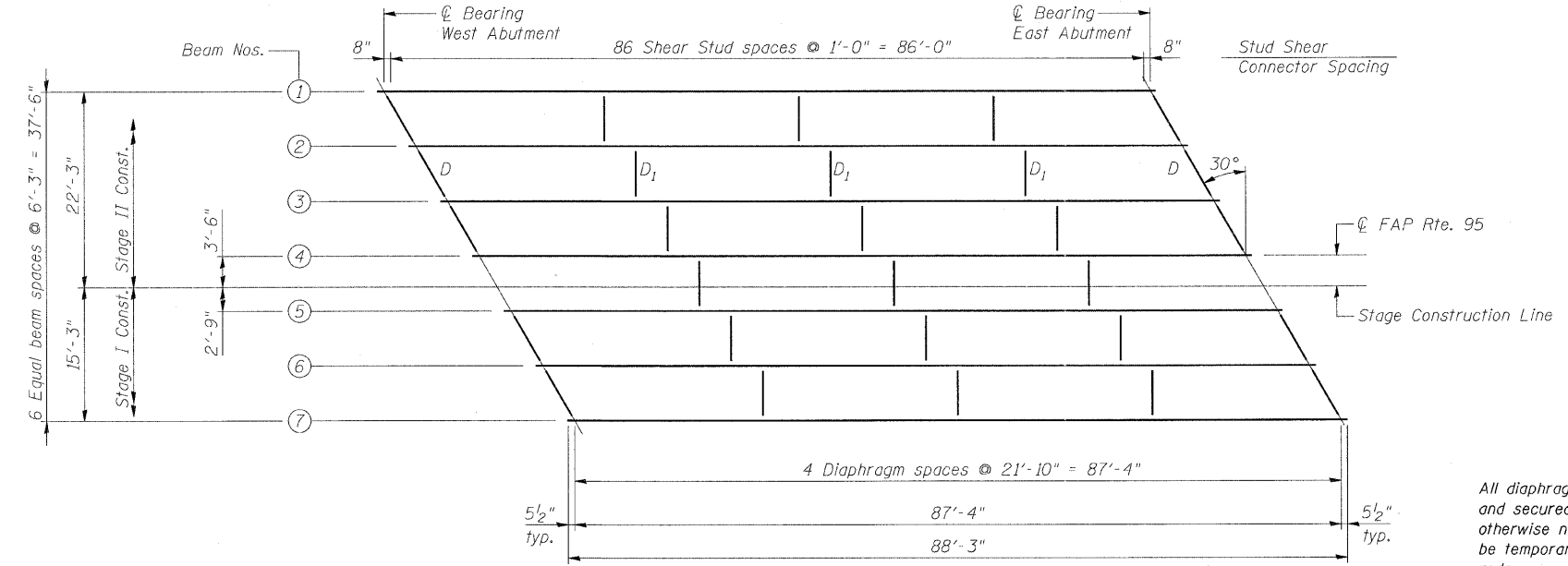


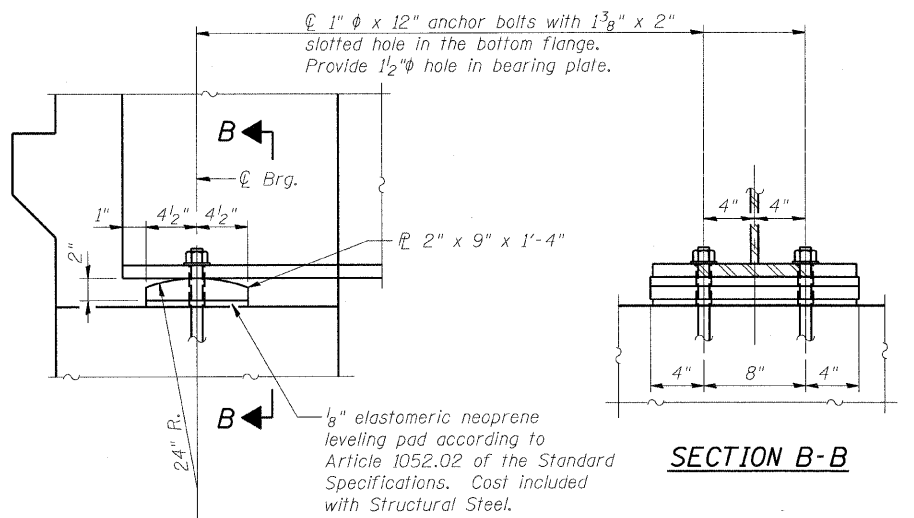
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 10 18 SHEETS
FAP 95	6BR-7	JASPER	546	250	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-			

Contract No. 94437



FRAMING PLAN
(All beams W33x201 "NTR" - M270 Gr. 50)

