

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 7 17 SHEETS
FAS 1732	*	MACOUPIN	22	10	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

*01-00081-00-BR

	0.4 Sp. #1	0.6 Sp. #2	Pier
I	(in ⁴)	90,956	
I'	(in ⁴)	264,902	
S _b	(in ³)	5,153	
S _b '	(in ³)	8,592	
S _t	(in ³)	3,736	
S _t '	(in ³)	23,716	
D	(k/')	1.079	1.079
M _D	(k)	904.4	0
s _D	(k/')	0.32	0.32
M _{sD}	(k)	154.4	220.7
M _L	(k)	506.9	424.1
M (Imp)	(k)	122.2	102.2

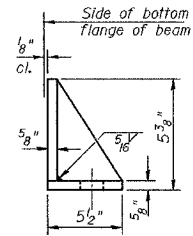
	Abut.	Pier
R _D	(k)	44.1
R _{sD}	(k)	10.2
R _L	(k)	33.7
Imp.	(k)	8.1
R (Total)	(k)	96.1

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.
 M_D is the moment due to dead loads on the non-composite prestressed beam. It is conservatively calculated at 0.5 of the span.
 M_{sD} is the moment due to dead loads on composite section.
 M_L is the moment due to live load on composite section.
 M (Imp) is the moment due to live load impact on the composite section.

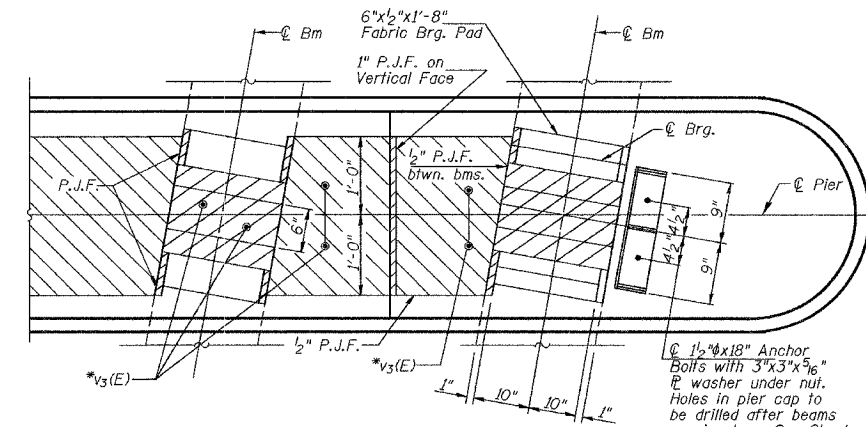
NOTES

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.
 The side retainer shall be galvanized after shop fabrication according to AASHTO M11 and ASTM A 385.
 Cost of side retainer and anchor bolts shall be included in Concrete Structures.
 The cost of P.J.F. and Fabric Bearing Pads is included in "Concrete Structures".

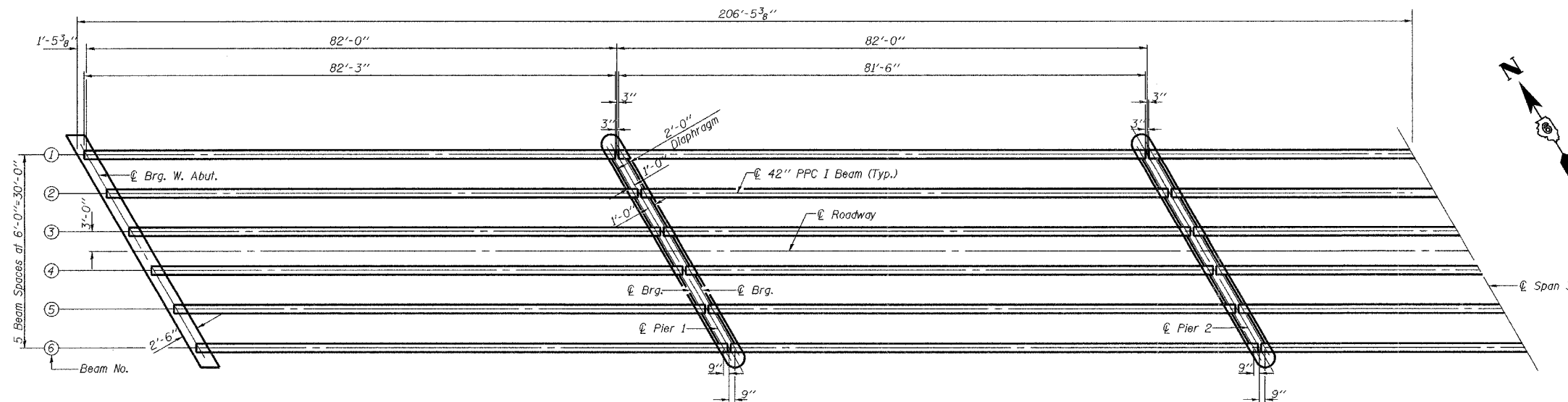
*v₃ (E) bars installed with pier See Sheet 14 of 17 for locations.



SIDE RETAINER



1 1/2" x 18" Anchor Bolts with 3"x3"x5/16" E washer under nut. Holes in pier cap to be drilled after beams are in place. See Sheet 14 of 17 for locations.



PLOT DATE = 07/07/2006
 PLOT SCALE = 1/8" = 1'-0"
 USER NAME = TFC

ILLINOIS DEPARTMENT OF TRANSPORTATION	
SHEET TITLE FRAMING PLAN	
PROJECT FAS ROUTE 1732 (COUNTY ROUTE 11) SECTION 01-00081-00-BR MACOUPIN COUNTY STATION 167+61.06 STRUCTURE NUMBER 059-3331	PROJECT NO. 04081 SCALE DATE 07/07/06 DRAWN BY TEG CHECKED BY ML/MCB
DRAWING NO. 7	
COOMBE-BLOXDORF P.C. Engineers / Land Surveyors Springfield, Illinois Design Firm License No. 184-002703	
OF 17 SHTS	