

INDEX OF SHEETS

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37-39	DETAILS FOR WIDTH RESTRICTION SIGNING

LIST OF HIGHWAY STANDARDS

	DESCRIPTION
STANDARD NO.	DESCRIPTION
000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND FOOT
630001-12	STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-15	TRAFFIC BARRIER TERMINAL, TYPE 6
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701201-05	LANE CLOSURE, 2L,2W, DAY ONLY, FOR SPEEDS > = 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701321-17	LANE CLOSURE, 2L,2W, BRIDGE REPAIR WITH BARRIER
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
725001-01	OBJECT AND TERMINAL MARKERS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAIL

USER NAME = shawleres	DESIGNED -	REVISED -		INDEX OF SHEETS, STANDARDS, GENERAL NOTES		F.A.P. RTF	SECTION	COUNTY TO	TAL SHEET				
	DRAWN -	REVISED -	STATE OF ILLINOIS			332	(48X-2)BDR	VERMILION 3	39 2				
PLOT SCALE = 40.0000 / in	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION			3.1	V. U9Z-I	0034				CONTRACT NO	0. 70D27
PLOT DATE = 11/14/2018	DATE -	REVISED -		SCALE:	SHEET 1	OF 1	SHEETS	STA.	TO STA.		ILLINOIS FED	AID PROJECT	

GENERAL NOTES

G.N.-100

ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

G.N.-105.09A

ALL ELEVATIONS SHOWN IN THE PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. (NAVD 88)

G.N.-406

THE QUANTITIES INCLUDED IN THE PLANS FOR HOT-MIX ASPHALT RESURFACING ARE INTENDED TO GIVE THE COVERAGE SHOWN ON THE TYPICAL CROSS SECTIONS. IT IS NOT INTENDED TO INCREASE THE THICKNESS OF THE HOT-MIX ASPHALT MIXTURE IN ORDER TO USE ALL OF THE QUANTITIES INCLUDED IN THE CONTRACT.

G.N.-406H

MIXTURE REQUIREMENTS

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

Location	FAP 332 L 1	FAP 332 IL 1
Mixture Use	Mainline &	Shoulders
	Shoulder Surface	(Bottom 6")
AC/PG	PG 64-22	PG 64-22
Design Air Voids	4.0% @ Ndes=50	4.0% @ Ndes=50
Mix Comp(Gradation)	IL 9.5	IĽ 19.0
Friction Aggregate	Mix C	N.A.
Mixture Weight	112	112
Quality Management Program	QC/QA	QC/QA
Sublot Size	N.A.	N.A.

G.N.-482

ALL LOW ESAL MIXTURE PLACED AS HOT-MIX ASPHALT SHOULDERS SHALL BE COMPACTED TO 94.0 – 98.4 PERCENT OF THE MAXIMUM THEORETICAL DENSITY. THIS REQUIREMENT SHALL APPLY TO IL 9.5L GRADATION MIXES. THIS MAXIMUM DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE OF FOUR TESTS AS IN OTHER QC/QA TESTING. A NUCLEAR GAUGE DENSITY/CORE CORRELATION SHALL BE PERFORMED FOR THE IL 9.5L USING STANDARD CORRELATION PROCEDURES WHEN MORE THAN 3,000 TONS ARE TO BE PLACED.

G.N.- 501A

THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHOULD FOLLOW THE GUIDE BRIDGE SPECIAL PROVISIONS FOR CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.

SEE R.E. FILE FOR CALCULATIONS AND SCHEDULES.

THERE ARE NO COMMITMENTS ASSOCIATED WITH THIS PROJECT.

SUMMARY OF QUANTITIES

			VERMILION CO.
			FAP 332 (IL-1)
			RURAL / TWO LANE
			BRIDGE DECK REPAIR
			S.N. 092-0034
			80% FEDERAL / 20% STA
			0059
CODE			
NO.	ITEM	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	35.0
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	181.0
40603415	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, N50	TON	25.0
48101200	AGGREGATE SHOULDERS, TYPE B	TON	11.0
48203100	HOT-MIX ASPHALT SHOULDERS	TON	69.0
50102400	CONCRETE REMOVAL	CU YD	16.3
50300100	FLOOR DRAINS	EACH	40.0
50300255	CONCRETE SUPERSTRUCTURE	CU YD	18.0
50500255			10.0
50300300	PROTECTIVE COAT	SQ YD	41.0
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	5,050.0
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2,210.0
50800515	BAR SPLICERS	EACH	28.0
52000110	PREFORMED JOINT STRIP SEAL	FOOT	86.0
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	10.0

USER NAME = shawleres	DESIGNED -	REVISED -		SUMMARY OF QUANTITIES S.N. 092–0034			F.A.P.	SECTION	COUNTY TOTA	TAL SHEET		
	DRAWN -	REVISED -	STATE OF ILLINOIS				332	(48X-2)BDR	VERMILION 39	9 3		
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION			3.N. U92-	-0034				CONTRACT NO.). 70D27
PLOT DATE = 11/14/2018	DATE -	REVISED -		SCALE:	SHEET 1	OF 3 SHEETS	STA.	TO STA.		ILLINOIS FED.	ND PROJECT	

SUMMARY OF QUANTITIES

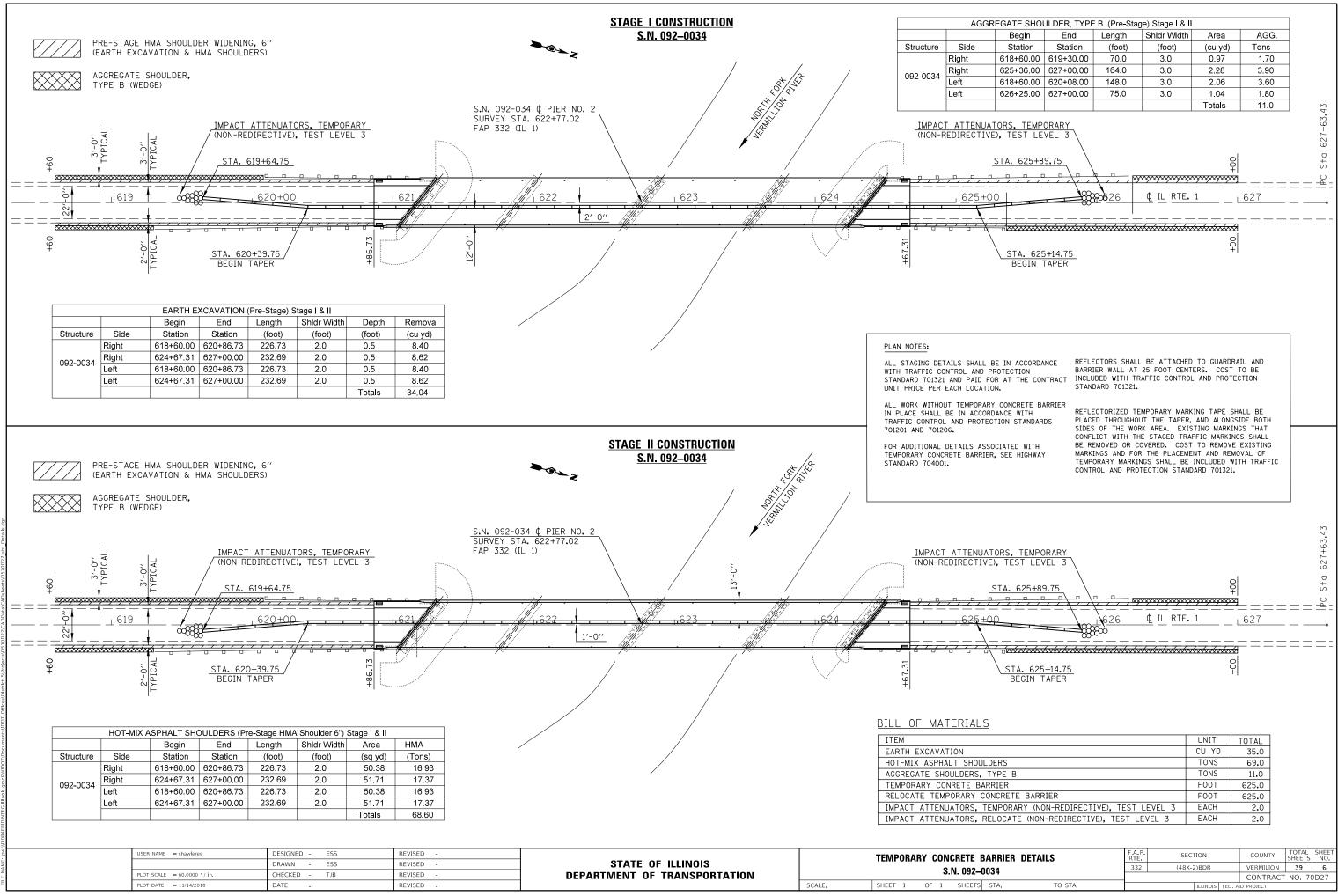
			VERMILION CO.
			FAP 332 (IL-1)
			RURAL / TWO LANE
			BRIDGE DECK REPAIR
			S.N. 092-0034
			80% FEDERAL / 20% STAT
			0059
CODE			
NO.	ITEM	UNIT	QUANTITY
52100520	ANCHOR BOLTS, 1"	EACH	20.0
62000001		FOOT	200.0
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	200.0
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4.0
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4.0
63200310	GUARDRAIL REMOVAL	FOOT	600.0
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	6.0
67100100	MOBILIZATION	L SUM	1.0
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1.0
70100403		LAGH	1.0
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1.0
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1.0
70400100	TEMPORARY CONCRETE BARRIER	FOOT	625.0
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	625.0
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2.0
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2.0

-	USER NAME = shawleres	DESIGNED -	REVISED -			SUMMARY OF QUANTITIES	F.A.P. RTE	SECTION	COUNTY TOTAL SH SHEETS N	IEET NO.
-		DRAWN -	REVISED -	STATE OF ILLINOIS	S.N. 092–0034			(48X-2)BDR	VERMILION 39	4
	PLOT SCALE = 40.0000 / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION					CONTRACT NO. 70D2	27
	PLOT DATE = 11/14/2018	DATE -	REVISED -		SCALE:	SHEET 2 OF 3 SHEETS STA. TO STA.		ILLINOIS FED	AID PROJECT	

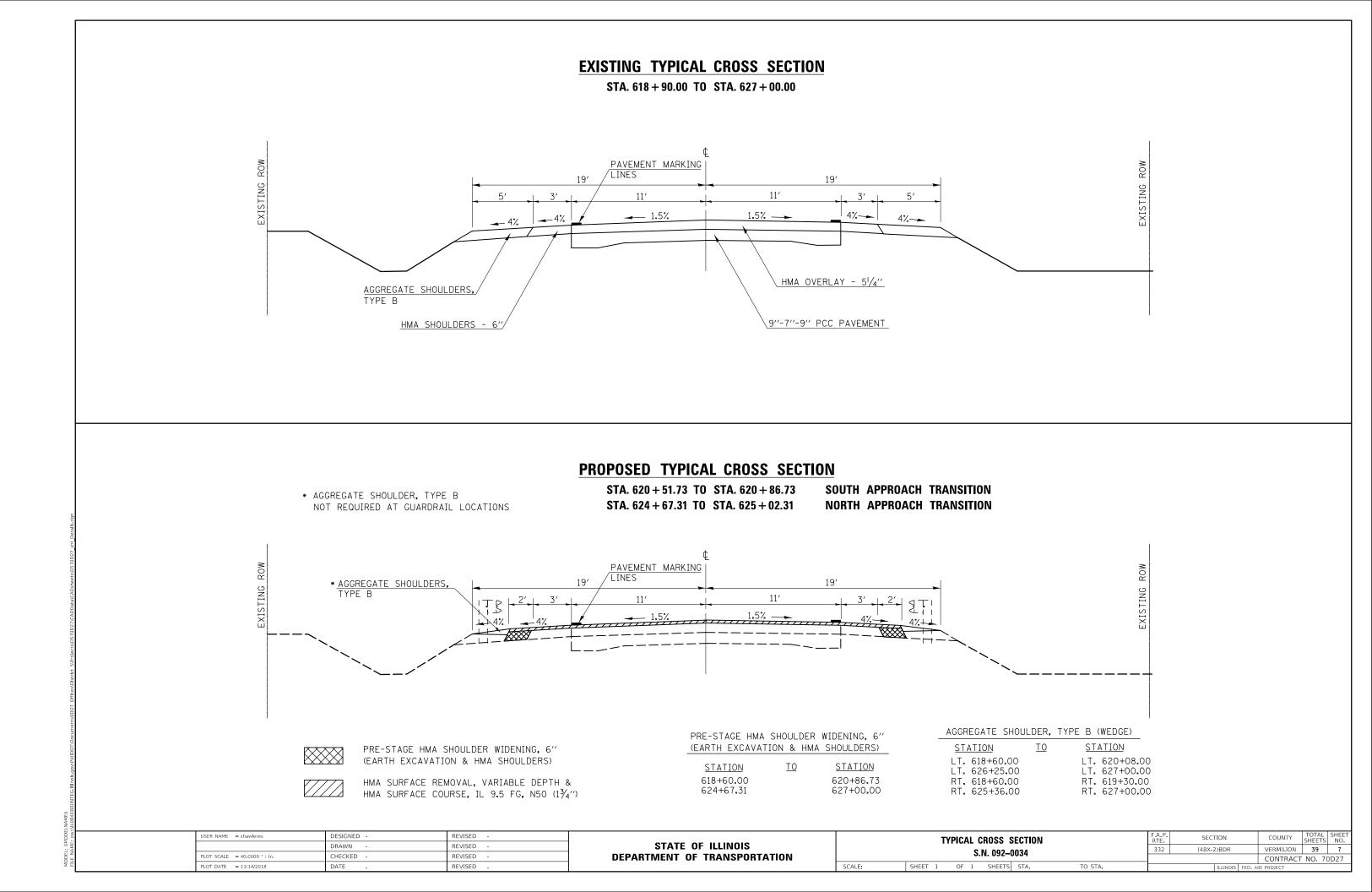
SUMMARY OF QUANTITIES

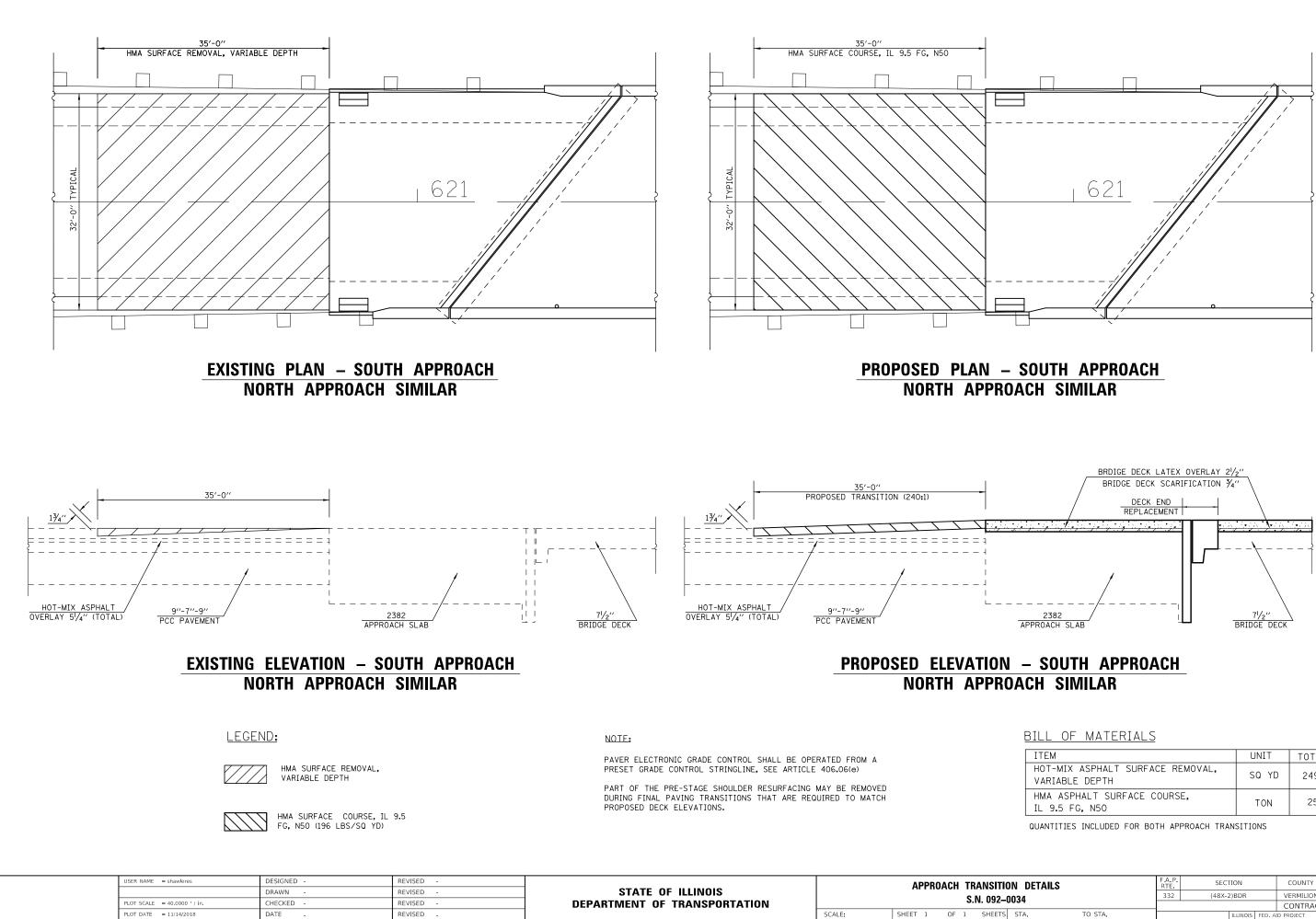
			VERMILION CO.
			FAP 332 (IL-1)
			RURAL / TWO LANE
			BRIDGE DECK REPAIR
			S.N. 092-0034
			80% FEDERAL / 20% STA
			0059
CODE			
NO.	ITEM	UNIT	QUANTITY
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4.0
78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	8.0
78200010	BARRIER WALL REFLECTORS, TYPE B	EACH	10.0
X0931400	INLET BOXES TO BE ADJUSTED (SPECIAL)	EACH	4.0
///////////////////////////////////////			
X1200030	FILL INLETS TEMPORARY	EACH	4.0
X1200000			1.0
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	249.0
74401100			
50300260	BRIDGE DECK GROOVING	SQ YD	1,135.0
50500200		3010	1,135.0
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1.0
X/200201		L SUW	1.0
70001900		EACH	10.0
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	10.0
70004000	STRUCTURAL STEEL REMOVAL	POUND	0.000.0
Z0001903		POUND	3,320.0
70004005		DOUND	2 540.0
Z0001905	STRUCTURAL STEEL REPAIR	POUND	3,510.0
70000044			1 010 0
Z0006014	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2 INCHES	SQ YD	1,318.0
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	1,318.0
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.0
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	8.5
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	50.9

