

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(68-1HB-2,3)BRR	MONTGOMERY	7	1
		ILLINOIS	CONTRACT NO. 72742	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**PROPOSED
CONTRACT MAINTENANCE**

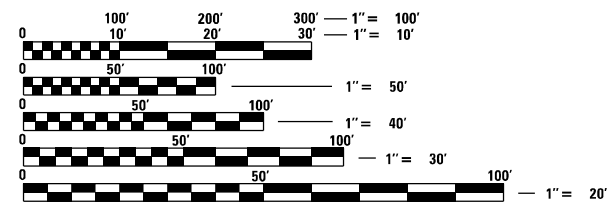
**FAI ROUTE 55 (I-55)
SECTION (68-1HB-2,3)BRR
PROJECT (STATE ONLY)
BRIDGE BEARING REPLACEMENT
MONTGOMERY COUNTY**

C-96-070-24



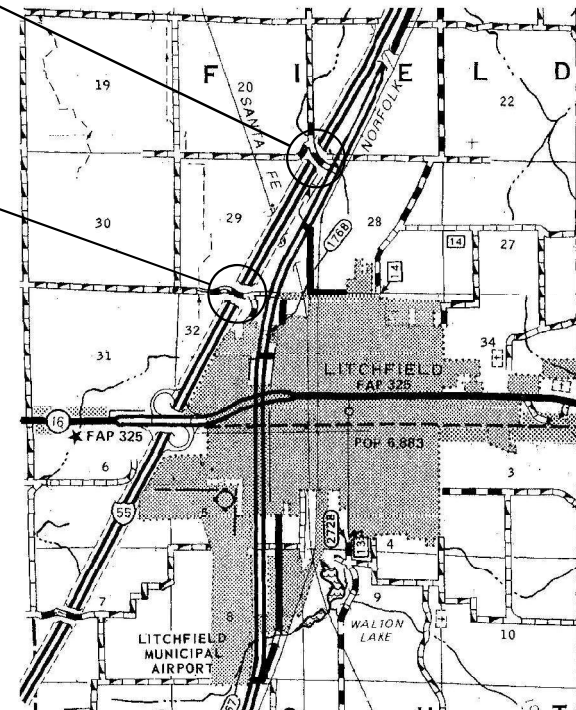
LOCATION #1
SN 068-0047
TR 48 OVER I-55
2.3 MI N IL 16

LOCATION #2
SN 068-0050
TR 235 OVER I-55
1.1 MI N IL 16



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 EXCAVATION
1-800-892-0123
OR 811

