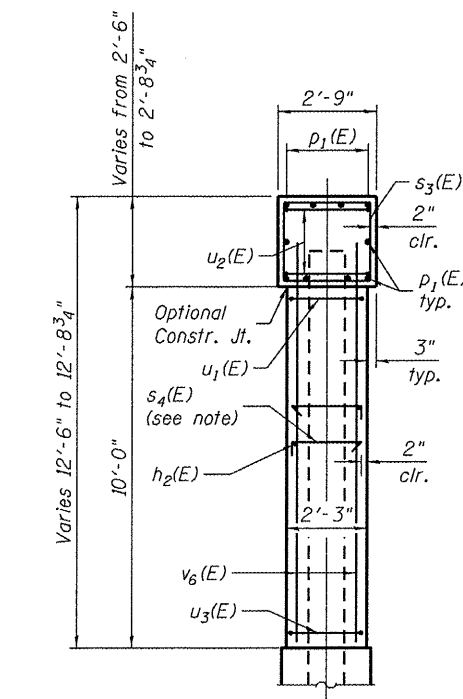


Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

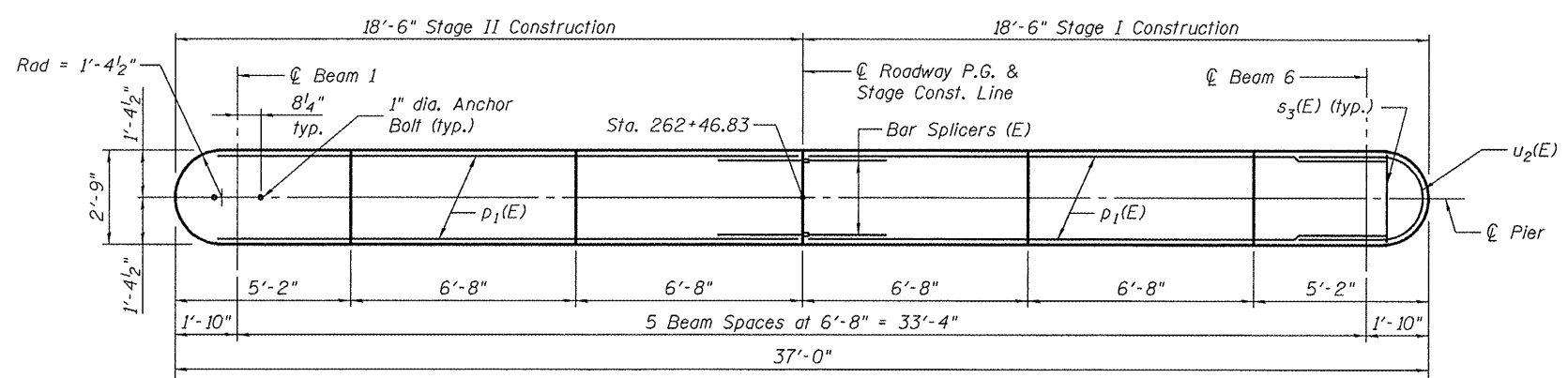
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PILE DATA
 Type: 14" Metal Shell with 0.312" walls
 Nominal Required Bearing: 513 kips
 Factored Resistance Available: 231 kips
 Est. Length: 74'
 No. Production Piles: 9
 No. Test Piles: 1

