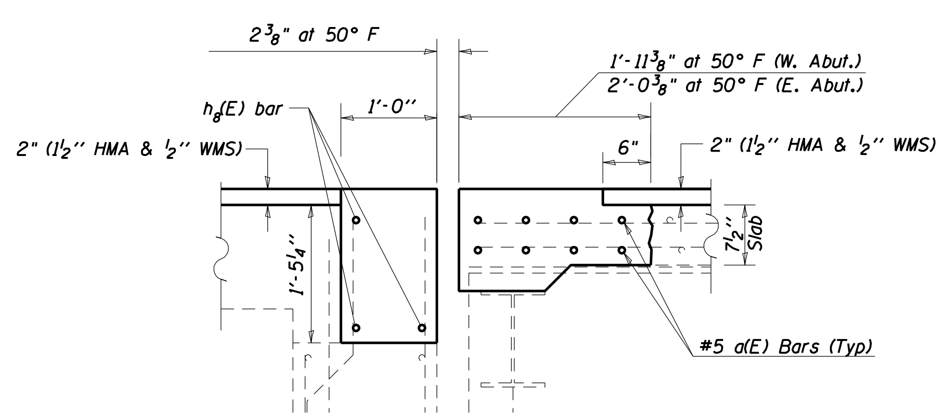
BILL OF MATERIAL (2 ABUTMENTS)

Bar	No.	Size	Length	Shape
a(E)	32	#5	17'-0"	——
a2(E)	12	#6	4'-0"	——
d(E)	12	#4	5'-1"	L
d1(E)	12	#5	3'-11"	⟍
h2(E)	8	#5	5'-0"	——
h8(E)	12	#6	15'-7"	——
Bar Splicers #5			Each	6
Bar Splicers #6			Each	16
Concrete Superstructure			Cu Yd	9.1
Concrete Removal			Cu Yd	8.1
Reinforcement Bars, Epoxy Coated			Pound	1,050

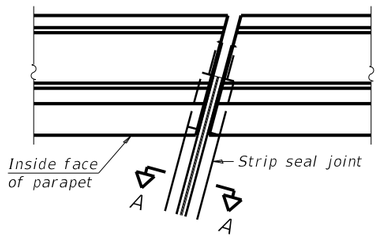
Note:
Removal and replacement of guardrail necessary to complete the proposed joint work shall be included in the cost of Preformed Joint Strip Seal and no other compensation shall be allowed.



