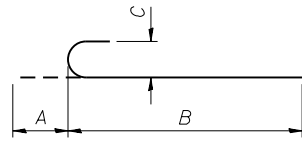


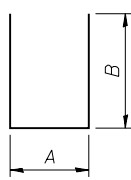
BARS $u(E)$ THRU $u_3(E)$

Bar	A	B	C
$u(E)$	2'-4"	5'-9"	1'-10"
$u_1(E)$	2'-11"	5'-6"	1'-9"
$u_2(E)$	9'-8"	5'-6"	1'-9"
$u_3(E)$	2'-4"	6'-7"	2'-1"



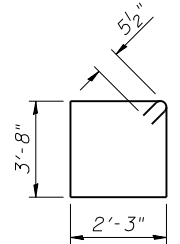
BARS $n(E)$, $n_1(E)$, $d_3(E)$ & $d_4(E)$

Bar	A	B	C
$n(E)$	7"	5'-10"	5"
$n_1(E)$	1'-3"	9'-4"	11 $\frac{3}{4}$ "
$d_3(E)$	1'-3"	17'-4"	11 $\frac{3}{4}$ "
$d_4(E)$	1'-3"	15'-7"	11 $\frac{3}{4}$ "



BARS $s(E)$ THRU $s_3(E)$, $s_5(E)$ and $s_6(E)$

Bar	A	B
$s(E)$	3'-8"	5'-9"
$s_1(E)$	3'-8"	5'-2"
$s_2(E)$	3'-6"	1'-0"
$s_3(E)$	2'-3"	3'-1"
$s_5(E)$	4'-2"	5'-9"
$s_6(E)$	4'-2"	8'-11"



BAR $s_4(E)$

BILL OF MATERIAL - PIER 1

Bar	No.	Size	Length	Shape
$d_3(E)$	78	#9	18'-7"	U
$h(E)$	34	#4	27'-9"	—
$h_1(E)$	34	#4	23'-0"	—
$h_2(E)$	16	#5	30'-3"	—
$h_3(E)$	26	#5	23'-6"	—
$h_4(E)$	5	#5	13'-0"	—
$h_5(E)$	5	#5	6'-3"	—
$h_6(E)$	5	#5	19'-7"	—
$h_7(E)$	5	#5	32'-11"	—
$n(E)$	6	#5	6'-4"	U
$n_1(E)$	78	#9	10'-7"	U
$p(E)$	9	#9	52'-9"	—
$p_1(E)$	9	#9	39'-6"	—
$p_2(E)$	10	#5	6'-4"	—
$p_4(E)$	12	#9	57'-2"	—
$p_5(E)$	12	#9	43'-11"	—
$s(E)$	93	#5	15'-2"	U
$s_1(E)$	93	#5	14'-0"	U
$s_2(E)$	126	#5	5'-6"	U
$s_3(E)$	96	#4	8'-5"	U
$s_4(E)$	126	#5	12'-9"	□
$sp(E)$	6	#4	15'-2"	W
$t_1(E)$	194	#6	10'-8"	—
$t_2(E)$	98	#5	10'-8"	—
$u(E)$	14	#4	10'-5"	U
$u_1(E)$	9	#5	11'-4"	U
$v(E)$	6	#5	5'-5"	—
$w_2(E)$	24	#5	28'-9"	—
$w_3(E)$	24	#5	24'-0"	—
Structure Excavation		Cu. Yd.	223	
Concrete Structures		Cu. Yd.	305.1	
Reinforcement Bars, Epoxy Coated		Pounds	31,180	
Bar Splicers		Each	29	
Micro-Piles		Each	42	
Micro-Pile Proof Load Test		Each	1	