USER NAME = shawleres	DESIGNED -	REVISED -		SUMMARY OF QUANTIITES		F.A.P. BTF	SECTION	COUNTY	TOTAL SHEET	
	DRAWN -	REVISED -	STATE OF ILLINOIS			332	(48X-2)BDR	VERMILION	39 5	
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	S.N. 092–0034			,		CONTRACT	NO. 70D27
PLOT DATE = 11/14/2018	DATE -	REVISED -		SCALE:	SHEET 3 OF 3 SHEETS STA.	TO STA.		ILLINOIS FED. AI	D PROJECT	



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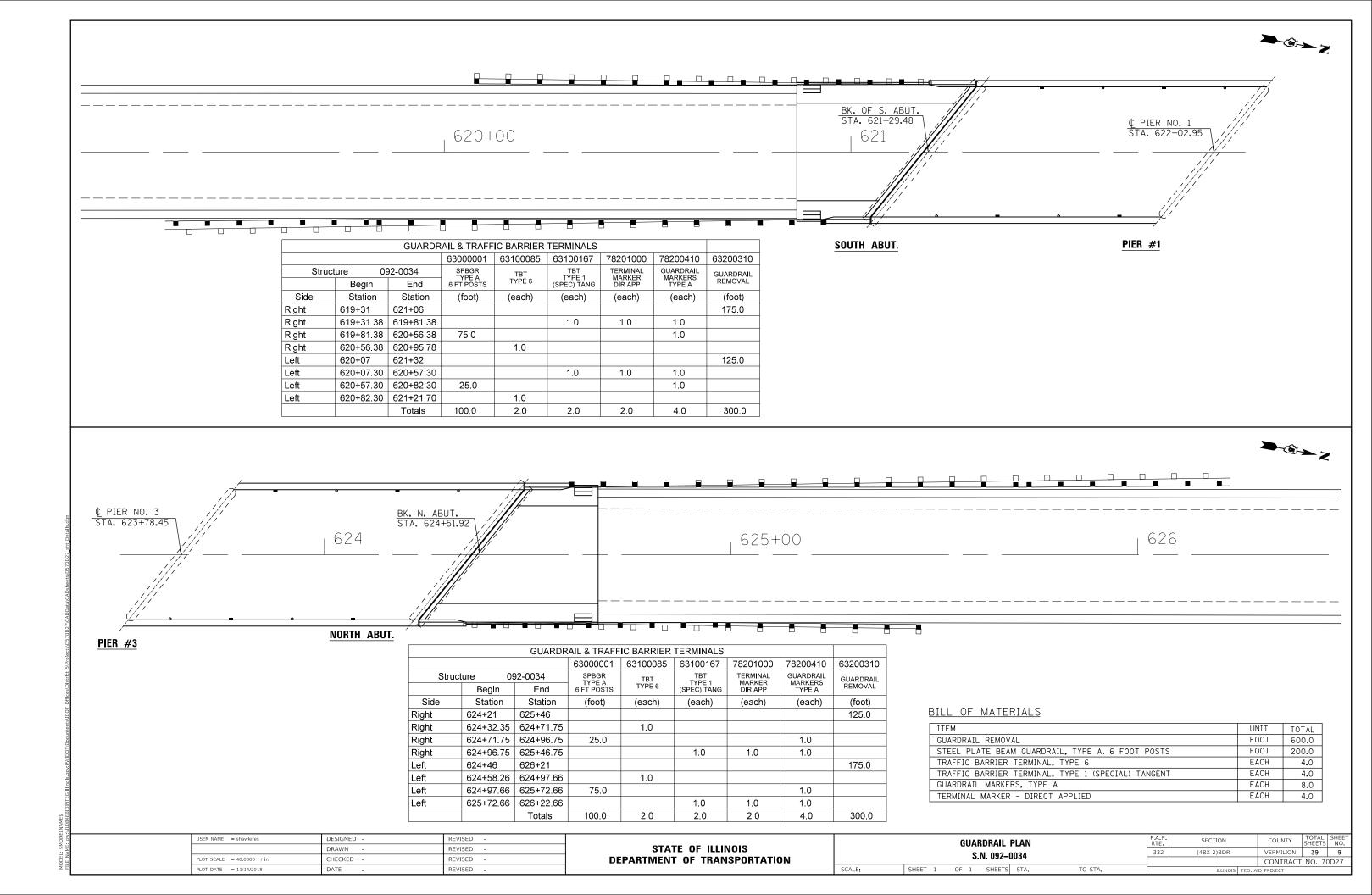


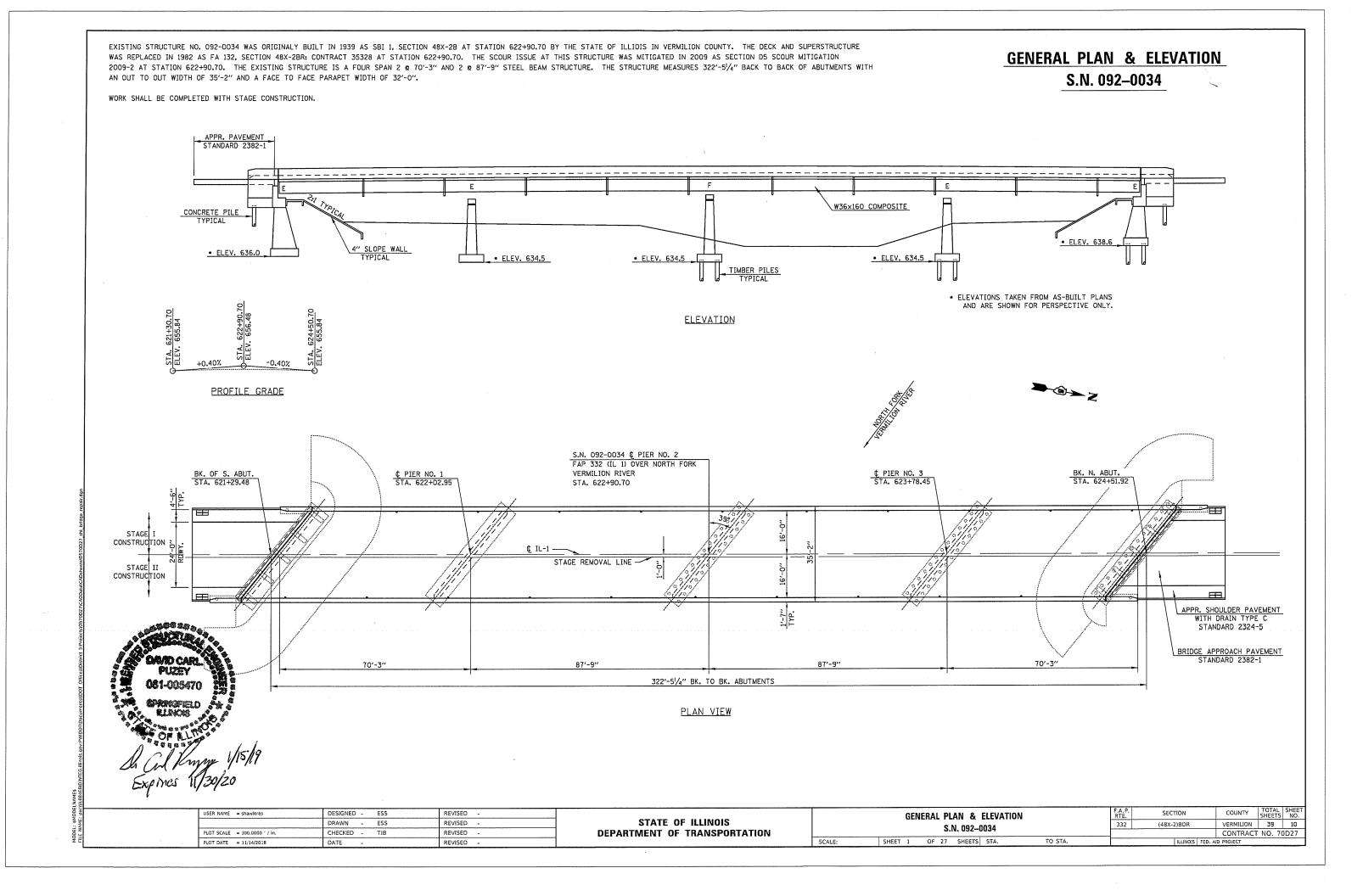


SCALE:

ITEM	UNIT	TOTAL
HOT-MIX ASPHALT SURFACE REMOVAL, Variable depth	SQ YD	249.0
HMA ASPHALT SURFACE COURSE, IL 9.5 FG, N50	TON	25.0

10	N DETAI	LS	F.A.P. RTE	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.	
-0034			332	(48X-2	VERMILION	39	8			
							CONTRACT	NO. 70)D27	
S	STA.	TO STA.		ILLINOIS FED. AID PROJECT						





PROPOSED IMPROVEMENTS

- 1. PERFORM BRIDGE DECK SCARIFICATION.
- 2. PERFORM FULL-DEPTH DECK PATCHING, REMOVAL DECK ENDS, PARAPETS, AND HATCH BLOCKS.
- 3. PLACE PROPOSED FLOOR DRAINS.
- 4. PERFORM BEAM END REPAIRS AND REPLACE END DIAPHRAGMS.
- 5. REPLACE BEARING.

*

- 6. CAST DECK ENDS, PARAPET ENDS AND HATCH BLOCKS.
- 7. ADJUST SHOULDER INLET BOXES.
- 8. PLACE BRIDGE DECK LATEX CONCRETE OVERLAY, $2\frac{1}{2}$ ".
- 9. COMPLETE MILLING TRANSITIONS AND HMA OVERLAY AT APPROACH ENDS.
- 10. COMPLETE BRIDGE DECK GROOVING.

TOTAL BILL OF MATERIALS

	ITEM	UNIT	TOTAL
	CONCRETE REMOVAL	CU YD	16.3
	FLOOR DRAINS	EACH	40.0
	CONCRETE SUPERSTRUCTURE	CU YD	18.0
÷	PROTECTIVE COAT	SQ YD	41.0
	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	5,050.0
	REINFORCEMENT BARS (EPOXY COATED)	POUND	2,210.0
	BAR SPLICERS	EACH	28.0
	PREFORMED JOINT STRIP SEAL	FOOT	86.0
	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	10.0
	ANCHOR BOLTS 1"	EACH	20.0
	BRIDGE DECK GROOVING	SQ YD	1,135.0
	JACK AND REMOVE EXISTING BEARINGS	EACH	10.0
	STRUCTURAL STEEL REMOVAL	POUND	3,320.0
	STRUCTURAL STEEL REPAIR	POUND	3,510.0
	BRIDGE DECK LATEX CONCRETE OVERLAY, 21/2"	SQ YD	1,318.0
	BRIDGE DECK SCARIFICATION 3⁄4″	SQ YD	1,318.0
	DECK SLAB REPAIR (FULL-DEPTH, TY I)	SQ YD	8.5
	DECK SLAB REPAIR (FULL-DEPTH, TY II)	SQ YD	50.9
	INLET BOXES TO BE ADJUSTED (SPECIAL)	EACH	4.0

* TOP AND INSIDE FACE OF PARAPETS AND DECK SURFACE OF NEW CONCRETE ADJACENT TO JOINTS.

GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE 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 WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

DIAPHRAGM CONNECTION HOLES SHALL BE 15% " Ø FOR 3/4" Ø BOLTS. TWO HARDENED WASHERS SHALL BE REQUIRED AT DIAPHRAGM CONNECTIONS.

WISE NOTED.

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.

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.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

PRIOR TO POURING THE NEW CONCRETE DECK, ALL HEAVY OR LOOSE RUST, LOOSE MILL SCALE, AND OTHER LOOSE OR POTENTIALLY DETRIMENTAL FOREIGN MATERIAL SHALL BE REMOVED FROM THE SURFACES IN CONTACT WITH THE CONCRETE. TIGHTLY ADHERED PAINT MAY REMAIN UNLESS OTHERWISE NOTED. REMOVAL SHALL BE ACCOMPLISHED BY METHODS THAT WILL NOT DAMAGE THE STEEL AND THE COST WILL BE INCLUDED IN THE PAY ITEM COVERING REMOVAL OF THE EXISTING CONCRETE.

SPECIAL PROVISIONS.

OTHERWISE NOTED.

EXISTING STRUCTURAL STEEL THAT WILL BE IN CONTACT WITH NEW STRUCTURAL STEEL SHALL BE CLEANED AND PAINTED PRIOR TO ERECTION AS REQUIRED BY THE SPECIAL PROVISION "CLEANING AND PAINTING CONTACT SURFACE AREAS OF EXISTING STEEL STRUCTURES".

ALL STRUCTURAL STEEL AND BEARING ASSEMBLIES SHALL BE HOT DIPPED GALVANIZED. SEE SPECIAL PROVISIONS FOR "HOT DIP GALVANIZING FOR STRUCTURAL STEEL".

AREAS OF DECK SLAB REPAIRS SHOWN ARE ESTIMATED. THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK SLAB REPAIRS ON AS- BUILT PLANS.

DECK SLAB REPAIR.

USER NAME = shawleres	DESIGNED -	REVISED -		BILL OF MATERIALS; GENERAL NOTES		F.A.P. BTE	SECTION	COUNTY	TOTAL SHEE	ſ		
	DRAWN -	REVISED -	STATE OF ILLINOIS				NOTED	332	(48X-2)BDR	VERMILION	39 11	-
PLOT SCALE = 40.0000 / in	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		S.N. 092–0034					CONTRACT	NO. 70D27	-
PLOT DATE = 1/15/2019	DATE -	REVISED -		SCALE:	SHEET 2 OF 27 SHEE	TS STA.	TO STA.		ILLINOIS FED	AID PROJECT		-

FASTENERS SHALL BE HIGH STRENGTH BOLTS. BOLTS $\frac{3}{4}$ " Ø, OPEN HOLES $\frac{13}{16}$ " Ø, UNLESS OTHER

COST OF REMOVAL AND RE -INSTALLATION OF ALL MEMBERS NECESSARY TO COMPLETE THE WORK AS DETAILED ON THE PLANS AND AS SPECIFIED IN THE SPECIAL PROVISIONS SHALL BE INCLUDED WITH FURNISHING AND ERECTING STRUCTURAL STEEL

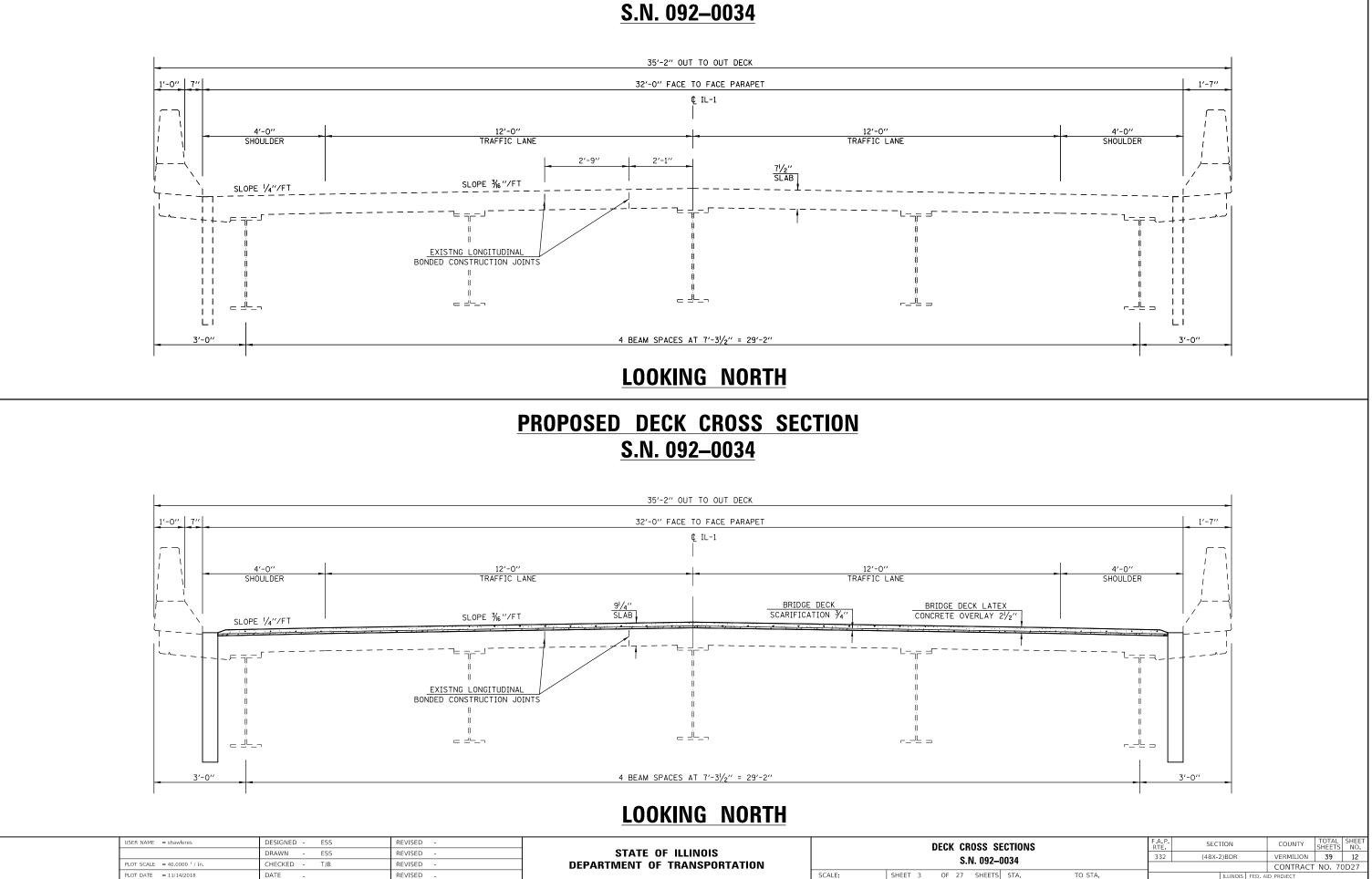
THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONS TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.

