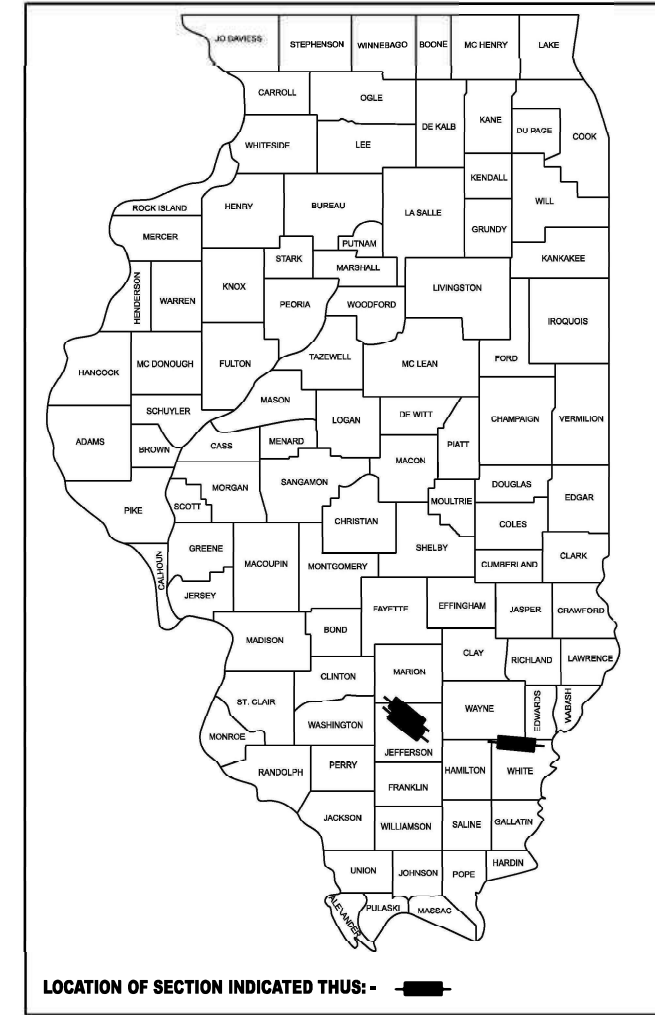


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	D9 BRIDGE REPAIR 2024-2	JEFF. / WHITE	36	1
		ILLINOIS	CONTRACT NO. 78A28	

D-99-007-24



FOR INDEX OF SHEETS, SEE SHEET NO. 3  
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4-6

F.A.S. 826 (CH 10) - S.N. 041-0051

TRAFFIC DATA

ROADWAY CLASSIFICATION: MAJOR COLLECTOR  
CURRENT ADT (2021) = 2,550  
DESIGN YEAR ADT (2044) = 3,210  
SU = 2.0%  
MU = 2.0%

TOWNSHIP: SHILOH  
POSTED SPEED: 55 MPH

TR 1A - S.N. 041-0053

TRAFFIC DATA

ROADWAY CLASSIFICATION: LOCAL ROAD  
CURRENT ADT (2021) = 450  
DESIGN YEAR ADT (2044) = 570  
SU = 15.6%  
MU = 0.7%

TOWNSHIP: SHILOH  
POSTED SPEED: 55 MPH

TR 214 - S.N. 097-0045

TRAFFIC DATA

ROADWAY CLASSIFICATION: LOCAL ROAD  
CURRENT ADT (2021) = 25  
DESIGN YEAR ADT (2044) = 30  
SU = 36.0%  
MU = 20.0%

TOWNSHIP: BURNT PRAIRIE  
POSTED SPEED: 55 MPH

COORDINATE SYSTEM: N/A

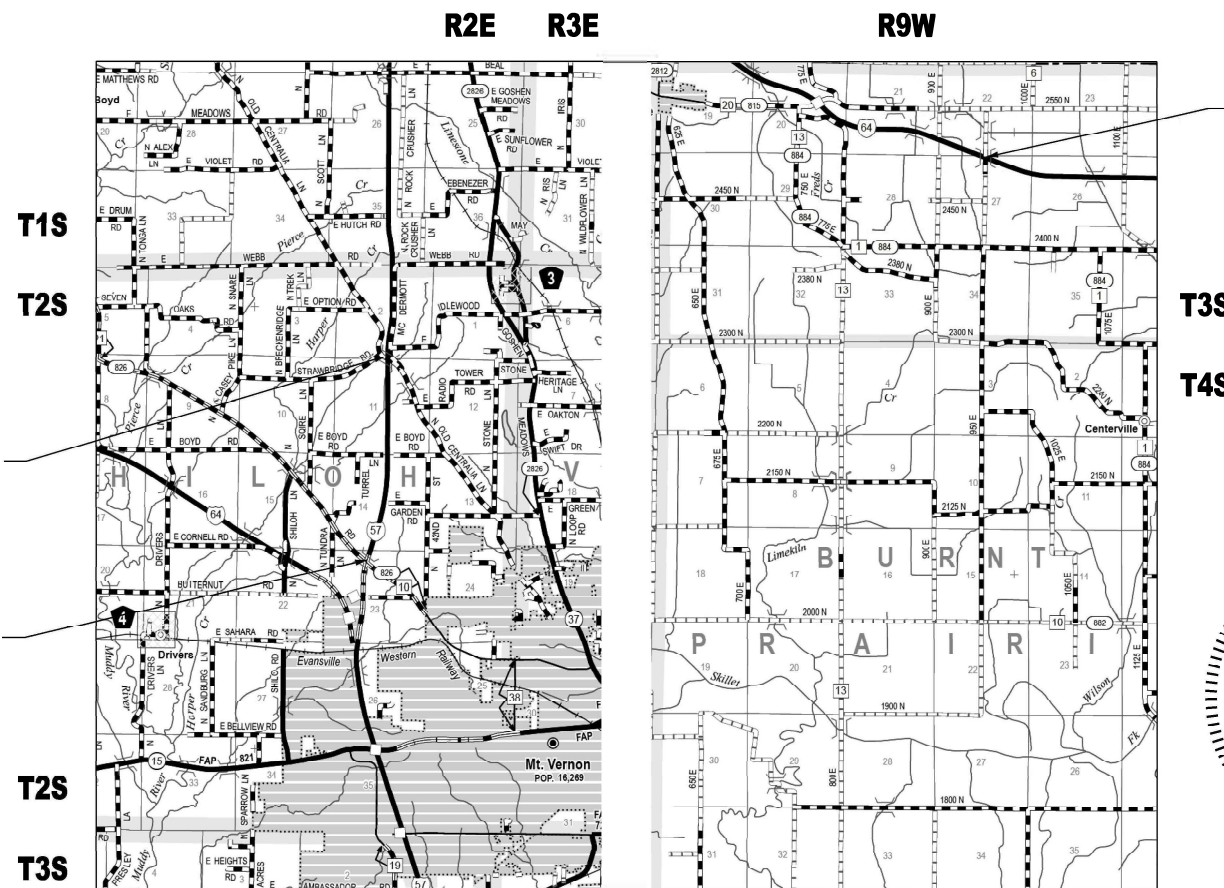
PROPOSED  
HIGHWAY PLANS

FAI 57 (I-57) AND FAI 64 (I-64)  
SECTION D9 BRIDGE REPAIR 2024-2  
STRUCTURE REHABILITATION

C-99-030-24

JEFFERSON COUNTY

WHITE COUNTY



S.N. 041-0053 (TR 1A) OVER I-57

S.N. 041-0051 (FAS 826) OVER I-57

S.N. 097-0045 (TR 214) OVER I-64

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

PROJECT ENGINEER: EHREN KIRBY, P.E.  
PROJECT MANAGER: CMT INC.

CONTRACT NO. 78A28

S.N. 041-0051: GROSS LENGTH = 255.17 FT. = 0.048 MILE  
NET LENGTH = 255.17 FT. = 0.048 MILE

S.N. 041-0053: GROSS LENGTH = 267.00 FT. = 0.051 MILE  
NET LENGTH = 267.00 FT. = 0.051 MILE

S.N. 097-0045:  
GROSS LENGTH = 250.75 FT. = 0.047 MILE  
NET LENGTH = 250.75 FT. = 0.047 MILE

SIGNATURE: [Signature]

DATE SIGNED: 3 / 1 / 24

LICENSE EXPIRATION DATE: 11 / 30 / 2025



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 15, 2024  
Kirk H. Brown  
REGIONAL ENGINEER

May 10, 2024 [Signature]  
ENGINEER OF DESIGN AND ENVIRONMENT

May 10, 2024 [Signature]  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

MODEL: 02-Signature (Sheet)  
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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

USER NAME = byoung	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 / in.	CHECKED -	REVISED -
PLOT DATE = 2/20/2024	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

FAS 826 (CH 10) OVER I-57, TR 1A OVER I-57, TR 214 OVER I-64  
 SIGNATURE SHEET

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	D9 BRIDGE REPAIR 2024-2	JEFF. / WHITE	36	2
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				

\*FAS 826 (CH 10) OVER I-57, TR 1A OVER I-57, TR 214 OVER I-64

**INDEX OF SHEETS**

1	COVER
2	SIGNATURE
3	GENERAL NOTES
4 - 6	SUMMARY OF QUANTITIES
7 - 9	TYPICAL SECTIONS
10	SCHEDULES OF QUANTITIES
11	ROADWAY PLAN
12 - 13	MAINTENANCE OF TRAFFIC - S.N. 041-0051 (E)
14	MAINTENANCE OF TRAFFIC - S.N. 041-0053 (E)
15	MAINTENANCE OF TRAFFIC - S.N. 097-0045 (E)
16 - 19	STRUCTURE PLANS - S.N. 041-0051 (E)
20 - 23	STRUCTURE PLANS - S.N. 041-0053 (E)
24 - 26	STRUCTURE PLANS - S.N. 097-0045 (E)
27 - 35	EXISTING STRUCTURE PLANS
36	CONSTRUCTION DETAILS

**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.
ALL AGGREGATE	2.05 TONS/CU. YD.

**COMMITMENTS**

- THREE WEEKS PRIOR TO THE CLOSURE OF TR 1A (N. OLD CENTRALIA LN.) OVER I-57, CONTACT JEFF HARRISON, SHILOH TOWNSHIP ROAD COMMISSIONER, AT (618) 214-3937 TO NOTIFY SHILOH TOWNSHIP IN ADVANCE OF THE PLANNED ROAD CLOSURE.

**HIGHWAY STANDARDS**

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE 2L, 2W, MOVING OPERATIONS
701316-13	LANE CLOSURE 2L, 2W, BRIDGE REPAIR, FOR SPEEDS ≥ 45 MPH
701400-12	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-13	LANE CLOSURE, FREEWAY/EXPRESSWAY
701428-01	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY
701901-09	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

**HMA MIXTURE TABLE**

LOCATIONS	HOT-MIX ASPHALT SURFACE COURSE
MIXTURE USE(S):	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX C, N50
PG:	PG 64-22
DESIGN AIR VOIDS:	4.0%, 50 GYRATION DESIGN
MIXTURE COMPOSITION (GRADATION MIXTURE):	IL-9.5mm
FRICTION AGGREGATE:	MIX C
MIXTURE WEIGHT:	112 LBS/SQ YD/IN
QUALITY MANAGEMENT PROGRAM:	QC/QA
SUBLOT SIZE:	3,000 TONS
MATERIAL TRANSFER DEVICE	NO

LOCATIONS	WATER PROOFING (SURFACE LIFT)*
MIXTURE USE(S):	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, 9.5-SMA N50
PG:	SBS PG 76-22
DESIGN AIR VOIDS:	4.0%, 50 GYRATION DESIGN
MIXTURE COMPOSITION (GRADATION MIXTURE):	IL-9.5mm
FRICTION AGGREGATE:	MIX D
MIXTURE WEIGHT:	112 LBS/SQ YD/IN
QUALITY MANAGEMENT PROGRAM:	QC/QA
SUBLOT SIZE:	3,000 TONS
MATERIAL TRANSFER DEVICE	NO

LOCATIONS	WATER PROOFING (BINDER LIFT)*
MIXTURE USE(S):	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, 4.75mm N50
PG:	SBS PG 76-22
DESIGN AIR VOIDS:	4.0%, 50 GYRATION DESIGN
MIXTURE COMPOSITION (GRADATION MIXTURE):	IL-4.75mm
FRICTION AGGREGATE:	NONE
MIXTURE WEIGHT:	112 LBS/SQ YD/IN
QUALITY MANAGEMENT PROGRAM:	QC/QA
SUBLOT SIZE:	3,000 TONS
MATERIAL TRANSFER DEVICE	NO

\* COMPONENT OF FULL LANE SEALANT WATERPROOFING SYSTEM ON BRIDGE STRUCTURE

REV. - MS

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PLOT DATE = 3/8/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FAS 826 (CH 10) OVER I-57, TR 1A OVER I-57, TR 214 OVER I-64  
GENERAL NOTES**

SCALE: Full Size 1 = 1    SHEET 1    OF 1    SHEETS    STA.    TO STA.

*FAS 826 (CH 10) OVER I-57, TR 1A OVER I-57, TR 214 OVER I-64			
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS
*	D9 BRIDGE REPAIR 2024-2	JEFF. / WHITE	36
			SHEET NO.
			3
CONTRACT NO. 78A28			
ILLINOIS   FED. AID PROJECT			

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				FUNDING: 100% STATE		
				BRIDGE 0013 S.N. 041-0051	BRIDGE 0013 S.N. 041-0053	BRIDGE 0013 S.N. 097-0045
40603200	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50	TON	35.2		35.2	
40604150	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	TON	81.3		81.3	
40605020	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "C", N50	TON	99		99	
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	29.6		29.6	
50157300	PROTECTIVE SHIELD	SQ YD	354		354	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	4,233	1,185	1,418	1,630
52000015	PREFORMED JOINT SEAL 1 1/2"	FOOT	61			61
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	18		10	8
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	8	8		
52100520	ANCHOR BOLTS, 1"	EACH	52	16	20	16
58100210	FULL LANE SEALANT WATERPROOFING SYSTEM	SQ YD	778		778	
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	1	1		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	1	2	1
67100100	MOBILIZATION	L SUM	1	0.3	0.3	0.4

REV. - MS

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FAS 826 OVER I-57, TR 1A OVER I-57, TR 214 OVER I-64  
SUMMARY OF QUANTITIES**

SCALE: SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	D9 BRIDGE REPAIR 2024-2	JEFF. / WHITE	36	4
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				

\*FAS 826 (CH 10) OVER I-57, TR 1A OVER I-57, TR 214 OVER I-64



CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				FUNDING: 100% STATE		
				BRIDGE 0013 S.N. 041-0051	BRIDGE 0013 S.N. 041-0053	BRIDGE 0013 S.N. 097-0045
70100100	TRAFFIC CONTROL AND PROTECTION, STANDARD 701316	EACH	1	1		
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1		1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1		
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1		
70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6		
70107006	PAVEMENT MARKING BLACKOUT TAPE, 6"	FOOT	1,778	1,778		
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	126	42	42	42
70200100	NIGHTTIME WORK ZONE LIGHTING	L SUM	1		1	
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1,778	1,778		
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	899	899		
* 86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1	1		
X5030530	FLOOR DRAIN EXTENSION	EACH	6		6	
X7011800	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1		0.5	0.5
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	26	8	10	8
Z0012102	CONCRETE BRIDGE DECK SCARIFICATION 3/8 INCH	SQ YD	743	743		

\* SPECIALTY ITEM

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	DRAWN -	REVISED -
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PLOT DATE = 3/21/2024	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FAS 826 OVER I-57, TR 1A OVER I-57, TR 214 OVER I-64  
SUMMARY OF QUANTITIES

SCALE: SHEET 2 OF 3 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	D9 BRIDGE REPAIR 2024-2	JEFF. / WHITE	36	5
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				

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\*FAS 826 (CH 10) OVER I-57, TR 1A OVER I-57, TR 214 OVER I-64

CONSTRUCTION CODE		
FUNDING: 100% STATE		

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE		
				0013	0013	0013
				S.N. 041-0051	S.N. 041-0053	S.N. 097-0045
Z0012193	BRIDGE DECK THIN POLYMER OVERLAY 3/8"	SQ YD	1482	743		739
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	134		134	
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	136	20	116	
Z0021902	SILICONE JOINT SEALER, 1/2"	FOOT	24	12	12	
Z0065700	SLOPE WALL REPAIR	SQ YD	1	1		
Z0065730	SLOPE WALL SLURRY PUMPING	CU YD	5	5		

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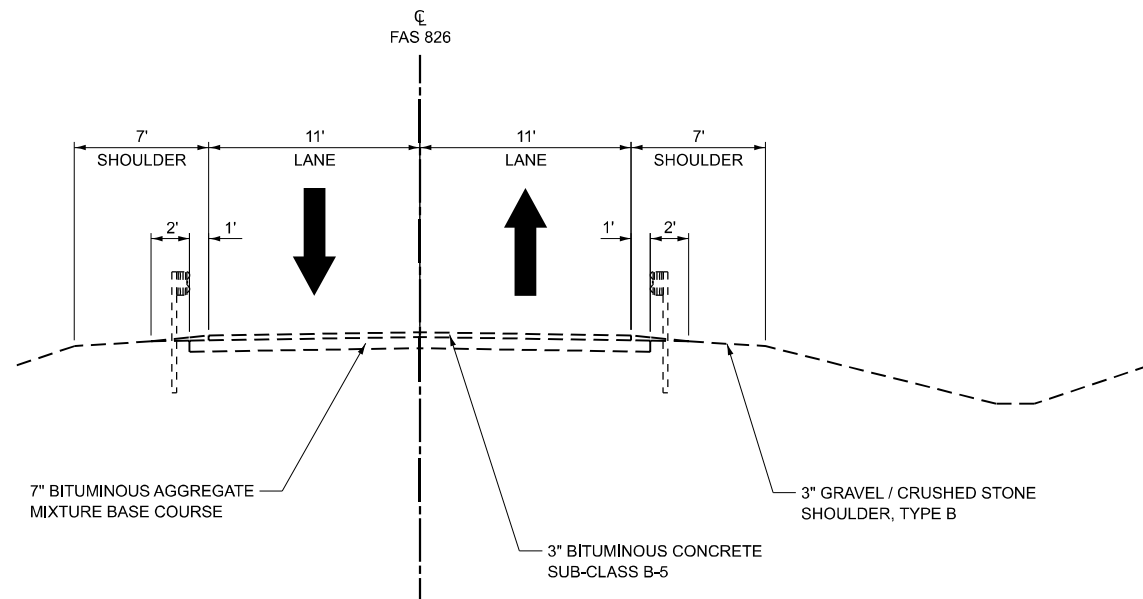
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

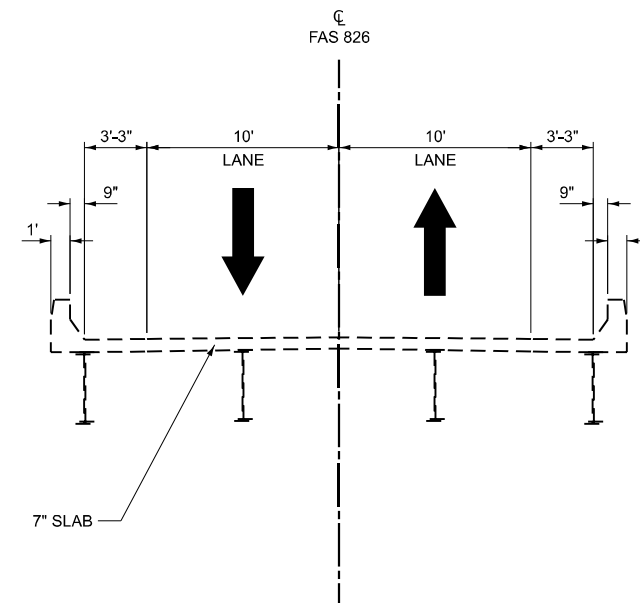
**FAS 826 OVER I-57, TR 1A OVER I-57, TR 214 OVER I-64  
SUMMARY OF QUANTITIES**

SCALE: SHEET 3 OF 3 SHEETS STA. TO STA.

*FAS 826 (CH 10) OVER I-57, TR 1A OVER I-57, TR 214 OVER I-64				
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	D9 BRIDGE REPAIR 2024-2	JEFF. / WHITE	36	6
CONTRACT NO. 78A28				
ILLINOIS   FED. AID PROJECT				



**FAS ROUTE 826 (CH 10)**  
(LOOKING WEST)



**FAS ROUTE 826 (CH 10)**  
(LOOKING WEST)  
BRIDGE

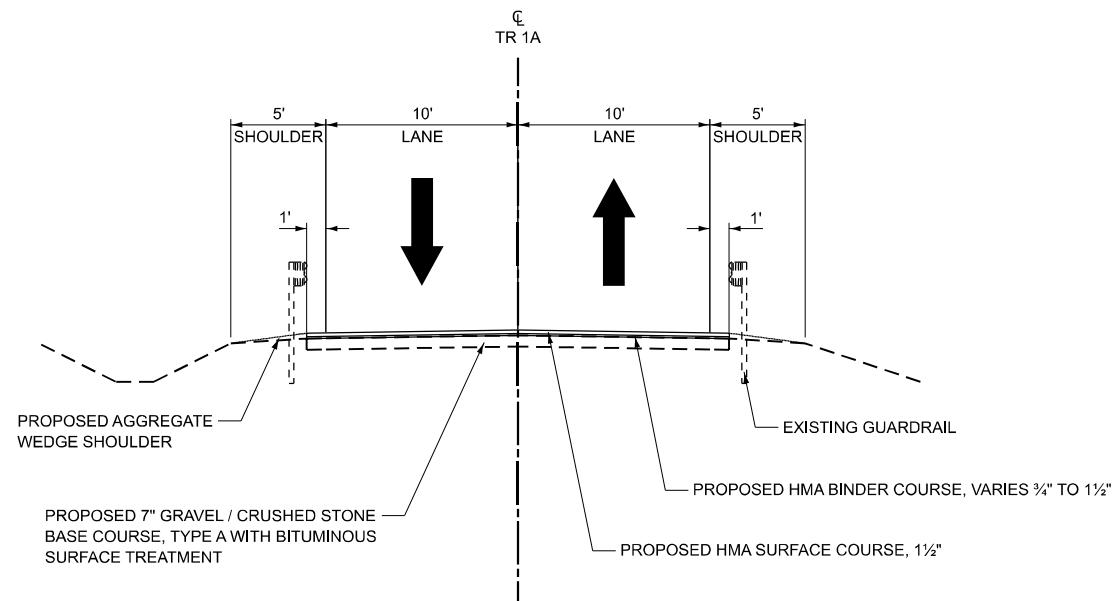
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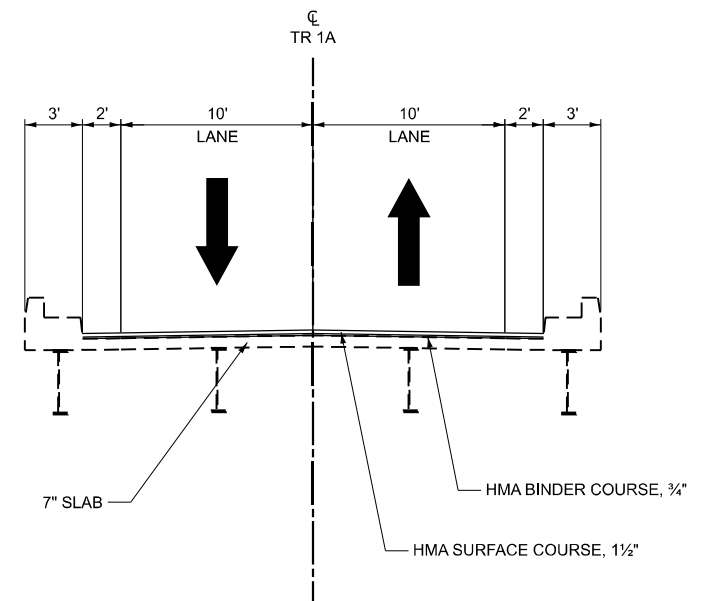
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>F.A.P. 826 (CH 10) TYPICAL SECTION</b>	
SCALE: 1"=5'	SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
826	D9 BRIDGE REPAIR 2024-2	JEFFERSON	36	7
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				



**TR 1A**  
(LOOKING WEST)



**TR 1A**  
(LOOKING WEST)  
BRIDGE

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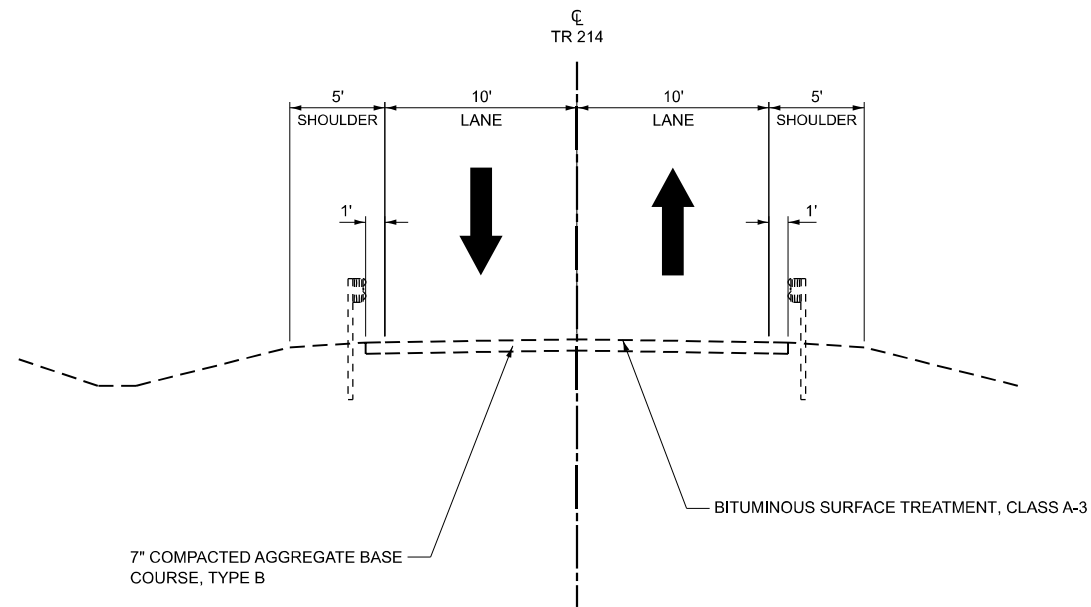
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

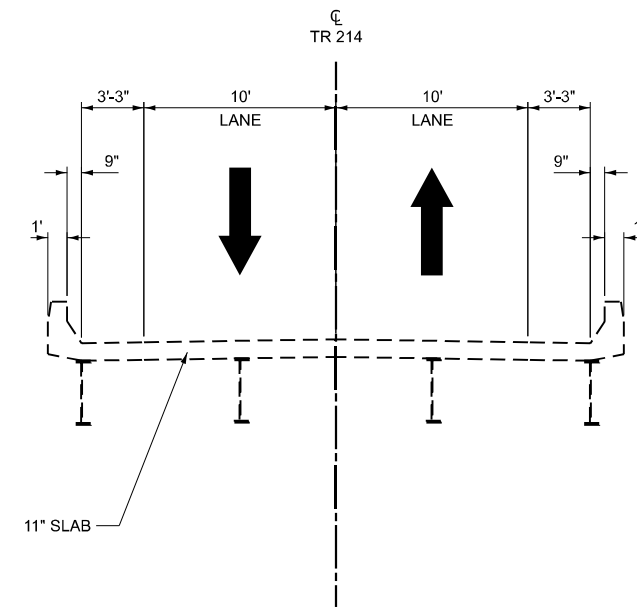
**TR 1A (N. OLD CENTRALIA LN.)**  
**TYPICAL SECTION**

SCALE: 1"=5' SHEET 2 OF 3 SHEETS STA. TO STA.

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1A	D9 BRIDGE REPAIR 2024-2	JEFFERSON	36	8
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				



**TR 214**  
(LOOKING WEST)



**TR 214**  
(LOOKING WEST)  
BRIDGE

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	DRAWN -	REVISED -
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PLOT DATE = 1/15/2024	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**TR 214 (COUNTY RD. 950 E.)**  
**TYPICAL SECTIONS**

SCALE: 1"=5'    SHEET 3    OF 3    SHEETS    STA.    TO STA.

