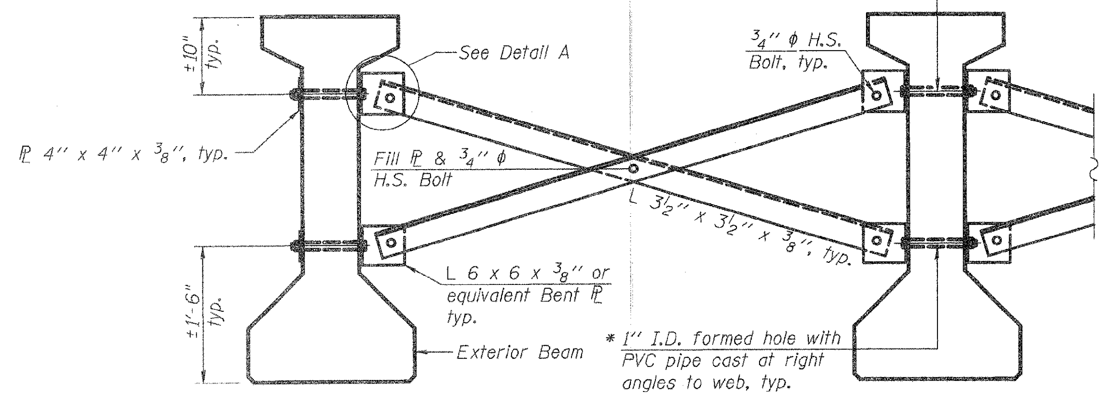
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	60-16-1, 42-1	JERSEY	481	193
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Sheet 9 of 35 Sheets

CONTRACT NO. 76318

* Fabricator shall locate to miss strands within permissible tolerances.



Notes:

All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted.

Two hardened washers are required for each set of oversized holes.

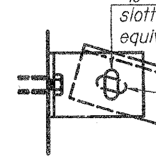
All holes shall be $\frac{15}{16}$"ϕ unless otherwise noted.

$\frac{5}{16}$" x 3" x 3" plate washers are required over all slotted holes.

All bolts shall be galvanized according to AASHTO M232.

Bracing shall be installed as beams are erected and tightened as soon as possible during erection.

Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete I-Beams.



DETAIL A

PERMANENT BRACING DETAILS FOR 48" PPC I-BEAM

INTERIOR BEAM MOMENT TABLE STRUCTURE NO. 042-0026 (S.B.)		0.4 Sp. #1 or 0.6 Sp. #3	Pier 1 or 2	0.5 Span 2
I	(in^4)	144117		144117
I'	(in^4)	398900		398900
S_b	(in^3)	6834		6834
S_b'	(in^3)	11230		11230
S_t	(in^3)	5355		5355
S_t'	(in^3)	32000		32000
DL	(k/')	1.296		1.296
M DL	('k)	720		1313
s DL	(k/')	.506	.506	.506
Ms DL	('k)	141	322	191
M LL	('k)	506	474	556
M (Imp)	('k)	132	117	129

INTERIOR BEAM REACTION TABLE STRUCTURE NO. 042-0026 (S.B.)		Abuts.	Pier 1 Span 1 Pier 2 Span 3	Pier 1 Span 2 Pier 2 Span 2
R DL	(k)	44	44	58
Rs DL	(k)	12	22	22
R LL	(k)	40	29	29
Imp.	(k)	10	7	7
R (Total)	(k)	106	102	116

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.

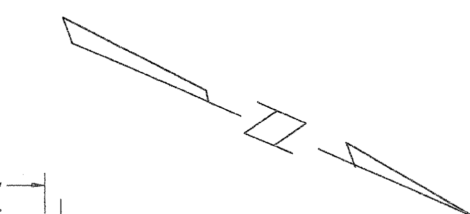
M DL is the moment due to dead loads on the non-composite prestressed beam. It is conservatively calculated at 0.5 of the span.