SYNTHETIC FIBERS SHALL BE ADDED TO THE BRIDGE DECK LATEX CONCRETE OVERLAY. SEE

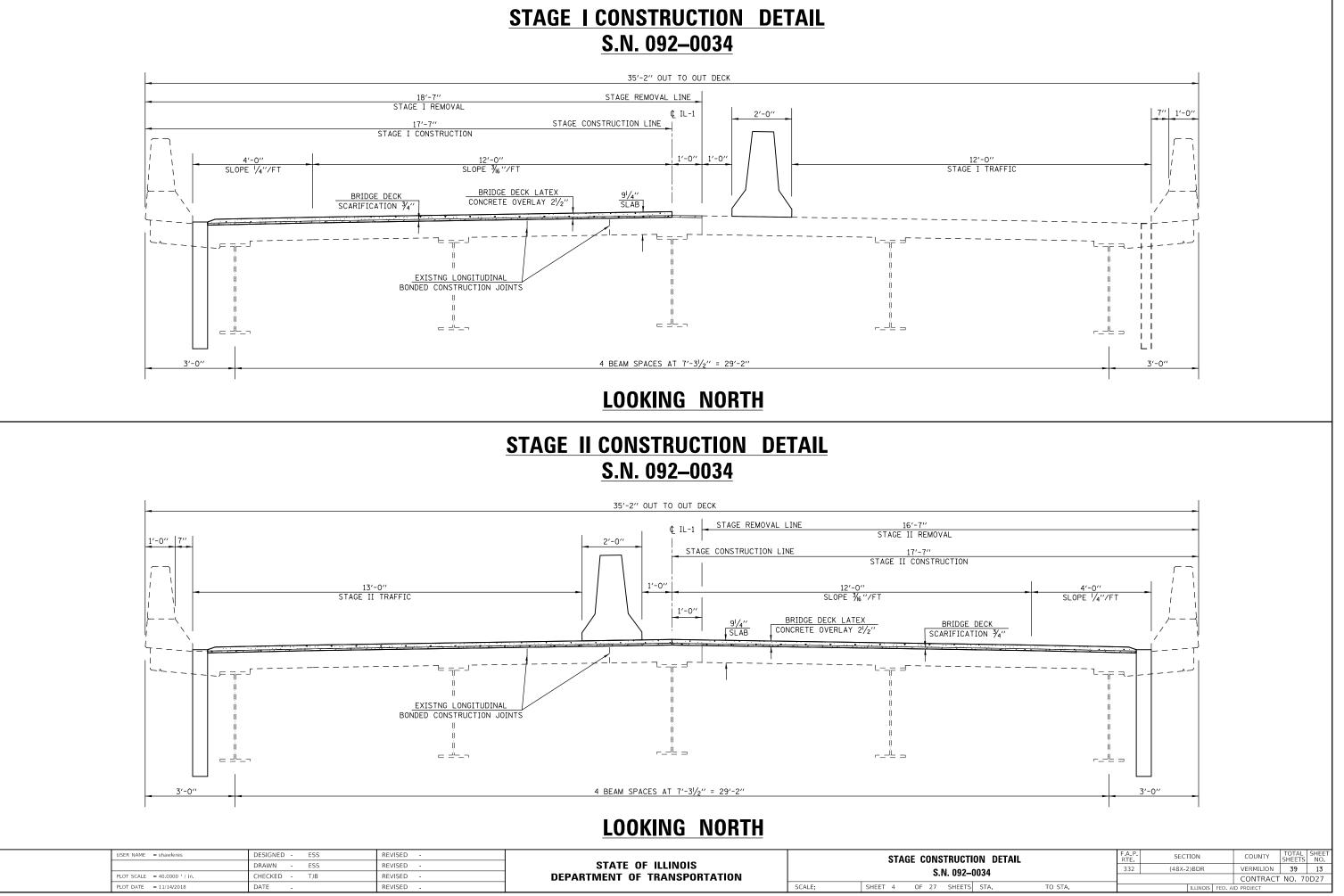
ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO CLASSIFICATION M-270, GR. 50, UNLESS

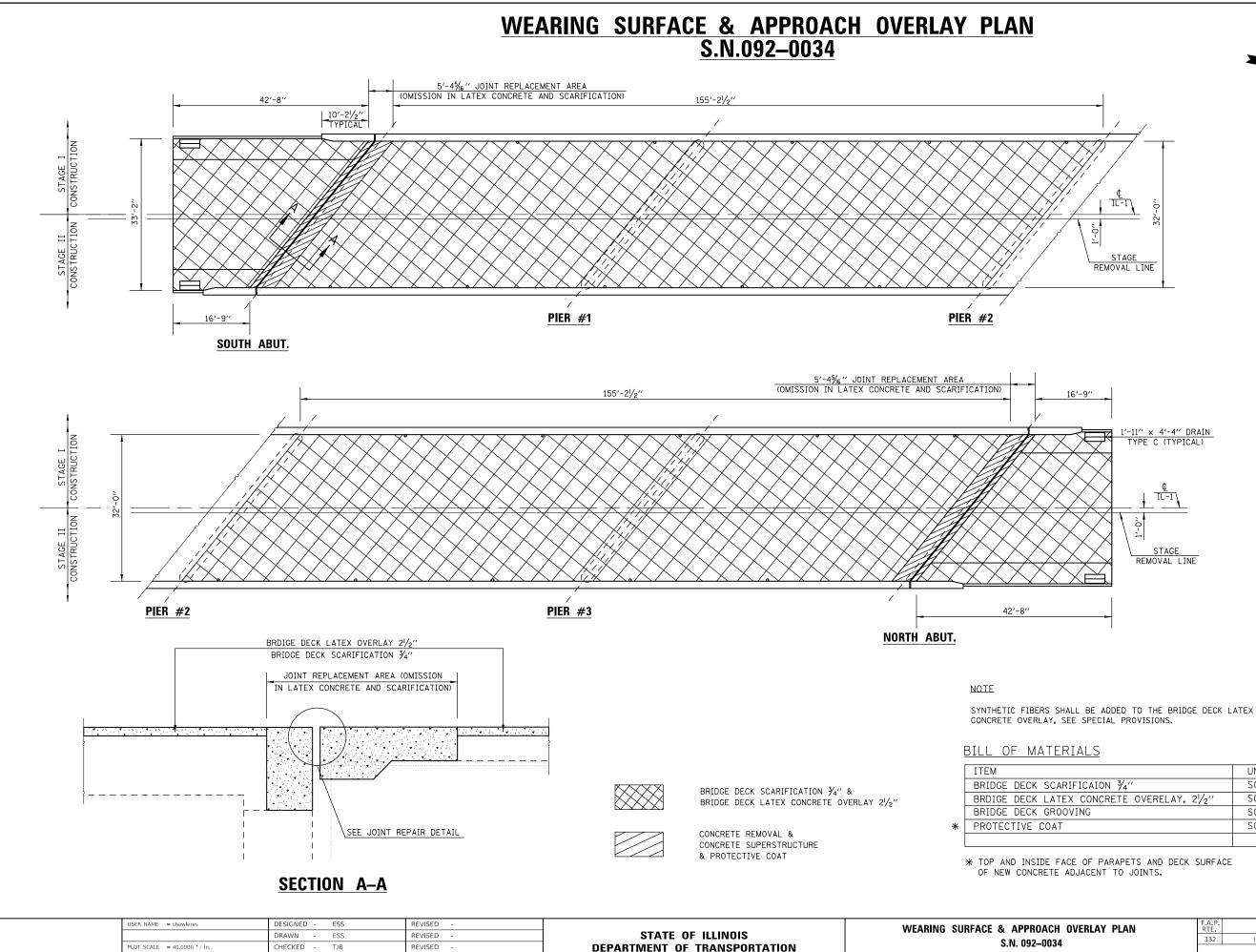
SEE SPECIAL PROVISION "DECK SLAB REPAIR" FOR ADDITIONAL REQUIREMENTS PERTAINING TO

EXISTING DECK CROSS SECTION S.N. 092–0034



STAGE I CONSTRUCTION DETAIL S.N. 092-0034





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DEPARTMENT OF TRANSPORTATION

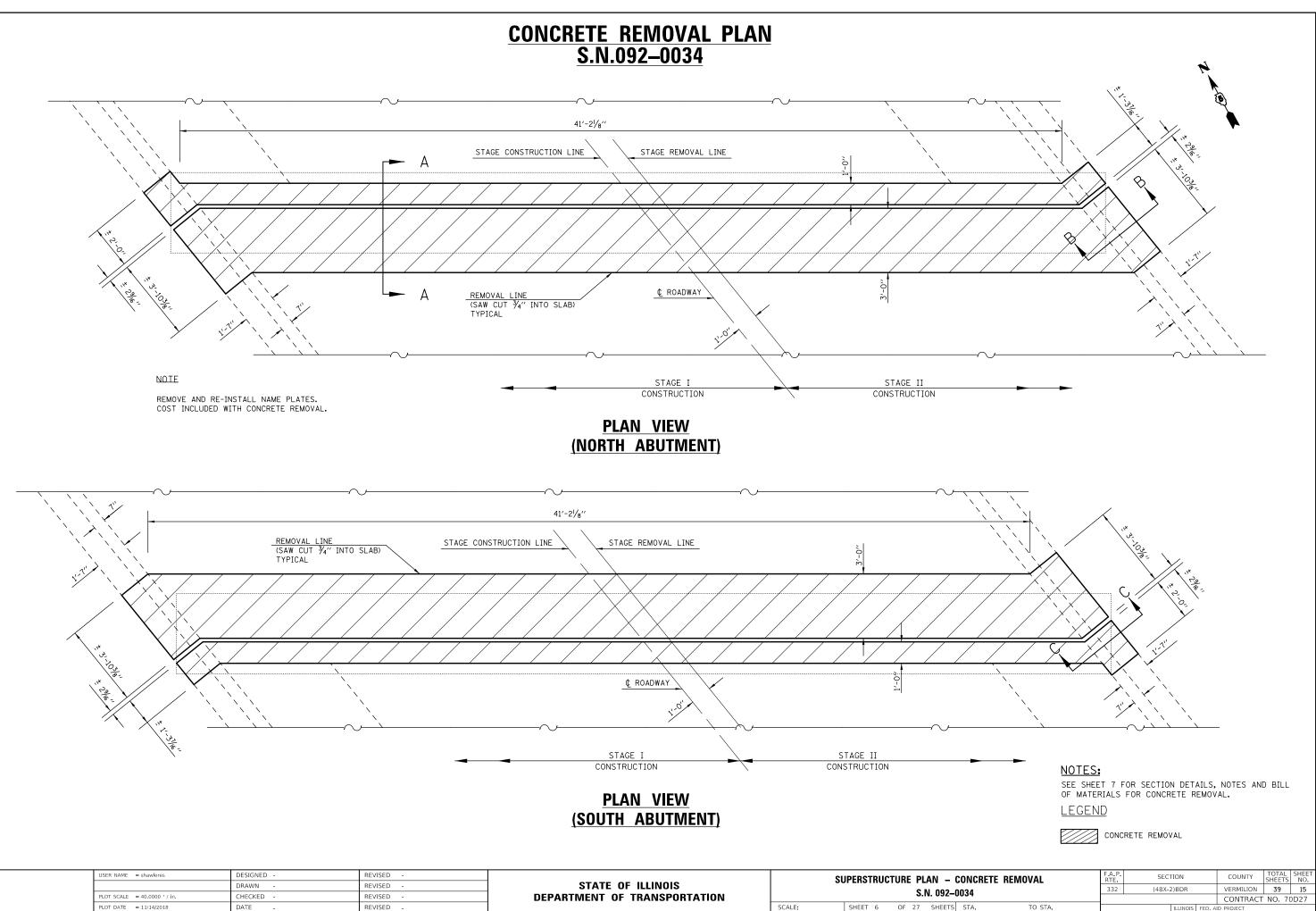
SHEET 5 OF 27 SHEET

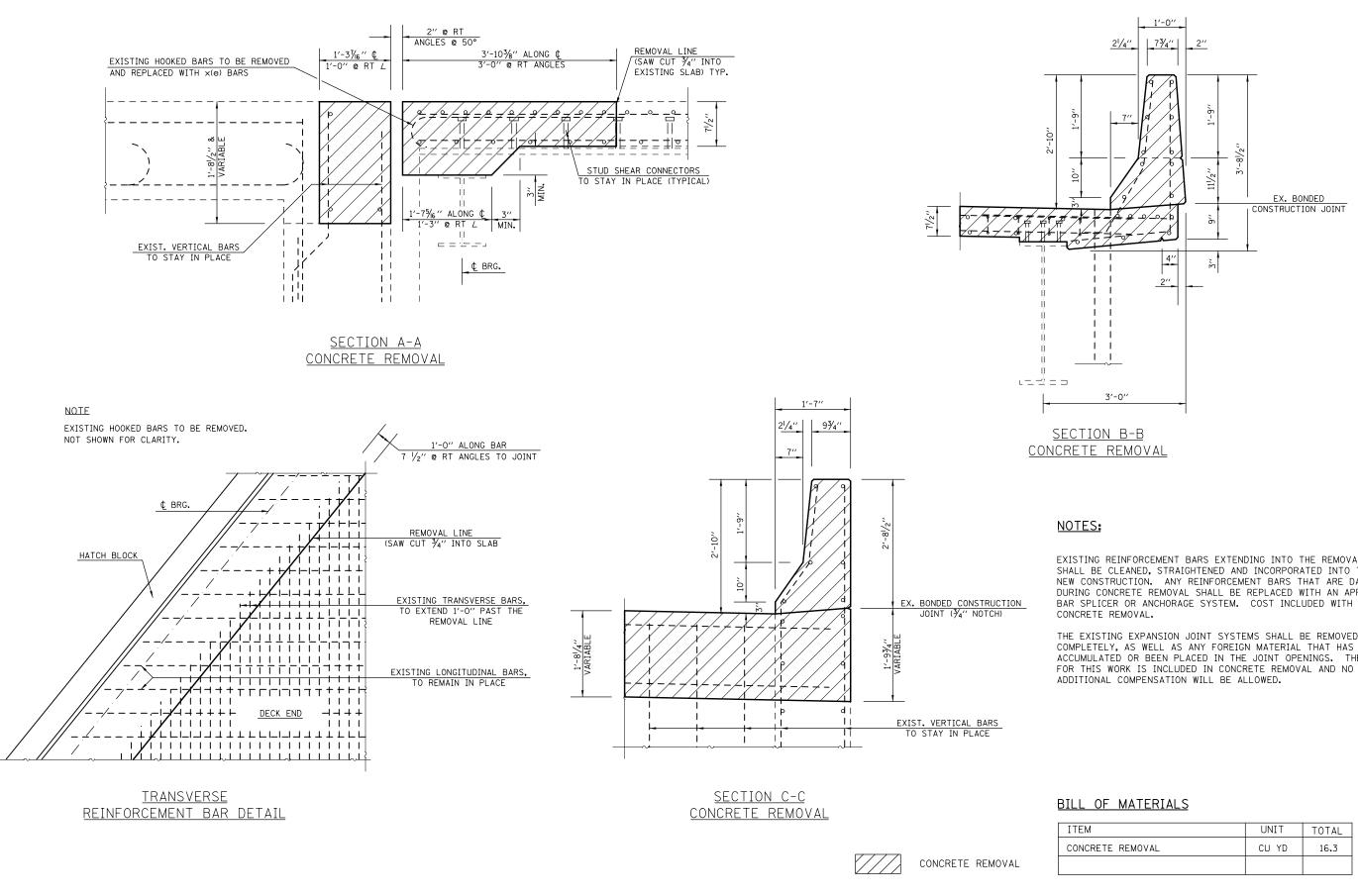
SCALE:

	UNIT	TOTAL
<pre>SCARIFICAION ⅔4''</pre>	SQ YD	1,318.0
K LATEX CONCRETE OVERELAY, 21/2"	SQ YD	1,318.0
GROOVING	SQ YD	1,135.0
COAT	SQ YD	41.0

OACH OVERLAY PLAN		F.A.P. RTE	E SECTION		COUNTY	TOTAL SHEETS	SHEET NO.		
2-0034			332	332 (48X-2)BDR			VERMILION	39	14
		CONTRACT NO. 70D27							
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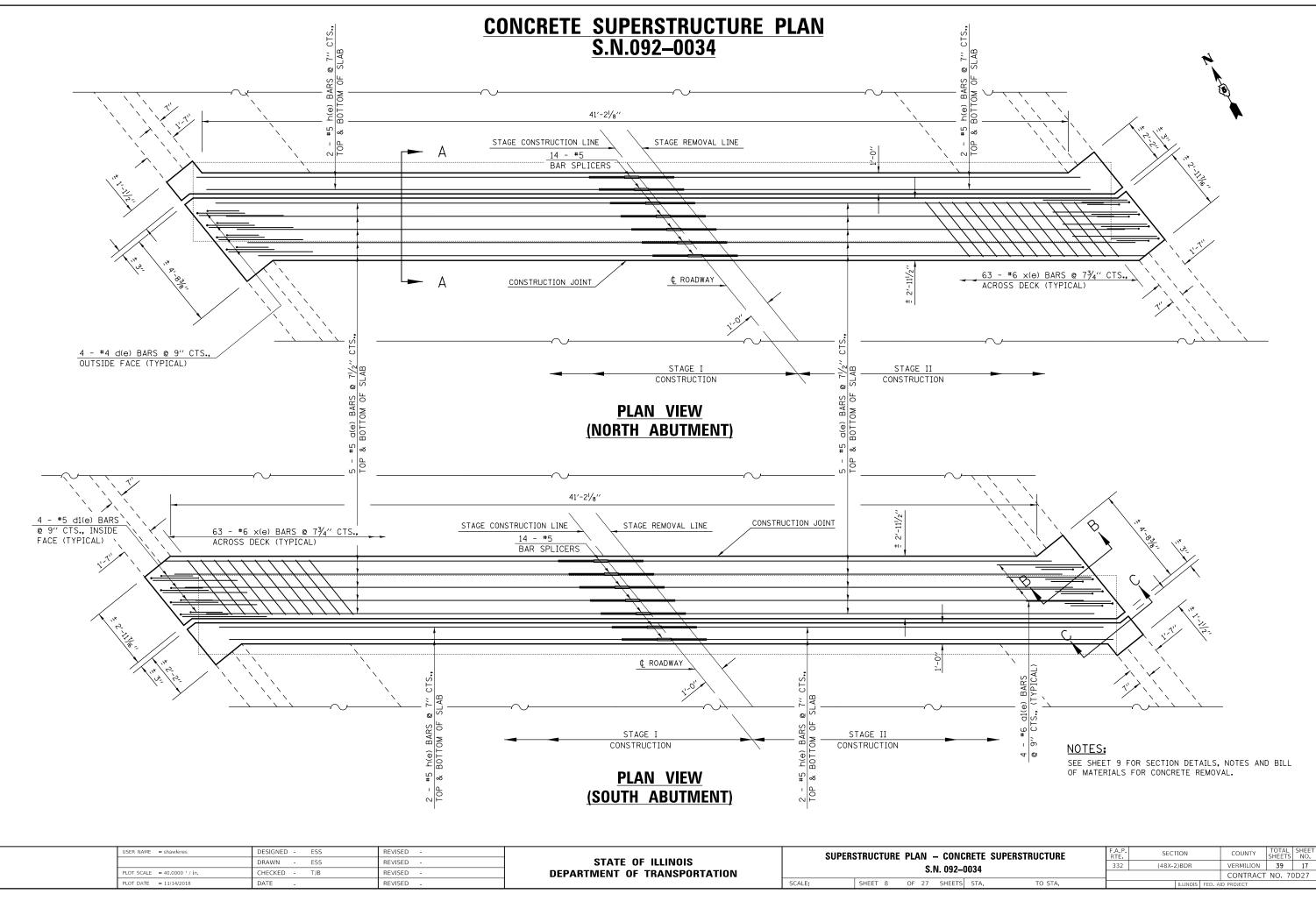


