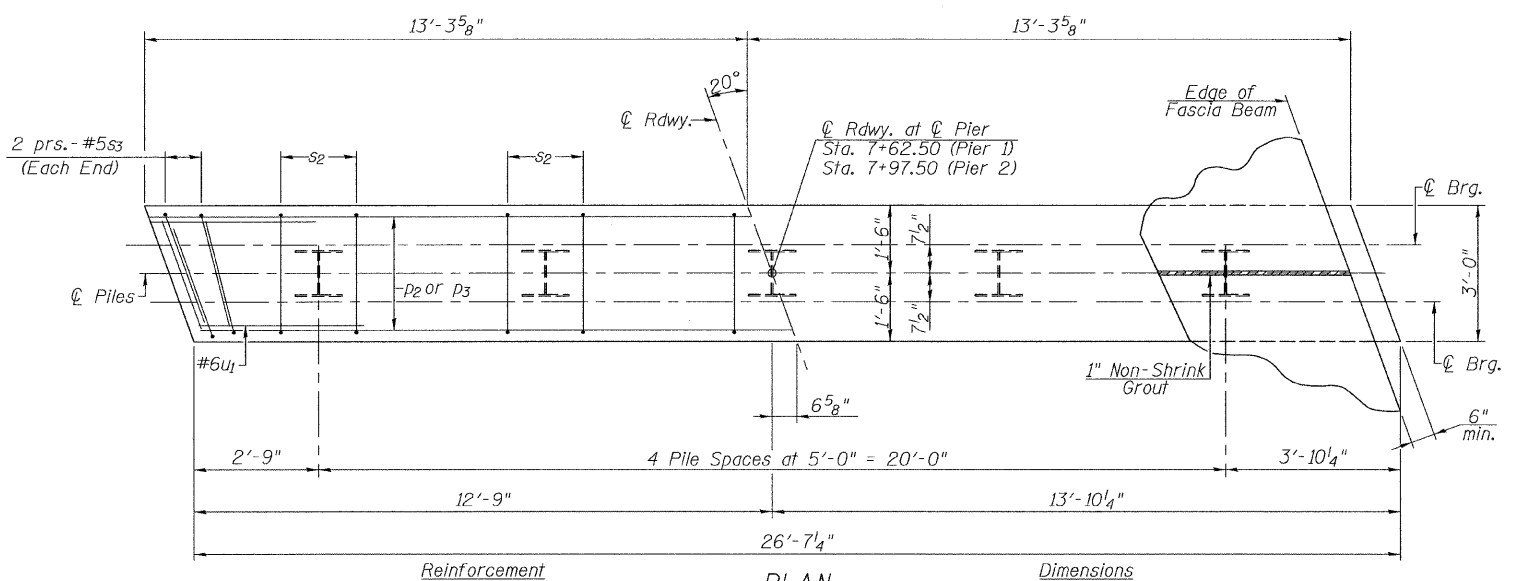
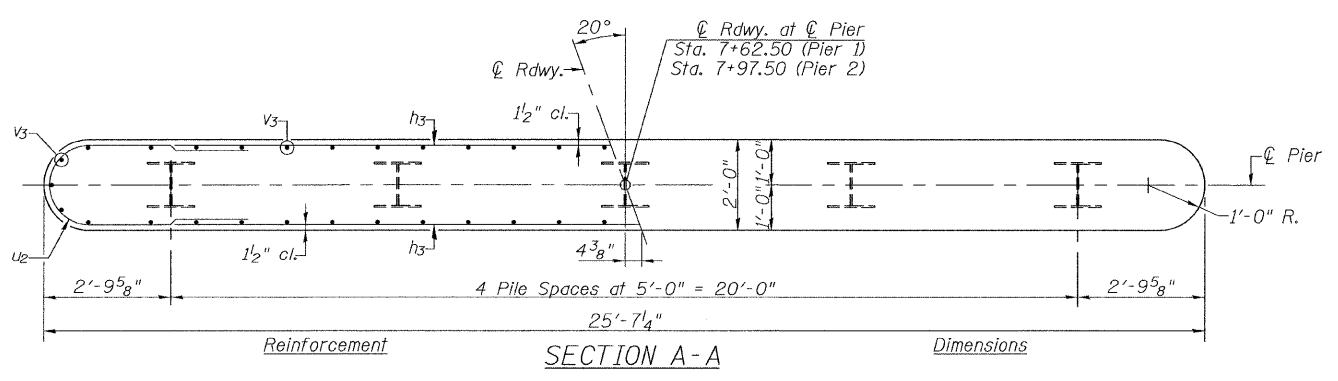


