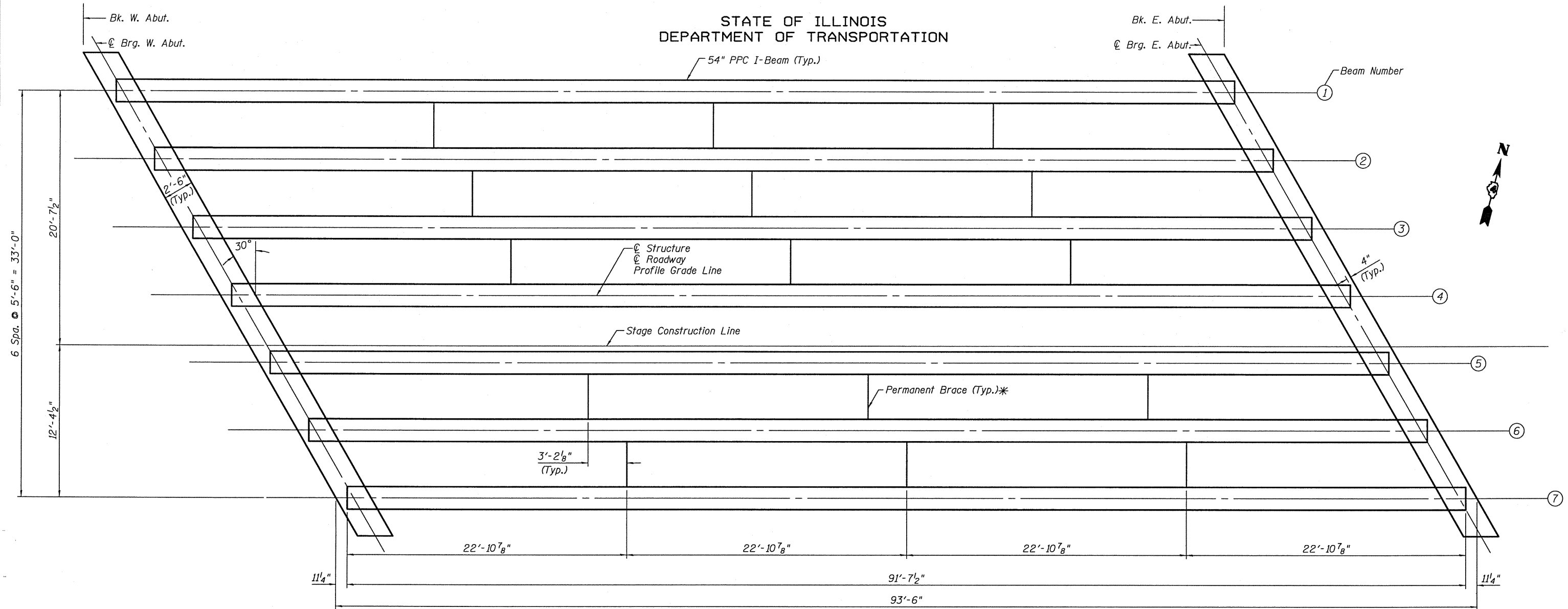


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



FRAMING PLAN

*Cost included in Furnishing and Erecting
Precast Prestressed I-Beams, 54 In.
See Sheet 12 of 22 for details.

INTERIOR BEAM MOMENT TABLE		
		0.5 Sp.
I	(in ⁴)	213,715
I'	(in ⁴)	478,017
S_b	(in ³)	8,559
S_b'	(in ³)	12,506
S_t	(in ³)	7,362
S_t'	(in ³)	30,293
$DC1$	(k/')	1.27
M_{DC1}	(k)	1300.9
$DC2$	(k/')	0.13
M_{DC2}	(k)	132.3
DW	(k/')	0.26
M_{DW}	(k)	263.7
$M_L + IM$	(k)	1,297.3

INTERIOR BEAM REACTION TABLE		
		Abut.
R_{DC1}	(k)	57.3
R_{DC2}	(k)	5.9
R_{DW}	(k)	11.8
$R_L + IM$	(k)	81.22
R_{Total}	(k)	156.2

- I : Non-composite moment of inertia of beam section (in.⁴).
- I' : Composite moment of inertia of beam section (in.⁴).
- S_b : Non-composite section modulus for the bottom fiber of the prestressed beam (in.³).
- S_b' : Composite section modulus for the bottom fiber of the prestressed beam (in.³).
- S_t : Non-composite section modulus for the top fiber of the prestressed beam (in.³).
- S_t' : Composite section modulus for the top fiber of the prestressed beam (in.³).
- $DC1$: Un-factored non-composite dead load (kips/ft.).
- M_{DC1} : Un-factored moment due to non-composite dead load (kip-ft.).
- $DC2$: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
- M_{DC2} : Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- DW : Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
- M_{DW} : Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- $M_L + IM$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

DESIGNED	RRD
CHECKED	AJS
DRAWN	KAS
CHECKED	AJS

FRAMING PLAN
S.N. 090-0177
STRAND ASSOCIATES, INC.

SHEET NO. 10	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	693	(119 BR-2)BR	TAZEWELL	65	27
22 SHEETS	CONTRACT NO. 68660				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		