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
214	D9 BRIDGE REPAIR 2024-2	WHITE	36	9
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				

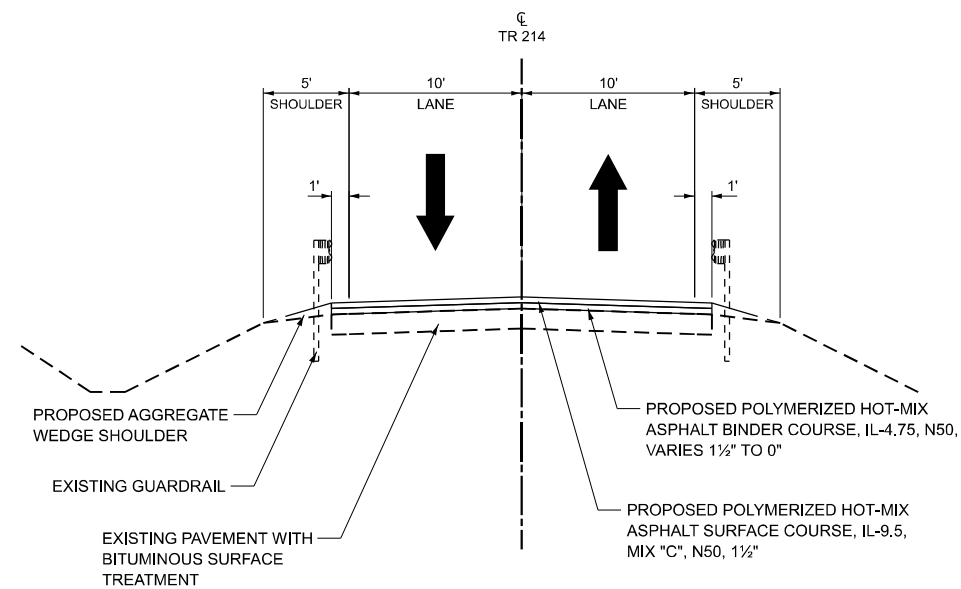


### PAVEMENT MARKING SCHEDULE

LOCATION			PAINT PAVEMENT MARKING - LINE 4"	
			WHITE	YELLOW
STA.	TO	STA.	FOOT	FOOT
S.N. 041-0051				
117+00.83	TO	124+89.13	1,578	200
<b>TOTAL</b>			<b>1,778</b>	

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F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.																		
*	D9 BRIDGE REPAIR 2024-2	JEFF. / WHITE	36	10																		
CONTRACT NO. 78A28																						
						*FAS 826 (CH 10) OVER I-57, TR 1A OVER I-57, TR 214 OVER I-64 ILLINOIS    FED. AID PROJECT																

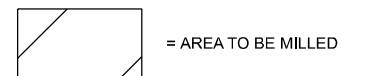
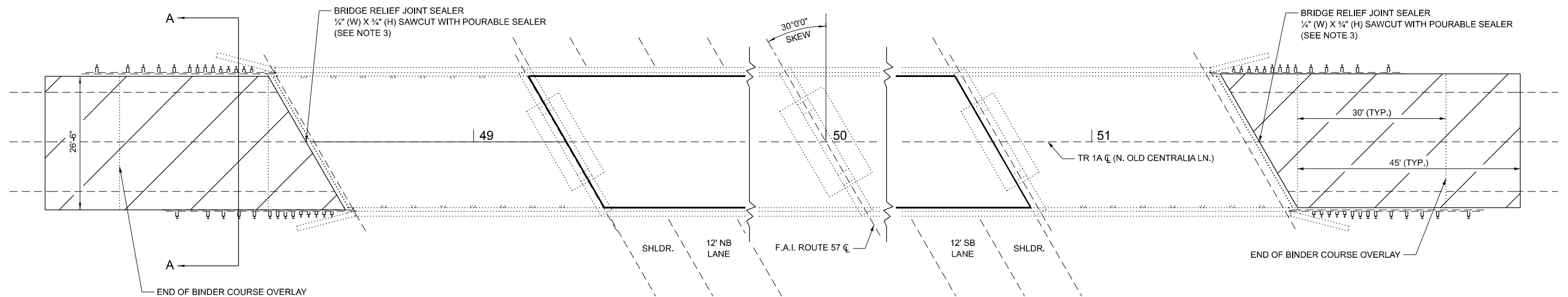


**SECTION A-A**

(LOOKING WEST)

**NOTES**

- 1) SEE BUTT JOINT DETAIL SHEET 36 FOR LIMITS AND DEPTH OF MILLING AND HMA LIFT THICKNESS.
- 2) AGGREGATE WEDGE SHOULDER TO BE USED TO TRANSITION THROUGH HMA RESURFACING LIMITS BENEATH GUARDRAIL.
- 3) BRIDGE RELIEF JOINT SEALER TO BE CONSTRUCTED AT EXISTING BRIDGE ABUTMENTS AT APPROXIMATELY STA. 48+66.50 AND STA. 51+33.50. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE ARTICLES OF SECTION 588 OF THE STANDARD SPECIFICATIONS. THE COST WILL BE INCLUDED IN POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50



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PLOT DATE = 3/8/2024	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TR 1A OVER I-57  
ROADWAY PLAN**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 1A	D9 BRIDGE REPAIR 2024-2	JEFFERSON	36	11
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				

### STAGE CONSTRUCTION GENERAL NOTES

- ONE LANE OF TRAFFIC ON FAS ROUTE 826 SHALL BE MAINTAINED AT ALL TIMES.
- EMERGENCY ACCESS SHALL BE PROVIDED AT ALL TIMES.

### TRAFFIC CONTROL NOTES

- TWO PHASE SIGNAL OPERATION IS REQUIRED WHEN HIGHWAY STANDARD 701316 IS IN EFFECT. THE ENGINEER OF TRAFFIC SHALL APPROVE ALL TIMING PARAMETERS. PRIVATE DRIVE SHALL BE GREEN WITH EASTBOUND PHASE.
- THE CONTRACTOR WILL HAVE THE OPTION TO USE MICROWAVE DETECTION FOR USE WITH THE TEMPORARY TRAFFIC SIGNALS IN ACCORDANCE WITH HIGHWAY STANDARD 701316.
- REMOVAL OF THE RUMBLE STRIPS AFTER STAGED CONSTRUCTION SHALL BE COMPLETED TO THE SATISFACTION OF THE ENGINEER. ANY DAMAGE TO THE EXISTING PAVEMENT FROM THE RUMBLE STRIPS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THERE WILL BE NO ADDITIONAL COMPENSATION.

### PRIVATE LANE SIGNALS NOTES

- THE CONTRACTOR SHALL PROVIDE A TEMPORARY SIGNAL ACROSS FROM THE PRIVATE LANE AND SIDEROAD AT THE LOCATION DETAILED IN THE PLANS.
- THE SIGNAL SHALL CONTAIN A RED ARROW AND TWO YELLOW ARROWS.
- THE PRIVATE DRIVE SIGNAL FOR THE PRIVATE ENTRANCE SHALL BE WIRED DIRECTLY WITH THE EASTBOUND PHASE AS FOLLOWS: RED ARROW TO RED, TOP YELLOW ARROW TO YELLOW AND BOTTOM YELLOW ARROW TO GREEN.
- THE SIGNAL SHALL BE INCLUDED IN THE COST OF TEMPORARY BRIDGE TRAFFIC SIGNALS, EACH.

### STAGE 1 CONSTRUCTION

#### PHASE 1

- UTILIZE TRAFFIC CONTROL AND PROTECTION STANDARD 701201 AND 701316.
- PLACE TEMPORARY TRAFFIC CONTROLS AS SHOWN ON THE DETAILS.
- INSTALL TEMPORARY TRAFFIC SIGNALS PRIOR TO CLOSING THE WESTBOUND LANE OF THE ROADWAY. SEE "TRAFFIC CONTROL NOTES" FOR MORE DETAILS.

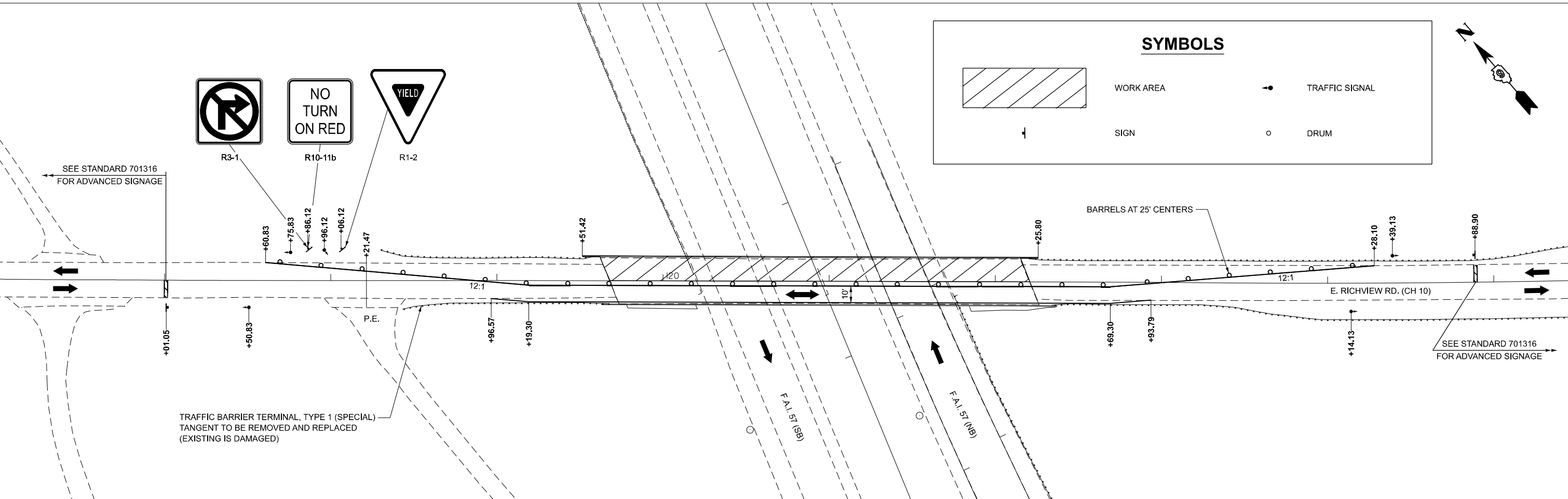
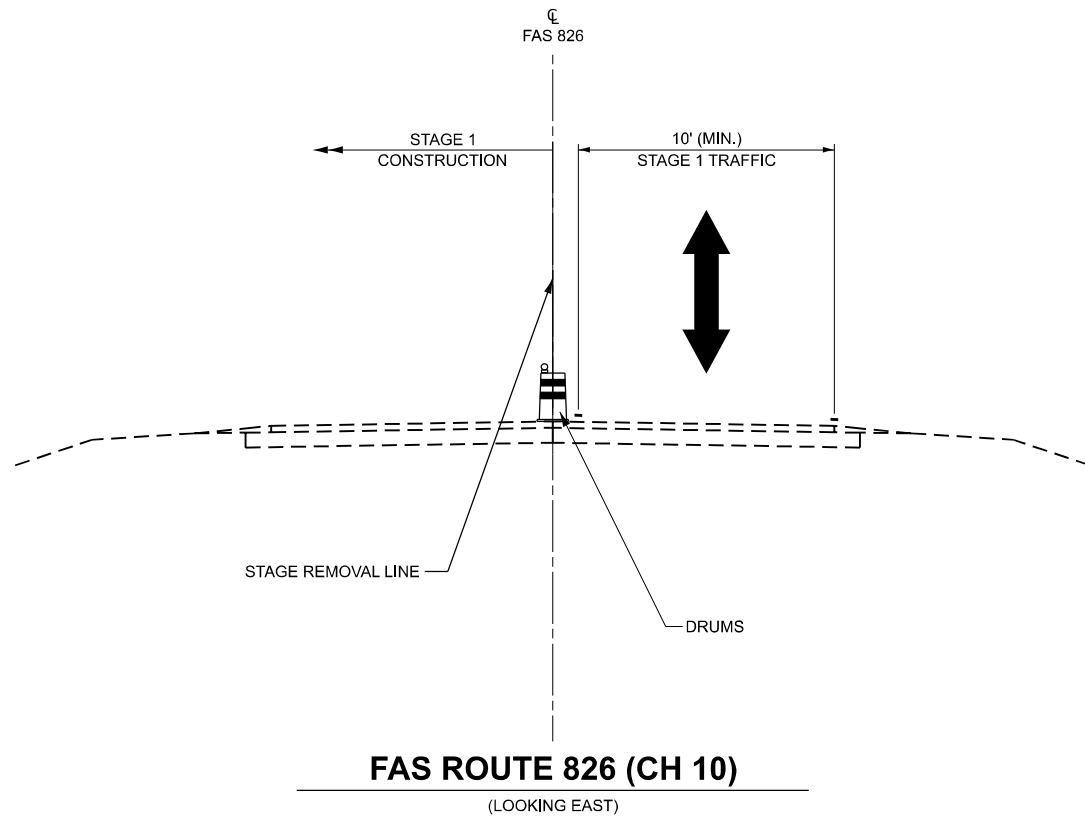
#### PHASE 2

- UTILIZE TRAFFIC CONTROL AND PROTECTION, STANDARD 701316, DIRECT TRAFFIC TO THE SOUTH SIDE OF FAS ROUTE 826.
- CONSTRUCT REPAIRS TO THE NORTH SIDE OF THE STRUCTURE.

### TRAFFIC CONTROL & PROTECTION STANDARD 701316 NOTES

ALL ITEMS BELOW SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE, EACH, FOR TRAFFIC CONTROL AND PROTECTION, STANDARD 701316. NO OTHER COMPENSATION WILL BE ALLOWED.

- ALL SIGNAGE AS SHOWN ON THE HIGHWAY STANDARD AND ADDITIONAL SIGNAGE SHOWN ON THE DETAIL BELOW. THE NOTED WORK SHALL INCLUDE SIGNS, POSTS, HARDWARE, AND LABOR. THE CONTRACTOR SHALL ERECT THE SIGNS AT THE LOCATIONS DETAILED IN THE PLANS AND AT LOCATIONS DIRECTED BY THE ENGINEER.
- PER ARTICLE 703.07, WHEN TEMPORARY PAVEMENT MARKING IS SHOWN ON THE STANDARD AND DETAIL, THE COST OF TEMPORARY PAVEMENT MARKING AND ITS REMOVAL WILL BE INCLUDED IN THE COST OF THE STANDARD.
- ALL TEMPORARY DRUMS OR BARRICADES SHOWN ON THE HIGHWAY STANDARDS AND AS SHOWN ON THE PLANS.



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PLOT DATE = 3/3/2024	CHECKED -	REVISED -
	DATE -	REVISED -

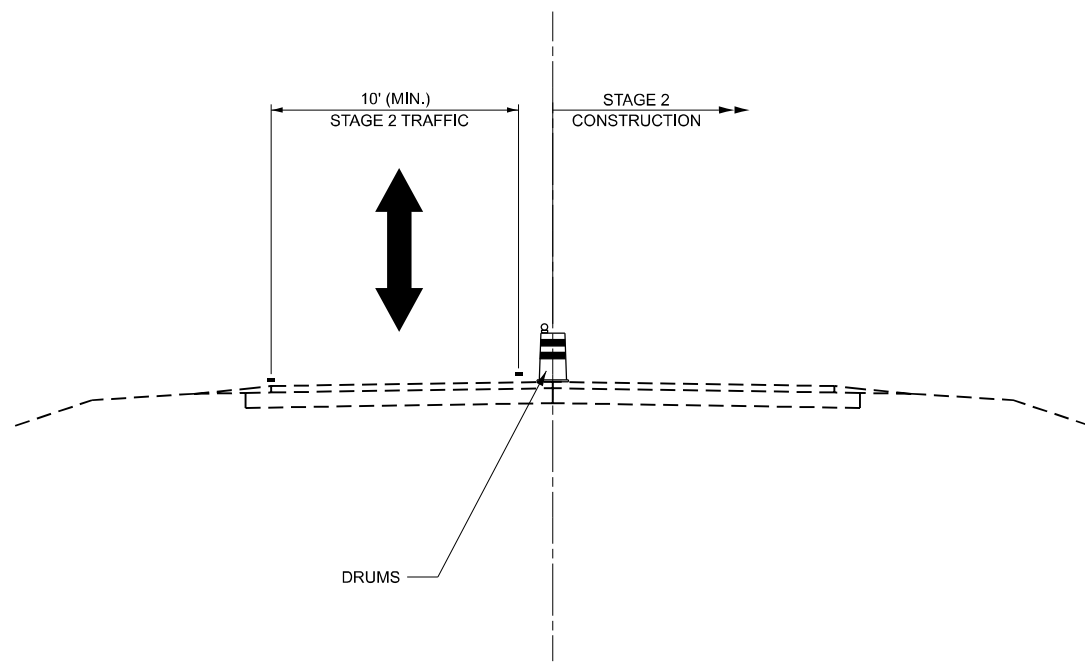
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**F.A.P. 826 (CH 10)  
MAINTENANCE OF TRAFFIC - STAGE 1**

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
826	D9 BRIDGE REPAIR 2024-2	JEFFERSON	36	12
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				

FAS 826



**FAS ROUTE 826 (CH 10)**  
(LOOKING EAST)

**STAGE CONSTRUCTION GENERAL NOTES**

- ONE LANE OF TRAFFIC ON FAS ROUTE 826 SHALL BE MAINTAINED AT ALL TIMES.
- EMERGENCY ACCESS SHALL BE PROVIDED AT ALL TIMES.

**TRAFFIC CONTROL NOTES**

- TWO PHASE SIGNAL OPERATION IS REQUIRED WHEN HIGHWAY STANDARD 701316 IS IN EFFECT. THE ENGINEER OF TRAFFIC SHALL APPROVE ALL TIMING PARAMETERS. PRIVATE DRIVE SHALL BE GREEN WITH EASTBOUND PHASE.
- THE CONTRACTOR WILL HAVE THE OPTION TO USE MICROWAVE DETECTION FOR USE WITH THE TEMPORARY TRAFFIC SIGNALS IN ACCORDANCE WITH HIGHWAY STANDARD 701316.
- REMOVAL OF THE RUMBLE STRIPS AFTER STAGED CONSTRUCTION SHALL BE COMPLETED TO THE SATISFACTION OF THE ENGINEER. ANY DAMAGE TO THE EXISTING PAVEMENT FROM THE RUMBLE STRIPS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THERE WILL BE NO ADDITIONAL COMPENSATION.
- ALL TEMPORARY PAVEMENT MARKINGS, DRUMS, ETC. SHALL BE PLACED PRIOR TO PLACING TEMPORARY CONCRETE BARRIER.

**PRIVATE LANE SIGNALS NOTES**

- THE CONTRACTOR SHALL PROVIDE A TEMPORARY SIGNAL ACROSS FROM THE PRIVATE LANE AND SIDEROAD AT THE LOCATION DETAILED IN THE PLANS.
- THE SIGNAL SHALL CONTAIN A RED ARROW AND TWO YELLOW ARROWS.
- THE PRIVATE DRIVE SIGNAL FOR THE PRIVATE ENTRANCE SHALL BE WIRED DIRECTLY WITH THE EASTBOUND PHASE AS FOLLOWS: RED ARROW TO RED, TOP YELLOW ARROW TO YELLOW AND BOTTOM YELLOW ARROW TO GREEN.
- THE SIGNAL SHALL BE INCLUDED IN THE COST OF TEMPORARY BRIDGE TRAFFIC SIGNALS, EACH.

**STAGE 2 CONSTRUCTION**

**PHASE 1**

- UTILIZE TRAFFIC CONTROL AND PROTECTION STANDARD 701201 AND 701316.
- PLACE TEMPORARY TRAFFIC CONTROL AS SHOWN ON THE DETAILS.
- INSTALL TEMPORARY TRAFFIC SIGNALS PRIOR TO CLOSING THE EASTBOUND LANE OF THE ROADWAY. SEE "TRAFFIC CONTROL NOTES" FOR MORE DETAILS.

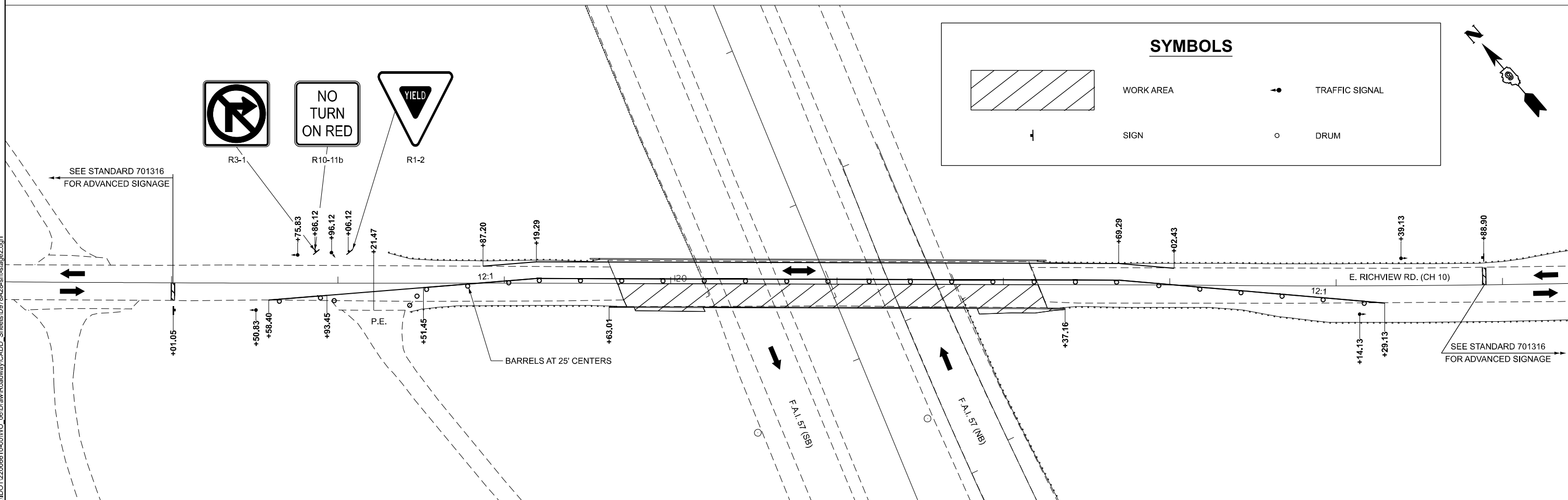
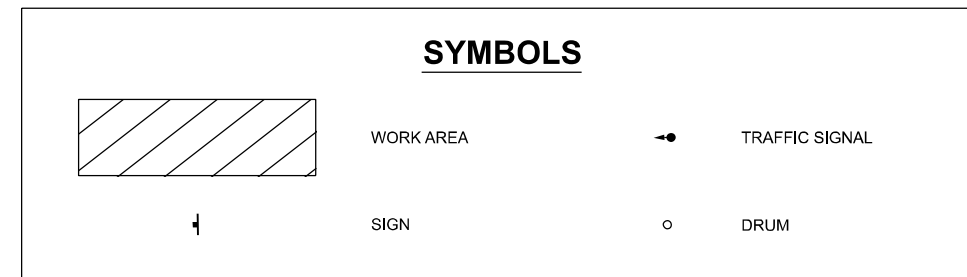
**PHASE 2**

- UTILIZE TRAFFIC CONTROL AND PROTECTION, STANDARD 701316, DIRECT TRAFFIC TO THE NORTH SIDE OF FAS ROUTE 826.
- CONSTRUCT REPAIRS TO THE SOUTH SIDE OF THE STRUCTURE.

**TRAFFIC CONTROL & PROTECTION STANDARD 701316 NOTES**

ALL ITEMS BELOW SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE, EACH, FOR TRAFFIC CONTROL AND PROTECTION, STANDARD 701316. NO OTHER COMPENSATION WILL BE ALLOWED.

- ALL SIGNAGE AS SHOWN ON THE HIGHWAY STANDARD AND ADDITIONAL SIGNAGE SHOWN ON THE DETAIL BELOW. THE NOTED WORK SHALL INCLUDE SIGNS, POSTS, HARDWARE, AND LABOR. THE CONTRACTOR SHALL ERECT THE SIGNS AT THE LOCATIONS DETAILED IN THE PLANS AND AT LOCATIONS DIRECTED BY THE ENGINEER.
- PER ARTICLE 703.07, WHEN TEMPORARY PAVEMENT MARKING IS SHOWN ON THE STANDARD AND DETAIL, THE COST OF TEMPORARY PAVEMENT MARKING AND ITS REMOVAL WILL BE INCLUDED IN THE COST OF THE STANDARD.
- ALL TEMPORARY DRUMS OR BARRICADES SHOWN ON THE HIGHWAY STANDRD AND AS SHOWN ON THE PLANS.



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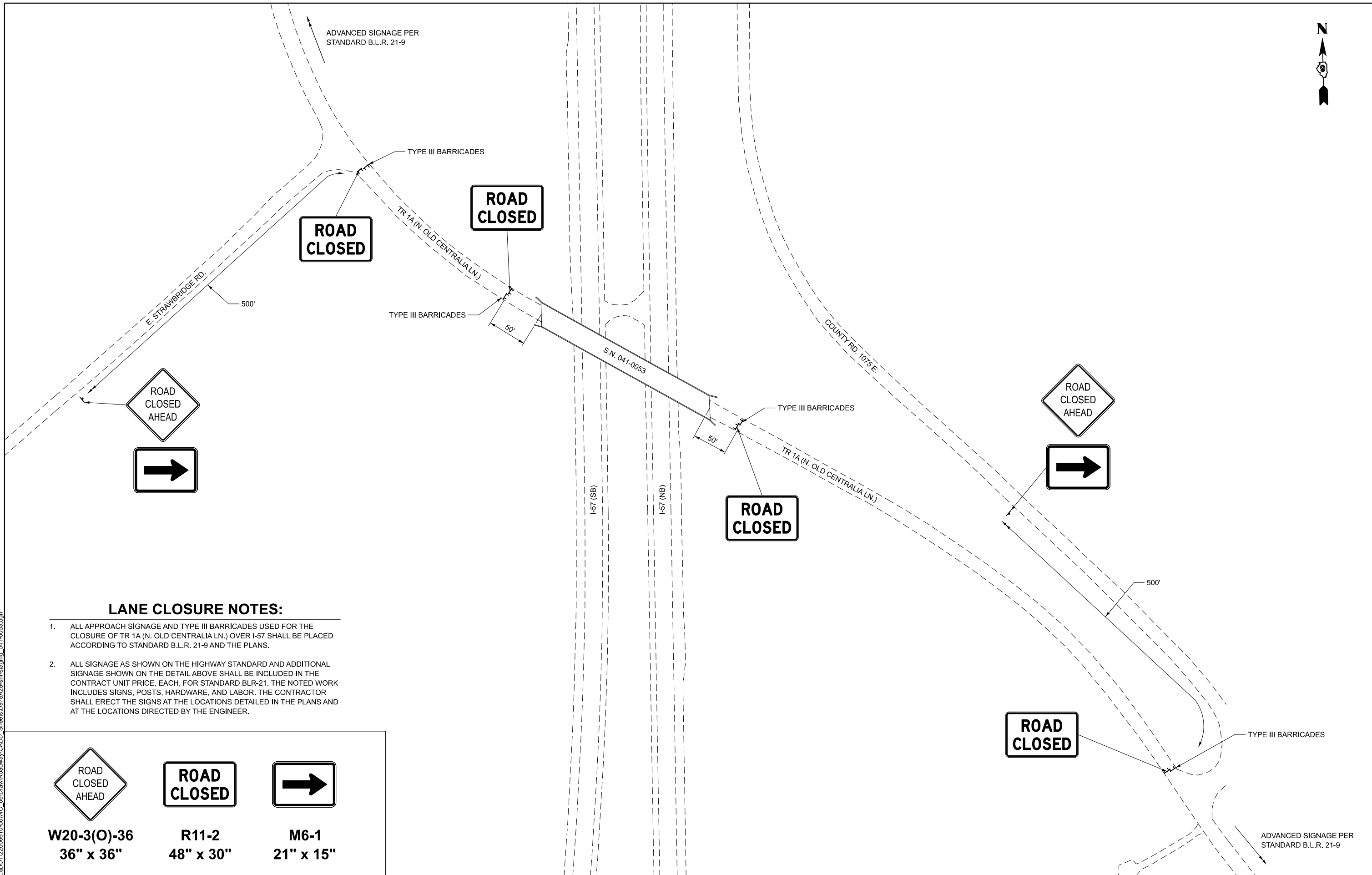
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PLOT DATE = 3/3/2024	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**F.A.P. 826 (CH 10)  
MAINTENANCE OF TRAFFIC - STAGE 2**

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
826	D9 BRIDGE REPAIR 2024-2	JEFFERSON	36	13
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				



**LANE CLOSURE NOTES:**

1. ALL APPROACH SIGNAGE AND TYPE III BARRICADES USED FOR THE CLOSURE OF TR 1A (N. OLD CENTRALIA LN.) OVER I-57 SHALL BE PLACED ACCORDING TO STANDARD B.L.R. 21-9 AND THE PLANS.
2. ALL SIGNAGE AS SHOWN ON THE HIGHWAY STANDARD AND ADDITIONAL SIGNAGE SHOWN ON THE DETAIL ABOVE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE, EACH, FOR STANDARD BLR-21. THE NOTED WORK INCLUDES SIGNS, POSTS, HARDWARE, AND LABOR. THE CONTRACTOR SHALL ERECT THE SIGNS AT THE LOCATIONS DETAILED IN THE PLANS AND AT THE LOCATIONS DIRECTED BY THE ENGINEER.

