

097

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
904	D9 BRIDGE REPAIRS 2020-1	WILLIAMSON	18	1
			CONTRACT NO 78725	

FOR INDEX OF SHEETS, SEE SHEET NO. 3
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4-6
FOR STRUCTURAL PAVEMENT DESIGN INFORMATION, SEE SHEET NO. NA

PROPOSED HIGHWAY PLANS

F.A.S. 904 (IL 166)
SECTION D9 BRIDGE REPAIR 2020-1
STP-55ZT(534)
BRIDGE REPAIRS OVER S FORK SALINE RELIEF
WILLIAMSON COUNTY

TRAFFIC DATA

IL 166 TRAFFIC DATA
2017 ADT=3100
8% TRUCKS

TOWNSHIPS

CO UNIT ROAD DISTRICT 01

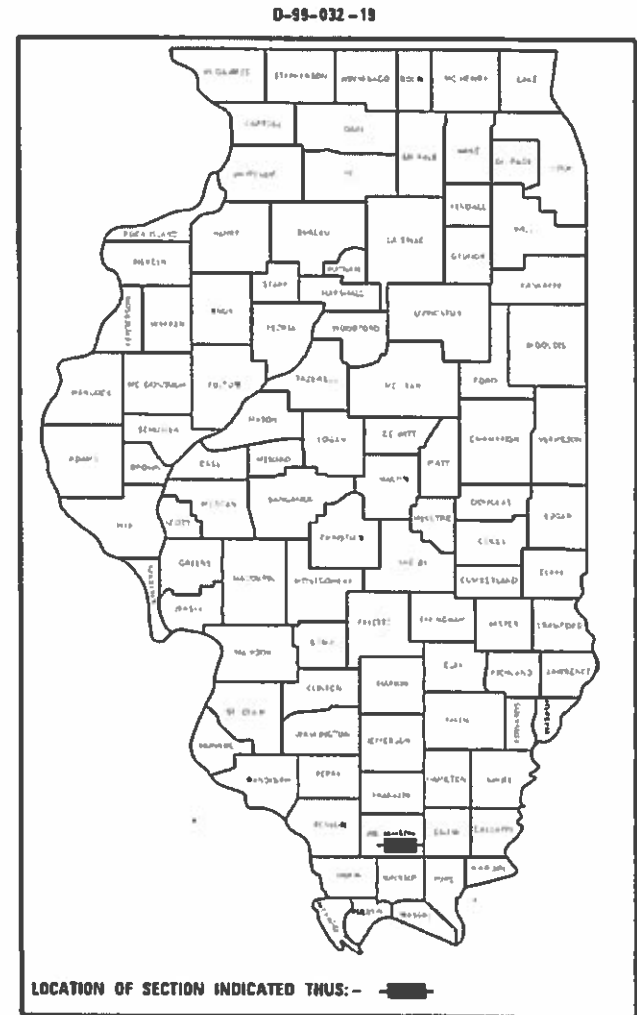
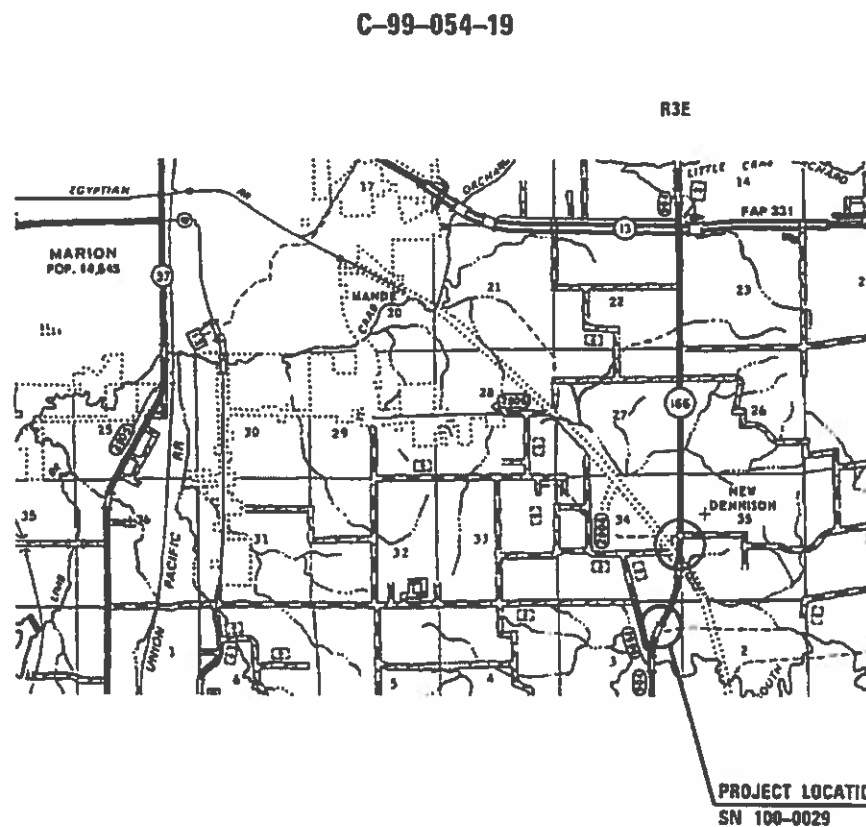
DESIGN DESIGNATION : NA
COORDINATE SYSTEM : ILLINOIS COORDINATE SYSTEM, EAST ZONE
POSTED SPEED : 55 MPH

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: DAVID PICHE
PROJECT DESIGNER: AUSTIN HENK

CONTRACT NO. 78725

GROSS LENGTH = 182.1 FT. = 0.03 MILES
NET LENGTH = 182.1 FT. = 0.03 MILES



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 11-12-2019
[Signature]
REGION FIVE ENGINEER

Jan 31 2020
[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

Jan 31 2020
[Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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Prepared By: Charles Stein
DISTRICT STUDIES & PLANS ENGINEER

Examined By: Nancy New
DISTRICT LAND ACQUISITION ENGINEER

Examined By: Carroll
DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By: Karl Kelly
DISTRICT OPERATIONS ENGINEER

Examined By: [Signature]
DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By: Daryl J. [Signature]
DISTRICT CONSTRUCTION ENGINEER

Examined By: [Signature]
DISTRICT MATERIALS ENGINEER

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	DRAWN - ASH	REVISED -
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PLOT DATE = 10/30/2019	DATE - 10/01/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SIGNATURES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
904	D9 BRIDGE REPAIR 2020-1	WILLIAMSON	18	2
CONTRACT NO. 78725				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

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

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.

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

THE QUANTITY OF SHORT TERM PAVEMENT MARKING SHOWN IN THE PLANS IS BASED ON ONE APPLICATION FOR THE SURFACE COURSE.

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.

COMMITMENTS: NONE

STANDARDS

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
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
701311-03	LANE CLOSURE, 2L2W MOVING OPERATION DAY ONLY
701316-13	LANE CLOSURE, 2L2W BRIDGE REPAIR >45 MPH
701901-08	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS

INDEX OF SHEETS

1	COVER SHEET
2	SIGNATURES
3	INDEX OF SHEETS; GENERAL NOTES; STANDARDS; MIX REQUIREMENTS
4-6	SUMMARY OF QUANTITIES
7	GENERAL PLAN AND ELEVATION
8-9	STAGE CONSTRUCTION DETAILS
10	DECK AND APPROACH SLAB REPAIRS
11-14	JOINT CONSTRUCTION DETAILS
15-16	SUBSTRUCTURE REPAIRS
17	BUTT JOINT DETAILS
18	PAVED SHOULDER REMOVAL

MIXTURE REQUIREMENTS

Locations	Hot-Mix Asphalt Surface Course
Mixture Use(s):	Hot-Mix Asphalt Surface Course, Mix C, N70, Fine Graded
AB/PG:	PG64-22
ABR % (Max):	See Special Provision
Design Air Voids:	4.0 %, 70 Gyration Design
Mixture Composition:	IL-9.5mm Fine Graded
Friction Aggregate:	C Surface
Mixture Weight:	112 lbs/Sq Yd/in QCQA
Quality Management Program:	
Sublot Size:	NA

Locations	Hot-Mix Asphalt Binder, Base Course Widening
Mixture Use(s):	Hot-Mix Asphalt Binder Course, N70, IL-19.0
AB/PG:	PG64-22
ABR % (Max):	See Special Provision
Design Air Voids:	4.0 %, 70 Gyration Design
Mixture Composition:	IL-19.0mm
Friction Aggregate:	None
Mixture Weight:	112 lbs/Sq Yd/in QCQA
Quality Management Program:	
Sublot Size:	NA

REV. - MS

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PLOT DATE = 11/13/2019	DATE - 10/01/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES, STANDARDS,
INDEX OF SHEETS, AND MIX REQUIREMENTS**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
904	D9 BRIDGE REPAIR 2020-1	WILLIAMSON	18	3
CONTRACT NO. 78725				
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES

COUNTY:	WILLIAMSON
ROUTE:	IL 166
FUNDING:	80% FED 20% STATE
LOCATION:	RURAL
	SN 100-0029
	0013

CODE NUMBER	ITEM DESCRIPTION	UNIT	
35600716	HOT-MIX ASPHALT BASE COURSE WIDENING, 10"	SQ YD	54
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	285
40600990	TEMPORARY RAMP	SQ YD	53
40700100	BITUMINOUS MATERIALS (TACK COAT)	POUND	348
44004250	PAVED SHOULDER REMOVAL	SQ YD	54
50102400	CONCRETE REMOVAL	CU YD	2.4
50300255	CONCRETE SUPERSTRUCTURE	CU YD	2.5
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	450
50800515	BAR SPLICERS	EACH	8
52000110	PREFORMED JOINT STRIP SEAL	FOOT	75
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	539
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4

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PLOT DATE = 11/13/2019	DATE - 10/01/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
904	D9 BRIDGE REPAIR 2020-1	WILLIAMSON	18	4
CONTRACT NO. 78725				
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES - CONT

COUNTY:	WILLIAMSON
ROUTE:	IL 166
FUNDING:	80% FED 20% STATE
LOCATION:	RURAL
	SN 100-0029
	0013

CODE NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY
67100100	MOBILIZATION	L SUM	1
70100100	TRAFFIC CONTROL AND PROTECTION, STANDARD 701316	EACH	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28
70300100	SHORT TERM PAVEMENT MARKING	FOOT	109
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	37
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1,272
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1,272
* 86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
40604052	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, MIX "C", N70	TON	87
X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	276

* SPECIALTY ITEM

REV. - MS

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PLOT DATE = 11/13/2019	DATE - 10/01/2019	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO
ILLINOIS FED. AID PROJECT										

SUMMARY OF QUANTITIES - CONT

COUNTY:	WILLIAMSON
ROUTE:	IL 166
FUNDING:	80% FED 20% STATE
LOCATION:	RURAL
	SN 100-0029
	0013

CODE NUMBER	ITEM DESCRIPTION	UNIT	
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	424
Z0001700	APPROACH SLAB REPAIR (FULL DEPTH)	SQ YD	3
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	24
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	1

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PLOT DATE = 11/13/2019	DATE - 10/01/2019	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO
ILLINOIS FED. AID PROJECT										

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.

