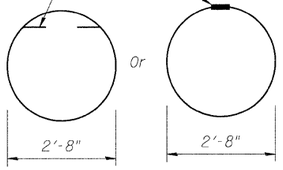
Notes:
1. Space reinforcement in cap to miss anchor bolts.
2. Pour steps monolithically with cap.
3. When splicing of spiral reinforcement is necessary, the spirals shall be provided with $1\frac{1}{2}$ extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4 or shall both terminate with a 135° standard hook.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

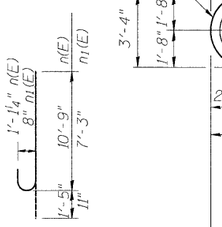
Standard 135° Bends

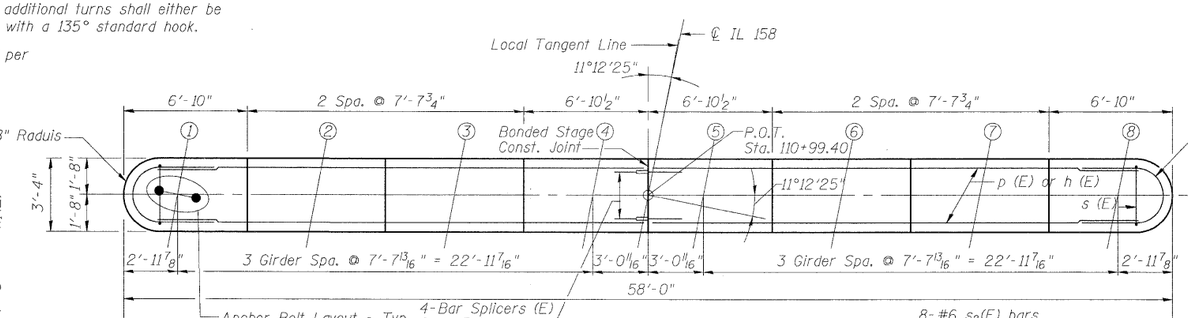
*Welded or Mechanically Spliced

*Shop Weld per AWS D1.4



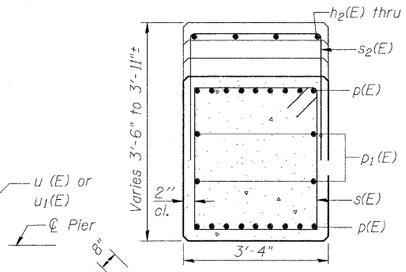
BAR $sp_7(E)$





TOP PLAN

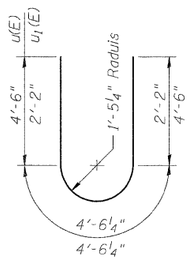
BARS n (E) or n1(E)



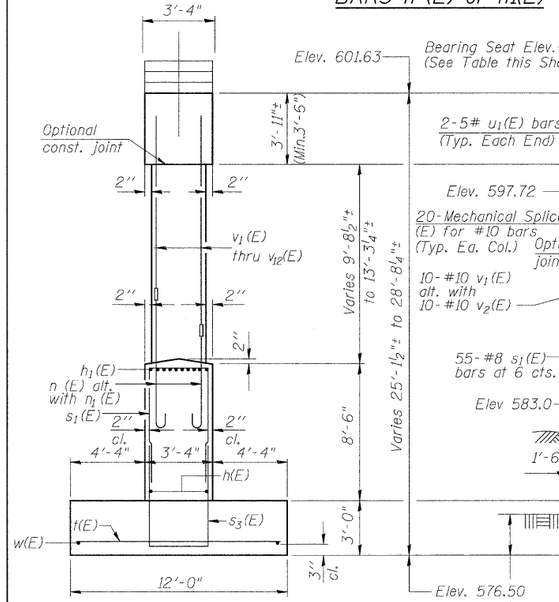
BAR s (E)

SEC. A-A

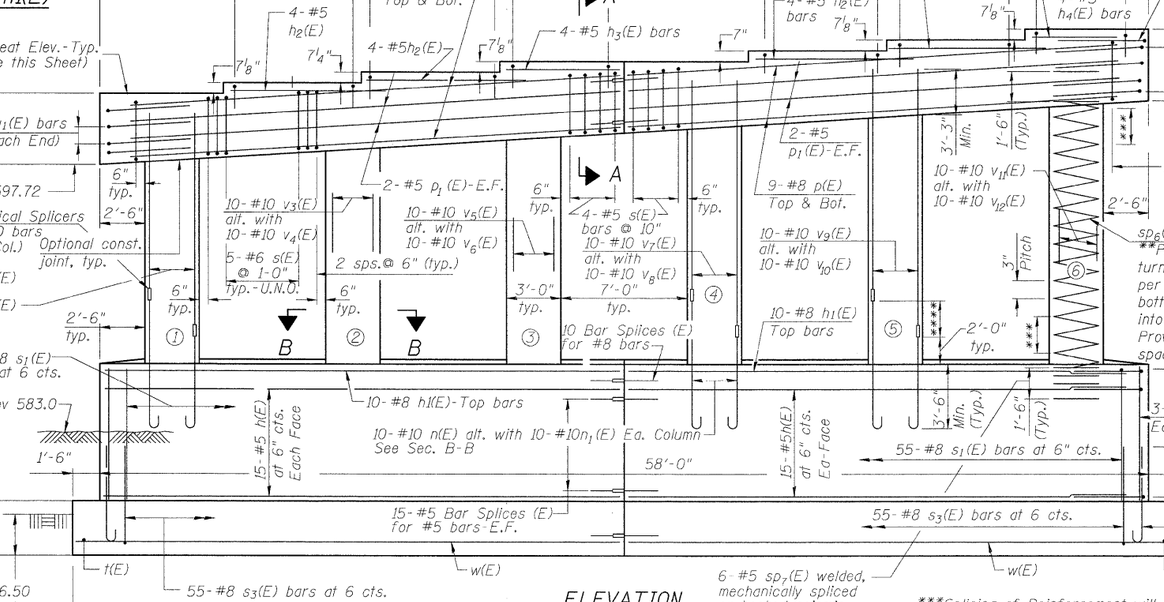
**** Offset alternating reinforcement bars by 2'-0" vertically



