# **STATE OF ILLINOIS**

## **DEPARTMENT OF TRANSPORTATION**

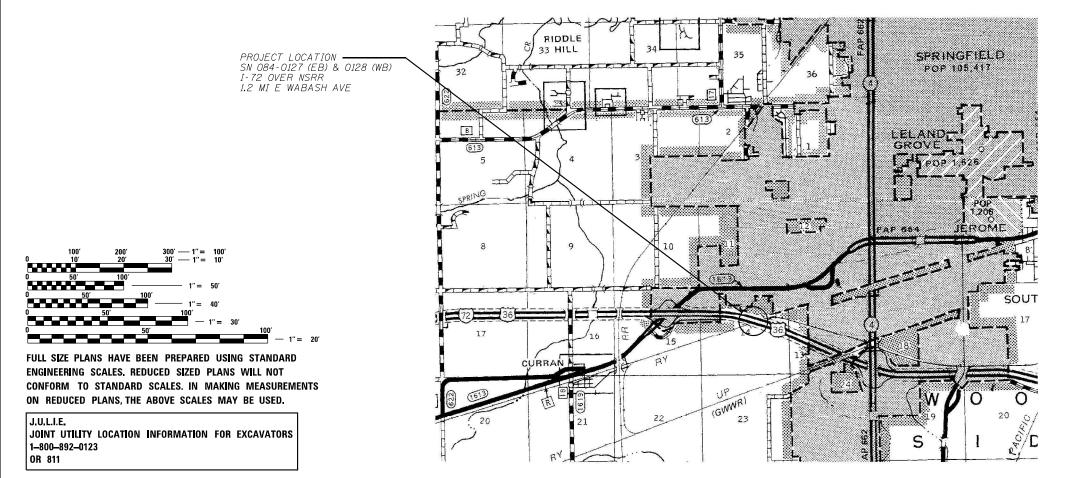
D-96-017-24

FOR INDEX OF SHEETS, SEE SHEET NO. 2

# **PROPOSED** HIGHWAY PLANS

**FAI ROUTE 72 (I–72) SECTION** (84–9–3)BP PROJECT NHPP-163E(650) **BRIDGE PAINTING SANGAMON COUNTY** 

C-96-033-24

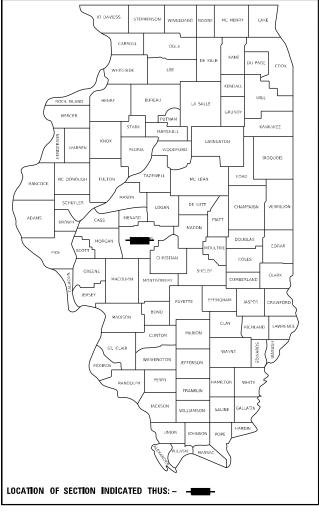


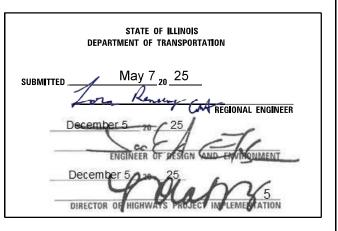
BRIDGE MAINTENANCE ENGINEER: BRANDON DUDLEY - (217) 785-9290

GROSS LENGTH = 224 FT. = 0.04 MILE NET LENGTH = 224 FT. = 0.04 MILE

**CONTRACT NO. 72729** 

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HIGHWAY STANDARDS

INDEX OF SHEETS

COVER SHEET

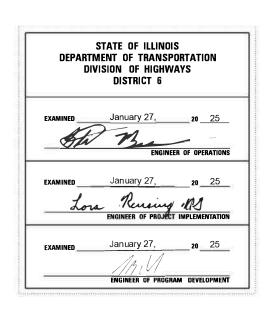
INDEX, STANDARDS, GENERAL NOTES, & SIGNATURES SUMMARY OF QUANTITIES

4-7 EXISTING BRIDGE PLANS, SN 084-0127 & 0128

000001-09 001006 701101-05 701106-02 701400-12 701402-12 701901-11 704001-08 782006-01

