

**Notes:**

Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 For details of piles, see sheet 22 of 26.  
 Concrete Sealer shall be applied to traffic faces of pier cap, crashwall, columns and top of crashwall within 10 feet of shoulder.

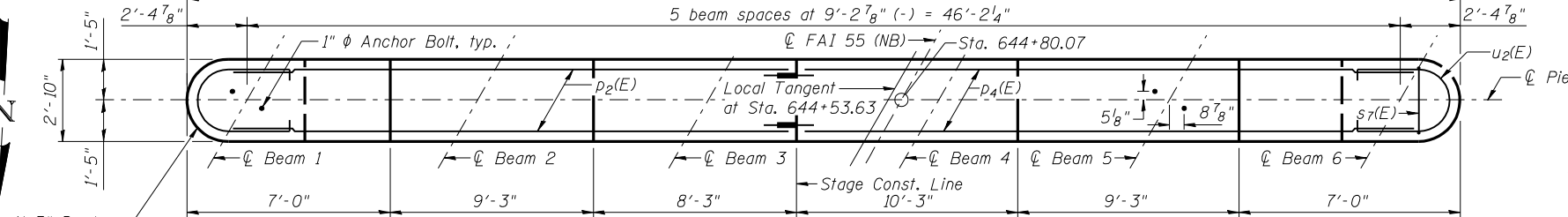
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

51'-0"

5 beam spaces at 9'-2 7/8" (-) = 46'-2 1/4"

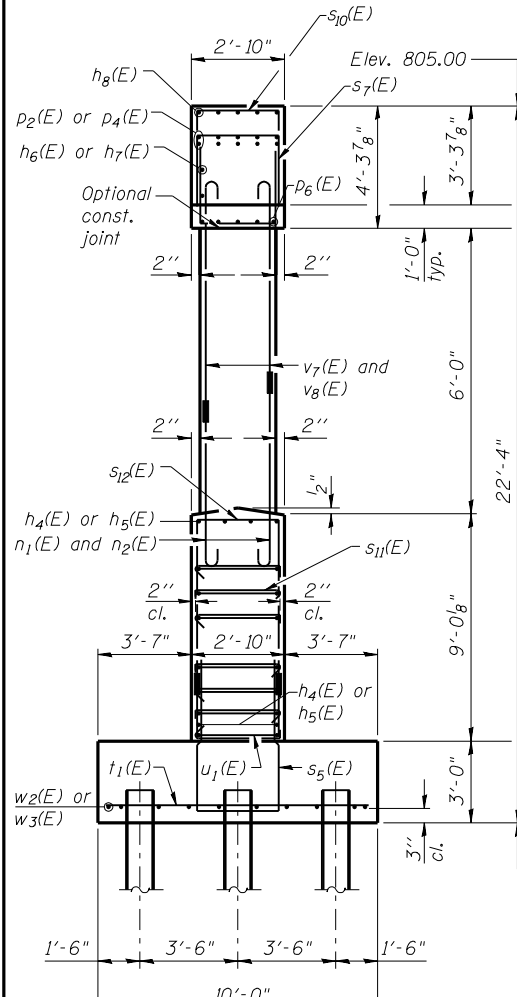
Sta. 644+80.07

**TOP PLAN**



**PILE DATA**

Type: Steel HP 12x63  
 Nominal Required Bearing: 427 kip  
 Factored Resistance Available: 235 kip  
 Est. Length: 45 ft.  
 No. Production Piles: 26  
 No. Test Piles: 1



**END VIEW**

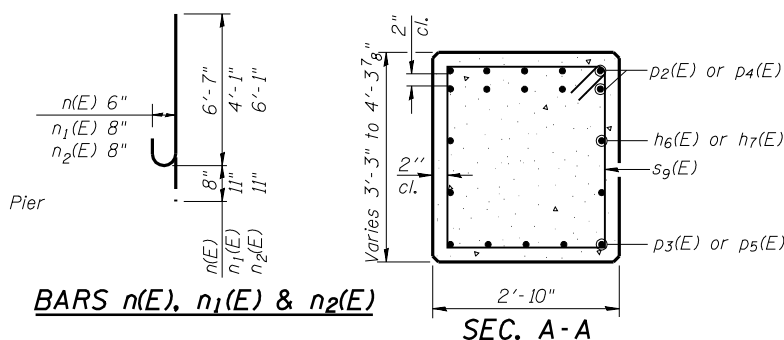
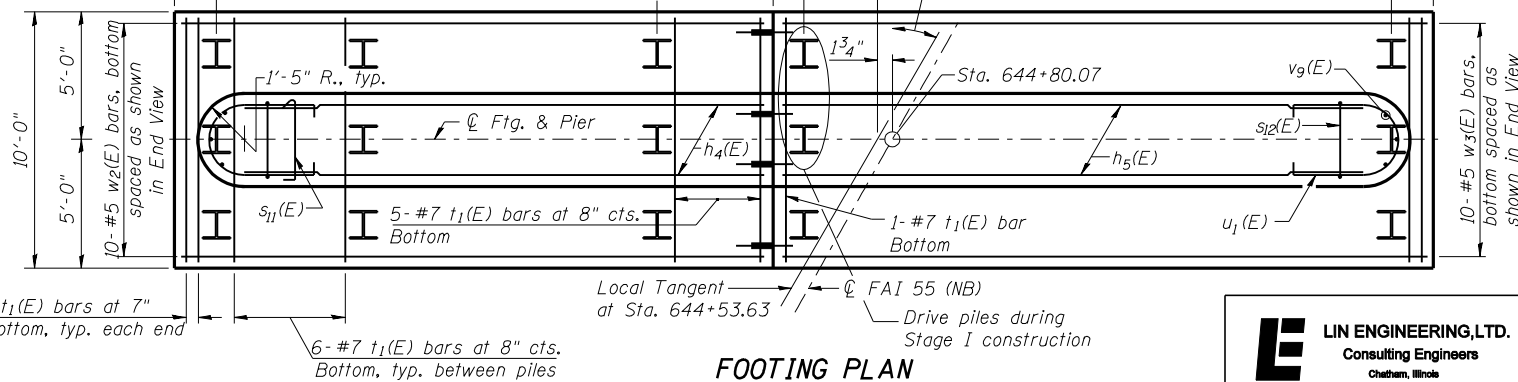
\*\*88- #4 s11(E) bars at 4'-0" cts. max. (40 Stage I, 48 Stage II). Hook With h4(E) and h5(E) bars