** Length is height of spiral.

BILL OF MATERIAL - PIER 2

Bar	No.	Size	Length	Shape
$d_4(E)$	78	#9	15'-10"	U
$h_2(E)$	16	#5	30'-3"	—
$h_3(E)$	16	#5	23'-6"	—
$h_5(E)$	5	#5	6'-3"	—
$h_6(E)$	5	#5	19'-7"	—
$h_8(E)$	5	#5	26'-3"	—
$h_9(E)$	46	#4	28'-0"	—
$h_{10}(E)$	46	#4	22'-9"	—
$n(E)$	6	#5	6'-5"	U
$n_1(E)$	78	#9	10'-7"	U
$p(E)$	9	#9	52'-9"	—
$p_1(E)$	9	#9	39'-6"	—
$p_2(E)$	10	#5	6'-4"	—
$p_4(E)$	12	#9	57'-2"	—
$p_5(E)$	12	#9	43'-11"	—
$s_2(E)$	57	#5	5'-6"	U
$s_3(E)$	96	#4	8'-5"	U
$s_4(E)$	126	#5	12'-9"	□
$s_5(E)$	92	#5	15'-8"	U
$s_6(E)$	92	#5	22'-0"	U
$sp_1(E)$	6	#4	12'-5"	W
$t_1(E)$	192	#6	10'-8"	—
$t_2(E)$	98	#5	10'-8"	—
$u_1(E)$	8	#5	11'-4"	U
$u_3(E)$	20	#4	11'-3"	U
$v(E)$	6	#5	8'-11"	—
$w_2(E)$	24	#5	28'-9"	—
$w_3(E)$	24	#5	24'-0"	—
Structure Excavation		Cu. Yd.	223	
Concrete Structures		Cu. Yd.	378.8	
Reinforcement Bars, Epoxy Coated		Pounds	30,550	
Bar Splicers		Each	29	
Micro-Piles		Each	50	
Micro-Pile Proof Load Test		Each	1	

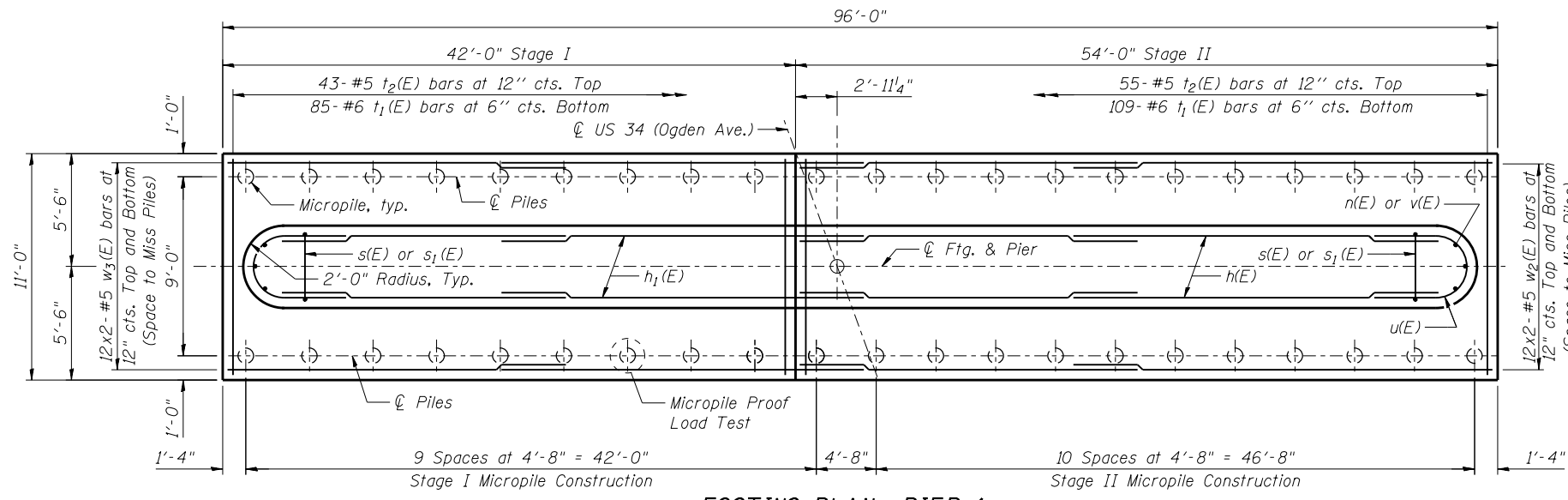
** Length is height of spiral.