GENERAL NOTES:

- 1. WORK SHALL CONSIST OF BLASTING AND PAINTING STRUCTURAL STEEL AT LOCATIONS DESCRIBED IN THE SPECIAL PROVISIONS. CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES". ALL AREAS TO BE PAINTED SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING PER SSPC SP 10. ALL EXISTING STEEL CLEANED SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 0Z/E/U. THE COLOR OF THE FINAL FINISH COATS SHALL BE AS DESCRIBED IN THE SPECIAL PROVISIONS.
- THE USE OF AIR MONITORS WILL BE REQUIRED AT LOCATIONS AS CALLED OUT IN THE SPECIAL PROVISIONS.
- THE SSPC-QP-1 AND SSPC-QP2 PAINTING CONTRACTOR CERTIFICATIONS WILL BE REQUIRED.
- 4. CARE SHALL BE TAKEN NOT TO DAMAGE RUBBER BEARING OR JOINT COMPONENTS DURING BLASTING AND CLEANING OPERATIONS. ANY DAMAGE TO THESE COMPONENTS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. RUBBER COMPONENTS SHALL NOT BE PAINTED.
- 5. UPON COMPLETION OF PAINTING OPERATIONS, THE CONTRACTOR SHALL REMOVE ALL DEBRIS FROM PIER OR ABUTMENT CAPS UPON WHICH PAINTING OPERATIONS TOOK PLACE. FINAL CLEANUP SHALL BE CONSIDERED INCIDENTAL TO THE PAINT PAY ITEM FOR THE RESPECTIVE LOCATION. THE ENGINEER SHALL HAVE THE RIGHT TO WITHOLD PAYMENT UNTIL SATISFACTORY CLEANUP IS ACHIEVED.
- One Call services do not locate buried railroad signal and communications lines. The contractor shall contact the Railroad's representative two days in advance of work at those places where excavation, pile driving, or heavy loads may damage the Railroad's underground facilities. Upon request from the Contractor or Sponsor, Railroad forces will locate and paint mark or flag the Railroad's underground facilities. The Contractor shall avoid excavation or other disturbance of these facilities. If disturbance or excavation is required near a buried Railroad facility, the Contractor shall coordinate with the Railroad to have the facility potholed manually with careful hand excavation. The facility shall be protected by the Contractor during the course of the disturbance under the supervision and direction of the Railroad's representative. (See NS Public Projects Manual, Appendix E, Section 3.D)



**REV - MS** 

	USER NAME = brandon.dudley	DESIGNED ==	REVISED -		INDEX OF SHEETS, STANDARDS,					F.A.I.	SECTION	COUNTY	TOTAL S	HEET NO.	
		DRAWN	REVISED -	STATE OF ILLINOIS	GENERAL NOTES, & SIGNATURES				72	(84-9-3)BP	SANGAMON	7	2		
	PLOT SCALE = 100.0000 / in.	CHECKED :=	REVISED =	DEPARTMENT OF TRANSPORTATION							CONTRACT NO. 72729				
	PLOT DATE = 8/20/2025	DATE	REVISED +		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	, l	ILLINOIS FED. A	ID PROJECT		

0-01379-6002 NHPP 90/10

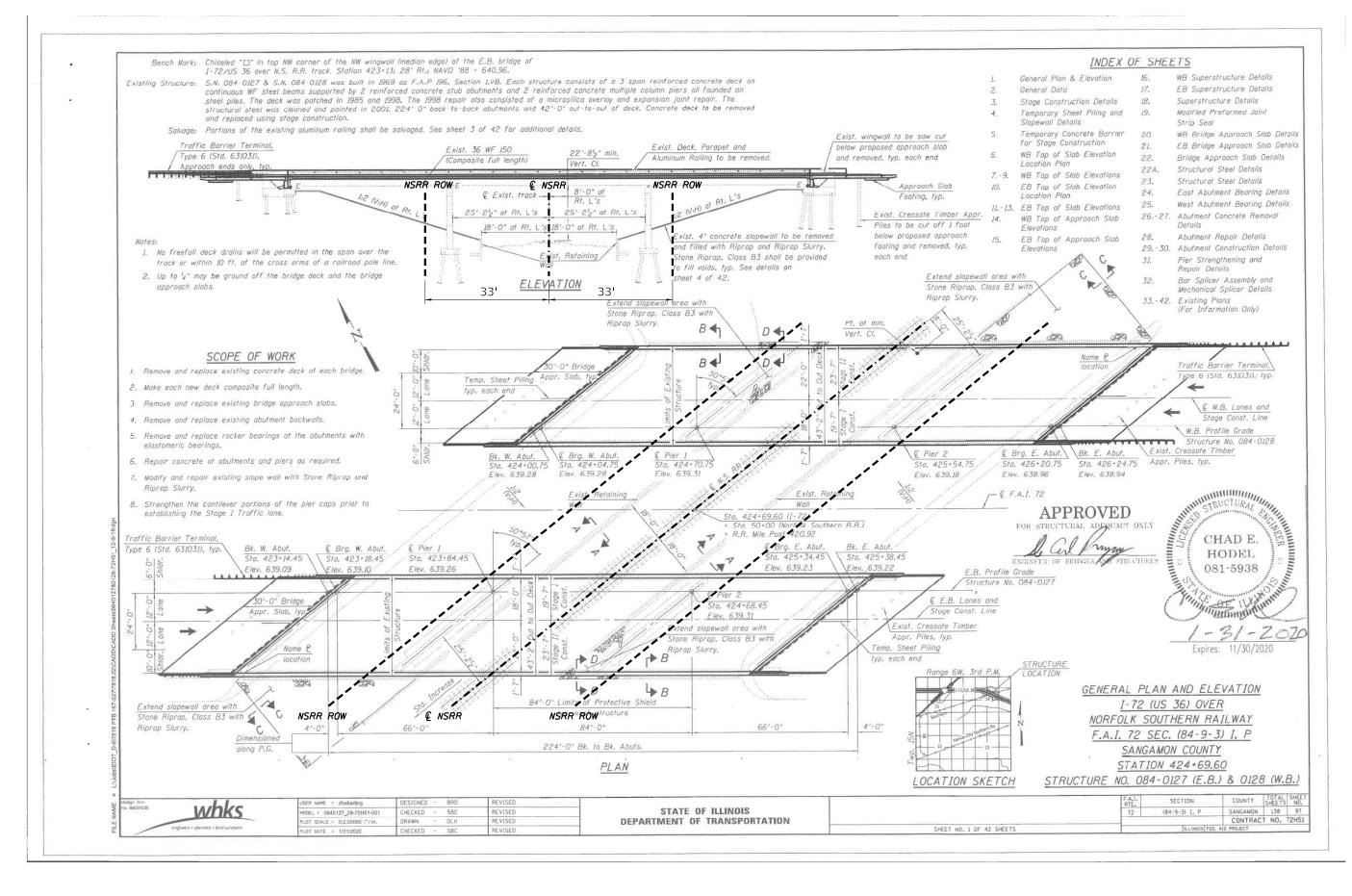
				SN 084-0127 & 0128
CODE			TOTAL	0047-URBAN
NO.	ITEM	UNIT	QUANTITY	SANGAMON
67100100	MOBILIZATION	L SUM	1	1
70100207	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	2	2
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	14	14
70400100	TEMPORARY CONCRETE BARRIER	FOOT	800	800
70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1	1
Z0007102	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1	1
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1
Z0010502	CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1	1
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

