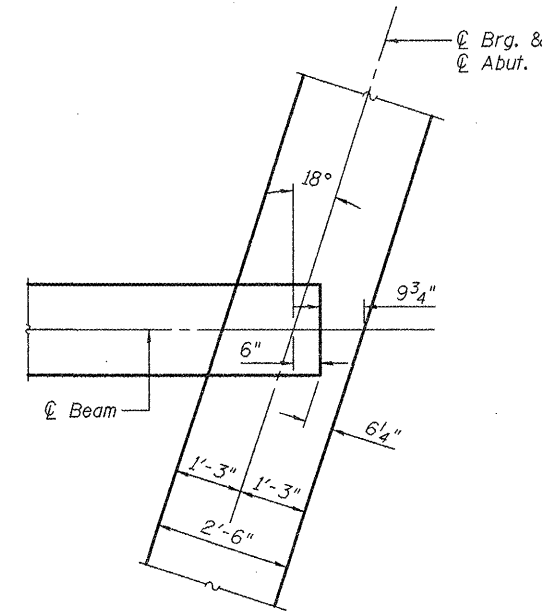


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

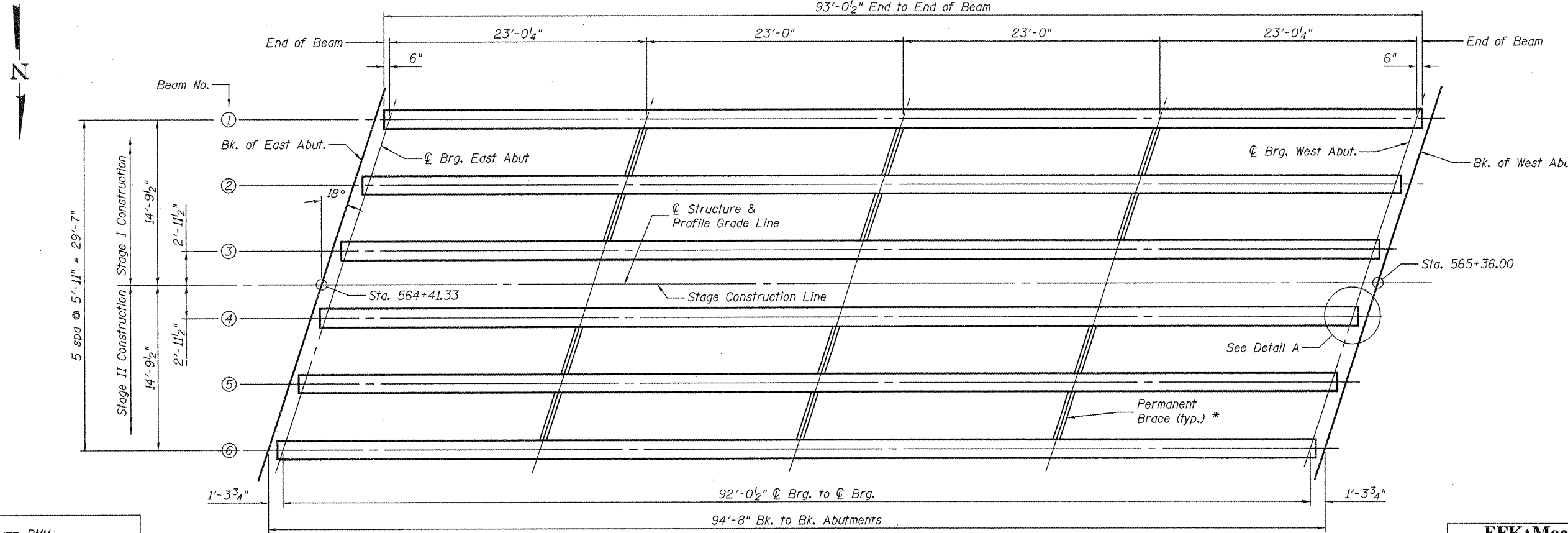
INTERIOR BEAM MOMENT TABLE		
0.5 Sp. 1		
I	(in ⁴)	213715
I'	(in ⁴)	490525
S _b	(in ³)	8559
S _b '	(in ³)	12628
S _t	(in ³)	7362
S _t '	(in ³)	32364
DC1	(k/ft)	1.26
M _{DC1}	(k)	1338.3
DC2	(k/ft)	0.15
M _{DC2}	(k)	158.8
DW	(k/ft)	0.267
M _{DW}	(k)	282.7
M _{L + IM}	(k)	1387.0

INTERIOR BEAM REACTION TABLE		
Abutment		
R _{DC1}	(k)	58.0
R _{DC2}	(k)	6.9
R _{DW}	(k)	12.3
R _{L + IM}	(k)	81.3
R _{Total}	(k)	158.5

I: Non-composite moment of inertia of beam section (in⁴).
 I': Composite moment of inertia of beam section (in⁴).
 S_b: Non-composite section modulus for the bottom fiber of the prestressed beam (in³).
 S_b': Composite section modulus for the bottom fiber of the prestressed beam (in³).
 S_t: Non-composite section modulus for the top fiber of the prestressed beam (in³).
 S_t': Composite section modulus for the top fiber of the prestressed beam (in³).
 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.).



DETAIL A



FRAMING PLAN

* Cost included in Furnishing and Erecting Precast Prestressed I-Beams, 54 in.

FRAMING PLAN
STRUCTURE NO. 055-0079

DESIGNED	PMM
CHECKED	CTW
DRAWN	SEC
CHECKED	CTW

E.F.K. Moen, LLC Civil Engineering Design		331 Salem Place Suite 225 Fairview Heights, IL 62208	Phone 618-206-4250 Fax 618-206-4253
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
685	37BR-1	MCDONOUGH	138
SHEET NO. 14		SHEET NO. 69	
21 SHEETS		CONTRACT NO. 68352	
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT