F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	*	COOK	907	660
STA. 1200+00.00	TO STA. 1365+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* (1516.1, 1717 & 1818) R-9

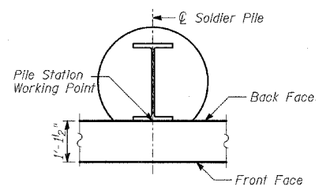
62695

PILE LAYOUT

Pile	Station at Working Point	Top of Parapet El.	Top of Pile El.	Bot. of Wall El.	Section	Pile Tip El.	Pile Length
P-1	139+68.29	10.43	8.43	5.75	W18x106	-20.32	28'-9"
P-2	139+76.17	10.42	8.42	5.57		-20.50	28'-11"
P-3	139+84.05	10.41	8.41	5.39		-20.68	29'-1"
P-4	139+91.91	10.39	8.39	5.21		-20.86	29'-3"
P-5	139+99.78	10.38	8.38	5.04		-21.04	29'-5"
P-6	140+07.64	10.37	8.37	4.86		-21.22	29'-7"
P-7	140+15.49	10.36	8.36	4.68		-21.39	29'-9"
P-8	140+23.34	10.34	8.34	4.50		-21.57	29'-11"
P-9	140+31.13	10.33	8.33	4.32		-21.75	30'-1"
P-10	140+39.00	10.32	8.32	4.15		-21.93	30'-3"
P-11	140+46.86	10.30	8.30	3.97		-22.11	30'-5"
P-12	140+54.72	10.29	8.29	3.79		-22.21	30'-6"
P-13	140+62.57	10.28	8.28	3.61		-22.39	30'-8"
P-14	140+70.42	10.26	8.26	3.43		-22.57	30'-10"
P-15	140+78.26	10.25	8.25	3.26		-22.75	31'-0"
P-16	140+86.10	10.24	8.24	3.08	W18x106	-22.93	31'-2"
P-17	140+93.89	10.21	8.21	2.93	W21x132	-25.12	33'-4"
P-18	141+01.74	10.18	8.18	2.80		-25.24	33'-5"
P-19	141+09.59	10.15	8.15	2.67		-25.35	33'-6"
P-20	141+17.44	10.11	8.11	2.55		-25.47	33'-7"
P-21	141+25.28	10.08	8.08	2.42		-25.59	33'-8"
P-22	141+33.12	10.05	8.05	2.29		-25.79	33'-10"
P-23	141+40.95	10.01	8.01	2.17		-25.91	33'-11"
P-24	141+48.78	9.98	7.98	2.04		-26.02	34'-0"
P-25	141+56.60	9.94	7.94	1.91		-26.14	34'-1"
P-26	141+64.42	9.91	7.91	1.79		-26.26	34'-2"
P-27	141+72.24	9.88	7.88	1.66		-26.37	34'-3"
P-28	141+80.04	9.84	7.84	1.53		-26.49	34'-4"
P-29	141+87.80	9.81	7.81	1.44		-26.61	34'-5"
P-30	141+95.63	9.77	7.77	1.37		-26.64	34'-5"
P-31	142+03.45	9.74	7.74	1.30		-26.76	34'-6"
P-32	142+11.27	9.71	7.71	1.23		-26.79	34'-6"
P-33	142+19.08	9.67	7.67	1.16		-26.91	34'-7"
P-34	142+26.89	9.64	7.64	1.09		-26.94	34'-7"
P-35	142+34.70	9.61	7.61	1.02		-27.06	34'-8"
P-36	142+42.50	9.57	7.57	0.95		-27.09	34'-8"
P-37	142+50.30	9.54	7.54	0.88		-27.13	34'-8"
P-38	142+58.09	9.50	7.50	0.81		-27.25	34'-9"
P-39	142+65.87	9.47	7.47	0.74		-27.28	34'-9"
P-40	142+73.65	9.44	7.44	0.67		-27.40	34'-10"
P-41	143+23.79	9.49	7.49	0.14		-27.92	35'-5"
P-42	143+31.47	9.64	7.64	0.23		-27.72	35'-5"
P-43	143+39.16	9.79	7.79	0.32		-27.71	35'-6"
P-44	143+46.85	9.94	7.94	0.42		-27.64	35'-7"
P-45	143+54.53	10.09	8.09	0.51		-27.58	35'-8"
P-46	143+62.22	10.24	8.24	0.60		-27.43	35'-8"
P-47	143+69.92	10.39	8.39	0.69		-27.36	35'-9"
P-48	143+77.61	10.54	8.54	0.78		-27.30	35'-10"
P-49	143+85.30	10.68	8.68	0.92		-27.15	35'-10"
P-50	143+93.00	10.83	8.83	1.12		-26.92	35'-9"
P-51	144+00.69	10.98	8.98	1.32		-26.68	35'-8"
P-52	144+08.39	11.13	9.13	1.51		-26.54	35'-8"
P-53	144+16.08	11.28	9.28	1.71		-26.30	35'-7"
P-54	144+23.78	11.43	9.43	1.91		-26.16	35'-7"
P-55	144+31.48	11.58	9.58	2.10		-25.92	35'-6"
P-56	144+39.18	11.73	9.73	2.30		-25.77	35'-6"
P-57	144+46.88	11.75	9.75	2.47		-25.59	35'-4"
P-58	144+54.58	11.64	9.64	2.62		-25.44	35'-1"
P-59	144+62.27	11.54	9.54	2.77		-25.30	34'-10"
P-60	144+69.97	11.43	9.43	2.91		-25.15	34'-7"
P-61	144+77.67	11.33	9.33	3.06		-25.01	34'-4"
P-62	144+85.37	11.22	9.22	3.21		-24.86	34'-1"
P-63	144+93.07	11.12	9.12	3.35		-24.72	33'-10"
P-64	145+00.77	11.01	9.01	3.50	W21x132	-24.57	33'-7"
P-65	145+08.48	10.90	8.90	3.60	W18x106	-22.43	31'-4"

