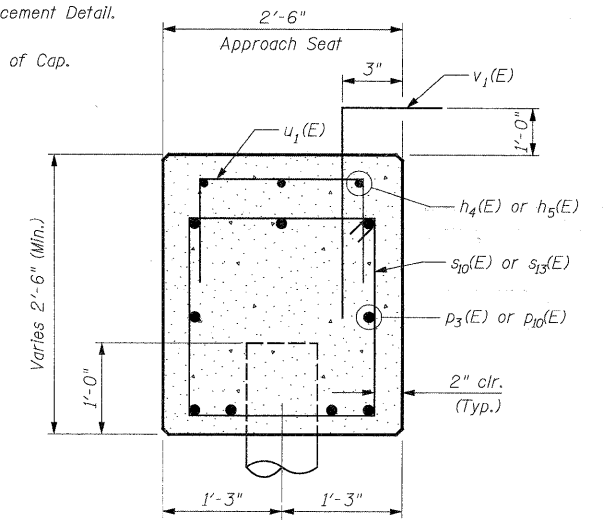
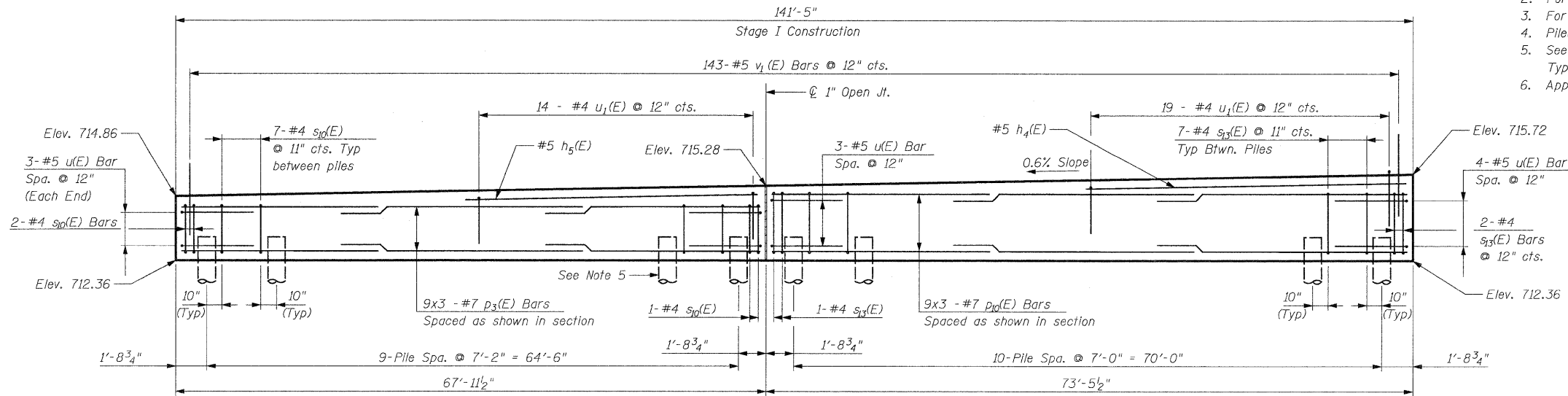


**NOTES:**

1. Bars indicated thus 20 x 3 - #5 etc. indicates 20 lines of bars with 3 lengths per bar.
2. For details of piles see Sheet SA26.
3. For details of Bar Splicers, see Sheet SA27.
4. Piles are numbered sequentially as shown.
5. See Sheet SA26 for Metal Shell Reinforcement Detail. Typical for all piles.
6. Apply Concrete Sealer to top and sides of Cap.



