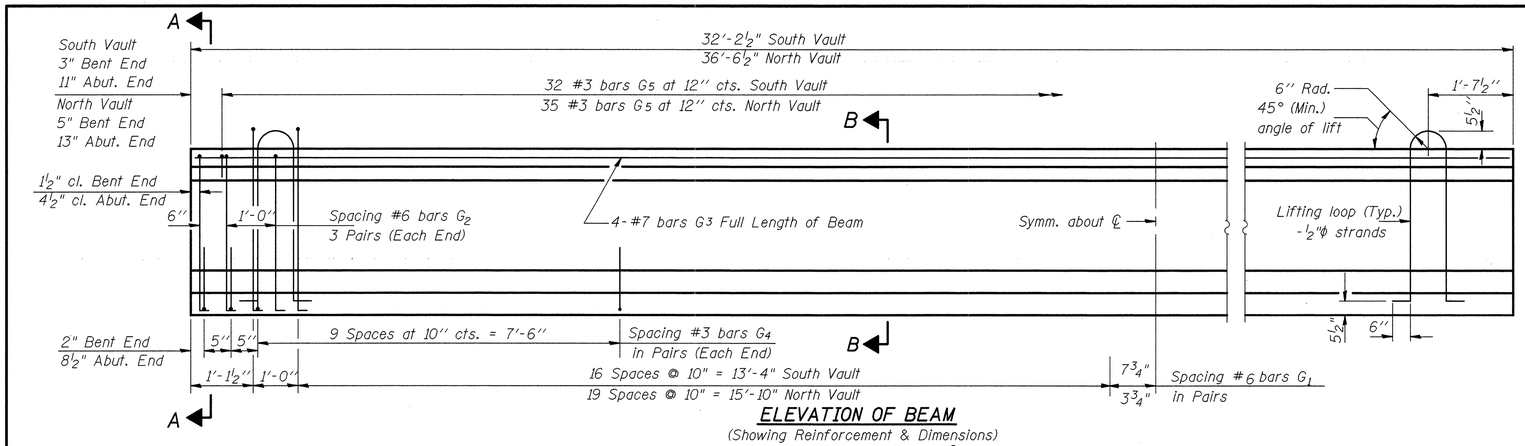
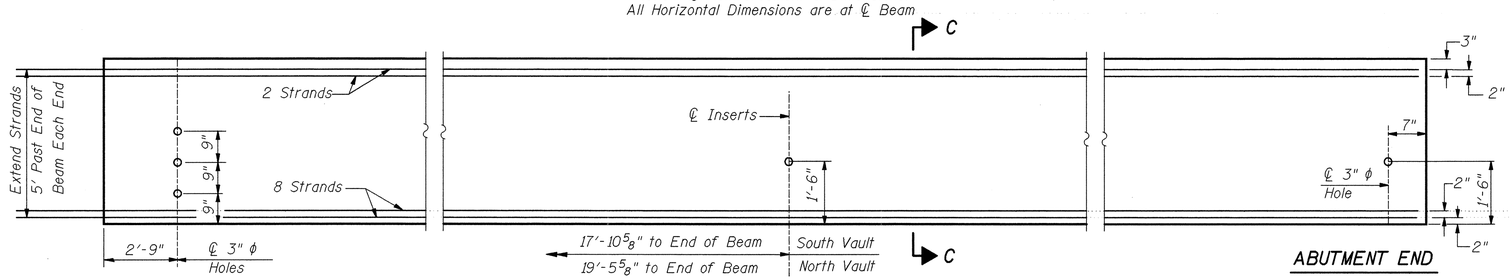
C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
NA	98-00009-00-BR	SANGAMON	107	48
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
M.P. 179 SPRINGFIELD SUBDIVISION				
SHEET 11 OF 27				

