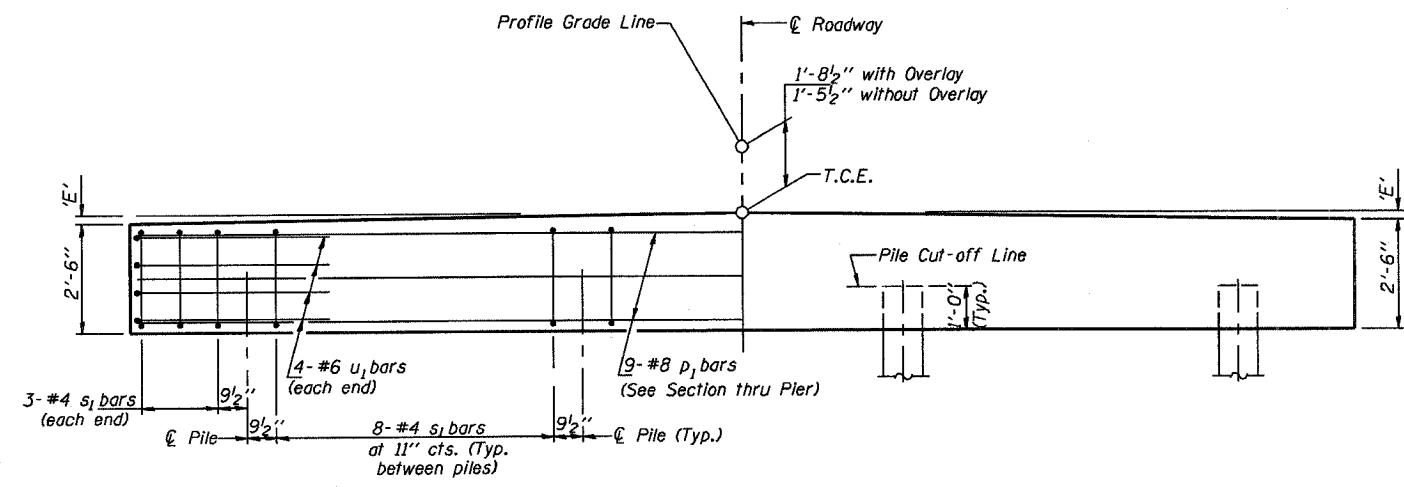


PLAN
(*D*' = Designated Skew Angle)



ELEVATION

DIMENSION 'E'

GRADE	'D'=25°		'D'=30°	
	UPGRADE END	DOWNGRADE END	UPGRADE END	DOWNGRADE END
0%	2 1/2"	2 1/2"	2 3/8"	2 3/8"
Over 0% to 1%	2 1/4"	2 7/8"	2"	2 7/8"
Over 1% to 2%	1 3/8"	3 5/8"	1"	3 3/4"
Over 2% to 3%	5/8"	4 3/8"	5/8"	4 5/8"
Over 3% to 4%	0"	5 1/8"		

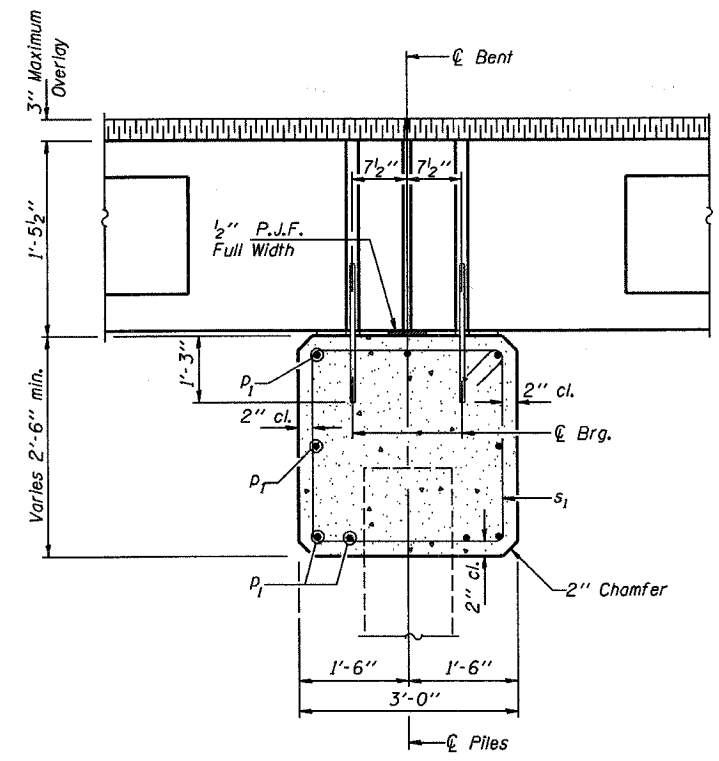
MAXIMUM PILE LOADS

SPAN	TONS
25'	34
30'	38
35'	42
40'	45

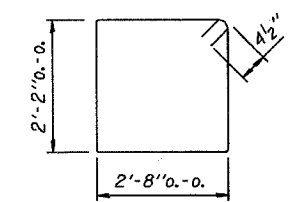
Longer of Either Span Supported by Pier.

DESIGN STRESSES

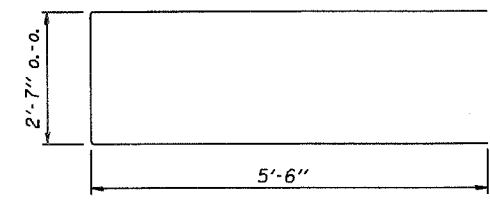
$f'_c = 3,500$ psi
 $f_y = 60,000$ psi



SECTION THRU PIER
(At Right Angles)



BAR s1



BAR u1

BILL OF MATERIAL FOR ONE PIER

Bar	No.	Size	Length	Shape
p_1	9	#8	29'-8"	—
s_1	30	#4	10'-5"	□
u_1	8	#6	12'-7"	—
Concrete Structures			8.7	Cu. Yds.
Reinforcement Bars			1070	Lb.

NOTE

Reinforcement bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-322, Grade 60.

**P.P.C. DECK BEAMS
PILE BENT PIER**

24' RDWY.	17" BMS.	'D'=25° OR 30°
STANDARD CP-2417-30		

Illinois Department of Transportation
 PASSED APRIL 4, 2005
 Thomas S. Demagala, Jr.
 Engineer of Bridge Design
 APPROVED APRIL 4, 2005
 Ralph E. Anderson
 Engineer of Bridges and Structures