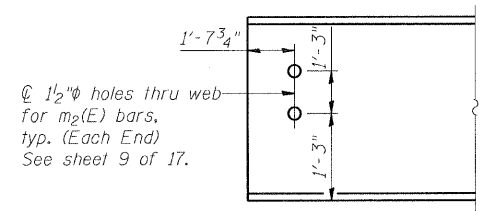


SECTION B-B

TOP OF BEAM ELEVATIONS*

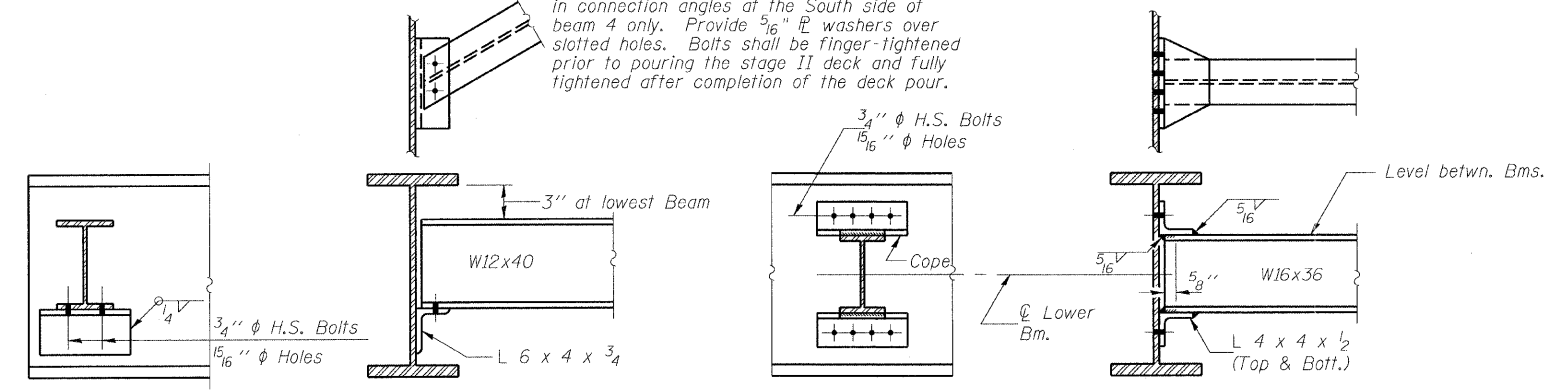
	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6	Beam 7
⊕ Bearing West Abut.	583.01	583.12	583.20	583.28	583.17	583.05	582.90
⊕ Bearing East Abut.	582.57	582.69	582.77	582.85	582.73	582.61	582.47

*For fabrication use only
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.



END OF BEAM ELEVATION

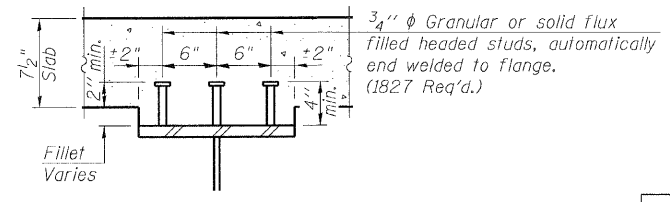
ELEVATION AT ABUTMENT



DIAPHRAGM D
(10 Required)

DIAPHRAGM D1
(18 Required)

Note:
Two hardened washers shall be required over all oversize holes.



SECTION THRU TOP FLANGE

INTERIOR GIRDER MOMENT TABLE		0.527 Span l
Is	(in ⁴)	11500
Ic (n)	(in ⁴)	25304
Ic (3n)	(in ⁴)	18644
Ss	(in ³)	684
Sc (n)	(in ³)	914
Sc (3n)	(in ³)	835
Z	(in ³)	
ϕ	(k/ft.)	0.844
Mϕ	(k)	803
sϕ	(k/ft.)	0.414
Msϕ	(k)	394
Mϕ	(k)	737
M (Imp)	(k)	173
5/3[Mϕ + M(Imp)]	(k)	1517
Ma	(k)	3528
Mu	(k)	4265
fsϕ non-comp	(k.s.i.)	14.1
fsϕ (comp)	(k.s.i.)	5.7
fs 5/3 (4 + Imp)	(k.s.i.)	19.9
fs (Overload)	(k.s.i.)	39.7
fs (Total)	(k.s.i.)	
VR	(k)	45.1

INTERIOR BEAM REACTION TABLE		Abut.
Rϕ	(k)	55.0
Rϕ	(k)	36.5
Imp.	(k)	8.6
R (Total)	(k)	100.1

Is and Ss are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).
Ic(n) and Sc(n) are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.
Ic(3n) and Sc(3n) are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads.
VR is the maximum Live Load + Impact shear range in span.
Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.
Ma (Applied Moment) = 1.3[Mϕ + Msϕ + 5/3(Mϕ + M(Imp))].
The Plastic Moment capacity (Mu) is computed according to AASHTO 10.48.1 and 10.50.1.1.
fs (Overload) is the sum of the stresses due to Mϕ + Msϕ + 5/3(Mϕ + M(Imp)).
fs (Total) (Non-compact section) is the sum of the stresses due to 1.3[Mϕ + Msϕ + 5/3(Mϕ + M(Imp))].

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STRUCTURAL STEEL
IL RTE 33 OVER WEST FORK OF BIG MUDDY CREEK
FAP RTE 95 - SECTION 6BR-7
JASPER COUNTY
STATION 729+72.50
SN 040-0021

SCALE: VERT. 1"=8'
HORIZ. 1"=40'
DATE: 8/25/04

GREENE & BRADFORD, INC.
OF SPRINGFIELD
PROFESSIONAL ENGINEERS
REGISTERED IN ILLINOIS
NO. 123-084, 02875-0227 P.E. No. 02875-0227

PROJECT 01256
2/26/10-FAV

DESIGNED BY: LANDREY
CHECKED BY: WATKINS
COMPUTER FILE NO. 01256SS

FILE NAME = I:\01256\DRAWINGS\040-0021\01256SS.dgn
SCALE = 1/4"=1'-0"
PLOT DATE = 3/7/2010
PLOT TIME = 5:16:44 PM
OPERATOR = F-ronky