USER NAME = shawleres	DESIGNED - ESS	REVISED -		SUP	SUPERSTRUCTURE DETAILS - CONCRETE REMOVAL		SECTION	COUNTY TOTAL SHEET SHEETS NO.
	DRAWN - ESS	REVISED -	STATE OF ILLINOIS	S.N. 092–0034		332	(48X-2)BDR	VERMILION 39 16
PLOT SCALE = 40.0000 ' / in.	CHECKED - TJB	REVISED -	DEPARTMENT OF TRANSPORTATION					CONTRACT NO. 70D27
PLOT DATE = 11/14/2018	DATE -	REVISED -		SCALE:	SHEET 7 OF 27 SHEETS STA. TO STA.		ILLINOIS FED. A	ID PROJECT

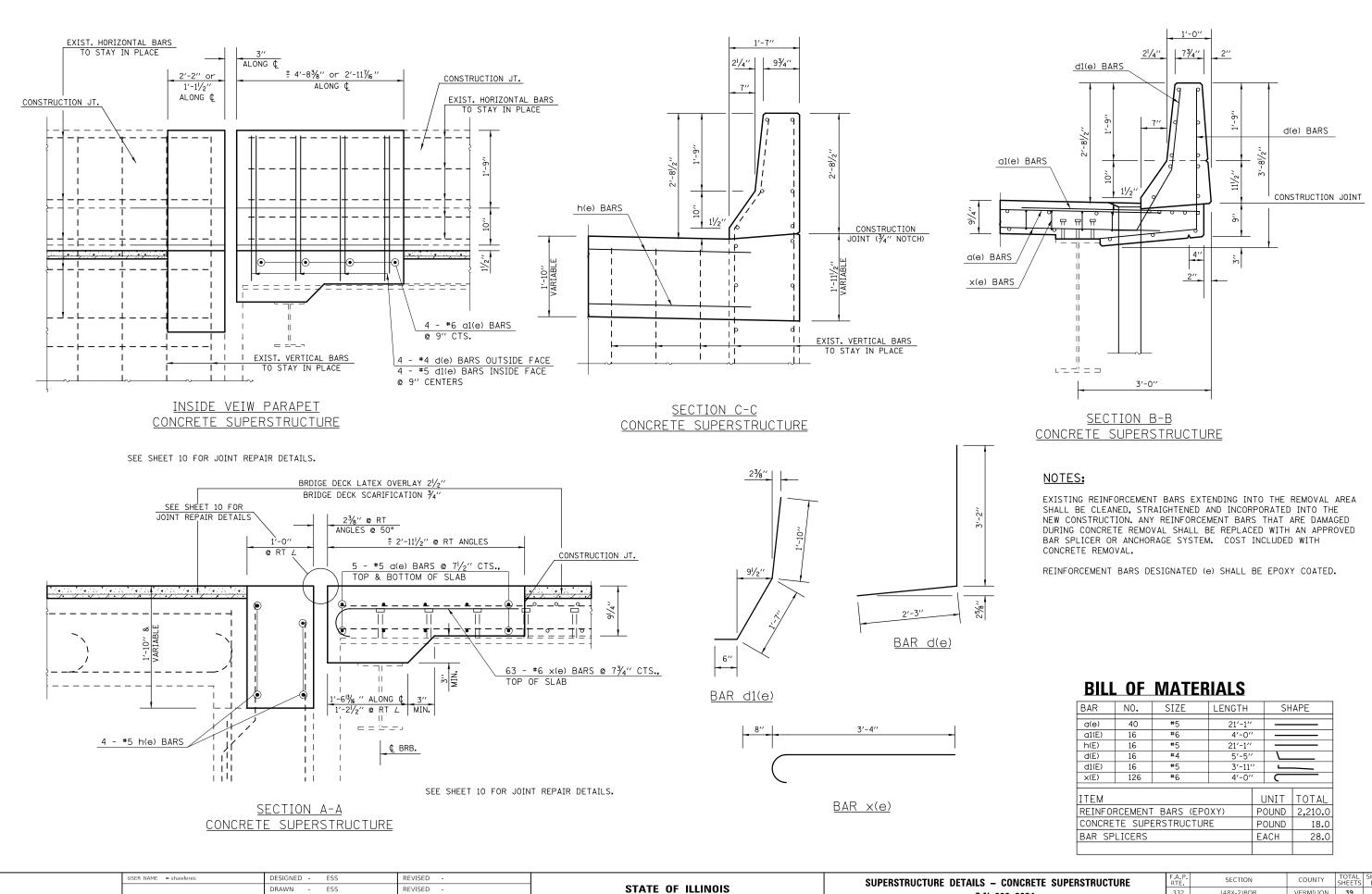
EXISTING REINFORCEMENT BARS EXTENDING INTO THE REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY REINFORCEMENT BARS THAT ARE DAMAGED DURING CONCRETE REMOVAL SHALL BE REPLACED WITH AN APPROVED

THE EXISTING EXPANSION JOINT SYSTEMS SHALL BE REMOVED COMPLETELY. AS WELL AS ANY FOREIGN MATERIAL THAT HAS ACCUMULATED OR BEEN PLACED IN THE JOINT OPENINGS. THE COST

ITEM	UNIT	TOTAL
CONCRETE REMOVAL	CU YD	16.3



_(0034		332	(48X-2)BDR		VERMILION	39	17
_	5054						CONTRACT	NO. 70)D27
S	STA.	TO STA.			ILLINOIS	FED. A	D PROJECT		



DEPARTMENT OF TRANSPORTATION SCALE: SHEET 9 OF 27 SHEETS

LOT SCALE = 40.0000 / in.

PLOT DATE = 11/14/2018

HECKED -

DATE

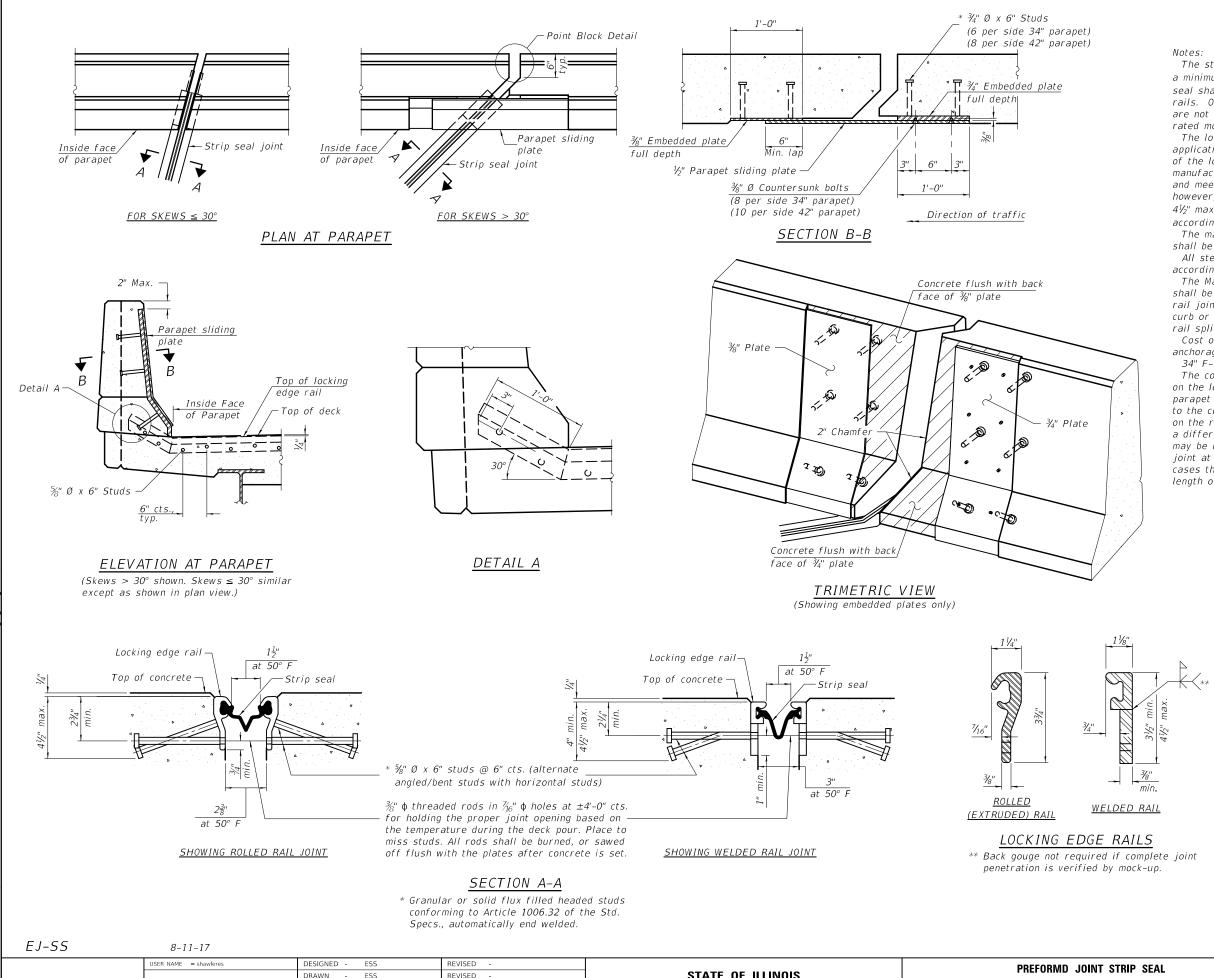
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REVISED

REVISED

BAR	NÔ.	SIZE	LENGTH		SH	APE		
a(e)	40	#5	21'-1''	21'-1''				
a1(E)	16	#6	4'-0''					
h(E)	16	#5	21'-1''					
d(E)	16	#4	5'-5''					
d1(E)	16	#5	3'-11'	~	L			
×(E)	126	#6	4'-0'	′				
				-				
ITEM				UNIT		TOTAL		
REINFOR	RCEMENT	P	DUND	2,210.0				
CONCRE	TE SUPE	E	POUND		18.0			
BAR SP	LICERS			EACH		28.0		

AILS – CONCRETE SUPERSTRUCTURE S.N. 092–0034				F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				332	(48X-2)BDR	VERMILION	39	18
3.14. 052-0034						CONTRACT	NO. 70)D27
27	SHEETS	STA.	TO STA.		ILLINOIS FED	AID PROJECT		



_	USER NAME = shawleres	DESIGNED - ESS	REVISED -		PREFORMD JOINT STRIP SEAL S.N. 092–0034 SCALE: SHEET 10 OF 27 SHEETS STA. TO STA.		F.A.P. RTE	SECTION	COUNTY TOTAL SHEET SHEETS NO.
		DRAWN - ESS	REVISED -	STATE OF ILLINOIS			332	(48X-2)BDR	VERMILION 39 19
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TJB	REVISED -	DEPARTMENT OF TRANSPORTATION					CONTRACT NO. 70D27
	PLOT DATE = 1/15/2019	DATE -	REVISED -				TO STA.		ILLINOIS FED. A

The strip seal shall be made continuous and shall have a minimum thickness of $\frac{1}{4}$ ". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4¹/₂" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

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

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

Cost of parapet sliding plates, embedded plates, and anchorage study 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.

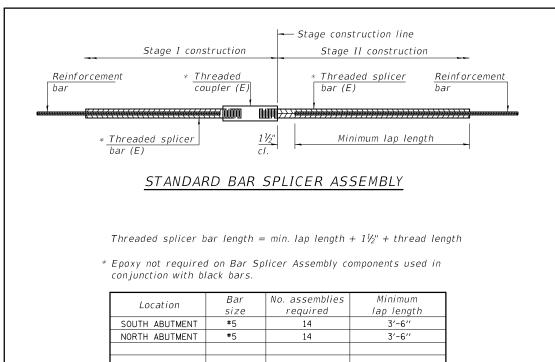
> Grind flush Omit weld a seal openin

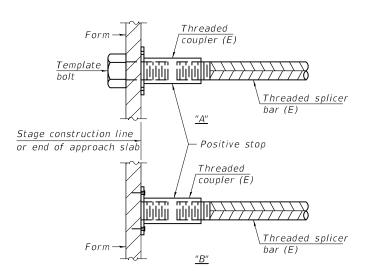
LOCKING EDGE RAIL SPLICE

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	86.0

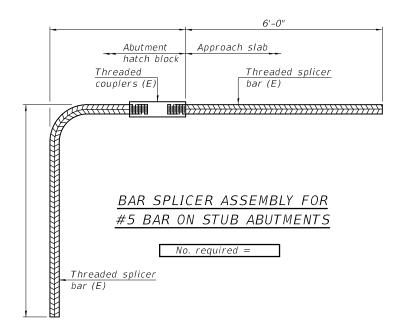




INSTALLATION AND SETTING METHODS

"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.

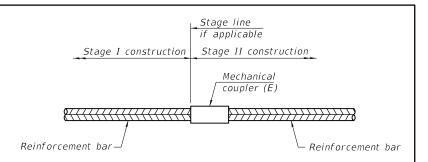


yield strength. alternatives.

BSD-1

2-17-2017

USER NAME = shawleres	DESIGNED -	REVISED -		BAR SE	PLICER ASSEN	IBLY AND MECHANICAL	SPLICER DETAILS	F.A.P. BTE	SECTION	COUNTY TO	OTAL SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS		S.N. 092–0034		332	(48X-2)BDR	VERMILION	39 20	
PLOT SCALE = 40.0000 / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION						CONTRACT N	0. 70D27	
PLOT DATE = 11/14/2018	DATE -	REVISED -		SCALE:	SHEET 11	OF 27 SHEETS STA.	TO STA.		ILLINOIS FEI	D. AID PROJECT	



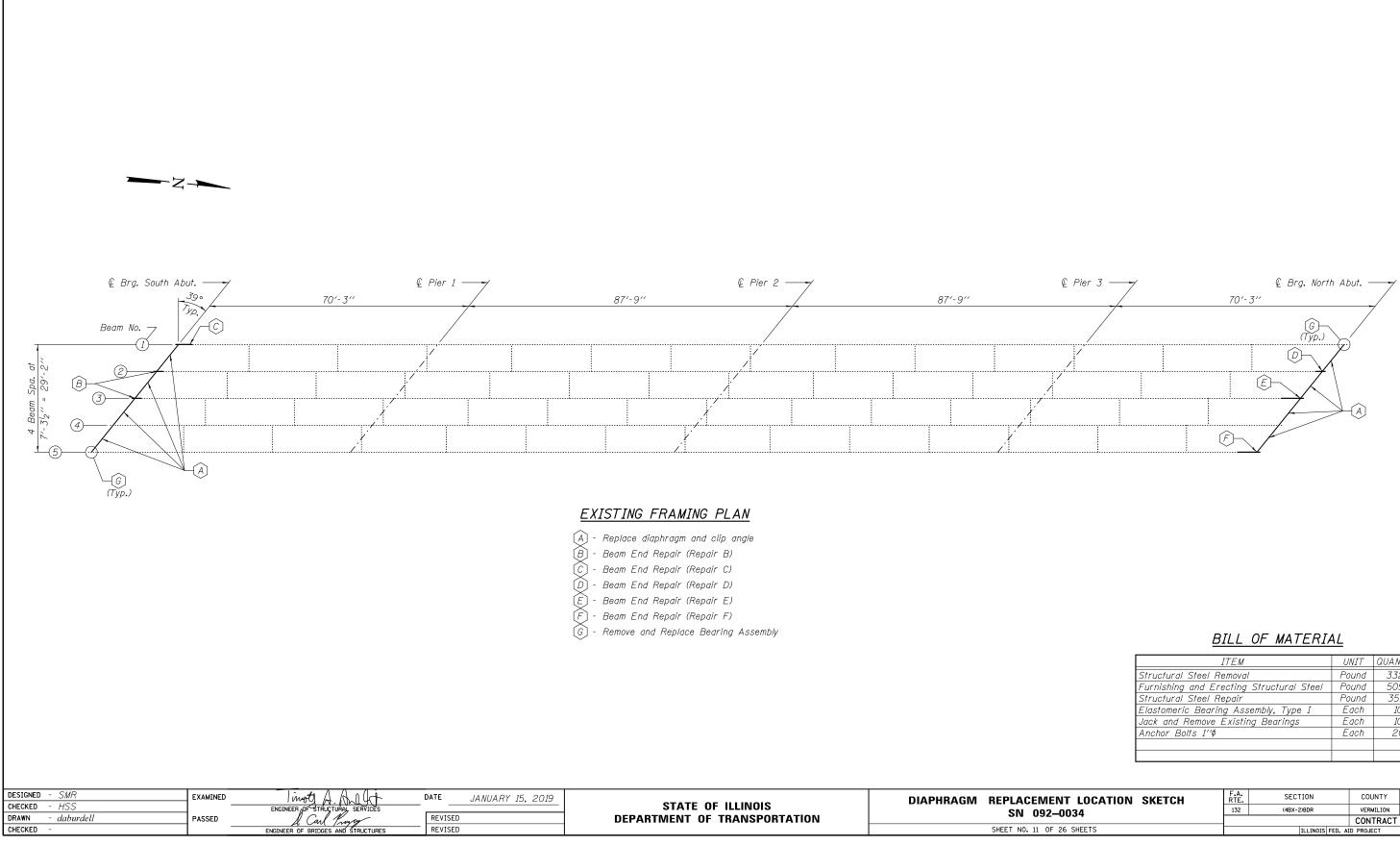
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

