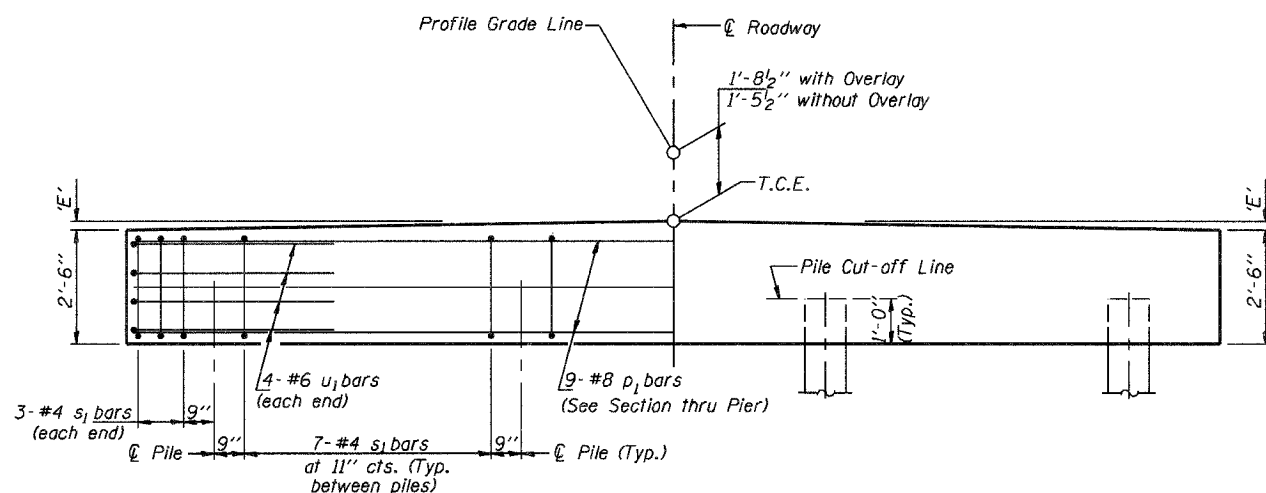


PLAN
 ('D' = Designated Skew Angle)



ELEVATION

DIMENSION 'E'

GRADE	'D'=0°		'D'=5°		'D'=10°	
	UPGRADE END	DOWNGRADE END	UPGRADE END	DOWNGRADE END	UPGRADE END	DOWNGRADE END
0%	2 ³ / ₈ "	2 ³ / ₈ "	2 ³ / ₈ "	2 ³ / ₈ "	2 ³ / ₈ "	2 ³ / ₈ "
Over 0% to 1%	2 ³ / ₈ "	2 ³ / ₈ "	2 ¹ / ₄ "	2 ³ / ₈ "	2 ¹ / ₈ "	2 ¹ / ₂ "
Over 1% to 2%	2 ³ / ₈ "	2 ³ / ₈ "	2 ¹ / ₈ "	2 ¹ / ₂ "	1 ⁷ / ₈ "	2 ³ / ₄ "
Over 2% to 3%	2 ³ / ₈ "	2 ³ / ₈ "	2"	2 ⁵ / ₈ "	1 ⁵ / ₈ "	3"
Over 3% to 4%	2 ³ / ₈ "	2 ³ / ₈ "	1 ⁷ / ₈ "	2 ³ / ₄ "	1 ³ / ₈ "	3 ¹ / ₄ "

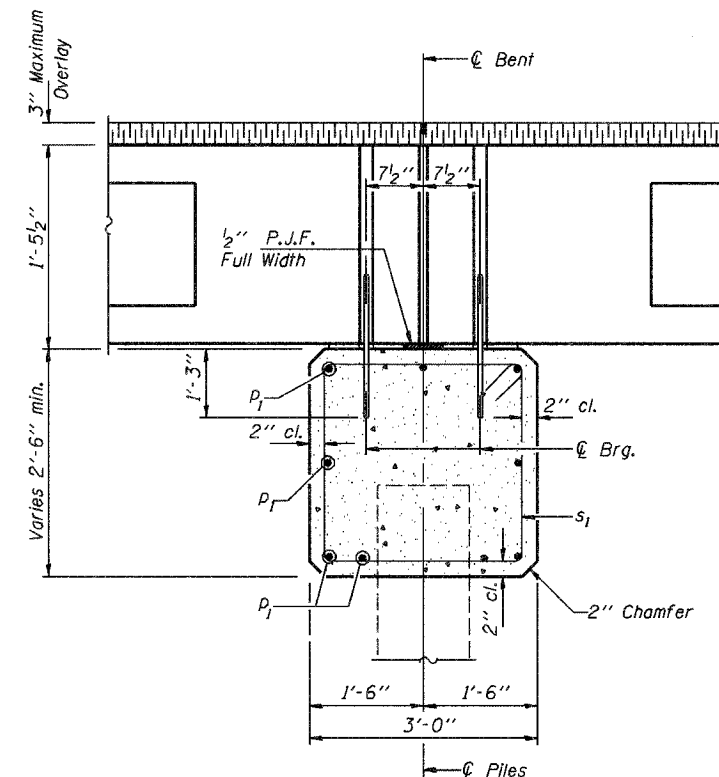
MAXIMUM PILE LOADS

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

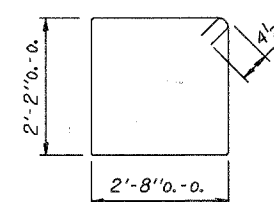
Longer of Either Span Supported by Pier.

DESIGN STRESSES

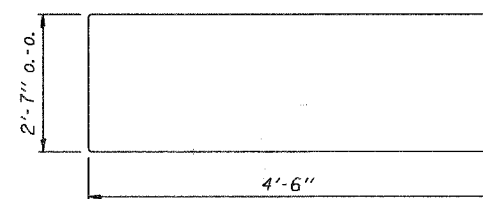
f'c = 3,500 psi
 fy = 60,000 psi



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	25'-2"	—
s ₁	27	#4	10'-5"	□
u ₁	8	#6	11'-7"	▭
Concrete Structures			7.4	Cu. Yds.
Reinforcement Bars			930	Lb.

NOTE

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

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

P.P.C. DECK BEAMS PILE BENT PIER		
24' RDWY.	17" BMS.	'D'=0°, 5° OR 10°
STANDARD CP-2417-10		