93346



ELEVATION OF BEAM

(Showing Reinforcement & Dimensions)
All Horizontal Dimensions are at ℄ Beam

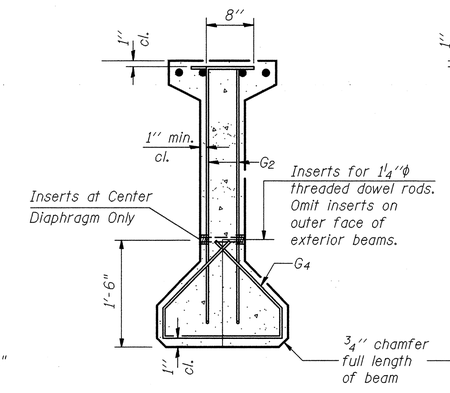


BENT END

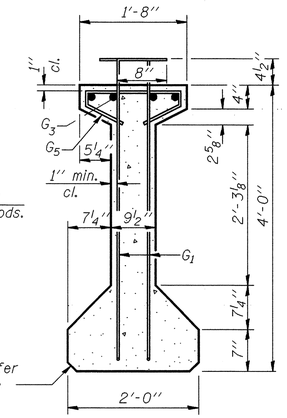
ELEVATION OF BEAM

(Showing Prestressing Steel)
All Horizontal Dimensions are at ℄ Beam

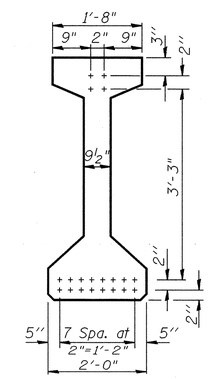
ABUTMENT END



SECTION A-A



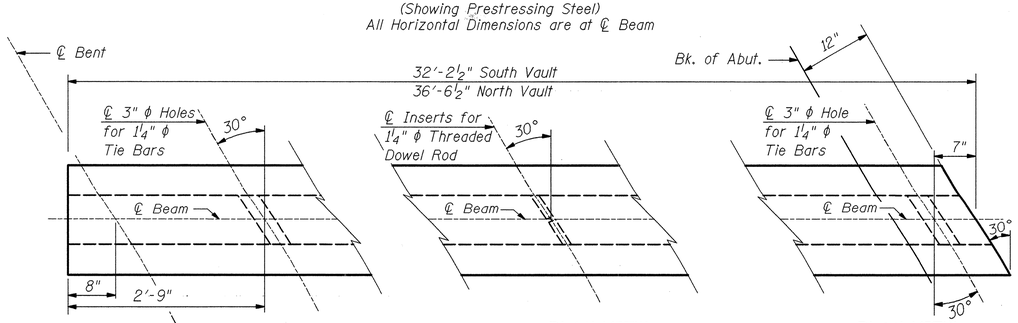
SECTION B-B



SECTION C-C

BEAM PROPERTIES

A	=	665	in.²
I	=	163065	in.⁴
Sb	=	7575	in.³
St	=	6159	in.³
Cb	=	21.52	in.
Ct	=	26.48	in.
Wt	=	693	Lbs/Lin. Ft.



PLAN VIEW
BENT END

PLAN VIEW
CENTER DIAPHRAGM

PLAN VIEW
ABUTMENT END

* SOUTH VAULT BAR LIST

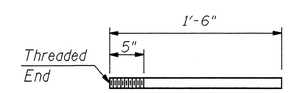
Bar	No.	Size	Length	Shape
G1	72	#6	5'-6½"	
G2	12	#6	4'-8"	
G3	4	#7	31'-10"	
G4	48	#3	3'-5½"	
G5	32	#3	2'-8½"	

* For one beam only.

* NORTH VAULT BAR LIST

Bar	No.	Size	Length	Shape
G1	84	#6	5'-6½"	
G2	12	#6	4'-8"	
G3	4	#7	36'-2"	
G4	48	#3	3'-5½"	
G5	35	#3	2'-8½"	

* For one beam only.



1¼" ϕ THREADED DOWEL ROD

Included in the Cost for Furnishing and Erecting Precast Prestressed Concrete I-Beams, 48" Special

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 48" Special	Ft.	207

NOTES

All inserts and threaded dowel rods for inserts, reinforcing and Prestressing Steel, and other items which are cast into the Precast Concrete I-Beams shall be included in the contract unit price per foot of Furnishing and Erecting Precast Prestressed Concrete I-Beams, 48" Special.

Inserts for 1¼"ϕ threaded dowel rods are to be two strut, coil type for interior I-Beams and single coil, flared loop type for exterior I-Beams.

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.

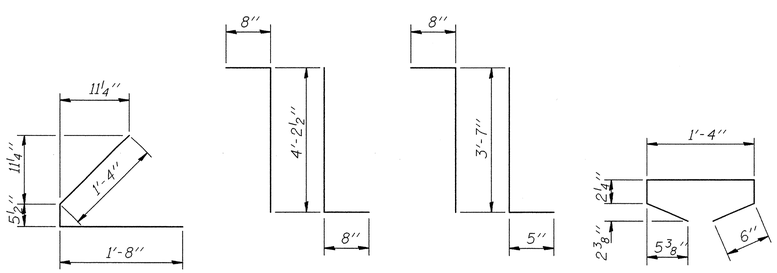
The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

Non-prestressing steel shall conform to AASHTO designation M-31, M-42 or M-53 Grade 60.

Lifting loops shall be 2-½"ϕ-270 ksi strands, as shown.

Required release strength, f'ci, shall be 5000 psi.

Adjust reinforcement spacing as necessary to clear inserts and holes.

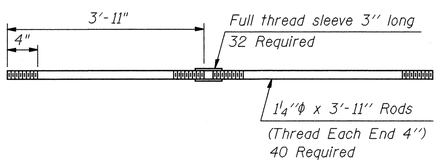


BAR G4

BAR G1

BAR G2

BAR G5



1¼" ϕ TIE BARS

Included in the Cost for Furnishing and Erecting Precast Prestressed Concrete I-Beams, 48" Special

48" P.P.C. I-BEAM DETAILS
UNION PACIFIC RAILROAD
OVER MEREDITH DRIVE
SANGAMON COUNTY
SEC. 98-00009-00-BR
STA. 9437+93.49
STRUCT. NO. 084-9946

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DESIGNED BY:	CHECKED BY:	DRAWN BY:	DATE:
G.B.M.	D.R.B.	J.P.H.	1-3-03

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