NOTES

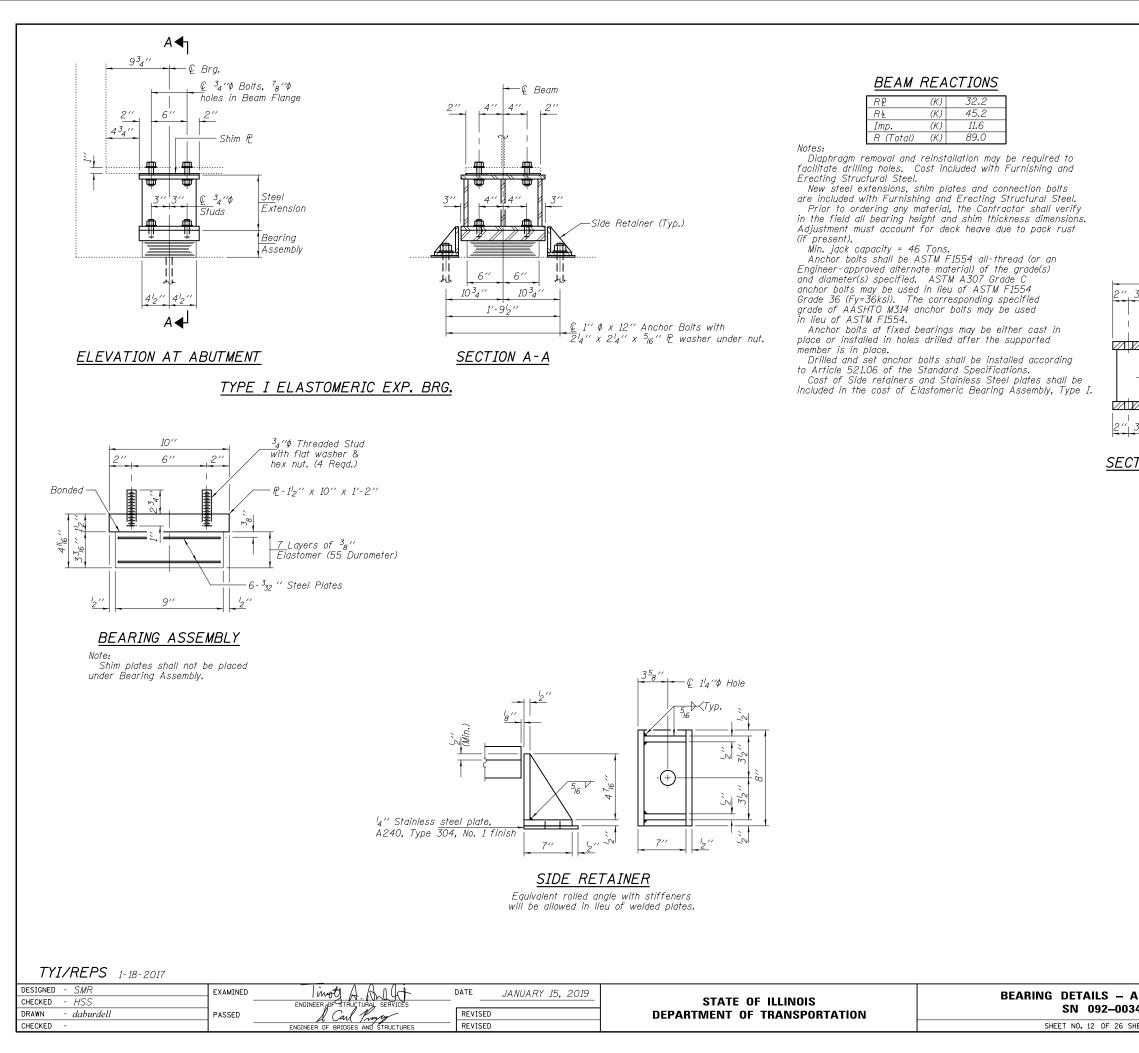
Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi

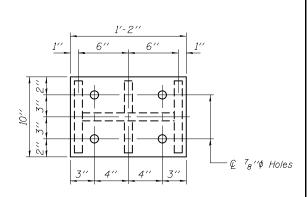
All reinforcement shall be lapped and tied to the splicer bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications. See approved list of bar splicer assemblies and mechanical splicers for

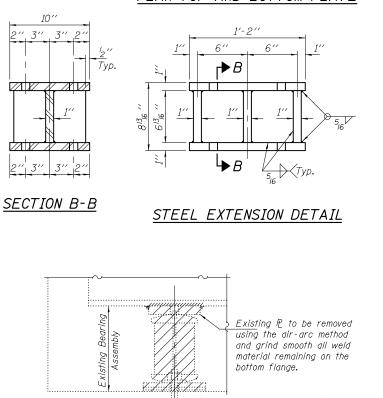


ITEM	UNIT	QUANTITY
Structural Steel Removal	Pound	3320
Furnishing and Erecting Structural Steel	Pound	5050
Structural Steel Repair	Pound	3510
Elastomeric Bearing Assembly, Type I	Each	10
Jack and Remove Existing Bearings	Each	10
Anchor Bolts 1''¢	Each	20

0034 132 (4BX-2)BDR VERMILION 39 21 CONTRACT NO. 70D27	IT LOCATION SKETCH	F.A. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO. 70D27	0034	132	(4BX-2)BDR		VERMILION	39	21
					CONTRACT	NO. 70	DD27
26 SHEETS ILLINOIS FED. AID PROJECT	26 SHEETS		ILLINOIS	FED. A	ID PROJECT		







PLAN TOP AND BOTTOM PLATE

Burn existing anchor bolts flush with existing concrete surface. Grind existing anchor bolt smooth and seal with epoxy.

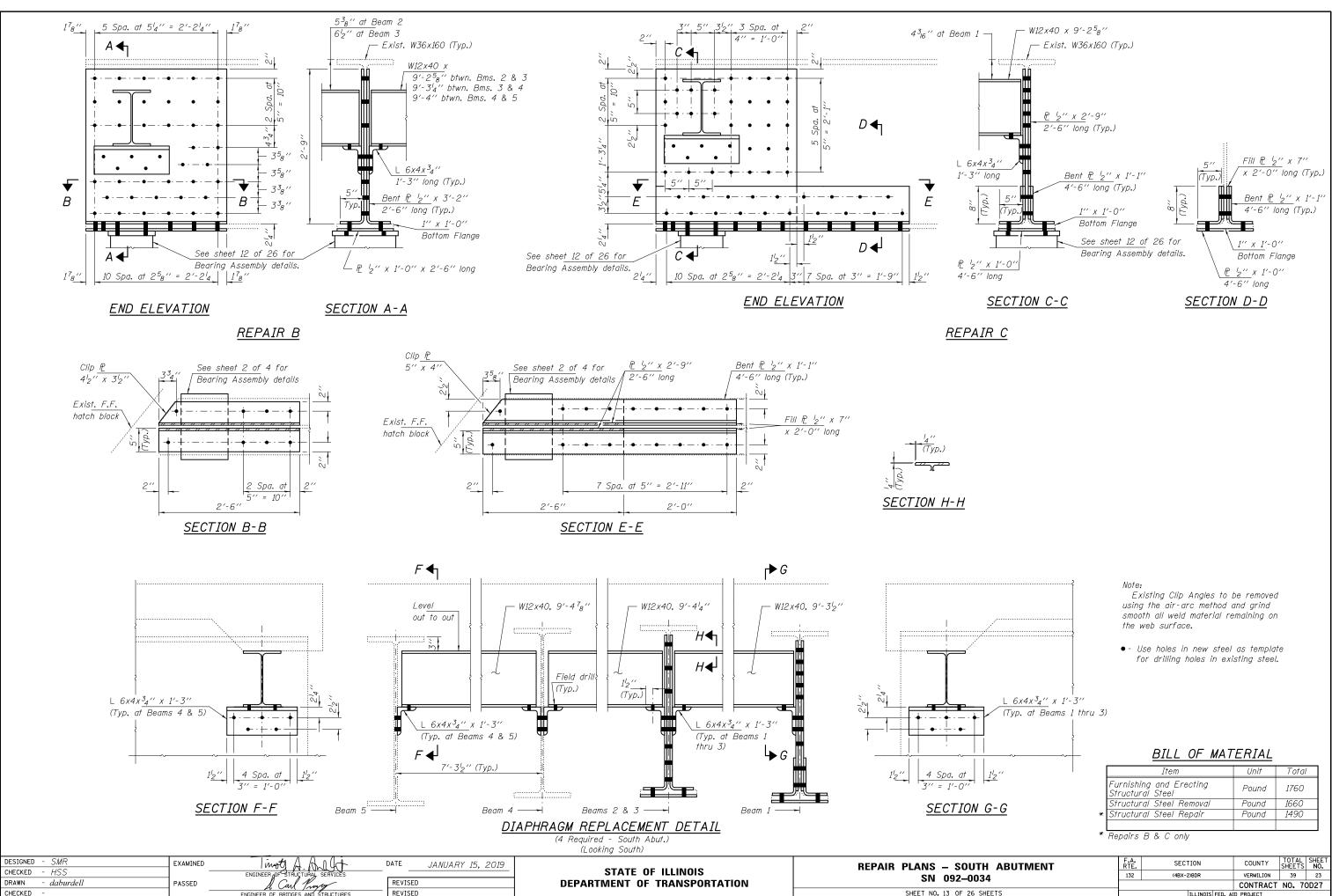
EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

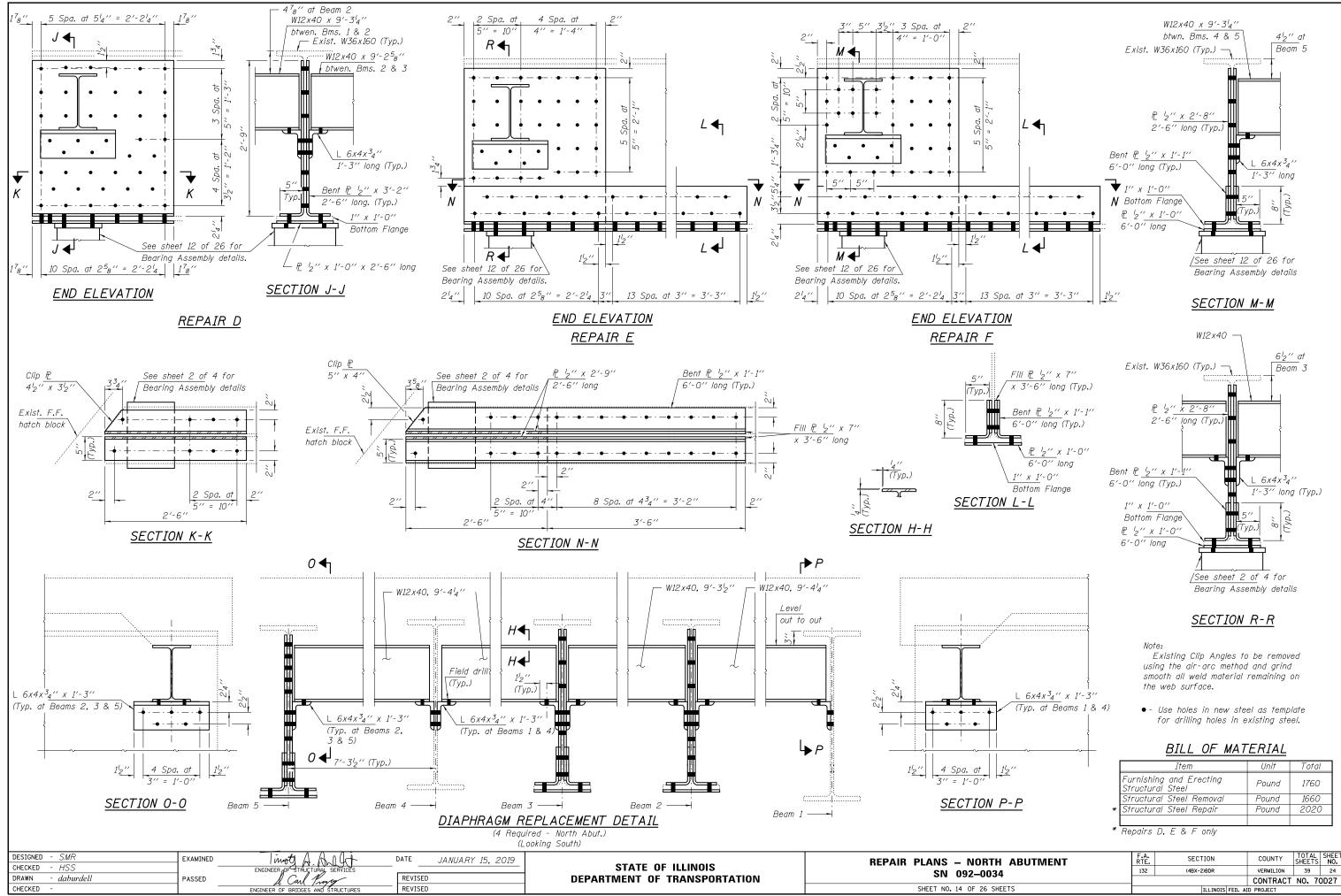
BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	10
Jack and Remove Existing Bearings	Each	10
Furnishing and Erecting Structural Steel	Pound	1530
Anchor Bolts 1''¢	Each	20

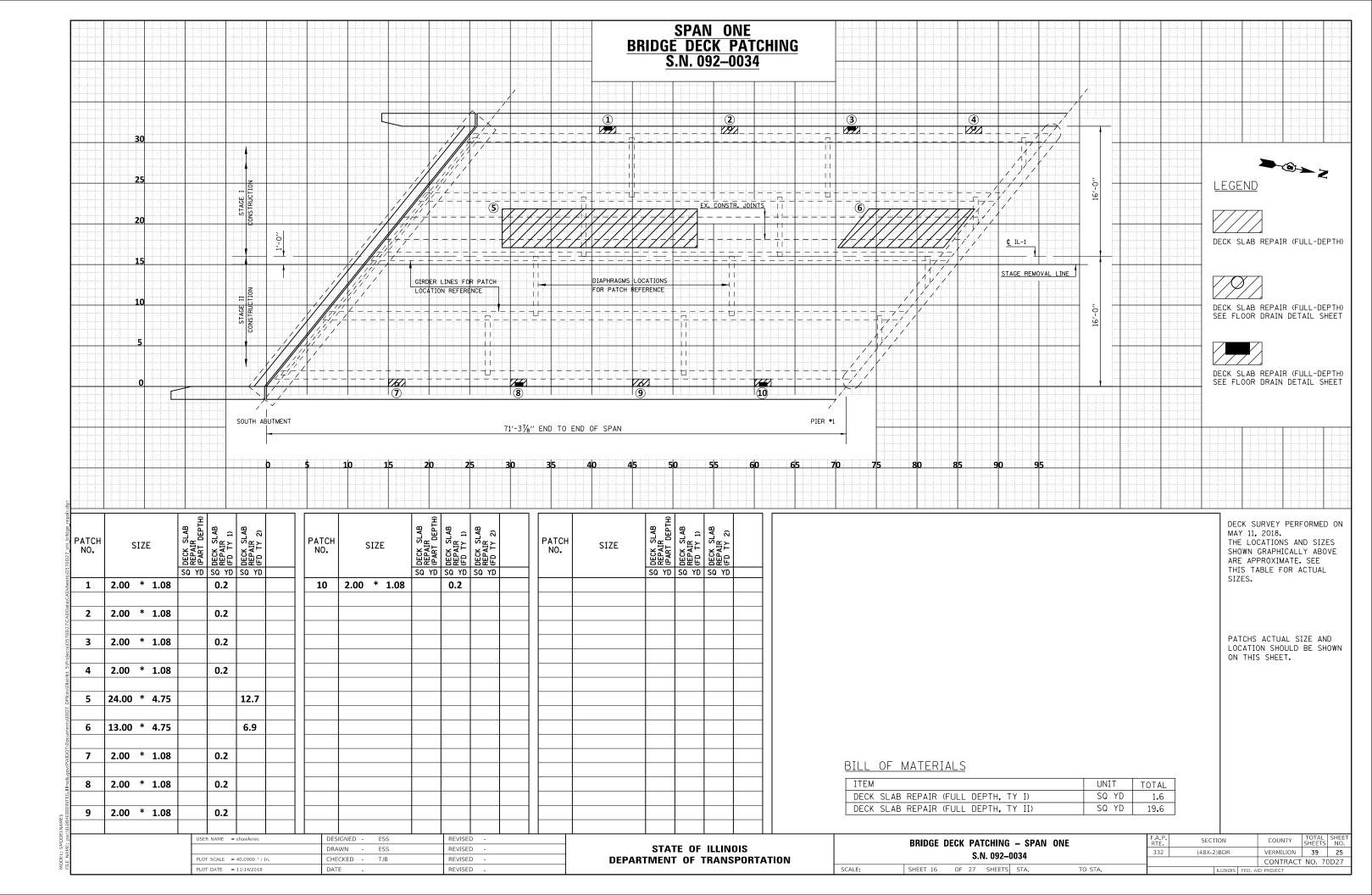
– ABUTMENTS 0034		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		(4BX-2)BDR	VERMILION	39	22
			CONTRACT	NO. 70	DD27
26 SHEETS	ILLINOIS FED. AID PROJECT				