\*\*\* As an alternative construction sequence, the contractor may choose to eliminate the v7(E) and v8(E) bars and mechanical splices in the columns by adjusting the length of the n1(E) and n2(E) bars up to the required height in the pier cap.

2- #7 t1(E) bars at 7" cts. Bottom, typ. each end

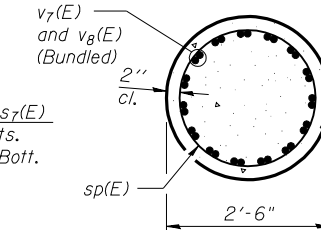
6- #7 t1(E) bars at 8" cts. Bottom, typ. between piles

**FOOTING PLAN**

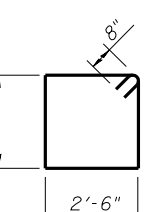


**SEC. A-A**

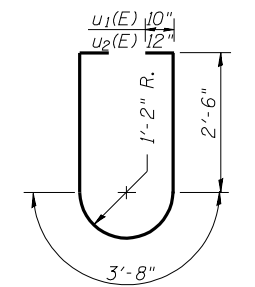
**BARS n(E), n1(E) & n2(E)**



**SEC. B-B**



**BAR s9(E)**



**BARS u1(E) & u2(E)**

**BARS v7(E) & v8(E)**

**BAR s11(E)**

**BARS s5(E) THRU s12(E)**

**A DIMENSIONS**

Bar	A
s5(E)	6'-7"
s7(E)	2'-2"
s8(E)	2'-11"
s10(E)	2'-6"
s12(E)	8'-9"

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h4(E)	22	#5	17'-6"	—
h5(E)	22	#5	19'-6"	—
h6(E)	4	#6	23'-0"	—
h7(E)	4	#6	25'-0"	—
h8(E)	4	#6	5'-6"	—
h9(E)	4	#6	17'-6"	—
h10(E)	4	#6	9'-11"	—
n(E)	6	#6	7'-3"	U
n1(E)	60	#8	5'-0"	U
n2(E)	60	#8	7'-0"	U
p2(E)	10	#10	23'-0"	—
p3(E)	5	#8	18'-10"	—
p4(E)	10	#10	25'-0"	—
p5(E)	5	#8	20'-10"	—
p6(E)	10	#6	4'-4"	—
s5(E)	48	#6	15'-8"	U
s7(E)	48	#6	6'-10"	U
s8(E)	12	#6	8'-4"	U
s9(E)	71	#6	12'-2"	U
s10(E)	33	#5	7'-6"	U
s11(E)	88	#4	3'-3"	U
s12(E)	48	#6	20'-0"	U
sp(E)	4	#4	8'-6"	MM
t1(E)	52	#7	9'-8"	—
u1(E)	20	#5	10'-4"	U
u2(E)	9	#6	10'-8"	U
v7(E)	60	#8	7'-0"	U
v8(E)	60	#8	5'-0"	U
v9(E)	6	#6	8'-9"	—
w2(E)	10	#5	19'-2"	—
w3(E)	10	#5	21'-2"	—

Structure Excavation	Cu. Yd.	215
Concrete Structures	Cu. Yd.	106.9
Reinforcement Bars, Epoxy Coated	Pound	15,330
Furnishing Steel Piles HP 12x63	Foot	1170
Driving Piles	Foot	1170
Test Pile Steel HP 12x63	Each	1
Concrete Sealer	Sq. Ft.	257

\*\*\*\*Length is height of spiral.

**PIER 2 DETAILS  
 STRUCTURE NO. 057-0249**

LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	SHEET NO. 20	F.A.I. RTE. 55	SECTION (57-7HB-2)BR	COUNTY MCLEAN	TOTAL SHEETS 153	SHEET NO. 97
	26 SHEETS	CONTRACT NO. 70520		ILLINOIS FED. AID PROJECT		