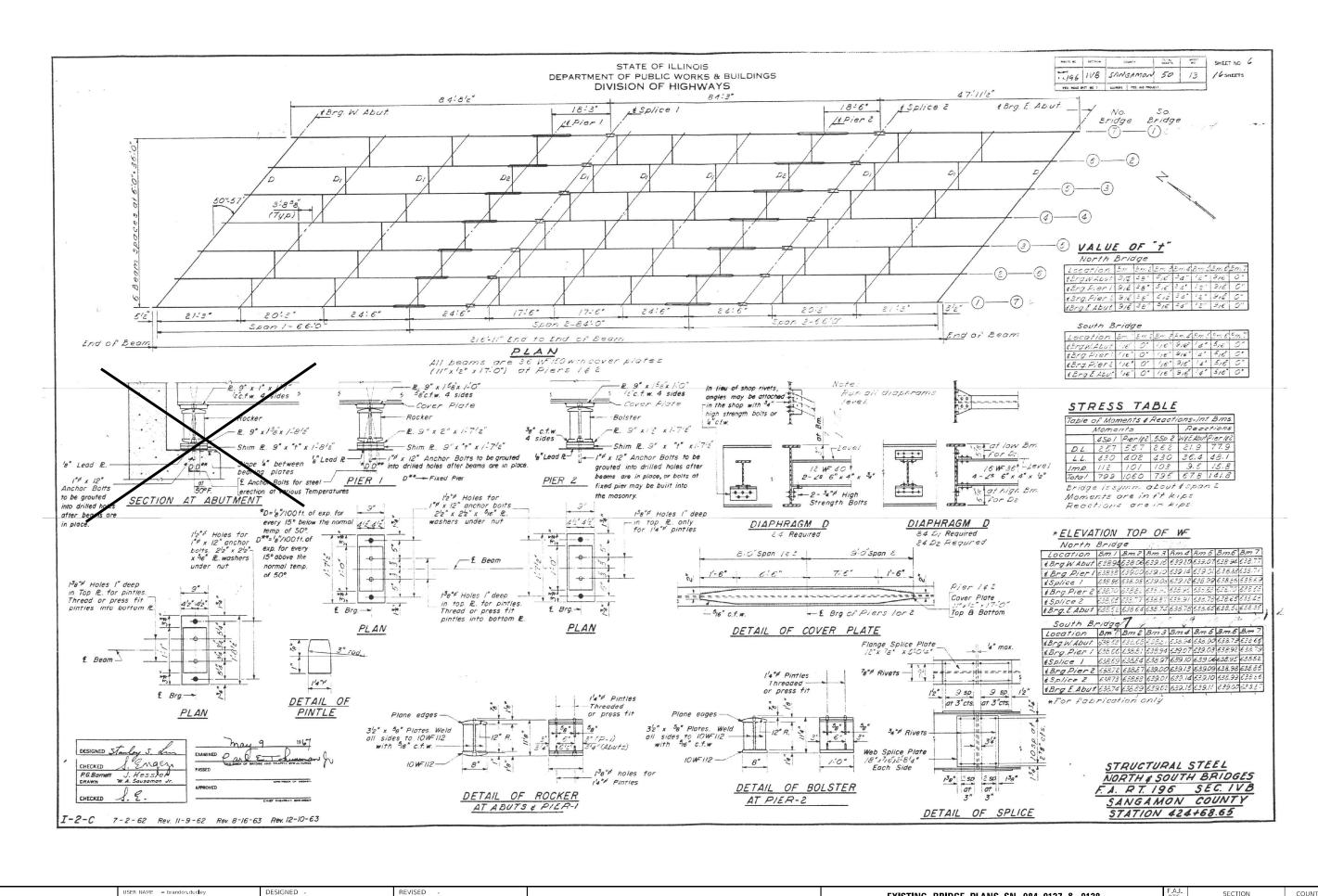
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					F.A.I. RTE				COUNTY	TOTAL SHEETS	SHEET NO.
	SUMMARY	72	(84-9-3)BP			SANGAMON	7	3			
									CONTRACT	NO. 72	2729
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PLOT DATE = 8/20/2025	DATE -	REVISED -

EX	ISTING	BRIDGE P	LANS, SN	084-012	7 & 0128	F.A.I. SECTION			COUNTY	TOTAL SHEETS	SHEET NO.	
		72	(84-9-3)BP			SANGAMON	7	4				
		(FOR INF	UIIIVIAIJU	N ONLY)						CONTRACT	NO. 72	2729
	SHEET	OF	SHEETS	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT		



