

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

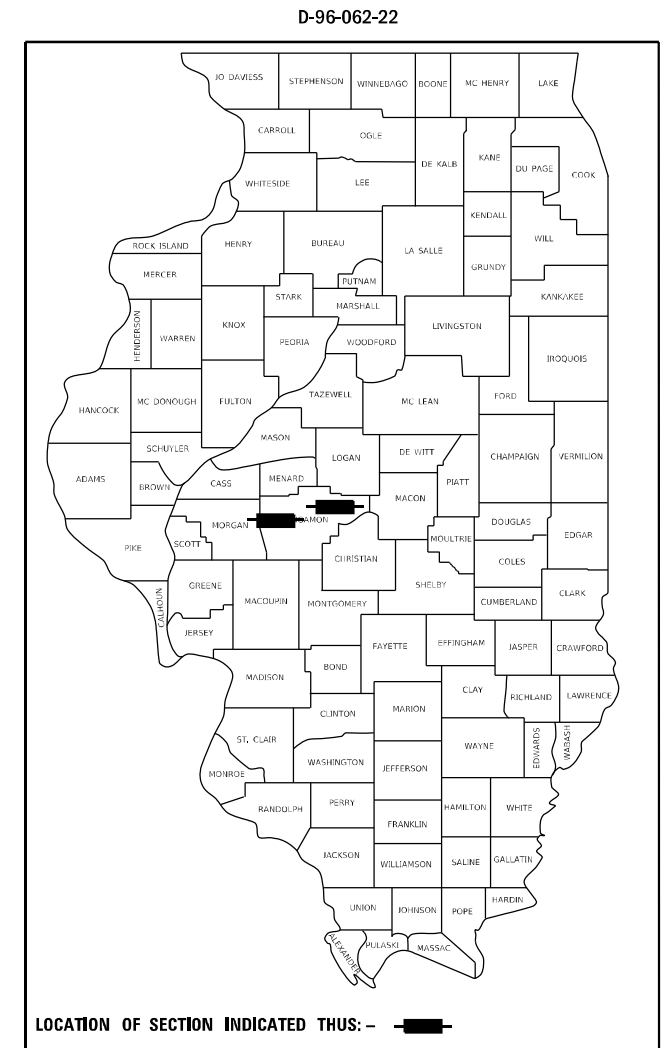
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72, 72A	(84-9-2HB, 84-10-1HB-1)BRR	SANGAMON	7	1
		ILLINOIS	CONTRACT NO. 72016	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED CONTRACT MAINTENANCE

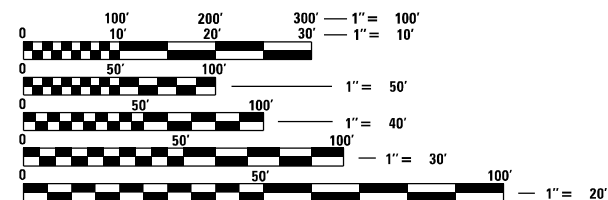
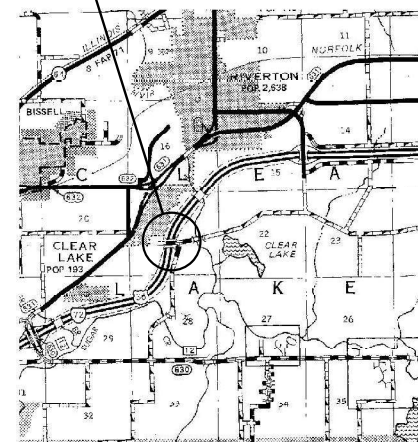
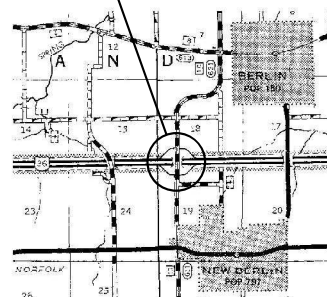
FAI ROUTE 72, 72A (I-72)
SECTION (84-9-2HB, 84-10-1HB-1)BRR
PROJECT (STATE)
BRIDGE BEARING REPLACEMENT
SANGAMON COUNTY

C-96-080-22



SN 084-0142
WAVERLY RD OVER I-72
© NEW BERLIN INT.

