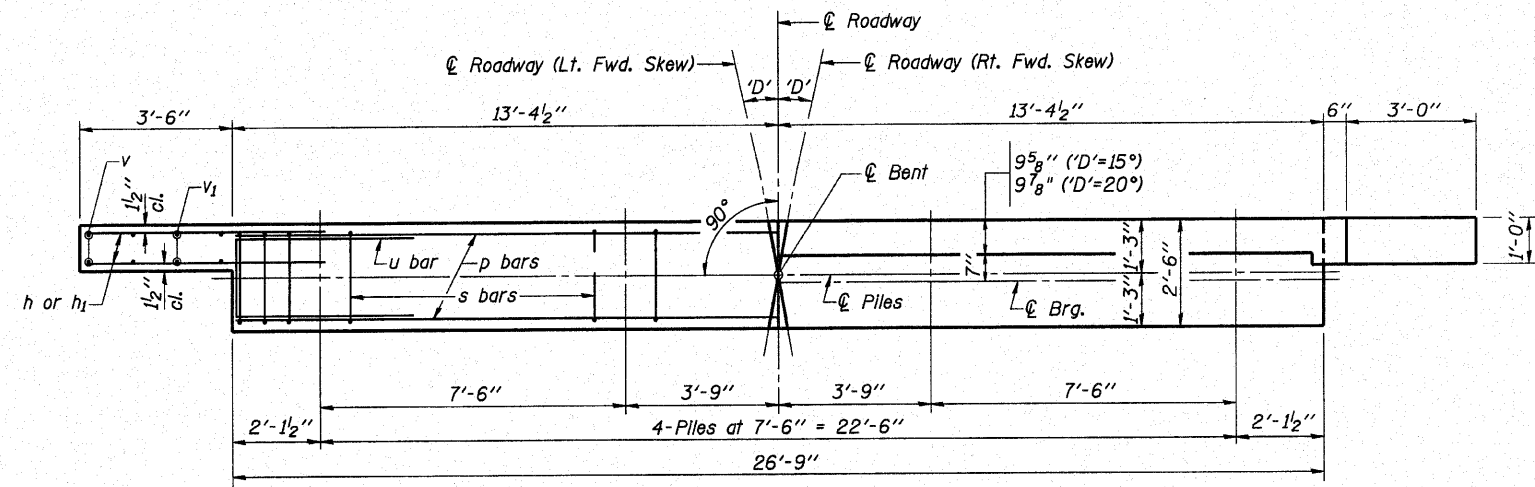
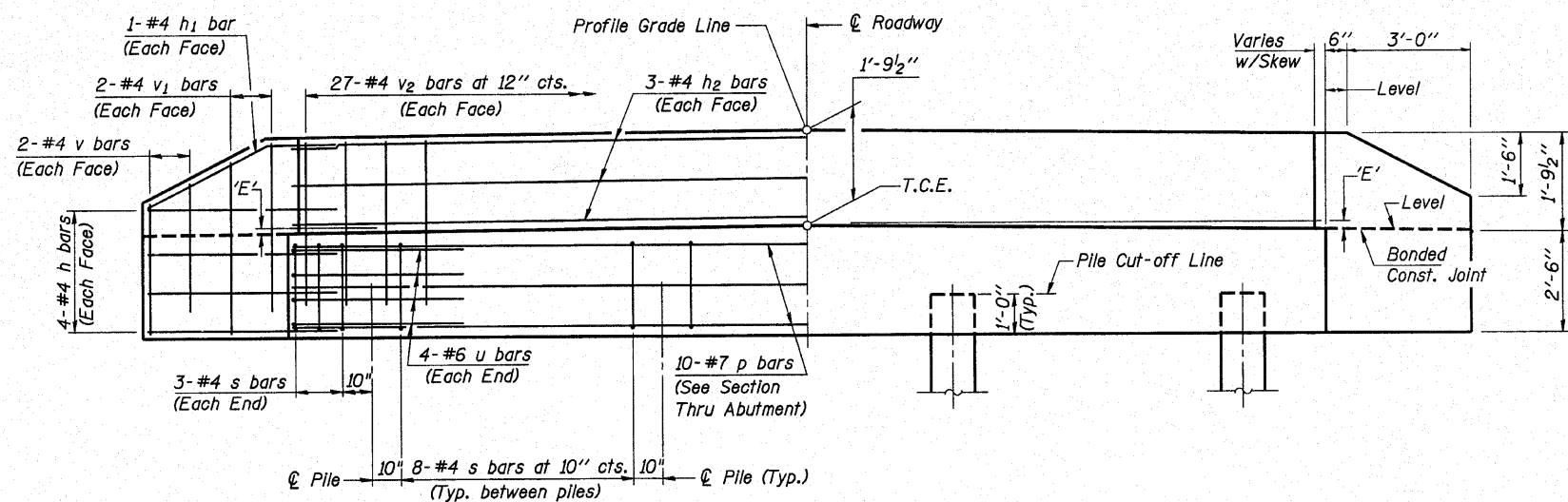