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

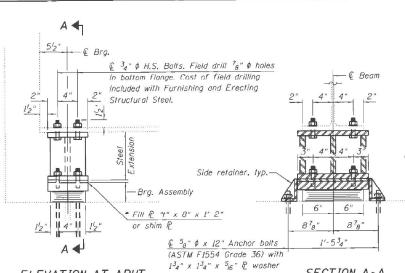
EXISTING BRIDGE PLANS, SN 084-0127 & 0128
(FOR INFORMATION ONLY)

 
 F.A.I. RTE.
 SECTION
 COUNTY
 TOTAL SHEET SHEET
 SHEET SHEET
 NO.

 72
 (84-9-3)BP
 SANGAMON
 7
 5

 CONTRACT
 NO.
 72729

 ILLINOIS
 FED. AID PROJECT



#### \* TABLE OF "t" DIMENSIONS

Beam No.	084-0128 (WB)	Beam No.	084-0127 (EB)
I	1/6"	8	"16 "
2	I <sup>5</sup> 8"	9	
3	134"	IO	″16 "
4	1 <sup>13</sup> 16 "	11	1 <sup>5</sup> 8"
5	1 <sup>5</sup> 16 "	12	<sup>5</sup> 8 "
6	1'8"	13	1 <sup>3</sup> 8"
7	116"	14	15,6 "

\* The fill  $P_c$  thicknesses shown above are based on survey data to match the height of the existing bearing assemblies. Prior to ordering any material, the Contractor shall field verify all existing bearing heights and required fill plate thicknesses. The Contractor may adjust the height of the steel extensions in lieu of providing the above fill plates.

#### Notes:

- € Brg.

- 1. Hatched area indicates removal of existing bearing assembly. Cost included with Jacking and Cribbing. See Special Provision.
- 2. The void created from removing the existing  $1^3 g'' \times 9'' \times 1' \cdot 8' 2''$ masonry base plate from the existing abutment seat shall be repaired according to the requirements for Structural Repair of Concrete. Concrete damage adjacent to the existing plate, caused by the plate removal operations and requiring repair will not be measured for additional payment,

Existing plate to be removed using air arc method and grind smooth all weld material remaining on the bottom flange.

Burn existing anchor bolts flush with base of concrete removal area and grind smooth. Cost included with Jacking and Cribbing.

Void to be repaired after removing

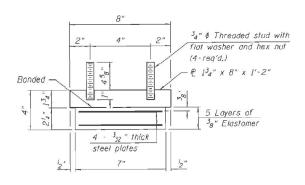
existing bearing, sec notes.

EXISTING BEARING ASSEMBLY REMOVAL DETAIL

### TYPE I ELASTOMERIC EXP. BRG.

under nut

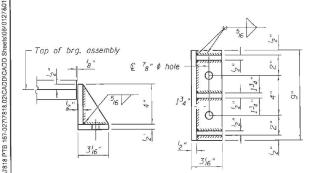
SECTION A-A



#### BEARING ASSEMBLY

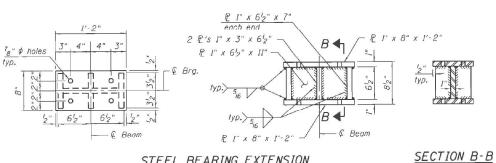
ELEVATION AT ABUT.

Shim plates shall not be placed under Bearing Assembly.

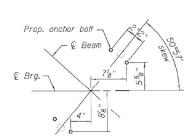


#### SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. (28 required)



## STEEL BEARING EXTENSION



#### ANCHOR BOLT LAYOUT

(Shown for information only, It is recommended that the Contractor set the side retainers in place and use the holes in the side retainers to locate the anchor bolts on the abutment.)