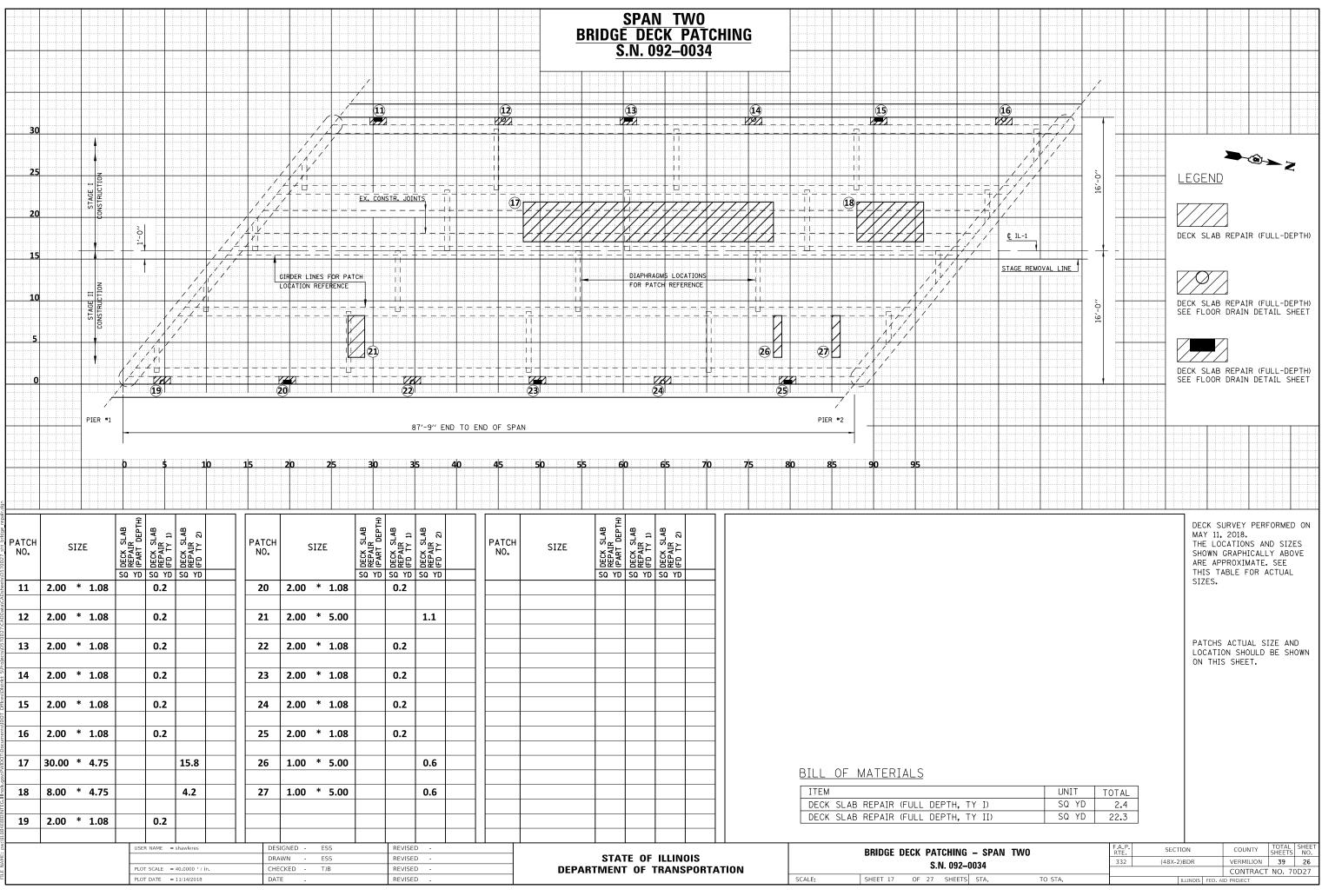


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UTH ABUTMENT		SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
0034	132	(4BX-2)BDR		VERMILION	39	23
				CONTRACT	NO. 70	DD27
26 SHEETS		ILLINOIS	FED. AI	D PROJECT		

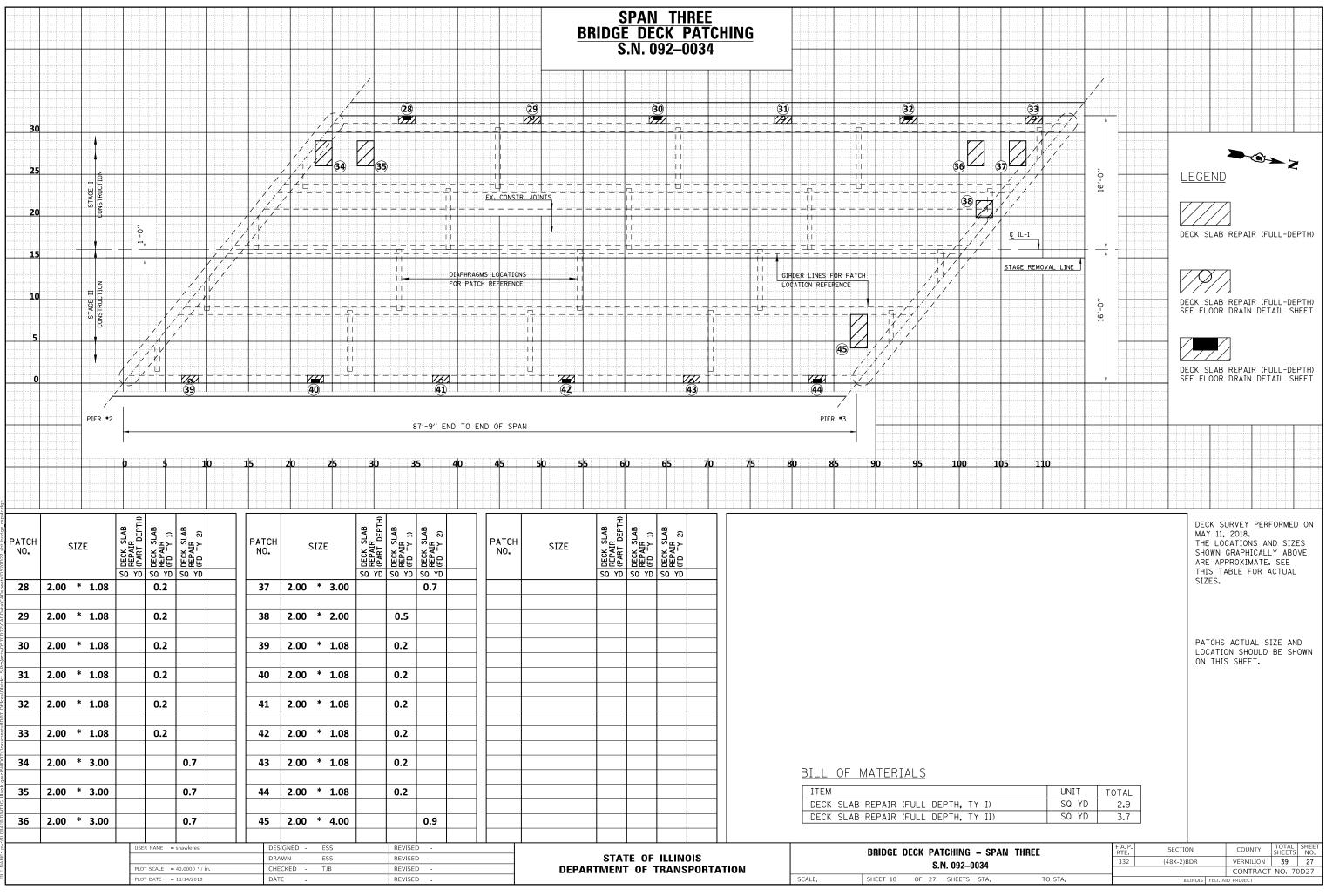


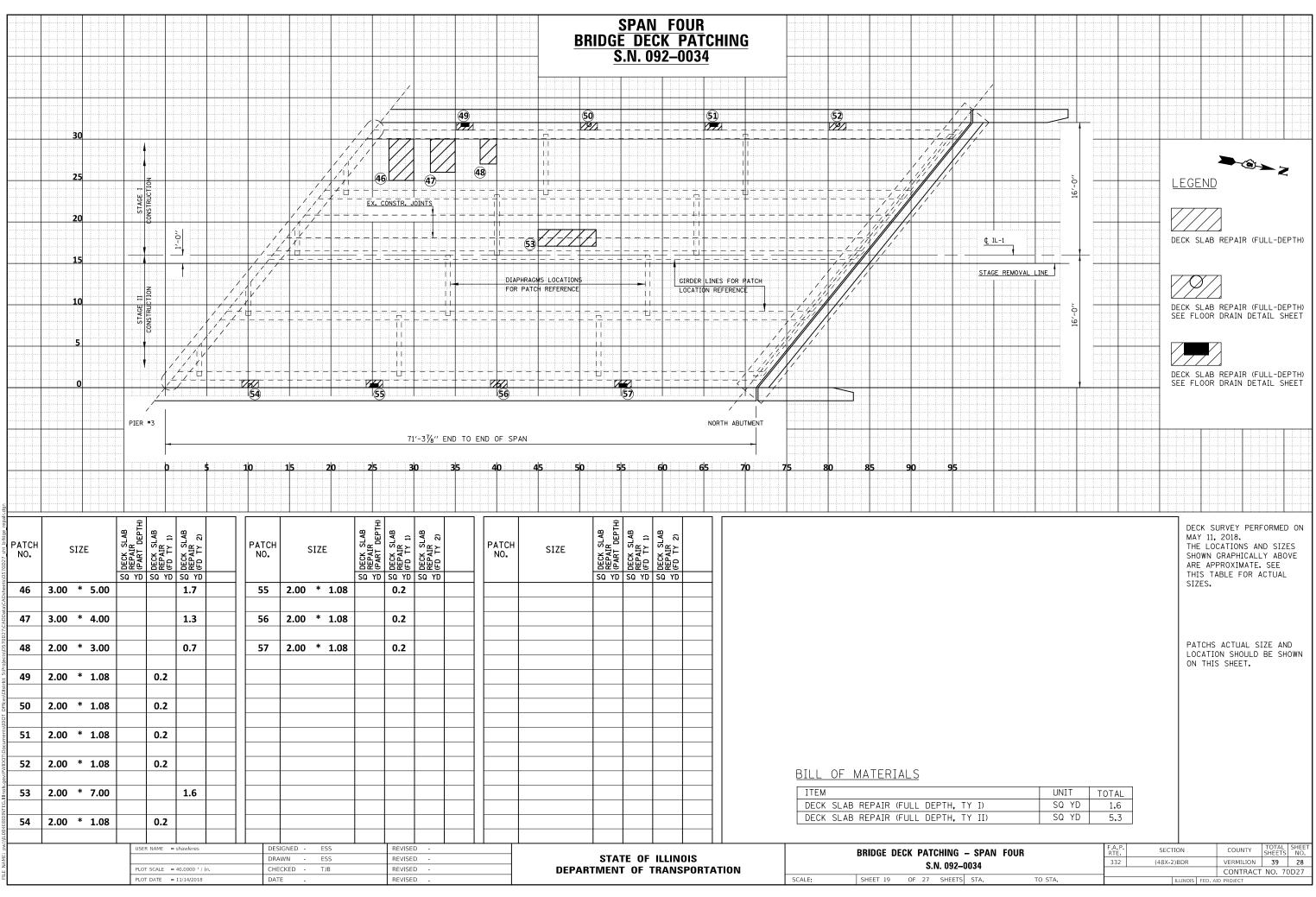
ORTH ABUTMENT		SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.
		(4BX-2	BDR		VERMILION	39	24
					CONTRACT	NO. 70	DD27
26 SHEETS			ILLINOIS	FED. AI	D PROJECT		

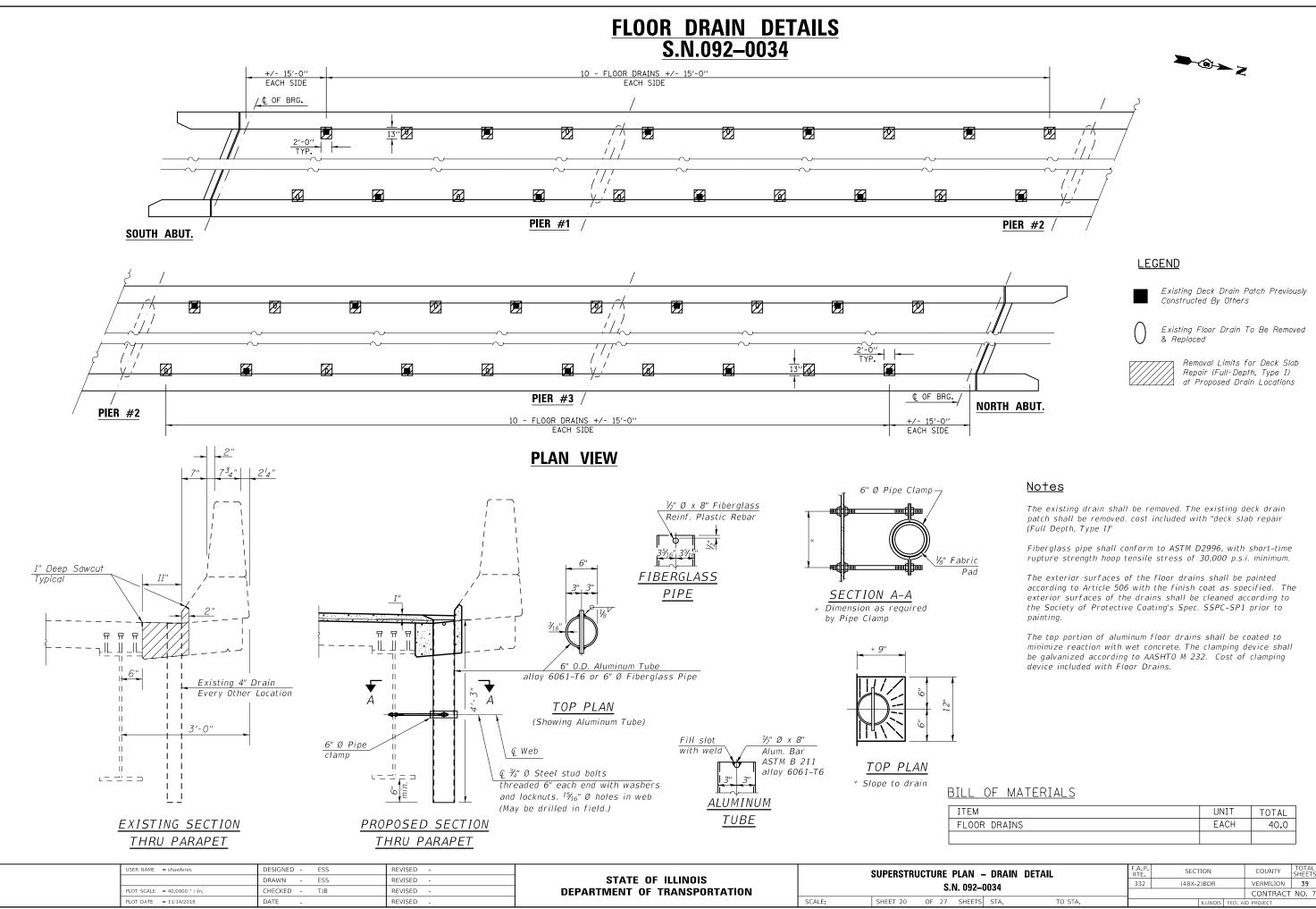




DEL: \$MODELNAME\$

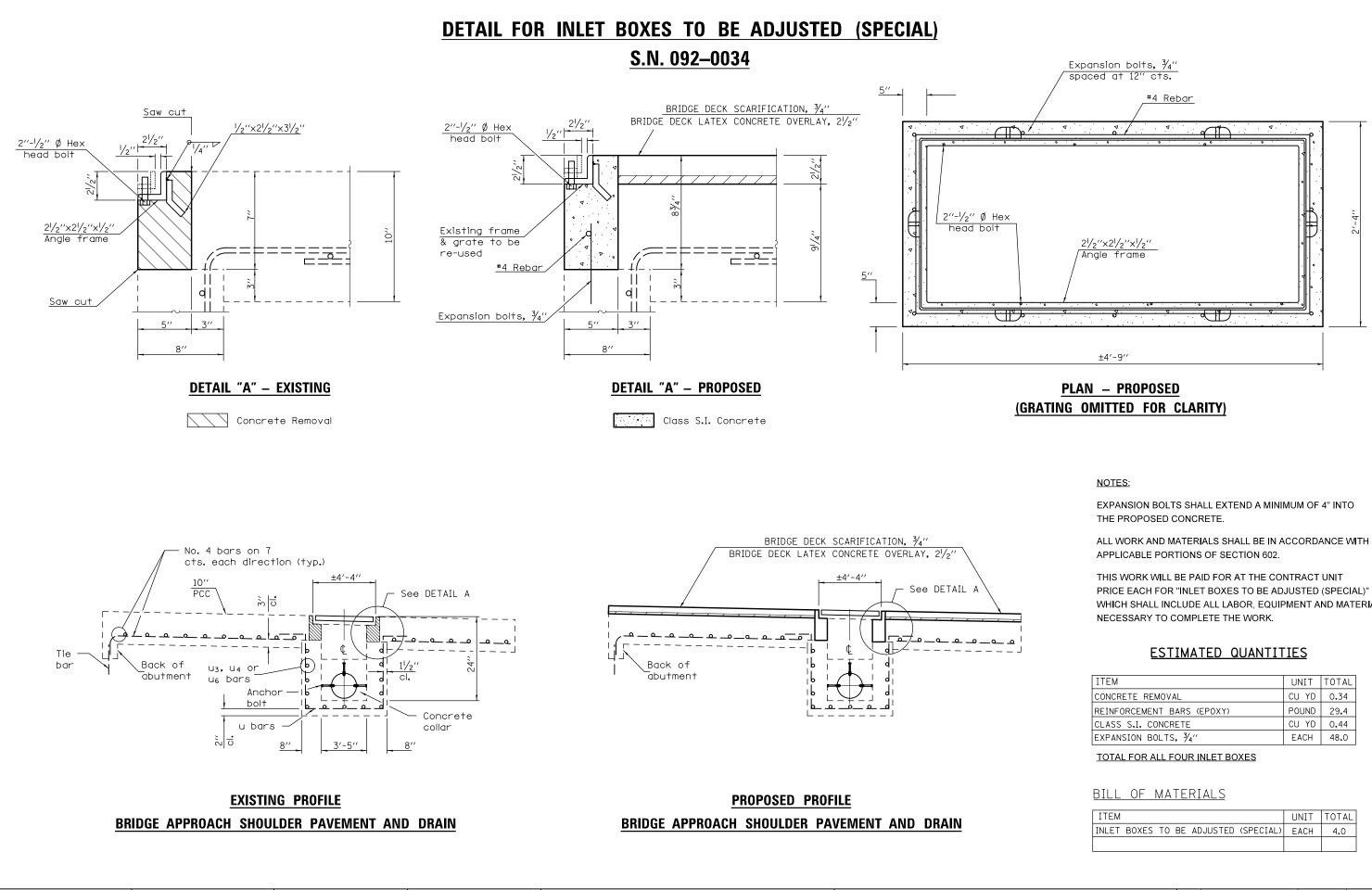






	UNIT	TOTAL
DR DRAINS	EACH	40.0

– DRAIN DETAIL 2–0034		F.A.P. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.		
		332	(48X-	(48X-2)BDR		VERMILION	39	29	
						CONTRACT	NO. 70)D27	
ΓS	STA.	TO STA.			ILLINOIS	FED. A	ID PROJECT		



