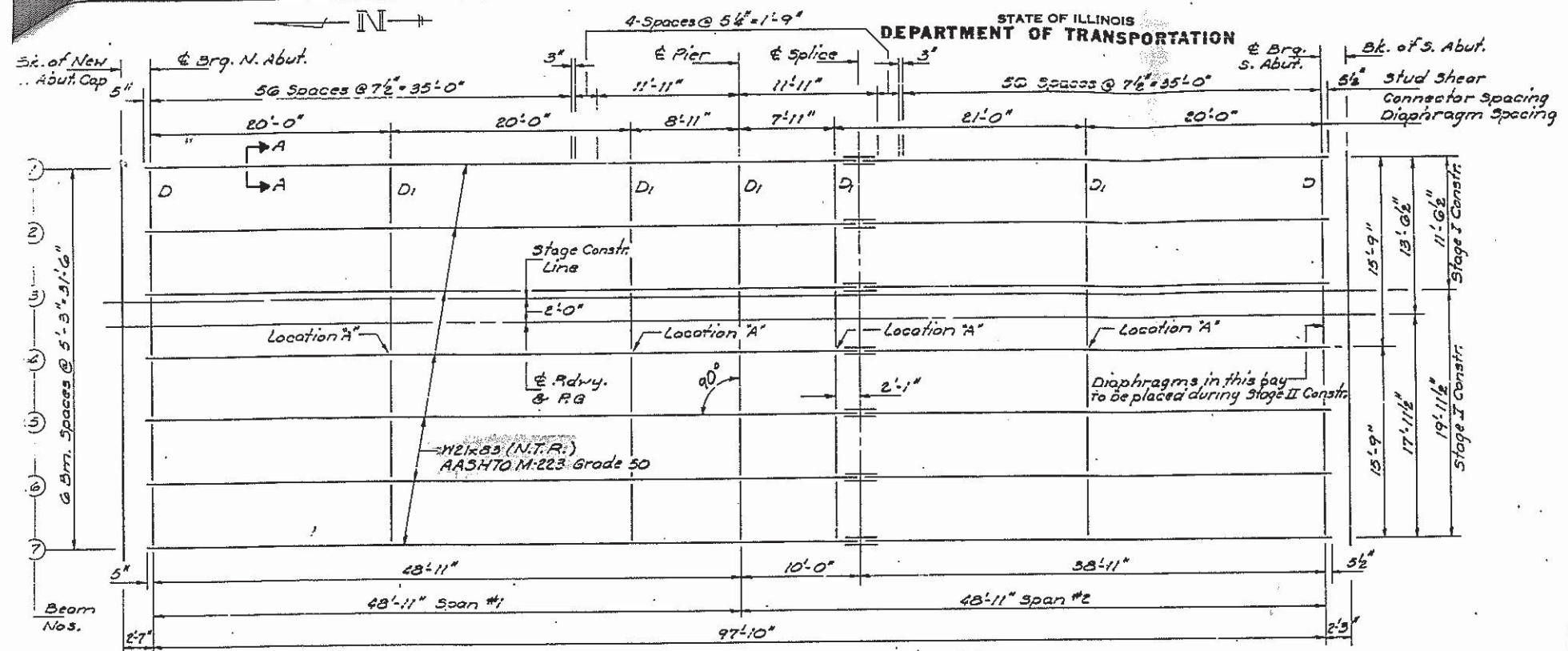


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8-30-80	116BR-I	SCOTT	32	24
80 SHEETS				



INTERIOR BEAM MOMENT TABLE

	4 Sp. #1 or 6 Sp. #2	Pier
I_s (in ⁴)	1830	1830
I_c (in ⁴)	5799	
S_s (in ³)	171	171
S_c (in ³)	276.8	
M (K/ft)	0.607	0.921
M_E (K)	102	247.1
M_S (K/ft)	0.314	
M_{S+E} (K)	64.3	
M_L (K)	250.1	117.6
M_{Imp} (K)	71.8	33.8
$S_3(E+I)$ (K)	556.5	252.3
M_a (K)	913.9	649.2
I_s (non-comp) (K/s.i.)	7.16	17.34
I_s (comp) (K/s.i.)	2.79	
$I_s S_3(E+I)$ (K/s.i.)	23.24	17.71
I_s (Overload) (K/s.i.)	33.19	35.05
I_s (Total) (K/s.i.)	45.17	45.56
V_R (K)	57.3	