SN 084-0151
OAK CREST RD OVER I-72
2.9 MI E I-55



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

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

GROSS LENGTH = x.xx FT. = x.xx MILE
NET LENGTH = x.xx FT. = x.xx MILE

CONTRACT NO. 72016

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED May 9 2022

REGIONAL ENGINEER

July 1, 2022 ENGINEER OF DESIGN AND ENVIRONMENT

July 1, 2022 DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

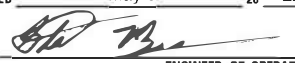


INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX, STANDARDS, SIGNATURES, & GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4-5 SN 084-0142 BRIDGE PLANS
- 6-7 SN 084-0151 BRIDGE PLANS

STANDARDS

- 000001-08
- 001001-02
- 001006
- 701001-02
- 701006-05
- 701101-05
- 701106-02
- 701201-05
- 701301-04
- 701901-08

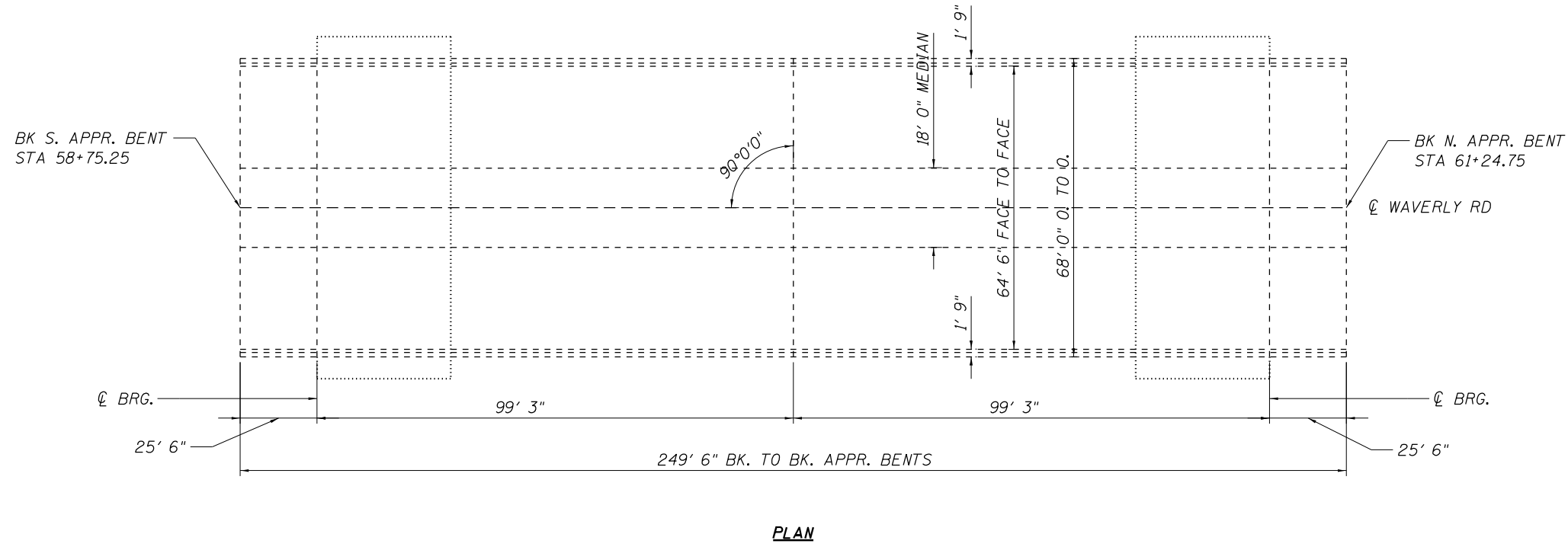
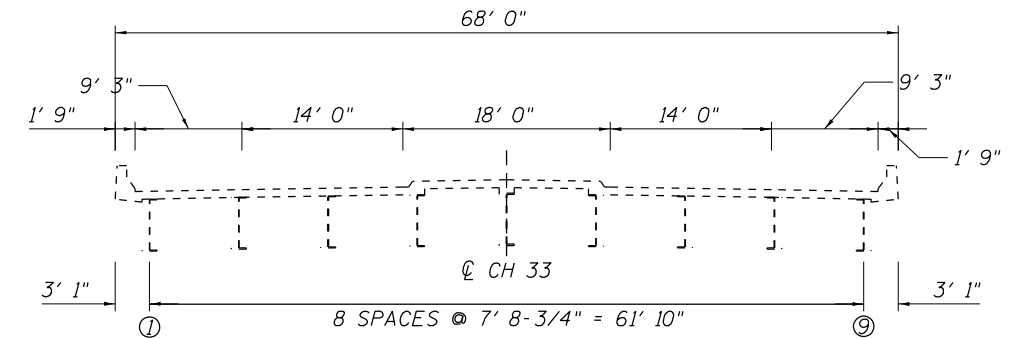
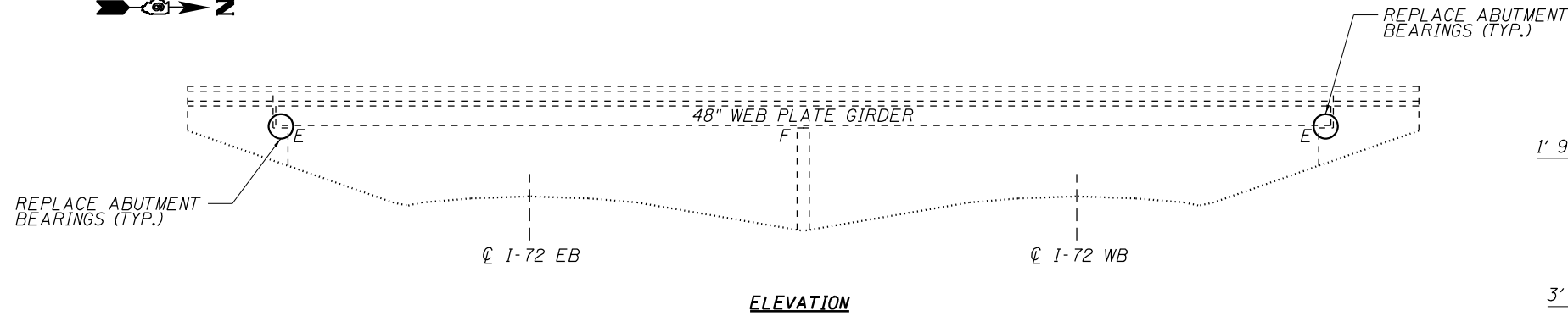
GENERAL NOTES:

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS DISTRICT 6	
EXAMINED _____	May 9 20 22
	
ENGINEER OF OPERATIONS	
EXAMINED _____	May 3 20 22
	
ENGINEER OF PROJECT IMPLEMENTATION	
EXAMINED _____	May 5 20 22
	
ENGINEER OF PROGRAM DEVELOPMENT	

REV. - MS

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<small>USER NAME = ducibgm</small>	<small>DESIGNED -</small>	<small>REVISED -</small>	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, GENERAL NOTES, HIGHWAY STANDARDS, & SIGNATURES	<small>F.A.I. RTE.</small>	<small>SECTION</small>	<small>COUNTY</small>	<small>TOTAL SHEETS</small>	<small>SHEET NO.</small>
<small>DRAWN -</small>	<small>REVISIED -</small>	<small>72.72A</small>			<small>(84-9-2HB, 84-10-1HB-1)BRR</small>	<small>SANGAMON</small>	<small>7</small>	<small>2</small>	
<small>PLOT SCALE = 100.0000' / in.</small>	<small>CHECKED -</small>	<small>REVISED -</small>			<small>CONTRACT NO. 72016</small>				
<small>PLOT DATE = 5/9/2022</small>	<small>DATE -</small>	<small>REVISED -</small>			<small>ILLINOIS FED. AID PROJECT</small>				
				<small>SCALE:</small>	<small>SHEET</small>	<small>OF</small>	<small>SHEETS</small>	<small>STA.</small>	<small>TO STA.</small>



JAYME F. SCHIFF
 081-005540
 STATE OF ILLINOIS
Jayme F. Schiff

STRUCTURE GENERAL NOTES:

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

ALL STRUCTURAL STEEL SHALL BE AASHTO M270 GRADE 36 UNLESS OTHERWISE NOTED.

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

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

THE CONTRACTOR SHALL CORRECT ELEVATION DIFFERENCES IN THE PROFILE GRADE ACROSS THE EXISTING EXPANSION JOINTS AT THE ENDS OF THE DECK. THIS SHALL BE ACCOMPLISHED BY ADDING SHIM PLATES AT LOCATIONS SHOWN ON THE PLANS. NO MORE THAN TWO SHIM PLATES SHALL BE ADDED TO EACH BEARING LOCATION. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING DIMENSIONS AND PROPOSE ALL VERTICAL ADJUSTMENTS TO THE ENGINEER PRIOR TO ORDERING THE EXTRA SHIMS. THE ALLOWABLE ELEVATION TOLERANCES BETWEEN THE TWO SIDES OF THE EXPANSION JOINTS SHALL BE $\pm 1/4"$. RECORDING ACCURATE MEASUREMENTS AND ORDERING PROPERLY SIZED SHIMS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. COST INCLUDED WITH FURNISHING AND ERECTING STRUCTURAL STEEL.

TOTAL BILL OF MATERIAL (SN 084-0142)

ITEM	UNIT	QUANTITY
Elastomeric Bearing Assembly, Type I	Each	18
Jack and Remove Existing Bearings	Each	18
Furnishing and Erecting Structural Steel	Pound	3610
Anchor Bolts, 1" ϕ	Each	36

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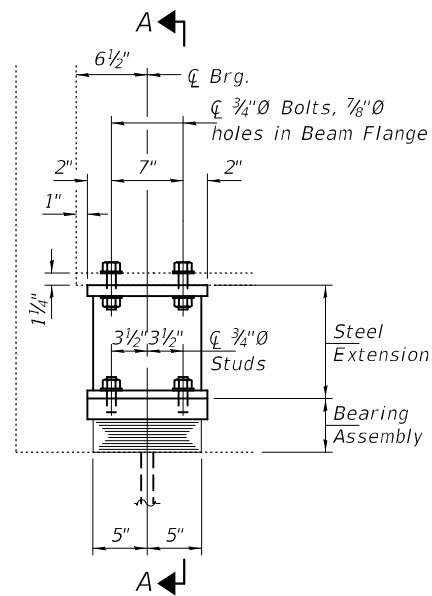
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	DRAWN - BRANDON DUDLEY	REVISED -
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PLOT DATE = 6/27/2022	DATE - 4/15/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BRIDGE PLAN & ELEVATION
SN 084-0142**

