



**FRAMING PLAN**

	0.4 Sp. #1 0.6 Sp. #2	Pier
$I$	(in <sup>4</sup> ) 48,648	-
$I'$	(in <sup>4</sup> ) 169,118	-
$S_b$	(in <sup>3</sup> ) 3165	-
$S_b'$	(in <sup>3</sup> ) 5838	-
$S_t$	(in <sup>3</sup> ) 2358	-
$S_t'$	(in <sup>3</sup> ) 24,057	-
$\bar{Q}$	(k/')	1.005
$M \bar{Q}$	(k)	418
$s \bar{Q}$	(k/')	0.450
$M s \bar{Q}$	(k)	105
$M \bar{L}$	(k)	367
$M (Imp)$	(k)	99

	Abut.	Pier Span 1 Pier Span 2
$R \bar{Q}$	(k) 29.0	29.0
$R s \bar{Q}$	(k) 9.8	16.2
$R \bar{L}$	(k) 34.6	21.6
$Imp.$	(k) 9.3	5.8
$R (Total)$	(k) 82.7	72.6

$I$  and  $I'$  are the moment of inertia and composite moment of inertia of the beam section.  
 $S_b$  and  $S_b'$  are the non-composite and composite section modulus for the bottom fiber of the prestressed beam.  
 $S_t$  and  $S_t'$  are the non-composite and composite section modulus for the top fiber of the prestressed beam.

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<p>ILLINOIS DEPARTMENT OF TRANSPORTATION</p> <p>FRAMING PLAN AND BEAM MOMENT AND REACTION TABLE</p> <p>IL-75 OVER ROCK RUN CREEK FAP RTE 505 - SECTION 111B STEPHENSON COUNTY STATION 10705+38.61 STRUCTURE NO. 089-0084</p>
	<p>DATE: 3/03/2009</p> <p>DRAWN BY JMT CHECKED BY WJV</p>