**ELEVATION**  
(Looking West)

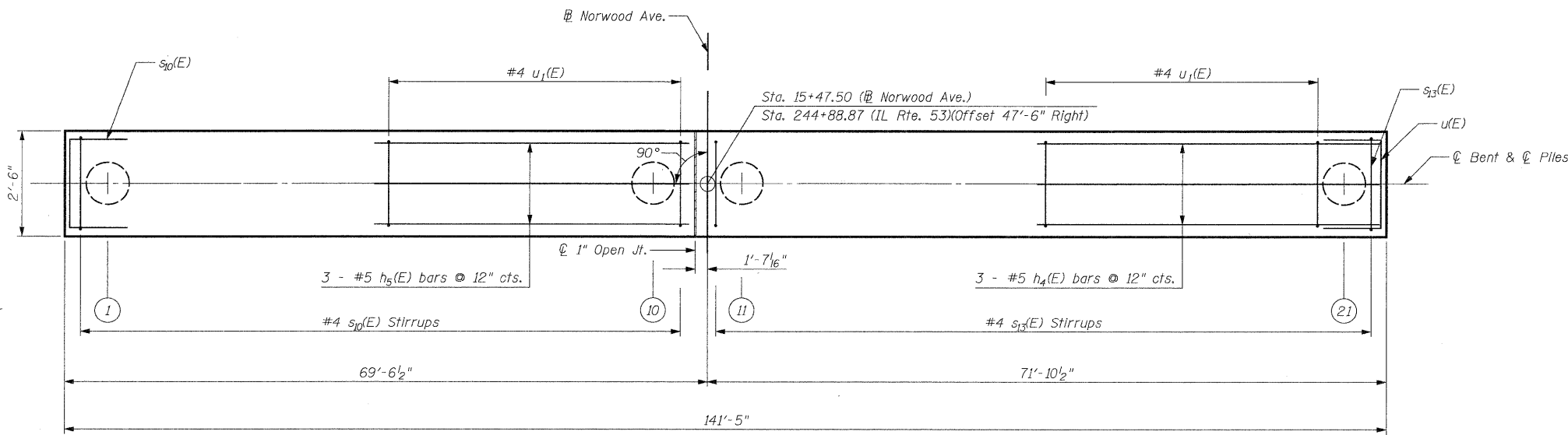
**TYP. LAP SPLICE**

BAR SIZE	MIN. LAP
#5	2'-11"
#7	5'-10"



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
p3(E)	27	#7	26'-6"	—
p10(E)	27	#7	28'-4"	—
h4(E)	3	#5	20'-0"	—
h5(E)	3	#5	13'-0"	—
s10(E)	67	#4	9'-5"	□
s13(E)	74	#4	10'-3"	□
u(E)	13	#5	6'-7"	U
u1(E)	33	#4	7'-2"	U
v1(E)				L
Porous Granular Embankment (Special)			Cu. Yd.	62
Structure Excavation			Cu. Yd.	125
Concrete Structures			Cu. Yd.	38.4
Reinforcement Bars, Epoxy Coated			Pound	4,860
Furnishing Metal Shell Piles, 14" x 0.312"			Foot	1,040
Driving Piles			Foot	1,040
Concrete Sealer			Sq. Ft.	1,184



**PLAN**

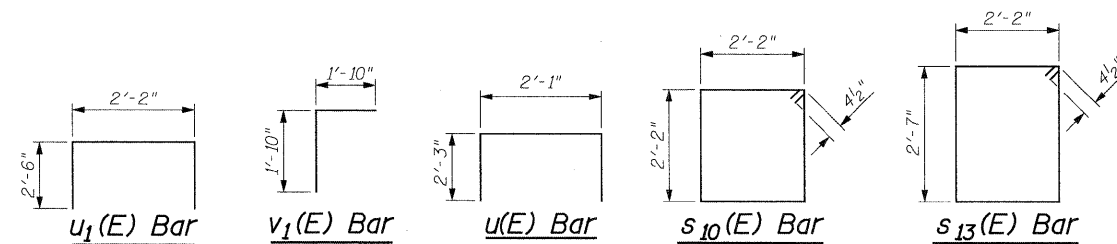
**BENT CAP TABLE**

Precore To Elevation	
Piles 1-4	Piles 5-20
692.38	712.70

**PILE DATA**

Type: Metal Shell - 14 in. dia. x 0.312 in. wall  
 Nominal Required Bearing: 382 kips  
 Factored Resistance Available: 210 kips  
 Est. Length: Piles 1-4: 56', Piles 5-21: 48'  
 No. Production Piles: 21  
 No. Test Piles: 0

DESIGNED - J. Vermillion
CHECKED - J. Refvik
DRAWN - J. Vermillion
CHECKED - J. Refvik



**NORWOOD AVE. EAST APPROACH BENT  
STRUCTURE NO. 022-0012**

SHEET NO. SA25 OF SA37	F.A.P. RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 629
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			

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