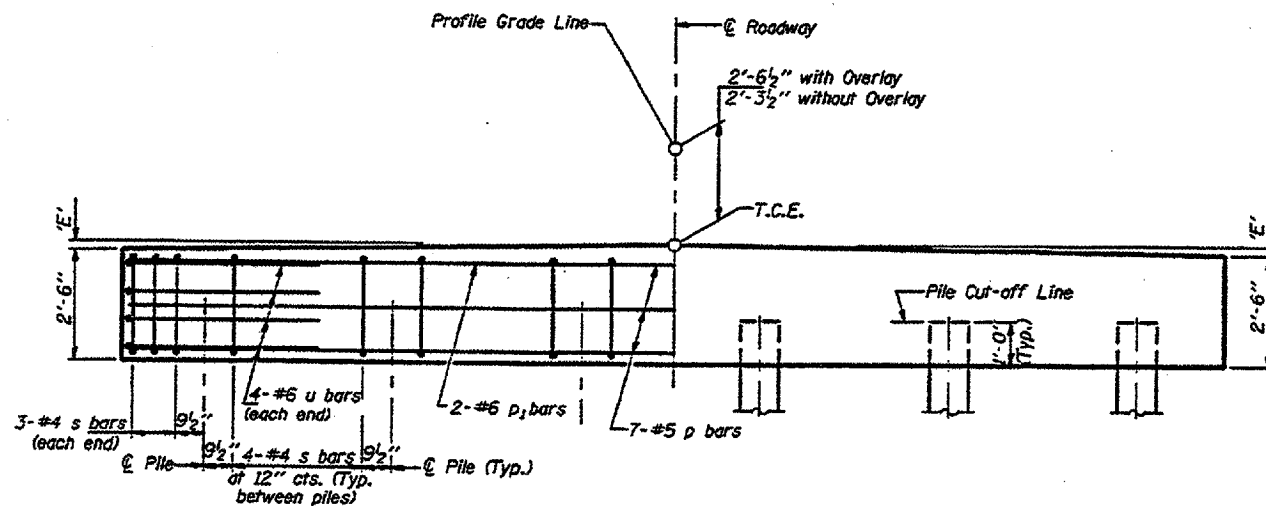


**PLAN**  
(D' = Designated Skew Angle)



**ELEVATION**

**DIMENSION 'E'**

GRADE	D'=15°		D'=20°	
	UPGRADE END	DOWNGRADE END	UPGRADE END	DOWNGRADE END
0%	2 3/8"	2 3/8"	2 3/8"	2 3/8"
Over 0% to 1%	2 1/2"	2 5/8"	2 5/8"	2 5/8"
Over 1% to 2%	1 3/4"	3"	1 1/2"	3 1/8"
Over 2% to 3%	1 3/8"	3 1/2"	1"	3 3/4"
Over 3% to 4%	1"	3 7/8"	3/8"	4 1/4"

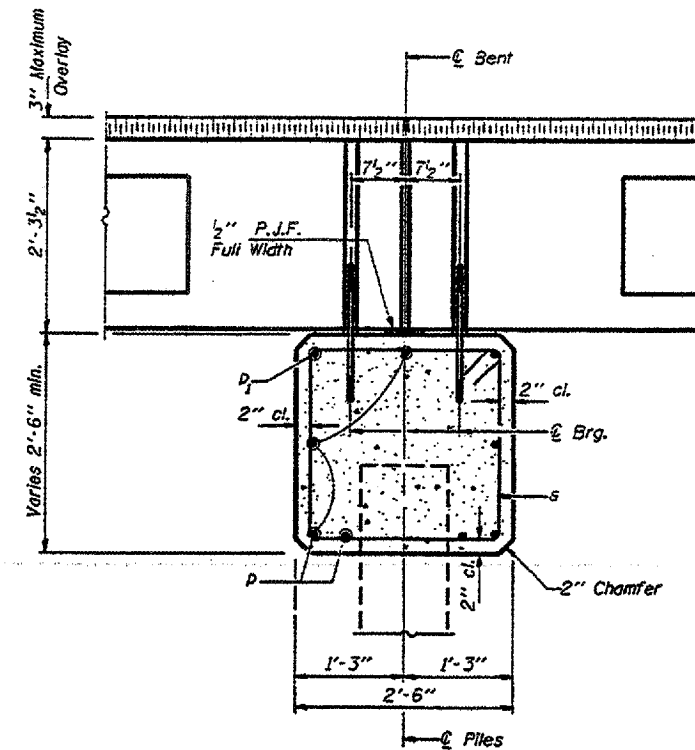
**MAXIMUM PILE LOADS**

SPAN	TONS
40'	34
50'	39
60'	45

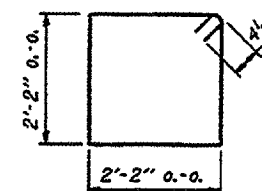
Longer of Either Span Supported by Pier.

**DESIGN STRESSES**

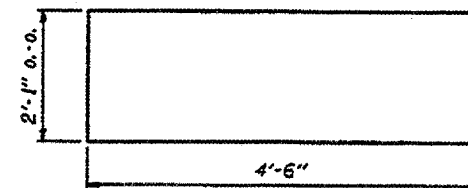
$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi



**SECTION THRU PIER**  
(At Right Angles)



**Bar s**



**Bar u**

**BILL OF MATERIAL FOR ONE PIER**

Bar	No.	Size	Length	Shape
D	7	#5	26'-5"	—
D1	2	#6	26'-5"	—
s	26	#4	9'-5"	□
u	8	#6	11'-1"	—
Concrete Structures			6.5	Cu. Yds.
Reinforcement Bars			570	Lbs.

**NOTE**

Reinforcement bars shall conform to A.A.S.H.T.O. M-31, M-42 or M-53, Grade 60.

P.P.C. DECK BEAMS PILE BENT PIER		
24' RDWY.	27" BMS.	D'=15° OR 20°
STANDARD CP-2427-20		

Illinois Department of Transportation  
PASSED November 1, 1995  
APPROVED November 1, 1995  
Engineer of Bridges and Structures