LEGEND

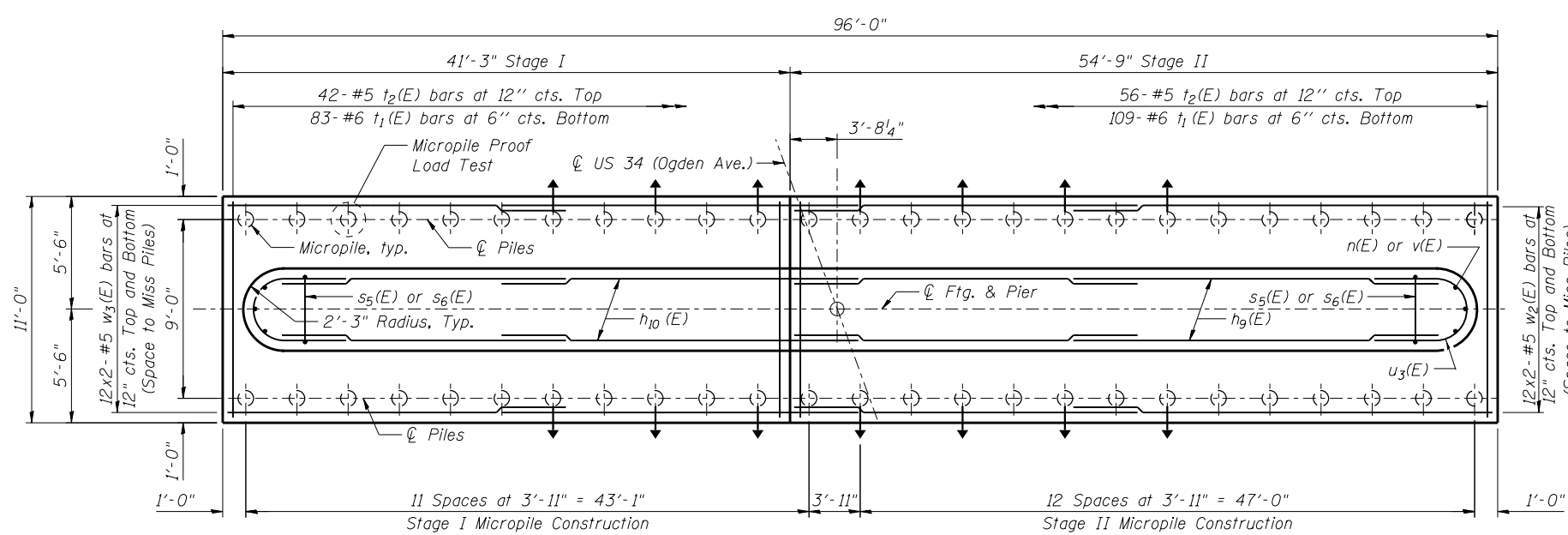
- () - Vertical Pile
- () - Battered Pile

MINIMUM BAR LAP

#5 Bar = 2'-11"



FOOTING PLAN - PIER 1



FOOTING PLAN - PIER 2



USER NAME =	DESIGNED - KMP	REVISED
	CHECKED - AMK	REVISED
PLOT SCALE =	DRAWN - KMP	REVISED
PLOT DATE = 02/28/2014	CHECKED - AMK	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER DETAILS
STRUCTURE NO. 022-0512
SHEET NO. S-40 OF S-53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	652-A	DuPAGE	383	203
CONTRACT NO. 60R06				
ILLINOIS FED. AID PROJECT				