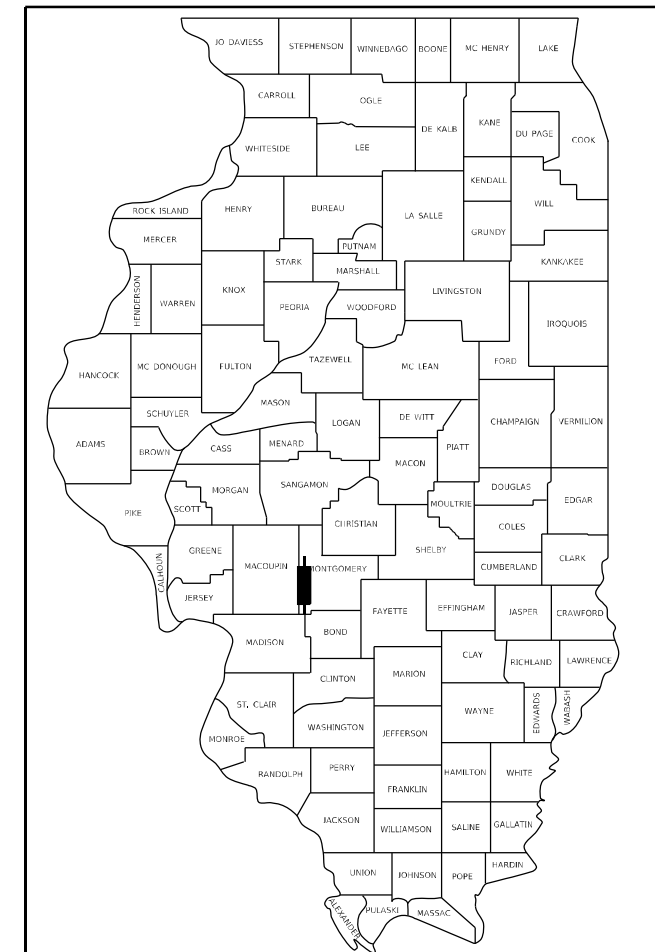


BRIDGE MAINTENANCE ENGINEER: BRANDON DUDLEY - (217) 785-9290

GROSS LENGTH = XXX FT. = X.XX MILE
NET LENGTH = XXX FT. = X.XX MILE

CONTRACT NO. 72742

D-96-049-24



LOCATION OF SECTION INDICATED THIS: - [black rectangle] -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED May 9 2024
John P. Meyer
REGIONAL ENGINEER
June 28, 2024
Scott A. Etkin
ENGINEER OF DESIGN AND ENVIRONMENT
June 28, 2024
Stephen M. Zwick
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS

INDEX OF SHEETS

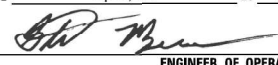
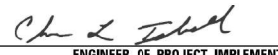
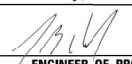
- 1 COVER SHEET
- 2 INDEX, STANDARDS, SIGNATURES, & GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4-5 SN 068-0047 BRIDGE PLANS
- 6-7 SN 068-0050 BRIDGE PLANS

STANDARDS

- 000001-08
- 001001-02
- 001006
- 701001-02
- 701006-05
- 701101-05
- 701106-02
- 701201-05
- 701901-09

GENERAL NOTES:

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 2 SHIM PLATES SHALL BE ADDED TO EACH BEARING LOCATION. HOWEVER, THE CONTRACTOR IS ENCOURAGED TO USE THE MINIMAL NUMBER OF SHIMS AT EACH LOCATION AND MINIMUM SHIM THICKNESS SHALL BE 1/8". 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 ±1/4". RECORDING ACCURATE MEASUREMENTS AND ORDERING PROPERLY SIZED BEARING EXTENSIONS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS DISTRICT 6	
EXAMINED	April, 24 20 24
 ENGINEER OF OPERATIONS	
EXAMINED	April, 24 20 24
 ENGINEER OF PROJECT IMPLEMENTATION	
EXAMINED	May, 7 20 24
 ENGINEER OF PROGRAM DEVELOPMENT	

MODEL: D:\p\h\...
FILE NAME: S:\Addresses\Bridges\Plans\CAD\72742 - 0680047 & 0050_bearing_extensions.dgn

	USER NAME = Brandon.Dudley	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, STANDARDS, GENERAL NOTES, & SIGNATURES	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			55	(68-1HB-2,3)BRR	MONTGOMERY	7	2				CONTRACT NO. 72742		
	PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED -									ILLINOIS		FED. AID PROJECT		
	PLOT DATE = 5/9/2024	DATE -	REVISED -													

0-02179-6015	0-02179-6015
SN 068-0047	SN 068-0050
100% STATE	100% STATE
BRIDGE/URBAN	BRIDGE/URBAN
0013	0013
MONTGOMERY	MONTGOMERY

CODE NO.	ITEM	UNIT	TOTAL QUANTITY		
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	3,380	1,770	1,610
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	18	10	8
52100520	ANCHOR BOLTS, 1"	EACH	36	20	16
67100100	MOBILIZATION	L SUM	1	0.5	0.5
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	0.5	0.5
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	18	10	8

