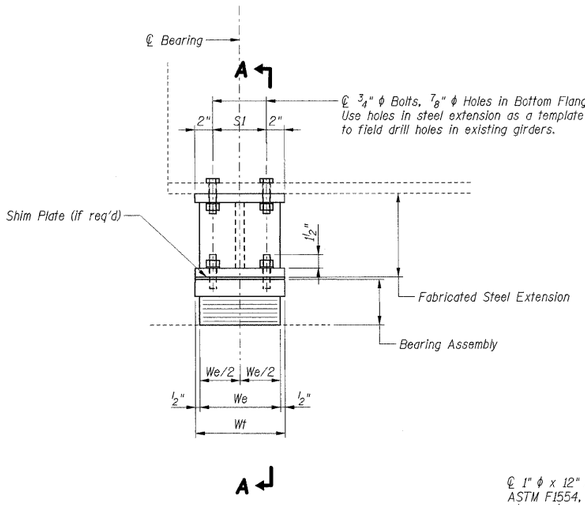
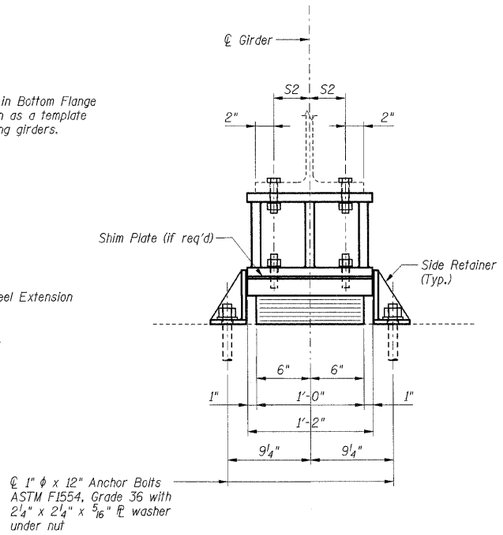
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	2021.1B-R	COOK	101	078
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

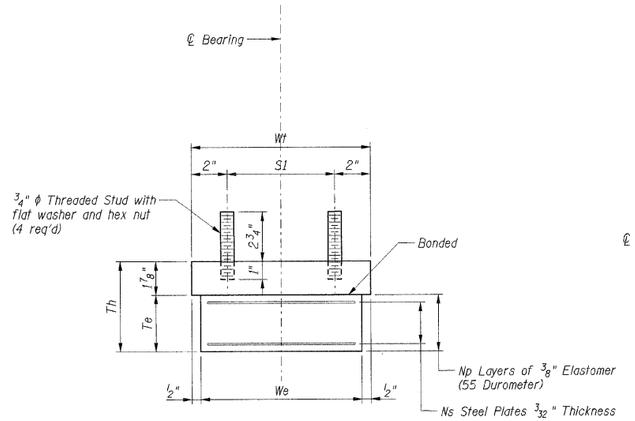
CONTRACT NO. 62532



ELEVATION

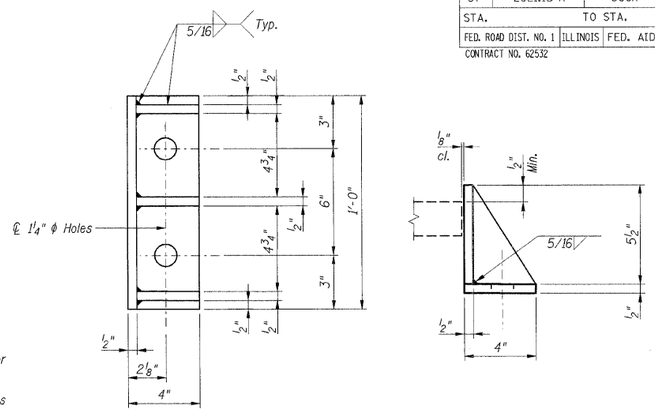


SECTION A-A



BEARING ASSEMBLY

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



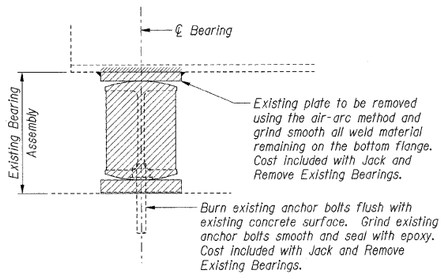
Note:
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