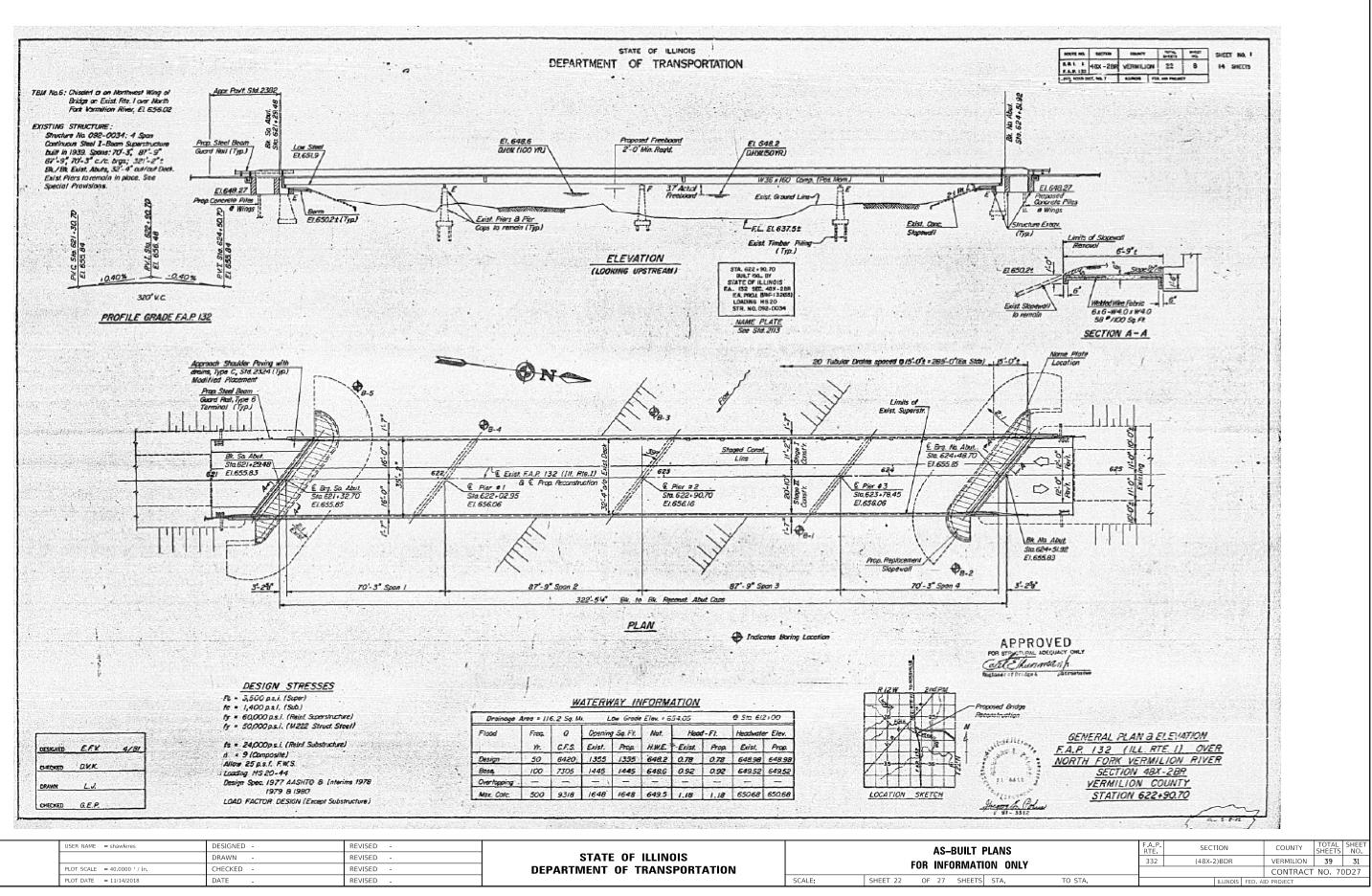
USER NAME = shawleres	DESIGNED -	REVISED -			INL	ET BOX TO BE
	DRAWN -	REVISED -	STATE OF ILLINOIS			
PLOT SCALE = 40.0000 / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION			S.N. 092–0
PLOT DATE = 11/14/2018	DATE -	REVISED -		SCALE:	SHEET 21	OF 27 SHEETS

WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIAL

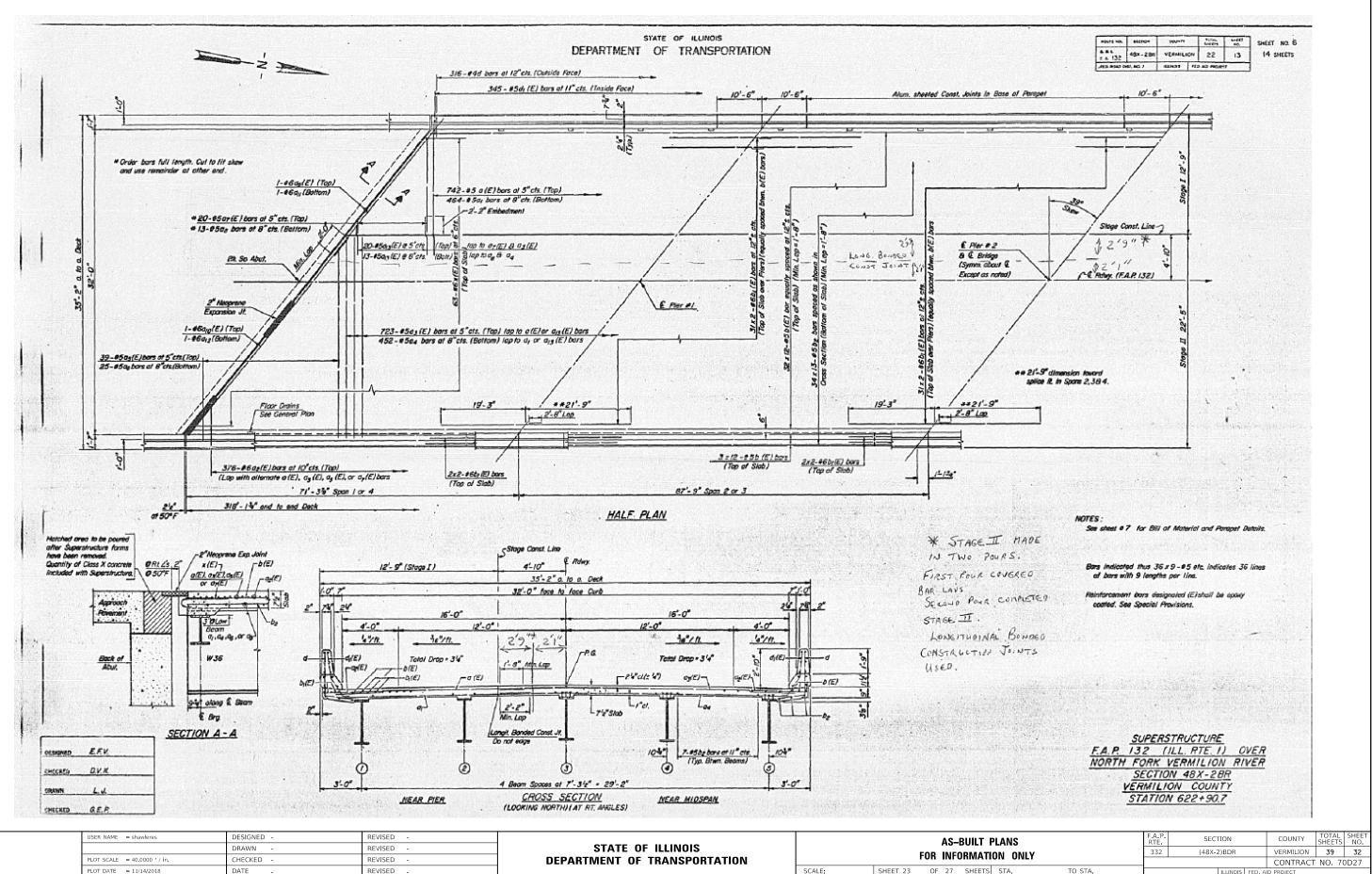
ITEM	UNIT	TOTAL
CONCRETE REMOVAL	CU YD	0.34
REINFORCEMENT BARS (EPOXY)	POUND	29.4
CLASS S.I. CONCRETE	CU YD	0.44
EXPANSION BOLTS, 3/4"	EACH	48.0

ITEM						UNIT	TOTAL
INLET	BOXES	ΤO	ΒE	ADJUSTED	(SPECIAL)	EACH	4.0

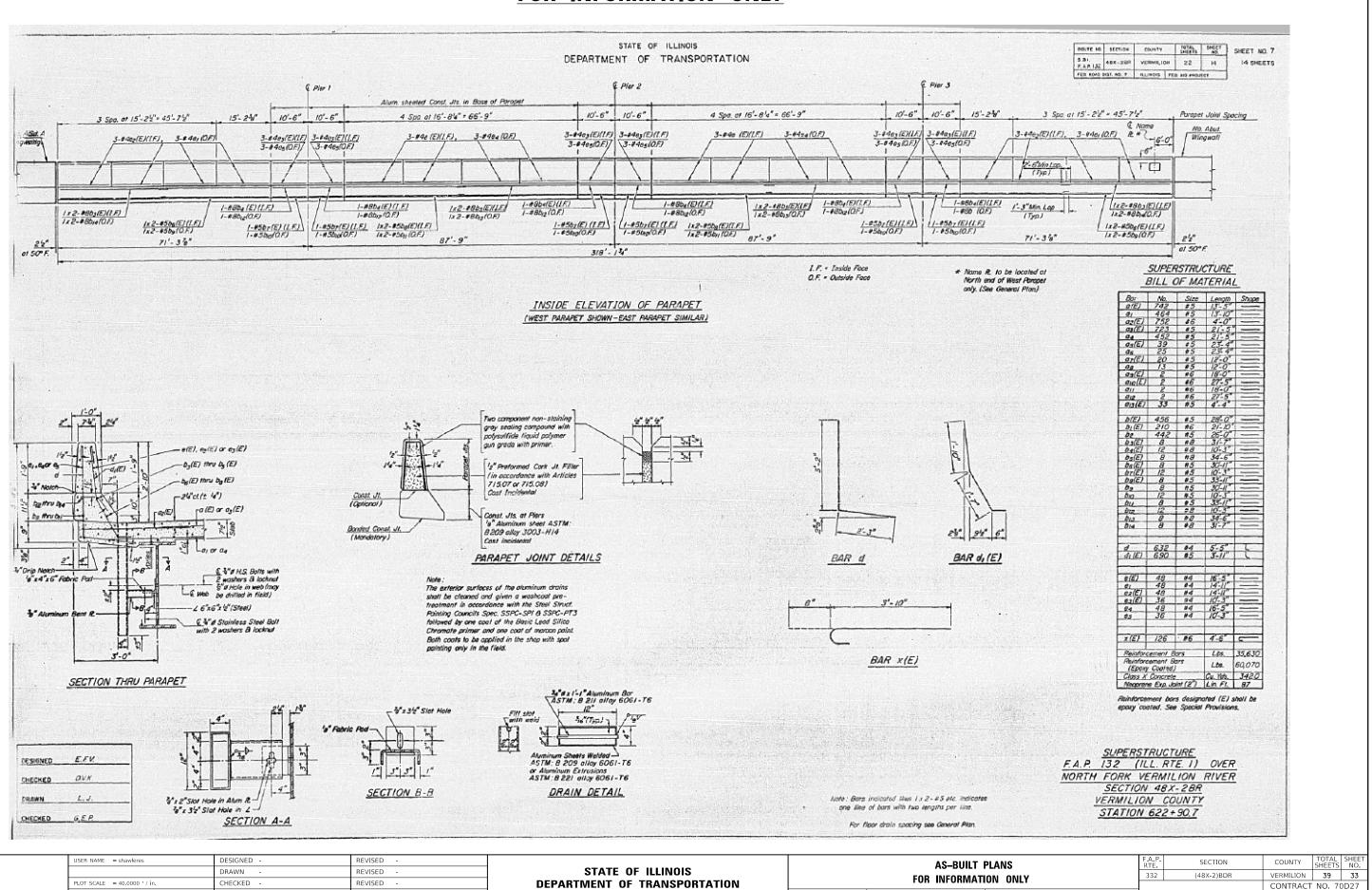
	ADJUSTE	34	F.A.P. RTE	F.A.P. RTE. SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
_(034		332	(48X-2)BDR			VERMILION	39	30
- •	0034						CONTRACT	NO. 70	D27
S	5 STA. TO STA.				ILLINOIS	FED. A	ID PROJECT		



USER NAME = shawleres	DESIGNED -	REVISED -				٨	-BUIL1
	DRAWN -	REVISED -	STATE OF ILLINOIS	i i i i i i i i i i i i i i i i i i i			
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	i i i i i i i i i i i i i i i i i i i	I	OR IN	FORMA
PLOT DATE = 11/14/2018	DATE -	REVISED -		SCALE:	SHEET 22	OF 27	SHEE



SHEET 23 OF 27 SHEETS STA.



SCALE:

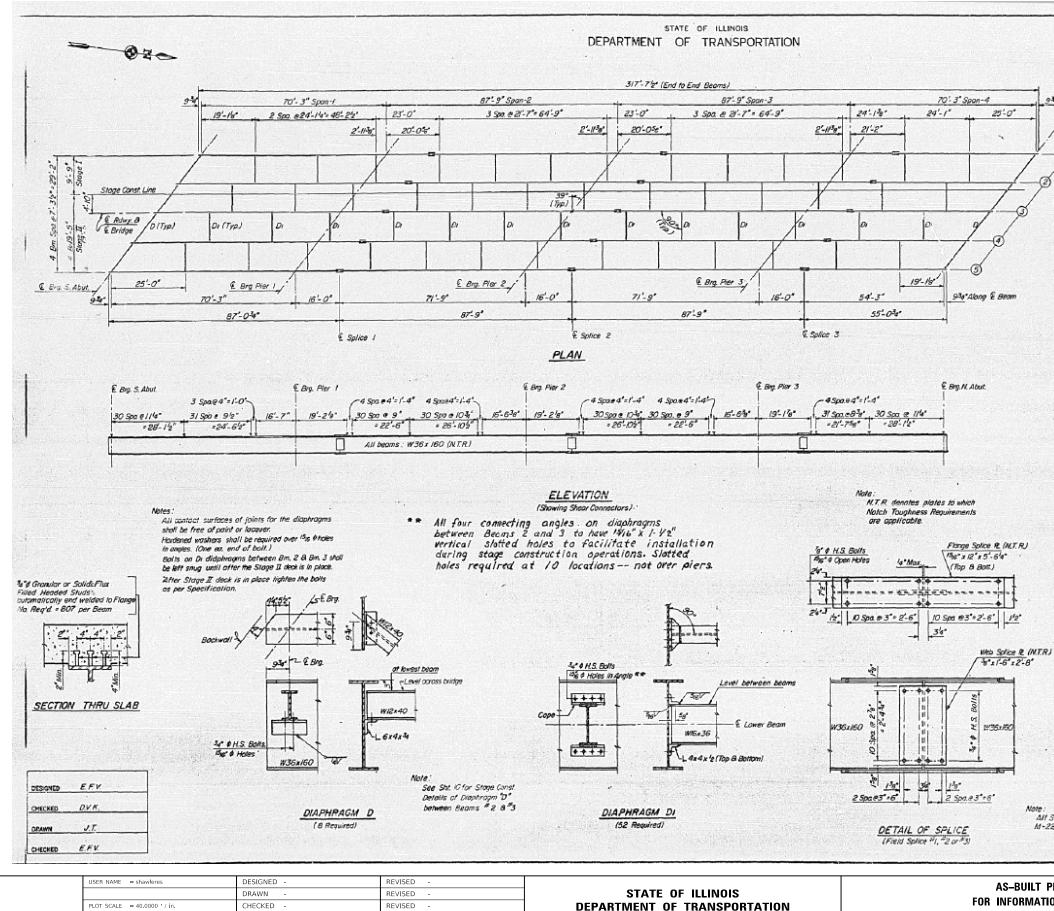
PLOT DATE = 11/14/2018

DATE

REVISED

SHEET 24	OF 27	SHEETS	STA.	TO STA.

ILLINOIS FED. AID PR



PLOT DATE = 11/14/2018

DATE

REVISED

HOUTE NO.	section	COUNTY	214	TOTAL D-COTE	5=047 192	SHEET NO. 9
5.8.1. F.A.P. 132	48×-288	VERMIL	ON	22	16	14 SHEETS
/10, 9040 D	UL NO. 7	ILLINGIS	100	AD PART		

94' E Brg. N. Abut. Beam Number

	* ELEVATI	ONS-TOP	OF W BEA	IMS	
Constanting of the second	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5
& Brg. S. Abut	654.99	655.09	655.18	655.04	654,89
E Brg. Pier 1	655,10	655.22	655.32	655.19	655.05
€ Splice 1	655.13	655.25	655.35	655.23	655.09
€ Brg. Pier 2	655./6	655.29	655.40	655.29	655.16
£ Splice 2	655.16	655.29	655.41	655.30	655.17
€ Brg. Pier 3	655.04	655.18	655.30	655.20	655.09
£ Splice 3	655.00	655.15	655.28	655.18	655.07
E Brg. N. Abul.	654.89	655.04	655.18	655.09	654.99

For fabrication only

IN	FERIOR B	EAM MOM	NT TABLE	NO. TO THE
	0.4 Sp. 18 0.6 Sp. 4	Pier I or 3	0.550 2003	Pier 2
Is (in.4)	9750	9750	9750	9750
Ic · (in.4)	22658	100	22685	-
5s (in.3)	542	542	542	542
Sc (in.3)	743	10.441.00	743	-
2 0(1)	0.894	1.208	0.884	1.208
MEIXI	392.2	932.5	374.2	975.1
fs non comp (ksi)	8.68	20.65	8.28	21.59
5 8 (KA)	0.324		0.324	-
Ms € ('K)	164.8		183.5	
ME ('K)	1224.0	805.7	1334.6	883.9
Mimp (K)	3/3.5	197.9	3/3.6	207.7
Total ('K)	1702.3	1003.6	1831.7	1091.6
Is comp (ksi)	27.49	22.22	29.58	24.17
ts Total (ks.i)	36./7	42.87	37.86	45.76
VR (K)	55.8		50.3	

INTERIOR BEAM REACTION TABLE

Sector March	Abul.	Pier lor 3	Pier 2
R£ (K)	32.2	105.2	106.7
R & (K)	45.2	59.7	61.9
Imp. (K)	11.6	14.7	14.5
R Total (K)	89.0	179.6	183.1

Is and Ss are the mament of inertia and section modulus of the steel section used in computing $f_{\rm S}$ Total. Ic and Sc are the moment of inertia and section modulus of the composite section used in computing is Total.

