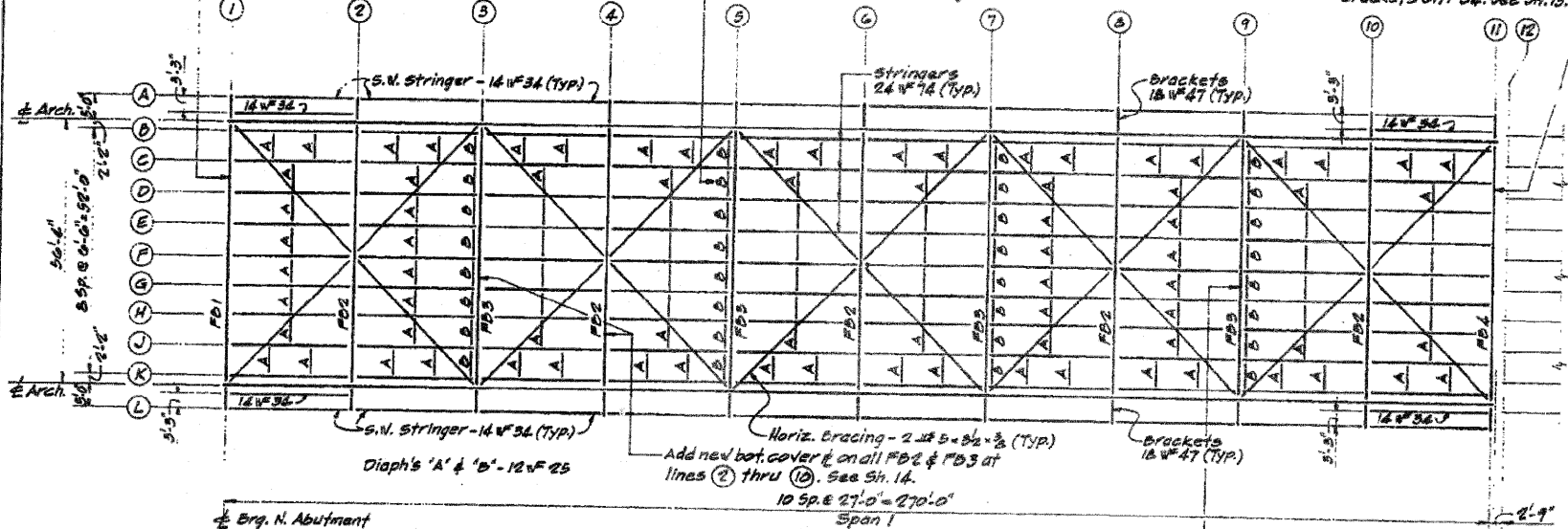


\* Remove all exist. exp. device brackets on FB1. See Sh. 13.

\* Remove all exist. diaphragms 'B' of lines 3, 5, 7, 9 and replace with new diaphragms. See Sh. 14.

\* Remove all exist. exp. device brackets on FB4. See Sh. 13.



**INTERIOR GIRDER MOMENT TABLE**

	Pier 2-3	Pier 3-4	Pier 4
I <sub>s</sub> (IN <sup>4</sup> )	23000	45200	25000
I <sub>c</sub> (IN <sup>4</sup> )	52200	52200	52200
S <sub>s</sub> (IN <sup>3</sup> )	885	1500	885
S <sub>c</sub> (IN <sup>3</sup> )	1040	1040	1040
D.L. (K)	0.85	1.07	0.85
M <sub>max</sub> (K)	415	1206	415
F <sub>max</sub> (K)	5.85	9.65	5.65
S.D.L. (K)	0.10	0.10	0.10
M <sub>max</sub> (K)	85	65	65
F <sub>max</sub> (K)	0.75	0.75	0.75
M.L.L. (K)	109	682	754
M <sub>max</sub> (K)	161	147	155
Total (K)	270	829	896
S <sub>s</sub> Total (K)	3.06	6.65	9.47
VR (K)	16.26	16.28	15.85
VR (K)	50.3	46.9	46.9

Sta. 12 of 25

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
599	17(D) BR	ROCK ISLAND	24	25

**FLOOR BEAM MAX. MOMENTS (F.L.K), SHEAR (K) & STRESSES (K/IN<sup>2</sup>)**

MARK	MOMENT	STRESS	SHEAR	STRESS
FB1 & FB4	217.9	15.9	182	5.78
FB2 & FB3	302.6	18.8	226	9.58

INCLUDES D.L. (STEEL+CONCRETE), L.L. & IMPACT.