 <b>W20-3(O)-36</b> <b>36" x 36"</b>	 <b>R11-2</b> <b>48" x 30"</b>	 <b>M6-1</b> <b>21" x 15"</b>
--	--------------------------------------	-------------------------------------

MODEL: SN 041-55 (Sheet)  
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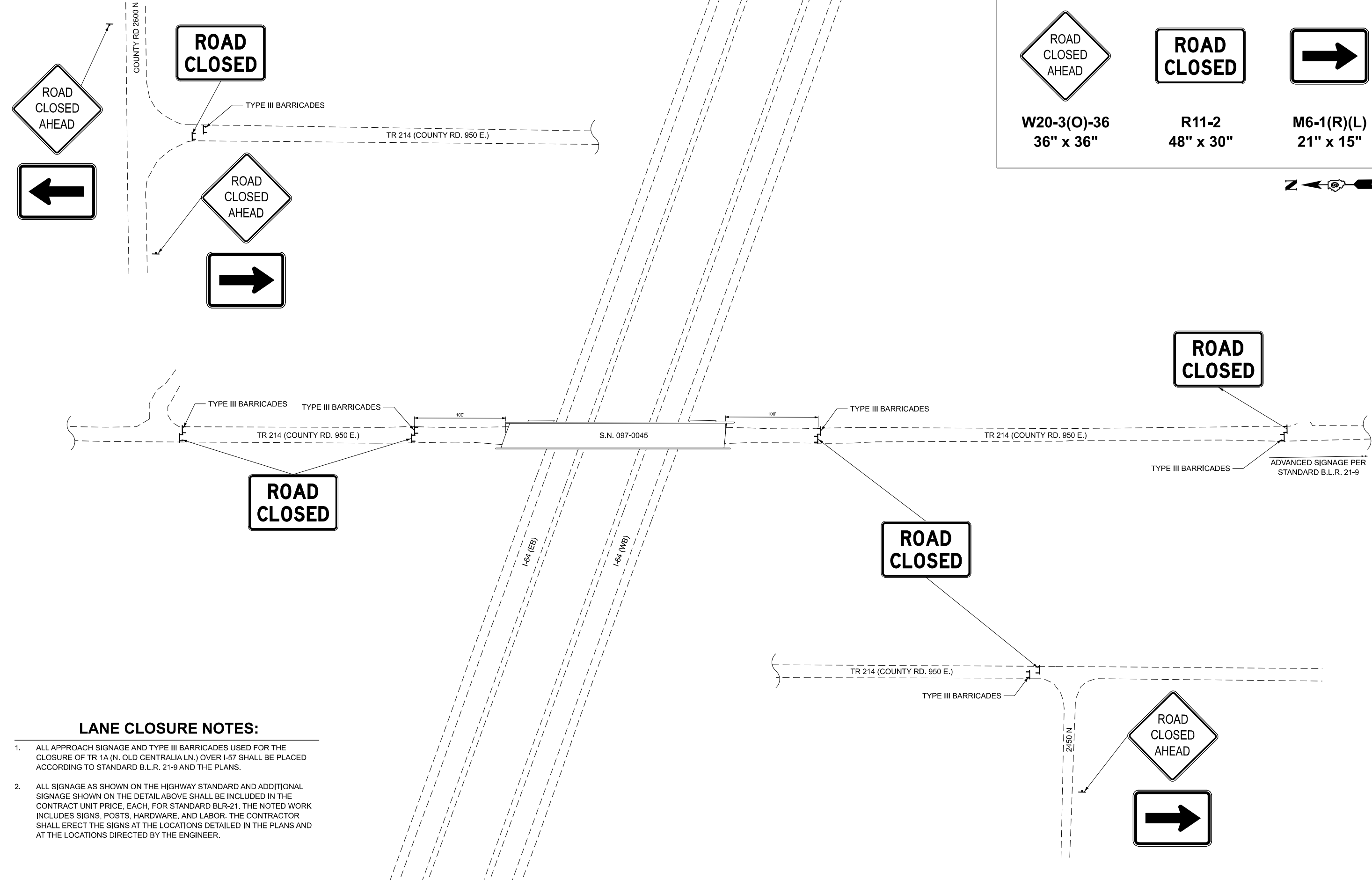
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**TR 1A OVER I-57**  
**MAINTENANCE OF TRAFFIC - ROAD CLOSURE**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 1A	D9 BRIDGE REPAIR 2024-2	JEFFERSON	36	14
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				





**LANE CLOSURE NOTES:**

1. ALL APPROACH SIGNAGE AND TYPE III BARRICADES USED FOR THE CLOSURE OF TR 1A (N. OLD CENTRALIA LN.) OVER I-57 SHALL BE PLACED ACCORDING TO STANDARD B.L.R. 21-9 AND THE PLANS.
2. ALL SIGNAGE AS SHOWN ON THE HIGHWAY STANDARD AND ADDITIONAL SIGNAGE SHOWN ON THE DETAIL ABOVE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE, EACH, FOR STANDARD BLR-21. THE NOTED WORK INCLUDES SIGNS, POSTS, HARDWARE, AND LABOR. THE CONTRACTOR SHALL ERECT THE SIGNS AT THE LOCATIONS DETAILED IN THE PLANS AND AT THE LOCATIONS DIRECTED BY THE ENGINEER.

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	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TR 214 OVER I-64  
MAINTENANCE OF TRAFFIC - ROAD CLOSURE**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 1A	D9 BRIDGE REPAIR 2024-2	WHITE	36	15
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				

**EXISTING STRUCTURE**

Structure Number 041-0051 was originally constructed in 1968 under Section 41-3HB-2. The structure measures 255'-2" back-to-back abutments, and has a 22°50'23" right forward skew. The four-span continuous 7" concrete slab is supported by 36WF150 beams and measures 30'-0" out to out deck. The superstructure is supported by reinforced concrete hammerhead piers on spread footings and stub abutments on steel piles.

The structure will be repaired using staged construction to maintain traffic.

**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications for Highway Bridges

**DESIGN STRESSES**

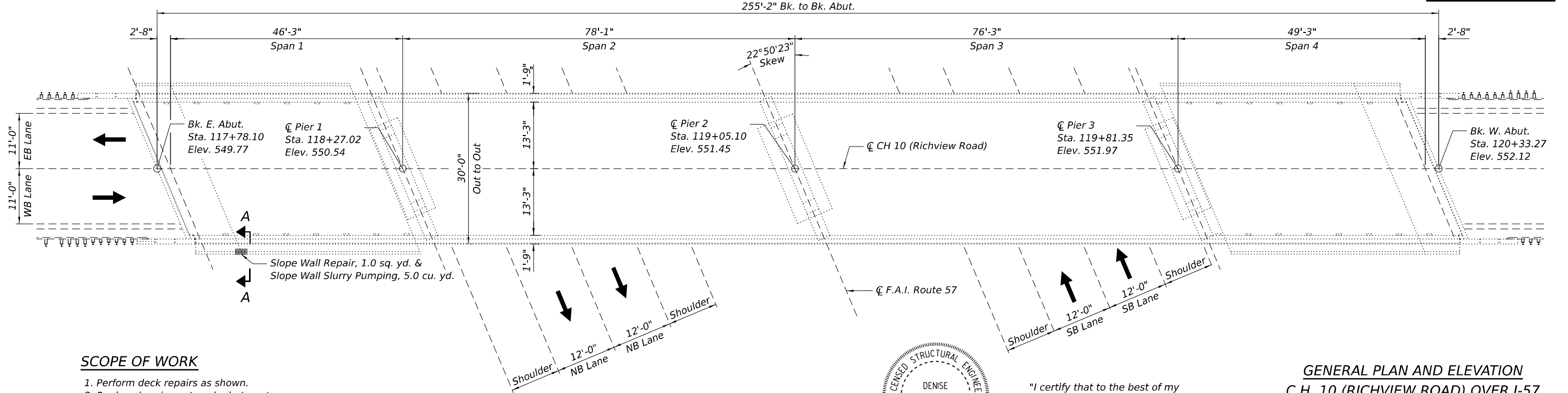
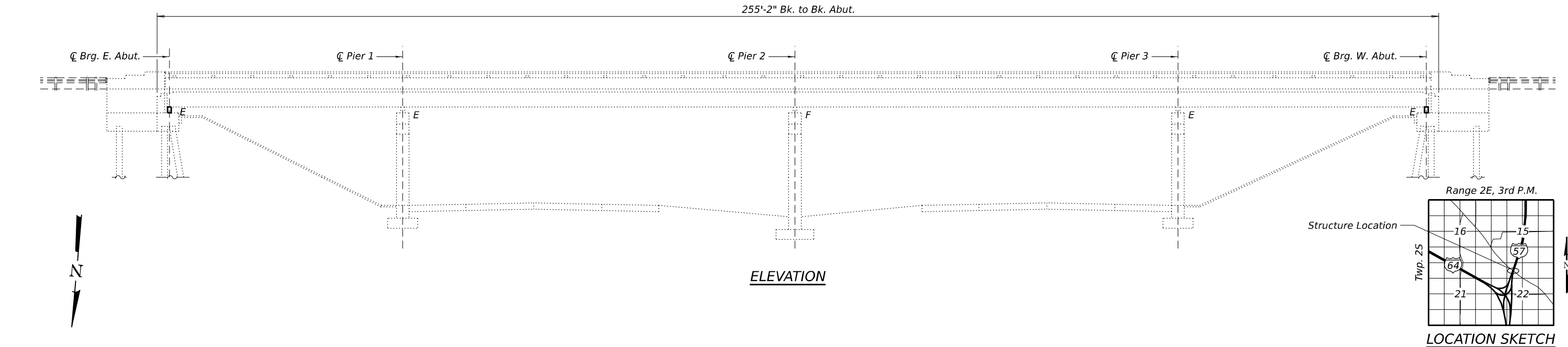
**FIELD UNITS**

**NEW CONSTRUCTION**  
 $f'_c = 4,000 \text{ psi}$   
 $f_y = 36,000 \text{ psi (M270 Grade 36)}$

**EXISTING STRUCTURE**  
 $f_c = 1,400 \text{ psi (Superstructure \& substructure)}$   
 $f_s = 20,000 \text{ psi (Reinforcement)}$   
 $f_s = 20,000 \text{ psi (Structural Steel)}$

**INDEX OF SHEETS**

- 1 - General Plan & Elevation
- 2 - General Data
- 3 - Deck Repairs
- 4 - Abutment Bearings



**SCOPE OF WORK**

1. Perform deck repairs as shown.
2. Replace bearings at each abutment.
3. Seal corners of bridge joints using silicone joint sealer.
4. Remove oil and chip surface and overlay deck with thin polymer overlay.

Note:  
See sheet 2 of 5 for Section A-A.

**PLAN**



"I certify that to the best of my knowledge, information and belief, this design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of the structure and complies with the requirements of the current Design Specifications listed."

**GENERAL PLAN AND ELEVATION**  
**C.H. 10 (RICHVIEW ROAD) OVER I-57**  
**F.A.S. 826 SECTION D9 BRIDGE REPAIR 2024-2**  
**JEFFERSON COUNTY**  
**STRUCTURE NO. 041-0051**

FILE NAME: L:\DOT\22006610-00\WO\_06\681006\CADD Data\Bridges\CADD Sheets\SN 041-0051\0410051-78A28-01-General Plan & Elevation.dgn

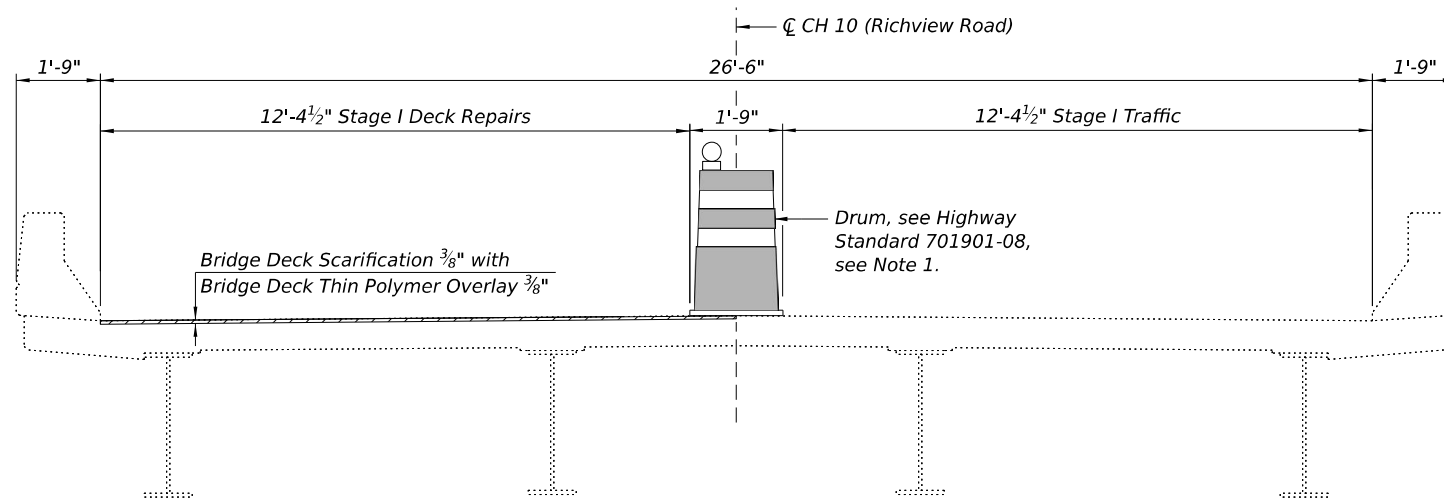
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	PLOT SCALE = N/A	CHECKED - DH	REVISED -				SCALE:	SHEET 1 OF 4 SHEETS	STA. TO STA.	CONTRACT NO. 78A28	
License No. 184-002613	PLOT DATE = 3/8/2024	DATE = 1/12/2024	REVISED -								

**GENERAL NOTES**

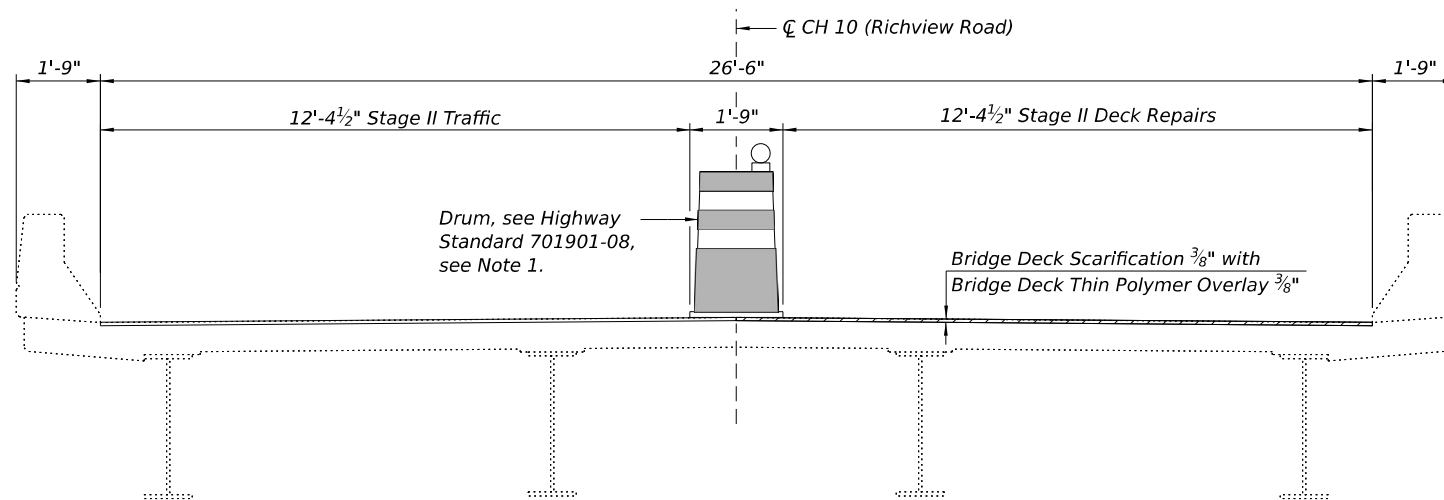
1. All structural steel shall be AASHTO M270 Grade 36.
2. Plan dimensions and details relative to the existing structure have been taken from existing plans and are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction 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.
3. All new structural steel and bearing assembly shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel".
4. Staged construction shall be utilized for deck slab repair work and bearing replacement. Traffic shall not be allowed directly over cribbed areas of the superstructure while jacking the existing beams for bearing replacement.

**TOTAL BILL OF MATERIAL**

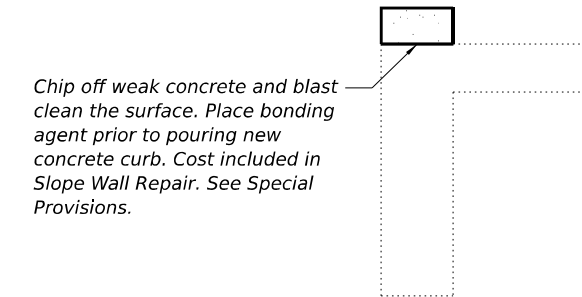
ITEM	UNIT	SUPER	SUB	TOTAL
Furnishing and Erecting Structural Steel	Pound		1,185	1,185
Elastomeric Bearing Assembly, Type II	Each		8	8
Anchor Bolts, 1"	Each		16	16
Jack and Remove Existing Bearings	Each		8	8
Concrete Bridge Deck Scarification, 3/8"	Sq. Yd.	743		743
Bridge Deck Thin Polymer Overlay, 3/8"	Sq. Yd.	743		743
Deck Slab Repair (Partial)	Sq. Yd.	20		20
Silicone Joint Sealer, 1/2"	Foot	12		12
Slope Wall Repair	Sq. Yd.		1	1
Slope Wall Slurry Pumping	Cu. Yd.		5	5



**CROSS SECTION - STAGE I**  
(Looking east)



**CROSS SECTION - STAGE II**  
(Looking east)



**SECTION A-A**

**Note:**

1. With the permission of the Resident Engineer, the traffic control devices shall be adjusted in location during construction operations by the Contractor. Prior to completion of construction activities for each working day, the barrels shall be placed back at the centerline of the roadway as indicated herein.

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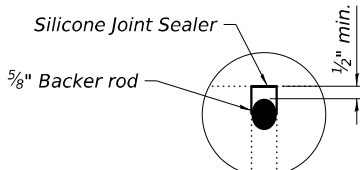
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA  
STRUCTURE NO. 041-0051**

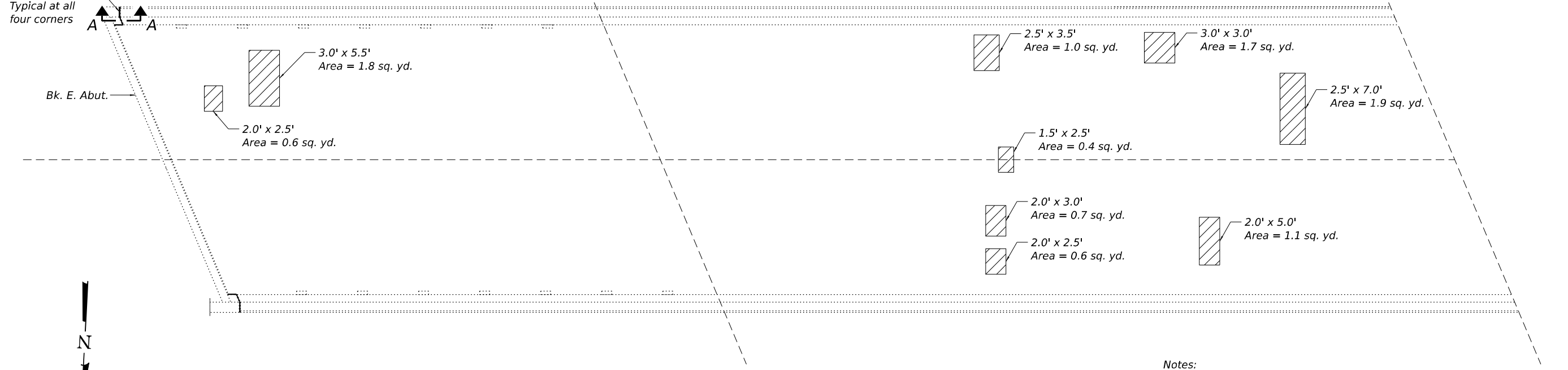
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F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
826	D9 Bridge Repair 2024-2	JEFFERSON	36	17
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				



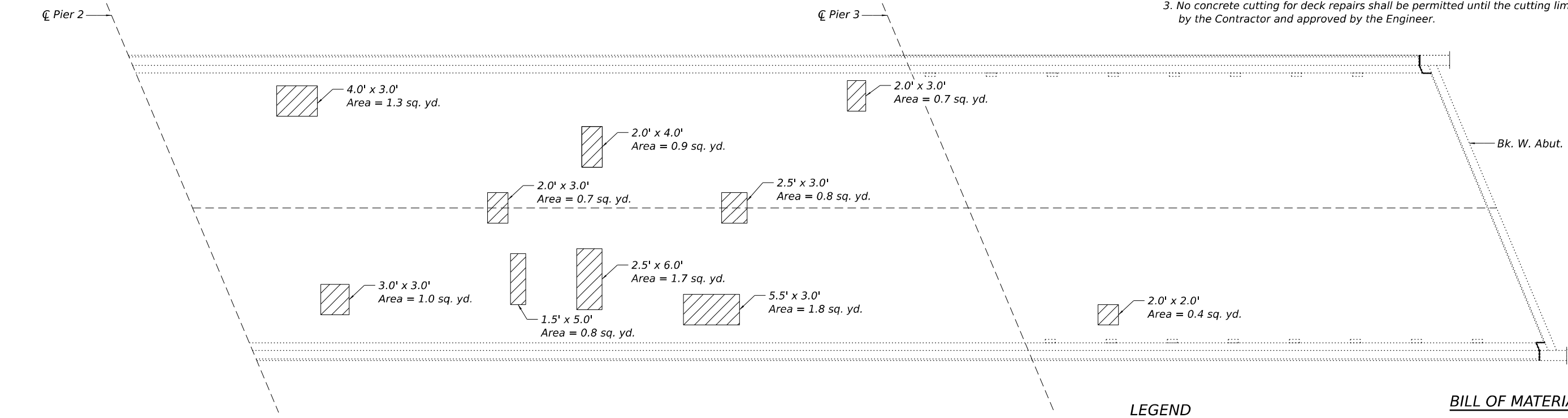
Silicone Joint Sealer, 1/2" Typical at all four corners

**SECTION A-A**



**PARTIAL DECK PLAN**

- Notes:**
1. Areas of deck repairs shown are an estimate. The Resident Engineer will determine final patch locations, repair type(s), and quantities in the field after removal of the deck overlay, prior to bridge deck patching operations. The deck patching locations are based on the May 2023 delamination survey.
  2. The Engineer in the field shall be responsible to show all the actual loations of the deck repairs on As-built Plans. The Contractor will be paid for the actual quantity of Deck Slab Repair (Partial) at the bid unit price.
  3. No concrete cutting for deck repairs shall be permitted until the cutting limits have been outlines by the Contractor and approved by the Engineer.



**PARTIAL DECK PLAN**

**LEGEND**

Deck Slab Repair (Partial)

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Silicone Joint Sealer, 1/2"	Foot	12
Deck Slab Repair (Partial)	Sq. Yd.	20

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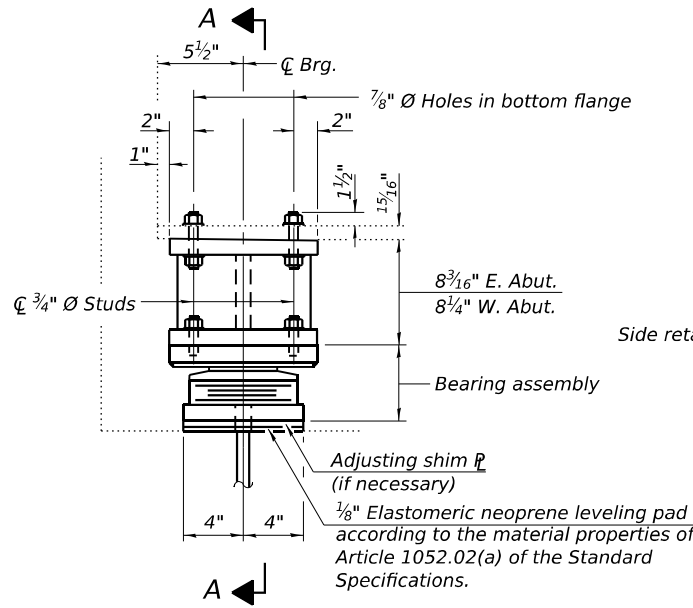
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

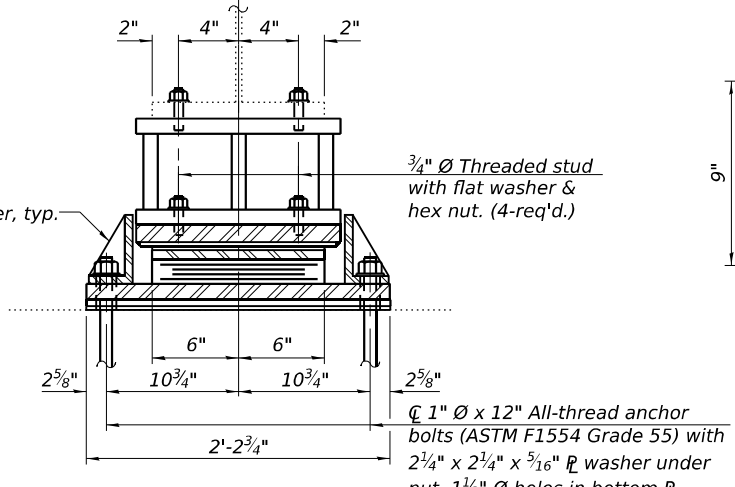
**DECK REPAIRS  
STRUCTURE NO. 041-0051**

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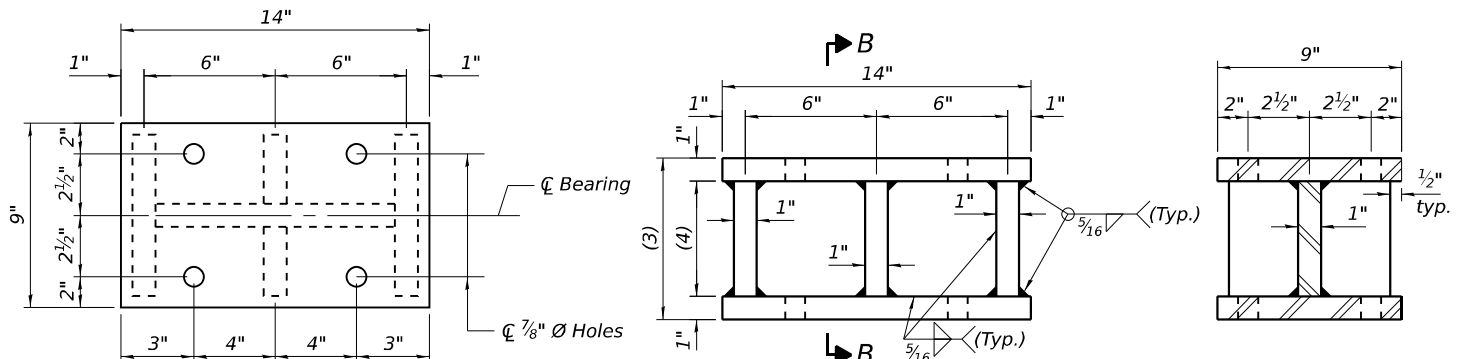
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826	D9 Bridge Repair 2024-2	JEFFERSON	36	18
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				



**ELEVATION AT ABUT.**



**SECTION A-A**



**PLAN TOP AND BOTTOM PLATE**

**ELEVATION**

**SECTION B-B**

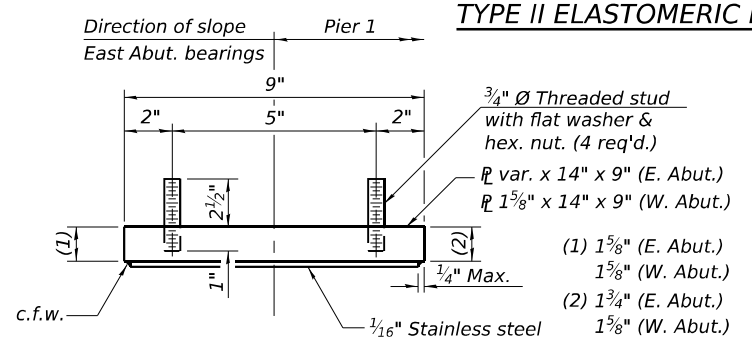
**STEEL EXTENSION DETAIL**

- (3) 8 3/16" (E. Abut.)  
8 1/4" (W. Abut.)
- (4) 6 3/16" (E. Abut.)  
6 1/4" (W. Abut.)

