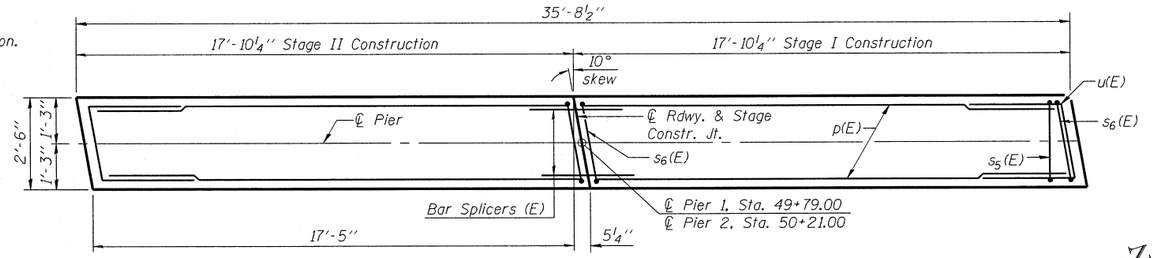
Notes:
For details of piles and Concrete Encasement, see sheet 13 of 16.
For details of Bar Splicers and Mechanical Splicers, see sheet 14 of 16.
If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

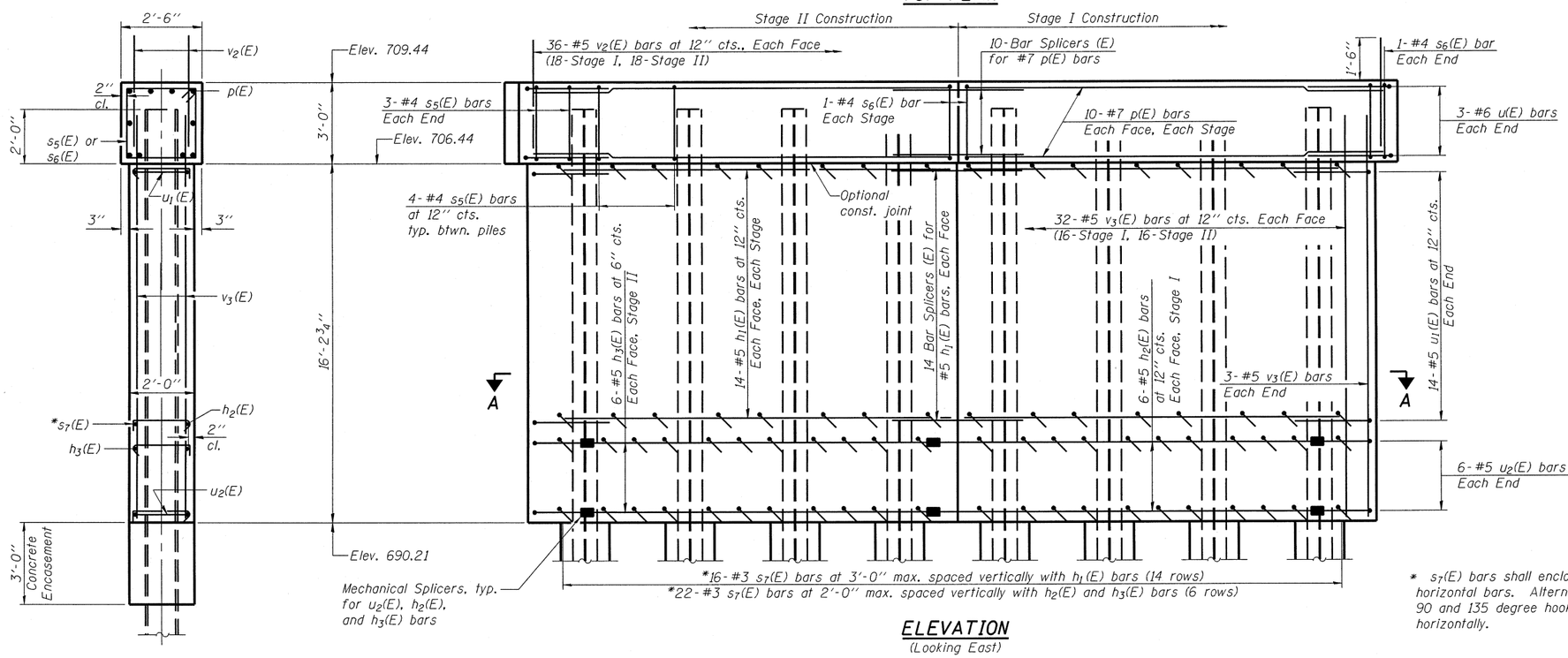
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PILE DATA