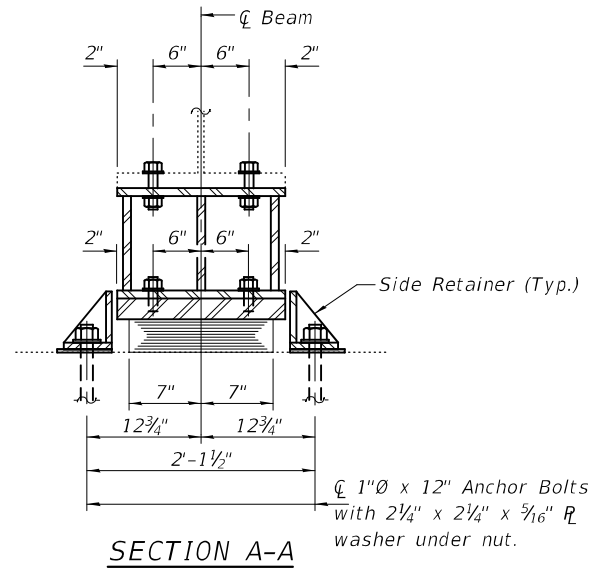
SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72,72A	(84-9-2HB, 84-10-1HB-1)BRR	SANGAMON	7	4
ILLINOIS FED. AID PROJECT			CONTRACT NO. 72016	



ELEVATION AT BOTH ABUTMENT'S

TYPE I ELASTOMERIC EXP. BRG.



SECTION A-A

BEAM REACTIONS

R _D	(K)	47.3
R _L	(K)	41.3
Imp.	(K)	12.4
R (Total)	(K)	101

Notes:

Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.

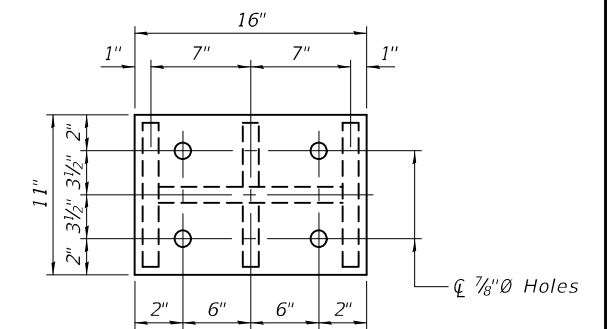
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

Min. jack capacity = 26 Tons.

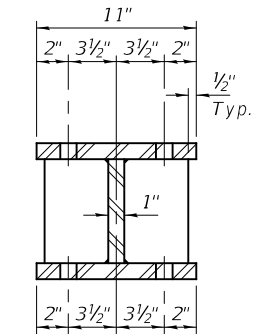
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (F_y=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

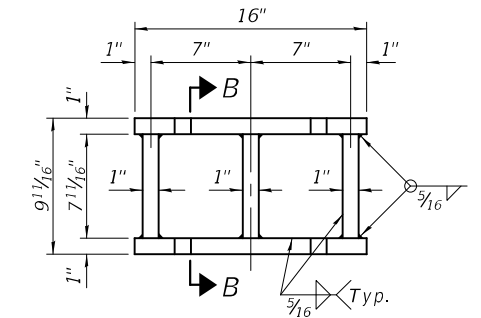
Cost of Side retainers and Stainless Steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.



