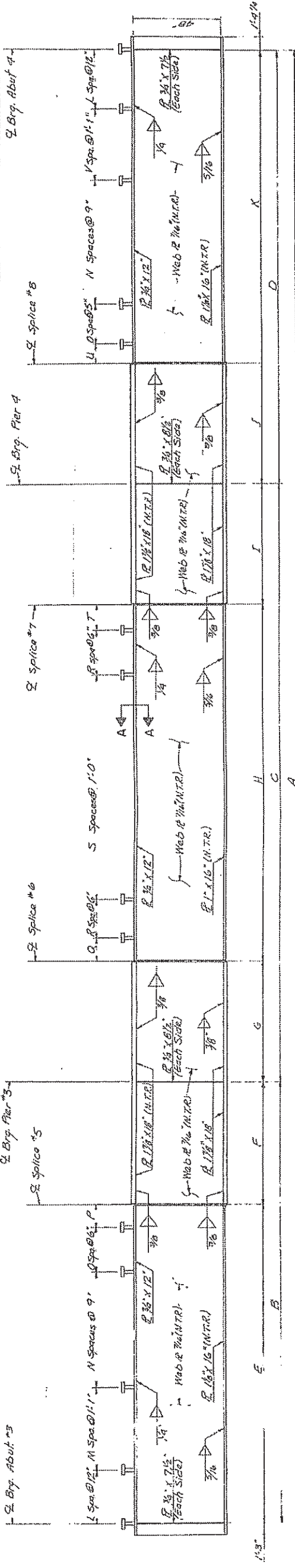


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ADAMS 57 30A
SHEET NO. 27 SHEET



GIRDER ELEVATION

N.T.R. Denotes Notch Toughness Requirements for location and spacing of diaphragm connection plates and intermediate stiffeners, see Framing Plan, Sheet #12.

GIRDER DIMENSIONS

GIRDER	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
6	275'-5 1/2"	84'-0 1/2"	106'-1 3/8"	85'-1 3/8"	62'-0 1/2"	22'-0"	26'-0"	56'-1 3/8"	24'-0"	24'-0"	60'-0 3/4"	0	23	33	6	1'-10 3/8"	1'-6"	7	46	1'-7 3/8"	1'-8 3/8"	22
7	276'-1 1/8"	84'-0 1/2"	106'-5"	85'-0 3/4"	62'-1 1/8"	22'-0"	26'-0"	56'-5"	24'-0"	24'-0"	61'-0 3/8"	0	23	33	6	2'-0 3/8"	1'-6"	7	46	1'-11"	1'-11 3/8"	22
8	275'-10 1/8"	84'-1 1/8"	106'-8 1/2"	85'-3 3/8"	62'-1 1/8"	22'-0"	26'-0"	56'-8 1/2"	24'-0"	24'-0"	61'-3 3/8"	0	23	33	6	2'-3"	1'-6"	7	46	2'-2 1/8"	2'-2 1/8"	22
9	277'-6"	85'-1 1/8"	106'-11 1/2"	85'-6 3/8"	62'-1 1/8"	22'-0"	26'-0"	56'-11 1/2"	24'-0"	24'-0"	61'-6 3/8"	0	23	33	6	2'-5 1/2"	1'-6"	7	47	1'-5 1/2"	2'-5 1/2"	22
10	276'-5 1/4"	85'-5 3/8"	107'-3 1/2"	85'-9 3/8"	62'-5 3/8"	22'-0"	26'-0"	57'-3 1/2"	24'-0"	24'-0"	61'-9 3/8"	0	23	33	6	2'-7 3/8"	1'-6"	7	47	1'-9 3/8"	2'-5 3/8"	22

CUTOFF ANGLE, Θ

GIRDER	ABUT. 3	ABUT. 4
6	38.947	44.593
7	39.100	44.728
8	39.254	44.904
9	39.410	45.094
10	39.567	45.288

TOP OF WEB ELEVATIONS (For Fabrication Only)*

GIRDER NO.	6	7	8	9	10
Abut. 3	514.02	513.49	512.95	512.41	511.87
Splice 6	514.02	513.55	512.01	512.47	511.93
Abut. 4	514.19	513.59	513.05	512.51	511.97
Splice 7	514.19	513.65	513.11	512.57	512.03
Splice 8	514.30	513.75	513.21	512.67	512.13
Abut. 3	514.37	513.85	513.28	512.73	512.19
Splice 9	514.54	513.99	513.44	512.89	512.34

* Elevations at Splices have been adjusted for Dead Load Deflections.