REV. - MS

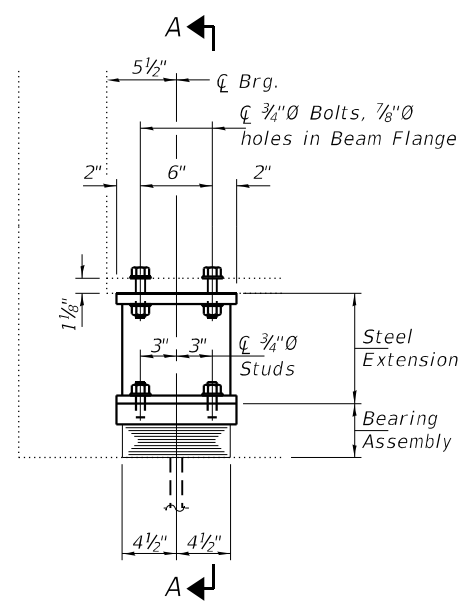
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USER NAME = Brandon.Dudley	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISIED -
PLOT DATE = 5/9/2024	CHECKED -	REVISIED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

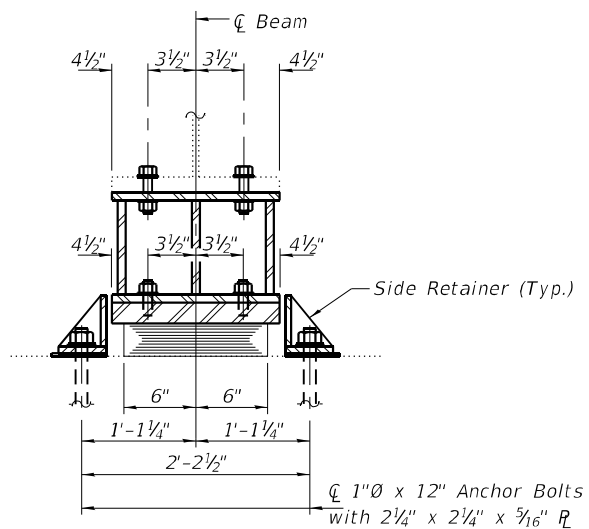
SUMMARY OF QUANTITIES				
SCALE:	SHEET	OF	SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(68-1HB-2,3)BRR	MONTGOMERY	7	3
				CONTRACT NO. 72742
ILLINOIS FED. AID PROJECT				



ELEVATION AT BOTH ABUTMENT'S

TYPE I ELASTOMERIC EXP. BRG.



SECTION A-A

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Fasteners shall be ASTM F 3125 Grade A325 Type 1, mechanically galvanized bolts. Bolts 3/4", holes 13/16", unless otherwise noted.

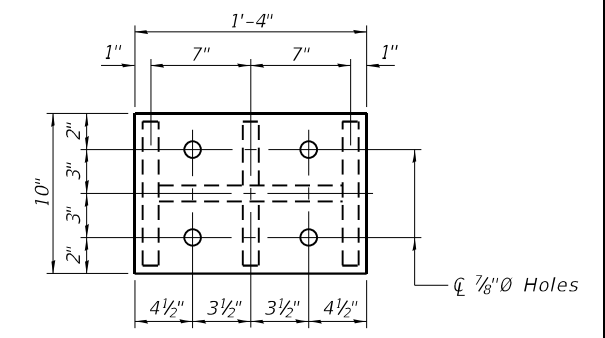
Plan dimensions and details relative to the existing structure have been taken from existing plans and are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

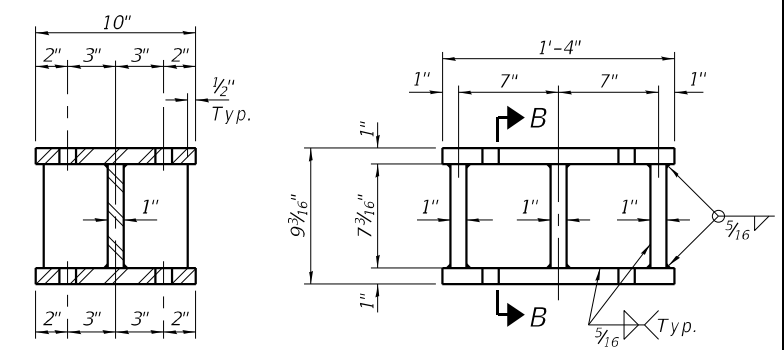
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

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", and the Standard Specifications. Cost included with Furnishing and Erecting Structural Steel.