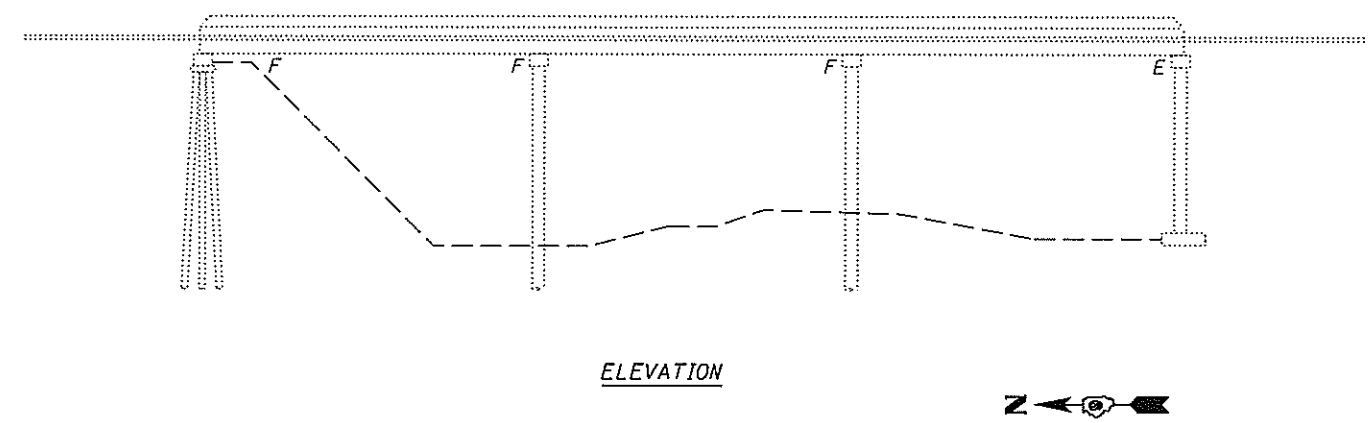
Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Reinforcement bars designated (E) shall be epoxy coated.


Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on as-built plans.

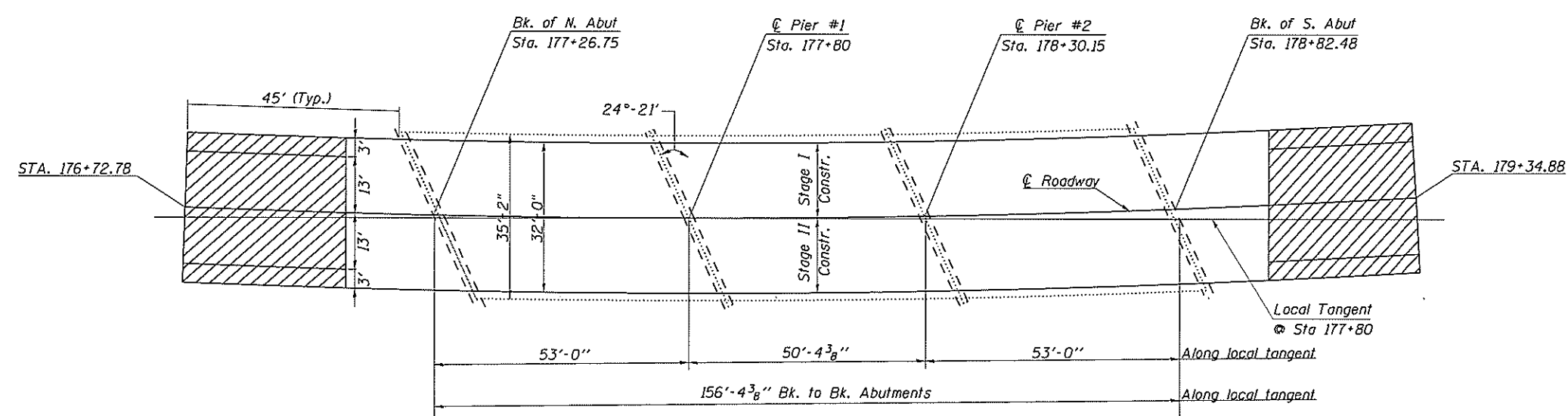
The deck surface final finish shall be tined according to Article 420.09(e)(1) of the Standard Specifications, cost included with Concrete Superstructure.

The cost to remove and re-erect the terminals attached to the parapets shall be included in the cost of Concrete Removal.



LEGEND:

 HMA Surface Removal - Butt Joint



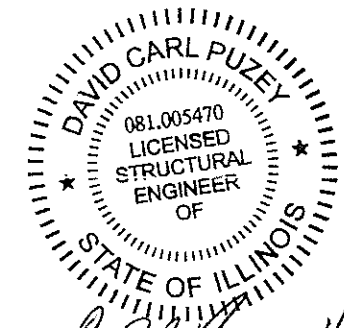
PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	2.4
Concrete Superstructure	Cu. Yd.	2.5
Reinforcement Bars, Epoxy Coated	Pound	450
Bar Splicers	Each	8
Preformed Joint Strip Seal	Foot	75
Waterproofing Membrane System	Sq. Yd.	539
Hot-Mix Asphalt Surface Course, IL-9.5 FG, N70	Ton	87
Structural Repair of Concrete (Depth < 5 Inches)	Sq. Ft.	24
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	1
Approach Slab Repair (Full Depth)	Sq. Yd.	3

Scope of Work

- 1) Setup Traffic Control Std 701316 for Stage I Work in Northbound Lane
- 2) Remove Existing Bridge Joints and Replace with Preformed Joint Strip Seal
- 3) Perform Deck and Approach Slab Repairs and Install WMS and HMA Overlay
- 4) Switch Stages and Repeat
- 5) Substructure Repairs

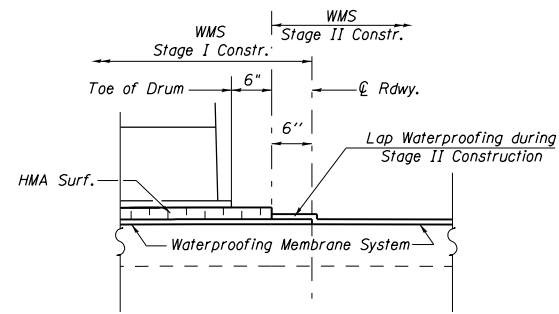


David Carl Puzey 1/28/2020
Expires 1/30/2020

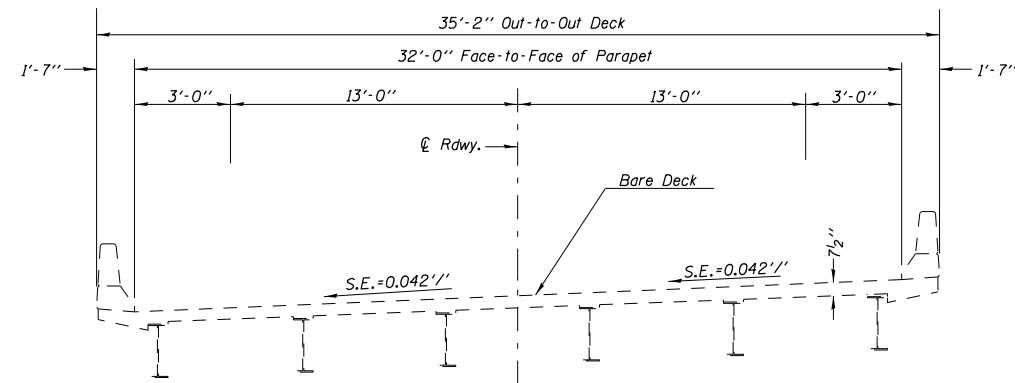
**BRIDGE REPAIR
ILLINOIS ROUTE 166 (FAS 904)
OVER S FORK SALINE RELIEF
WILLIAMSON COUNTY
STATION 177+80
SN 100-0029**

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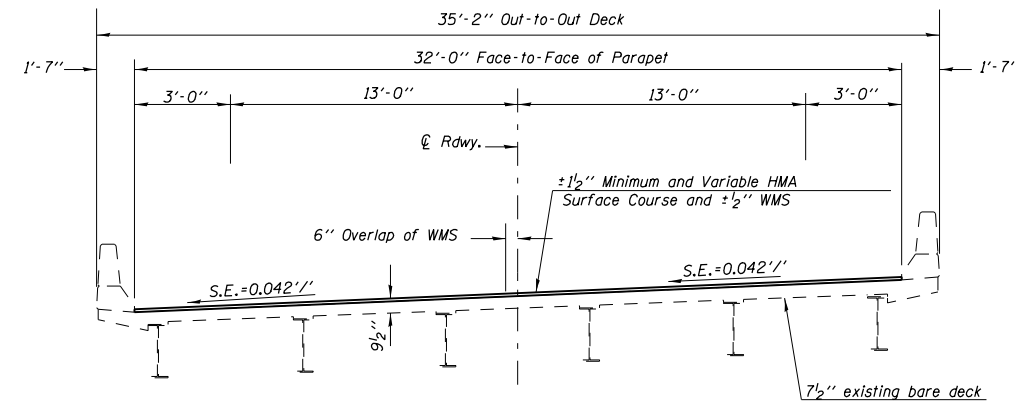
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PLOT DATE = 11/13/2019	CHECKED - MAS	REVISED -		ILLINOIS FED. AID PROJECT						
	DATE - 10/01/2019	REVISED -								



