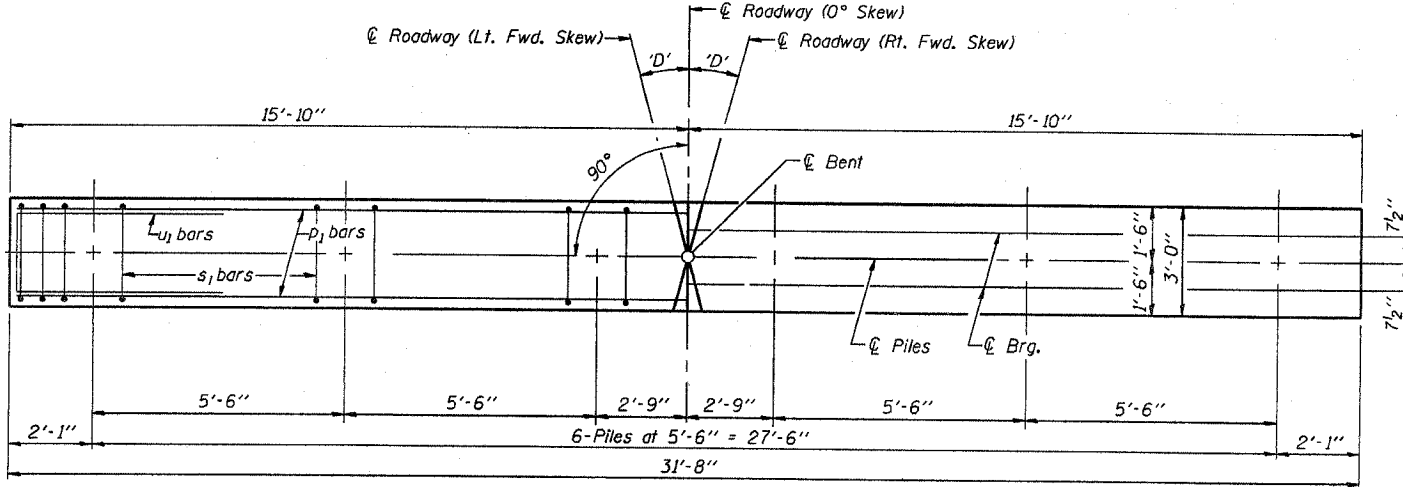
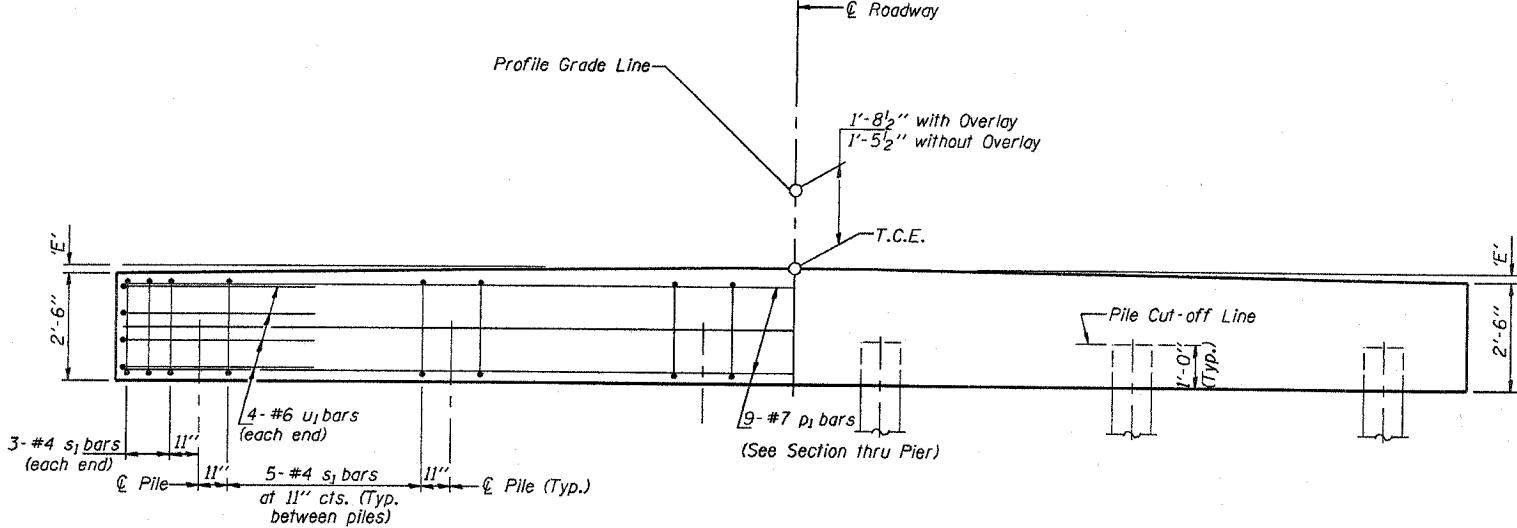


