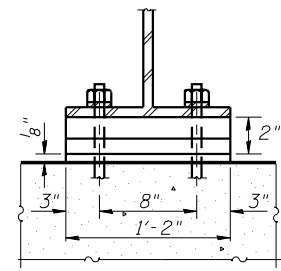
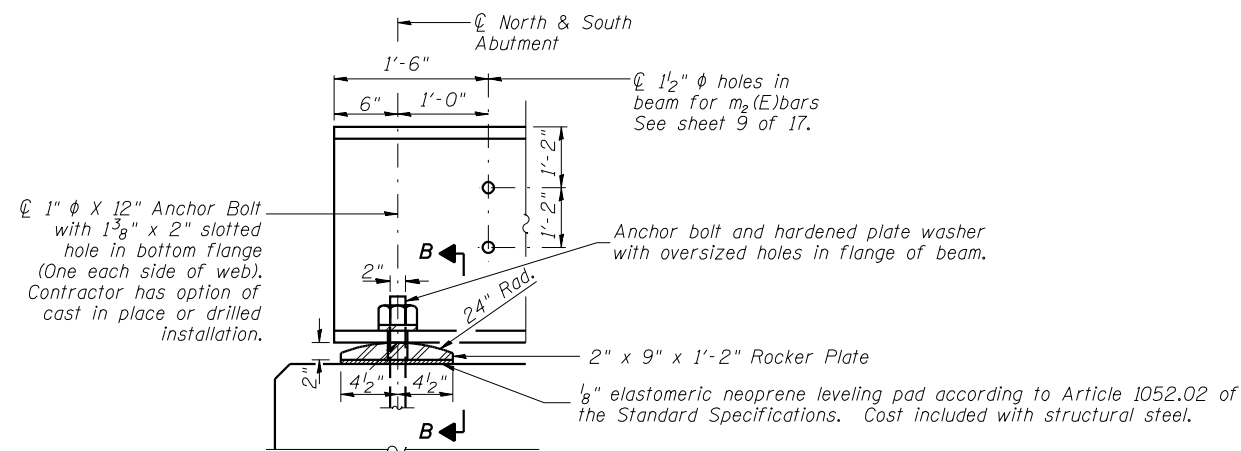
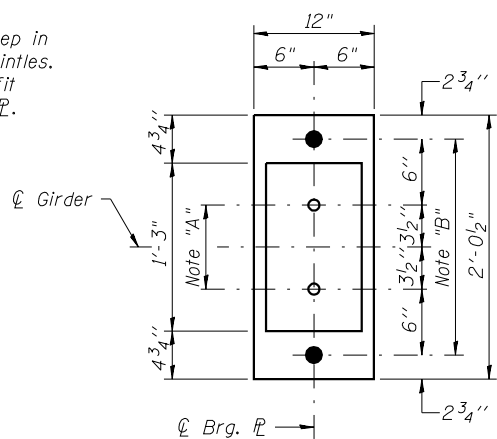


		0.4 Sp. 1 & 0.6 Sp. 2	Pier
Is	(in ⁴)	14929	32071
I _{cn}	(in ⁴)	37204	
I _{cn(3n)}	(in ⁴)	26673	
Ss	(in ³)	758	1387
S _{cn}	(in ³)	1040	
S _{cn(3n)}	(in ³)	946	
Z	(in ³)		
DC1	(k/ft)	0.760	0.900
M DC1	(k-ft)	595	1587
DC2	(k/ft)	0.137	0.137
M DC2	(k-ft)	109	214
DW	(k/ft)	0.267	0.267
M DW	(k-ft)	212	418
M LL	(k-ft)	1114	1084
M Imp	(k-ft)	367	358
M LL+Imp	(k-ft)	1481	1442
Ma (Strength I)	(k-ft)	3790	5402
Mr	(k-ft)	5371	
fs DC1	(ksi)	9.4	13.7
fs DC2	(ksi)	1.4	1.9
fs DW	(ksi)	2.7	3.6
fs 1.3(LL+I)	(ksi)	22.2	12.5
fs (Ser II)	(ksi)	35.7	31.7
fs (Total) (Strength I)	(ksi)		41.7
V _{sr}	(k)	23.1	



END OF GIRDER AT ABUTMENTS

Note "A"
 1 3/8" ϕ Holes-1" deep in top \mathbb{R} for 1 1/4" ϕ Pintles. Thread or press fit pintles in bottom \mathbb{R} .



Note "B"
 2" ϕ Holes for 1 1/2" ϕ Anchor Bolts-3" x 3" x 5/16" \mathbb{R} washer under nut.

		Abutment	Pier
R _{DC1}	(k)	32.0	128.7
R _{DC2+DW}	(k)	16.2	55.6
R _{LL}	(k)	55.0	105.1
R _{Imp}	(k)	18.2	34.7
R (Total)	(k)	121.4	324.1

		Abutment	Pier
R _{DL}	(k)	47.9	184.7
R _{LL}	(k)	34.2	59.6
R _{Imp}	(k)	7.3	8.7
R (Total)	(k)	89.4	253.0

Is and Ss are the moment of inertia and section modulus of the steel section used in computing fs due to non-composite loads.
 I_{cn} and S_{cn} are the moment of inertia and section modulus of the composite section used in computing fs due to short-term composite loads.
 I_{cn(3n)} and S_{cn(3n)} are the moment of inertia and section modulus of the composite section used in computing fs due to long-term composite loads.
 V_{sr} is the maximum of 0.75 (LL+IM) shear range in span.
 Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.
 Ma (Strength I)= 1.25 M(DC1+DC2) + 1.5 DW + 1.75 M(LL+Imp)
 Mr is the Full Plastic Moment Capacity computed in accordance with AASHTO 6.10.3.1.3 and 6.10.4.2.2
 fs (Service II) is the sum of the stresses due to DC1 + DC2 + DW + 1.3 (LL+Imp).
 fs (Total) (Non-compact section) is the sum of the stresses due to 1.25 (DC1 + DC2) + 1.5 DW + 1.75 (LL+Imp).
 DC1 is the dead load acting on non-composite section.
 DC2 is the dead load acting on the long-term composite section.
 DW is the dead load acting on long-term composite section due to wearing surface.

Note: All Steel plates shown on this sheet shall be AASHTO M270 Grade 50.

LIN ENGINEERING, LTD.
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 Designed By: MTH
 Checked By: STD
 Drawn By: JMD
 Date: 11/02
 File: 0920203.DGN

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BEARING DETAILS
 FAP ROUTE 840 (IL 49N)
 OVER FAI RTE 74 (I-74)
 SECTION (10-92-8HB-4) BR
 VERMILION COUNTY
 STA. 1160+20.53 (I-74)
 STA. 50+00.00 (IL 49N)
 STRUCTURE NO. 092-0203