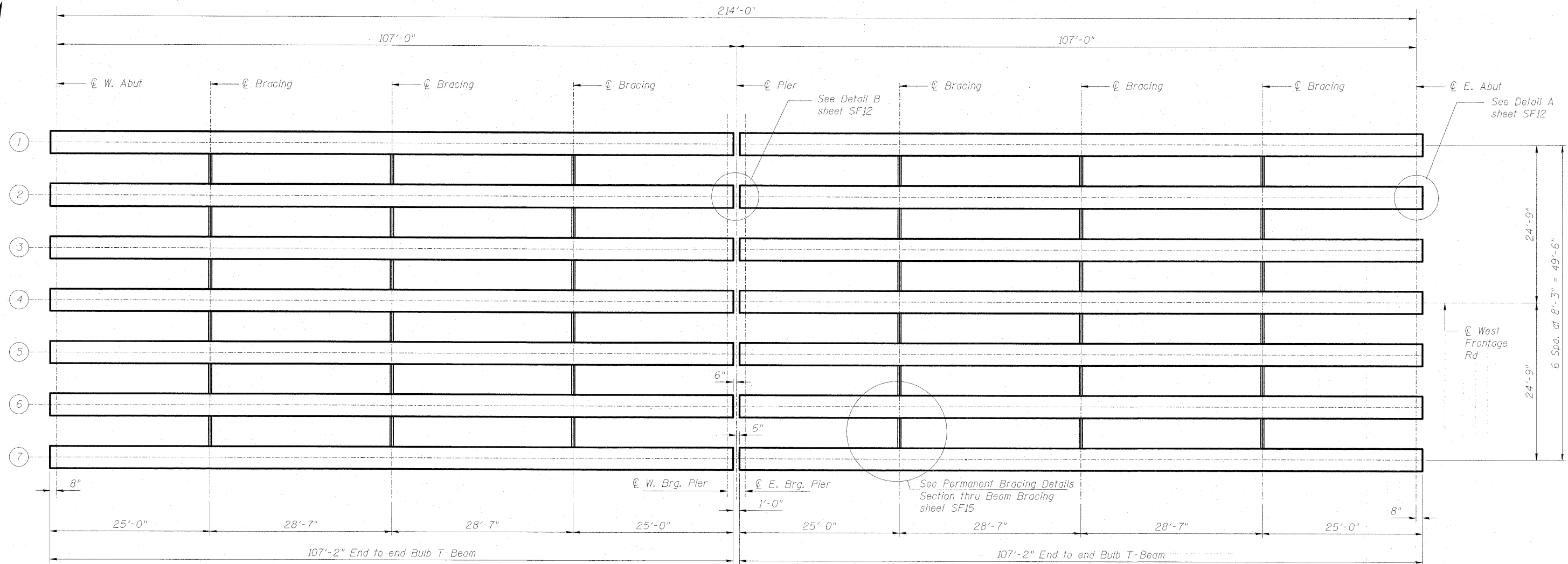


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



FRAMING PLAN

		0.4 Sp. 1 or 0.6 Sp 2	Pier 1
I	(in ⁴)	392638	392638
I'	(in ⁴)	794649	
S_b	(in ³)	12224	12224
S_b'	(in ³)	16651	16651
S_t	(in ³)	12715	12715
S_t'	(in ³)	52011	52011
$DC1$	(k/')	1.611	1.611
M_{DC1}	('k)	2214	
$DC2$	(k/')	0.148	0.148
M_{DC2}	('k)	119.8	210.2
DW	('k)	0.385	0.385
M_{DW}	('k)	311.4	546.8
$M_L + IM$	('k)	1755.8	1784.8

		w. Abut. or E. Abut.	Pier 1
R_{DC1}	(k)	86.2	172.4
R_{DC2}	(k)	6.0	19.8
R_{DW}	(k)	15.5	51.5
$R_L + IM$	(k)	77.3	162.6
R_{Total}	(k)	185.0	406.3

* The total R_{DC2} , R_{DW} and $R_L + IM$ are assumed to be distributed evenly to each bearing line at a pier regardless of the span ratios. The bearing design at a pier is based on the maximum reactions of either span.

- 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.).

DESIGNED	MJL
CHECKED	PMH
DRAWN	RJ
CHECKED	BKB

**FRAMING PLAN
STRUCTURE NO. 099-0347**



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SHEET NO. SF13	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	92-2HB-2B-1	WILL	756	515
SF24 SHEETS	SN 099-0347		CONTRACT NO. 60F12		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					