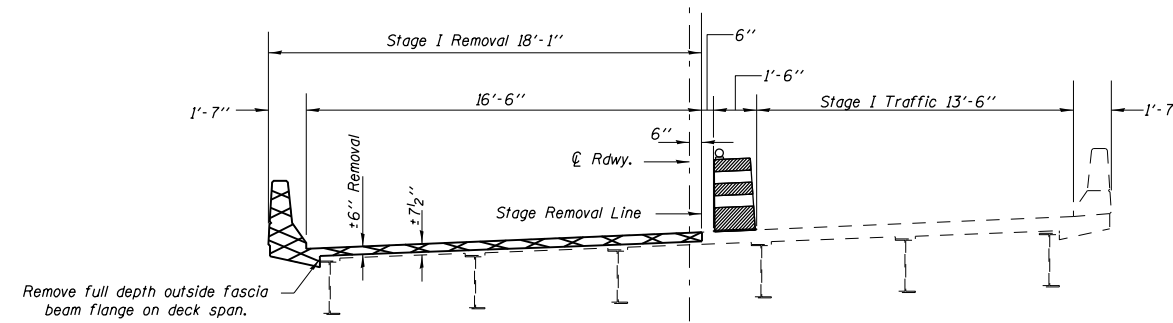
WATERPROOFING TREATMENT AT STAGE CONSTRUCTION



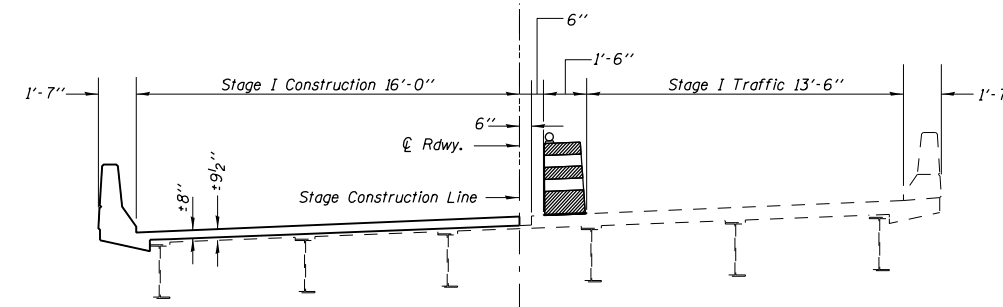
TYPICAL BRIDGE SECTION - EXISTING



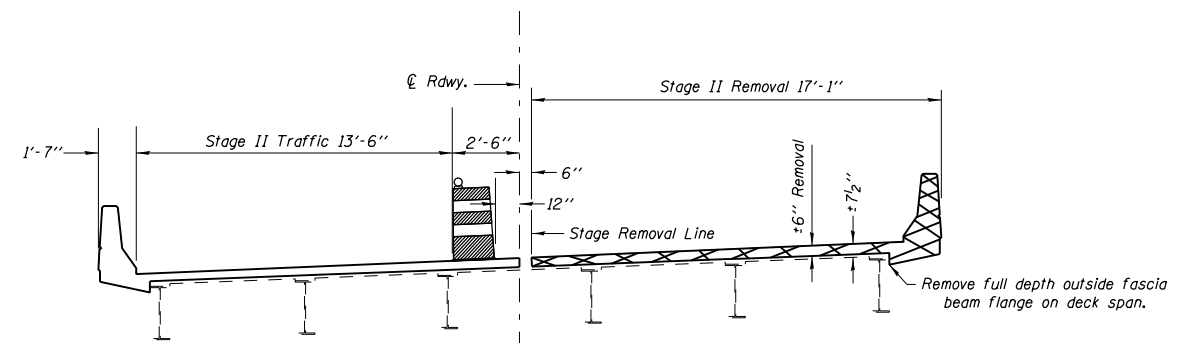
TYPICAL BRIDGE SECTION - PROPOSED



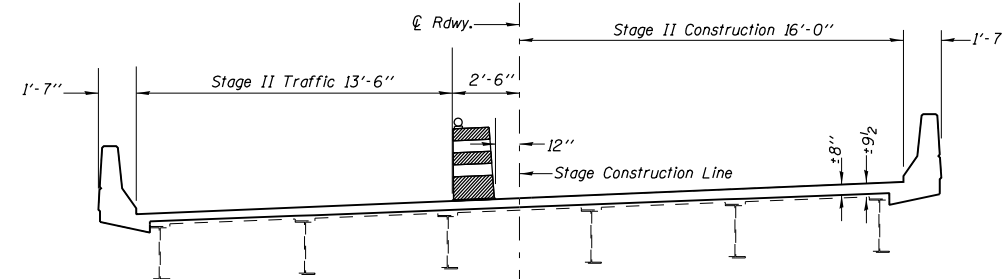
STAGE I REMOVAL (At joint locations only)



STAGE I CONSTRUCTION (At joint locations only)



STAGE II REMOVAL (At joint locations only)



STAGE II CONSTRUCTION (At joint locations only)

LEGEND:

Concrete Removal

Notes: All Sections looking South

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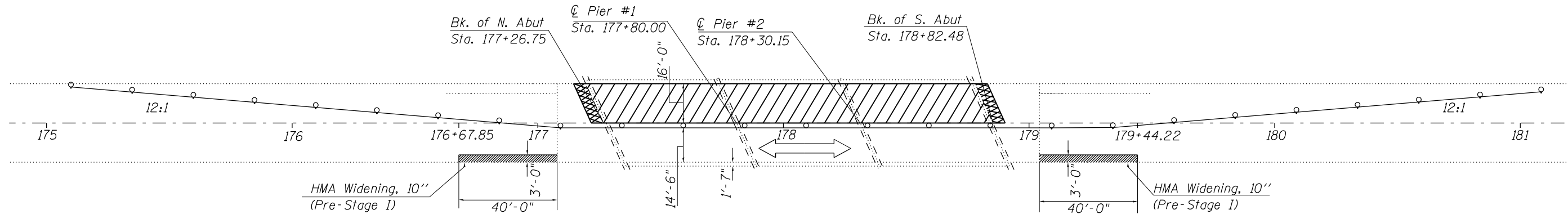
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

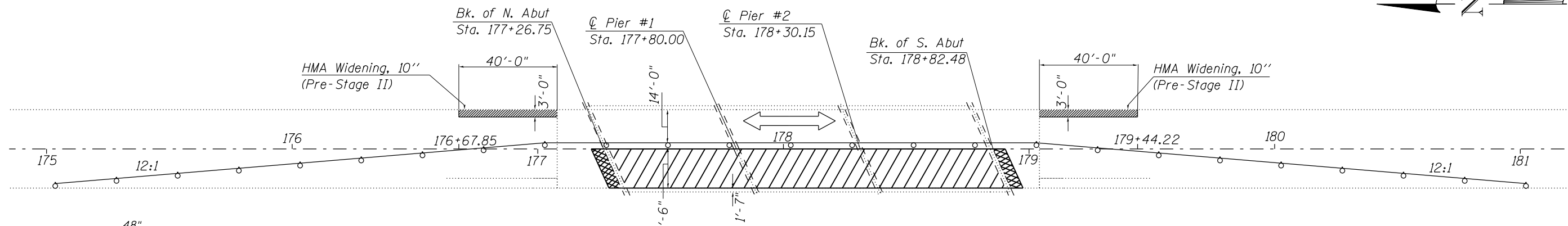
STAGE CONSTRUCTION DETAILS

SCALE: SHEET OF SHEETS STA. TO STA.

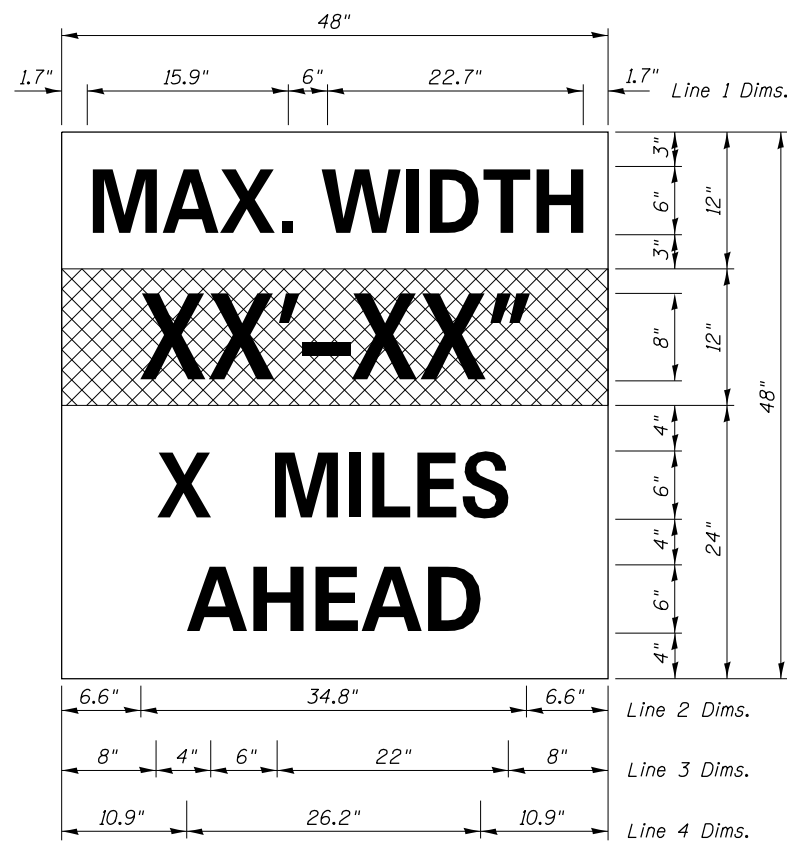
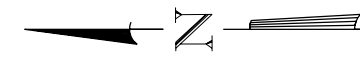
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
904	D9 BRIDGE REPAIR 2020-1	WILLIAMSON	18	8
			CONTRACT NO. 78725	
ILLINOIS FED. AID PROJECT				



STAGE I TRAFFIC



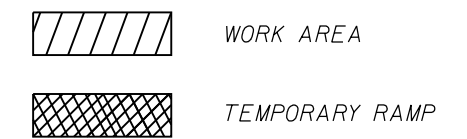
STAGE II TRAFFIC



W12-I103

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

LEGEND:



Notes for Max Width Sign:

1. Install a Max Width Sign each direction on IL 166 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-I103 sign shall be 18" less than what is shown in the staged lane widths or as directed by the Engineer.
5. The "X" MILES AHEAD will be determined by the engineer.

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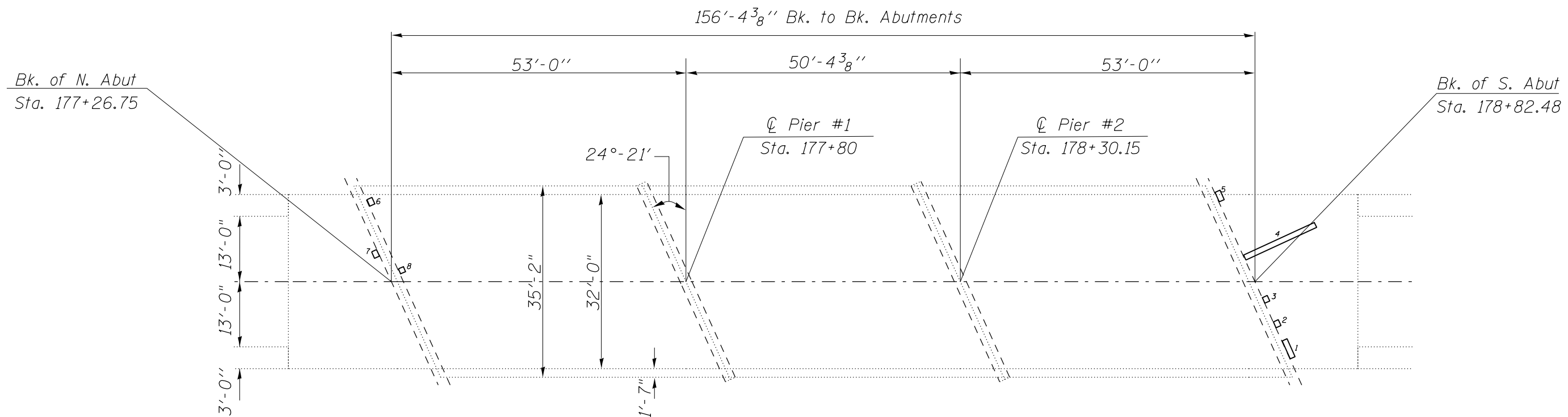
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE CONSTRUCTION DETAILS

SCALE: SHEET OF SHEETS STA. TO STA.

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904	D9 BRIDGE REPAIR 2020-1	WILLIAMSON	18	9
CONTRACT NO. 78725				
ILLINOIS FED. AID PROJECT				



PLAN

Number	Length (ft)	Width (ft)	Area (sq yd)
1	1.0	3.6	0.4
2	1.0	1.2	0.1
3	1.0	1.1	0.1
4	14.3	1.0	1.6
5	1.0	1.9	0.2
6	1.0	1.3	0.1
7	1.0	1.3	0.1
8	1.0	1.0	0.1

Notes: Deck sounding was performed in April 2019
 The Resident Engineer will determine final patch locations and quantities in the field before bridge deck patching operations begin.

BILL OF MATERIAL

Item	Unit	Total
Deck Slab Repair (Full Depth, Type I)	SQ YD	1
Approach Slab Repair (Full Depth)	SQ YD	3

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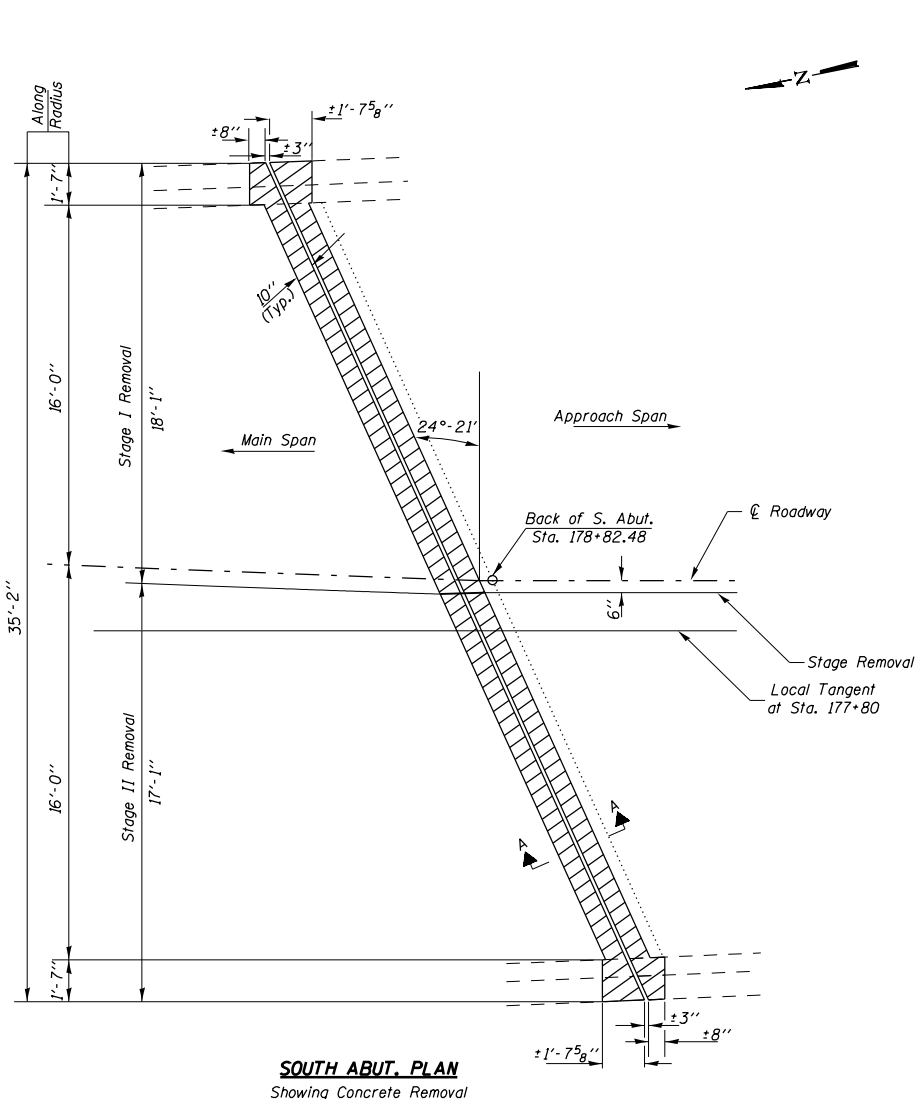
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**STATE OF ILLINOIS
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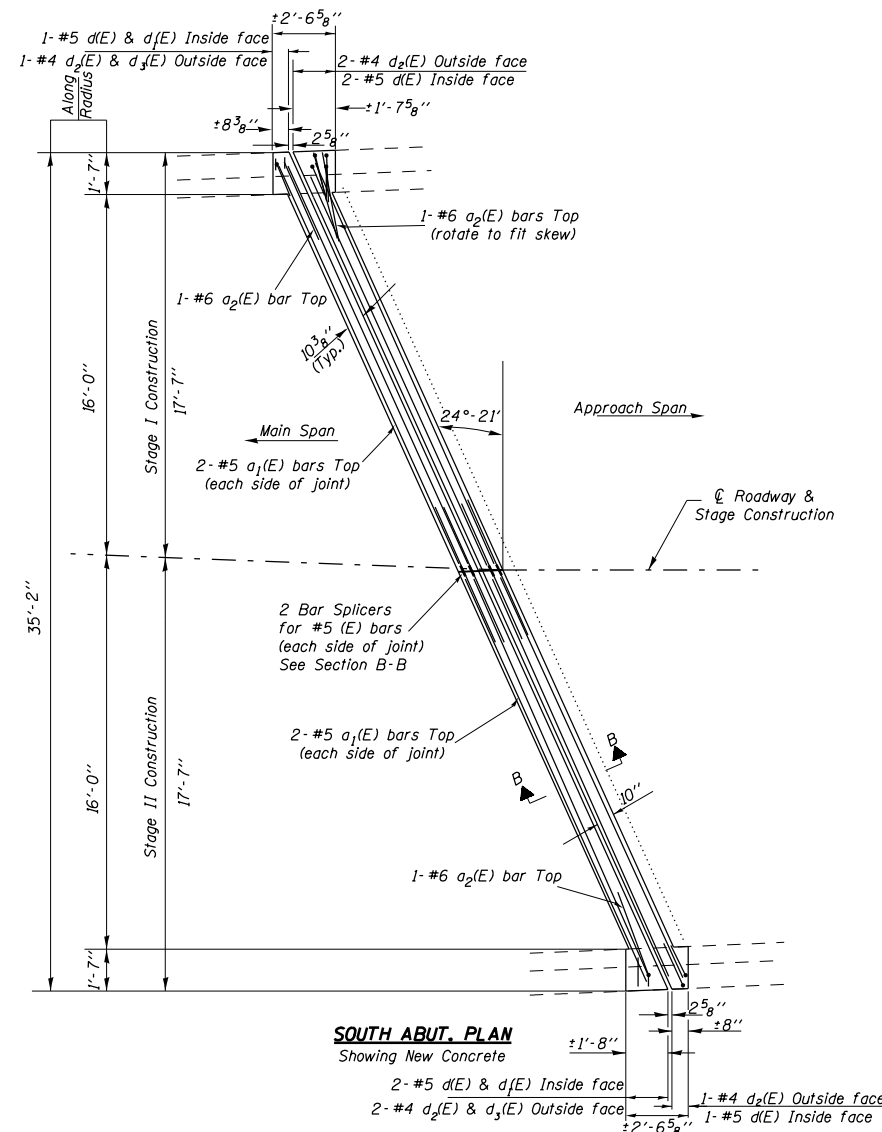
DECK AND APPROACH SLAB REPAIRS

SCALE: SHEET OF SHEETS STA. TO STA.

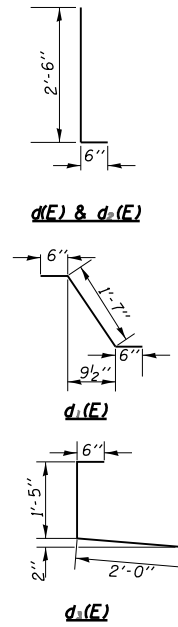
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CONTRACT NO. 78725				
ILLINOIS FED. AID PROJECT				



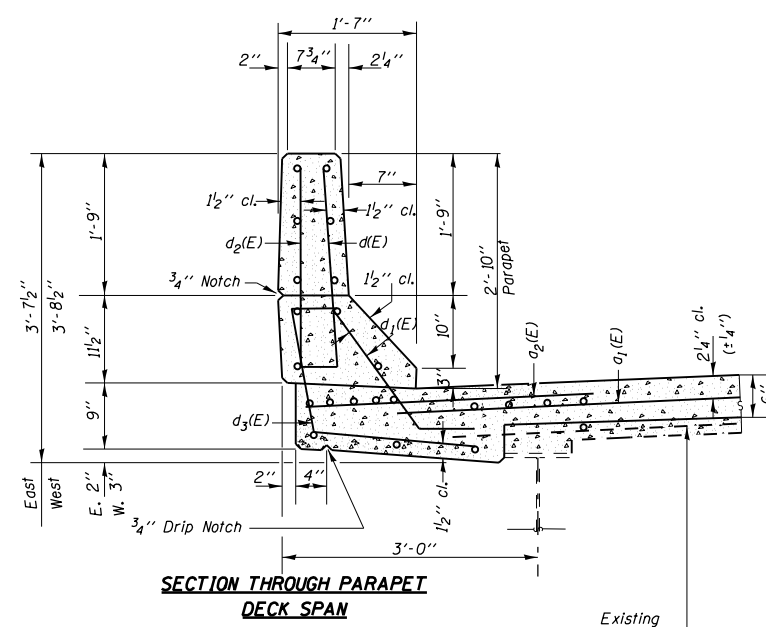
SOUTH ABUT. PLAN
Showing Concrete Removal



SOUTH ABUT. PLAN
Showing New Concrete

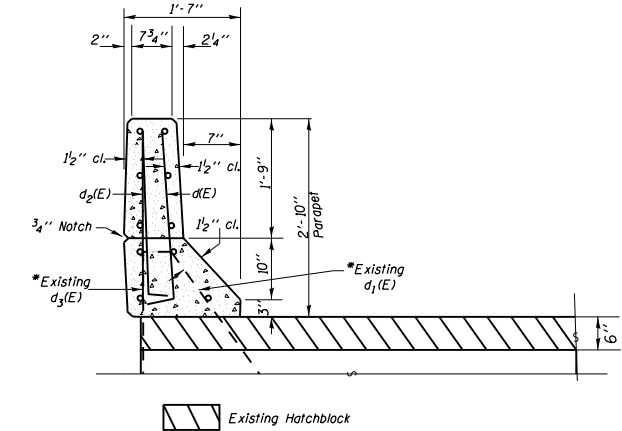


d(E) & d1(E)
d1(E)



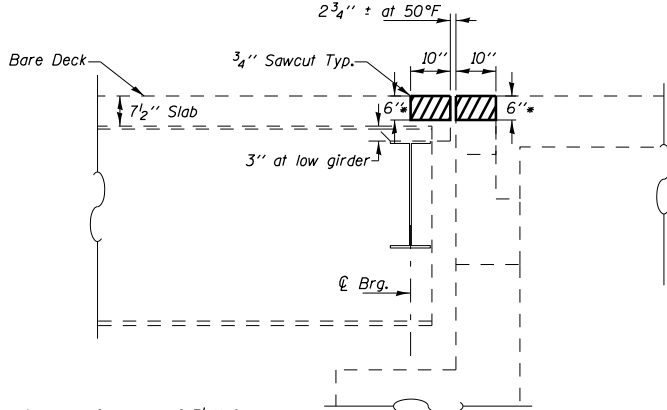
SECTION THROUGH PARAPET DECK SPAN

Existing Reinforcement (to remain)

