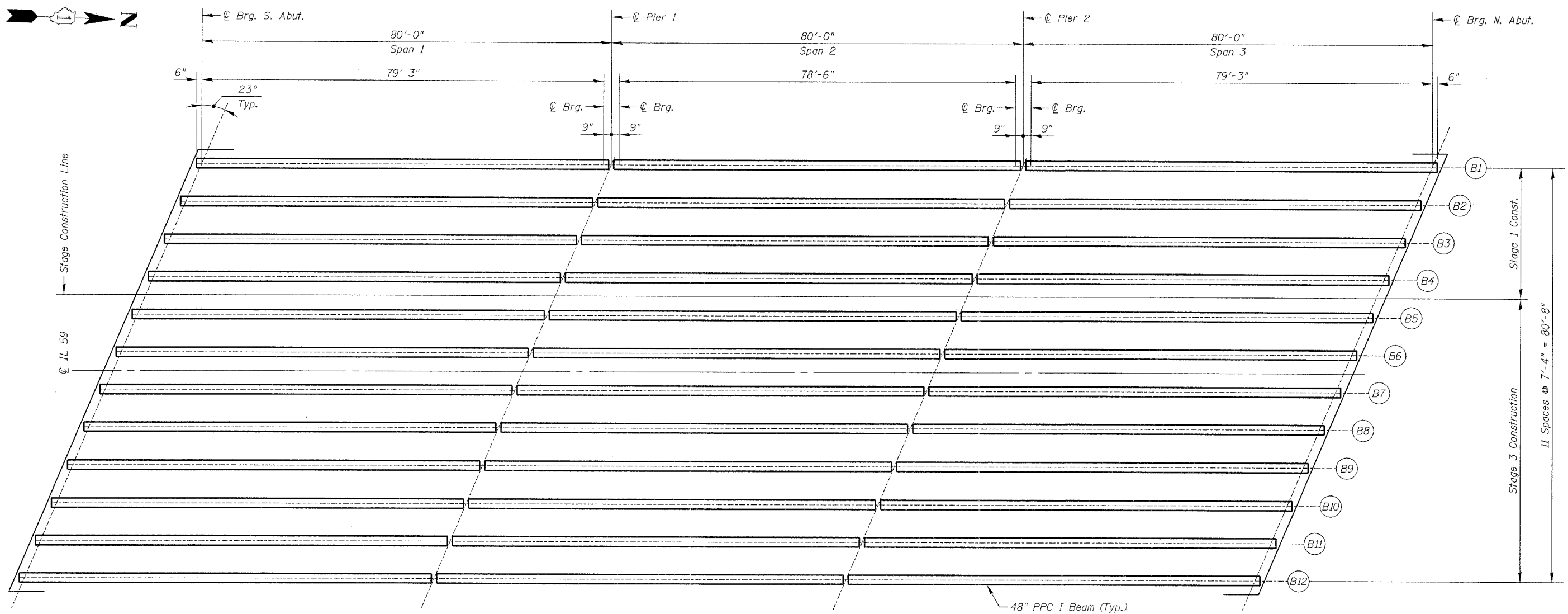


FAP RFE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
338	114 BY-R-1	WILL	139	78
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FRAMING PLAN

BEAM MOMENT TABLE

		0.4 S1 0.6 S3	Pier 1 or 2	0.5 S2
I	(in ⁴)	144117		144117
I'	(in ⁴)	397956		397956
Sb	(in ³)	6834		6834
Sb'	(in ³)	11216		11216
St	(in ³)	5355		5355
St'	(in ³)	31786		31786
Q	(k/')	1.320		1.320
M _Q	(k)	1056		1056
s _Q	(k/')	0.57	0.57	0.57
Ms _Q	(k)	293	361	95
M _L	(k)	617	490	506
M (Imp)	(k)	151	120	124

INTERIOR BEAM REACTION TABLE

		Abut.	Pier 1 Span 1 Pier 2 Span 3	Pier 1 Span 2 Pier 2 Span 2
R _Q	(k)	52.8	52.8	52.8
Rs _Q	(k)	18.3	25.0	25.0
R _L	(k)	41.0	29.2	29.2
Imp.	(k)	10.0	7.2	7.2
R (Total)	(k)	122.1	114.2	114.2

I and *I'* are the moment of inertia of the beam section.

Sb and *Sb'* are the non-composite and composite section modulus for the bottom fiber of the prestressed beam.

St and *St'* are the non-composite and composite section modulus for the top fiber of the prestressed beam.

M_Q is the moment due to the dead loads on the non-composite prestressed beam. It is conservatively calculated at 0.5 of the span.

M_{sQ} is the moment due to dead loads on the composite section.

M_L is the moment due to live load on the composite section.

M (Imp) is the moment due to live load impact on the composite section.

Notes:
Work this DWG. with DWGS S-20 & S-21.

DWG. S-19 of 34

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION FRAMING PLAN DETAILS ILLINOIS ROUTE 59 OVER DuPAGE RIVER FAP ROUTE 338 SECTION 114 BY-R-1 WILL COUNTY STATION 3209+85.00 STRUCTURE NUMBER 099-0339
NAME	DATE	
		SCALE: NONE DATE: 08/17/07
		DESIGNED BY: SB CHECKED BY: WPM
		DRAWN BY: TL CHECKED BY: SB

File: L:\16632\01\Cad\1\Sheets\Roadway_Structures\Bridges\1663201-50339-BM01.dgn