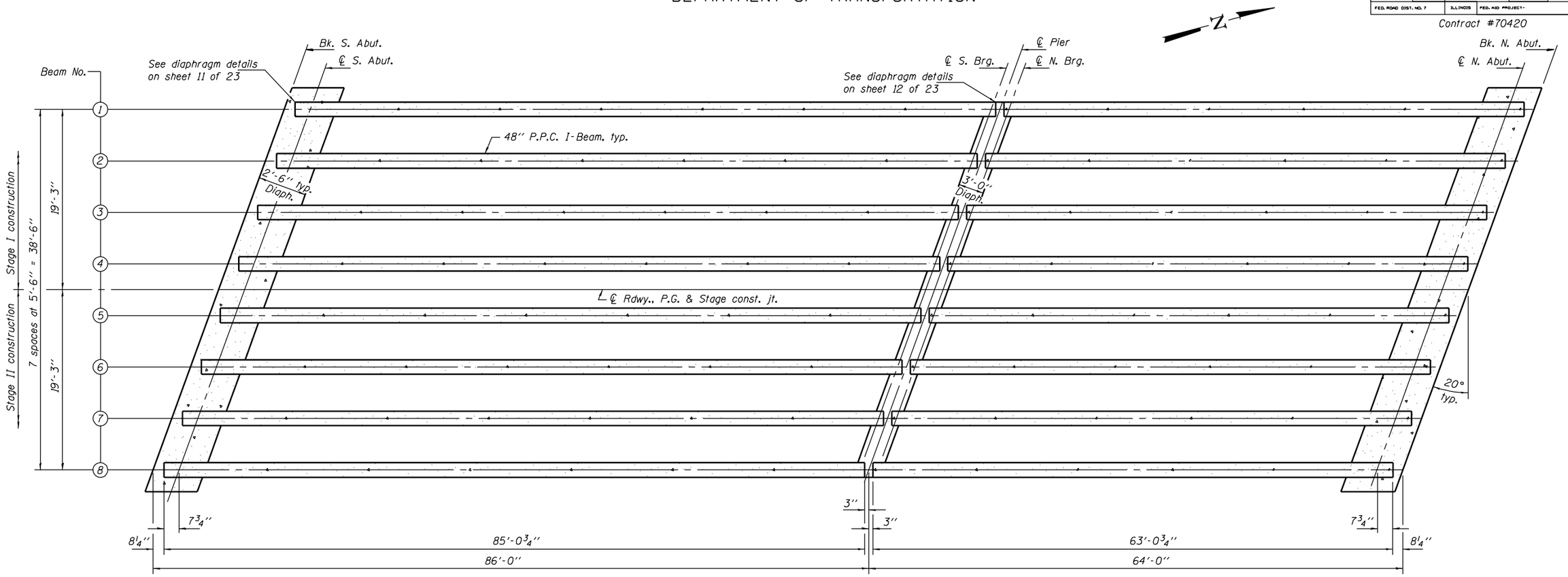
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 332	47BR-2	VERMILION	68	32
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 13
23 SHEETS

Contract #70420



FRAMING PLAN

INTERIOR BEAM MOMENT TABLE				
		0.4 Sp. 1	Pier	0.6 Sp. 2
Strand Pattern				
I	(in^4)	144117	144117	144117
I'	(in^4)	366626	———	366626
S_b	(in^3)	6834	6834	6834
S_b'	(in^3)	10938	———	10938
S_t	(in^3)	5355	5355	5355
S_t'	(in^3)	25319	———	25319
DC1	(k/')	1.147	1.147	1.147
M DC1	('k)	1027.9	———	563.1
DC2	(k/')	0.113	0.113	0.113
M DC2	('k)	73.3	59.8	29.4
DW	(k/')	0.275	0.275	0.275
M DW	('k)	178.4	145.4	71.4
M℄ + Imp	('k)	1001.4	601.5	686.9

I — Non-composite moment of inertia of beam section.
I' — Composite moment of inertia of beam section.
S_b — Non-composite section modulus for the bottom fiber of the prestressed beam.
S_b' — Composite section modulus for the bottom fiber of the prestressed beam.
S_t — Non-composite section modulus for the top fiber of the prestressed beam.
S_t' — Composite section modulus for the top fiber of the prestressed beam.
DC1 — Un-factored non-composite dead load.
M DC1 — Un-factored moment due to non composite dead load. It is conservatively calculated at 0.5 of the span.
DC2 — Un-factored long term composite (superimposed excluding future wearing surface) dead load.
M DC2 — Un-factored moment due to long term composite (superimposed excluding future wearing surface) dead load.
DW — Un-factored long term composite (superimposed future wearing surface only) dead load.
M DW — Un-factored moment due to long term composite (superimposed future wearing surface only) dead load.
M℄ + Imp — Un-factored live load moment plus dynamic load allowance (impact).

INTERIOR BEAM REACTION TABLE - HL93 LOADING					
			S. Abut.	Pier	N. Abut.
				Span 1 / Span 2	
	R DC1	(k)	48.6	53.4 / 40.7	35.9
*	R DC2	(k)	4.1	5.0 / 5.0	2.6
*	R DW	(k)	9.9	12.2 / 12.2	6.3
*	R℄ + Imp	(k)	73.4	49.5 / 49.5	66.4
	R (Total)	(k)	136.0	120.1 / 107.4	111.2

* The total R DC2, R DW and R℄ + Imp are assumed to be distributed evenly to each bearing line at a pier regardless of the span ratios.

DESIGNED	D. P. Narielwala
CHECKED	S. M. Ryan
DRAWN	h.t. duong
CHECKED	DPN/SMR

August 4, 2006
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

FRAMING PLAN
F.A.P. RTE. 332 - SEC. 47BR-2
VERMILION COUNTY
STATION 2522+72.00
STRUCTURE NO. 092-0206