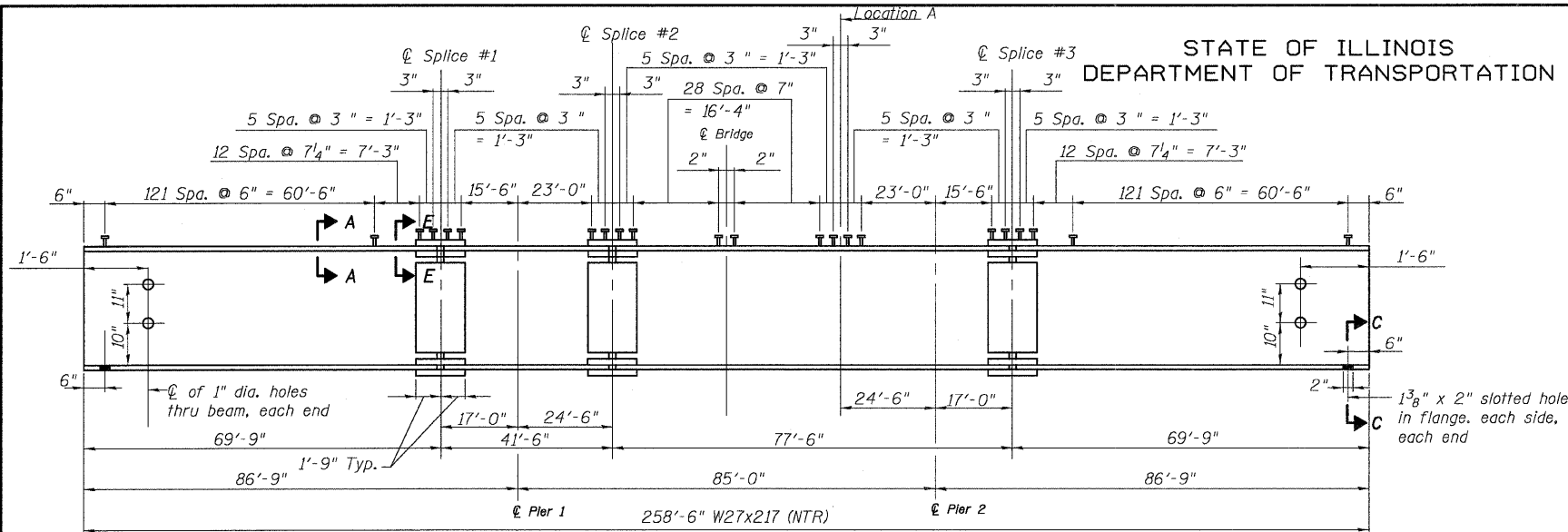


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 324	23B-1	MCHENRY	97	53
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

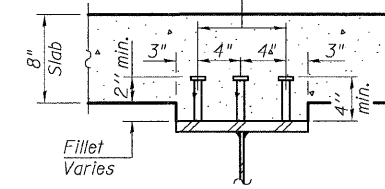
SHEET NO. 13
25 SHEETS

Contract # 62892

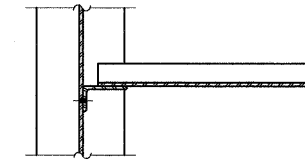


BEAM ELEVATION
Looking West

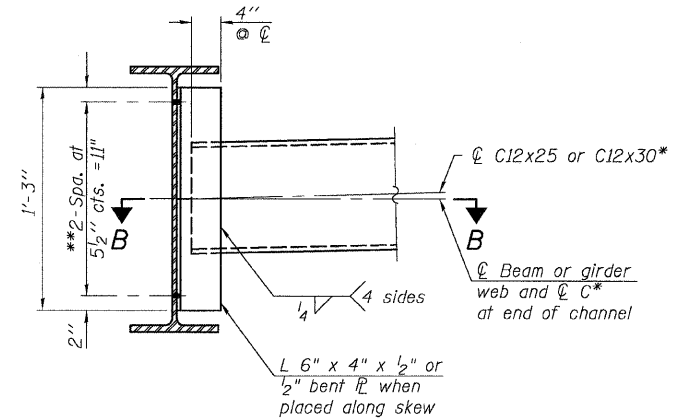
3/4" ϕ Granular or solid flux filled headed studs, automatically end welded to flange. (B112 Required)



SECTION A-A
Typical Stud Spacing
Except at Flange Splice
Plates and Location A



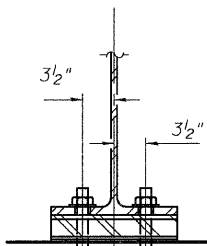
SECTION B-B



INTERIOR DIAPHRAGM

Note:
Two hardened washers required for each set of oversized holes.

* Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.
** 3/4" ϕ HS bolts, 5/8" ϕ holes



SECTION C-C

NOTES:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineered-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.

Anchor bolts may be either cast in place or installed in holes drilled after the supported member is in place.

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

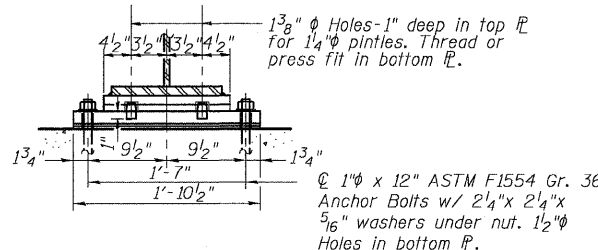
Furnishing and installing fixed steel bearings including shim plates and neoprene mat shall be included with the cost of "Erecting Structural Steel".