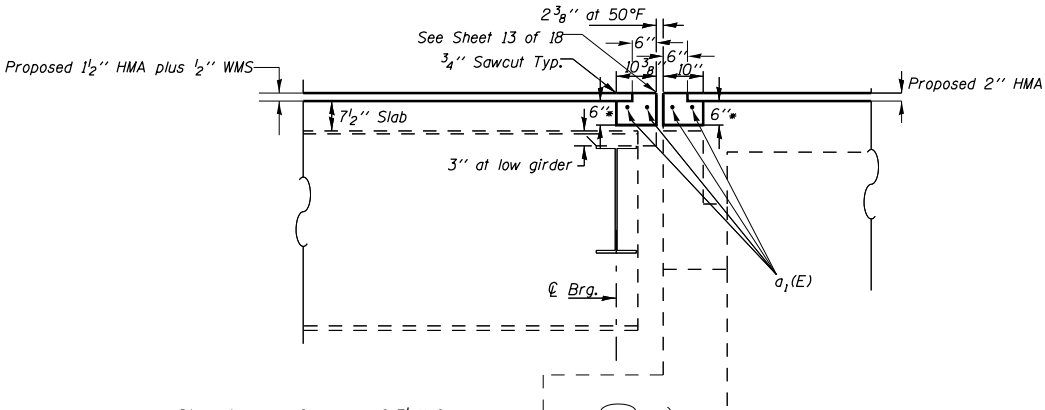


SECTION THROUGH PARAPET APPROACH SPAN

Existing Hatchblock



SECTION A-A
Dimensions measured at Right Angles



SECTION B-B
Dimensions measured at Right Angles

BILL OF MATERIAL (BOTH ABUTS)

Bar No.	Size	Length	Shape
a1(E)	#5	18'-10"	—
a2(E)	#6	4'-0"	—
d(E)	#5	3'-0"	—
d1(E)	#5	2'-7"	—
d2(E)	#4	3'-0"	—
d3(E)	#4	3'-11"	—
d4(E)	#5	2'-10"	—
Bar Splicer	Each	8	
Concrete Superstructure	Cu. Yd.	2.5	
Concrete Removal	Cu. Yd.	2.4	
Reinforcement Bars, Epoxy Coated	Pound	450	

* To be cleaned and incorporated into the new construction.

JOINT RECONSTRUCTION DETAILS AT SOUTH ABUTMENT
WILLIAMSON COUNTY
SN 100-0029

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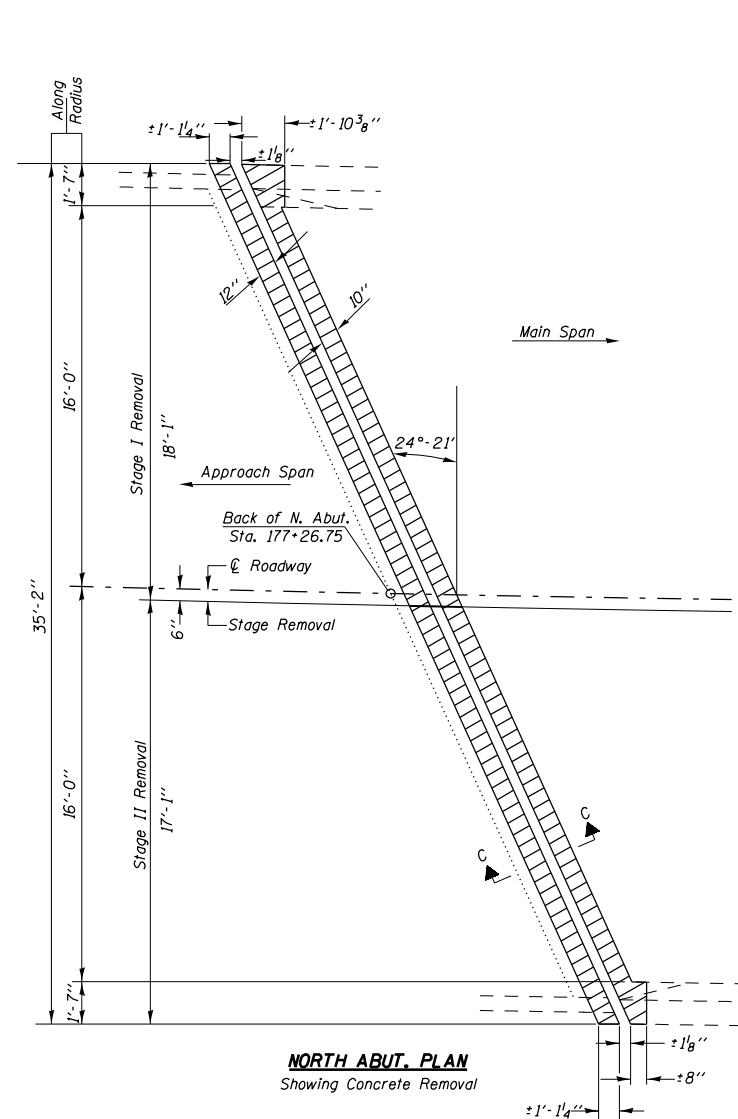
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

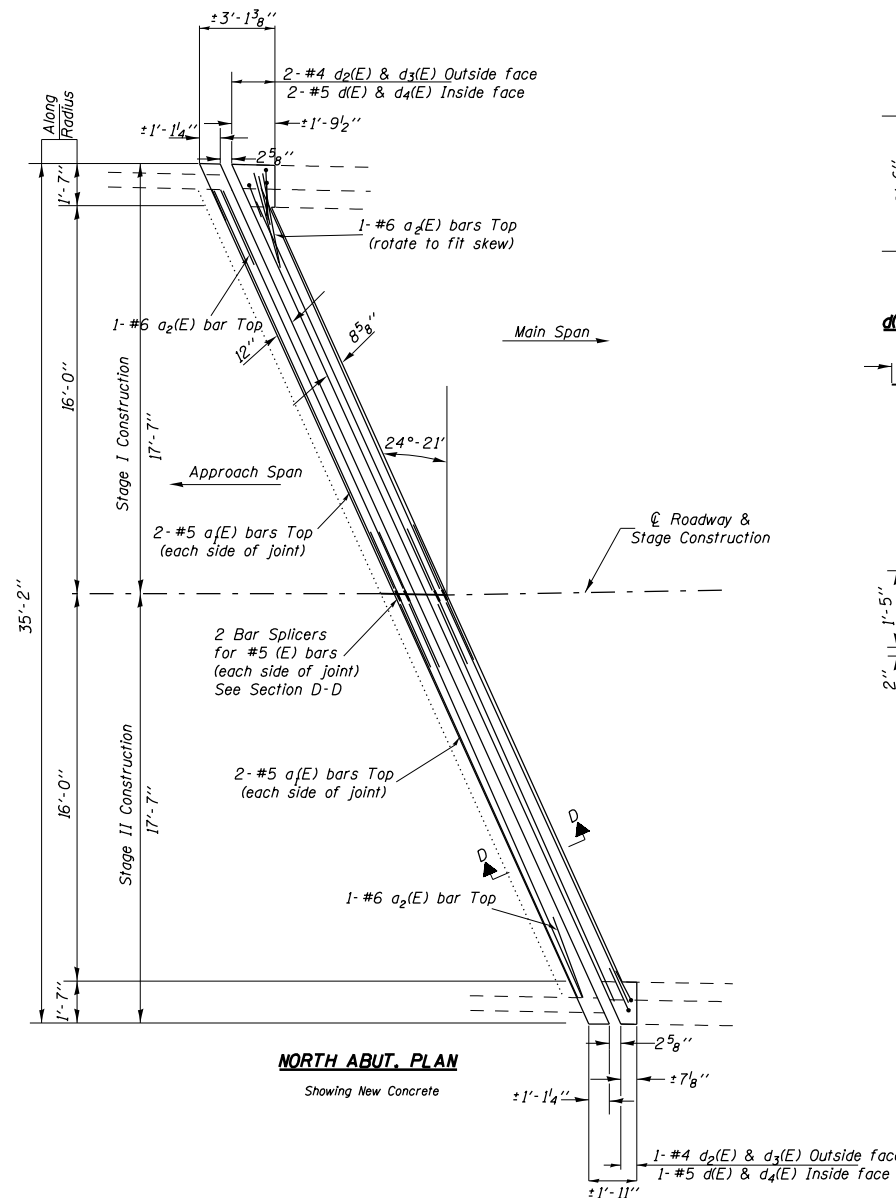
JOINT RECONSTRUCTION DETAILS AT SOUTH ABUTMENT
SN 100-0029

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
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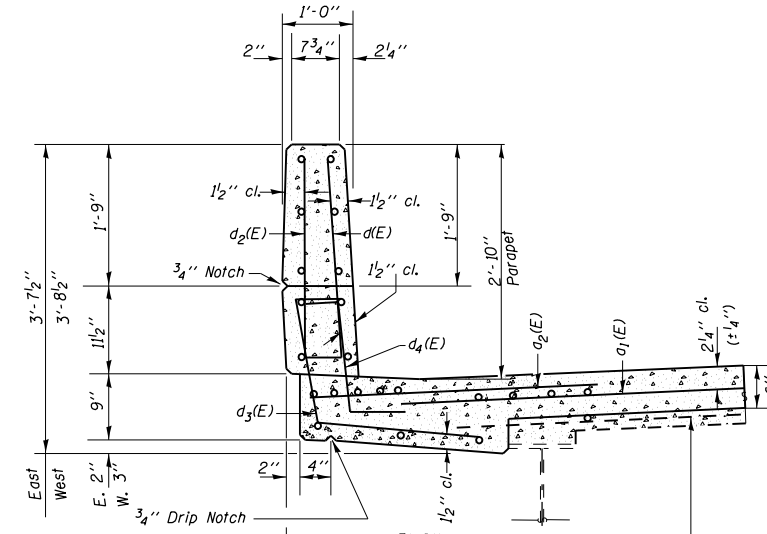
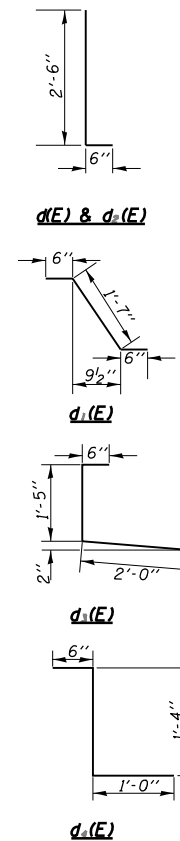
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904	D9 BRIDGE REPAIR 2020-1	WILLIAMSON	18	11
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78725	



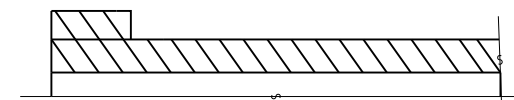
NORTH ABUT. PLAN
Showing Concrete Removal