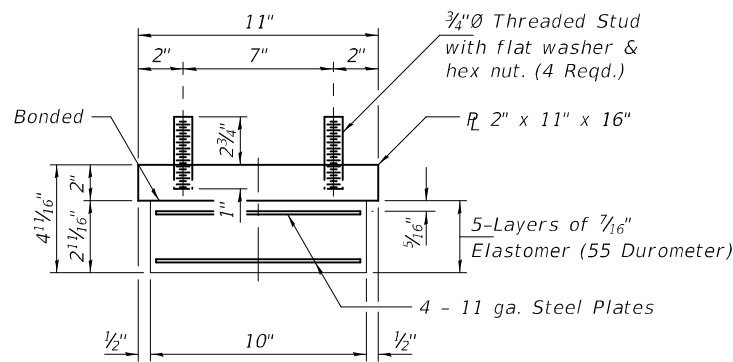
PLAN TOP AND BOTTOM PLATE



SECTION B-B



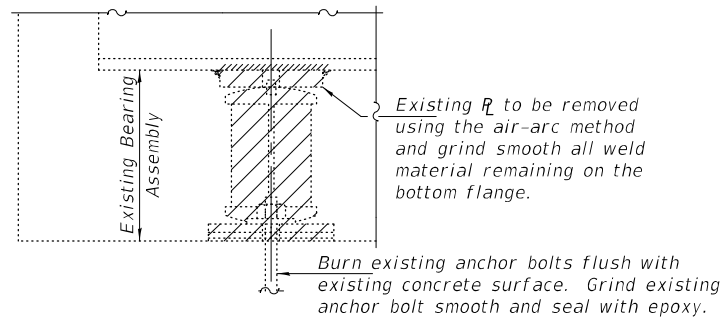
STEEL EXTENSION DETAIL



BEARING ASSEMBLY

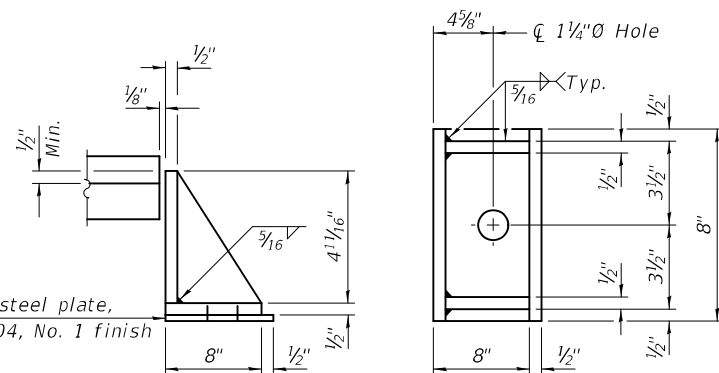
Note:

Shim plates shall not be placed under Bearing Assembly.



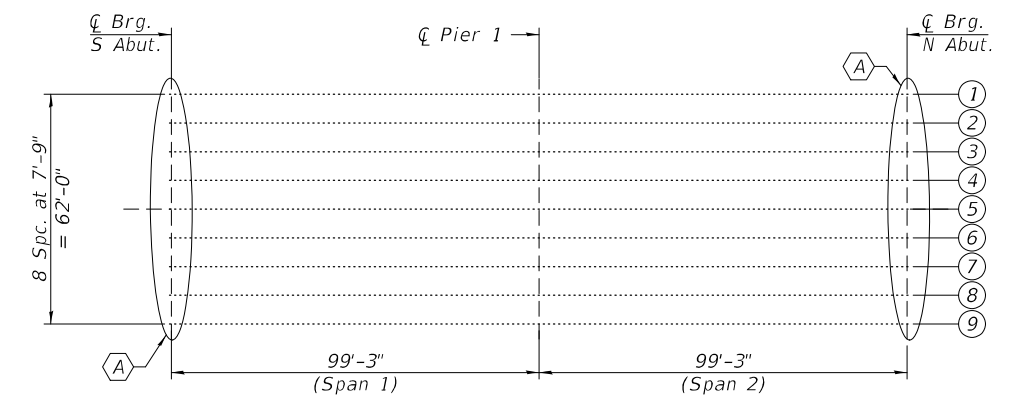
EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



SIDE RETAINER

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



PARTIAL FRAMING PLAN

A - Bearing Removal and Replacement.

BILL OF MATERIAL NORTH ABUTMENT

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	18
Jack and Remove Existing Bearings	Each	18
Furnishing and Erecting Structural Steel	Pound	3610
Anchor Bolts, 1"Ø	Each	36



EXPIRES 11-30-2022

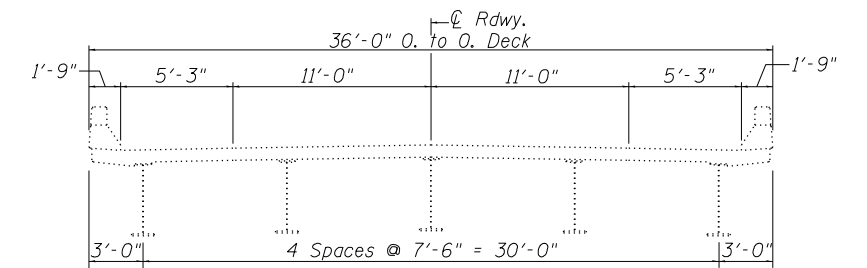
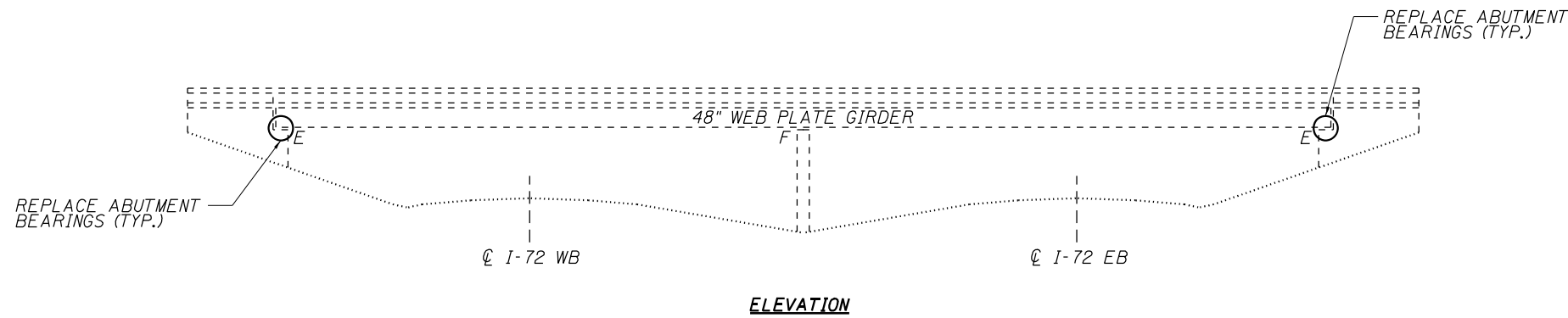
DESIGNED - Victor H. Veliz	EXAMINED - ENGINEER OF STRUCTURAL SERVICES	DATE - JUNE 21, 2022
CHECKED - Steven M. Ryan	PASSED - ENGINEER OF BRIDGES AND STRUCTURES	REVISED -
DRAWN - Venkat Ramana Reddy		REVISED -
CHECKED - VHV SMR		