#### JACK AND REMOVE EXISTING BEARINGS PROCEDURE

- I. The Contractor shall submit for upproval by the Engineer, plans for jacking and removing existing bearings prior to commencing any related work. See Jacking and Cribbing Special Provisions.
- 2. Jacking and removing existing bearings shall be done in stages after existing deck removal is completed.
- 3. The Maximum Dead Load Reaction with deck removed (per bearing) at each ubutment is 4.5 kips. Minimum jack capacity is 7 kips.
- 4. The existing abutment seats shall be repaired, the new bearings shall be in place, and the jacks shall be lowered prior to forming and pouring the new deck.

- 1. Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 unchor bolts may be used in lieu of ASTM F1554.
- 2. Any damage to the concrete repair area adjacent to the proposed bearing caused from drilling anchor bolts shall be repaired by the Contractor to the satisfaction of the Engineer at no additional cost to the Department.
- 3. Side retainers and other steel members required for the elastomeric bearing assembly, except steel bearing extension, fill plates, and bolts in bottom flange shall be included in the cost of Elastomeric Bearing Assembly, Type I. Steel bearing extensions, fill plates, and bolts in bottom flange are included in the quantity for Furnishing and Erecting Structural Steel.
- 4. Two  $^{l}8^{"}$  adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. Cost included with Furnishing and Erecting Structural Steel.

#### BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	14
Anchor Bolts, 58"	Each	56
Jacking and Cribbing, Location No. 1	L.Sum	0.5
Furnishing and Erecting Structural Steel	Pound	2,410
Structural Repair of Concrete (Depth Equal to or less than 5 inches)	Sq. Ft.	18.0

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REVISED DESIGNED - BRD USER NAME : dheberling MODEL = 0840127\_28-72H51-024 CHECKED -REVISED REVISED PLOT SCALE = 0:2.00000 "." / in.

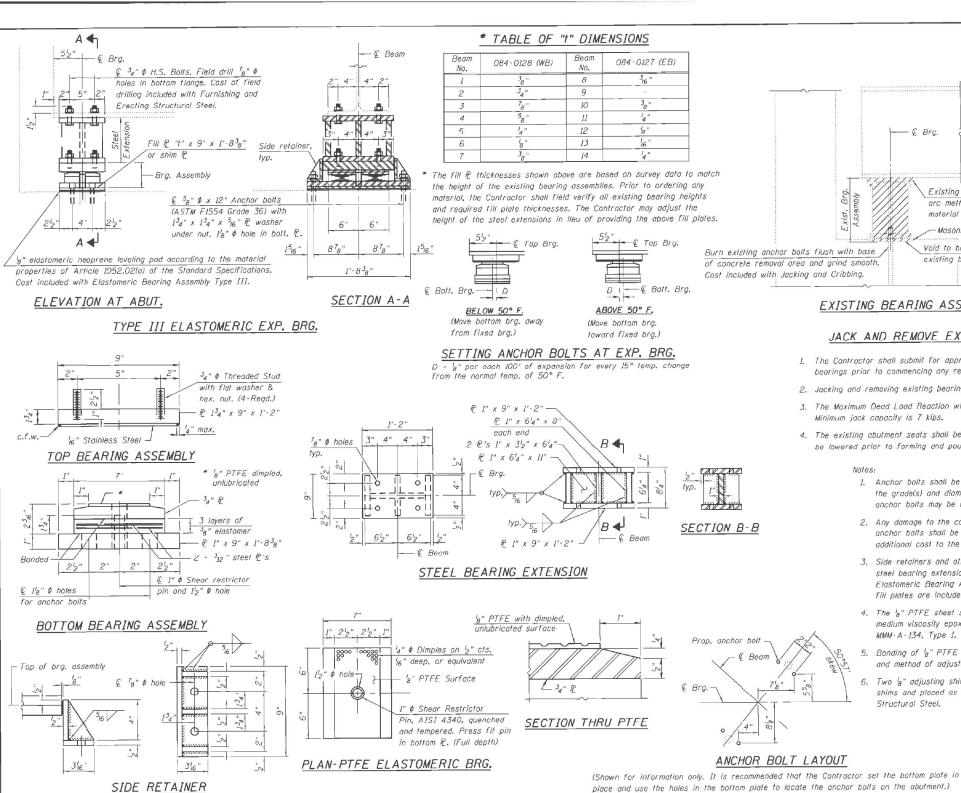
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