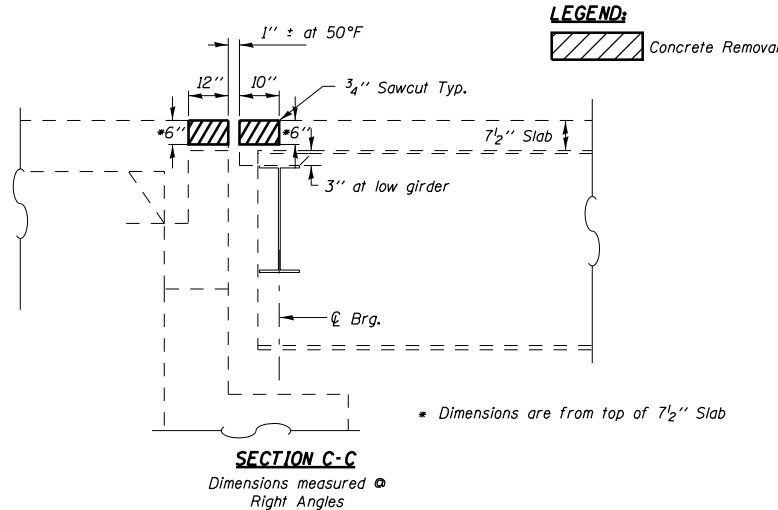
NORTH ABUT. PLAN
Showing New Concrete



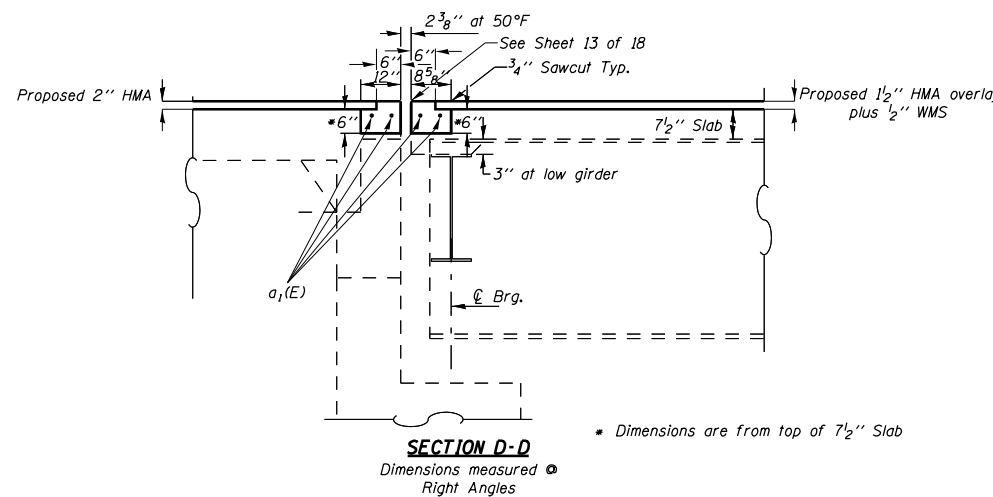
SECTION THROUGH PARAPET DECK SPAN



SECTION THROUGH CURB APPROACH SPAN



SECTION C-C
Dimensions measured at Right Angles



SECTION D-D
Dimensions measured at Right Angles

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

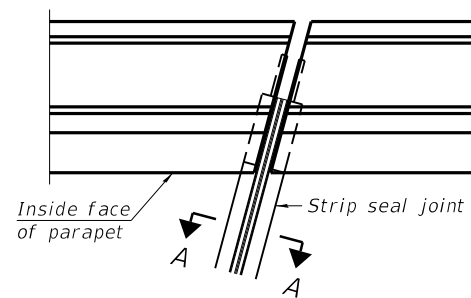
JOINT RECONSTRUCTION DETAILS AT NORTH ABUTMENT
SN 100-0029

JOINT RECONSTRUCTION
DETAILS AT NORTH ABUTMENT
WILLIAMSON COUNTY
SN 100-0029

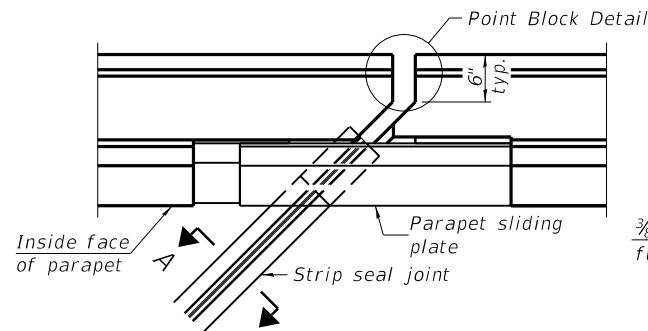
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F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 78725				
ILLINOIS FED. AID PROJECT				

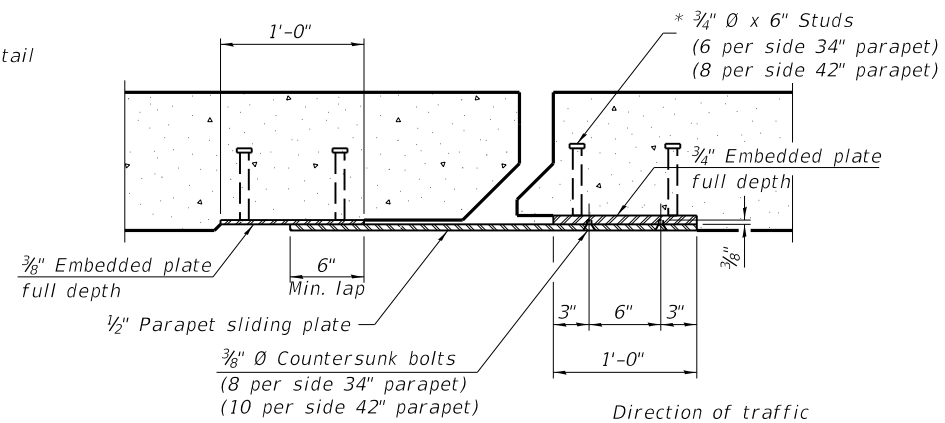


FOR SKEWS $\leq 30^\circ$

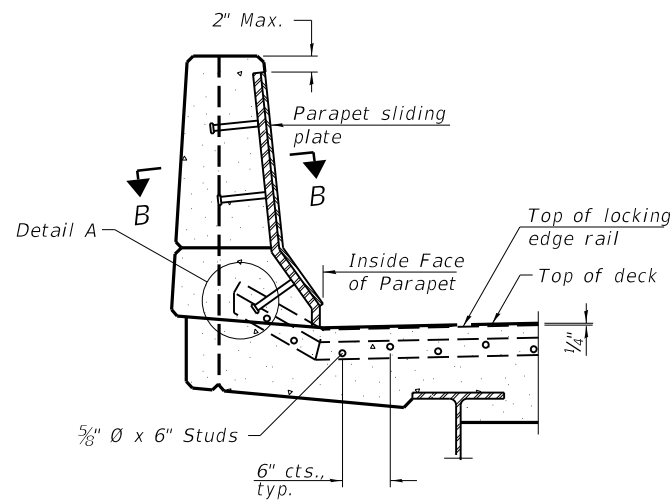


FOR SKEWS $> 30^\circ$

PLAN AT PARAPET

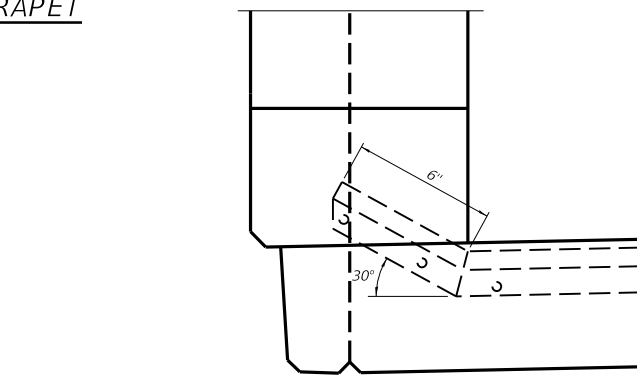


SECTION B-B

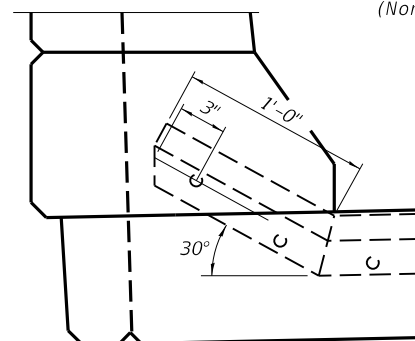


ELEVATION AT PARAPET

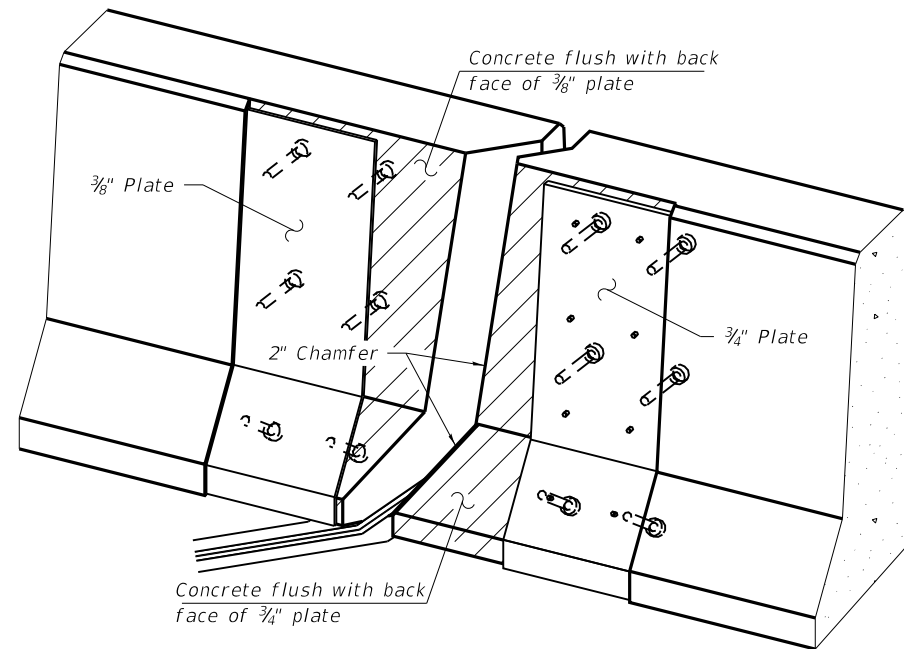
(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)



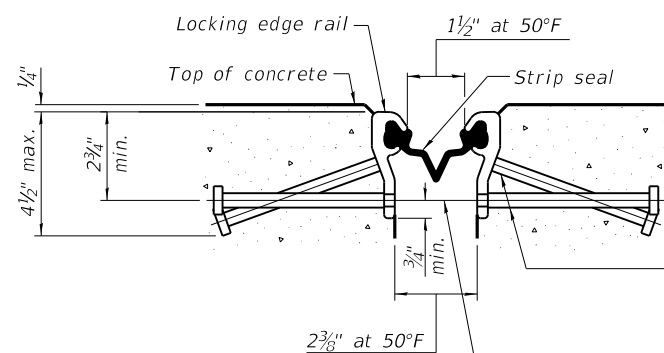
DETAIL A
(North Abutment)



DETAIL A
(South Abutment)



TRIMETRIC VIEW
(Showing embedded plates only)



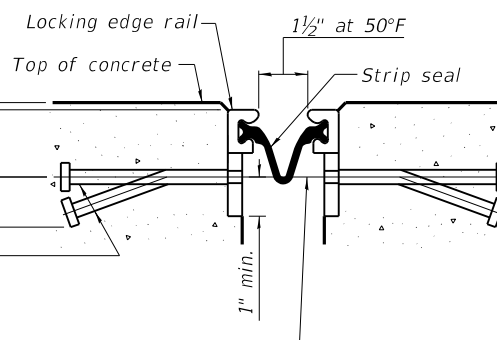
SHOWING ROLLED RAIL JOINT

* $5/8"$ ϕ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

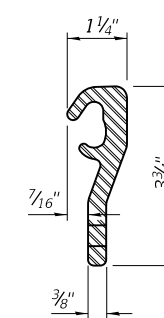
$3/8"$ ϕ threaded rods in $7/16"$ ϕ holes at $\pm 4'-0"$ cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

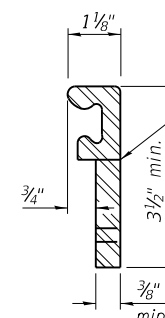
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



SHOWING WELDED RAIL JOINT



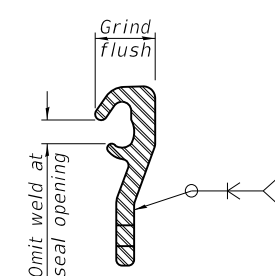
ROLLED (EXTRUDED) RAIL



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	75

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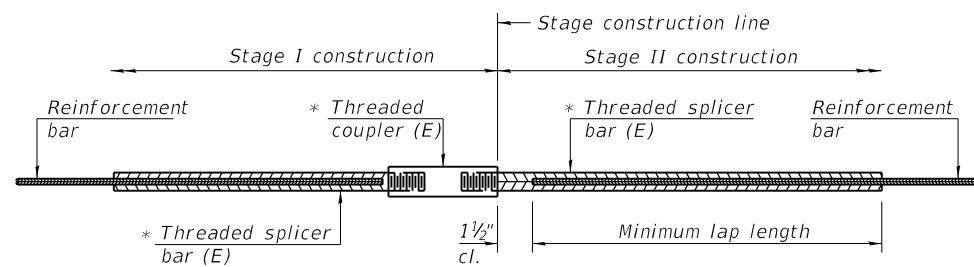
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	DATE - 10/01/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PREFORMED JOINT STRIP SEAL
SN 100-0029**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 78725				
ILLINOIS / FED. AID PROJECT				

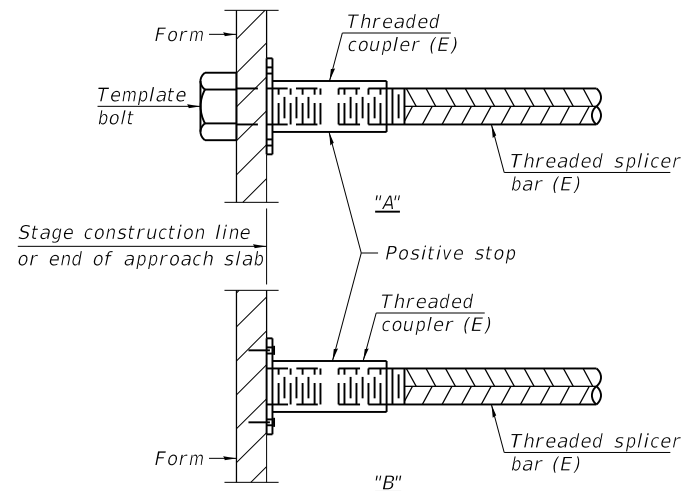


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

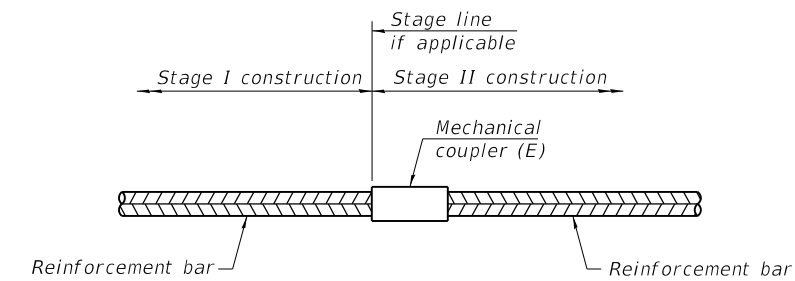
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
at Joint Repairs	#5	8	3'-0"



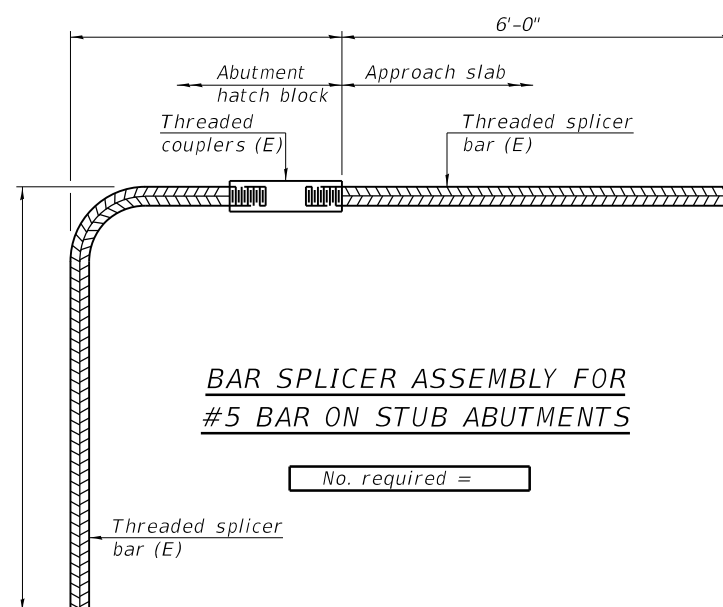
INSTALLATION AND SETTING METHODS

"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



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.

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BSD-1

2-17-2017

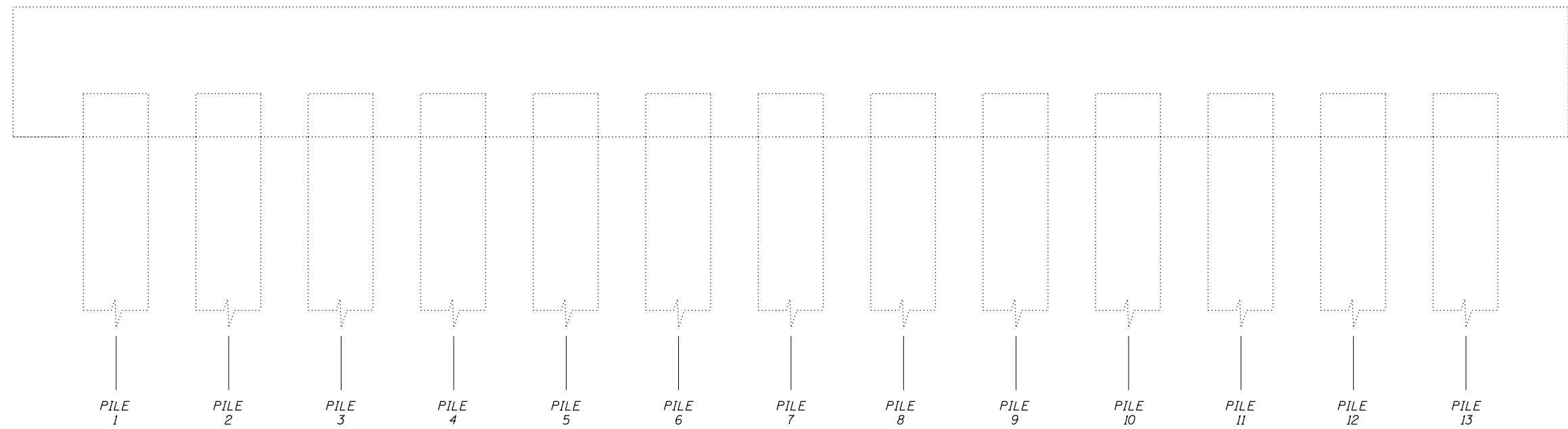
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

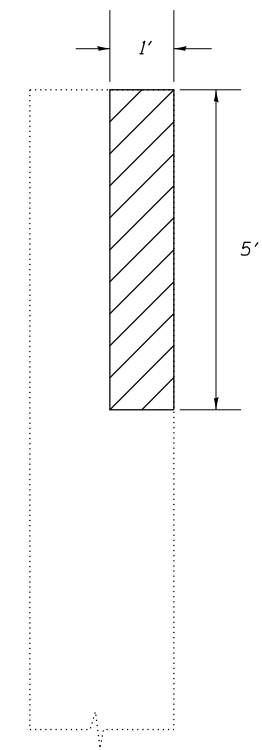
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 78725				
ILLINOIS FED. AID PROJECT				

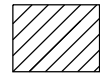


ELEVATION - PIER 1
LOOKING NORTH



PILE 12
EAST FACE

LEGEND:

 Structural repair of concrete
(Depth equal to or less than 5 inches)

BILL OF MATERIAL

Item	Unit	Quantity
Structural repair of concrete (Depth equal to or less than 5 inches)	Sq. Ft.	5

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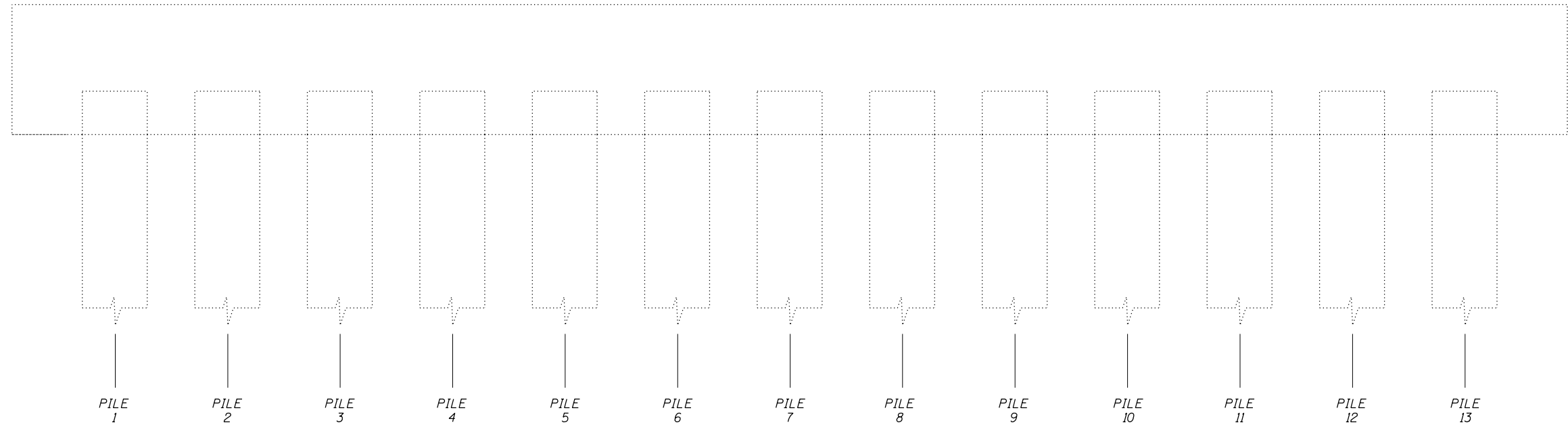
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE REPAIRS - PIER 1

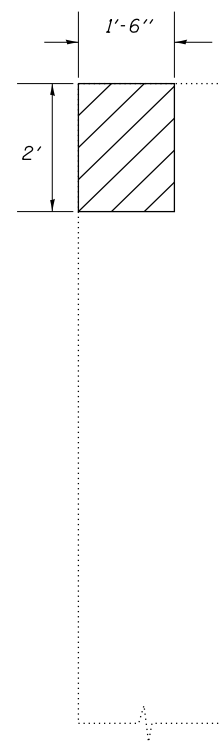
SCALE: SHEET OF SHEETS STA. TO STA.

