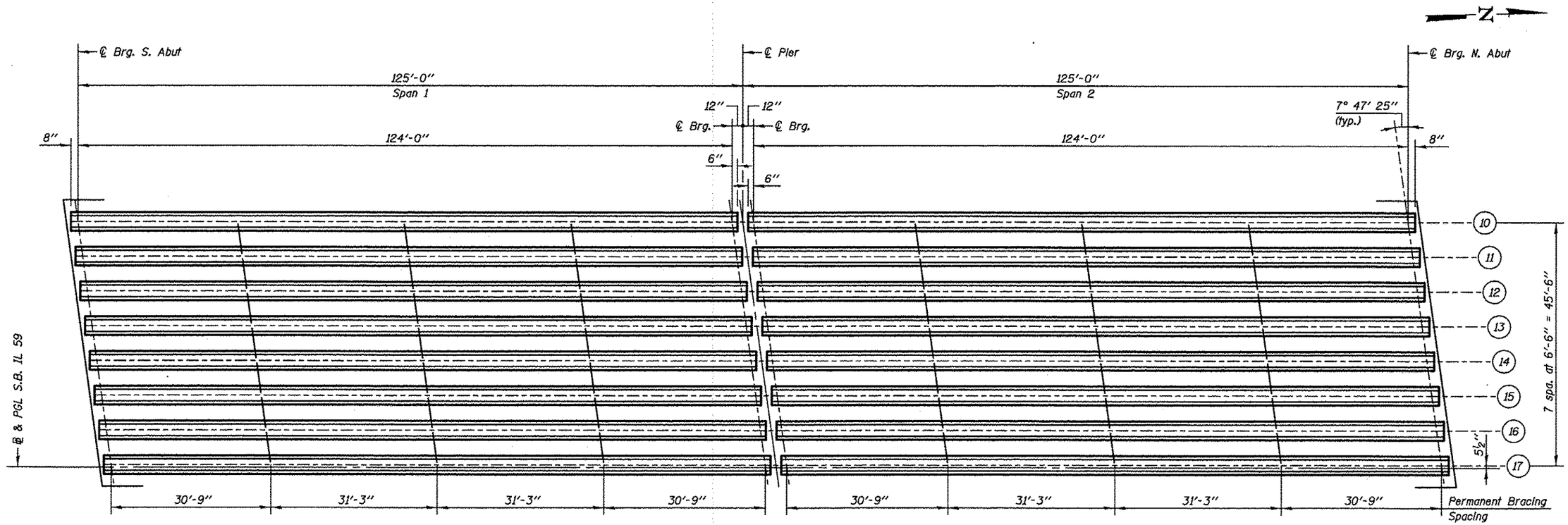

FRAMING PLAN
(SB Bridge)

INTERIOR BEAM MOMENT TABLE			
		0.4 Span 1 0.6 Span 2	Pier
I	(in^4)	545894	-
I'	(in^4)	977244	977244
S_b	(in^3)	14915	-
S_b'	(in^3)	19236	19236
S_t	(in^3)	15421	-
S_t'	(in^3)	46104	46104
$DC1$	(k/')	1.45	1.45
M_{DC1}	('k)	2717	-
$DC2$	(k/')	0.21	0.21
M_{DC2}	('k)	235	413
DW	(k/')	0.29	0.29
M_{DW}	('k)	317	556
M_{L+IM}	('k)	1797	1703

EXTERIOR BEAM 17 MOMENT TABLE			
		0.4 Span 1 0.6 Span 2	Pier
I	(in^4)	545894	-
I'	(in^4)	1002942	1002942
S_b	(in^3)	14915	-
S_b'	(in^3)	19419	19419
S_t	(in^3)	15421	-
S_t'	(in^3)	49277	49277
$DC1$	(k/')	1.51	1.51
M_{DC1}	('k)	2834	-
$DC2$	(k/')	0.21	0.21
M_{DC2}	('k)	235	413
DW	(k/')	0.29	0.29
M_{DW}	('k)	317	556
M_{L+IM}	('k)	1870	1772

INTERIOR BEAM REACTION TABLE			
		Abutment	Pier
R_{DC1}	(k)	90.6	181.2
* R_{DC2}	(k)	10.0	33.4
* R_{DW}	(k)	13.5	44.8
* R_{L+IM}	(k)	89.0	179.8
R_{Total}	(k)	203.1	439.2

EXTERIOR BEAM 17 REACTION TABLE			
		Abutment	Pier
R_{DC1}	(k)	94.5	189.0
* R_{DC2}	(k)	10.0	33.4
* R_{DW}	(k)	13.5	44.8
* R_{L+IM}	(k)	75.1	153.1
R_{Total}	(k)	193.1	420.3

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.).

* At continuous piers, reactions from composite loads are assumed to be equally distributed to each bearing line.

KNIGHT
Engineers & Architects

SCALE - NONE	DESIGNED - WPM	REVISED	
	CHECKED - TB	REVISED	
	DRAWN - TB	REVISED	
DATE - 10/15/2012	CHECKED - WPM	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN (SB)
S.N. 022-2029 (SB) TOLLWAY B.N. 826
S.N. 022-2030 (NB) TOLLWAY B.N. 825
SHEET NO. SA-40 OF 63 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	(112 & 113) WRS-5	DUPAGE	963	624
		CONTRACT NO. 60131		
	ILLINOIS FED. AID PROJECT			