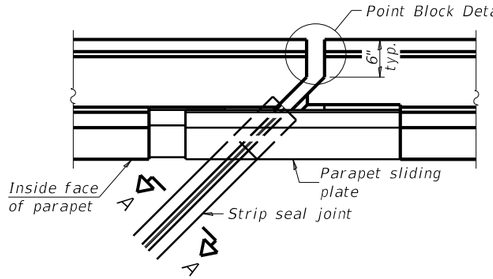
SECTION A-A



SECTION B-B

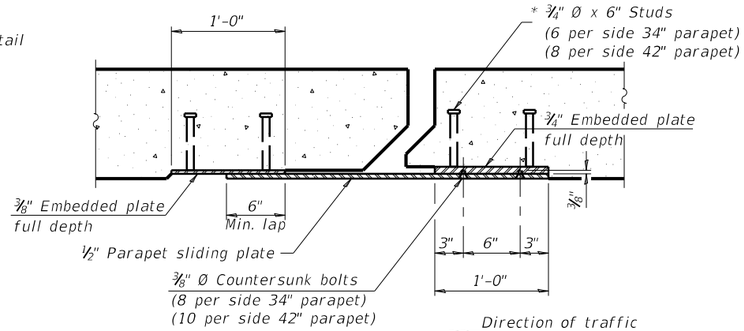


FOR SKEWS ≤ 30°

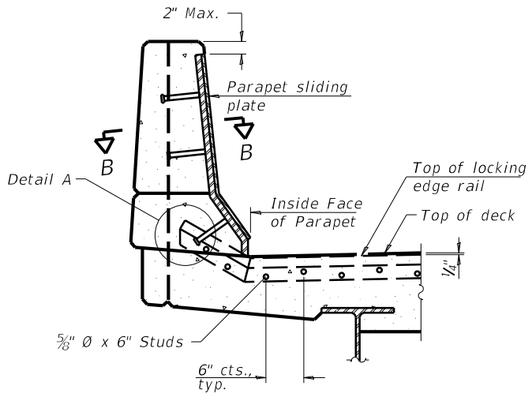


FOR SKEWS > 30°

PLAN AT PARAPET

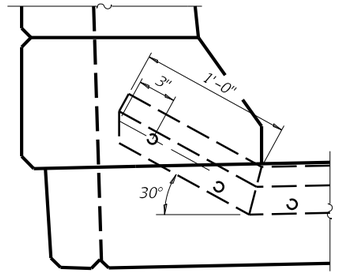


SECTION B-B

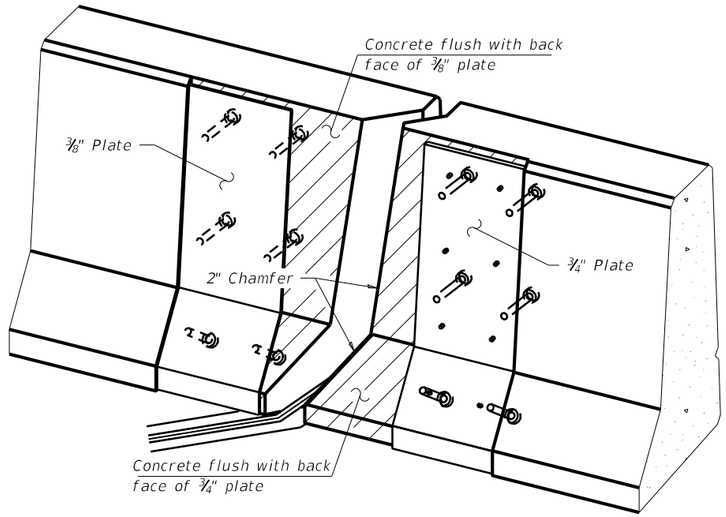


ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW

(Showing embedded plates only)

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.

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.

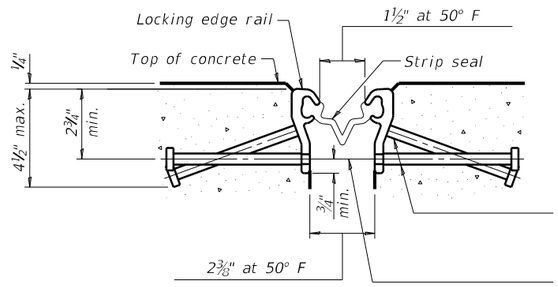
The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.

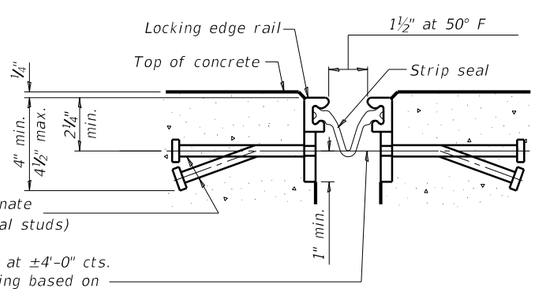
Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

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



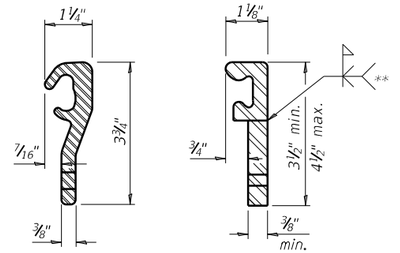
SHOWING WELDED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

⅞" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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



ROLLED (EXTRUDED) RAIL

WELDED RAIL

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

EJ-SS

8-11-17

USER NAME = LamportCP	DESIGNED - _____	REVISED - _____
	DRAWN - _____	REVISED - _____
PLOT SCALE = 55.0000 ' / in.	CHECKED - _____	REVISED - _____
PLOT DATE = 12/13/2018	DATE - _____	REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
SN 100-0033

SCALE: _____ SHEET __ OF __ SHEETS STA. _____ TO STA. _____

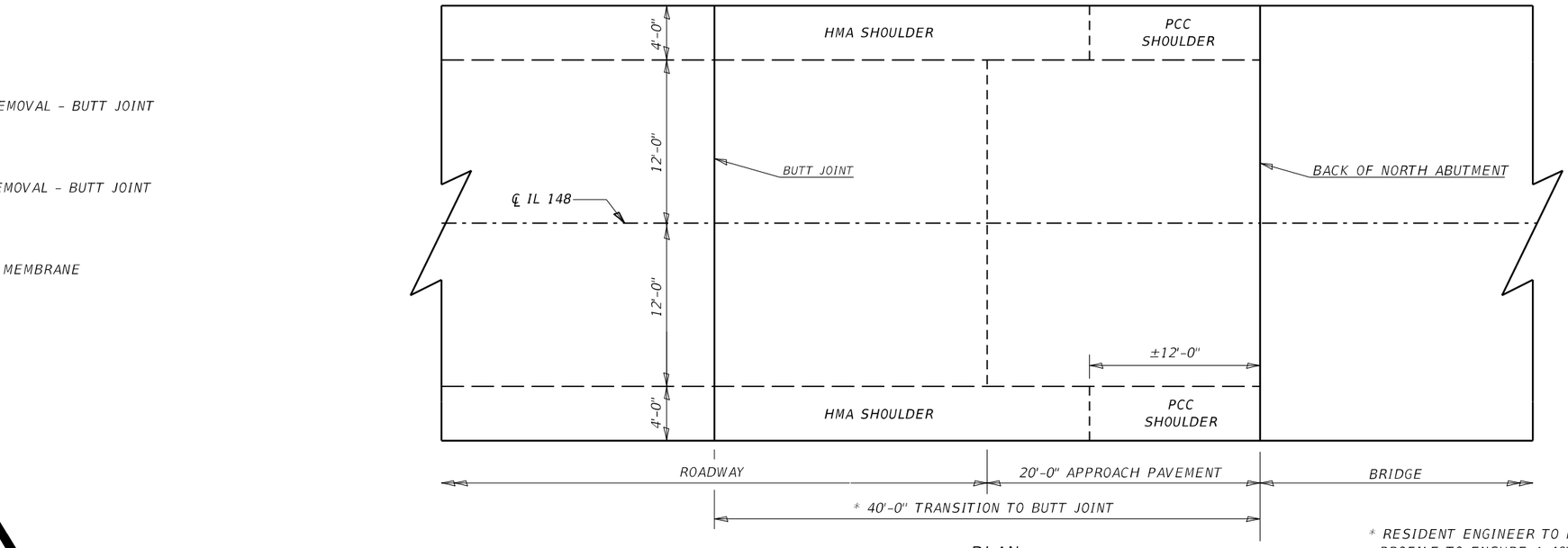
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	18
		CONTRACT NO. 78662		
	ILLINOIS	FED. AID PROJECT		

MODEL: Default
FILE NAME: pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT1Documents\IDOT Offices\District 9\Projects\78662\CADData\Design\D978662-Design.dgn

HMA SURFACE REMOVAL - BUTT JOINT

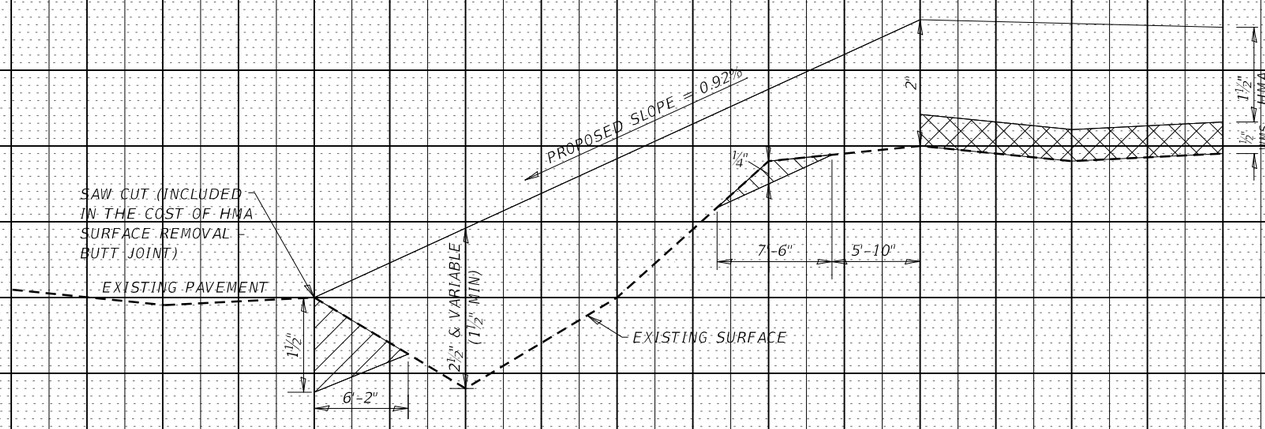
PCC SURFACE REMOVAL - BUTT JOINT

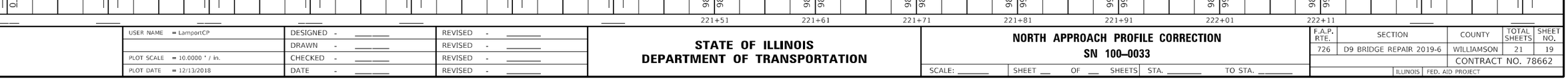
WATERPROOFING MEMBRANE



PLAN

* RESIDENT ENGINEER TO FIELD VERIFY EXISTING PROFILE TO ENSURE A 40'-0" TRANSITION LENGTH IS ADEQUATE TO BRIDGE EXISTING DEPRESSION. LENGTHEN TRANSITION AS NECESSARY.





PROFILE
SURVEYED
PLOTTED
DRAWN
CHECKED
NOTE BOOK
NO.
BY
DATE
ALIGNMENT CHECKED
R.I. OF WAY CHECKED
CADD FILE NAME
ISM. NOTED
STRUCTURE NOTATNS CHKD

PLAN
SURVEYED
PLOTTED
DRAWN
CHECKED
NOTE BOOK
NO.
BY
DATE
ALIGNMENT CHECKED
R.I. OF WAY CHECKED
CADD FILE NAME
ISM. NOTED
STRUCTURE NOTATNS CHKD

MODEL: Default
FILE NAME: pw:\\IL084:BIDINTEG.Illinois.zpov:PWIDOT\Documents\IDOT Offices\District 9\Projects\78662\CADData\Design\D978662-Design.dgn

USER NAME = LamportCP	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 10.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 12/13/2018	DATE -	REVISED -

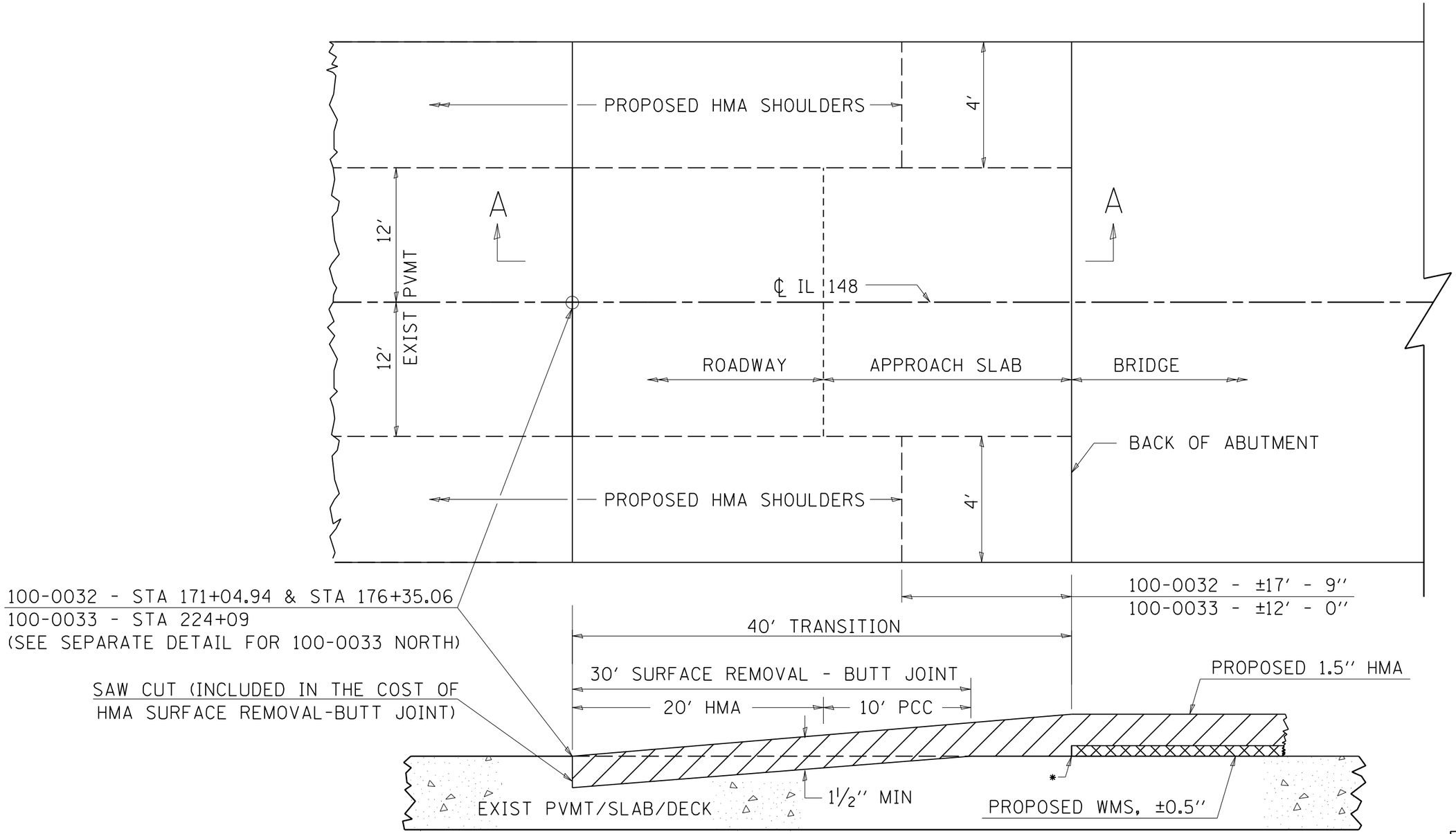
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH APPROACH PROFILE CORRECTION
SN 100-0033

SCALE: _____ SHEET __ OF __ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	19
		CONTRACT NO. 78662		
		ILLINOIS	FED. AID PROJECT	

