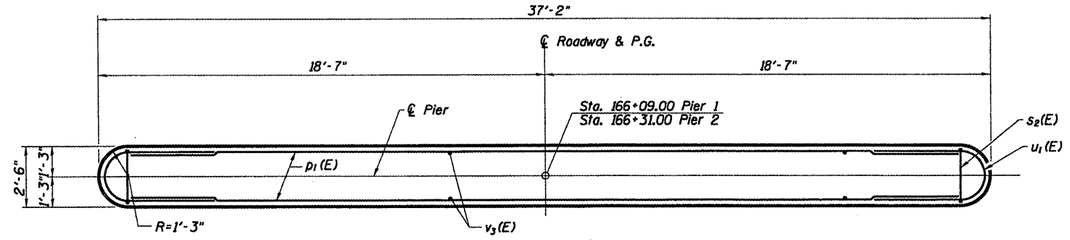
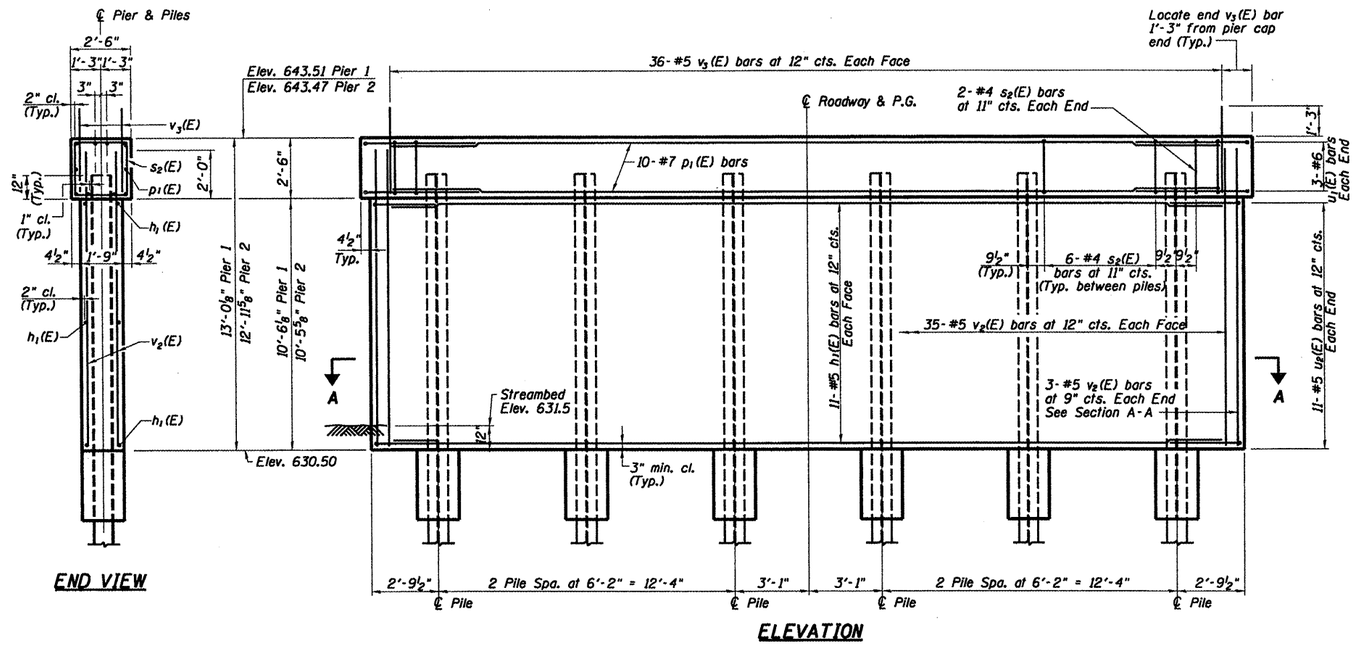
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253	*	MARSHALL	9	5
STA		TO STA		
FED. ROAD DIST. NO. *	ILL. STATE	FED. AID PROJECT-		
"68(BR.BR-1)		DWG. NO. 8 OF 9		