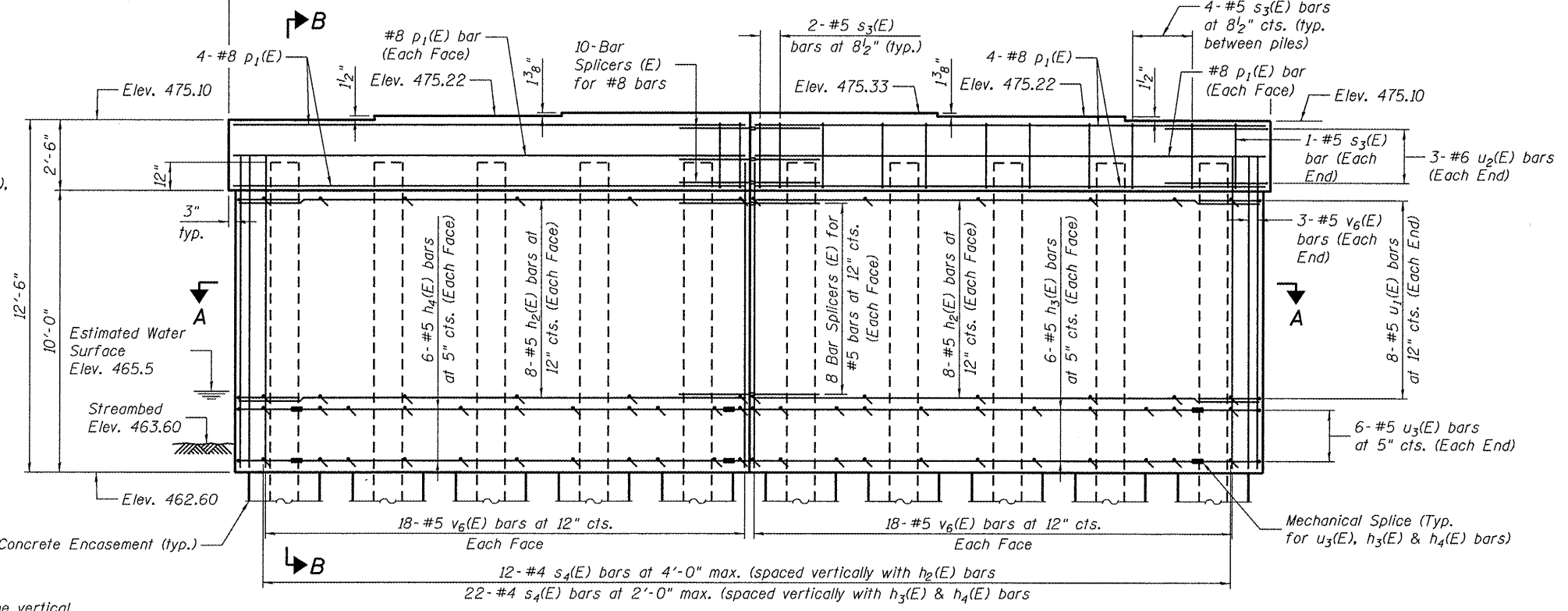


SECTION B-B
 Note:
 s₄(E) bars shall enclose both the vertical and horizontal reinforcing bars. The position of the 90 and 135 degree hooked ends shall be alternated between adjacent bars as shown, both vertically and horizontally.

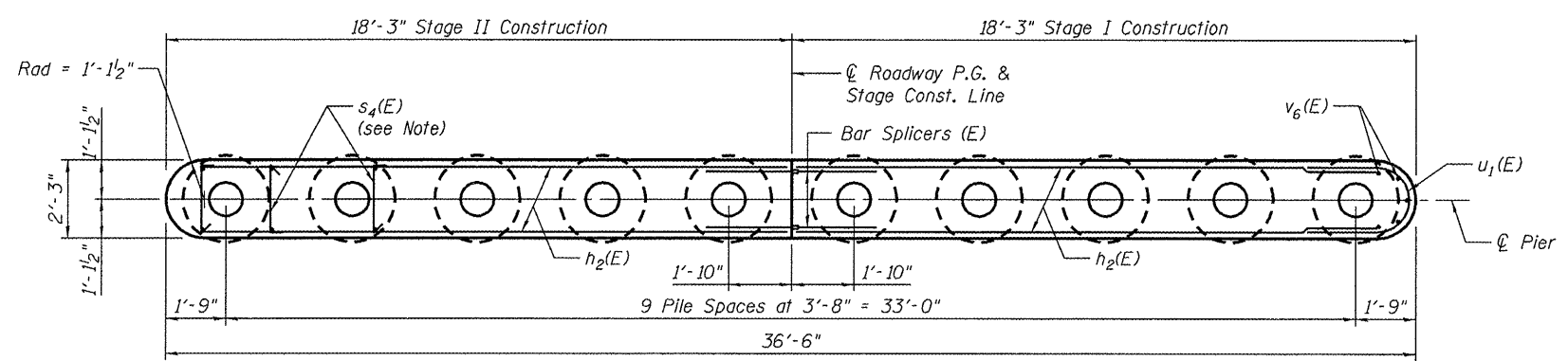
DESIGNED	SEC
CHECKED	CDL
DRAWN	DP
CHECKED	CDL