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

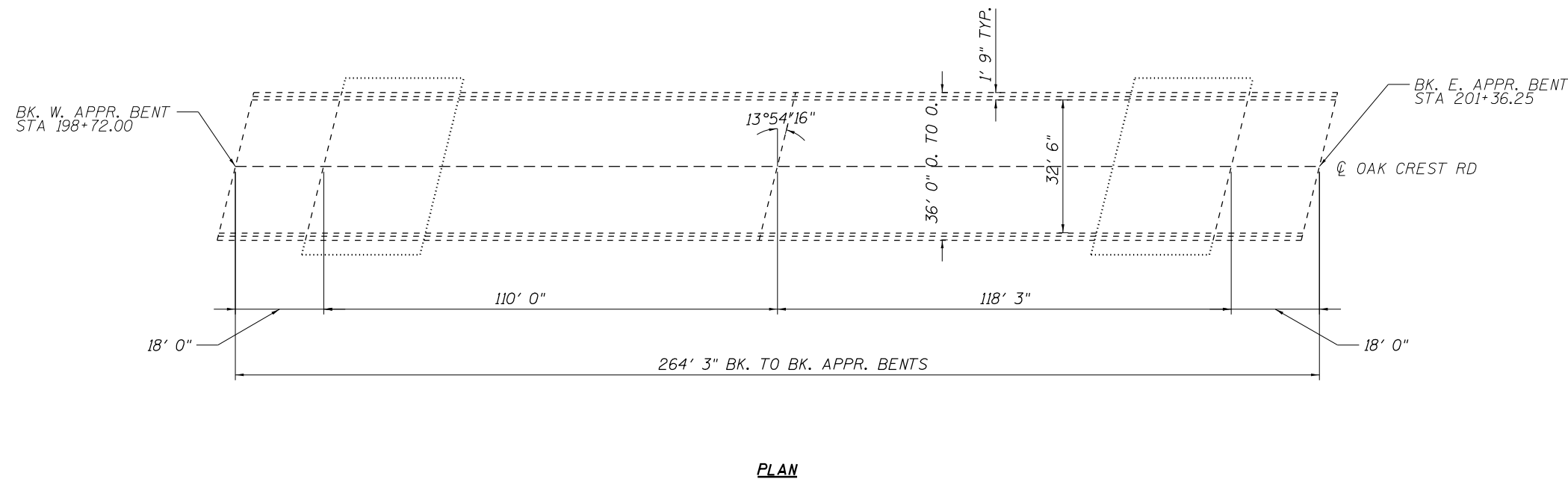
BEARING DETAILS - BOTH ABUTMENTS
WAVERLY ROAD (CH 10) OVER I-75 / US-36
SN 084-0142

SHEET NO. 1 OF 1 SHEETS

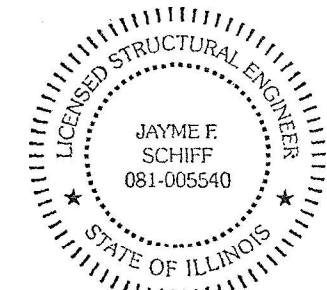
F.A.I. RTE. 72.72A	SECTION (84-9-2HB, 84-10-1HB-1)BRR	COUNTY SANGAMON	TOTAL SHEETS 7	SHEET NO. 5
ILLINOIS FED. AID PROJECT			CONTRACT NO. 72016	



DECK CROSS SECTION



PLAN



Jayme F. Schiff

STRUCTURE GENERAL NOTES:

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TOTAL BILL OF MATERIAL (SN 084-0151)

ITEM	UNIT	QUANTITY
Elastomeric Bearing Assembly, Type I	Each	10
Jack and Remove Existing Bearings	Each	10
Furnishing and Erecting Structural Steel	Pound	1960
Anchor Bolts, 1" φ	Each	20

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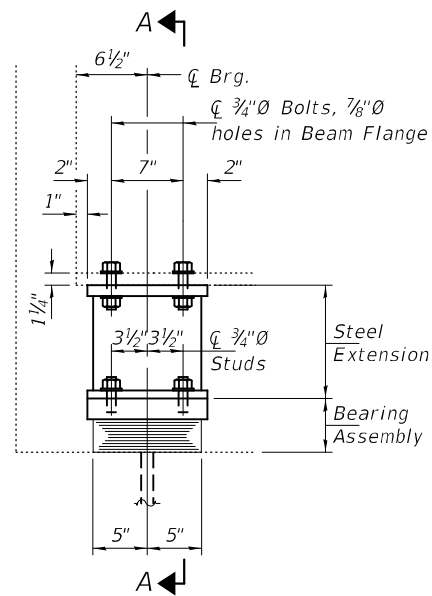
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PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 5/9/2022	DATE - 4/15/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BRIDGE PLAN & ELEVATION
SN 084-0151**

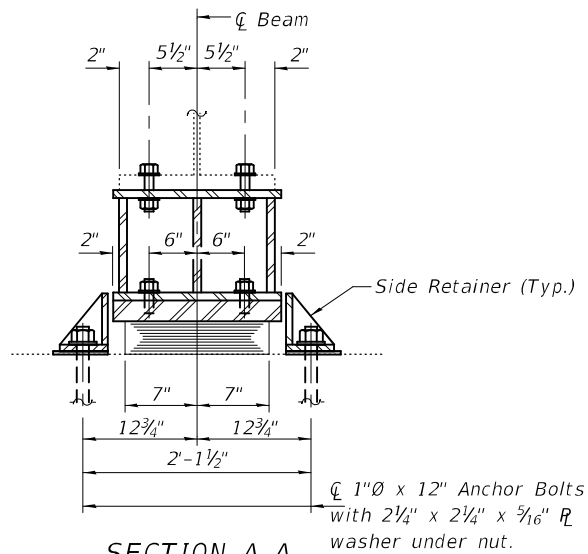
SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72,72A	(84-9-2HB, 84-10-1HB-1)BRR	SANGAMON	7	6
ILLINOIS FED. AID PROJECT			CONTRACT NO. 72016	



ELEVATION AT BOTH ABUTMENT'S

TYPE I ELASTOMERIC EXP. BRG.



SECTION A-A

BEAM REACTIONS

	W. Abut.	E. Abut.
R _D	(K) 56.6	65.4
R _L	(K) 44	44.5
Imp.	(K) 9.4	9.2
R (Total)	(K) 110	119.1

Notes:

Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.

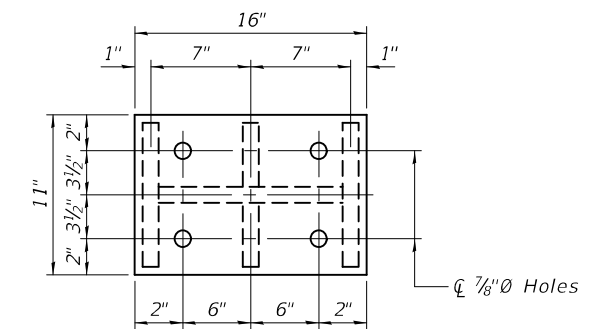
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

Min. jack capacity = 26 Tons.

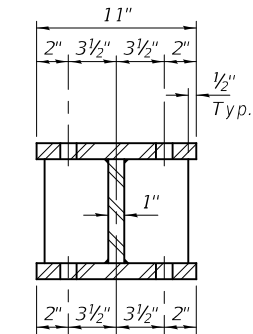
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (F_y=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

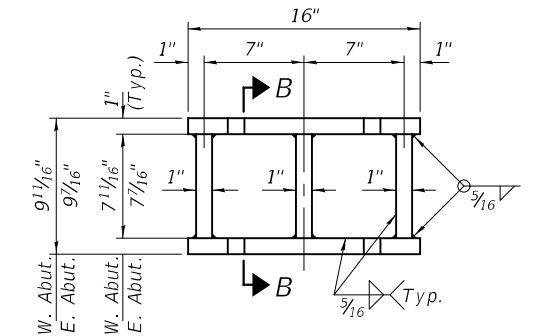
Cost of Side retainers and Stainless Steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.



