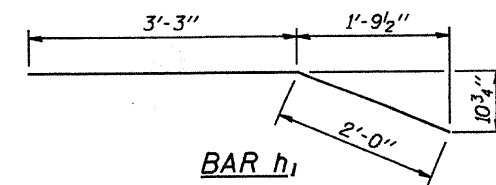
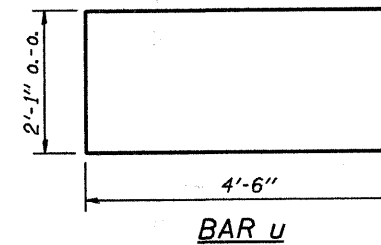
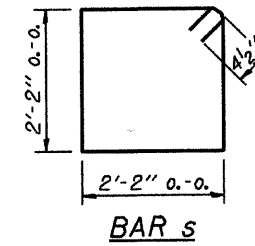


DIMENSION 'E'

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"

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.



BILL OF MATERIAL FOR ONE ABUTMENT

Bar	No.	Size	Length	Shape
h	20	#4	5'-0"	—
h1	4	#4	5'-3"	—
h2	6	#4	24'-9"	—
p	10	#7	24'-9"	—
s	26	#4	9'-5"	□
u	8	#6	11'-1"	—
v	8	#4	3'-8"	—
v1	8	#4	4'-8"	—
v2	50	#4	4'-5"	—
Concrete Structures			9.6 Cu. Yds.	
Reinforcement Bars			1170 Lb.	

MAXIMUM PILE LOADS

SPAN	TONS
60'	36
70'	40
75'	41

DESIGN STRESSES

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

P.P.C. DECK BEAMS	
PILE BENT ABUTMENT	
24' RDWY.	33" BMS. 'D'=0°, 5° OR 10°
STANDARD CA-2433-10	

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