Maximum Moment, Shear & Stresses for 27'-0" Stringers: \*

Moment = 242 FT-K  
 Flexure Stress = 17.1 KSI  
 Shear = 45.0 K  
 Shear Stress = 7.7 KSI

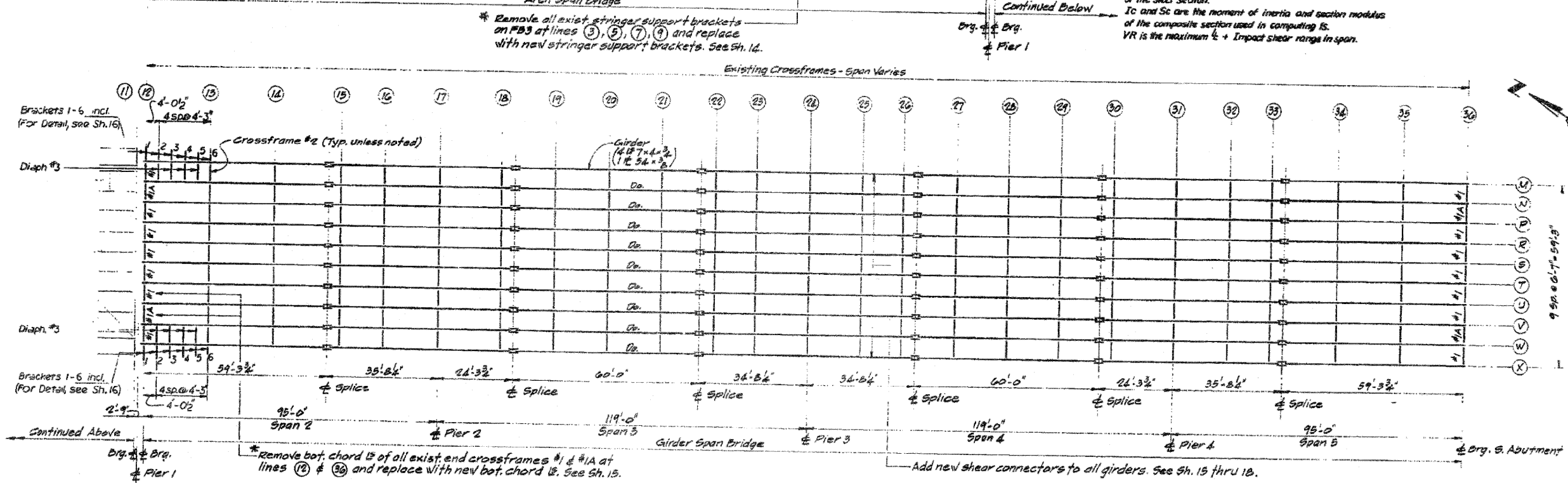
Includes D.L. (Steel & Concrete), L.L.+Impact

\* @ 1/2 of Span

**INTERIOR GIRDER REACTION TABLE**

	Pier 2-3	Pier 3-4	Pier 4
R D.L. (K)	321	116.3	114.9
R L.L. (K)	426	72.3	74.9
Imp. (K)	9.7	10.8	10.4
R Total (K)	844	199.4	200.2

I<sub>s</sub> and S<sub>s</sub> are the moment of inertia and section modulus of the steel section.  
 I<sub>c</sub> and S<sub>c</sub> are the moment of inertia and section modulus of the composite section used in computing I<sub>s</sub>.  
 VR is the maximum 1/2 + Impact shear range in span.



**PLAN**

\* Cost of Removal of existing structural steel is incidental to Structural steel

All structural steel shown on this sheet is existing, unless otherwise noted.

Work this sheet with sheets 13 thru 18.

Sta. 24+38.25

**ILLINOIS DIVISION OF HIGHWAYS**

**FA ROUTE 599**

PROJECT BR-F-599(3) SECTION 17(D) BR

ROCK ISLAND COUNTY

**STEEL FRAMING PLAN - NORTH CHANNEL**

Designed By: SK Drawn By: JC Quantity By: RB  
 Checked By: DK Checked By: SK Checked By: SK

**TORNROSE, CAMPBELL & ASSOCIATES**