Reinforcement ELEVATION Dimensions



Reinforcement PLAN Dimensions



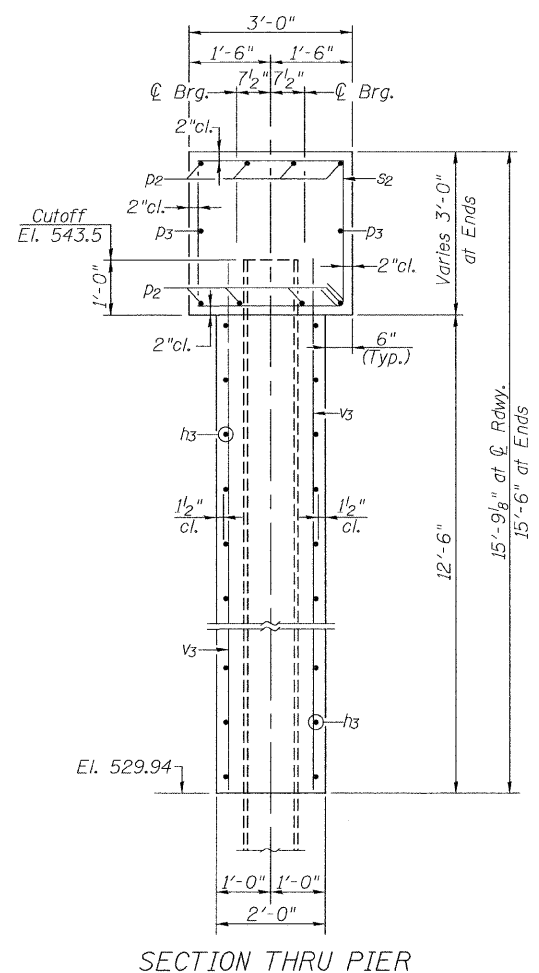
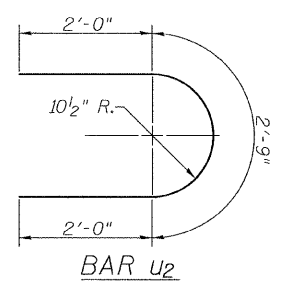
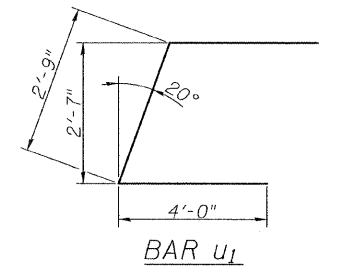
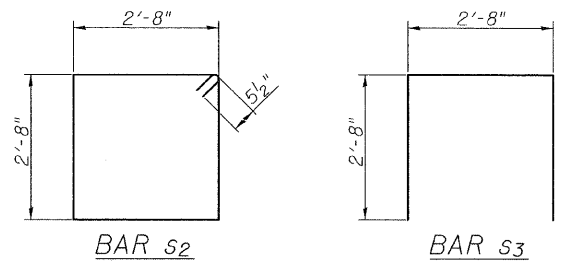
Reinforcement SECTION A-A Dimensions

PILE DATA

	Pier 1	Pier 2
Type:	Steel HP 10x42	Steel HP 10x42
Nominal Required Bearing:	284 Kips	284 Kips
Factored Resistance Available:	142 Kips	142 Kips
Estimated Pile Length:	54'	54'
Number of Production:	4	4
Number of Test Piles:	1	1

NOTES

The Steel H-Piles shall be according to AASHTO M270, Grade 50.
 All exposed edges shall have standard 3/4" chamfer except as noted.
 Space reinforcement in pier caps to miss beam anchor dowels.
 The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
 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.



SECTION THRU PIER

BILL OF MATERIAL TWO PIERS

BAR	NO.	SIZE	LENGTH	SHAPE
h3	52	#5	23'-7"	—
p2	16	#7	26'-2"	—
p3	4	#5	26'-2"	—
s2	44	#5	11'-7"	□
s3	16	#5	8'-0"	□
u1	16	#6	10'-9"	U
u2	52	#6	6'-9"	U
v3	108	#5	14'-3"	—
Concrete Structures		Cu. Yd.	65.2	
Reinforcement Bars		Pound	5300	
Furnishing Steel Piles, HP 10x42		Foot	432	
Driving Piles		Foot	432	
Test Pile, Steel HP 10x42		Each	2	
Underwater Structure Excavation		Each	1	
Protection - Location 1		Each	1	
Underwater Structure Excavation		Each	1	
Protection - Location 2		Each	1	
Structure Excavation		Cu. Yd.	46	

PIERS S.N. 087-3571

<p>Allen Henderson & Associates, Inc. Civil and Structural Engineers Springfield, IL. 62703 Phone: (217)544-8033 IL Design Firm No. 184-001907</p>	SHEET NO. 9 10 SHEETS	T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		140	09-05118-00-BR	SHELBY	21	12	
		STR. NO. 087-3571			CONTRACT NO. 95428		
		FED. ROAD DIST. NO. ILLINOIS			FED. AID PROJECT		