CONTRACT NO. 68573

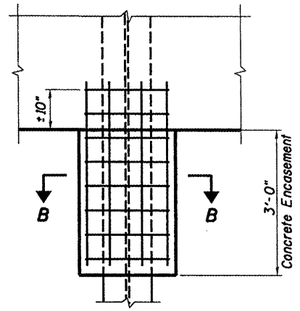


TOP PLAN



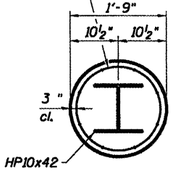
END VIEW

ELEVATION



ELEVATION

Welded wire fabric 6x6-W4.0xW4.0 weighing 58#/100 sq. ft.
The cost of excavation and reinforcement is included in the Concrete Encasement pay item. Forms for encasement may be omitted when soil conditions will permit.



SECTION B-B

PILE ENCASEMENT DETAILS

NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.

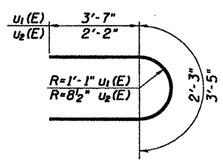
PIER BILL OF MATERIAL

(FOR ONE PIER UNLESS NOTED OTHERWISE)

Bar	No.	Size	Length	Shape
h_1(E)	22	#5	34'-8"	
p_1(E)	10	#7	34'-8"	
s_2(E)	34	#4	9'-5"	
u_1(E)	6	#6	10'-7"	
u_2(E)	22	#5	6'-7"	
v_2(E)	76	#5	12'-6"	
v_3(E)	72	#5	3'-6"	

		Pier 1	Pier 2
Concrete Structures	Cu. Yd.	33.1	33.0
Reinforcement Bars, Epoxy Coated	Pound	3220	3220
Structure Excavation	Cu. Yd.	10	10
Test Pile Steel HP10x42	Each	1	-
Furnishing Steel Piles HP10x42	Lin. Ft.	100	120
Driving Piles	Lin. Ft.	100	120
Underwater Structure Excavation Protection-Location 1	Each	1	
Underwater Structure Excavation Protection-Location 2	Each		1
Concrete Encasement	Cu. Yd.	1.6	1.6

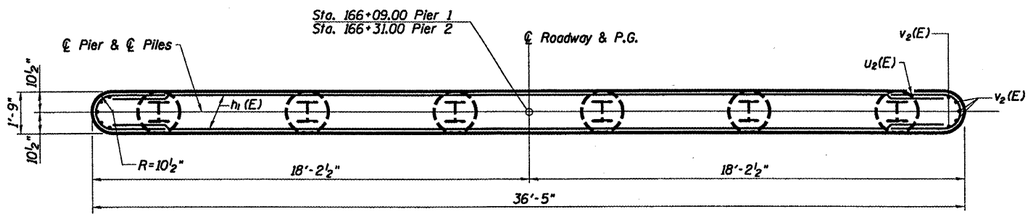
If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.



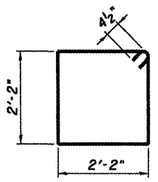
BARS u_1(E) & u_2(E)

PILE DATA

Pile Type: Steel HP10x42
Nominal Required Bearing: 335 Kips
Allowable Resistance Available: 111 Kips
Estimated Length: 20' (Pier 1)
20' (Pier 2)
No. Required: 11+1 test pile pier 1; 12 total



SECTION A-A



BAR s_2(E)

BAR BENDING DETAILS

ESCA CONSULTANTS, INC.		
DESIGNED BY:	E.L.H	11/05
DRAWN BY:	DWH	11/05
CHECKED BY:	E.L.H	05/06
APPROVED BY:	RDP	05/06

PIERS
IL ROUTE 251 OVER
SANDY CREEK
FAS ROUTE 253 - SECTION 68(BR.BR-1)
MARSHALL COUNTY
STATION 166+20
STRUCTURE NO. 062-0071