BARS u(E) or u_1(E)



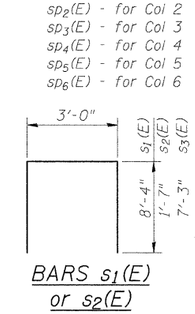
END VIEW



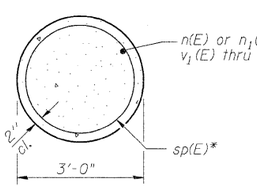
ELEVATION
(Looking)

FOOTING PLAN

Note: Maximum unfactored applied bearing pressure = 6.04ksf



BARS s_1(E) or s_2(E) or s_3(E)



SEC. B-B

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h (E)	60	#5	27'-3"	——
h_1(E)	20	#8	27'-3"	——
h_2(E)	16	#5	9'-9"	——
h_3(E)	4	#5	6'-7"	——
h_4(E)	4	#5	5'-0"	——
n (E)	60	#10	8'-11"	⊃
n_1(E)	60	#10	6'-11"	⊃
n_2(E)	6	#8	8'-2"	⊃
p (E)	36	#8	27'-3"	——
p_1(E)	8	#5	27'-3"	——
s (E)	46	#6	13'-8"	□
s_1(E)	110	#8	19'-8"	⊔
s_2(E)	45	#6	6'-2"	⊔
s_3(E)	110	#8	17'-6"	⊔
sp_1(E)	1	#5	10'-0"	∧∧∧
sp_2(E)	1	#5	10'-7"	∧∧∧
sp_3(E)	1	#5	11'-3"	∧∧∧
sp_4(E)	1	#5	11'-10"	∧∧∧
sp_5(E)	1	#5	12'-5"	∧∧∧
sp_6(E)	1	#5	13'-1"	∧∧∧
sp_7(E)	72	#5	9'-2"	○
t (E)	62	#8	11'-8"	——
u (E)	4	#8	13'-7"	⊃
u_1(E)	36	#5	8'-11"	⊃
v (E)	6	#8	8'-4"	——
v_1(E)	10	#10	9'-0"	——
v_2(E)	10	#10	11'-0"	——
v_3(E)	10	#10	9'-9"	——
v_4(E)	10	#10	11'-9"	——
v_5(E)	10	#10	10'-5"	——
v_6(E)	10	#10	12'-5"	——
v_7(E)	10	#10	11'-2"	——
v_8(E)	10	#10	13'-2"	——
v_9(E)	10	#10	11'-10"	——
v_{10}(E)	10	#10	13'-10"	——
v_{11}(E)	10	#10	12'-7"	——
v_{12}(E)	10	#10	14'-7"	——
w (E)	26	#8	30'-4"	——

Structure Excavation	Cu. Yd.	77
Rock Excavation for Structures	Cu. Yd.	122
Concrete Structures	Cu. Yd.	127
Mechanical Splicers	Each	120
Reinforcement Bars, Epoxy Coated	Pound	36,675

Note: Length of sp1(E) through sp6(E) is height of spiral.

**Allowable substitutions, provide $1\frac{1}{2}$ extra turns top and bottom with 135°standard hook into core at ends of spiral

*sp_1(E) - for Col 1
sp_2(E) - for Col 2
sp_3(E) - for Col 3
sp_4(E) - for Col 4
sp_5(E) - for Col 5
sp_6(E) - for Col 6

MIN. BAR LAP

#5 - 2'-2"
#6 - 2'-7"
#7 - 3'-5"
#8 - 4'-6"
#9 - 5'-9"

BEARING SEAT ELEV.

Girder	Elevation
1	601.63
2	602.23
3	602.83
4	603.42
5	603.42
6	604.01
7	604.60
8	605.19

DESIGNED	- CCS
CHECKED	- WPM
DRAWN	- MD
CHECKED	- WPM

9-28-09

MACTEC

PIER DETAILS
STRUCTURE NO. 067-0042

SHEET NO.	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEET NO.25	809	67-1HBR	Monroe	144	89
34 SHEETS			CONTRACT NO. 76977		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		