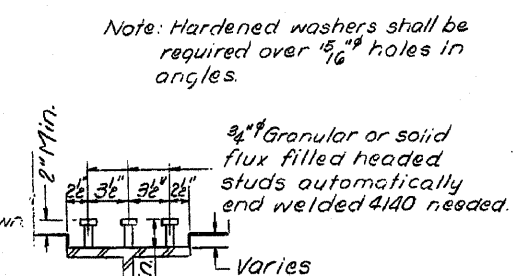
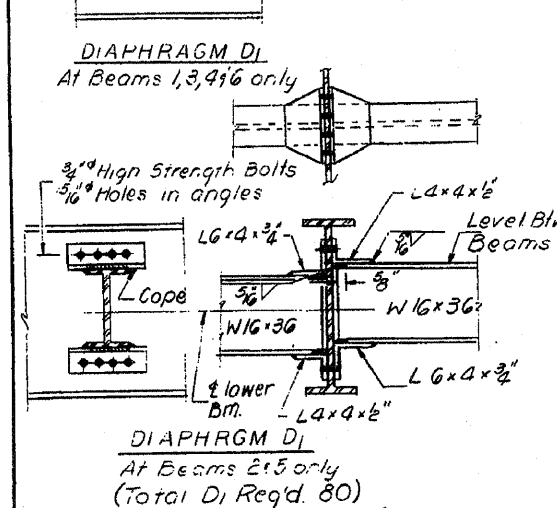
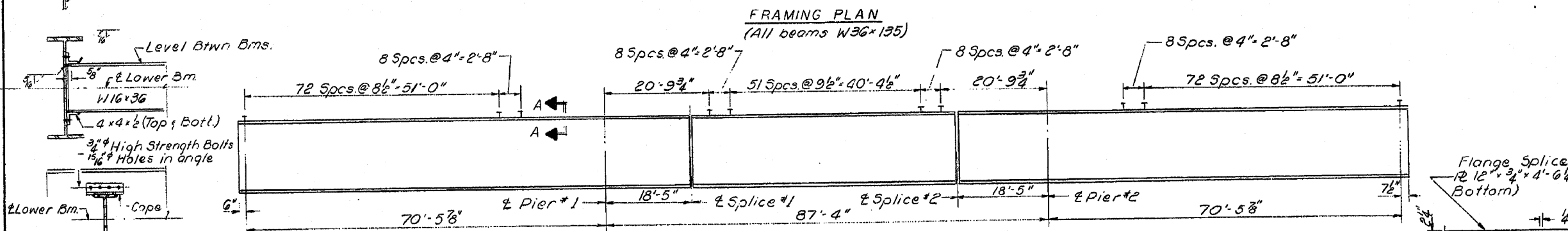
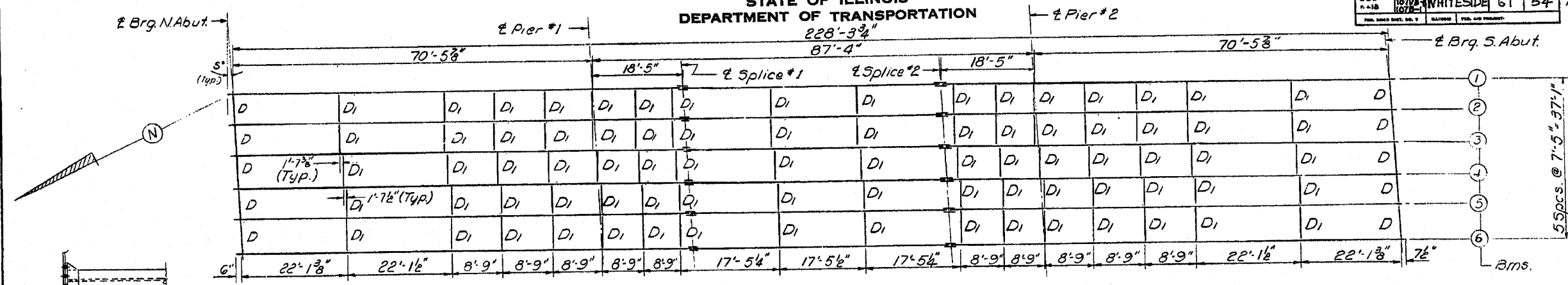


FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
107	107B-1	WHITESIDE 61	54	13 SHEETS



INTERIOR BEAM MOMENT TABLE

	4Sp. for 3	Piers	5 Span 2
Is (in ⁴)	7800	7800	7800
Ic (in ⁴)	20632		20632
Ss (in ³)	439	439	439
Sc (in ³)	644		644
Zs (in ³)	509	509	509
Zc (in ³)	0.872	1.262	0.872
S ₂ (in ²)	0.390		0.390
M ₂ (IK)	300	742	282
M ₃ (IK)	156		180
M ₄ (IK)	556	342	605
M Imp. (IK)	142	84	143
M ₄ + Imp. (IK)	698	426	748
M _{max} (IK)	2105	1888	2221
M _u (IK)	3722	2121	3722
VR (K)	54.21		45.86

INTERIOR BEAM REACTION TABLE

	Abuts.	Piers
R ₂ (K)	33.95	110.11
R ₄ (K)	33.54	53.88
Imp. (K)	10.11	18.21
R _{total} (K)	83.6	177.2

M_{max} is the maximum moment induced by the maximum design load = 1.3(M₁₂ + M₃₂ + M₄₂ + M₅₂)
M_u is the maximum moment capacity.

TOP OF BEAM ELEVATIONS (12 Req'd)

	Bm #1	Bm #2	Bm #3	Bm #4	Bm #5	Bm #6
± Brg. N. Abut.	603.59	603.74	603.86	603.85	603.74	603.59
± Pier #1	603.46	603.60	603.72	603.71	603.60	603.45
± Splice #1	603.42	603.56	603.68	603.68	603.56	603.41
± Splice #2	603.31	603.46	603.58	603.58	603.46	603.31
± Pier #2	603.28	603.43	603.54	603.54	603.43	603.27
± Brg. S. Abut.	603.14	603.28	603.40	603.40	603.28	603.13

Is and Ss are the moment of inertia and Section Modulus of the steel section. Zs is the plastic section modulus of the steel section. Ic and Sc are the Moment of Inertia and Section Modulus of the Composite Section. VR is the Maximum $\frac{1}{4}$ Imp. Shear Range in span used to determine Shear Connector Spacing.

STRUCTURAL STEEL
F.A. RT. 18 SEC. 107 B-1
WHITESIDE COUNTY
STA. 738+23.00

DESIGNED: T. J. Hensch
CHECKED: [Signature]
DRAWN: Mercado
APPROVED: [Signature]