Type: Steel-HP12x53 with pile shoes
Nominal Required Bearing: 329 kips
Factored Resistance Available: 145 kips
Est. Length: 55 feet
No. Production Piles: 7
No. Test Piles: 1

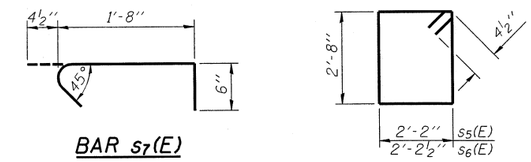


TOP PLAN



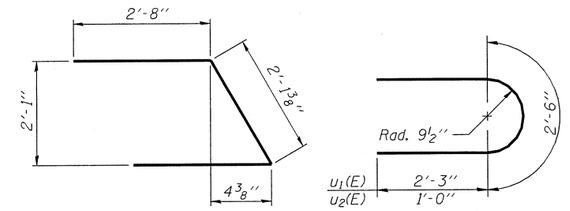
ELEVATION
(Looking East)

END VIEW



BAR s7(E)

BAR s5(E) and s6(E)



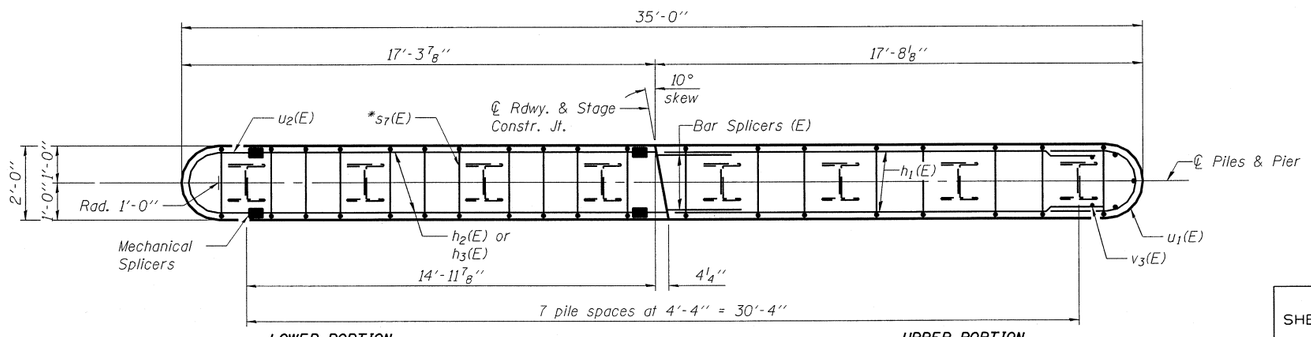
BAR u(E)

BARS u1(E) & u2(E)

BILL OF MATERIAL
(EACH PIER)

	Bar	No.	Size	Length	Shape
	$h_1(E)$	56	#5	16'-2"	
	$h_2(E)$	12	#5	16'-4"	
	$h_3(E)$	12	#5	14'-8"	
	$p(E)$	20	#7	17'-6"	
	$s_5(E)$	34	#4	10'-5"	
	$s_6(E)$	4	#4	10'-6"	
	$s_7(E)$	356	#3	2'-7"	
	$u(E)$	6	#6	7'-6"	
	$u_1(E)$	28	#5	7'-0"	
	$u_2(E)$	12	#5	4'-6"	
	$v_2(E)$	72	#5	3'-0"	
	$v_3(E)$	70	#5	17'-7"	
	Structure Excavation		Cu. Yd.	22	
	Concrete Structures		Cu. Yd.	51.5	
	Concrete Encasement		Cu. Yd.	2.8	
	Reinforcement Bars, Epoxy Coated		Pound	4500	
	Furnishing Steel Piles, HP12x53		Foot	385	
	Driving Piles		Foot	385	
	Test Pile, Steel HP12x53		Each	1	
	Pile Shoes		Each	8	
	Mechanical Splicers		Each	36	
Pier 1 Only	Underwater Structure Excavation Protection Location 1		Each	1	
Pier 2 Only	Underwater Structure Excavation Protection Location 2		Each	1	

* $s_7(E)$ bars shall enclose both the vertical and horizontal bars. Alternate the position of the 90 and 135 degree hooked ends both vertically and horizontally.



SECTION A-A

PIERS
STRUCTURE NO. 074-0087

MAURER & STUTZ, INC.
ENGINEERS SURVEYORS

DESIGNED	BAS
CHECKED	KEF
DRAWN	SGM
CHECKED	BAS

SHEET NO. 12	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
16 SHEETS	1517	11BR-1	PIATT	48	29
			CONTRACT NO. 70613		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		