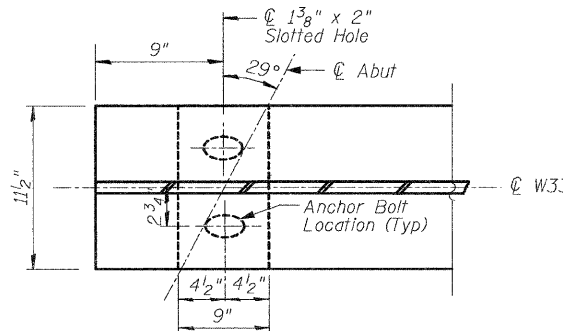
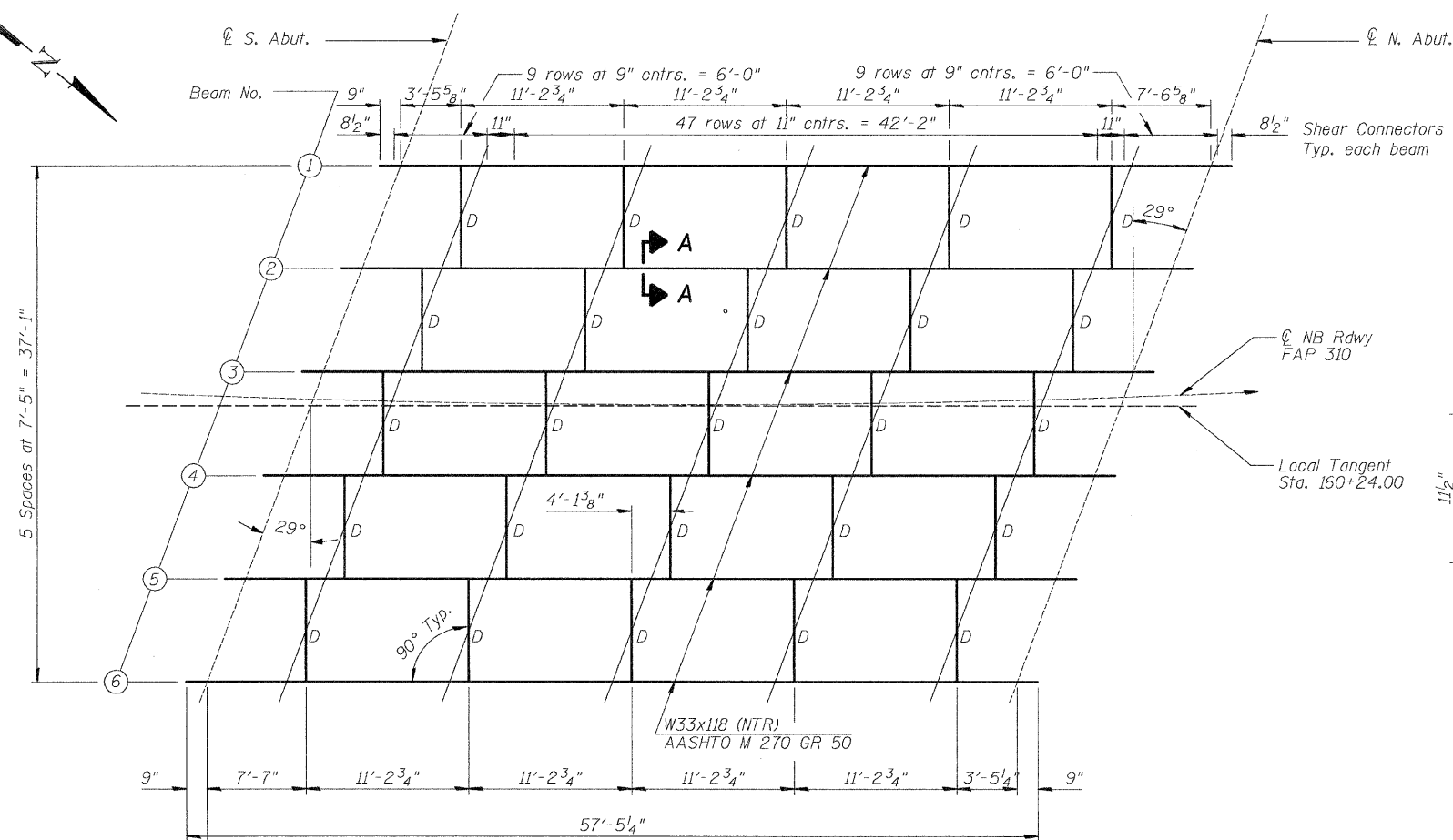


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	60-(16B, 16-1B)	MADISON	62	26
STA. 160+24.00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 76567				

Sheet No. 7
12 Sheets



1/8" THICK ELASTOMERIC NEOPRENE LEVELING PAD AND ROCKER PLATE (12 REQUIRED)
(Cost included with structural steel)