All new structural steel and bearing assemblies shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel".

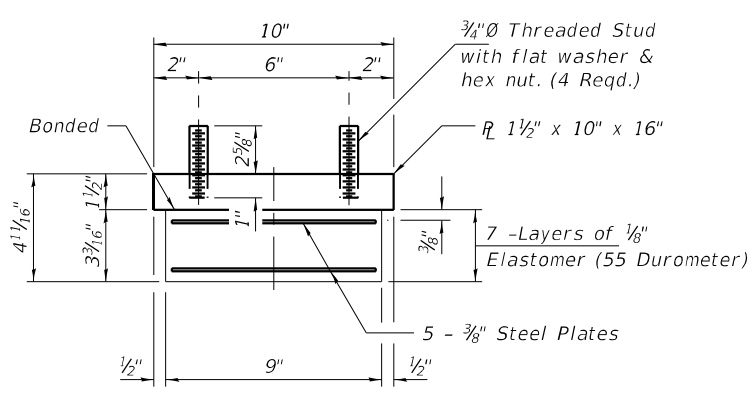


PLAN TOP AND BOTTOM PLATE



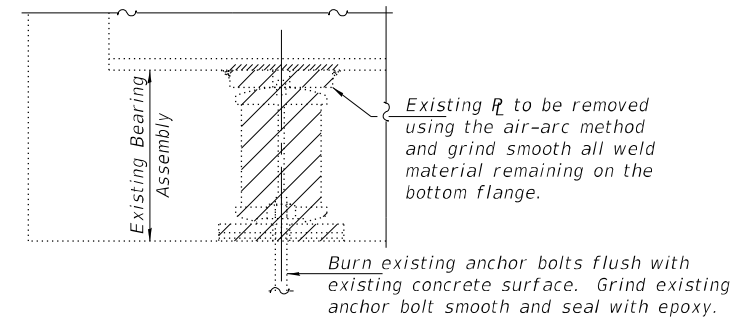
SECTION B-B

STEEL EXTENSION DETAIL



BEARING ASSEMBLY

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

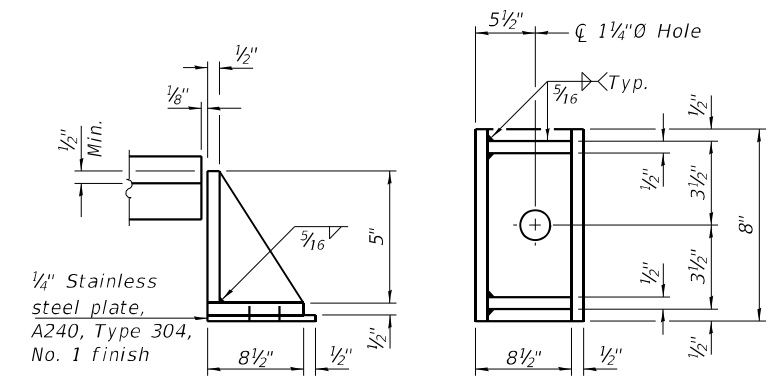


EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

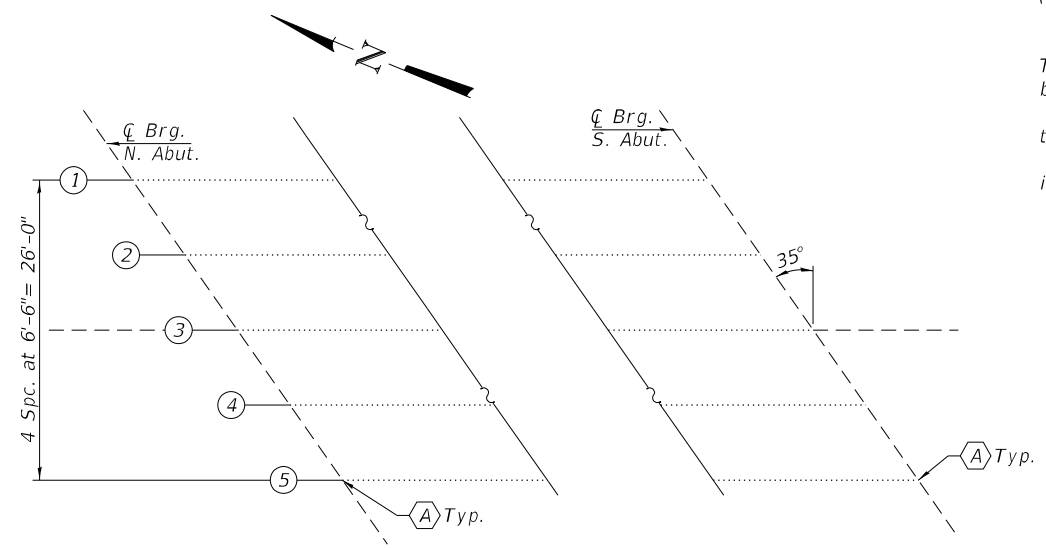
BEAM REACTIONS

R _R	(K)	34.0
R _L	(K)	43.6
Imp.	(K)	5.9
R (Total)	(K)	83.5



SIDE RETAINER

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



PARTIAL FRAMING PLAN