SECTION NO.	COUNTY HIGHWAY	COUNTY	SHEET OF SHEETS
00-00261-02-BR	83	ST. CLAIR	9 OF 14
FHWA REG. NO.	ILLINOIS	PROJ BROS-163(30)	
FEDERAL AID PROJECT	CONTRACT # 97346		

PIER DETAILS



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 7/8"	2 7/8"	2 7/8"	2 7/8"	2 7/8"	2 7/8"
Over 0% to 1%	2 7/8"	2 7/8"	2 7/8"	3"	2 3/4"	3"
Over 1% to 2%	2 7/8"	2 7/8"	2 5/8"	3 1/2"	2 3/8"	3 3/8"
Over 2% to 3%	2 7/8"	2 7/8"	2 1/2"	3 3/8"	2 1/2"	3 3/4"
Over 3% to 4%	2 7/8"	2 7/8"	2 3/8"	3 1/2"	1 3/4"	4"

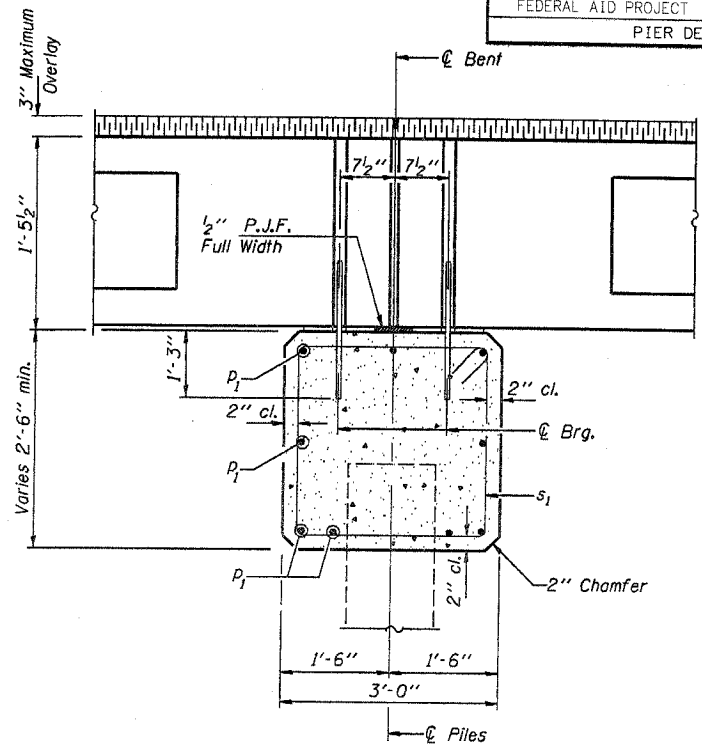
MAXIMUM PILE LOADS

SPAN	TONS
25'	25
30'	29
35'	32
40'	35

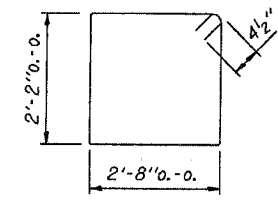
Longer of Either Span Supported by Pier.

DESIGN STRESSES

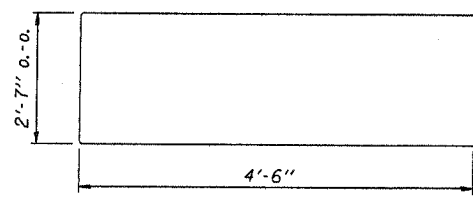
f'c = 3,500 psi  
fy = 60,000 psi



SECTION THRU PIER  
(At Right Angles)



BAR s1



BAR u1

BILL OF MATERIAL FOR ONE PIER

Bar	No.	Size	Length	Shape
p1	9	#7	31'-4"	—
s1	31	#4	10'-5"	□
u1	8	#6	11'-7"	—
Concrete Structures			9.1 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.

P.P.C. DECK BEAMS  
PILE BENT PIER

30' RDWY.	17" BMS.	'D'=0°, 5° OR 10°
STANDARD CP-3017-10		

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