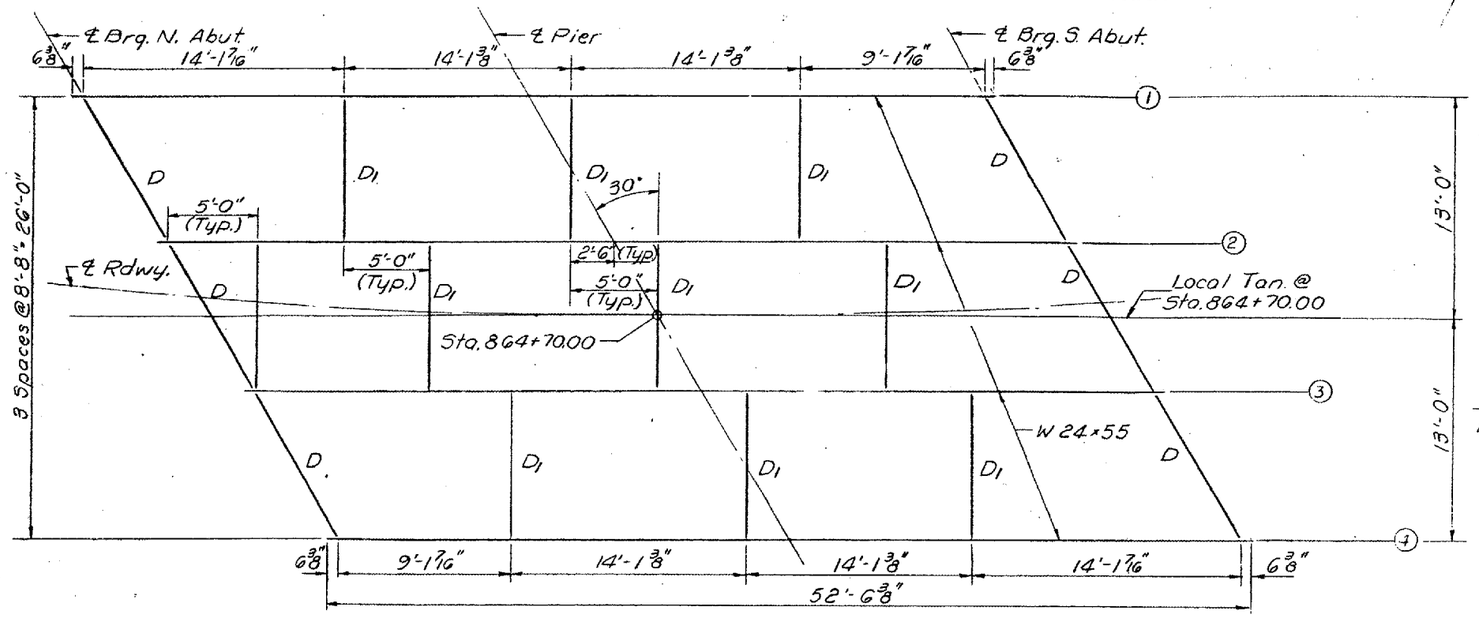
CONTRACT NO.: 98880
ROUTE: VARIOUS
COUNTY: VARIOUS
SECTION: D-9 CONTRACT MAINTENANCE 05-7
SHEET NO.: 11 OF 37

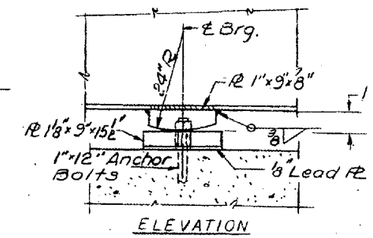
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 778	38-DR-2	Hardin	18	12

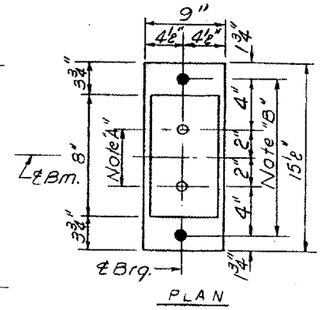
SHEET NO. 7
10 SHEETS



FRAMING PLAN
Bms. are parallel to local tangent



ELEVATION



PLAN

FIXED PIER

MOMENT TABLE

	4 Span 1 or 6 Span 2	Pier
I (in⁴)	1340	1340
S (in³)	114	114
PL (k/1)	1.18	1.18
M PL (1-k)	54.5	97.4
M ℄ (1-k)	142.2	126.8
IMP (1-k)	42.7	38.1
* fs	49.6	50.9

