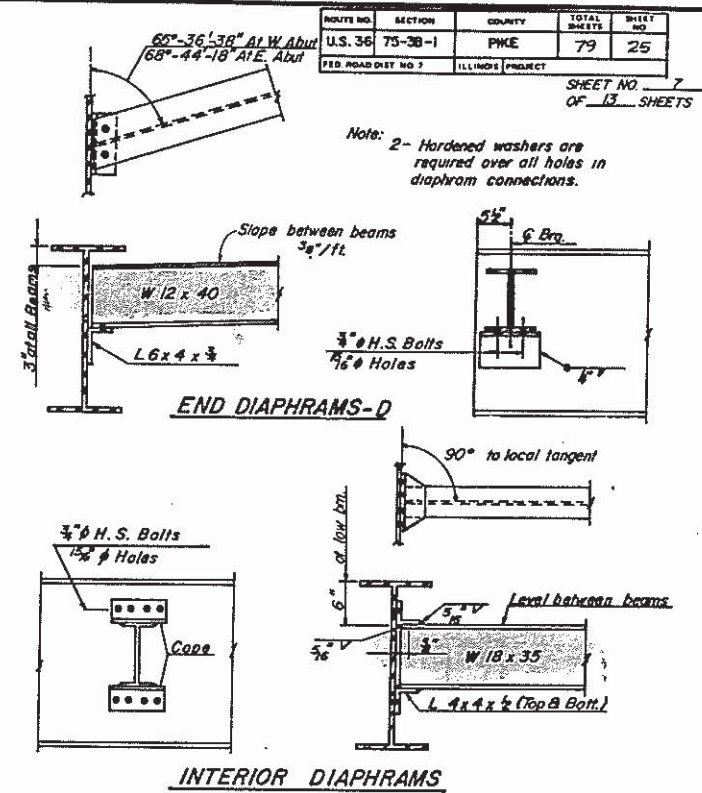
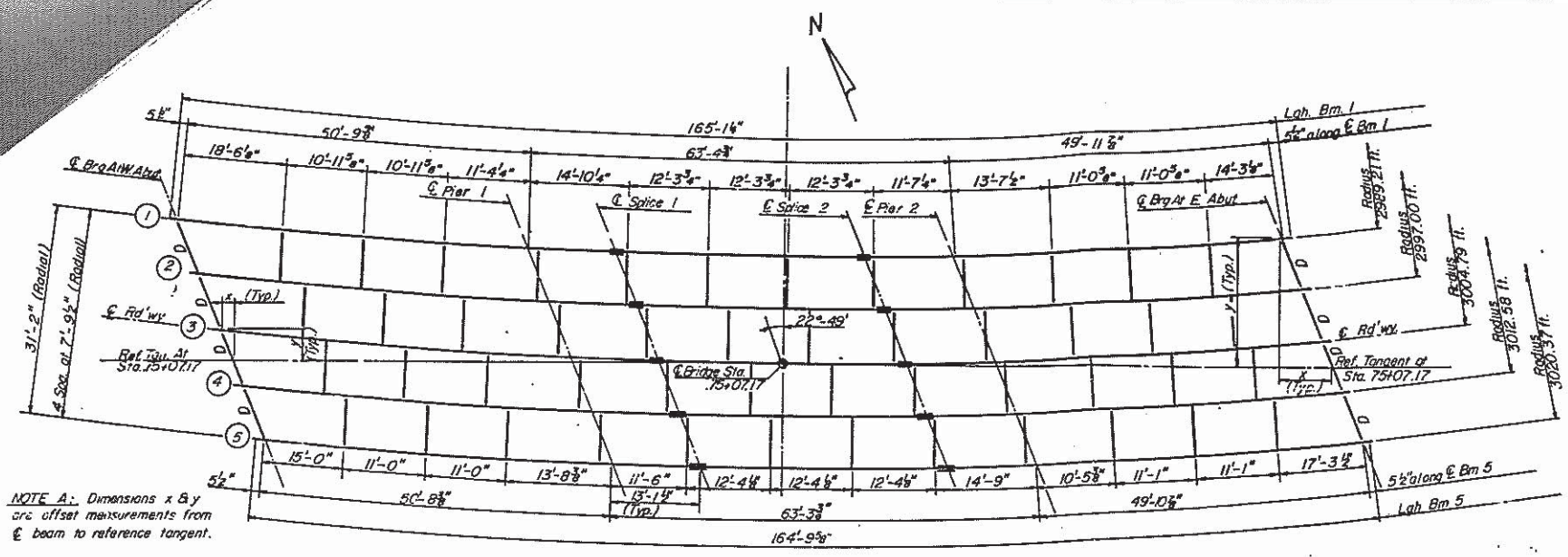
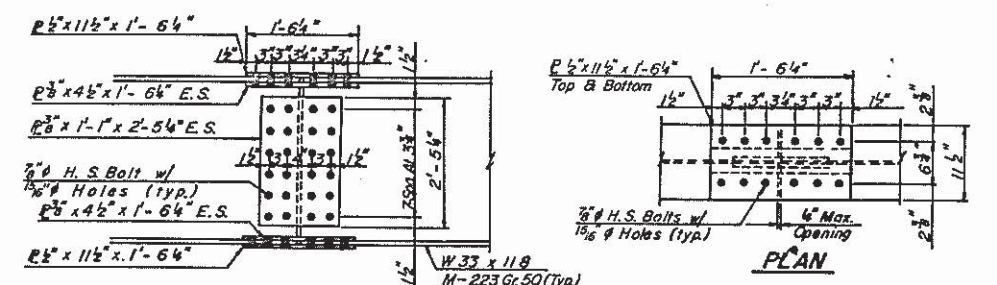
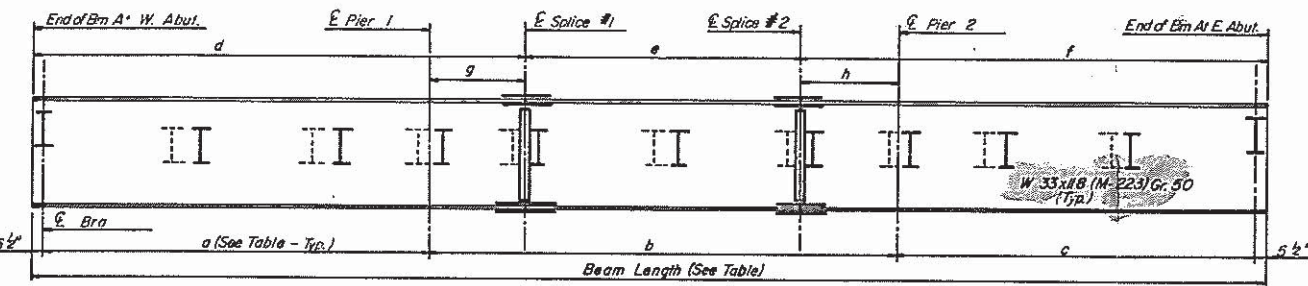