(A) - Bearing Removal and Replacement.

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 = 50 Tons.

Anchor bolts shall be ASTM F1554 (Grade 55) all-thread. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

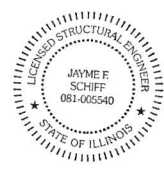
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

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

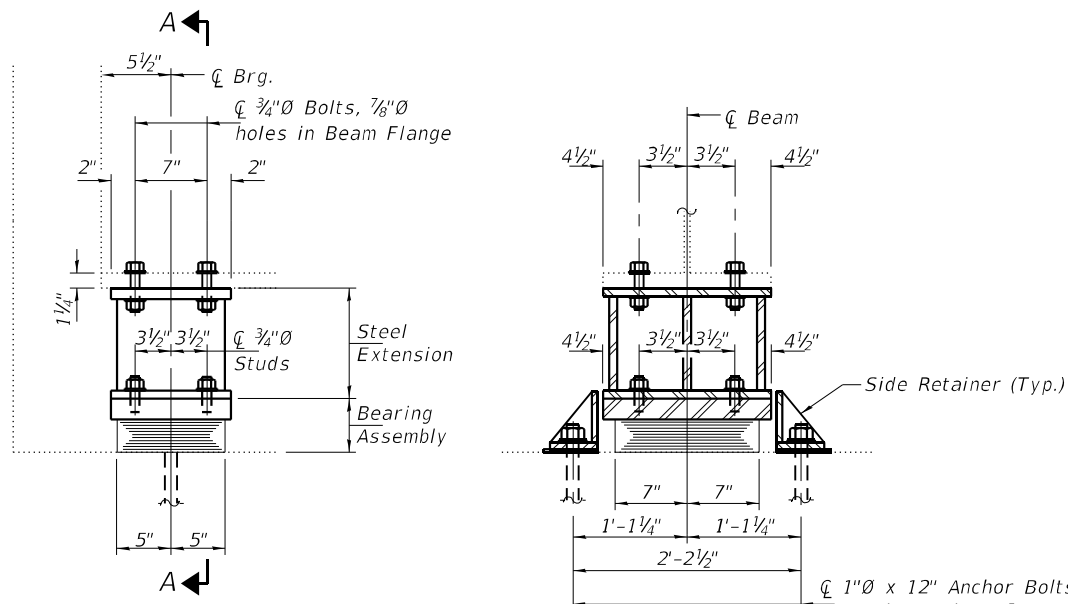
TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Jack and Remove Existing Bearings	Each	10
Elastomeric Bearing Assembly, Type I	Each	10
Furnishing and Erecting Structural Steel	Pound	1770
Anchor Bolts, 1"Ø	Each	20

All Steel to be galvanized.