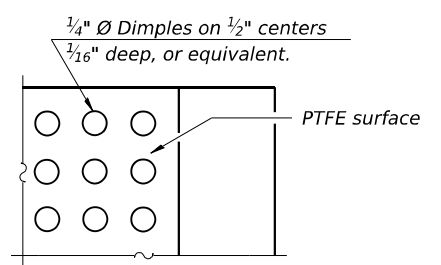
**SHIM TABLE**

Location	Bm. 1	Bm. 2	Bm. 3	Bm. 4
E. Abut.	0"	0"	5/8"	1/8"
W. Abut.	0"	0"	0"	1/8"

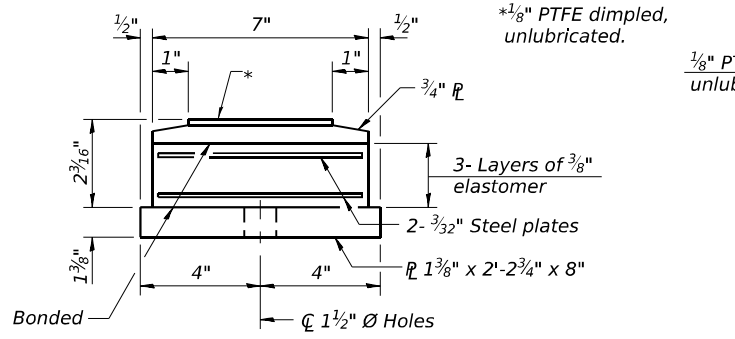
**TYPE II ELASTOMERIC EXP. BRG.**



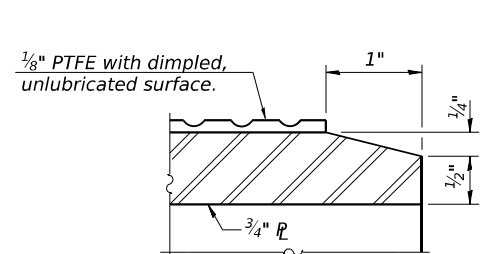
**TOP BEARING ASSEMBLY**



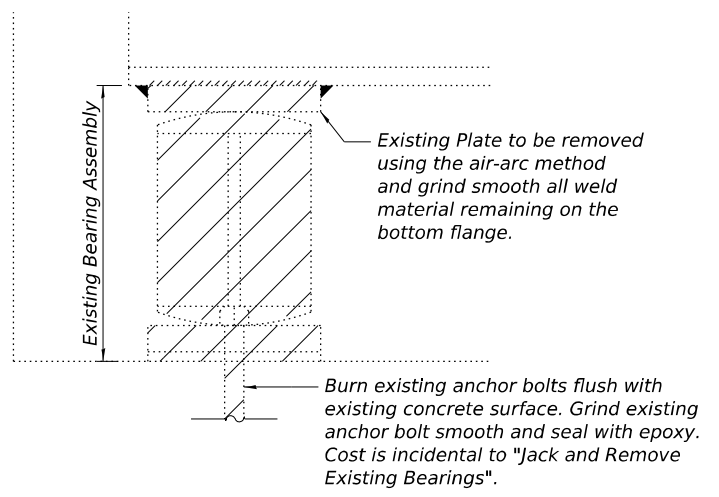
**PLAN-PTFE SURFACE**



**BOTTOM BEARING ASSEMBLY**



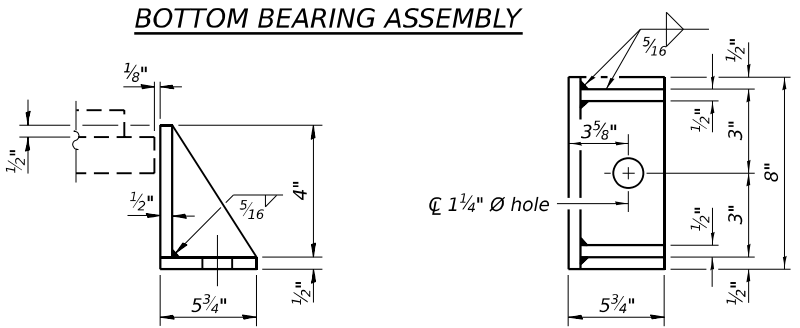
**SECTION THRU PTFE**



**EXISTING BEARING REMOVAL DETAIL**

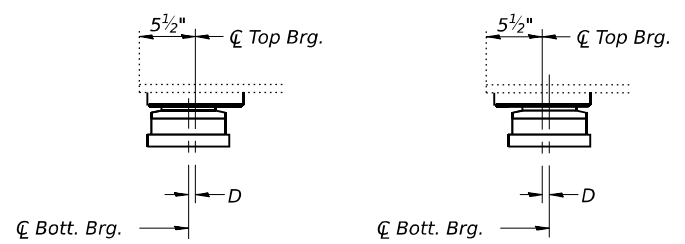
- Notes:
- Side retainers and leveling pad required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.
  - The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
  - Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.
  - Cost of steel extensions, shim plates, and connection bolts shall be included in payment for Furnishing and Erecting Structural Steel.
  - Minimum jack capacity = 20 tons.
  - Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.
  - Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
  - Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

Reactions (k)		
Location	E. Abut.	W. Abut.
DL	17.9	20.6
LL	30.1	30.6
IMP.	8.8	8.8
Total	56.8	60.0



**SIDE RETAINER**

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



BELOW 50°F. ABOVE 50°F.

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

**EXPANSION BEARING ORIENTATION**

The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.

**BILL OF MATERIAL**

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	1,185
Elastomeric Bearing Assembly Type II	Each	8
Anchor Bolts, 1"	Each	16
Jack and Remove Existing Bearings	Each	8

FILE NAME: L:\DOT\22006610-01\WO\_06\661006\CADD Data\Bridges\CADD Sheets\SN 041-0051\0410051-78A28-01-4-Abutment Bearings.dgn



USER NAME = bholland	DESIGNED - BLH	REVISED -
PLOT SCALE = N/A	DRAWN - BLH	REVISED -
PLOT DATE = 3/6/2024	CHECKED - DH	REVISED -
	DATE - 1/12/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ABUTMENT BEARINGS  
STRUCTURE NO. 041-0051**

SCALE: SHEET 4 OF 4 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
826	D9 Bridge Repair 2024-2	JEFFERSON	36	19
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				



**EXISTING STRUCTURE**

Structure Number 041-0053 was originally constructed in 1967 under Section 41-3HB-3. The structure measures 267'-0" back-to-back abutments, and has a 30°00'00" right forward skew. The four span continuous 7" concrete slab is supported by 33WF118 beams and measures 30'-0" out to out deck. The superstructure is supported by reinforced concrete hammerhead piers on spread footings and stub abutments on steel piles.

The structure will be closed to traffic during repairs.

**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications for Highway Bridges

**DESIGN STRESSES**

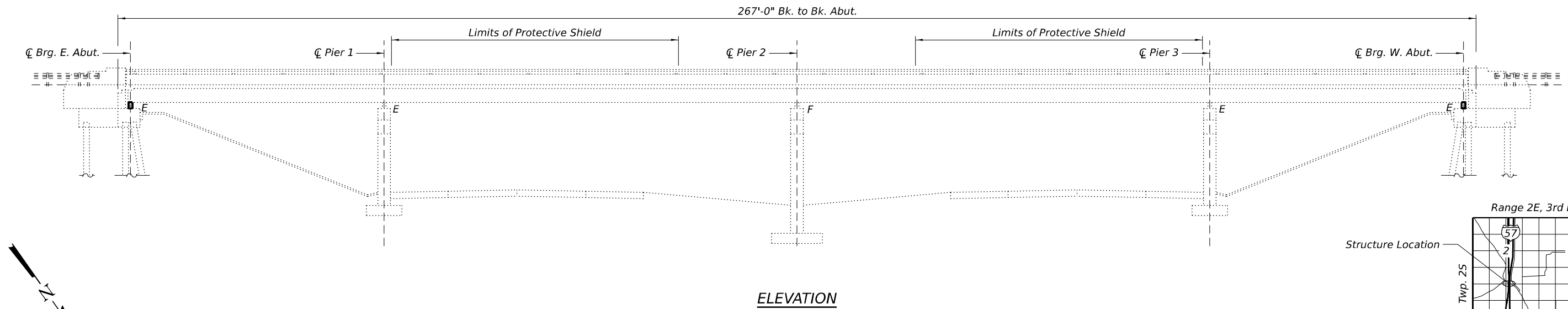
**FIELD UNITS**

**NEW CONSTRUCTION**  
 $f'_c = 4,000$  psi  
 $f_y = 36,000$  psi (M270 Grade 36)

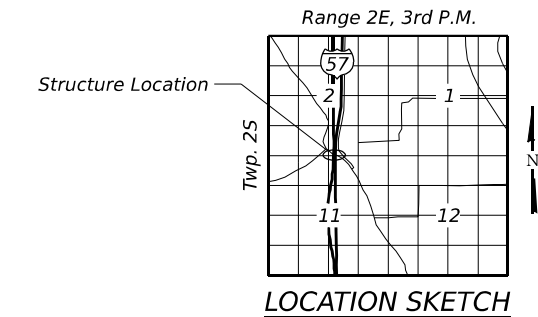
**EXISTING STRUCTURE**  
 $f'_c = 1,400$  psi (Superstructure & substructure)  
 $f_s = 20,000$  psi (Reinforcement)  
 $f_s = 20,000$  psi (Structural Steel)

**INDEX OF SHEETS**

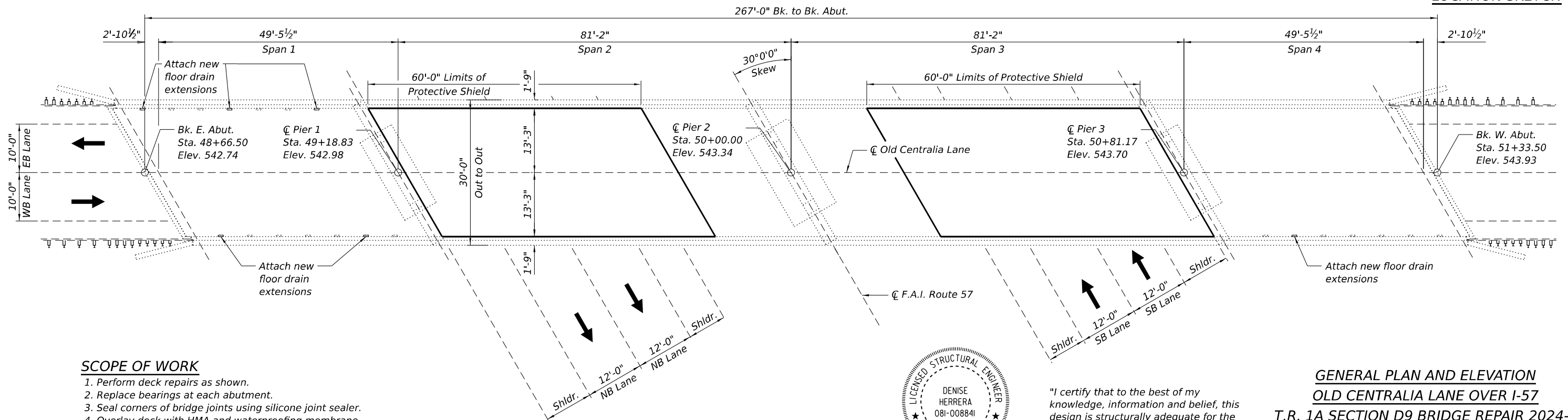
- 1 - General Plan & Elevation
- 2 - General Data
- 3 - Deck Repairs
- 4 - Abutment Bearings



**ELEVATION**



**LOCATION SKETCH**



**PLAN**

**SCOPE OF WORK**

1. Perform deck repairs as shown.
2. Replace bearings at each abutment.
3. Seal corners of bridge joints using silicone joint sealer.
4. Overlay deck with HMA and waterproofing membrane.
5. Attach new floor drain extensions.

LICENSED STRUCTURAL ENGINEER  
 DENISE HERRERA  
 081-008841  
 STATE OF ILLINOIS  
*Denise Herrera* 03/11/24  
 Exp. Date 11/30/2024

"I certify that to the best of my knowledge, information and belief, this design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of the structure and complies with the requirements of the current Design Specifications listed."

**GENERAL PLAN AND ELEVATION**  
**OLD CENTRALIA LANE OVER I-57**  
**T.R. 1A SECTION D9 BRIDGE REPAIR 2024-2**  
**JEFFERSON COUNTY**  
**STRUCTURE NO. 041-0053**

FILE NAME: L:\DOT\22006610-00\WO\_06\681006\CADD Data\Bridge\CADD Sheets\SN 041-0053\0410053-78A28-01-General Plan & Elevation.dgn

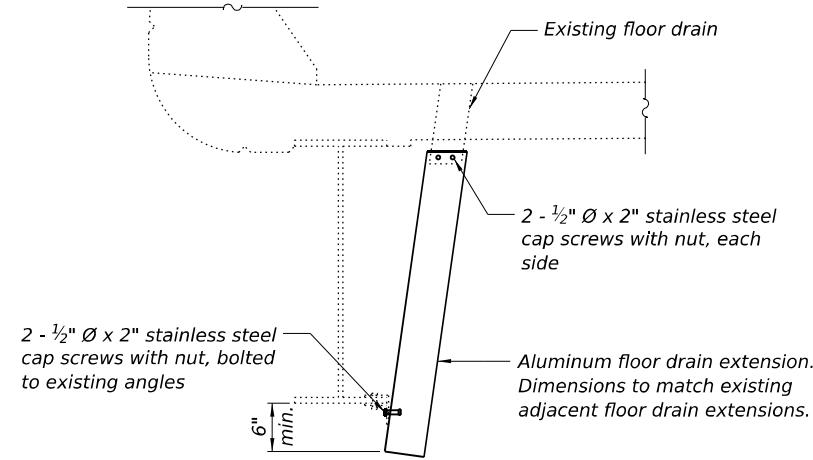
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	PLOT SCALE = N/A	CHECKED - DH	REVISED -		SCALE:	SHEET 1 OF 4 SHEETS	STA.	TO STA.	1A	D9 Bridge Repair 2024-2	JEFFERSON
PLOT DATE = 3/5/2024	DATE = 1/12/2024	REVISED -								CONTRACT NO. 78A28	
										ILLINOIS FED. AID PROJECT	

**GENERAL NOTES**

1. All Structural Steel shall be AASHTO M270 Grade 36.
2. Plan dimensions and details relative to the existing structure have been taken from existing plans and 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.
3. Protective Shield shall be provided for the full out to out deck width at the locations indicated on the plan view on sheet 1 of 4. Existing protective shield currently in place shall be removed and disposed of after the structural repairs are completed.
4. New downspouts to be attached paid for as Floor Drain Extension.
5. All new structural steel and bearing assembly shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing For Structural Steel".
6. Only night time lane closures on I-57 shall be allowed for installation and removal of the protective shield. See Special Provisions.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Polymerized Hot-Mix Asphalt Surface Course, Stone Matrix Asphalt, 9.5, Mix "C", N50	Ton	99		99
Protective Shield	Sq. Yd.	354		354
Furnishing and Erecting Structural Steel	Pound		1,418	1,418
Elastomeric Bearing Assembly, Type I	Each		10	10
Anchor Bolts, 1"	Each		20	20
Full Lane Sealant Waterproofing System	Sq. Yd.	778		778
Floor Drain Extension	Each	6		6
Jack and Remove Existing Bearings	Each		10	10
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	134		134
Deck Slab Repair (Partial)	Sq. Yd.	116		116
Silicone Joint Sealer, 1/2"	Foot	12		12



**FLOOR DRAIN EXTENSION**  
(6 thus)

FILE NAME: L:\DOT\22006610-01\WO\_06\661006\CADD Data\Bridges\CADD Sheets\SN 041-0053\0410053-78A28-02-General Data.dgn

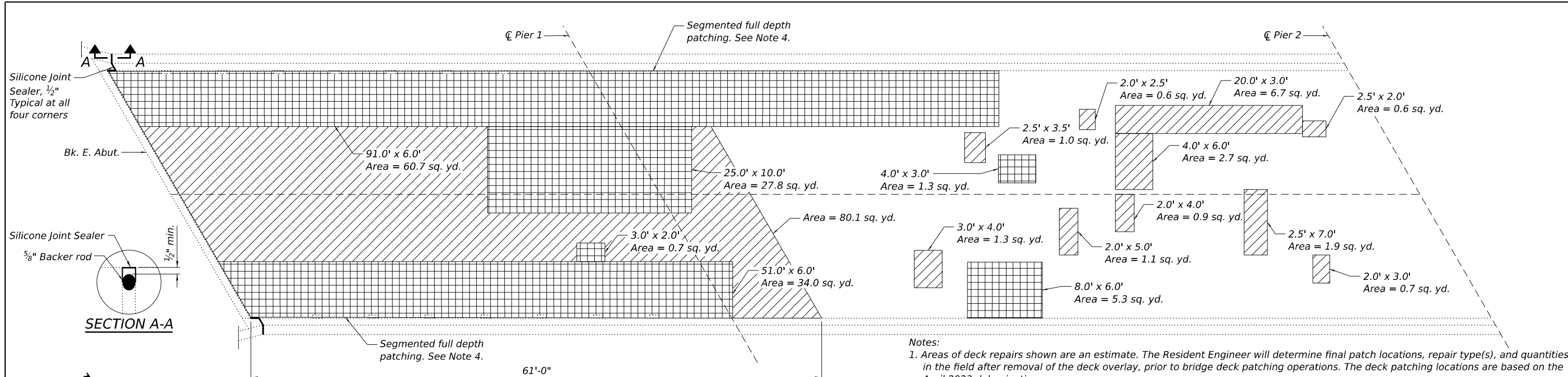


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	DRAWN - DH	REVISED -
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

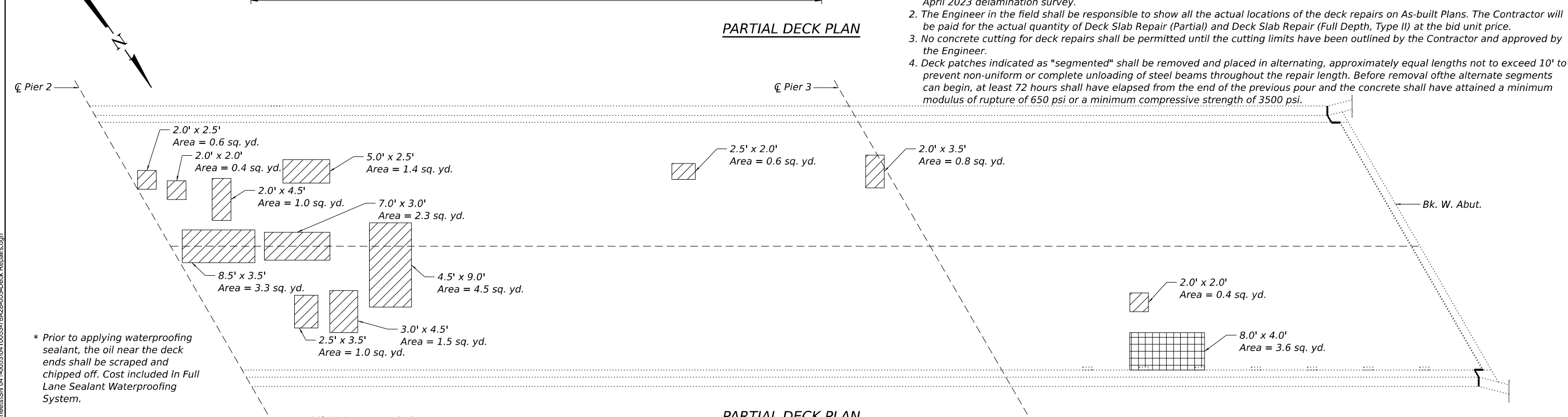
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<b>STRUCTURE NO. 041-0053</b>	
SCALE:	SHEET 2 OF 4 SHEETS TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1A	D9 Bridge Repair 2024-2	JEFFERSON	36	21
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				



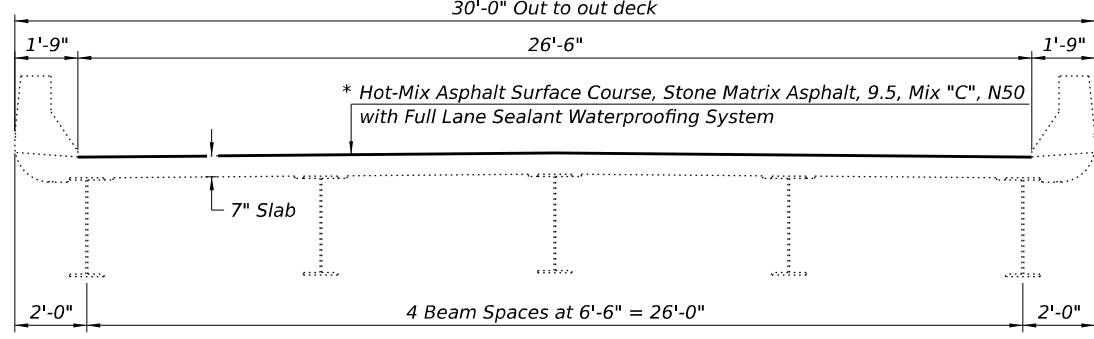
**PARTIAL DECK PLAN**

- Notes:**
1. Areas of deck repairs shown are an estimate. The Resident Engineer will determine final patch locations, repair type(s), and quantities in the field after removal of the deck overlay, prior to bridge deck patching operations. The deck patching locations are based on the April 2023 delamination survey.
  2. The Engineer in the field shall be responsible to show all the actual locations of the deck repairs on As-built Plans. The Contractor will be paid for the actual quantity of Deck Slab Repair (Partial) and Deck Slab Repair (Full Depth, Type II) at the bid unit price.
  3. No concrete cutting for deck repairs shall be permitted until the cutting limits have been outlined by the Contractor and approved by the Engineer.
  4. Deck patches indicated as "segmented" shall be removed and placed in alternating, approximately equal lengths not to exceed 10' to prevent non-uniform or complete unloading of steel beams throughout the repair length. Before removal of the alternate segments can begin, at least 72 hours shall have elapsed from the end of the previous pour and the concrete shall have attained a minimum modulus of rupture of 650 psi or a minimum compressive strength of 3500 psi.

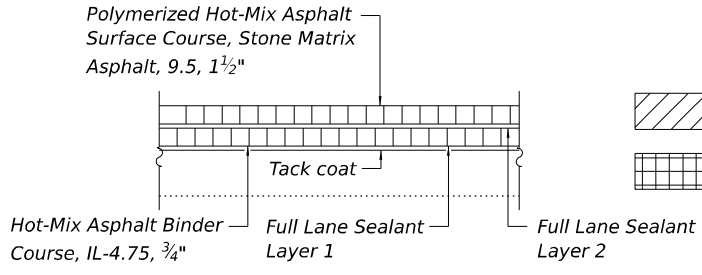


**PARTIAL DECK PLAN**

\* Prior to applying waterproofing sealant, the oil near the deck ends shall be scraped and chipped off. Cost included in Full Lane Sealant Waterproofing System.



**CROSS SECTION**



**FULL LANE SEALANT WATERPROOFING SYSTEM**

**LEGEND**

- Deck Slab Repair (Partial)
- Deck Slab Repair (Full Depth, Type II)

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Hot-Mix Asphalt Surface Course, Stone Matrix Asphalt, 9.5, Mix "C", N50	Ton	99
Full Lane Sealant Waterproofing System	Sq. Yd.	778
Silicone Joint Sealer, 1/2"	Foot	12
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	134
Deck Slab Repair (Partial)	Sq. Yd.	116

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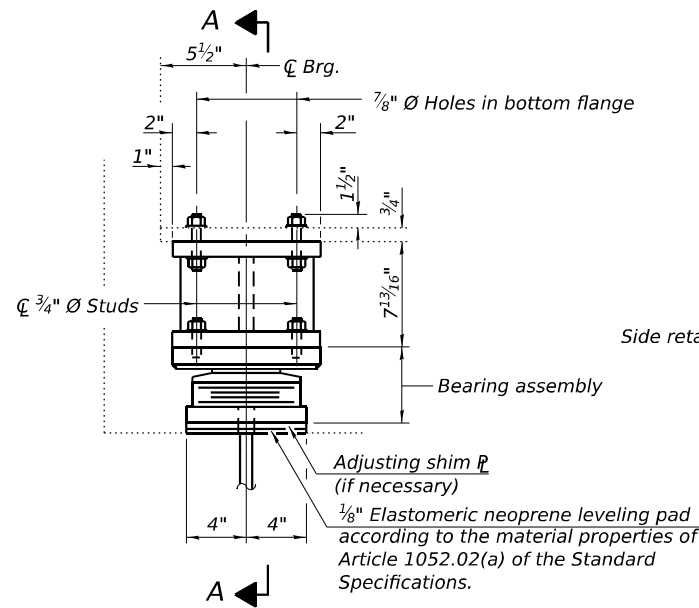
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

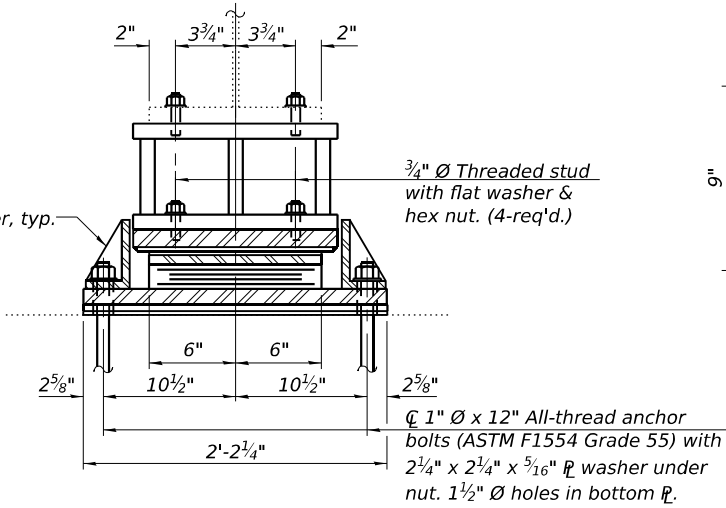
**DECK REPAIRS  
STRUCTURE NO. 041-0053**

SCALE: SHEET 3 OF 4 SHEETS STA. TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1A	D9 Bridge Repair 2024-2	JEFFERSON	36	22
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				

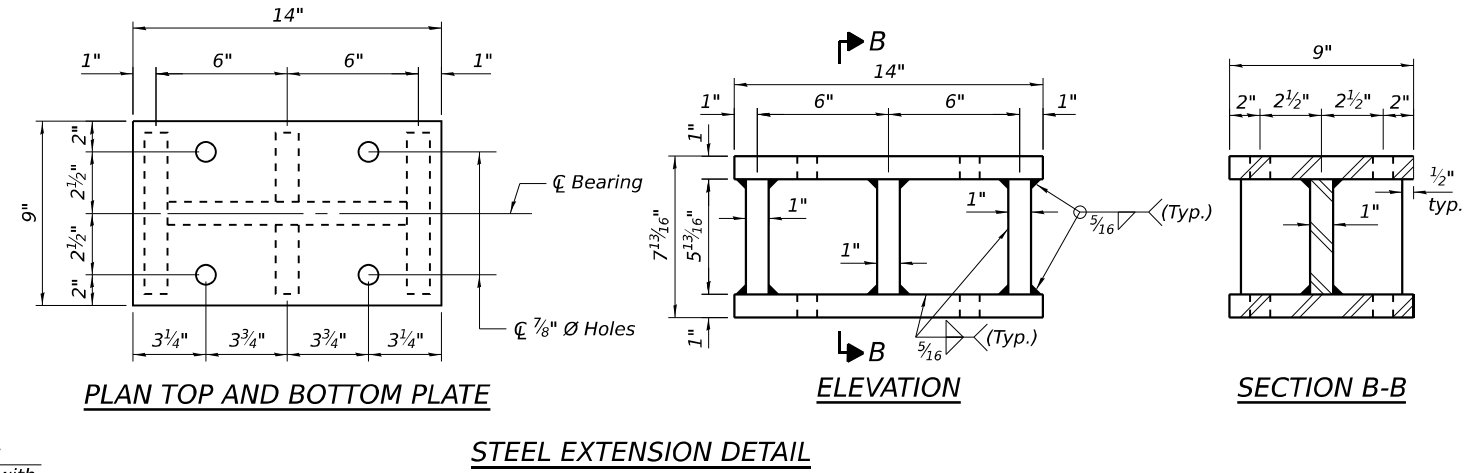


**ELEVATION AT ABUT.**



**SECTION A-A**

**TYPE II ELASTOMERIC EXP. BRG.**



**PLAN TOP AND BOTTOM PLATE**

**ELEVATION**

**SECTION B-B**

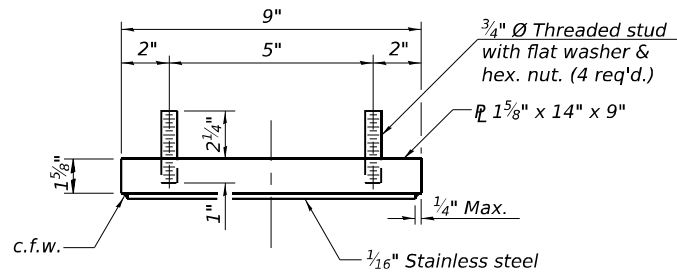
**STEEL EXTENSION DETAIL**

**SHIM TABLE**

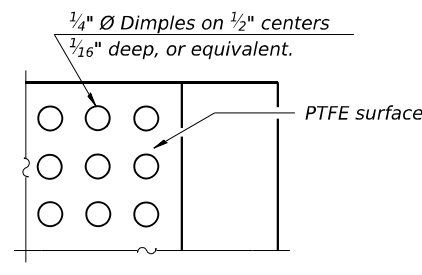
Location	Bm. 1	Bm. 2	Bm. 3	Bm. 4	Bm. 5
E. Abut.	0"	1/2"	1/4"	0"	0"
W. Abut.	0"	0"	0"	0"	0"

**Notes:**

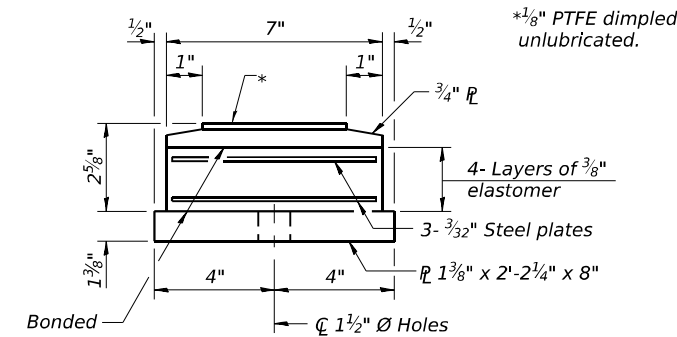
1. Side retainers and leveling pad required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.
2. The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
3. Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.
4. Cost of steel extensions, shim plates, and connection bolts shall be included in payment for Furnishing and Erecting Structural Steel.
5. Minimum jack capacity = 15 tons.
6. Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.
7. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
8. Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.