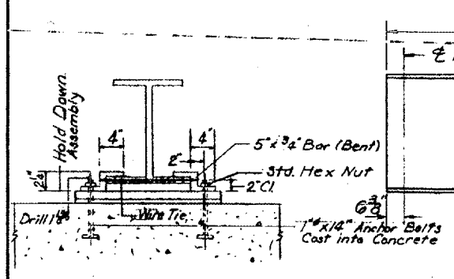
*Ultimate Stress in Girder
$fs = 1.3[fs\ PL + \frac{5}{3}(fs\ ℄ + imp)]$

INTERIOR GIRDER REACTION TABLE

	Abut.	Pier
R PL (k)	11.4	37.8
R ℄ (k)	34.3	47.4
IMP (k)	10.3	14.2
R Total (k)	56.0	99.4

Note "A"
1 3/8" ϕ Holes - 1" deep in top PL for 1 1/4" pintles
Thread or press fit pintles in bottom PL

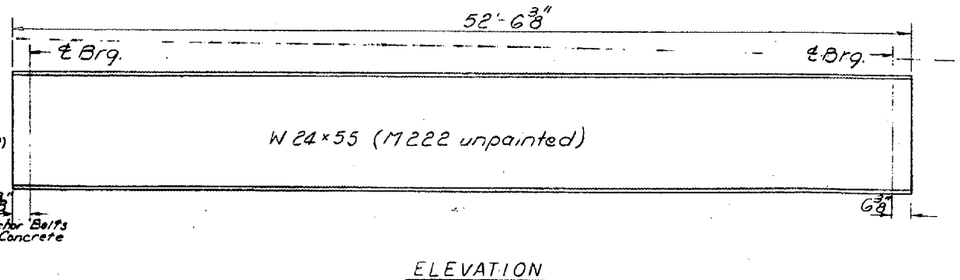
Note "B"
1 1/2" ϕ Holes for 1" ϕ Anchor Bolts - 2 1/2" × 2 1/2" × 5/16" PL washers under nut.



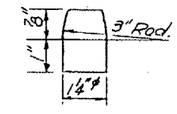
BEAM HOLD DOWN DETAIL

Note: Beams shall be held down at the Abutment on the opposite end of Bridge from which the deck pour is commenced. After pouring is completed the Hold Down Assembly shall be removed and Nuts placed on Anchor Bolts.
Cost incidental to Class X Concrete.

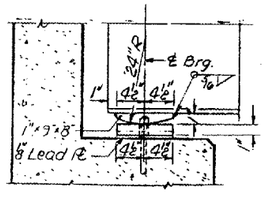
Note: Hardened washers shall be required over 15/16" ϕ holes in angles.



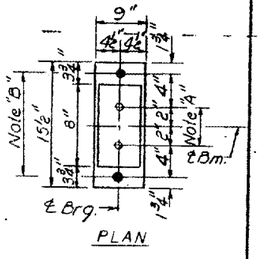
ELEVATION



DETAIL OF PINTLE

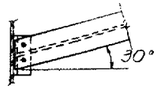


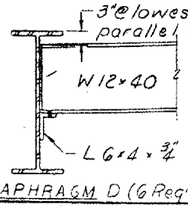
ELEVATION



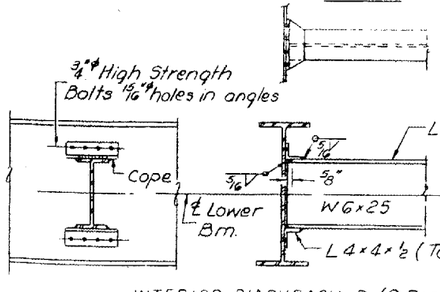
PLAN

NORTH & SOUTH ABUTMENTS
FIXED

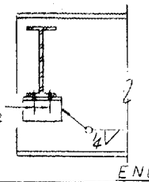




END DIAPHRAGM D (6 Req'd)



INTERIOR DIAPHRAGM D1 (9 Req'd)



DESIGNED	Dennis Babic
CHECKED	Paul S. McCreary
DRAWN	Mercado
CHECKED	P.S.M. DAB

EXAMINED Feb. 23 '78
PASSED
APPROVED

FOR INFORMATION ONLY:

BRIDGE NO. 2 STRUCTURE 035-0006

STRUCTURAL STEEL
F.A.RT. 778 SEC. 38-DR-2
HARDIN COUNTY
STA. 864+70.00