ROUTE NO.	SECT.	COUNTY	SHEET NO.	TOTAL SHEETS
F.A.I. 74	(72-7) R-3	PEORIA	428	1340
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 68200

TOP OF WEB ELEVATIONS

(For Fabrication Only)

	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6
℄ Brg. East Abutment	197.837	197.801	197.765	197.727	197.689	197.575
℄ Brg. West Abutment	199.391	199.368	199.348	199.348	199.328	199.237

INTERIOR GIRDER MOMENT TABLE		0.5 Span
Is	(10^6 mm^4)	5100
Ic (n)	(10^6 mm^4)	13328
Ic (3n)	(10^6 mm^4)	9165
Ss	(10^3 mm^3)	14990
Sc (n)	(10^3 mm^3)	19785
Sc (3n)	(10^3 mm^3)	18124
Sbi	(10^3 mm^3)	1200
℘	(kN/m)	9.90
M℘	(kN-m)	1326
S℘	(kN/m)	5.20
Ms℘	(kN-m)	696
M℄	(kN-m)	956
M (Imp)	(kN-m)	206
$\frac{5}{3}$ [M℄ +M(Imp)]	(kN-m)	1936
Ma	(kN-m)	5145
Mbi	(kN-m)	40
fs℘ (Non-comp.)	(MPa)	88
fs℘ (comp.)	(MPa)	38
fs $\frac{5}{3}$ [M℄ +M(Imp)]	(MPa)	98
fw	(MPa)	33
fs+fw (Overload)	(MPa)	250
fs (Total)	(MPa)	292
fs (Total)+fw	(MPa)	-
VR	(kN)	178
Fb	(MPa)	345

INTERIOR GIRDER REACTION TABLE		E. ABUT.	W. ABUT.
R DL	(kN)	247	247
R LL	(kN)	147	147
R IMP	(kN)	32	32
R (TOTAL)	(kN)	426	426

Fb- Maximum allowable stress Fbu or Fby computed according to AASHTO [Guide Specifications for Horizontally Curved Highway Bridges Section 2.12(B) and 2.16].

Is and Ss are the moment of inertia and section modulus of the steel section used in computing fs (Total and 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 load. (See AASHTO 10.38).

VR is the maximum ℄ + impact shear range in span.

Ma (Applied Moment)=1.3[M℘ +Ms℘ + $\frac{5}{3}$(M ℄+M(Imp))].

fs+fw (Overload) is the sum of the stress due to M℘ +Ms℘ + $\frac{5}{3}$(M ℄+M(Imp))+Mbi/1.3 .

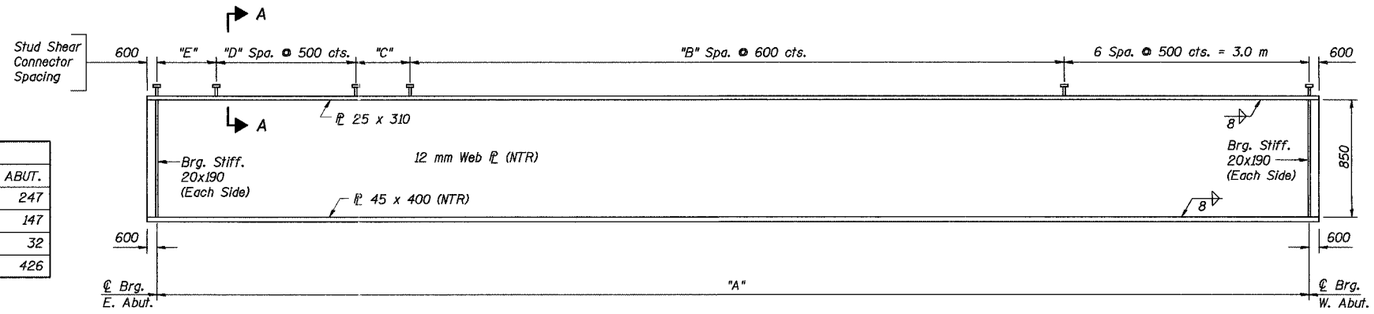
fs (Total) is the sum of the stress due to 1.3[M℘ +Ms℘ + $\frac{5}{3}$(M ℄+M(Imp))].

Sbi is the section modulus for one flange plate for lateral flange bending.

Mbi is the lateral bending moment for flange plate (factored).

fw is the calculated normal stress at the edge of flange due to lateral bending (factored).

M ℄ and R ℄ include the effects of centrifugal force and superelevation.

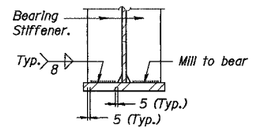


GIRDER ELEVATION

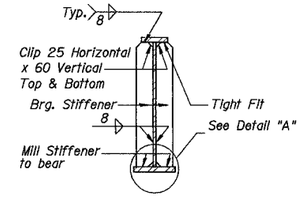
"NTR" denotes plates to which notch toughness requirements are applicable.

TABLE OF A THRU E DIMENSIONS

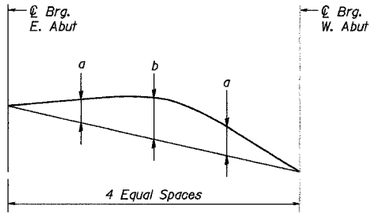
Girder No.	A	B	C	D	E
1	32.726 m	44	-	6	326
2	32.635 m	44	-	6	235
3	32.545 m	44	-	6	145
4	32.457 m	43	-	7	157
5	32.370 m	43	570	6	-
6	32.284 m	43	-	6	484



DETAIL "A"



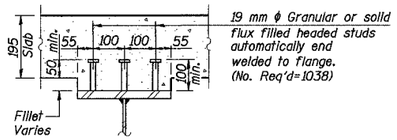
SECTION AT ABUTMENT



CAMBER DIAGRAM

TABLE OF CAMBER

Girder No.	a	b
1	170	238
2 - 3	158	222
4 - 5	153	215
6	159	223



SECTION A-A

Notes:

Work this Drawing with S-1.

Beams shall be fabricated to their respective radii.

All structural steel for flanges and webs of main girders and bearing stiffeners shall be AASHTO M 270M Grade 345.

For additional steel details see Dwg. S-3.

All dimensions are in millimeters (mm) except as noted.

REVISION	DATE	DESCRIPTION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER ELEVATION & DETAILS

RAMP A-3 OVER RAMP B-5
F.A.I. ROUTE 74 (SECTION 72-7)R-3
PEORIA COUNTY STA. 10+418.515 (RAMP A-3)
STRUCTURE NUMBER 072-0172

PARSONS TRANSPORTATION GROUP
CHICAGO, ILLINOIS

DRAWING NO.	SCALE	DATE	SHEET NO.
S-2	N.T.S.	11/16/04	9

Designed by:	AK
Checked by:	WEE
Drafted by:	JAG
Checked by:	WEE

Date: 11/19/2004 Time: 09:11:24 AM

Filename: P:\643996\structural\A3\072-0172\Sheet\Tracings\ST0002-IA0720172.dgn