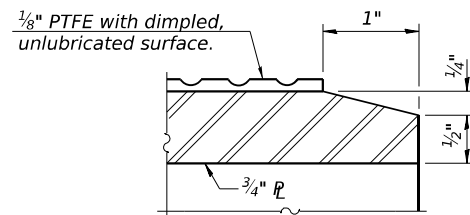
**TOP BEARING ASSEMBLY**



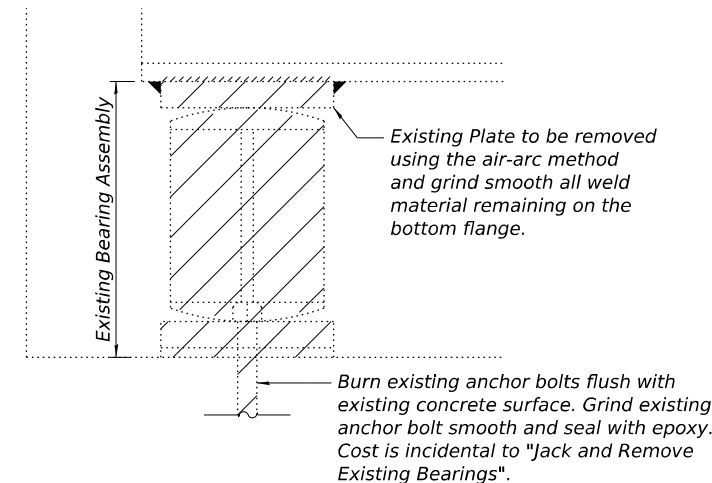
**PLAN-PTFE SURFACE**



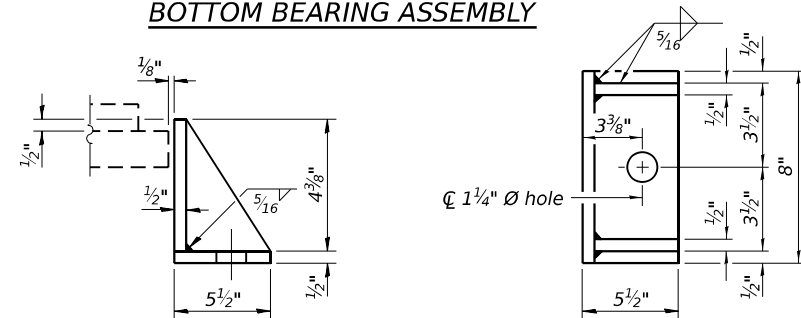
**BOTTOM BEARING ASSEMBLY**



**SECTION THRU PTFE**

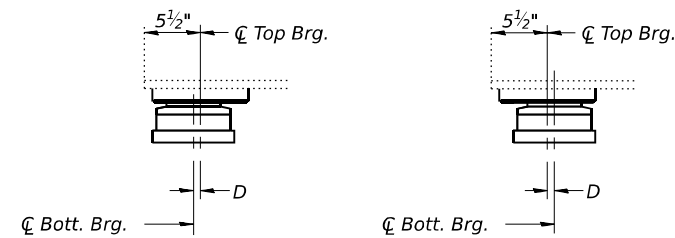


**EXISTING BEARING REMOVAL DETAIL**



**SIDE RETAINER**

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



**BELOW 50°F.**

D=1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

**ABOVE 50°F.**

**EXPANSION BEARING ORIENTATION**

The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.

Reactions (k)		
Location	E. Abut.	W. Abut.
DL	16.9	16.9
LL	32.7	32.7
IMP.	9.4	9.4
Total	59.0	59.0

**BILL OF MATERIAL**

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	1,418
Elastomeric Bearing Assembly Type II	Each	10
Anchor Bolts, 1"	Each	20
Jack and Remove Existing Bearings	Each	10

FILE NAME: L:\DOT\22006610-01\WO\_061681006\CADD Data\Bridge\CADD Sheets\SN 041-0053\0410053-78A28-04-Abutment Bearings.dgn



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PLOT DATE = 3/6/2024

DESIGNED - BLH  
DRAWN - BLH  
CHECKED - DH  
DATE - 1/12/2024

REVISED -  
REVISED -  
REVISED -  
REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ABUTMENT BEARINGS  
STRUCTURE NO. 041-0053**

SCALE: SHEET 4 OF 4 SHEETS STA. TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1A	D9 Bridge Repair 2024-2	JEFFERSON	36	23
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				

**EXISTING STRUCTURE**

Structure Number 097-0045 was originally constructed in 1975 under Section 97-1HB-2. The structure has a back-to-back approach bent length of 250'-9", and has a 20°04'21" left forward skew. The two span continuous 7½" concrete slab is supported by 48" web plate girders and measures 30'-0" out to out deck. The superstructure is supported by a reinforced concrete two column trapezoidal pier on a spread footing and vaulted abutments on steel piles. The 11" concrete approach slab is supported by the vaulted abutment and a reinforced concrete cap on steel piles.

The structure will be closed to traffic during repairs.

**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications for Highway Bridges

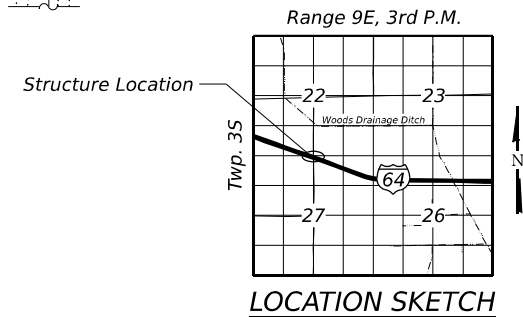
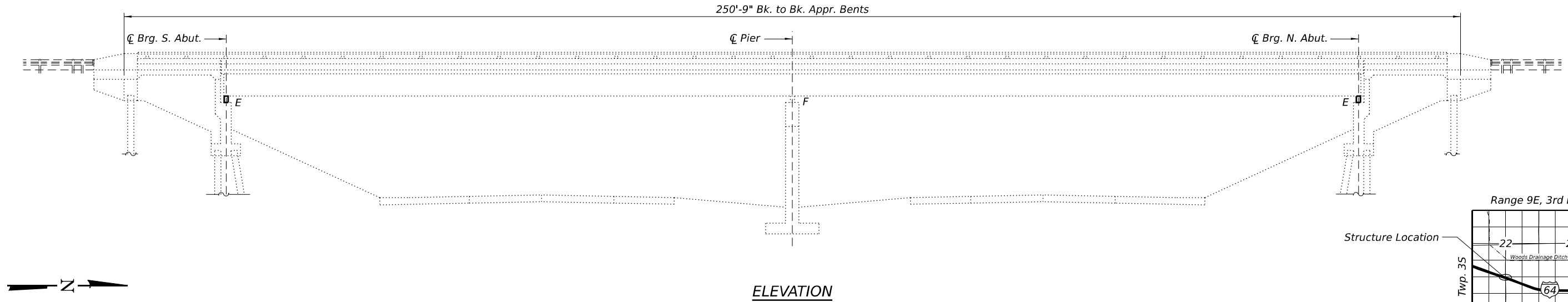
**DESIGN STRESSES**

**FIELD UNITS**  
**NEW CONSTRUCTION**  
 f'c = 4,000 psi  
 fy = 36,000 psi (M270 Grade 36)

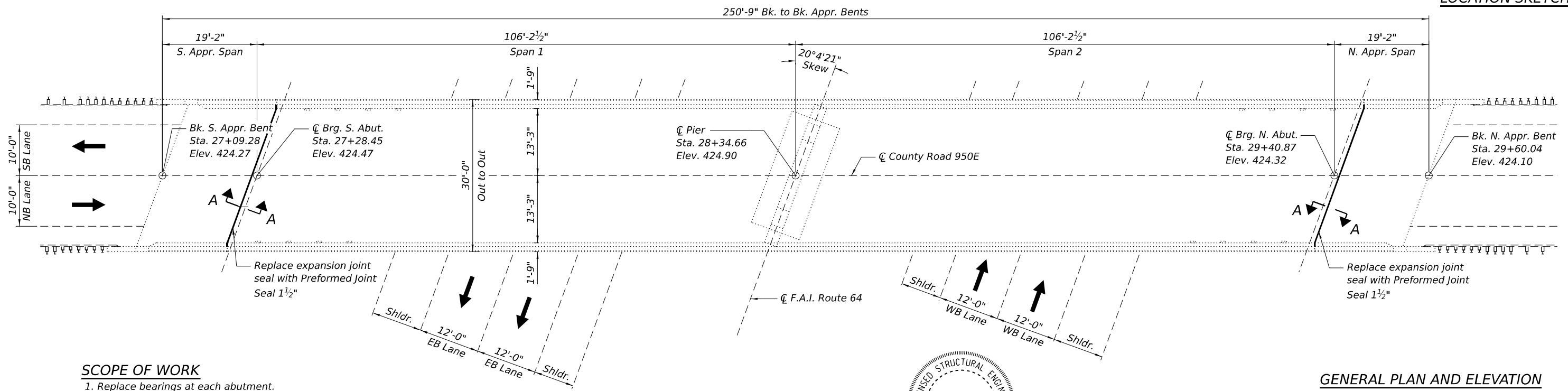
**EXISTING STRUCTURE**  
 fc = 1,200 psi (Deck Slab)  
 fc = 1,400 psi (Curb, Parapet, Substructure & Appr. Slab)  
 fs = 20,000 psi (Reinforcement)  
 fs = 20,000 psi (Structural Steel)

**INDEX OF SHEETS**

- 1 - General Plan & Elevation
- 2 - General Data
- 3 - Abutment Bearings



**ELEVATION**



- SCOPE OF WORK**
1. Replace bearings at each abutment.
  2. Replace strip seals at joints.
  3. Overlay deck with thin polymer overlay.

Note:  
See sheet 2 of 3 for Section A-A.

**PLAN**



"I certify that to the best of my knowledge, information and belief, this design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of the structure and complies with the requirements of the current Design Specifications listed."

**GENERAL PLAN AND ELEVATION**  
**COUNTY ROAD 950E OVER I-64**  
**T.R. 214 SECTION D9 BRIDGE REPAIR 2024-2**  
**WHITE COUNTY**  
**STRUCTURE NO. 097-0045**

FILE NAME: L:\DOT\22006610-00\WO\_06\681006\CADD Data\Bridges\CADD Sheets\SN 097-0045\0970045-76A28-01-General Plan & Elevation.dgn

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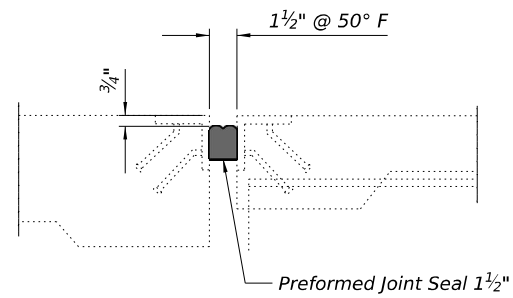


**GENERAL NOTES**

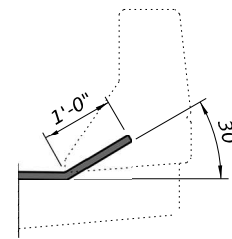
1. All Structural Steel shall be AASHTO M270 Grade 36.
2. Plan dimensions and details relative to the existing structure have been taken from existing plans and are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction 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.
3. Removal of existing expansion joint material shall be included in the cost of Preformed Joint Seal 1½".
4. Bridge Deck Thin Polymer Overlay ⅜" shall be applied to the full length of the approach slabs and bridge deck.
5. All new structural steel and bearing assembly shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel".

**TOTAL BILL OF MATERIAL**

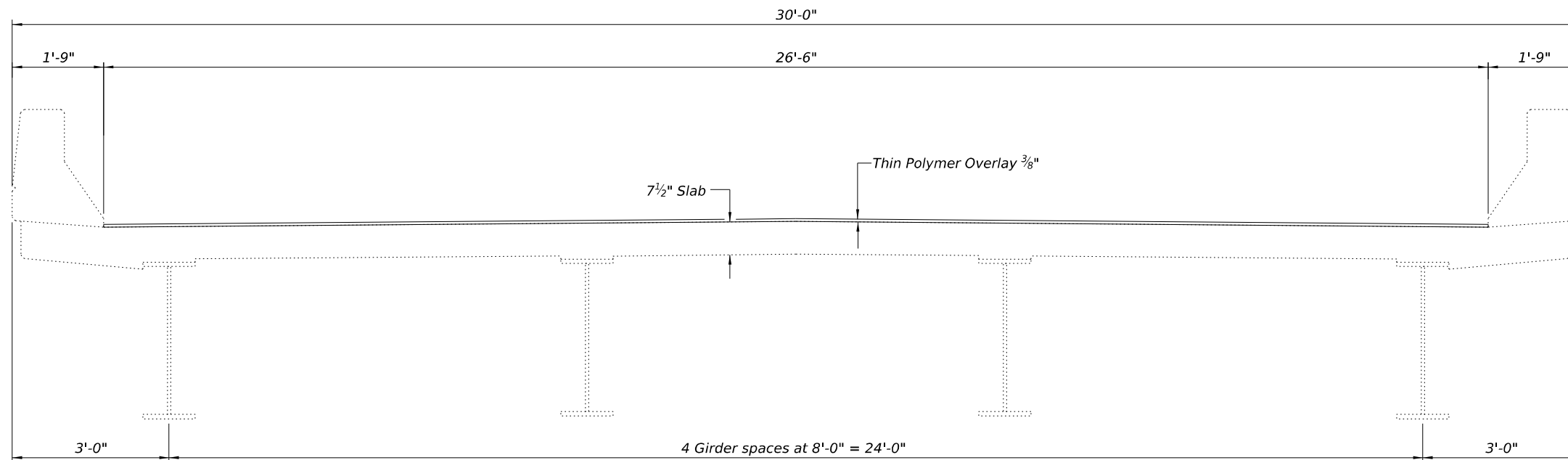
ITEM	UNIT	SUPER	SUB	TOTAL
Furnishing and Erecting Structural Steel	Pound		1,630	1,630
Preformed Joint Seal 1½"	Foot	61		61
Elastomeric Bearing Assembly, Type I	Each		8	8
Anchor Bolts, 1"	Each		16	16
Jack and Remove Existing Bearings	Each		8	8
Bridge Deck Thin Polymer Overlay ⅜"	Sq. Yd.	739		739



**SECTION A-A**



**JOINT SECTION THRU PARAPET**



**DECK CROSS SECTION**

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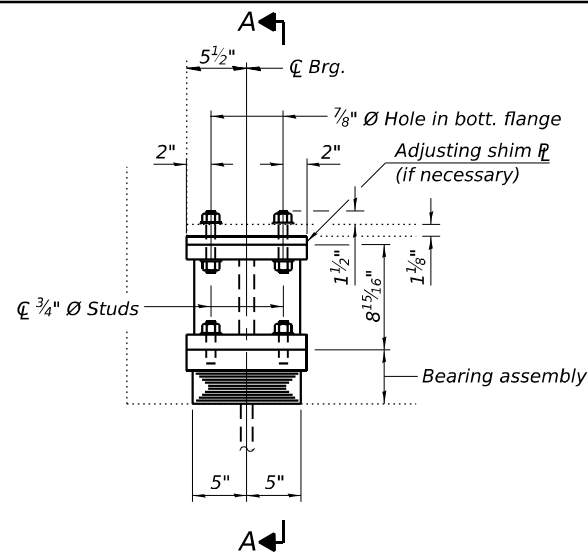
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	DATE - 1/12/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

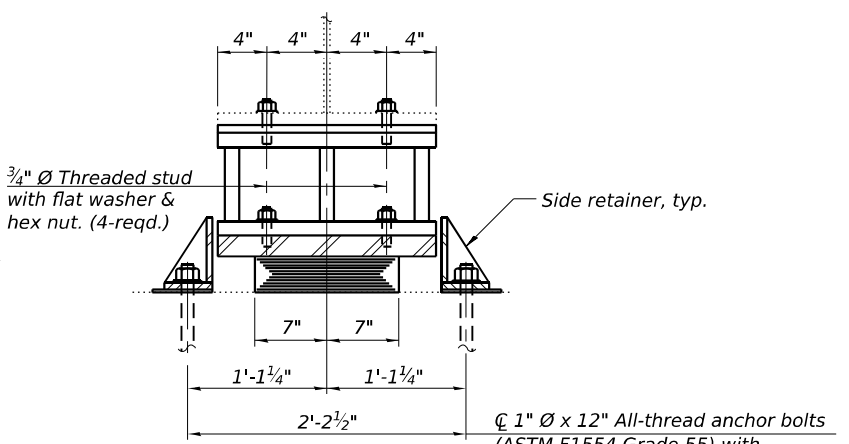
**GENERAL DATA  
STRUCTURE NO. 097-0045**

SCALE: SHEET 2 OF 3 SHEETS STA. TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
214	D9 Bridge Repair 2024-2	WHITE	36	25
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				

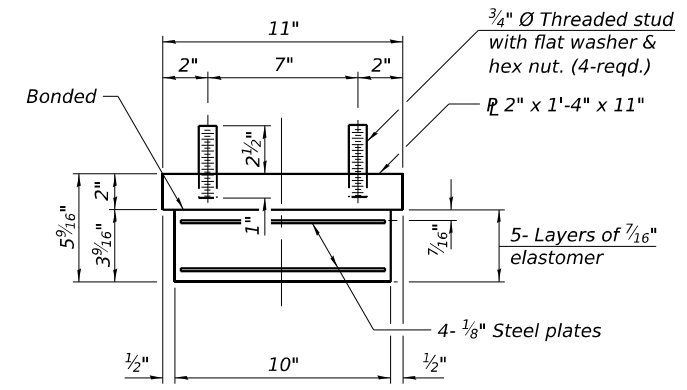


**ELEVATION AT ABUT.**



**SECTION A-A**

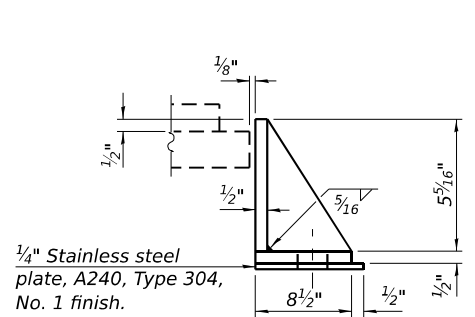
**TYPE I ELASTOMERIC EXP. BRG.**



**BEARING ASSEMBLY**

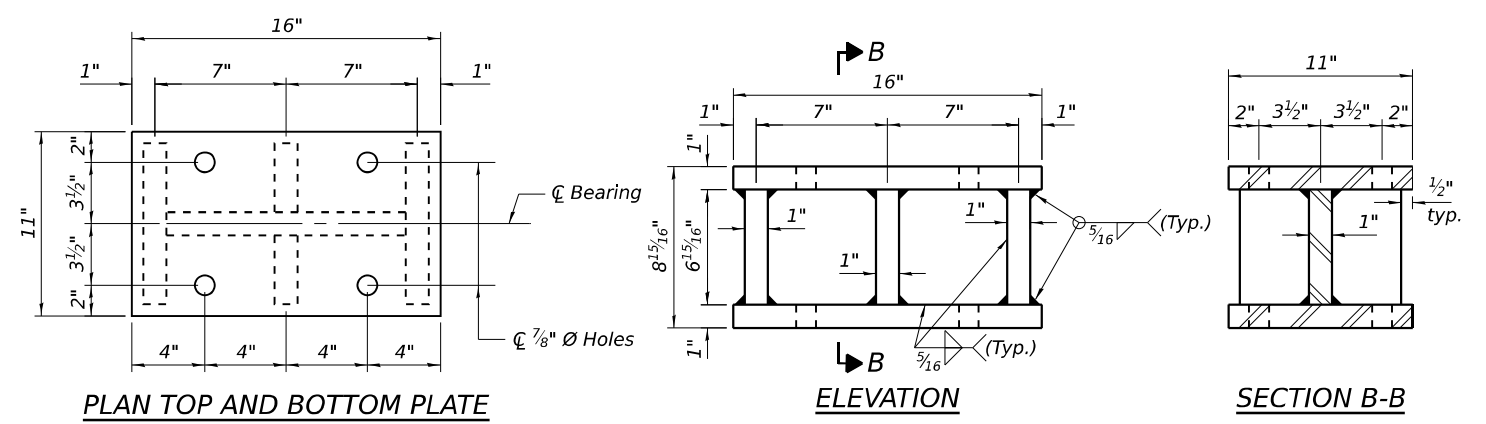
Note:  
Shim plates shall not be placed under bearing assembly.

- Notes:
1. Side retainers and stainless steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.
  2. Cost of steel extensions, shim plates, and connection bolts shall be included in payment for Furnishing and Erecting Structural Steel.
  3. Minimum jack capacity = 30 tons.
  4. Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.
  5. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
  6. Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.



**SIDE RETAINER**

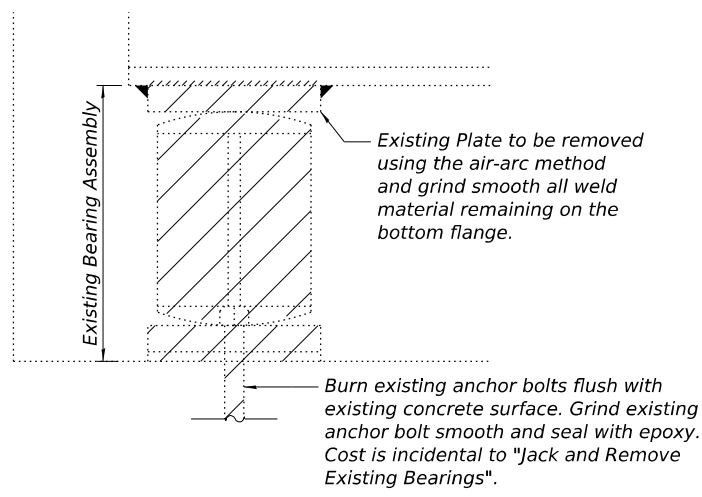
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



**STEEL EXTENSION DETAIL**

**SHIM TABLE**

Location	Bm. 1	Bm. 2	Bm. 3	Bm. 4
S. Abut.	0"	0"	3/8"	0"
N. Abut.	0"	3/8"	0"	0"



**EXISTING BEARING REMOVAL DETAIL**

Reactions (k)		
Location	S. Abut.	N. Abut.
DL	37.0	37.0
LL	51.0	51.0
IMP.	7.6	7.6
Total	95.6	95.6

**BILL OF MATERIAL**

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	1,630
Elastomeric Bearing Assembly Type I	Each	8
Anchor Bolts, 1"	Each	16
Jack and Remove Existing Bearings	Each	8

FILE NAME: L:\DOT\22006610-01\WO\_06\681006\CADD Data\Bridge\CADD Sheets\SN 097-0045\0970045-78A28-03-Abutment Bearings.dgn



USER NAME = bholland	DESIGNED - BLH	REVISED -
PLOT SCALE = N/A	DRAWN - BLH	REVISED -
PLOT DATE = 3/6/2024	CHECKED - DH	REVISED -
	DATE - 1/12/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ABUTMENT BEARINGS  
STRUCTURE NO. 097-0045**

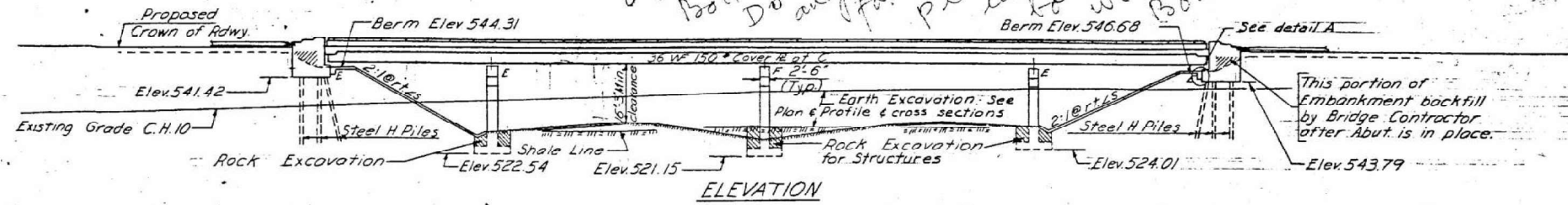
SCALE: SHEET 3 OF 3 SHEETS STA. TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
214	D9 Bridge Repair 2024-2	WHITE	36	26
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				

B.M.: Spike & Washer in root of 18" Elm 360'rt.  
Station 879+20 Elevation 527.46

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

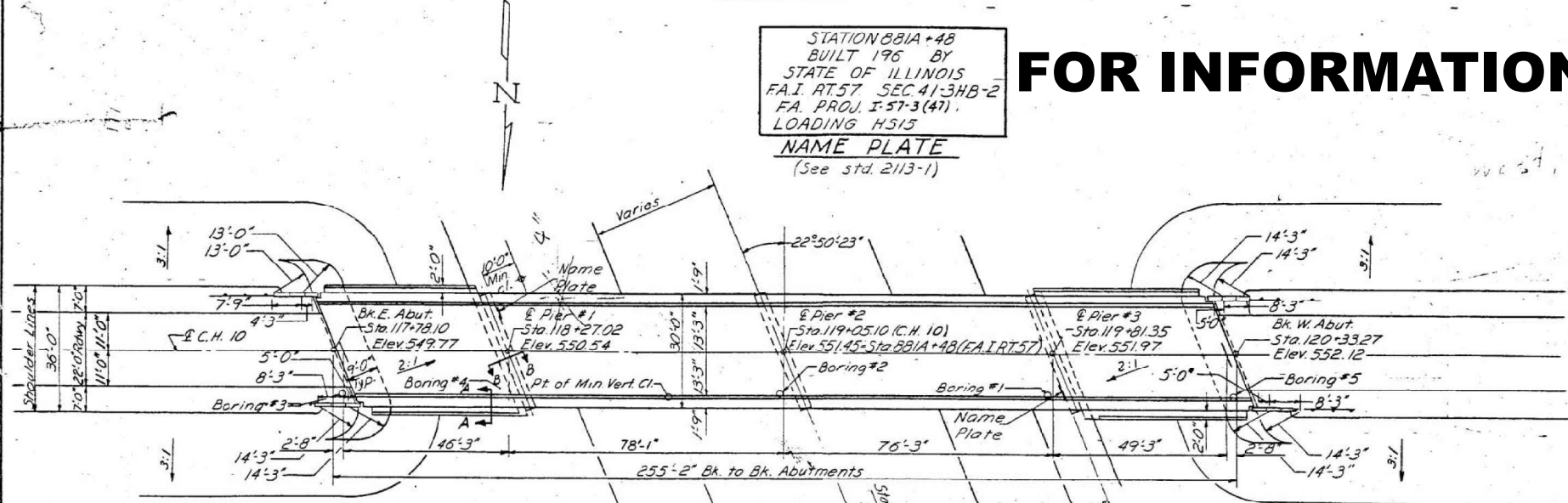
PROJECT NO.	DATE	DESIGNER	TOTAL SHEETS	SHEET NO.
4-30-2	11-18-66	JEFFERSON	42	13
10 SHEETS				



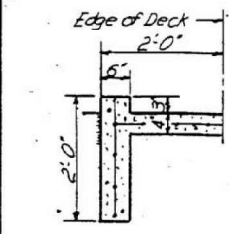
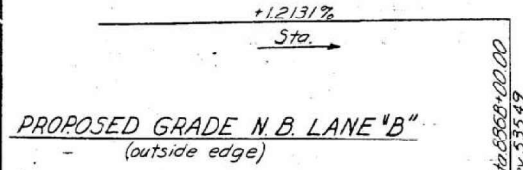
ELEVATION

STATION 881A+48  
BUILT 196 BY  
STATE OF ILLINOIS  
F.A.I. RT.57 SEC.41-3HB-2  
F.A. PROJ. I-57-3(47)  
LOADING HS15  
NAME PLATE  
(See std. 2/13-1)

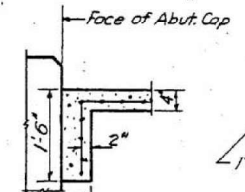
**FOR INFORMATION ONLY**



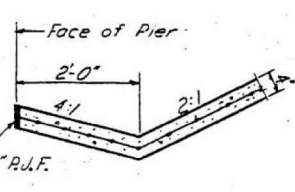
PLAN



SECTION A-A



DETAIL A



SECTION B-B

CURVE DATA - EDGE OF P.V.T. "B"

PI Sta. 875 B+01.24  
Δ = 17°-28'-04"  
D = 1°-27'-20"  
R = 3936.10'  
L = 1200.00'  
T = 604.69'  
E = 46.18'  
S.E. = 0.041 Ft. per Ft.  
Attained in 200'

C.H. #10 CURVE DATA

PI Sta. 110+70.89  
Δ = 9°-24'-00"  
D = 0°-45'-00"  
R = 7639.44'  
T = 628.08'  
L = 1253.33'  
S.E. = .02 Ft. per Ft.  
Attained in 150'

C.H. #10 CURVE DATA

PI Sta. 129+44.27  
Δ = 7°-27'-10"  
D = 0°-45'-00"  
R = 7639.44'  
T = 497.55'  
L = 993.71'  
S.E. = .02 Ft. per Ft.  
Attained in 150'

PROPOSED GRADE S.B. LANE  
'A' (Crown)

800' V.C.  
+1.855%  
+1.15%

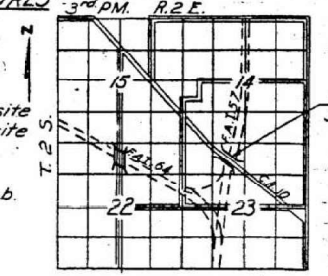
MAX. FOOTING PRESSURES

Pier 1 535 KSF  
Pier 2 765 KSF  
Pier 3 533 KSF

DESIGN STRESSES

f<sub>c</sub> = 1400 psi. Super. & Sub.  
v<sub>c</sub> = 75 psi. Footing  
f<sub>s</sub> = 20,000 psi. Reinf.  
f<sub>s</sub> = 20,000 psi. Struct.  
n = 10

LOADING: HS15-44



LOCATION SKETCH

Coarse aggregate to be used in parapet ha. trails and end post must be free of chert, flint, lignite, and soft sandstone.  
The concrete floor slab shall be finished in accordance with Art. 51.19 of the Standard Specifications.  
Slope Wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58# per 100 sq. ft.  
All reinforcement bars shall be lapped 20 diameters unless otherwise shown.  
All structural steel shall conform to A.S.T.M. Designation A-36.  
Rivets 3/4", Open Holes 1 1/8", unless otherwise noted.  
Anchor bolts shall be set before fastening diaphragms over supports.  
Exposed surfaces of the expansion devices, inaccessible after erection, shall receive two shop coats of red lead paint. All other surfaces shall be given one shop coat of red lead paint. Anchor studs shall not be painted.  
Expansion devices are included in the quantity of structural steel. Est. weight = 800 lbs.  
Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of al. minium paint. See Art 56.1 to 56.5 inclusive of the Standard Specifications.  
All Steel Piles shall be driven to refusal.  
Permanent forms will not be permitted in forming the concrete deck.  
The contractor shall drive one steel test pile at the East Abutment, in a permanent location, as directed by the Engineer before ordering the remainder of piles.  
Excavation for portions of structures in the embankments shall not be classified.  
Excavation required for construction of slope wall shall not be classified.