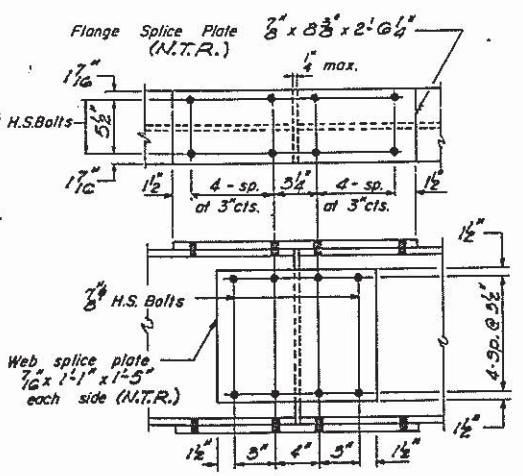
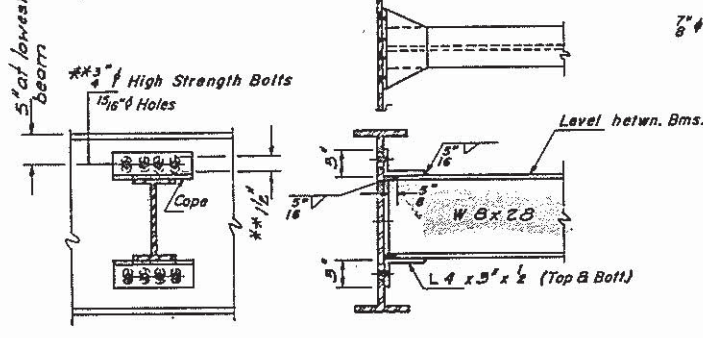
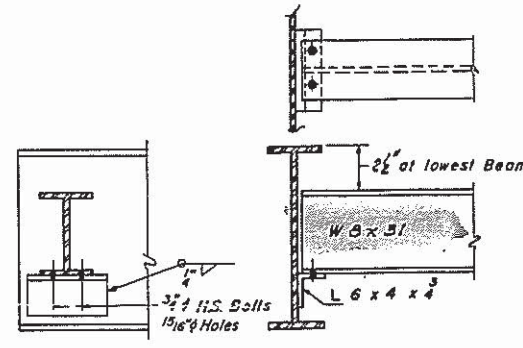
*** INTERIOR BM. REACTION TABLE**

	Abut.	Pier
R_E (K)	17.6	55.2
R_L (K)	27.0	31.9
S_{Imp} (K)	7.8	9.2
R Total (K)	52.4	96.3

I_s and S_3 are the moment of inertia and section modulus of the steel section used in computing f_s (Total & Overload).
 I_c and S_c are the moment of inertia and section modulus of the composite section used in computing f_s (Total & Overload).
 V_R is the maximum Live Load + Impact shear range in span.
 M_a (Applied Moment) = $1.3[M_E + M_S + S_3(M_E + I)]$.
 f_s (Overload) is the sum of the stresses due to $M_E + M_S + S_3(M_E + I)$.
 f_s (Total) is the sum of the stresses due to $1.3[M_E + M_S + S_3(M_E + I)]$.
 * Service Load Values.

FRAMING PLAN
(N.T.R. denotes Notch Toughness Requirements)

**Use $1\frac{1}{2}$ x $1\frac{1}{2}$ slotted holes in Bm. #4, Location 'A' only. Provide $\frac{5}{16}$ structural plate washers for slotted holes. Bolts shall be finger-tightened prior to the deck pour for Stage II construction and then be fully tightened after completion of the deck pour for Stage II construction.



***** TOP OF FLANGE ELEVATION**

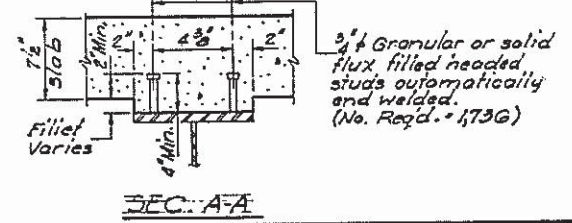
	#1	#2	#3	#4	#5	#6	#7
Brig. N. Abut.	474.75	474.84	474.92	474.94	474.85	474.77	474.66
Pier	474.65	474.74	474.83	474.84	474.76	474.67	474.56
Splice	474.63	474.72	474.80	474.82	474.75	474.65	474.54
Brig. S. Abut.	474.73	474.82	474.91	474.92	474.84	474.75	474.64

***For fabrication only

DESIGNED Victor Veltz
 CHECKED Y. Esmaili
 DRAWN J. SCHNELLER
 CHECKED V.V.

APPROVED
 April 2, 2014
 J. J. Kasper
 J. J. Kasper
 J. J. Kasper

I-2-D 8-30-80



SPlice
All splice plate material shall be AASHTO M-223 Grade 50.

STRUCTURAL STEEL
 F.A. RTE. 562 SEC. 116BR-I
 SCOTT COUNTY
 STA. 275+02.30