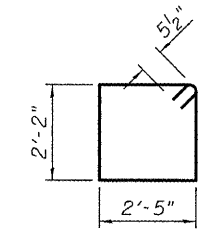
TOP PLAN



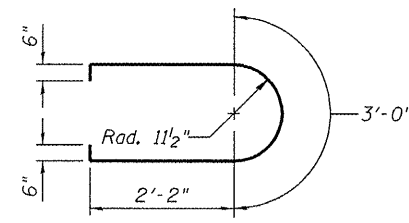
ELEVATION
 (Looking North)



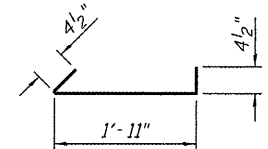
SECTION A-A



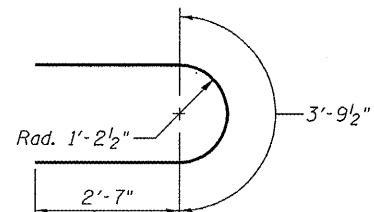
BARS s₃(E)



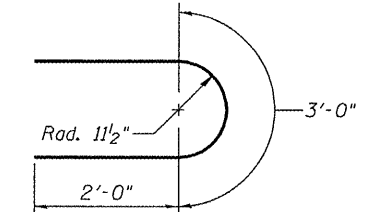
BAR u₁(E)



BAR s₄(E)



BAR u₂(E)



BAR u₃(E)

PIER
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₂ (E)	32	#5	17'-0"	—
h ₃ (E)	12	#5	16'-0"	—
h ₄ (E)	12	#5	14'-3"	—
p ₁ (E)	20	#8	17'-0"	—
s ₃ (E)	38	#5	10'-1"	□
s ₄ (E)	228	#4	2'-8"	└
u ₁ (E)	16	#5	8'-4"	U
u ₂ (E)	6	#6	9'-0"	U
u ₃ (E)	12	#5	7'-0"	U
v ₆ (E)	78	#5	11'-1"	—
Structure Excavation		Cu. Yd.	46	
Concrete Structures		Cu. Yd.	39.8	
Reinforcement Bars, Epoxy Coated		Pound	3870	
Furnishing Metal Shell Piles 14"x 0.312"		Foot	666	
Driving Piles		Foot	666	
Test Pile Metal Shells		Each	1	
Concrete Encasement		Cu. Yd.	5.5	
Mechanical Splice		Each	36	
Underwater Structure Excavation Protection		Each	1	

Notes:
 For details of Bar Splicers, see sheet 21 of 25.
 For details of piles and Concrete Encasement, see sheet 20 of 25.

MIN. BAR LAP
 #5 Bar = 3'-0"
 #6 Bar = 3'-7"

PIER
STRUCTURE NO. 102-0068

SHEET NO. 19 26 SHEETS	EFK Moen, LLC Civil Engineering Design		331 Salem Place Suite 225 Fairview Heights, IL 62208		Phone 618-206-4250 Fax 618-206-4253	
	F.A.S. RTE. 2370	SECTION 29BR-1	COUNTY WOODFORD	TOTAL SHEETS 76	SHEET NO. 41	
FED. ROAD DIST. NO.			ILLINOIS		FED. AID PROJECT	
				CONTRACT NO. 68466		