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

All beams, splice plates and fixed bearing plates are M270 Grade 50.

All diaphragms and angles connecting diaphragms to beams are M270 Grade 36.

HS splice bolts shall be 7/8" ϕ AASHTO M164/ ASTM A325
Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

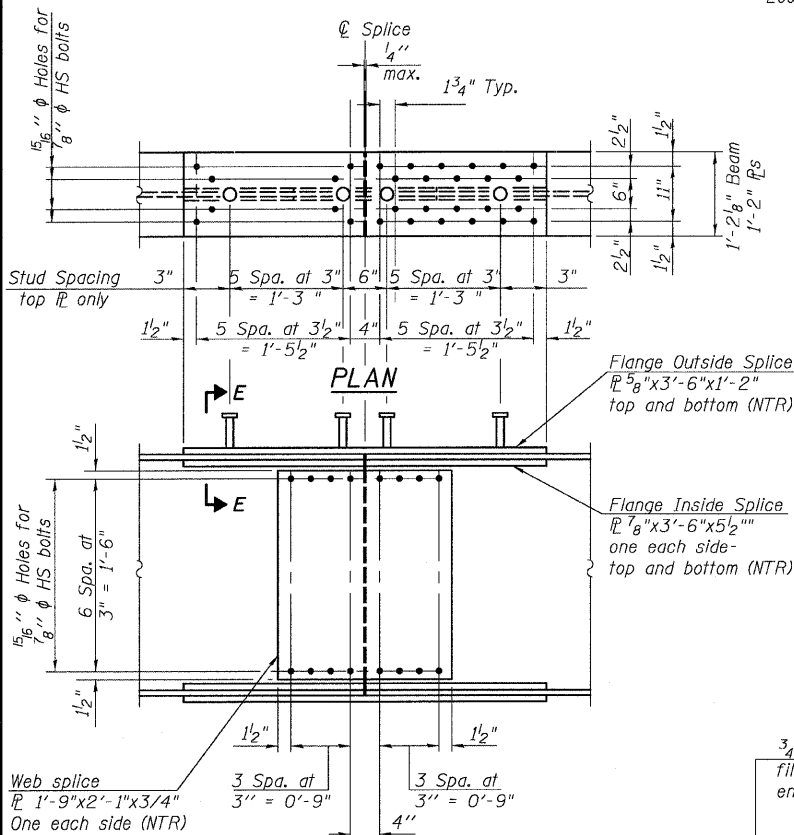


SECTION D-D

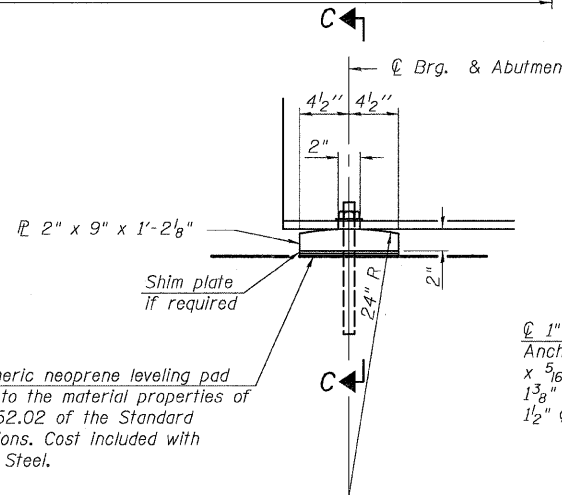


V3 Companies of Illinois Ltd.
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

FRAMING DETAILS
ILL. ROUTE 23 OVER
KISHWAUKEE RIVER
F.A.P. RT. 324
MCHENRY COUNTY
STATION 69+02.50
STRUCTURE NO. 056-0001



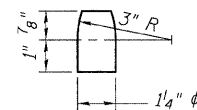
ELEVATION
SPLICE DETAIL
(24-Required)



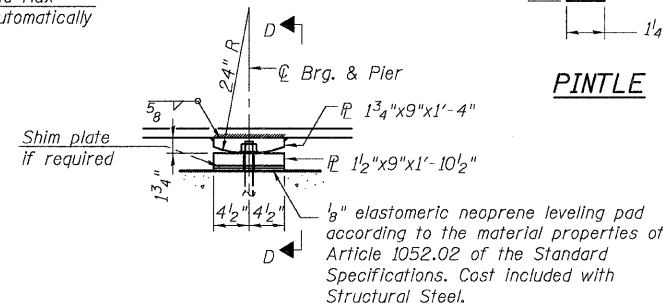
ELEVATION AT ABUTMENT

1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02 of the Standard Specifications. Cost included with Structural Steel.

FIXED BEARING AT ABUTMENTS

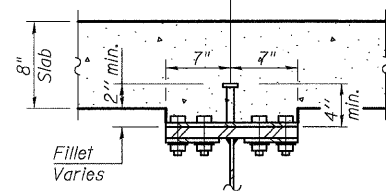


PINTLE



ELEVATION AT PIER

FIXED BEARING AT PIERS



SECTION E-E
Stud Spacing at Flange Splice
Plates and Location A

DESIGNED	WLA
CHECKED	CJB
DRAWN	DRP
CHECKED	PJM