EXPIRES 11-30-2024



ELEVATION AT BOTH ABUTMENT'S

SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Fasteners shall be ASTM F 3125 Grade A325 Type 1, mechanically galvanized bolts. Bolts 3/4", holes 13/16", unless otherwise noted.

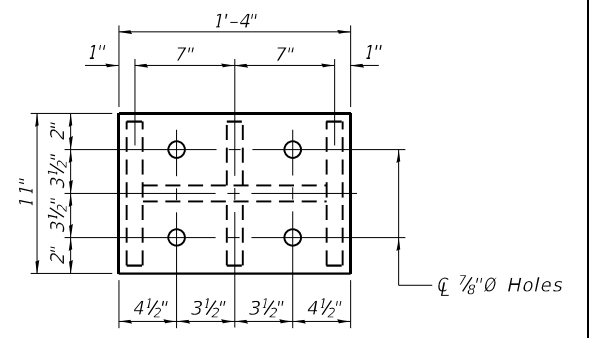
Plan dimensions and details relative to the existing structure have been taken from existing plans and are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

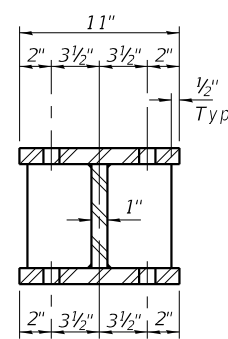
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

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", and the Standard Specifications. Cost included with Furnishing and Erecting Structural Steel.

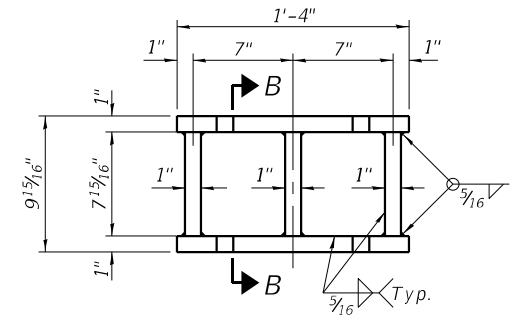
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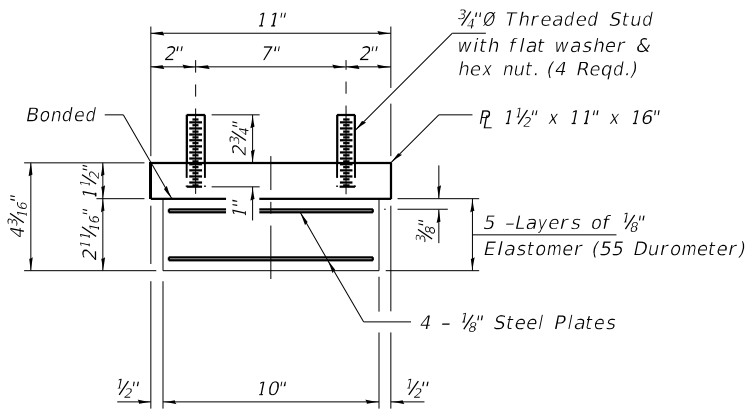
PLAN TOP AND BOTTOM PLATE



SECTION B-B

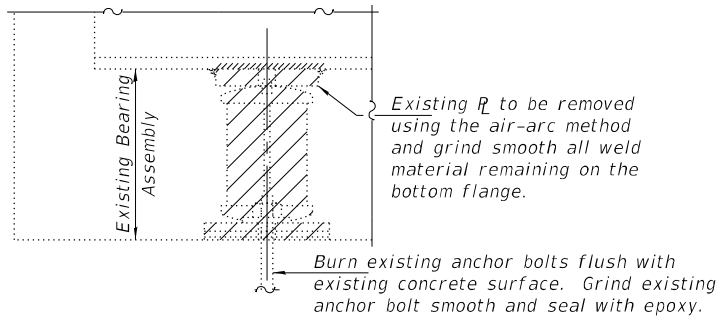


STEEL EXTENSION DETAIL



BEARING ASSEMBLY

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



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

BEAM REACTIONS

R _P	(K)	38.03
R _L	(K)	50.03
Imp.	(K)	7.56
R (Total)	(K)	95.62

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.