SIDE RETAINER

TYPE I ELASTOMERIC EXPANSION BEARING

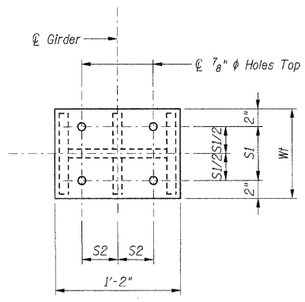
ELASTOMERIC BEARING SCHEDULE

Bearing Location	Girders	Type	Designation	Number Required	Th	H	We	Te	Np	Ns	Wt	S1	S2
W. and E. Abut.	1 - 14	I	9-a	28	4⅛"	9½"	9"	2¼"	5	4	10"	6"	4"
W. Brg. Pier 2	2 - 13	I	7-b	12	3⅝"	9⅞"	7"	1¾"	4	3	8"	4"	3"
	1 and 14	I	7-b	2	3⅝"	10¼"	7"	1¾"	4	3	8"	4"	4"



EXISTING BEARING REMOVAL DETAIL

Typical at Abutments and W. Bearing Pier 2

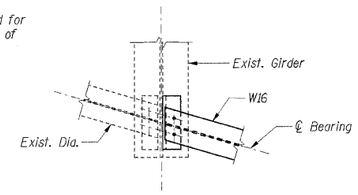


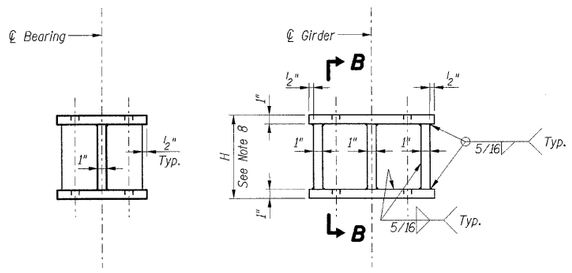
PLAN STEEL EXTENSION

Notes:
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 (Fy=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.

Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.



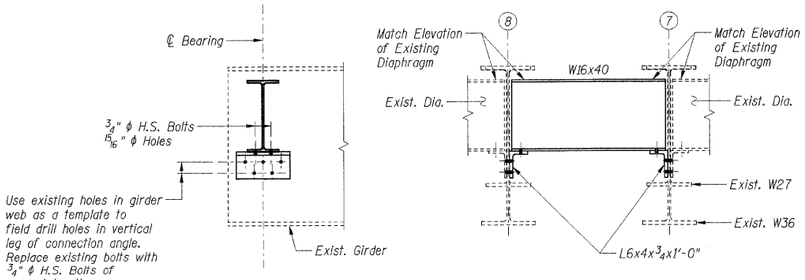


SECTION B-B

ELEVATION STEEL EXTENSION

Note:
Weight included with Furnishing and Erecting Structural Steel.

FABRICATED STEEL EXTENSION



END DIAPHRAGM (6 THUS)

BILL OF MATERIAL

Item	Unit	Total
Jack and Remove Existing Bearings	Each	42
Elastomeric Bearing Assembly, Type I	Each	42
Anchor Bolts, 1"	Each	168

Notes:
1. The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.
2. Fabricated steel extensions shall be AASHTO M 270 Grade 50.
3. All bolts and threaded studs shall be AASHTO M 164 (ASTM A 325).
4. Two hardened washers shall be required over all oversize holes.
5. For anchor bolt layout details see Sheets S-016, S-019, and S-020.
6. Steel extension height "H" determined from record plans. Prior to ordering any material the Contractor shall verify in the field all bearing height and shim thickness dimensions.
7. It is the responsibility of the Contractor to determine the top of girder elevations in the field prior to jacking and removal of the existing bearings and to rebuild to the field-verified elevations.
8. The Contractor shall submit for approval by the Engineer plans for lifting the existing girders and installing the new bearings prior to commencing any related work. The existing girders shall be lifted only after the existing concrete deck has been removed. The new bearings and steel extensions shall be in place and the jacks shall be lowered before the new concrete deck is placed.

SHT. S-014

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 57 (INTERSTATE 57)
111TH STREET BRIDGE DECK REPLACEMENT
111th STREET OVER I-57
SN 016-0989 STA. 556+99.89
COOK COUNTY

STRUCTURAL STEEL DETAILS

DRAWN BY: CCE
DATE: 01/16/09 CHECKED BY: JLR

TENG

TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
205 N. MICHIGAN AVE., CHICAGO, IL 60601
TELEPHONE: 312.616.0000

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pen table: N/A