BUTT JOINT



* ON SN100-0032 EXTEND WMS 1' BEYOND ABUTMENTS
TO INCLUDE COVERAGE OVER THE FIXED JOINT

SECTION A-A

REVISIONS

DRAWN	10-17-90
REVISED	01-11-07
REVISED	3-25-08
REVISED	5-17-13
REVISED	02-17-17
REVISED	03-09-17

STD. 9-86

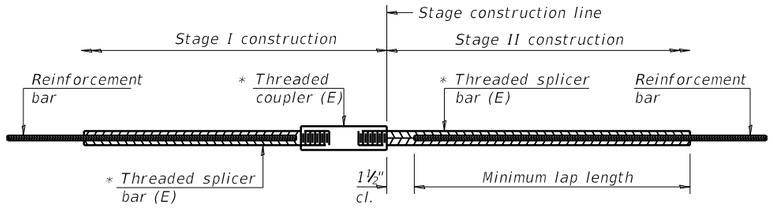
FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 9\Projects\78662\Data\Design\D978662-Design.dgn	USER NAME = LamportCP	DESIGNED -	REVISED -
	PLOT SCALE = 50.0000 ' / in.	DRAWN -	REVISED -
Default	PLOT DATE = 12/13/2018	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT DETAIL

SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	20
		CONTRACT NO. 78662		
		ILLINOIS FED. AID PROJECT		

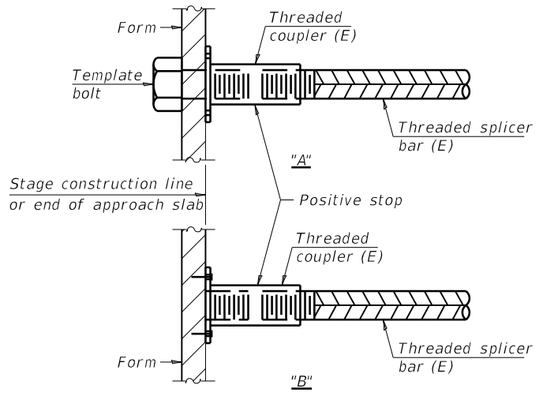


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1½" + thread length

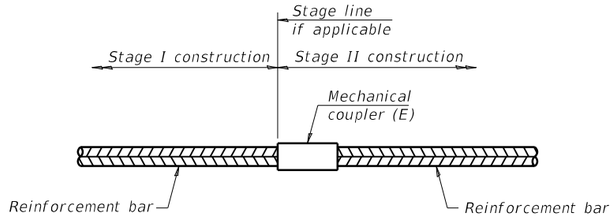
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
100-0032 - ℄ at Joint Repairs	#5	8	3'-1"
100-0033 - ℄ at Joint Repairs	#5	6	3'-1"
100-0033 - ℄ at Joint Repairs	#6	16	4'-5"



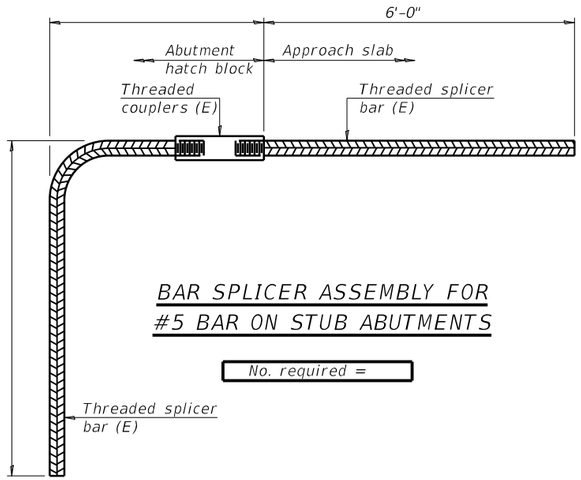
INSTALLATION AND SETTING METHODS

"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



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. 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.

BSD-1

2-17-2017

USER NAME = LamportCP	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 8.3333 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 12/13/2018	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS

SCALE: _____ | SHEET __ OF __ SHEETS | STA. _____ | TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
726	D9 BRIDGE REPAIR 2019-6	WILLIAMSON	21	21
		CONTRACT NO. 78662		
	ILLINOIS FED. AID PROJECT			

MODEL: Default
FILE NAME: pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 9\Projects\78662\CADData\Design\D0978662-Design.dgn