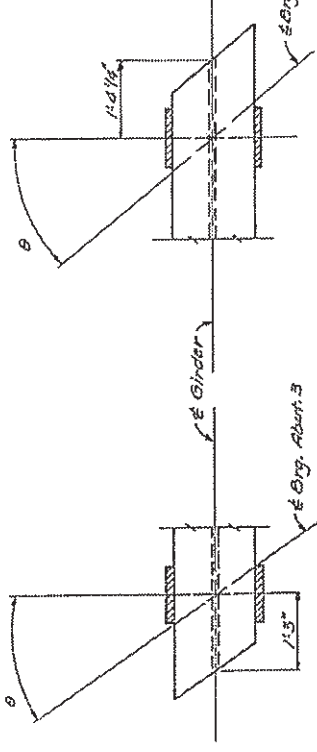
INTERIOR GIRDER MOMENT TABLE

IS	0.4 SPAN 1	PIER 3	0.5 SPAN 2	PIER 4	0.6 SPAN 3
Is (in ⁴)	19207.59	46228.60	18337.21	46228.60	79207.59
S ₃₃ (in ³)	937.67	1778.88	863.04	1778.88	937.67
DL (k-ft)	1.16	1.50	1.15	1.50	1.16
MDL (k-ft)	486.70	-7323.33	353.22	-7323.33	485.10
F ₃₃ DL (k-ft)	6.23	8.93	6.57	8.93	6.30
Ic (in ⁴)	38455.03	46,025.6	36,364.32	46,025.6	38455.03
S ₃₃ (in ³)	1189.00	1778.88	1094.38	1778.88	1189.00
SDL (k-ft)	0.36	0.36	0.36	0.36	0.36
MSDL (k-ft)	172.63	-3553.71	141.27	-3553.71	174.22
F ₃₃ SDL (k-ft)	1.75	2.60	1.75	2.60	1.75
Ic (in ⁴)	53423.75	46,025.6	50,216.16	46,025.6	53423.75
S ₃₃ (in ³)	1294.27	1778.88	1154.75	1778.88	1294.27
MLL (k-ft)	872.19	-800.52	823.44	-801.23	872.87
MIMP (k-ft)	204.22	-191.22	190.64	-181.20	200.72
M ₃ TOTAL (k-ft)	1074.41	-992.51	1074.08	-992.51	1084.57
F ₃₃ LL (k-ft)	9.39	6.62	10.78	6.62	9.63
F ₃₃ TOTAL (k-ft)	19.53	13.05	18.86	13.05	19.53
VR (k)	75.27	75.27	75.27	75.27	75.27

REACTION TABLE

	ABUT. 3	PIER 3	PIER 4	ABUT. 4
R DL (k)	49.24	171.41	171.41	45.60
R LL (k)	52.76	82.67	83.14	52.75
R IMP (k)	12.58	18.72	18.81	12.55
R TOTAL (k)	114.58	272.80	273.36	110.91

STRUCTURAL STEEL, GIRDERS 6-10
F.A. RTE. 408 SEC. 1-4B-1
ADAMS COUNTY
STA. 181+30.00 F.A. 408



FLANGE CUTTING DETAIL

AS REVISED

DESIGNED	J.R.H.
CHECKED	M.V.H.
DRAWN	S.S.B.
CHECKED	M.V.H.

GIRDER COORDINATES - TANGENT TO GIRDER AT STA. 181+30.00

GIRDER	ABUT. 3	ABUT. 4	SPLICE 6	SPLICE 7	PIER 3	PIER 4	ABUT. 4
6	-150.902	-4.011	-89.036	1.372	-60.009	0.204	14.097
7	-142.499	3.608	-79.281	1.132	-57.838	0.594	-31.841
8	-134.479	3.223	-71.406	0.914	-49.617	0.938	-23.614
9	-126.441	2.859	-63.341	0.714	-41.365	1.306	-15.364
10	-118.385	2.514	-55.084	0.544	-33.097	1.796	-7.099