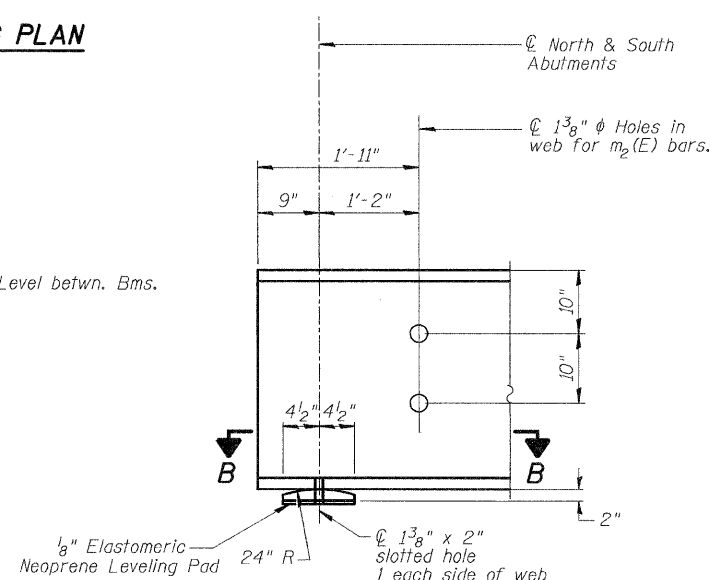
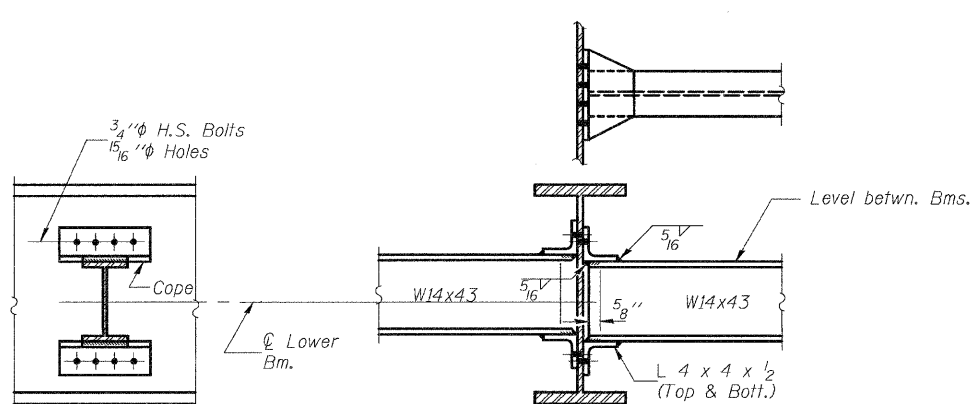
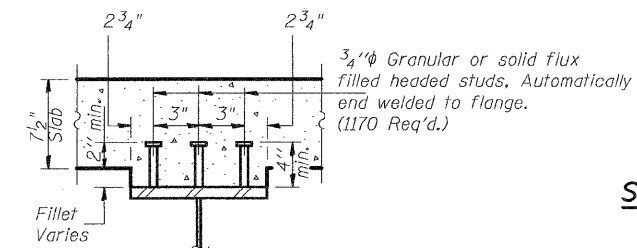
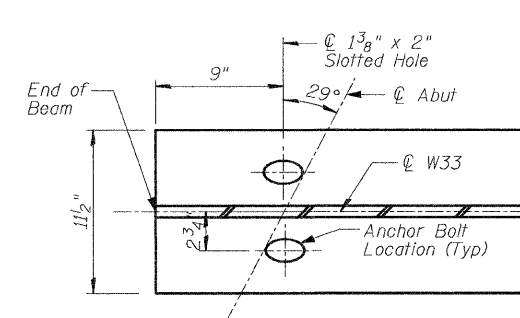
INTERIOR BEAM MOMENTS		0.5 Span
Is	(in ⁴)	5900
Ic (n)	(in ⁴)	15875
Ic (3n)	(in ⁴)	11895
Ss (n)	(in ³)	359
Sc (n)	(in ³)	526
Sc (3n)	(in ³)	479
ϕ	(K/ft.)	0.840
Mϕ	(K)	331
sϕ	(K/ft.)	0.518
Msϕ	(K)	203
* Mϕ	(K)	517
M (Imp)	(K)	143
ϕ ₃ (Mϕ + I)	(K)	1100
Ma	(K)	2123
Mu	(K)	2758
fsϕ non-comp(k.s.i.)		11.1
fsϕ (comp)	(k.s.i.)	5.1
fsϕ ₃ (ϕ + I)	(k.s.i.)	25.1
fs (Overload)	(k.s.i.)	41.3
VR	(K)	53.9

INTERIOR BEAM REACTIONS		Abut.
Rϕ	(K)	38.0
Rϕ	(K)	42.2
Imp.	(K)	11.7
R (Total)	(K)	91.8

* Includes centrifugal force and superelevation effects.
Is and Ss are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs (Total & Overload).
VR is the maximum Live Load + Impact shear range in span.
Ma (Applied Moment) = 1.3[Mϕ + Msϕ + ϕ₃(Mϕ + I)].
Mu is the Full Plastic Moment Capacity for Compact, Braced section.
fs (Overload) is the sum of the stresses due to Mϕ + Msϕ + ϕ₃(Mϕ + I).

Notes:

"NTR" denotes items to which notch toughness requirements are applicable.
All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.



Location	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6
ϕ South Abut.	535.87	536.25	536.63	537.01	537.39	537.78
ϕ North Abut.	535.19	535.55	535.91	536.28	536.64	537.01

TOP OF BEAM ELEVATIONS
(For Fabrication Only)

DESIGNED	R.P.B.
CHECKED	M.R.E.
DRAWN	M.R.E.
CHECKED	R.P.B./G.E.P.

I-2-D 12/21/00

STRUCTURAL STEEL
FAP 310 (US 67) OVER TRIB
SOUTH BRANCH OF PIASA CREEK
SECTION 60-(16B, 16-1B)
MADISON COUNTY STA 160+24.00
SN 060-0328