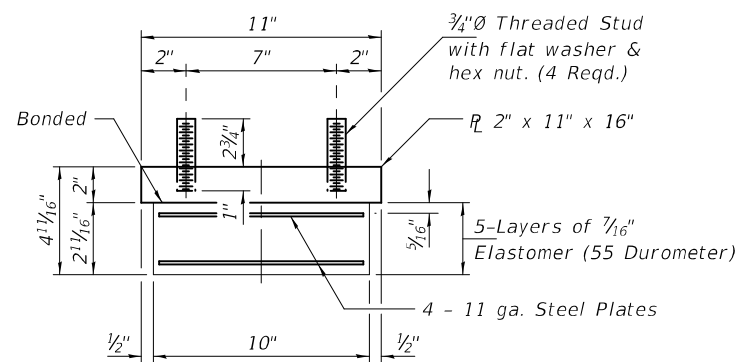
PLAN TOP AND BOTTOM PLATE



SECTION B-B

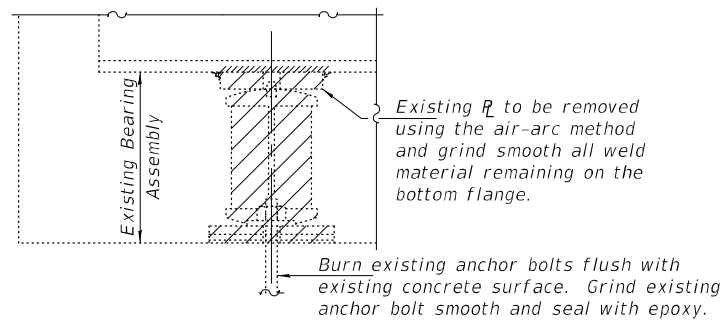


STEEL EXTENSION DETAIL



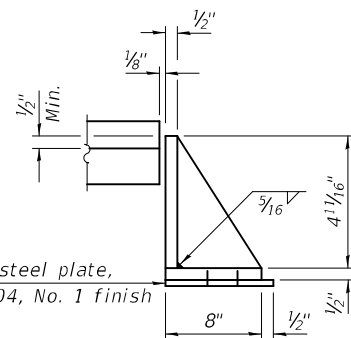
BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.



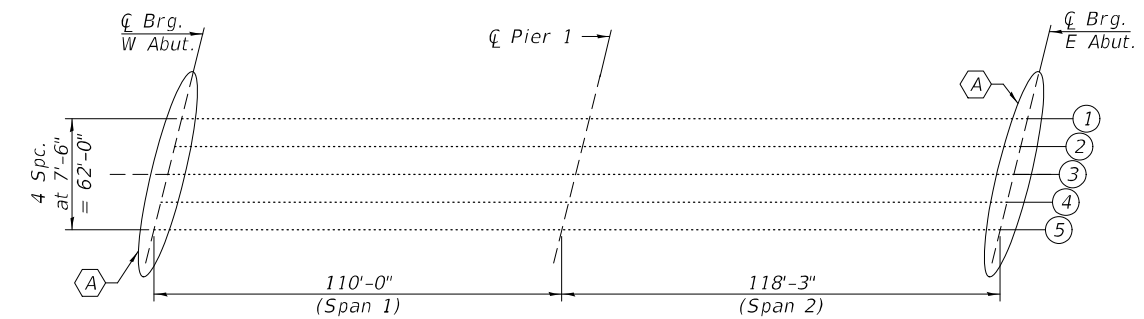
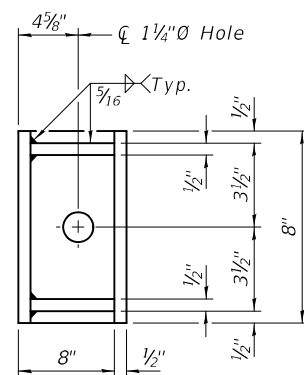
EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



SIDE RETAINER

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

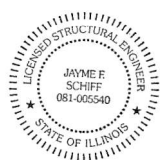


PARTIAL FRAMING PLAN

(A) - Bearing Removal and Replacement.

BILL OF MATERIAL NORTH ABUTMENT

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	10
Jack and Remove Existing Bearings	Each	10
Furnishing and Erecting Structural Steel	Pound	1960
Anchor Bolts, 1"Ø	Each	20



EXPIRES 11-30-2022

DESIGNED - Victor H. Veliz	EXAMINED - ENGINEER OF STRUCTURAL SERVICES	DATE - JUNE 21, 2022
CHECKED - Steven M. Ryan	PASSED - ENGINEER OF BRIDGES AND STRUCTURES	REVISED -
DRAWN - Venkat Ramana Reddy		REVISED -
CHECKED - VHV SMR		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS - BOTH ABUTMENTS
OAK CREST (TR 171) OVER I-72
SN 084-0151

SHEET NO. 1 OF 1 SHEETS

F.A.I. RTE. 72,72A	SECTION (84-9-2HB, 84-10-1HB-1)BRR	COUNTY SANGAMON	TOTAL SHEETS 7	SHEET NO. 7
ILLINOIS			FED. AID PROJECT	