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 118	07-17118-00-BR	MARION	14	10
FED. ROAD DIST. NO.	ILLINOIS PROJECT			

CONTRACT NO. 97452



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



**ELEVATION**

**DIMENSION 'E'**

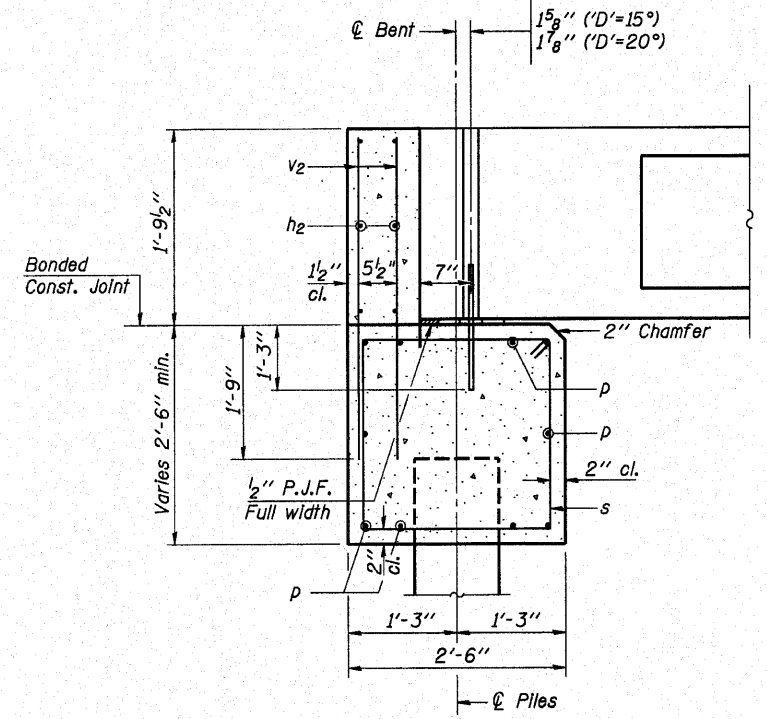
GRADE	'D'=15°		'D'=20°	
	UPGRADE END	DOWNGRADE END	UPGRADE END	DOWNGRADE END
0%	2 3/8"	2 3/8"	2 3/8"	2 3/8"
Over 0% to 1%	2 1/4"	2 5/8"	2 1/8"	2 5/8"
Over 1% to 2%	1 3/4"	3"	1 1/2"	3 1/8"
Over 2% to 3%	1 3/8"	3 1/2"	1"	3 3/4"
Over 3% to 4%	1"	3 7/8"	3/8"	4 1/4"

**NOTES**

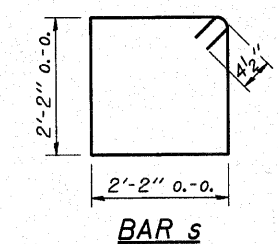
- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
- Reinforcement bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-322, Grade 60.
- Space reinforcement in cap to miss anchor bolts.

**DESIGN STRESSES**

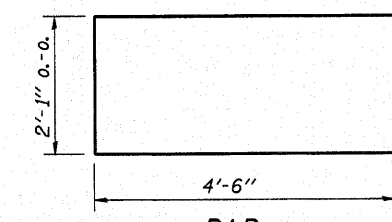
f'c = 3,500 psi  
fy = 60,000 psi



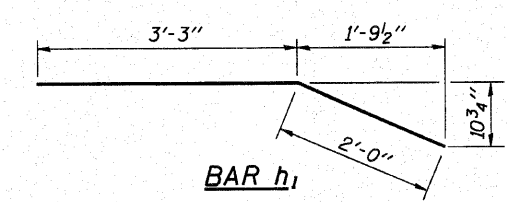
**SECTION THRU ABUTMENT**  
(At Right Angles)



**BAR s**



**BAR u**



**BAR h1**

**BILL OF MATERIAL FOR ONE ABUTMENT**

Bar	No.	Size	Length	Shape
h	16	#4	5'-0"	—
h1	4	#4	5'-3"	—
h2	6	#4	26'-5"	—
p	10	#7	26'-5"	—
s	30	#4	9'-5"	□
u	8	#6	11'-1"	□
v	8	#4	2'-8"	—
v1	8	#4	3'-8"	—
v2	54	#4	3'-5"	—
Concrete Structures			9.2 Cu. Yds.	
Reinforcement Bars			1190 Lb.	

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

24' ROADWAY  
21" BEAMS  
'D'=15° OR 20°

**RHUTASEL and ASSOCIATES, INC.**  
CONSULTING ENGINEERS • LAND SURVEYORS  
CENTRALIA, ILLINOIS FREEBURG, ILLINOIS

PREPARED FOR  
**AECOM**  
200705604

Date: 10/28/2010  
Design: MRQ  
Drawn: BLT  
Job No.: 50910