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ILLINOIS FED. AID PROJECT			CONTRACT NO. 78725	

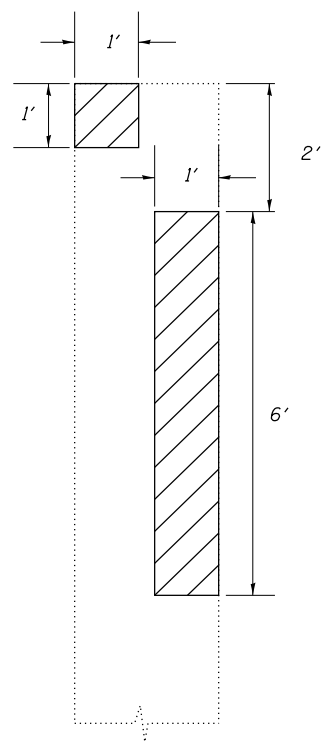


ELEVATION - PIER 2

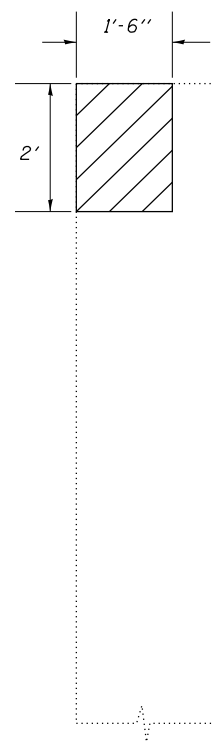
LOOKING NORTH



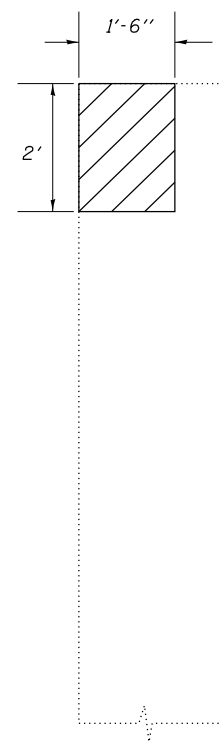
PILE 8
NORTH FACE



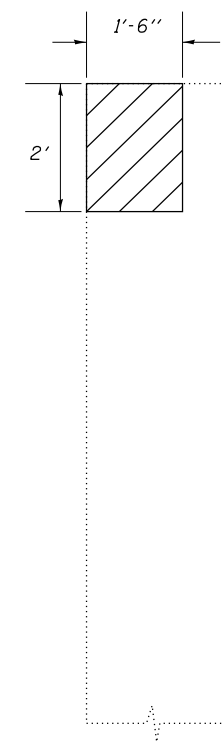
PILE 8
EAST FACE



PILE 12
NORTH FACE

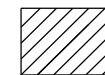


PILE 12
WEST FACE



PILE 12
SOUTH FACE

LEGEND:



Structural repair of concrete
(Depth equal to or less than 5 inches)

BILL OF MATERIAL

Item	Unit	Quantity
Structural repair of concrete (Depth equal to or less than 5 inches)	Sq. Ft.	19

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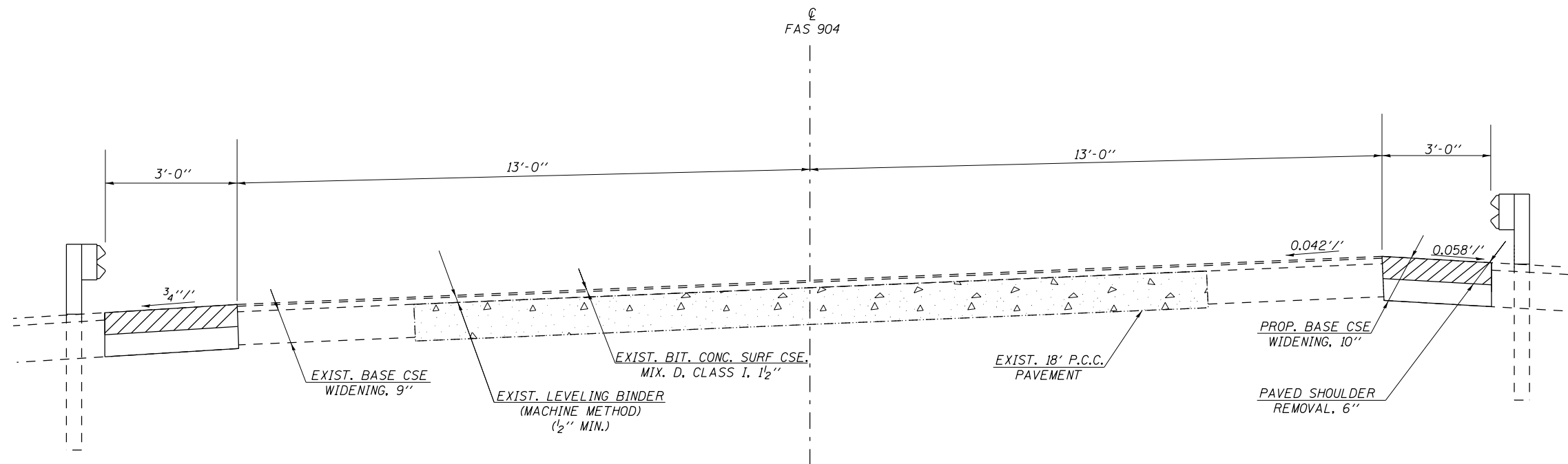
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE REPAIRS - PIER 2

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
904	D9 BRIDGE REPAIR 2020-1	WILLIAMSON	18	16
				CONTRACT NO. 78725
		ILLINOIS	FED. AID PROJECT	



TYPICAL SECTION

LEGEND:

PAVED SHOULDER REMOVAL, 6"

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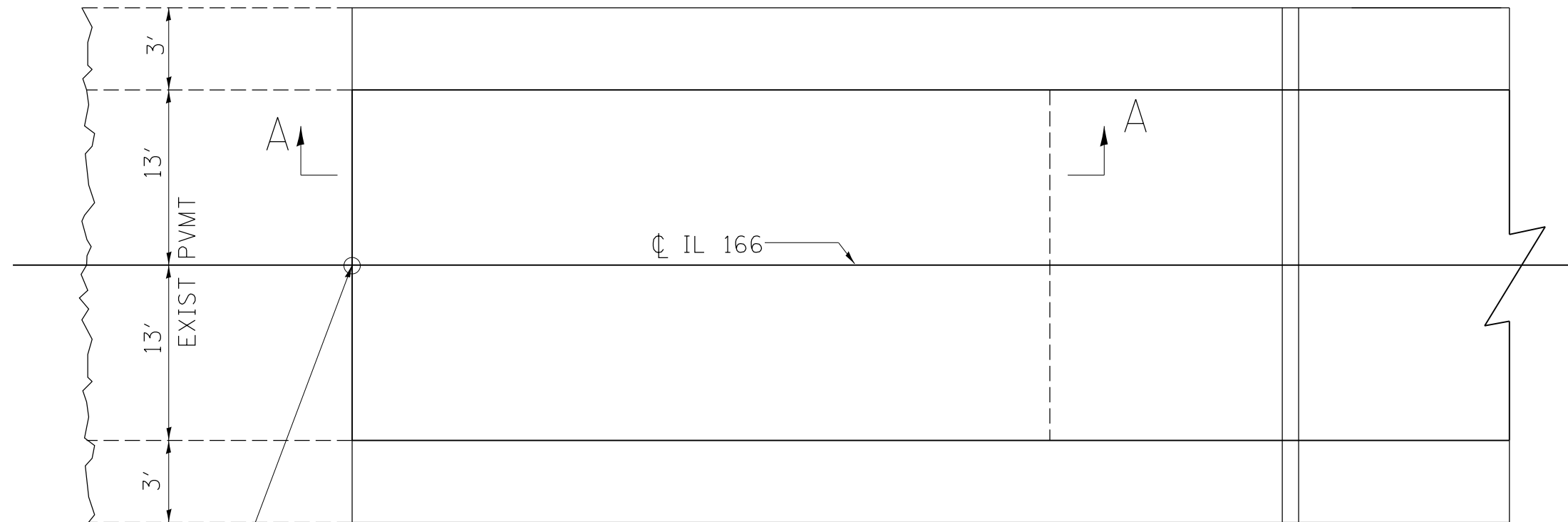
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTION
PAVED SHOULDER REMOVAL**

SCALE: SHEET OF SHEETS STA. TO STA.

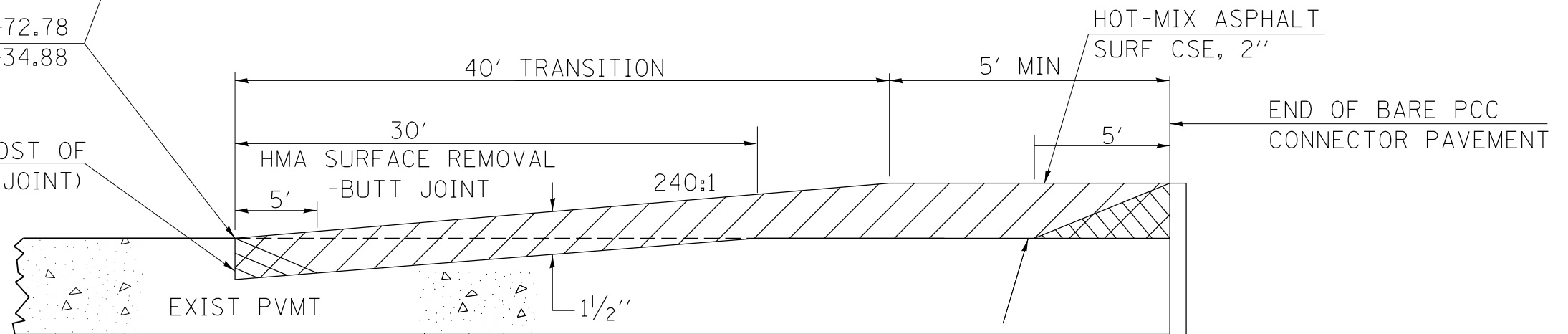
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904	D9 BRIDGE REPAIR 2020-1	WILLIAMSON	18	17
			CONTRACT NO. 78725	
ILLINOIS FED. AID PROJECT				

BUTT JOINT



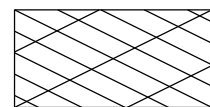
STA 176+72.78
STA 179+34.88

SAW CUT (INCLUDED IN THE COST OF
HMA SURFACE REMOVAL-BUTT JOINT)



SECTION A-A

LEGEND:



TEMPORARY RAMP



HMA SURF CSE

REVISIONS

DRAWN	03-09-17
REVISED	
REVISED	
REVISED	

STD. 9-118

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BUTT JOINT DETAIL

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
904	D9 BRIDGE REPAIR 2020-1	WILLIAMSON	18	18
CONTRACT NO. 78725				
ILLINOIS FED. AID PROJECT				