TOTAL BILL OF MATERIAL

Item	Unit	Super.	Sub.	Total
Class X Concrete	Cu. Yds.	2194	210.3	429.7
Protective Coat	Sq. Yds.	990		990
Structural Steel	Lbs.	185390		185390
Aluminum Handrail	Lin. Ft.	504		504
Reinforcement Bars	Lbs.	62730	179.0	80710
Steel Piles (BBP36)	Lin. Ft.		311	311
Test Piles Steel (BBP36)	Ea.		1	1
Name Plates	Ea.		2	2
Slope Wall (4')	Sq. Yds.		410	410
Rock Excavation for Struct.	Cu. Yds.		60	60

\*Includes application on inside vertical face, top, and exposed ends of abutment wings.  
FIELD WELDING OF CONNECTION ACCESSORIES TO THE BOTTOM FLANGES OR FOR A DISTANCE OF 2' OF THE SPAN EACH WAY FROM PIER SUPPORTS ON THE TOP FLANGES OF BEAMS OR GIRDERS WILL NOT BE PERMITTED. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

041-0051

GENERAL PLAN & ELEVATION

C.H. 10 OVER F.A.I. RT.57  
F.A.I. RT.57 SEC.41-3HB-2  
JEFFERSON COUNTY  
STA. 881A+48

Revised 7-19-66 [RH] Changed Super. Reinf. Bars from 54280 lbs. to 59680 lbs.

Revised 11-18-66 [Changed Super. Reinf. Bars from 59680 lbs. to 61490 lbs., Changed Sub. Reinf. Bars from 17700 lbs. to 17980 lbs.]

FILE NAME: L:\DOT\22006610-00\W0\_06\681006\CADD Sheets\Existing Plans\78A28-001-Existing Plans - I.dgn



USER NAME = bholland	DESIGNED - BLH	REVISED -
PLOT SCALE = N/A	DRAWN - BLH	REVISED -
PLOT DATE = 1/11/2024	CHECKED - DH	REVISED -
	DATE - 1/12/2024	REVISED -

DESIGNED - BLH	REVISED -
DRAWN - BLH	REVISED -
CHECKED - DH	REVISED -
DATE - 1/12/2024	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

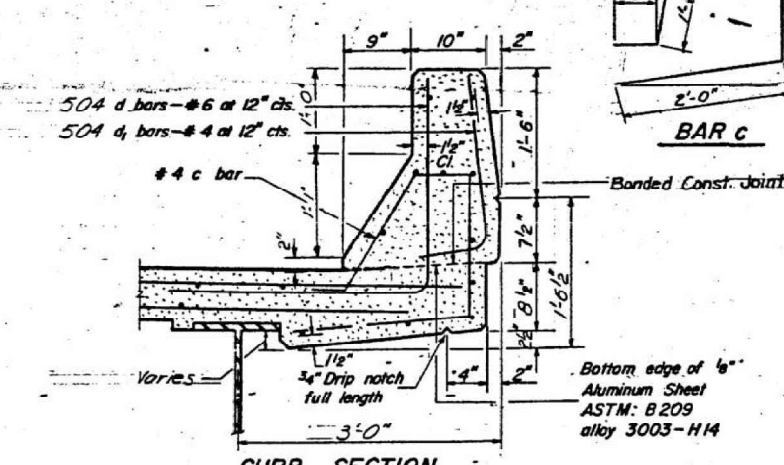
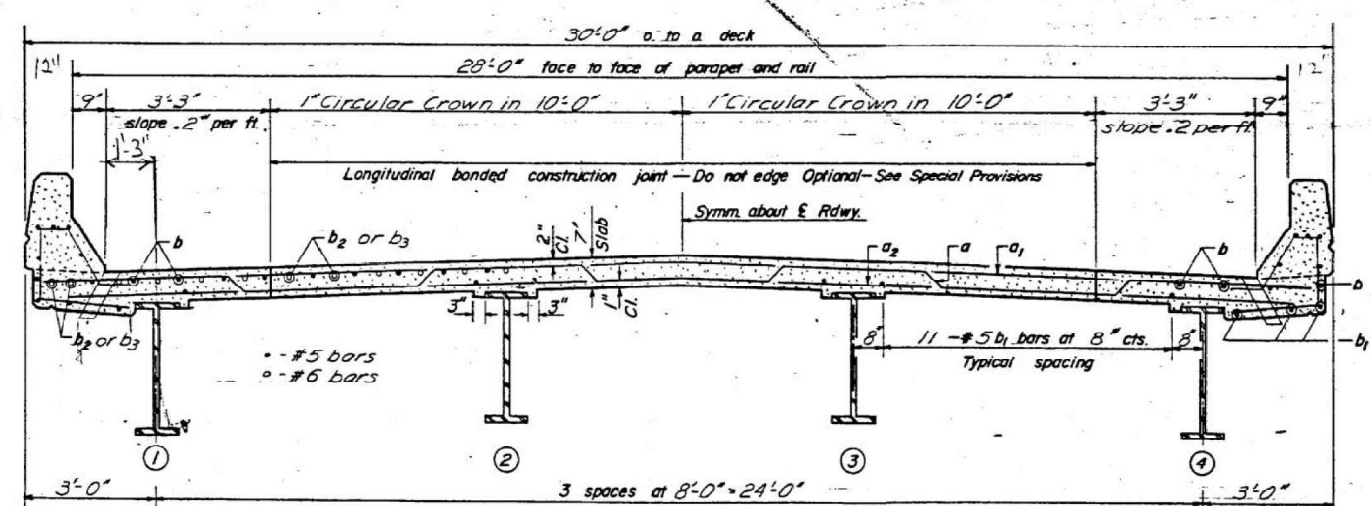
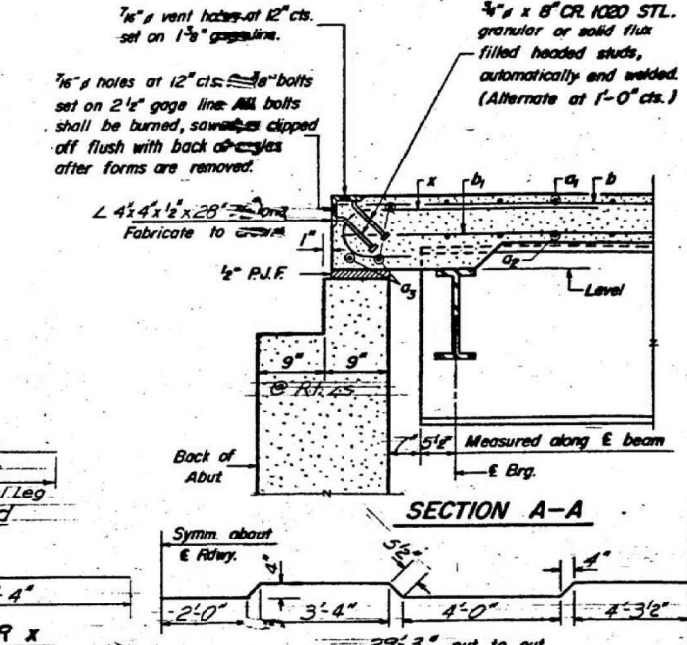
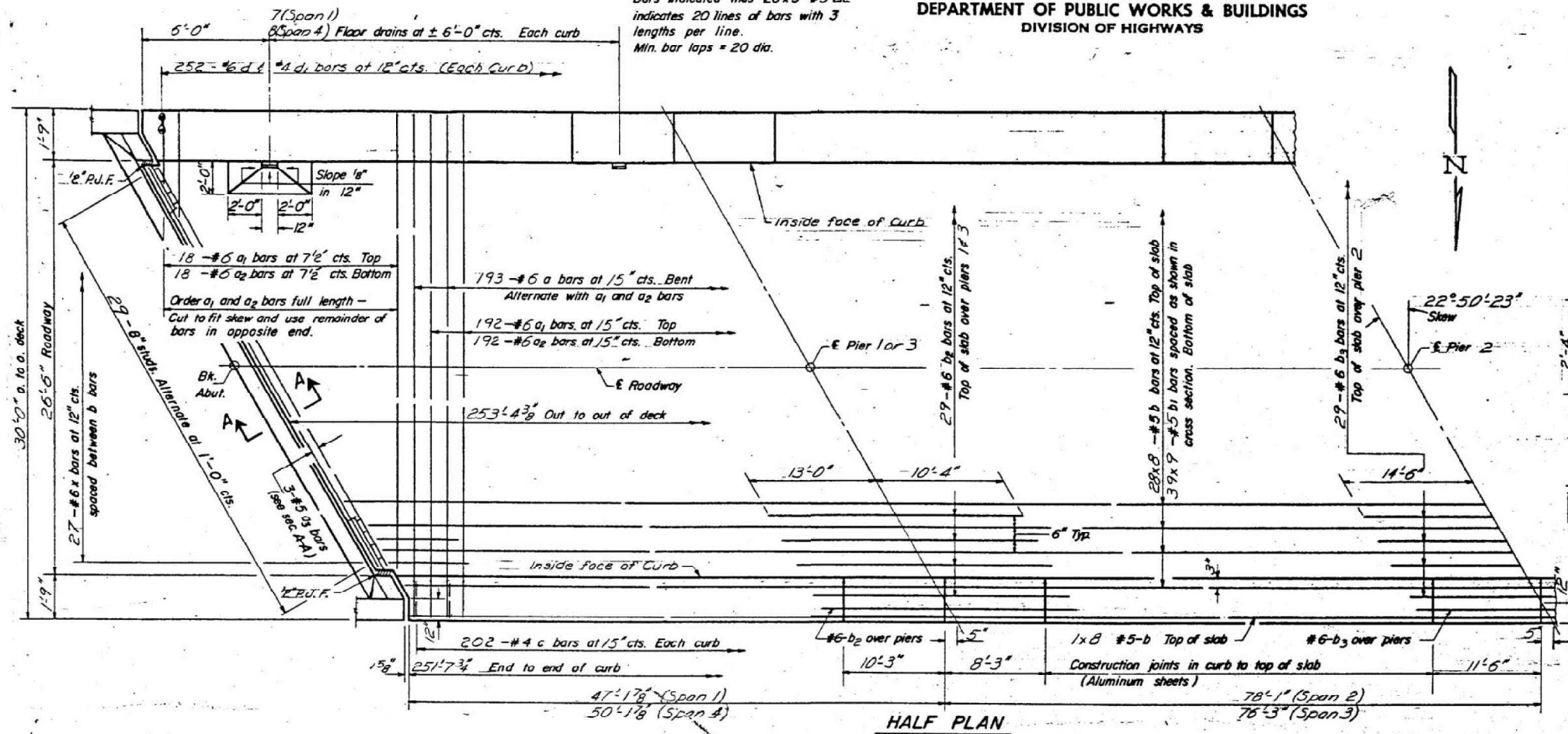
EXISTING PLANS - I

SCALE: SHEET 1 OF 9 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
826	D9 Bridge Repair 2024-2	JEFFERSON	36	27
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				



Note:  
Bars indicated thus 20x3-#5 etc.  
indicates 20 lines of bars with 3  
lengths per line.  
Min. bar laps = 20 dia.



BILL OF MATERIAL				
Bar	No.	Size	Length	Shape
a	193	#6	30'-0"	
a1	210	#6	29'-3"	
a2	210	#6	28'-10"	
a3	6	#5	28'-5"	
b	240	#5	32'-9"	
b1	351	#5	29'-3"	
b2	62	#6	23'-4"	
b3	31	#6	29'-0"	
c	404	#4	6'-0"	
d	504	#6	3'-9"	
d1	504	#4	2'-6"	
x	54	#6	5'-0"	
Reinforcement Bars			Lbs.	56840
Structural Steel			Lbs.	185300
Class X Concrete			Cu. Yd.	171.9

\* Weight of bearing assemblies with lead plates and anchor bolts are included as structural steel.  
Est. Wt = 6200 lbs.

The lengths and quantities of longitudinal reinforcement and Class X Concrete in curbs and parapets are not included in above quantities. See sheet 5A

**FOR INFORMATION ONLY**

**SUPERSTRUCTURE**  
F.A.I. RT. 57 SEC. 41-3HB-2  
JEFFERSON COUNTY  
STATION 881A+48

DESIGNED John Hayner  
CHECKED George A. Bapi  
R.P. Summer  
DRAWN DL Beemer  
CHECKED George A. Bapi

EXAMINED [Signature]  
PASSED [Signature]  
APPROVED [Signature]

JAN 11 1966

I-4-R (> 14') 8-1-65

Revised: 7-19-66 J.R.H. Changed 1/2" top of slab Cl. to 2" and Reinf. Bars from 52220 lbs. to 57620 lbs.  
Revised 11-18-66 J.R.H. Changed Reinf. Bars from 57620 lbs. to 59430 lbs.  
Revised 5-31-67 J.R.H. Changed Curb, Changed Reinf. Bars from 59430 lbs. to 56840 lbs., Changed Class X Conc. from 193.5 Cu. Yds. to 171.9 Cu. Yds.



USER NAME = bholland	DESIGNED - BLH	REVISED -
PLOT SCALE = N/A	DRAWN - BLH	REVISED -
PLOT DATE = 1/11/2024	CHECKED - DH	REVISED -
	DATE - 1/12/2024	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS - II

SCALE: SHEET 2 OF 9 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
826	D9 Bridge Repair 2024-2	JEFFERSON	36	28
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				

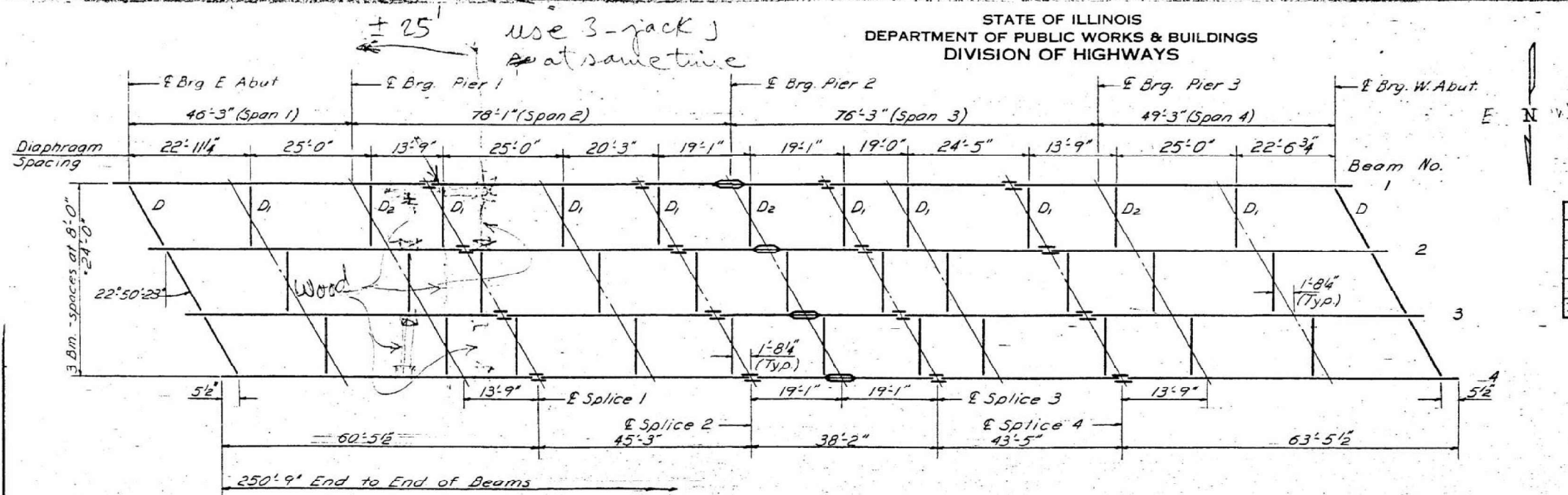
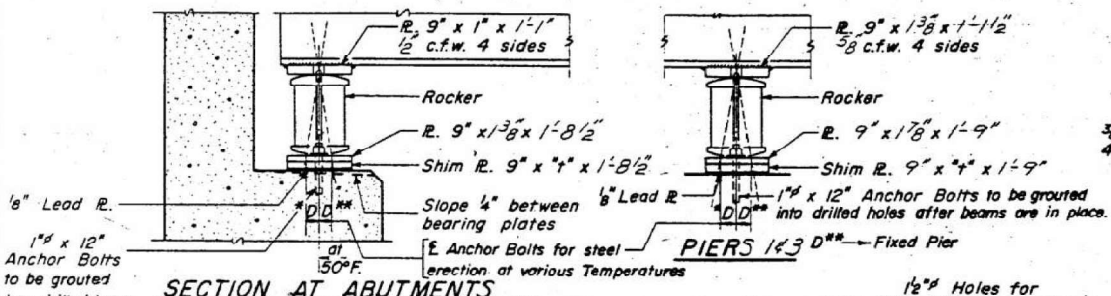


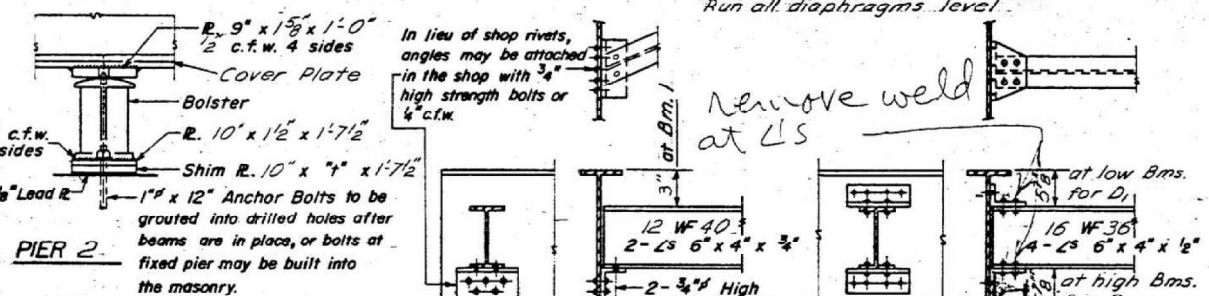
TABLE OF MOMENTS AND REACTION INTERIOR BEAMS

	Moment (Kip-Ft)				Reactions (Kips)							
	L.O.C.	1 Sp. 1	5 Sp. 2	5 Sp. 3	6 Sp. 4	E. Abut.	Pier 1	Pier 2	Pier 3	W. Abut.		
D. L.	1197	1497	3276	743	2913	481.1	1655	179	84.8	102.4	84.2	20.6
L. L.	254.4	288.9	362.3	373.9	360.0	285.3	276.0	30.1	40.8	45.0	40.7	30.6
IMP.	74.3	79.4	89.1	92.4	89.3	78.7	79.2	8.8	11.2	11.1	11.2	8.8
TOTAL	1448.4	1665.4	1779.0	1209.6	1406.6	845.1	520.7	56.8	136.8	158.5	136.1	60.0

FRAMING PLAN  
(all beams are 36 W 150)



SECTION AT ABUTMENTS



PIER 2

DIAPHRAGM D

DIAPHRAGM D1 & D2

4" DIMENSIONS

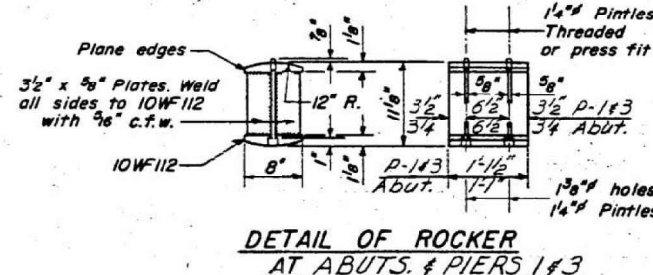
Location	Beam	Bm. 1	Bm. 2	Bm. 3	Bm. 4
E. Brg. E. Abut.	0"	0"	5'	16'	
E. Brg. Pier 1	0"	18'	3'	0"	
E. Brg. Pier 2	0"	5'	1'	0"	
E. Brg. Pier 3	0"	0"	18'	1'	
E. Brg. W. Abut.	0"	0"	0"	18'	

ELEVATION TOP OF W

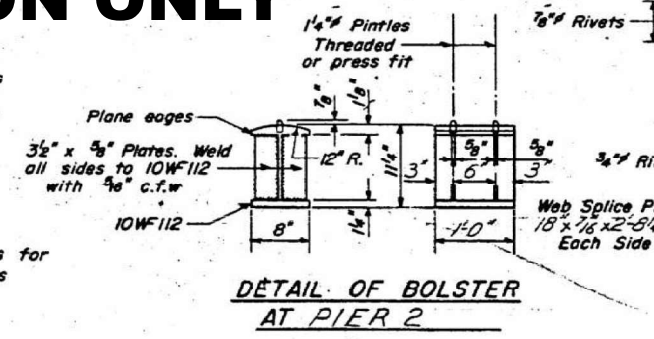
Location	Beam	Bm. 1	Bm. 2	Bm. 3	Bm. 4
E. Brg. E. Abut.	549.05	549.21	549.27	549.22	
E. Brg. Pier 1	549.74	549.89	549.94	549.88	
E. Splice 1	549.94	550.09	550.14	550.08	
E. Splice 2	550.48	550.62	550.66	550.58	
E. Brg. Pier 2	550.65	550.80	550.83	550.75	
E. Splice 3	550.84	550.97	550.99	550.91	
E. Splice 4	551.15	551.27	551.29	551.20	
E. Brg. Pier 3	551.21	551.33	551.34	551.25	
E. Brg. W. Abut.	551.42	551.53	551.53	551.43	

**FOR INFORMATION ONLY**

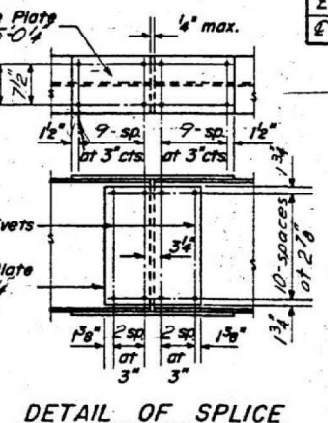
DESIGNED *John Hoyer*  
 CHECKED *George A. Basi*  
 DRAWN *W. A. Sausman Jr.*  
 EXAMINED *Jan. 11 1966*  
 PASSED *[Signature]*  
 APPROVED *[Signature]*



DETAIL OF ROCKER AT ABUTS. & PIERS 1 & 3



DETAIL OF BOLSTER AT PIER 2



DETAIL OF SPLICE

STRUCTURAL STEEL  
 F.A.I. RT57 SEC. 41-3HB-2  
 JEFFERSON COUNTY  
 STATION 881A+48

I-2-C 1-2-62 Rev. 11-9-62 Rev. 8-16-63 Rev. 12-10-63



USER NAME = bholland  
 PLOT SCALE = N/A  
 PLOT DATE = 1/11/2024

DESIGNED - BLH  
 DRAWN - BLH  
 CHECKED - DH  
 DATE - 1/12/2024

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING PLANS - III

SCALE: SHEET 3 OF 9 SHEETS STA. TO STA.

F.A.S. RTE. 826 SECTION D9 Bridge Repair 2024-2 COUNTY JEFFERSON TOTAL SHEETS 36 SHEET NO. 29 CONTRACT NO. 78A28 ILLINOIS FED. AID PROJECT

FILE NAME: L:\DOT\22006610-01\W0\_06\681006\CADD Sheets\Existing Plans\78A28-003-Existing Plans - III.dgn

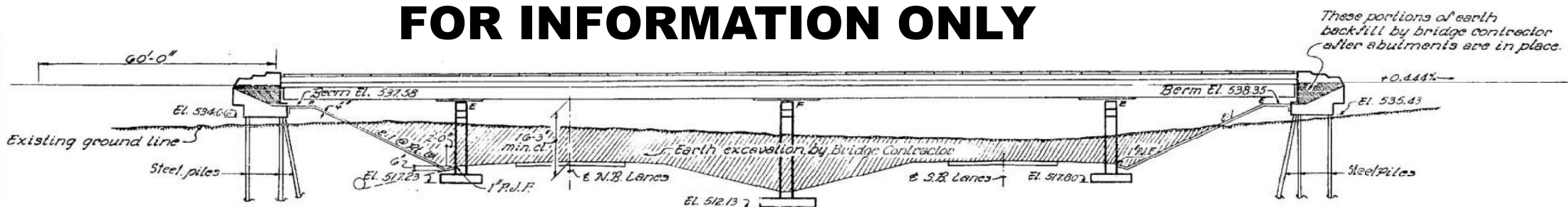


B.M. : 6" Spike in north side of 30" box elder  
118' Right of Sta. 996 + 25 EL. 534.02.

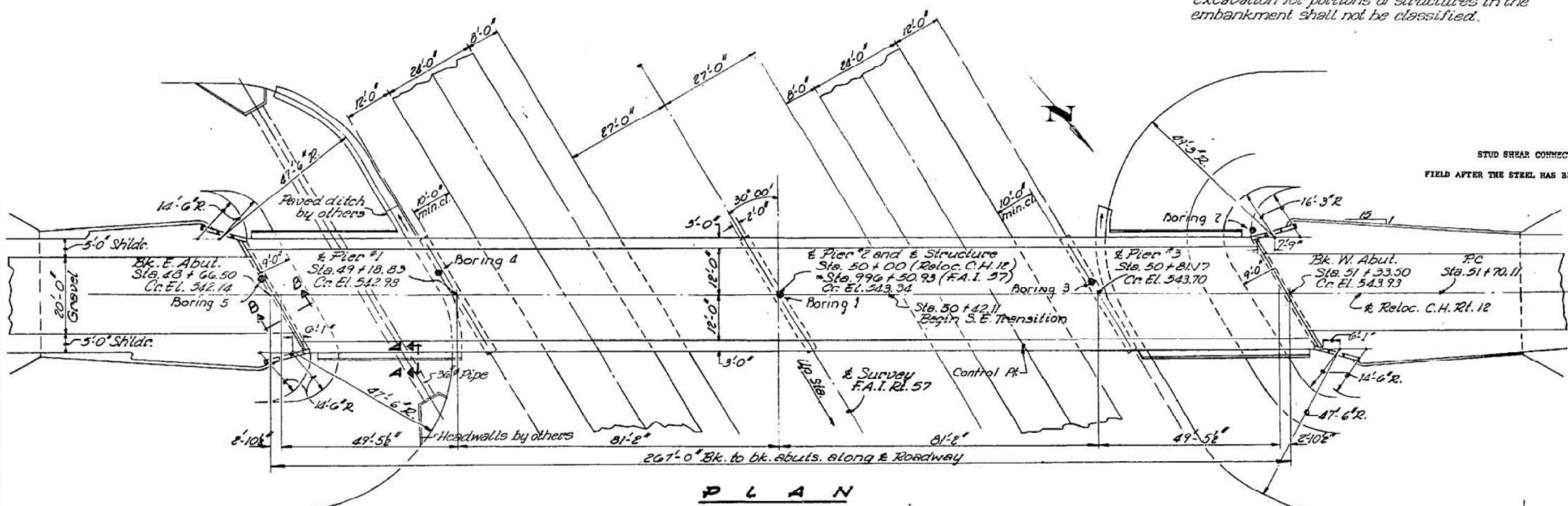
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO. / SHEETS
FA.I. RT. 57	#1-34B-3	Jefferson	51	15 / 9 SHEETS
P.O. ROAD DIST. NO. 1	ILLINOIS	P.O. JOB PROJECT: I-57-3(36)99		

# FOR INFORMATION ONLY



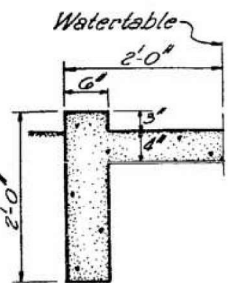
**ELEVATION**



**PLAN**

**CURVE DATA C.H. 12**

- $\Delta$  = 80° 00'
  - D = 6° 18'
  - T = 579.74'
  - L = 963.89'
  - R = 690.91'
  - S.E. = 0.08%
  - P.I. = Sta 97 + 49.05
- (Chord Definition)

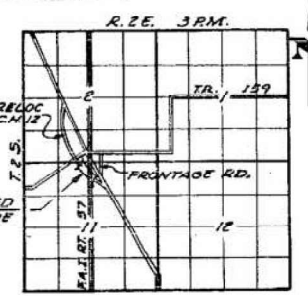


**SECTION A-A**

**DESIGN STRESSES**

- $f_c = 1,400$  psi..... Super & Sub
- $f_c = 75$  psi..... Footings
- $f_s = 20,000$  psi..... Reinforcement
- $f_s = 20,000$  psi..... Struct. (A-3a)
- $n = 10$
- $\&$  Defl. allowable =  $\frac{1}{1200}$  (Comp.)