COUNTY TOTAL SHEETS NO. SECTION EAST ABUTMENT BEARING DETAILS SANGAMON (84-9-3) I. P STRUCTURE NO. 084-0127 (EB), 084-0128 (WB) CONTRACT NO. 72H51 SHEET NO. 24 OF 42 SHEETS

JSER NAME = brandon.dudley DESIGNED REVISED DRAWN REVISED HECKED REVISED DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  EXISTING BRIDGE PLANS, SN 084-0127 & 0128 (FOR INFORMATION ONLY)

SECTION (84-9-3)BP SANGAMON CONTRACT NO. 72729



Notes:

- 1. Hatched area indicates removal of existing bearing assembly. Cost included with Jacking and Cribbing. See Special Provision.
- 2. The void created from removing the existing  $1^38$ " x 9" x 1'-8'2" masonry base plate from the existing abutment seat shall be repaired according to the requirements for Structural Repair of Concrete. Concrete damage adjacent to the existing plate, caused by the plate removal operations and requiring repair will not be measured for additional payment,

Existing plate to be removed using air arc method and grind smooth all weld material remaining on the bottom flange.

Burn existing anchor bolts flush with base of concrete removal area and grind smooth.

SCALE:

Masonry Base R Void to be repaired after removing existing bearing, see notes.

#### EXISTING BEARING ASSEMBLY REMOVAL DETAIL

#### JACK AND REMOVE EXISTING BEARINGS PROCEDURE

- 1. The Contractor shall submit for approval by the Engineer, plans for jacking and removing existing bearings prior to commencing any related work. See Jacking and Cribbing Special Provisions.
- 2. Jacking and removing existing bearings shall be done in stages after existing deck removal is completed.
- 3. The Maximum Dead Load Reaction with deck removed (per bearing) at each abutment is 4.5 kips. Minimum jack capacity is 7 kips.
- 4. The existing abutment seats shall be repaired, the new bearings shall be in place, and the jacks shall be lowered prior to forming and pouring the new deck.

- 1. Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
- 2. Any damage to the concrete repair area adjacent to the proposed bearing caused from drilling anchor bolts shall be repaired by the Contractor to the satisfaction of the Engineer at no
- 3. Side retainers and other steel members required for the elastomeric bearing assembly, except steel bearing extension, bottom flange bolts, and fill plates, shall be included in the cost of Elastomeric Bearing Assembly, Type III. Sleet bearing extensions, bottom flange bolts, and fill plates are included in the quantity for Furnishing and Erecting Structural Steel.
- 4. The '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.
- 5. Bonding of  $^{l}8$ " PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.
- 6. Two  $^{\prime}_{8}$ " adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on hearing details. Cost included with Furnishing and Erecting Structural Steel,

#### BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type III	Each	14
Anchor Bolts. 5g"	Each	56
Jacking and Cribbing, Location No. 1	L. Sum	0.5
Furnishing and Erecting Structural Steel	Pound	2,390
Structural Repair of Concrete (Depth Equal to or less than 5 inches)	Sq. F1.	18.0

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engle	with	stiffeners	will	be	allowed	in	lieu	of	welded	plates.	
		100									

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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

COUNTY TOTAL SHEE SECTION WEST ABUIMENT BEARING DETAILS (84-9-3) I. F SANGAMON STRUCTURE NO. 084-0127 (EB), 084-0128 (WB) CONTRACT NO. 72H51 SHEET NO. 25 OF 42 SHEETS

JSER NAME = brandon.dudley DESIGNED REVISED DRAWN REVISED HECKED REVISED PLOT DATE = 8/20/2025 REVISED DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

EX	EXISTING BRIDGE PLANS, SN 084-0127 & 0128  (FOR INFORMATION ONLY)									
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SECTION COUNTY (84-9-3)BP SANGAMON 7 CONTRACT NO. 72729