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
U.S. 36	75-3B-1	PIKE	79	25
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT			OF 13 SHEETS



All structural steel fabricators performing work on the main load carrying components of steel structures shall be certified under Category I (AISC) of the Quality Certification Program.



NOTE: 1. All beams W33 x 118 and splice plates shall be M-223 Gr. 50, & NTR.
2. NTR designates Notch Toughness Requirements

Beam No.	Radius	Measured along E beam								Total Length
		a	b	c	d	e	f	g	h	
1	2989.21'	50'-9 3/8"	63'-4 3/8"	49'-11 1/8"	64'-4 3/8"	37'-1 1/8"	63'-6 3/8"	13'-1 1/2"	13'-1 1/2"	165'-1 1/4"
2	2997.00'	50'-9 1/4"	63'-4 3/8"	49'-11 1/8"	64'-4 3/8"	37'-1 1/8"	63'-6 3/8"	13'-1 1/2"	13'-1 1/2"	165'-0 1/4"
3	3004.79'	50'-9"	63'-4"	49'-11 1/8"	64'-4"	37'-1"	63'-6 3/8"	13'-1 1/2"	13'-1 1/2"	164'-11 3/8"
4	3012.58'	50'-8 3/8"	63'-3 3/8"	49'-11 1/8"	64'-3 3/8"	37'-0 3/8"	63'-6 3/8"	13'-1 1/2"	13'-1 1/2"	164'-10 3/8"
5	3020.37'	50'-8 3/8"	63'-3 3/8"	49'-10 3/8"	64'-3 3/8"	37'-0 3/8"	63'-5 3/8"	13'-1 1/2"	13'-1 1/2"	164'-9 3/8"

	At E. Brg. W. Abut.		At E. Pier 1		At E. Splice #1		At E. Splice #2		At E. Pier 2		At E. Brg. E. Abut.	
	x	y	x	y	x	y	x	y	x	y	x	y
RQ	(K)	23.4										
R/L	(K)	39.8										
Imp.	(K)	11.3										
R (Total)	(K)	74.5										

	Abutts	Piers	
RQ	(K)	23.4	79.4
R/L	(K)	39.8	49.0
Imp.	(K)	11.3	13.5
R (Total)	(K)	74.5	141.9

	0.4 Sp. 1	Pier 1	0.5	
	or Sp. 3	or 2	Sp. 2	
Is	(in ⁴)	5900	5900	5900
So	(in ³)	359	359	359
Sh	(in ³)	16.3	16.3	16.3
Q	(K/ft)	1.237	1.237	1.237
MQ	(K)	219.7	412.4	215.5
ML	(K)	401.6	283.4	390.3
M (Imp)	(K)	114.1	77.6	103.7
Ms (M+I)	(K)	859.5	601.7	823.3
Mo	(K)	1402.9	138.3	1350.4
fsQ	(k.s.i.)	7.3	13.8	7.2
fs ³ (L+I)	(k.s.i.)	28.7	20.1	27.5
fw	(k.s.i.)	1.3	1.8	1.2
fs (Overload)	(k.s.i.)	36.0	33.9	34.7
fs Total	(k.s.i.)	46.8	44.1	45.1
fs + fw	(k.s.i.)	48.1	45.9	46.3

Location	Bm 1	Bm 2	Bm 3	Bm 4	Bm 5
E. Brg.-W. Abut.	525.12	525.40	525.67	525.95	526.23
E. Pier 1	525.07	525.35	525.63	525.91	526.19
E. Splice #1	525.07	525.35	525.63	525.91	526.19
E. Splice #2	525.07	525.36	525.64	525.92	526.20
E. Pier 2	525.08	525.36	525.65	525.93	526.21
E. Brg.-E. Abut.	525.14	525.42	525.71	526.00	526.28

SANDOVAL ENGINEERS, INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIKE COUNTY
F.A. RTE. 408
SECTION 75-3B-1
STATION 75+07.17

STRUCTURAL DETAILS

DESIGNED BY: [Signature]
DRAWN BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]

SCALE: [Blank]
DATE: 12/15/86
SHEET 25 OF 79 SHEETS