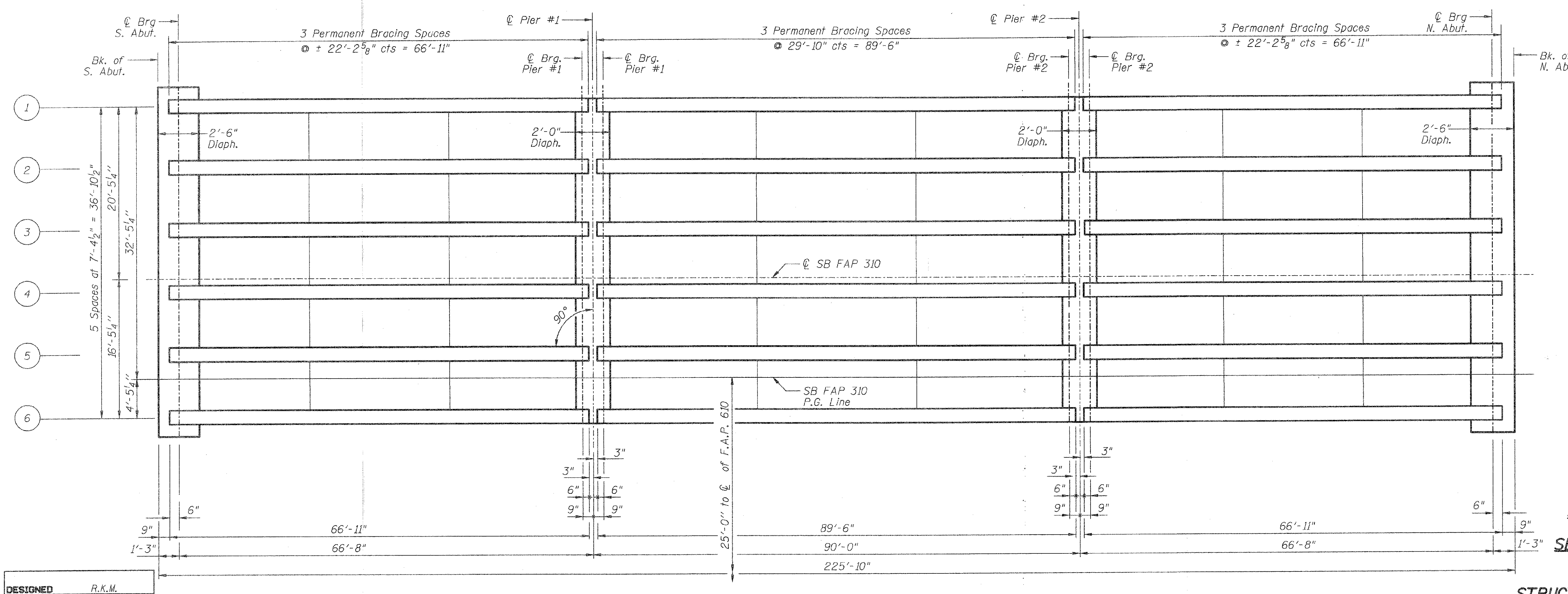
Ms DL is the moment due to dead loads on the composite section.

M LL 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.

R (Total) is the sum of the reaction per bearing due to R DL (non-composite) + R_sDL(composite) + R LL + I (composite).





FRAMING PLAN

FRAMING PLAN
SOUTHBOUND LANES
FAP-310
SECTION 60-16-1, 42-1
JERSEY COUNTY
STATION 318+48.66
STRUCTURE NO. 042-0026 (S.B.)

DESIGNED	R.K.M.
CHECKED	M.E.B.
DRAWN	P.W.S.
CHECKED	M.E.B.-R.K.M.

HR
HURST-ROSCHE ENGINEERS, INC.
601 NORTH BRUNS LANE
SPRINGFIELD, IL 62702
(217)-787-1199
FAX (217)-793-1199