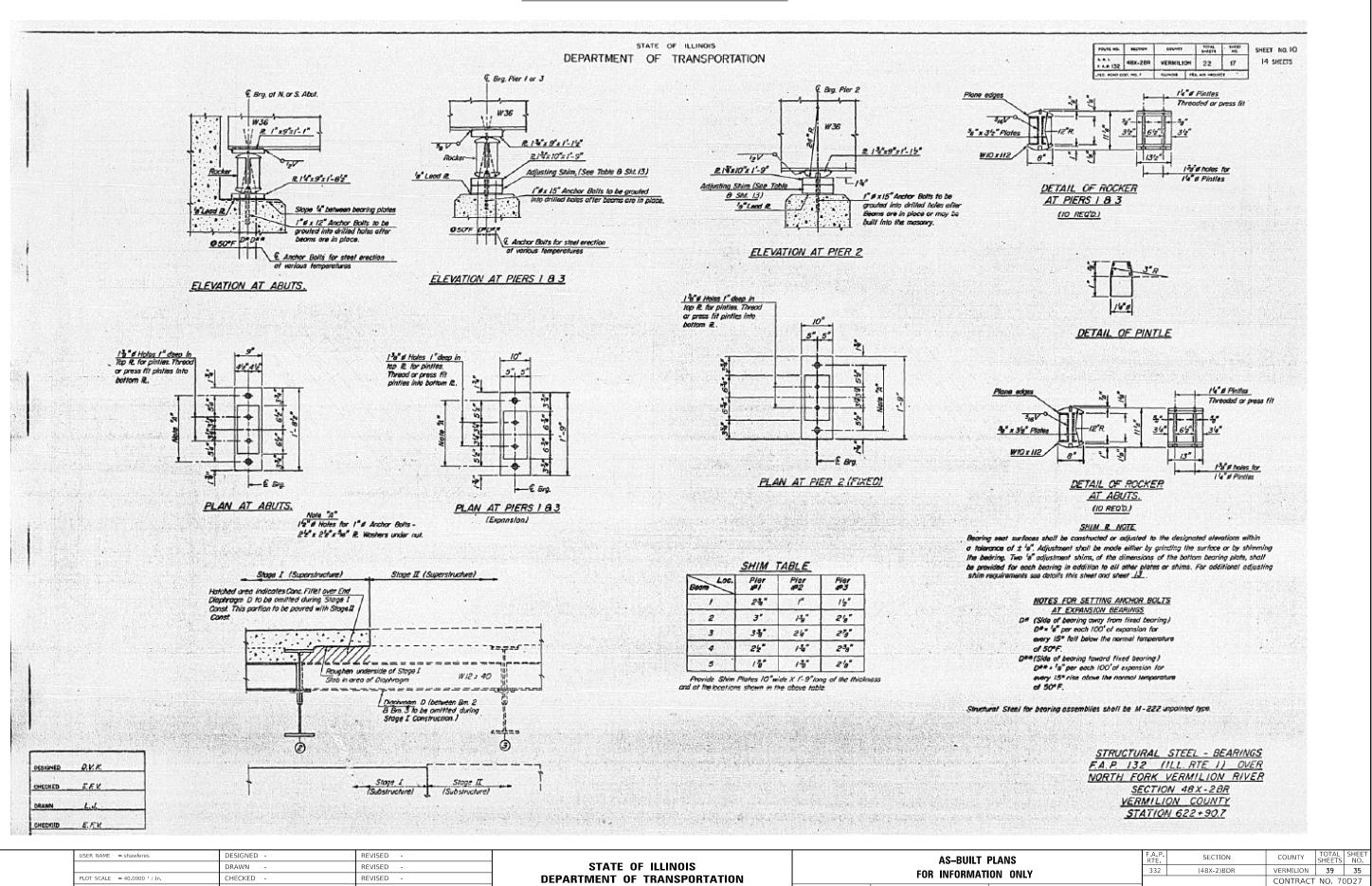
VR is the maximum & + Impact shear range in span. The load factor (1.3) $\left[2 + \frac{5}{2} \left(\frac{1}{2} + Imp. \right) \right]$ is used in computing moments and stresses."

STRUCTURAL STEEL DETAILS F.A.P. 132 (ILL. RTE. I) OVER NORTH FORK VERMILION RIVER SECTION 48X-2BR VERMILION COUNTY STATION 622+90.7

All Struct. Steel shall be M-222 unpointed type.

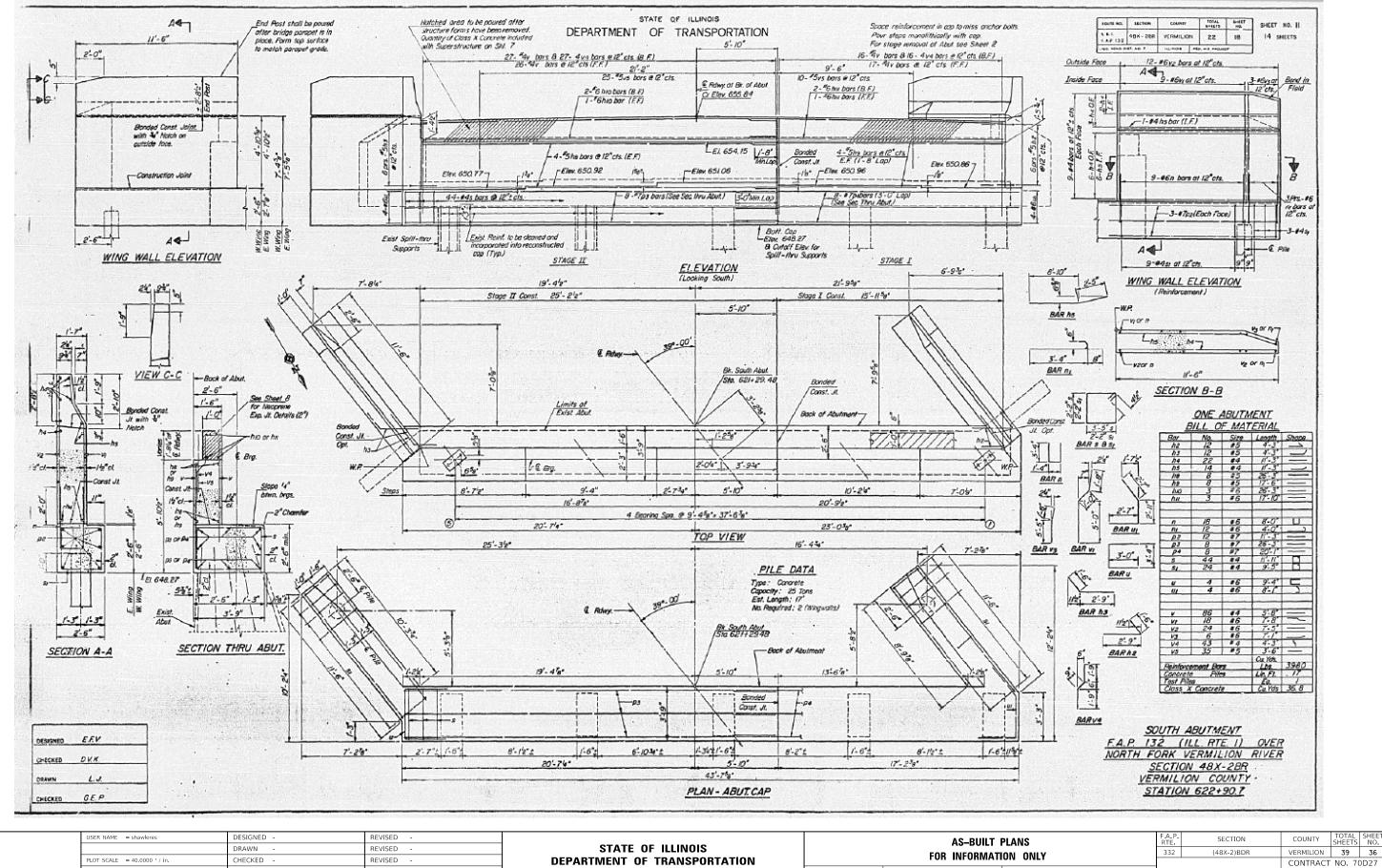
SCALE:

			BUILT F			F.A.P. RTE. 332	SECTION (48X-2)BDR		COUNTY	TOTAL SHEETS	SHEET NO.
	FOR	INFO	ORMATI			552	(407-2)001		CONTRACT	55	
SHEET 25	OF	27	SHEETS	STA.	TO STA.		ILLINOIS	FED, All	D PROJECT		



TO STA.

USER NAME = shawleres	DESIGNED -	REVISED -				20	-BUILT F	
	DRAWN -	REVISED -	STATE OF ILLINOIS					
PLOT SCALE = 40.0000 / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION			FOR INF	ORMATI	ON ON
PLOT DATE = 11/14/2018	DATE -	REVISED -		SCALE:	SHEET 26	OF 27	SHEETS	STA.



PLOT DATE = 11/14/2018

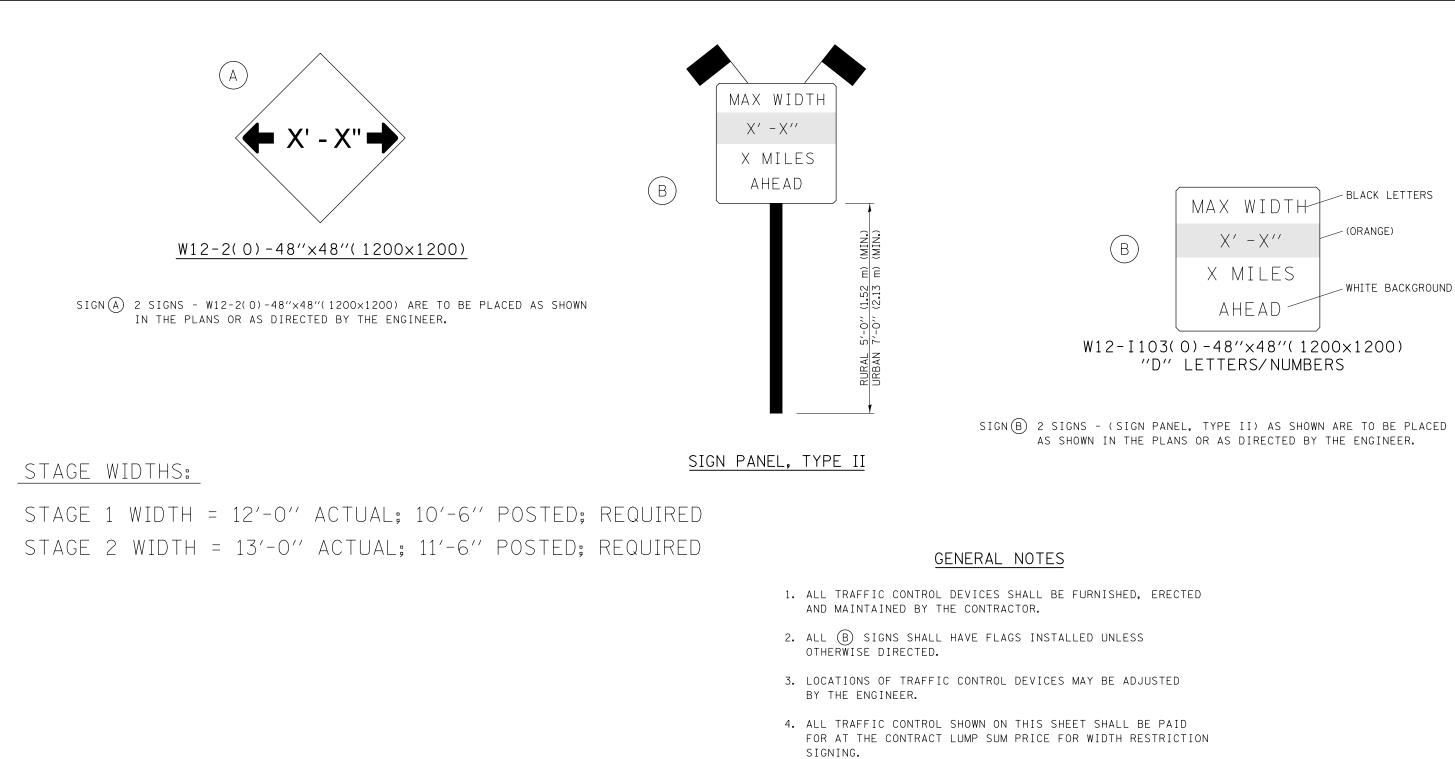
DATE

REVISED

SHEET 27 OF 27 SHEETS STA.

TO STA.

SCALE:



- 5. ALL SIGNS SHALL BE POST MOUNTED UNLESS OTHERWISE DIRECTED.
- 6. ALL SIGNS SHOWN ORANGE (0) SHALL BE FLUORESCENT ORANGE.
- 7. ALL SIGNS SHOWN SHALL CONSIST OF THE CURRENT RETROREFLECTIVE SHEETING REQUIREMENTS AS OUTLINED IN SECTION 1106.01 OF THE STANDARD SPECIFICATIONS BOOK.

								DIS	TRICT 5 DETAI	IL NO. X7200201
FILE NAME =	USER NAME = shawleres	DESIGNED -	REVISED -	03/11 -KJT				F.A.	SECTION	COUNTY TOTAL SHEET
pw:\\ILØ84EBIDINTEG.111.no1s.gov:PWIDOT\Do	cuments\IDOT Offices\District 5\Projects\D57	002RXXXXVData\EADsheets\D570D27_sht_width	r REVISED n.dgn	05/08	STATE OF ILLINOIS		WIDTH RESTRICTION SIGNING	332	(48X-2)BDR	VERMILION 39 37
	PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -	10/08 - KJT	DEPARTMENT OF TRANSPORTATION					CONTRACT NO. 70D27
	PLOT DATE = 11/14/2018	DATE -	REVISED -	7/09 - KJT		SCALE:	SHEET NO. 1 OF 3 SHEETS STA. TO STA.	FED. ROAD D		ID PROJECT

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

S.N. 092-0034

WIDTH RESTRICTION SIGNINGS FOR IL-1 TRAFFIC



NORTHBOUND ERECT BY WEST US-136 PRE-TURN SIGN 2.0 MILES AHEAD

(A1)

NORTHBOUND ERECT BY NORTH IL-1 SIGN INCLUDE 2.0 MILE AHEAD SIGN

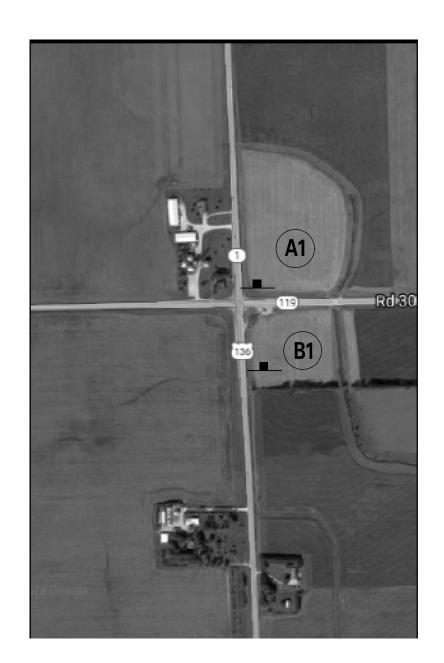
2.0 MILES

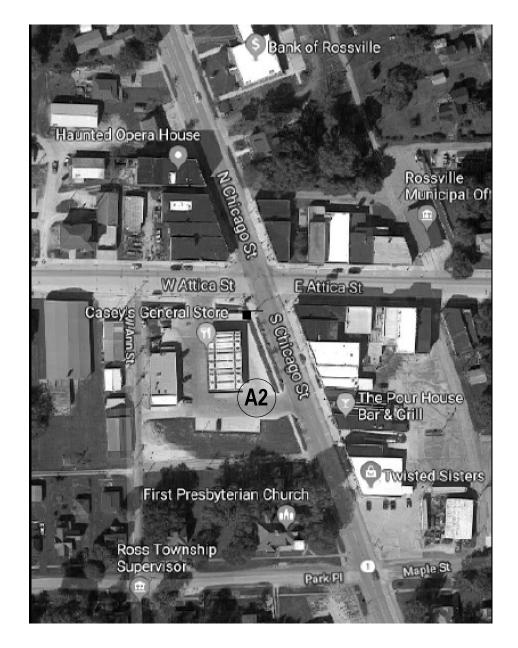
NORTH OF DANVILLE INTERSECTION OF IL-1 & US-136



SOUTHBOUND ERECT BY NORTH IL-1 SIG INCLUDE 2.0 MILE AHEAD







USER NAME = shawleres	DESIGNED -	REVISED -			WID	TH RES	TRICTIO	N SIGNING		F.A.P. BTE	SECTION	COUNTY TOTAL SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS				S.N. 092-			332	(48X-2)BDR	VERMILION 39 38
PLOT SCALE = 40,0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION				5.IN. U9Z-	-0034		'		CONTRACT NO. 70D27
PLOT DATE = 11/14/2018	DATE -	REVISED -		SCALE:	SHEET 2	OF 3	SHEETS	S STA.	TO STA.		ILLINOIS FED	AID PROJECT

GN	2.0	MILES
SIGN		

ROSSVILLE ILLINOIS INTERSECTION OF IL-1 & ATTICA ST.

<u>S.N. 092–0034</u>

WIDTH RESTRICTION SIGNINGS FOR IL-1 TRAFFIC

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A



SOUTHBOUND ERECT BY JUNCTION IL-9 SIGN 9.0 MILES AHEAD

A3

SOUTHBOUND ERECT BY SOUTH IL-1 SIGN INCLUDE 9.0 MILE AHEAD SIGN

9.0 MILES

HOOPESTON ILLINOIS INTERSECTION OF IL-1 & IL-9



1	USER NAME = shawleres	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION SCALE: SHEET 3 OF 3 SHEET		WIDTH RESTRICTION SIGNING		F.A.P. BTE	SECTION	COUNTY	TOTAL	SHEET
		DRAWN -	REVISED -					332	(48X-2)BDR	VERMILION	39	39
	PLOT SCALE = 40.0000 / in.	CHECKED -	REVISED -		5.11. 092-0034	. 092-0034				CONTRACT NO. 70D27		
	PLOT DATE = 11/14/2018	DATE -	REVISED -		SCALE:	SHEET 3 OF 3 SHEETS STA.	TO STA.		AID PROJECT			