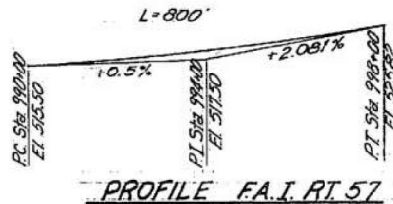
**LOADING HS15-44**



**LOCATION PLAN**

STATION 996+50.93  
BUILT 19 BY  
STATE OF ILLINOIS  
FA.I. RT. 57 SEC. 41-34B-3  
F.A. PROJ. I-57-3(36)  
LOADING HS15-44

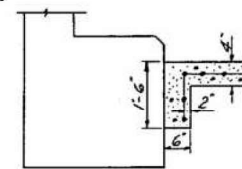
**NAME PLATE**  
See Std. 2113-1



**PROFILE FA.I. RT. 57**

**GENERAL NOTES**

Class X concrete shall be used throughout.  
Coarse aggregate to be used in parapet handrails and end posts must be absolutely free of chert, flint, limonite, lignite and soft sandstone.  
The concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications.  
Slope wall shall be reinforced with welded wire fabric 6" x 6" mesh, weighing 58 lbs. per 100 sq. ft.  
All reinforcement bars shall be lapped 20 diameters unless otherwise shown.  
Rivets  $\frac{3}{4}$ "; Open holes  $\frac{1}{2}$ ", unless otherwise noted.  
Anchor bolts shall be set before riveting diaphragms over supports.  
The exposed surfaces of the expansion guard shall be given two shop coats of red lead paint and the contact surfaces shall be given one coat of red lead paint.  
Anchor studs shall not be painted.  
Expansion guards are included in the quantity of structural steel. Estimated weight = 773 lbs.  
Except as otherwise provided, all structural steel shall receive one shop coat of red paint and two field coats of aluminum paint. See Article 56.1 to 56.5 inclusive of the Standard Specifications.  
The contractor shall drive one steel (B BP36) test pile in a permanent location at the west abutment as directed by the engineer before ordering the remainder of piles.  
Permanent forms will not be permitted in forming the concrete floor.



**SECTION B-B**

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Class A Excav. for Structures	Cu. yds.			76
Rock Excav. for Structures	Cu. yds.		84	84
Class X Concrete	Cu. yds.	255.8	220.5	476.3
Structural Steel	Lbs.	195,260		195,260
Reinforcement Bars	Lbs.	47,370	18,010	65,380
Alum. Handrail	lin. ft.	527		527
Steel Piles (B BP36)	lin. ft.		279	279
Test Piles Steel (B BP36)	Each		1	1
Name Plates	Each		2	2
Slope Wall 4"	Sq. yds.		417	417
Protective Coat	Sq. yds.	878		878

DESIGNED P. H. Hogeweg  
CHECKED J. B. OZZO  
DRAWN J. Mullerix  
CHECKED V. B. D.

EXAMINED W. E. Baumann  
PASSED  
APPROVED V. E. Duff

JUNE 24 19 64

PROJ. I-57-3(36)99

**GENERAL PLAN & ELEVATION**

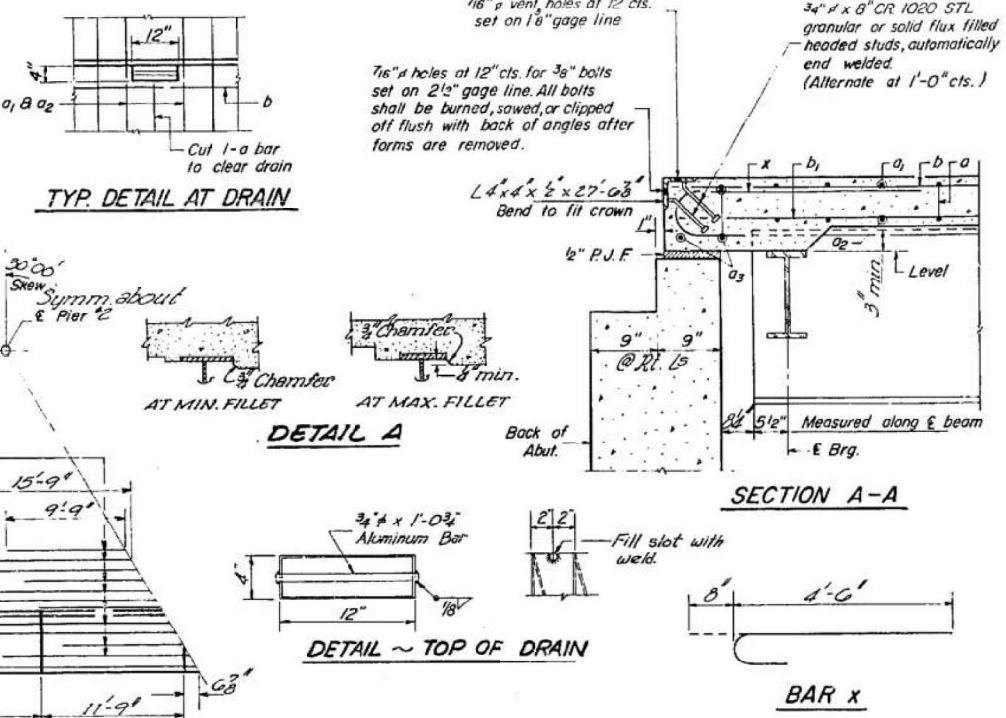
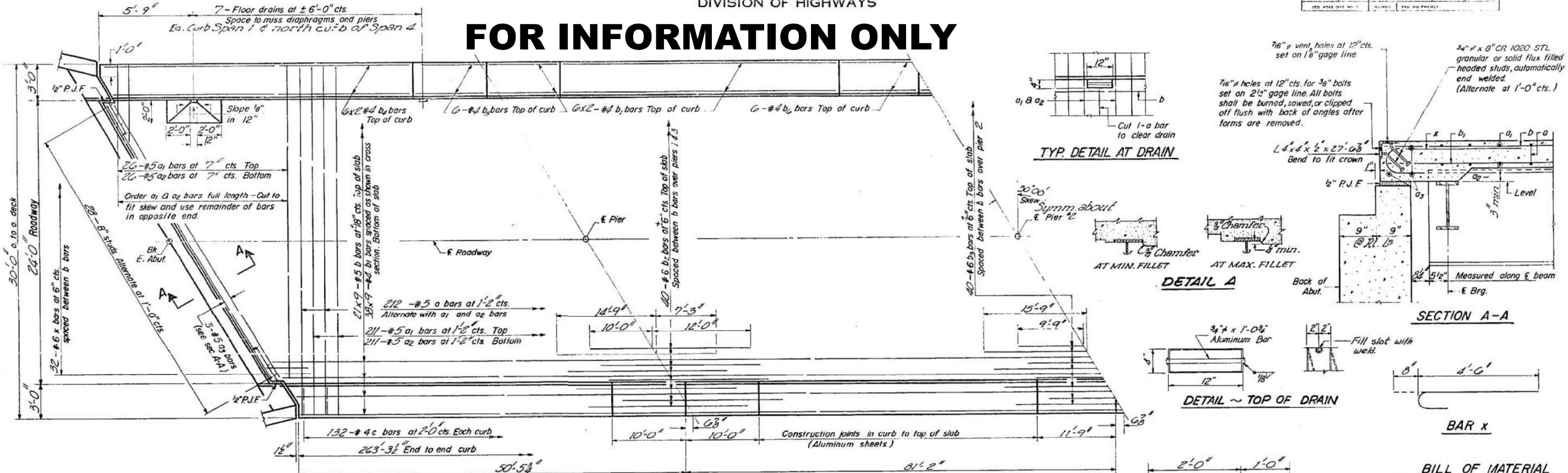
**F.A.I. RT. 57 SEC. 41-34B-3**

**JEFFERSON COUNTY**

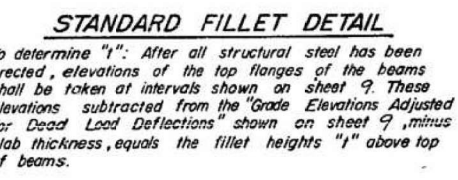
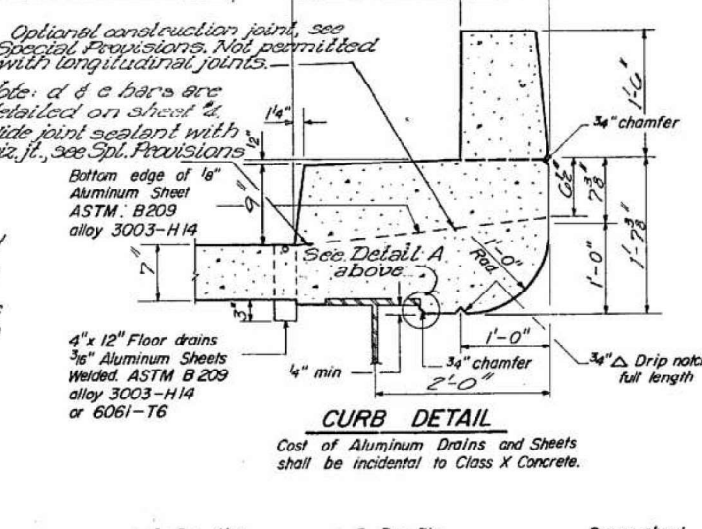
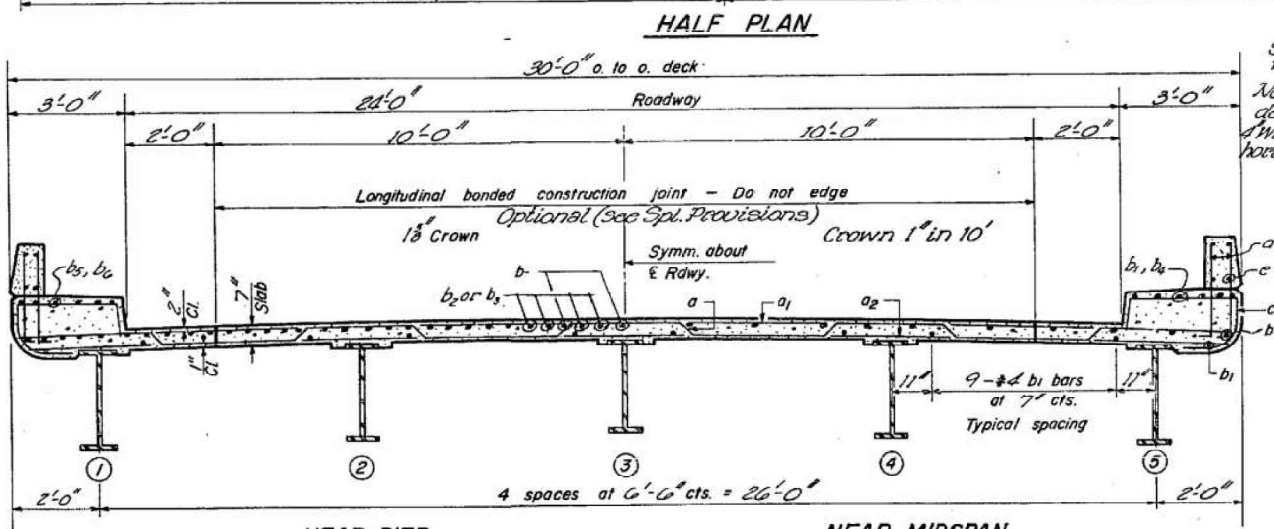
**STATION 996 + 50.93**

12-23-64 P.N.H. Revised and changed grade on C.H. 12 +0.50% to +0.444%. Incr. and spans 27'-8" to 49'-5" and B to B. of Abuts. 263'-6" to 267'-0". Changed F.A.I. RT. 57 grade from a +0.50% to a vertical curve. Corrected dimensions and elevations to fit. Updated slope wall at abut. Deleted from Bill of Mat'l - Borrow Excav., Class A Excav. for Struct., and Pipe Culvert (24") Typ. 2. Changed Total Quantities - Rock Excav. for Struct. 77 to 84 cu. yds.; Class X Conc. 460.8 to 476.3 cu. yds.; Struct. Steel 195,170 to 195,260 lbs.; Rein. Bars 47,170 to 65,380 lbs.; Alum. Handrail 520 to 527 lin. ft.; Steel Piles (B BP36) 289 to 279 lin. ft.; Slope wall 389 to 417 sq. yds.; and Protective Coat 846 to 878 sq. yds. Changed Embank. quantities - E. Abut. 1737 to 3907 cu. yds. and W. Abut. 1808 to 3811 cu. yds. and Borrow Excav. - E. Abut. 2170 to 4836 cu. yds. and W. Abut. 2260 to 4501 cu. yds. 2'-10" Increased Class X Conc. from 460.8 to 476.3 cu. yds. - as slab was revised to 7"

# FOR INFORMATION ONLY



Note:  
Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.  
Min bar laps = 20 dia.



DESIGNED *G.H. Hogewer*  
CHECKED *V.B. Ostrom*  
DRAWN *G.N.H. D.L. Beemer*  
CHECKED *V.B. O.*

EXAMINED *H.G. Baumann*  
PASSED *[Signature]*  
APPROVED *[Signature]*

JUNE 24 1964

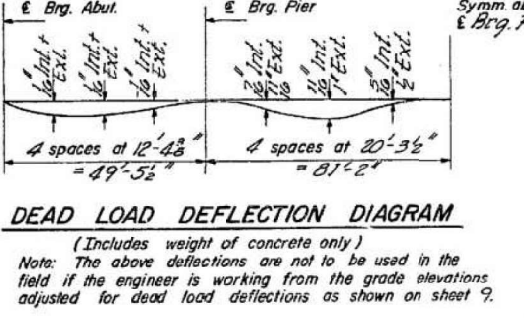
I-5-R (>15°) 10-10-62

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	212	#5	30'-7"	~
a <sub>1</sub>	237	#5	29'-7"	~
a <sub>2</sub>	237	#5	29'-2"	~
a <sub>3</sub>	6	#5	27'-3"	~
b	189	#5	30'-3"	~
b <sub>1</sub>	390	#4	30'-3"	~
b <sub>2</sub>	80	#6	22'-0"	~
b <sub>3</sub>	40	#6	23'-0"	~
b <sub>4</sub>	48	#4	21'-0"	~
b <sub>5</sub>	48	#4	9'-9"	~
b <sub>6</sub>	24	#4	11'-6"	~
c	264	#4	5'-9"	~
x	64	#6	5'-2"	~

Reinforcement Bars Lbs. 47,370  
Structural Steel Lbs. 195,260  
Class X Concrete Cu. Yd. 255.8

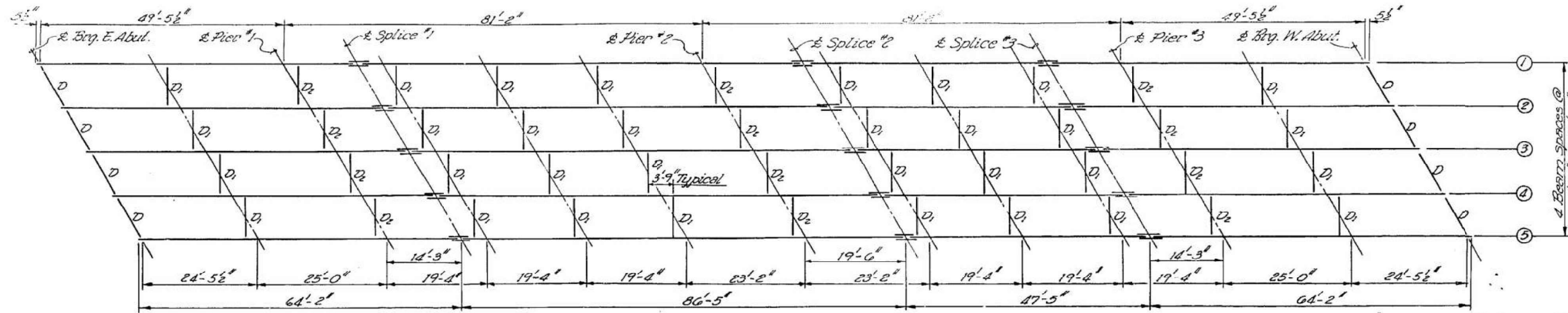
\* Weight of bearing assemblies with load plates, and anchor bolts are included as structural steel. Est. WT = 6,710.



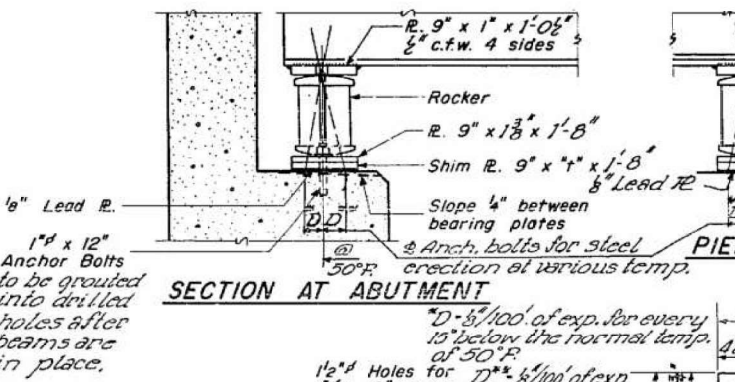
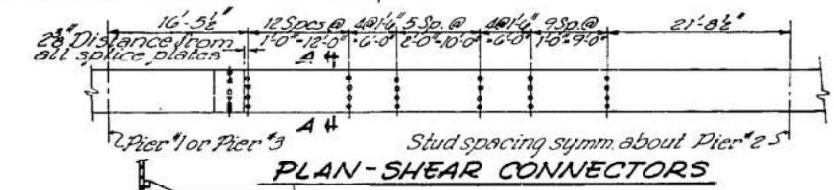
SUPERSTRUCTURE  
F.A.I.R.T. 57 SEC. 41-3HB-3  
JEFFERSON COUNTY  
STATION 996 + 50.93

12-23-64 P.H.H. Inc. end spans length from 48'-8 1/2" to 50'-5 1/2" and made related corrections. Changed quantities: Rein. Bars from 47,160 lbs. to 47,370 lbs., Structural Steel from 193,190 lbs. to 195,260 lbs. and Class X Conc. from 249.3 cu. yds. to 255.8 cu. yds.

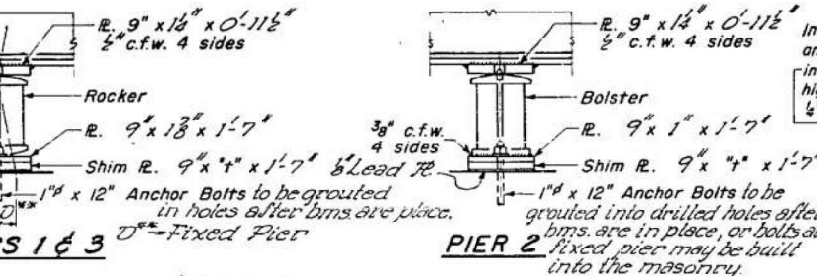




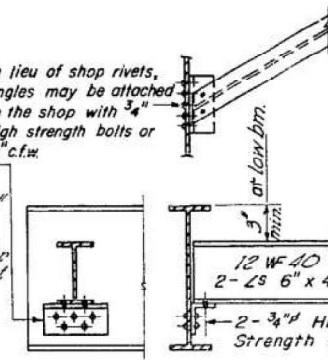
**FRAMING PLAN**  
All beams 33WF112



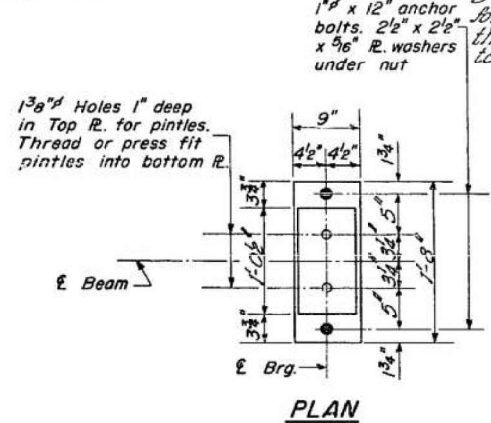
**SECTION AT ABUTMENT**



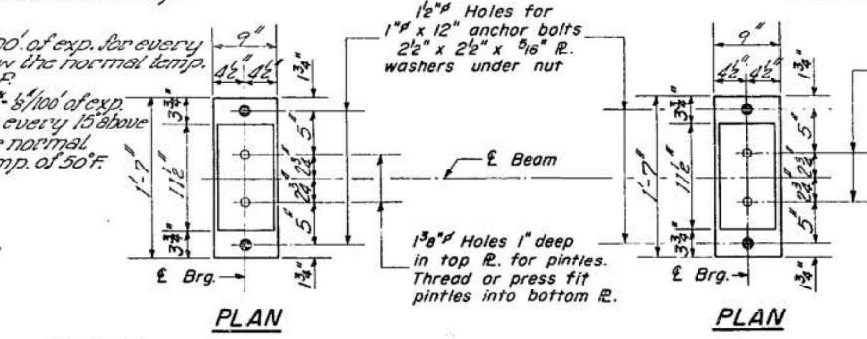
**PIERS 1 & 3**  
**PIER 2**



**DIAPHRAGM D**  
**DIAPHRAGMS D1 & D2**

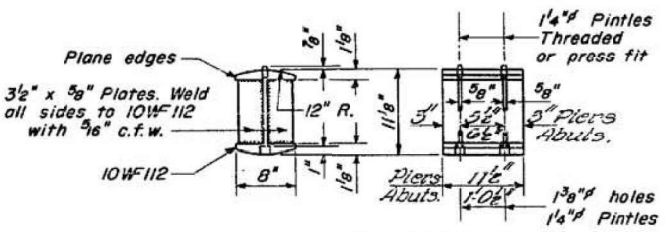


**PLAN**  
**DETAIL OF PINTLE**

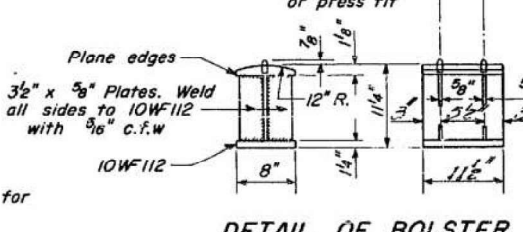


**DETAIL OF COVER PLATE AT PIERS**

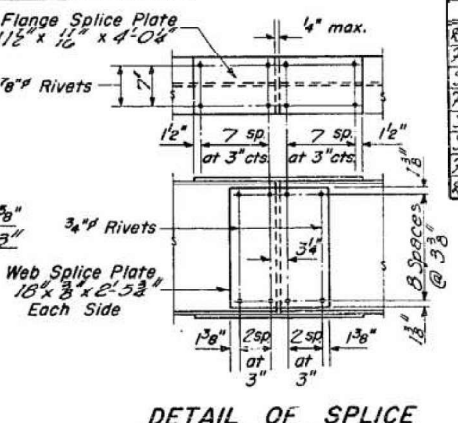
**FOR INFORMATION ONLY**



**DETAIL OF ROCKER AT ABUTS & PIERS 1 & 3**



**DETAIL OF BOLSTER AT PIER 2**



**DETAIL OF SPLICE**

**TABLE OF "E" DIMENSIONS**

	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5
E. Abut.	0	2"	4"	0	0
Pier #1	0	2"	4"	0	0
Pier #2	0	2"	4"	0	0
Pier #3	2"	2"	0	0	0
W. Abut.	0	0	0	0	0

**ELEVATION TOP OF W**

	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5
E. Abut.	542.03	542.14	542.20	542.18	542.10
Pier #1	542.20	542.31	542.37	542.35	542.27
Splice #1	542.25	542.36	542.42	542.40	542.32
Pier #2	542.55	542.66	542.72	542.70	542.62
Splice #2	542.64	542.75	542.81	542.79	542.71
Splice #3	542.95	543.02	543.08	542.92	542.76
Pier #3	543.11	543.14	543.10	542.96	542.77
E. Brg. W. Abut.	543.68	543.55	543.36	543.10	542.80

**STRUCTURAL STEEL**  
F.A.I. RT. 57 SEC. 41-3HB-3  
JEFFERSON COUNTY  
STATION 996 + 50.93

DESIGNED: G.H. Hogewer  
CHECKED: V.B. Sausaman Jr.  
DRAWN: W.A. Sausaman Jr.  
EXAMINED: W.B. Baumann  
PASSED: E.L. Schmitt  
APPROVED: J.L. Schmitt

I-2-C 7-2-62 Rev. 11-9-62 Rev. 8-16-63

12-23-64 R.H.H. Inc. and length of beams from 23'-3" to 64'-2" Revised Table of "E" Dimensions - Pier 3 only. Elevation Top of W table revised for grade changes.



B.M.: 12 ft. R. Sta. 25+27 - Top of south end of R.C.P. Culvert at east field entrance - Elevation 406.65.

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-64	D9	WHITE	27	9
SHEET NO. 1 12 SHEETS				

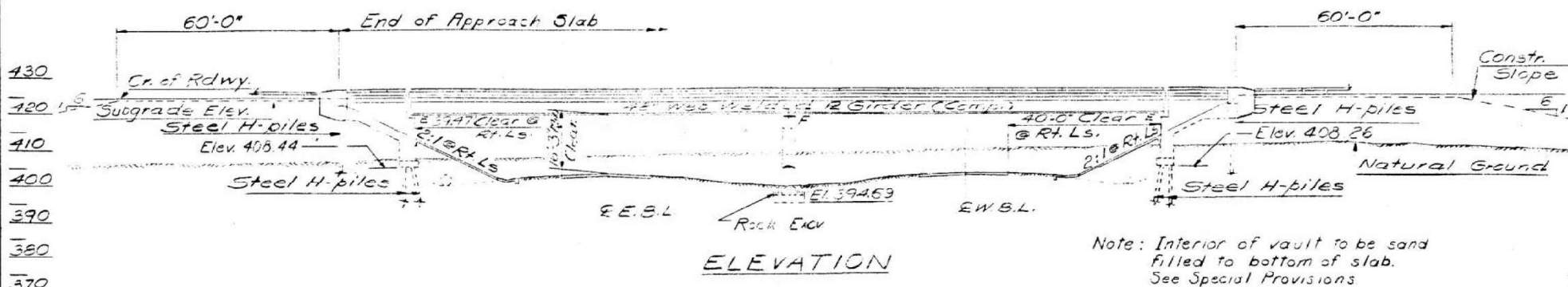
GENERAL NOTES

- All reinforcement bars shall be lapped 24 diameters unless otherwise shown.
- Fasteners shall be high strength bolts. Bolts 3/8"; open holes 1/2", unless otherwise noted.
- Calculated weight of Structural Steel = 192930 Lbs.
- The Basic Lead Silico Chromate paint system shall be used for shop and field painting of structural steel.
- Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
- Anchor bolts shall be set before bolting diaphragms over supports.
- Slope wall shall be reinforced with welded wire fabric 6" x 6" mesh, weighing 58# per 100 sq. ft.
- The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.
- The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.
- The contractor shall drive two steel test piles in a convenient location on each at S. Abut. and N. Appr. Bent as directed by the Engineer before ordering the remainder of piles.