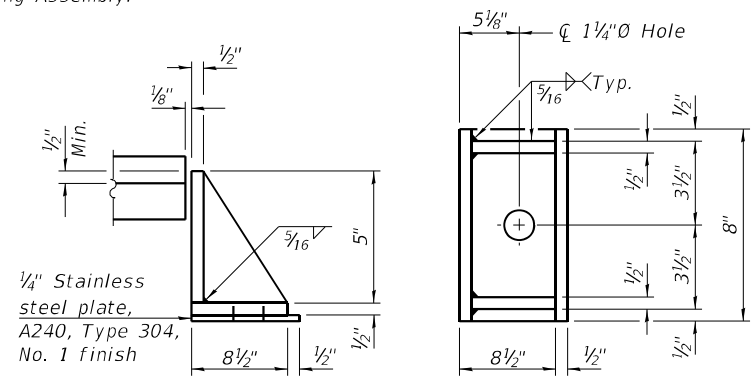
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

Min. jack capacity = 60 Tons.

Anchor bolts shall be ASTM F1554 (Grade 55) all-thread. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

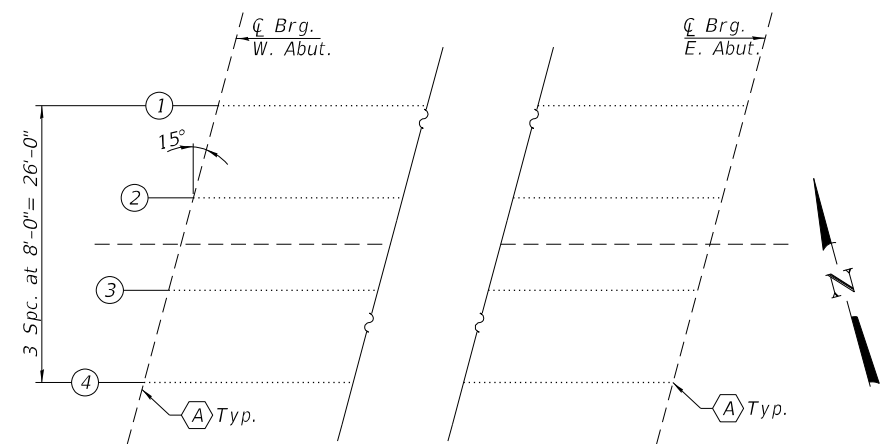
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

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



SIDE RETAINER

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



PARTIAL FRAMING PLAN

(A) - Bearing Removal and Replacement.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Jack and Remove Existing Bearings	Each	8
Elastomeric Bearing Assembly, Type I	Each	8
Furnishing and Erecting Structural Steel	Pound	1610
Anchor Bolts, 1"Ø	Each	16

All Steel to be galvanized.



EXPIRES 11-30-2024

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DESIGNED - VHV	EXAMINED	DATE - JUNE 25, 2024	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BLANK SHEET	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - ATH	 ENGINEER OF BRIDGES AND STRUCTURES	REVISED -			8240	(68-1HB-2,3)BRR	MONTGOMERY	7	6
DRAWN - Venkat Ramana Reddy		REVISED -			CONTRACT NO. 72742				
CHECKED - VHV ATH					SHEET NO. 1 OF 1 SHEETS				
					ILLINOIS		FED. AID PROJECT		

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DESIGNED - VHV	EXAMINED	DATE - JUNE 25, 2024	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BLANK SHEET	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - ATH	 ENGINEER OF BRIDGES AND STRUCTURES	REVISED -			8240	(68-1HB-2,3)BRR	MONTGOMERY	7	7
DRAWN - Venkat Ramana Reddy		REVISED -			CONTRACT NO. 72742				
CHECKED - VHV ATH					SHEET NO. 1 OF 1 SHEETS				
					ILLINOIS	FED. AID PROJECT			