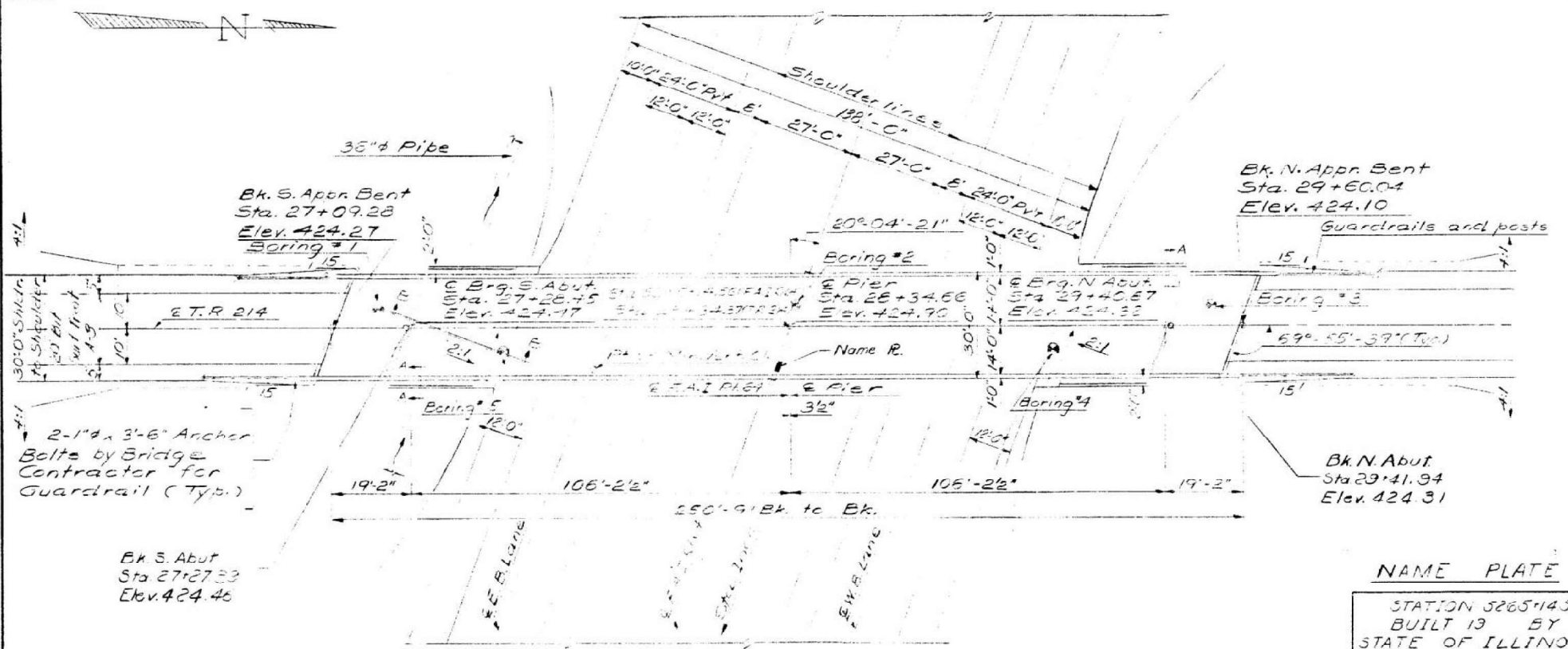
TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Structure Excavation	Cu Yds.		33	33
Protective Coat	Sq Yds.	340		340
Class X Concrete	Cu Yds.	2400	1743	4143
Structural Steel	L. S.	632		632
Stud Shear Connectors	Each	1536		1536
Aluminum Railings	Lin Ft.	490		490
Reinforcement Bars	Lbs.	56110	22050	78160
Steel Piles 8BP36	Lin Ft.		261	261
Test Pile Steel 8BP36	Each			1
Steel Piles 10BP42	Lin Ft.		137	137
Test Pile Steel 10BP42	Each			1
Name Plates	Each		1	1
Slope Wall 4"	Sq Yds.		30	30
Bridge Seat Sealer	L. S.	0.5		0.5
Sand Backfill	Cu Yds.		137	137
Push Excavation for Structure	Cu Yds.		30	30

\* At Abutments only

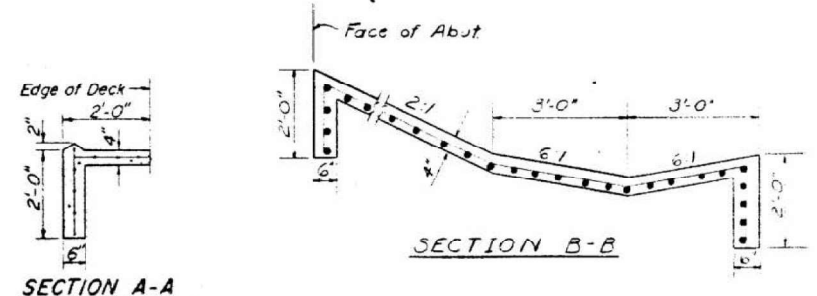


Note: Interior of vault to be sand filled to bottom of slab. See Special Provisions.



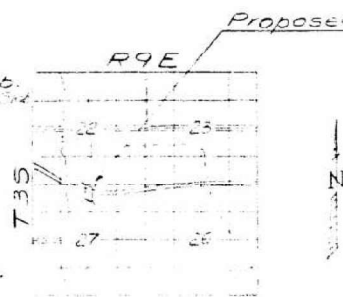
NAME PLATE  
STATION 5265+14.36  
BUILT 13 BY  
STATE OF ILLINOIS  
FAIR 64 SEC 97 1HB-2  
FA. PROJ I-64-4 (47)  
LOADING HS 15  
See Std. 2113-1

FOR INFORMATION ONLY



DESIGNED	APPROVED
CHECKED	EXAMINED
DRAWN	PASSED
CHECKED	APPROVED

DESIGN STRESSES  
fc = 12000 psi - Deck Slab  
fc = 14000 psi - Curb, Parapet Sub.  
fs = 200000 psi - Reinf.  
fs = 300000 psi - Struct.  
Vc = 75 psi - Frgs.  
n = 10



GENERAL PLAN & ELEVATION  
PROJECT: I-64-4 (47) 112  
TR 01A OVER FAI RT 64  
FAI RT 64 SECTION 97-1HB-2  
WHITE COUNTY  
STA 5265+14.36 (FAI RT 64)  
FA 13-137 (TR 214)

FILE NAME: L:\DOT\22006610-01\W0\_06\681006\CADD Data\Bridge\Existing Plans\78A28-007-Existing Plans - VIII.dgn



USER NAME = bholland	DESIGNED - BLH	REVISED -
PLOT SCALE = N/A	DRAWN - BLH	REVISED -
PLOT DATE = 1/11/2024	CHECKED - DH	REVISED -
	DATE - 1/12/2024	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS - VII

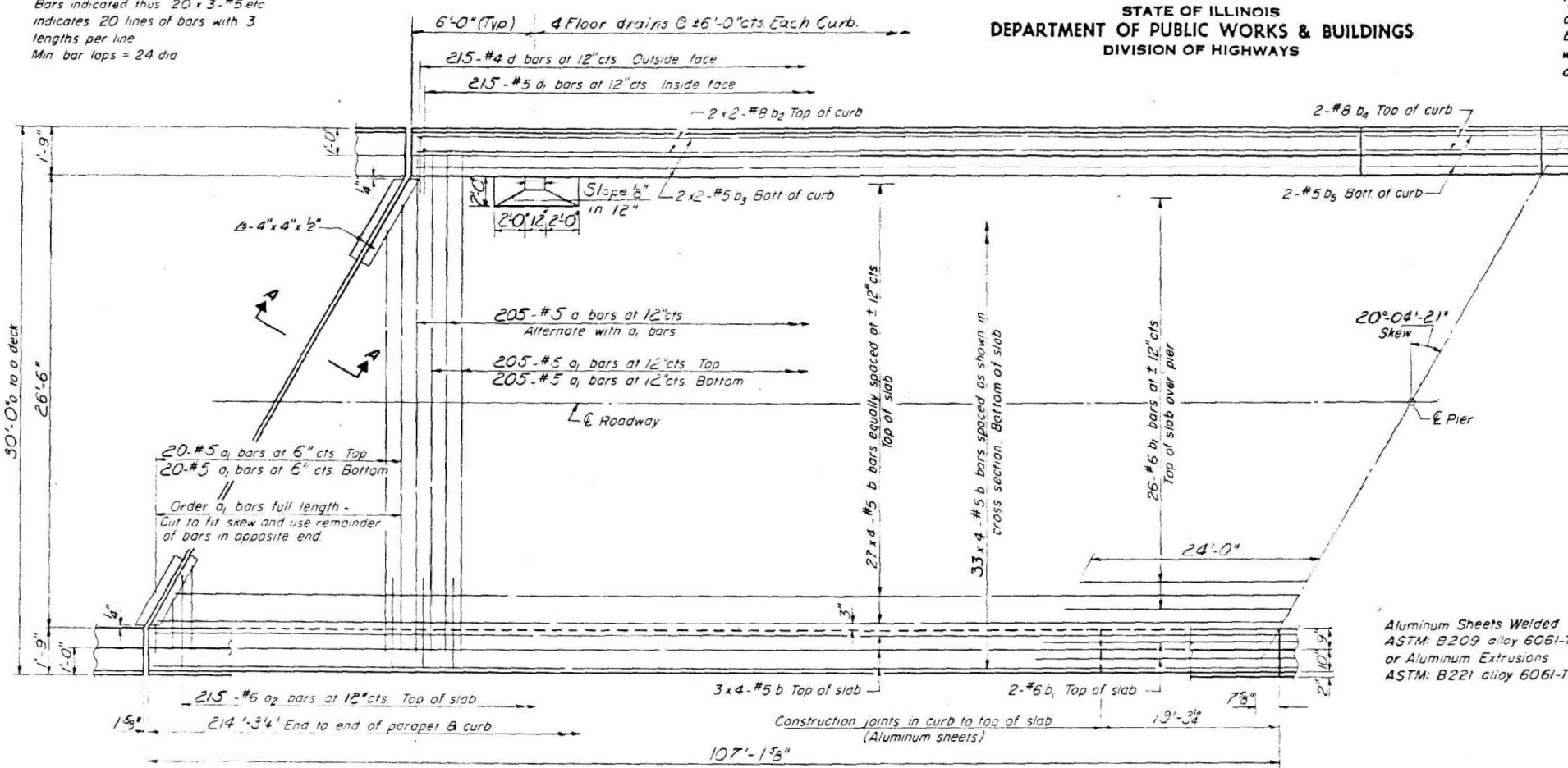
SCALE: SHEET 7 OF 9 SHEETS STA. TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
214	D9 Bridge Repair 2024-2	WHITE	36	33
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				

NOTE:

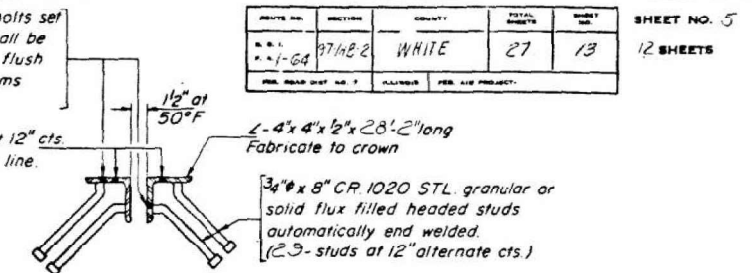
Bars indicated thus 20 x 3-#5 etc indicates 20 lines of bars with 3 lengths per line  
Mn bar lops = 24 dia

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

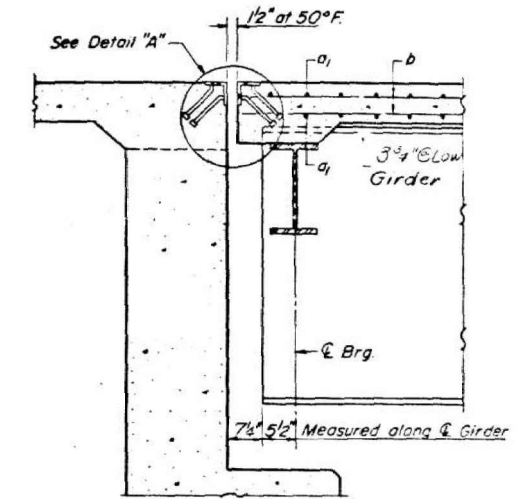


HALF PLAN

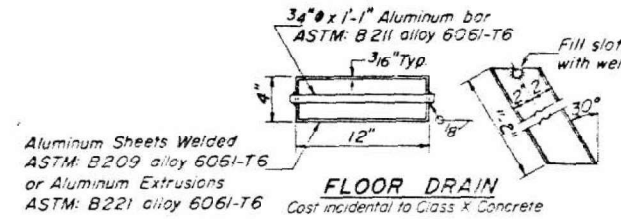
1/6" holes at 12" cts for 3/8" bolts set on 2 1/2" gage line. All bolts shall be burned, sowed or clipped off flush with back of angles after forms are removed.



DETAIL "A"



SECTION A-A

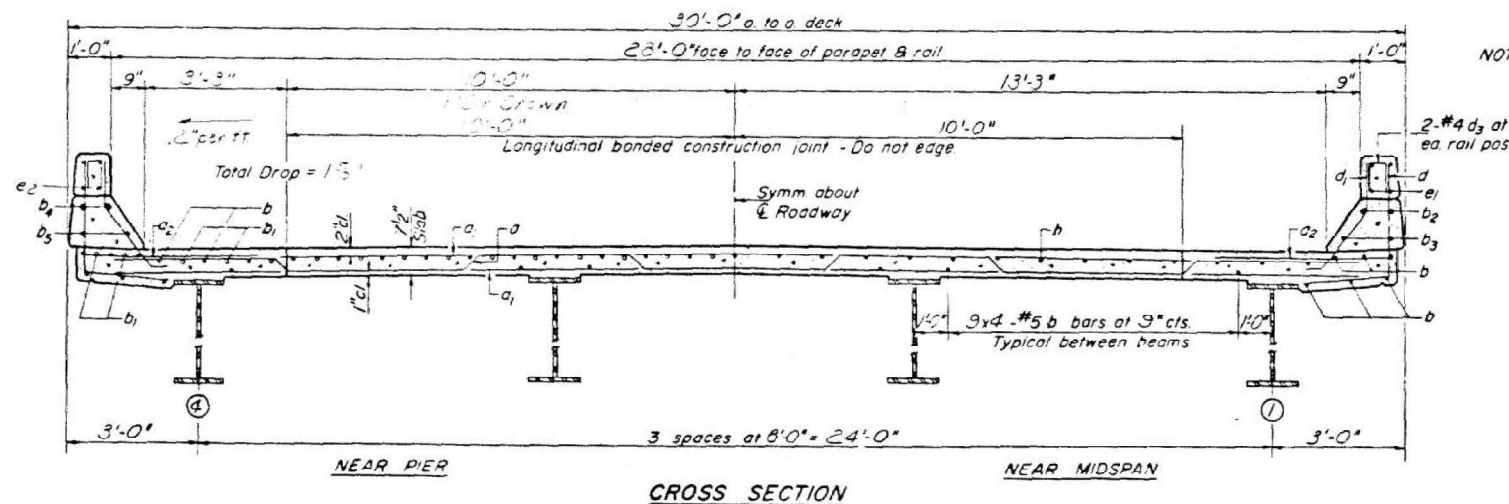


FLOOR DRAIN

Cost incidental to Class X Concrete

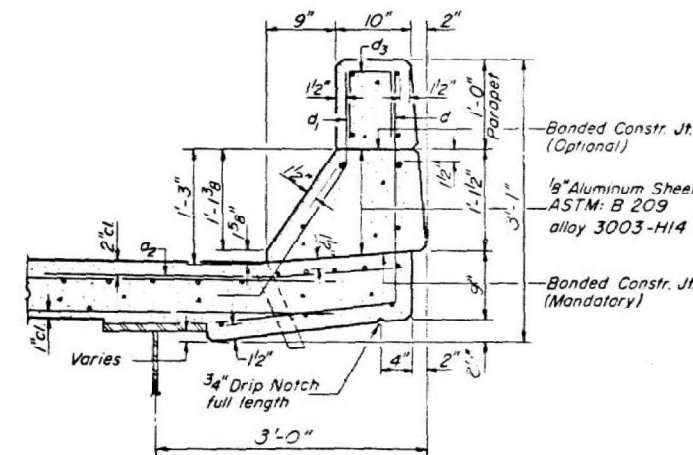
BILL OF MATERIAL

Bar	No	Size	Length	Space
a	205	#5	23'-0"	
a1	450	#5	28'-0"	
a2	430	#6	4'-0"	
b	264	#5	5'-0"	
b1	30	#6	4'-0"	
b2	16	#8	4'-0"	
b3	5	#5		
b4	5	#8		
b5	5	#5		
d	450	#4	7'-0"	
d1	150	#5	3'-3"	
Reinforcement Bars		Lbs	25150	
Class X Concrete		Cu Yds	173	
Stud Shear Conn's		Each	1530	



CROSS SECTION

NOTE: For placement of bars d3 and e thru e see sheet #6



CURB SECTION

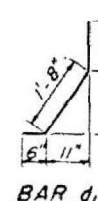
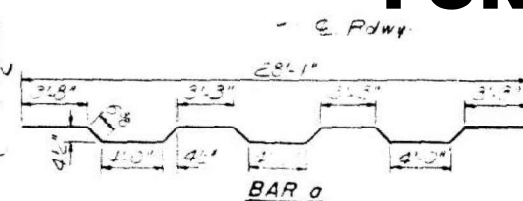
Cost of Aluminum Sheets shall be incidental to Class X Concrete.

Parapet Reinforcement and Class X Concrete are billed on sheet # 6

**FOR INFORMATION ONLY**

DESIGNED	
CHECKED	
DRAWN	
CHECKED	

EXAMINED	9/19/70
PASSED	
APPROVED	



SUPERSTRUCTURE  
MAIN SPAN  
FAIRFAX BRIDGE  
WHITE COUNTY  
STA 2045+14.50



USER NAME = bholland  
PLOT SCALE = N/A  
PLOT DATE = 1/11/2024

DESIGNED - BLH  
DRAWN - BLH  
CHECKED - DH  
DATE - 1/12/2024

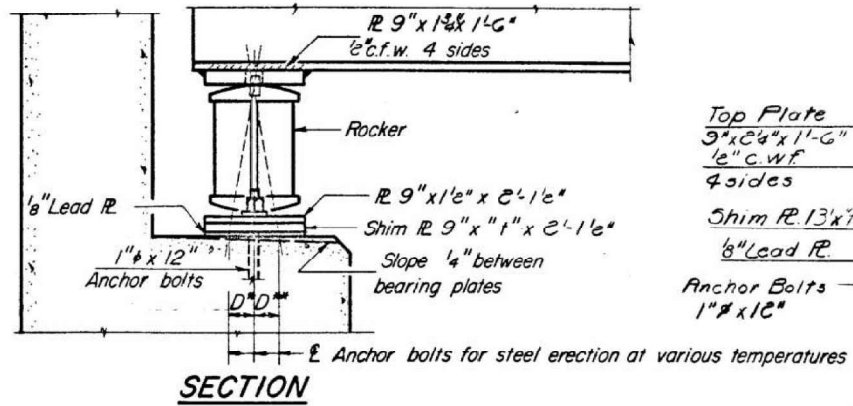
REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

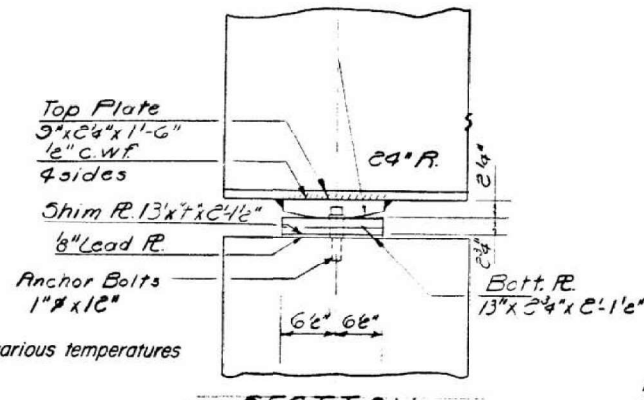
EXISTING PLANS - VIII

SCALE: SHEET 8 OF 9 SHEETS STA. TO STA.

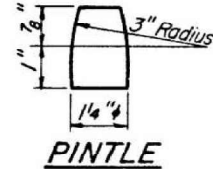
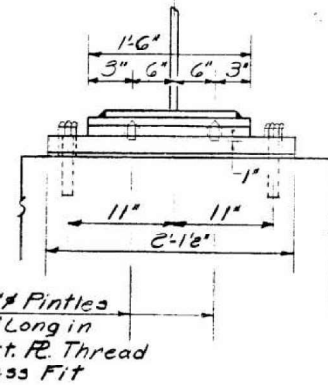
T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
214	D9 Bridge Repair 2024-2	WHITE	36	34
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				



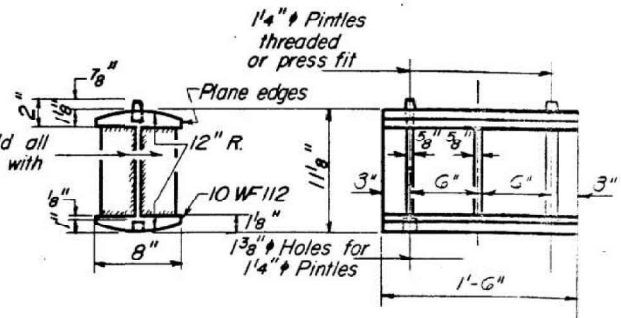
SECTION



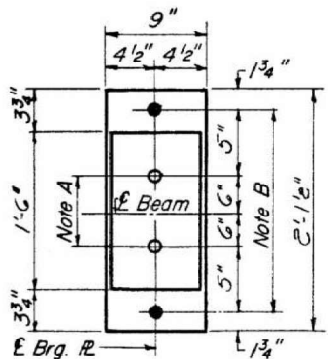
SECTION



PINTE

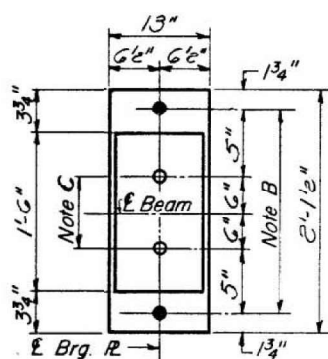


ROCKER



PLAN  
AT ABUTMENT

**NOTE A**  
1 3/8" Holes - 1" deep in top R.  
for pintles. Thread or press fit  
pintles into bottom R.



PLAN  
AT PIER

**NOTE B**  
1 1/2" Holes for 1" anchor bolts.  
2 1/2" x 2 1/2" x 3/16" R. Washers  
under nut.

**NOTE C**  
1 3/8" Holes 1" deep in top R.  
only for 1 1/4" pintles.

# FOR INFORMATION ONLY

## NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

- a) D\* (Side of brg. away from fixed brg.)  
D\* = 1/8" per each 100' of expansion for every 15° fall below the normal temp. of 50°F
- D\*\* (Side of brg. toward fixed brg.)  
D\*\* = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50°F.

b) After beams have been erected and dimensions D\* or D\*\* determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

## BEARING ASSEMBLY DETAILS

### TOP OF WEB ELEVATIONS

	Bm. 1	Bm. 2	Bm. 3	Bm. 4
E. Brg. S. Abut.	423.62	423.75	423.78	423.70
Splice 1	424.08 423.99	424.19 424.09	424.20 424.10	424.10 424.11
E. Brg. Pier	423.98	424.08	424.08	423.97
Splice C	424.04 423.97	424.13 424.07	424.12 424.03	423.91 423.93
E. Brg. N. Abut.	423.56	423.63	423.60	423.47

### \* DIMENSIONS

Beam Location	1	2	3	4
E. Brg. S. Abut.	0	0	1/2"	0
E. Brg. N. Abut.	0	1/8"	0	0
E. Brg. Pier	0	0	0	1/8"

### MOMENT TABLE - Symmetrical Composite 2 Span Areas Only (Composite in Positive Moment Areas Only)

	0.4 Sp. 1	Pier
I <sub>s</sub> (in <sup>4</sup> )	13345	50030
I <sub>c</sub> (in <sup>4</sup> )	43137	
S <sub>s</sub> (in <sup>3</sup> )	356	1306
S <sub>c</sub> (in <sup>3</sup> )	1286	
e (in)	3.99	1.393
M <sub>g</sub> (in-k)	672	1701.7
f <sub>sg</sub> (ksi)	8.4	10.7
S <sub>g</sub> (in <sup>3</sup> )	3.94	
M <sub>sp</sub> (in-k)	3.33	325
M <sub>g</sub> (in-k)	735	655
M <sub>imp</sub> (in-k)	160	140
TOTAL (in-k)	1218	1320
f <sub>sg,imp</sub> (ksi)	11.4	8.4
f <sub>s,tot</sub> (ksi)	19.8	19.1
VR (k)	40	

### REACTION TABLE - INTERIOR GIRDER REACTION TABLE

	Abut. ~	Pier
R <sub>g</sub> (k)	37	138
R <sub>g,imp</sub> (k)	51	112
Imp. (k)	46	13
R <sub>total</sub> (k)	95.6	263

I<sub>s</sub> and S<sub>s</sub> are the moment of inertia and section modulus of the steel section.  
I<sub>c</sub> and S<sub>c</sub> are the moment of inertia and section modulus of the composite section used in computing I<sub>s</sub>.  
VR is the maximum 4 \* Impact shear range.

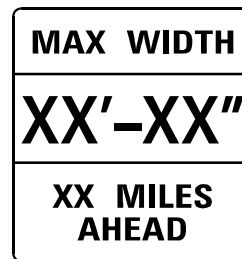
Work this sheet with sheet #3-3

BEARINGS  
FAIRBANKS 552-27-1HB-2  
WHITE COUNTY  
STA 5825+11.5

DESIGNED	ku wither	EXAMINED	1970
CHECKED	Ann M. Burt	PASSED	J. E. H. H. H.
DRAWN	J. Coffin P. G. Barnett	APPROVED	Richard H. Galton
CHECKED	J. W. B.		

I-2-B 9-1-65

## WIDE LOAD SIGN



**W12-I103 (48 X 48)**

SERIES D ALPHABET, NO BORDER,  
BLACK ON WHITE

### NOTES

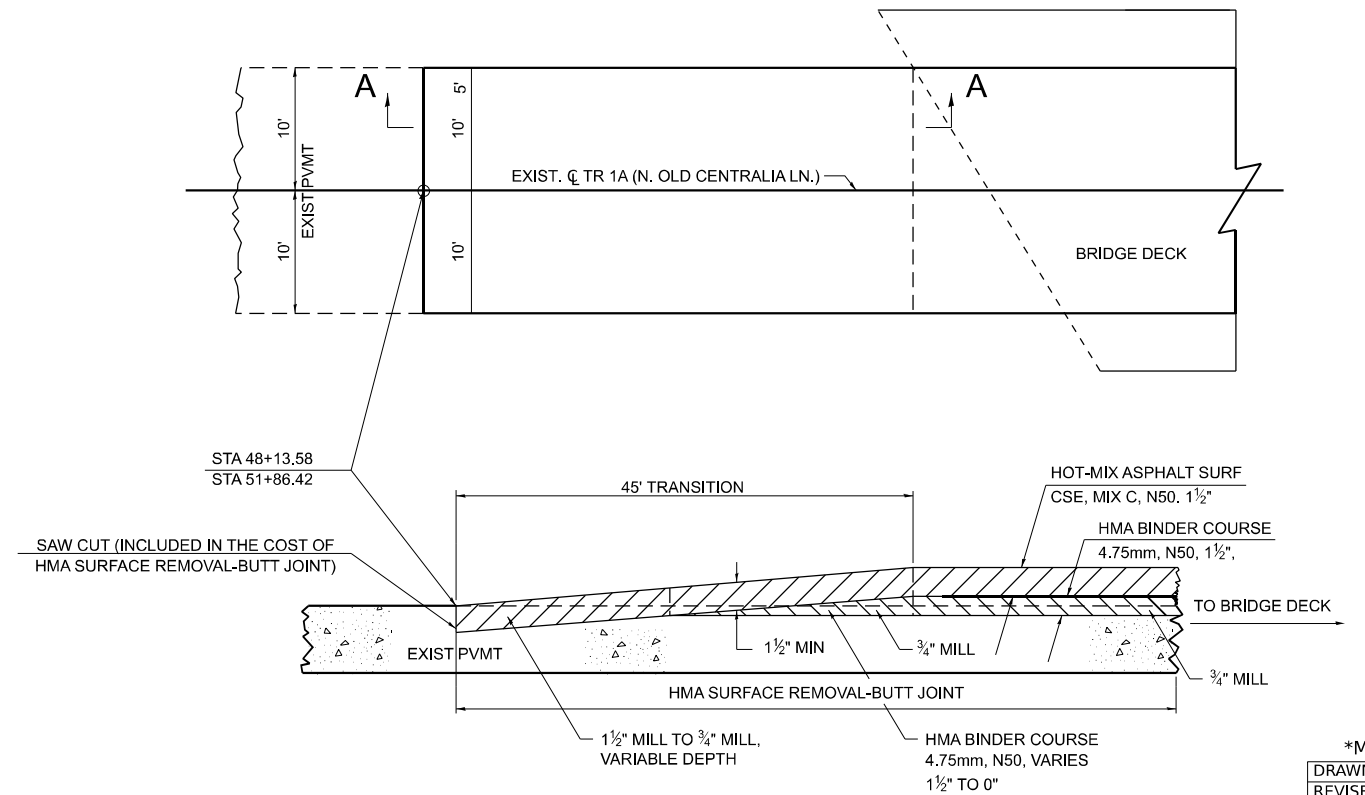
THE CONTRACTOR SHALL FURNISH THE POST AND ERECT THE SIGN AT THE NECESSARY LOCATION AS DIRECTED BY THE ENGINEER. THE SIGN SHALL BE POST MOUNTED.

THE ABOVE NOTED WORK, INCLUDING SIGNS, POSTS, HARDWARE, AND LABOR SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE, EACH, FOR TRAFFIC CONTROL AND PROTECTION STANDARD 701316, AND NO OTHER COMPENSATION WILL BE ALLOWED.

FOR WORK ON ALL STRUCTURES, THE WIDTH SHOWN ON THE W12-I103 SIGN SHALL BE 8'-6" OR DIRECTED BY THE ENGINEER. THE "X" MILES AHEAD WILL BE DETERMINED BY THE ENGINEER.

DETAIL USED ON F.A.S. 826 (CH 10) OVER I-57

## BUTT JOINT



DETAIL USED ON TR 1A (N. OLD CENTRALIA LN.) OVER I-57

### SECTION A-A

STD. 9-15

*MODIFIED	
DRAWN	10-17-90
REVISED	03-25-08
REVISED	10-21-21
REVISED	05-26-22

MODEL: Detail (Sheet)  
FILE NAME: L:\DOT\22066510-01\WO\_06\Draw\Roadway\CADD\_Sheets\I-57\826-sh1-details.dgn

USER NAME = byoung	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633' / in.	CHECKED -	REVISED -
PLOT DATE = 3/10/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FAP 826 (CH 10) OVER I-57, TR 1A OVER I-57, TR 214 OVER I-64  
CONSTRUCTION DETAILS**

SCALE: 1"=50'      SHEET 1 OF 1 SHEETS      STA.      TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
826	D9 BRIDGE REPAIR 2024-2	JEFFERSON	36	36
CONTRACT NO. 78A28				
ILLINOIS FED. AID PROJECT				