PILE LAYOUT

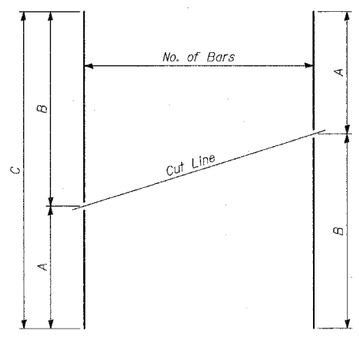
Pile	Station at Working Point	Top of Parapet El.	Top of Pile El.	Bot. of Wall El.	Section	Pile Tip El.	Pile Length
P-66	145+16.17	10.80	8.80	3.66	W18x106	-22.37	31'-2"
P-67	145+23.86	10.69	8.69	3.72		-22.31	31'-0"
P-68	145+31.55	10.59	8.59	3.78		-22.25	30'-10"
P-69	145+39.24	10.48	8.48	3.84		-22.18	30'-8"
P-70	145+46.93	10.38	8.38	3.90		-22.12	30'-6"
P-71	145+54.61	10.27	8.27	3.96		-22.06	30'-4"
P-72	145+62.29	10.17	8.17	4.02		-22.00	30'-2"
P-73	145+69.97	9.99	7.99	4.05		-22.01	30'-0"
P-74	145+77.65	9.74	7.74	4.03		-22.01	29'-9"
P-75	145+85.33	9.49	7.49	4.02		-22.01	29'-6"
P-76	145+93.00	9.24	7.24	4.01		-22.01	29'-3"
P-77	146+00.67	8.99	6.99	3.99		-22.01	29'-0"
P-78	146+08.34	8.74	6.74	3.98		-22.09	28'-10"
P-79	146+16.00	8.49	6.49	3.97		-22.09	28'-7"
P-80	146+23.67	8.24	6.24	3.95	W18x106	-22.09	28'-4"



SOLDIER PILE WORKING POINT

BAR TABLE SCHEDULE

Bar	No. of Sets Req'd	No. of Bars Per Set	A	B	C
v(E)	1	31	4'-4"	5'-0"	9'-4"
v_1(E)	1	31	5'-4"	5'-8"	10'-8"
v_2(E)	1	31	5'-8"	6'-3"	11'-11"
v_3(E)	1	31	6'-3"	6'-11"	13'-2"
v_4(E)	1	31	6'-11"	7'-4"	14'-3"
v_5(E)	1	31	7'-4"	7'-8"	15'-0"
v_6(E)	1	31	7'-8"	8'-1"	15'-9"
v_{10}(E)	1	31	9'-0"	9'-3"	18'-3"
v_{11}(E)	1	31	9'-3"	9'-6"	18'-9"
v_{13}(E)	1	31	9'-4"	9'-1"	18'-5"
v_{14}(E)	1	31	9'-1"	8'-1"	17'-2"
v_{15}(E)	1	31	8'-1"	7'-1"	15'-2"
v_{16}(E)	1	31	7'-1"	6'-5"	13'-6"
v_{17}(E)	1	31	6'-5"	5'-9"	12'-2"
v_{18}(E)	1	31	5'-9"	4'-10"	10'-7"
v_{19}(E)	1	31	4'-10"	3'-11"	8'-9"



SERIES OF BAR CUTTING DIAGRAM

See table for dimensions. Make all cuts normal to bar axis

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	196	#5	32'-2"	———
h_1 (E)	158	#5	29'-8"	———
v(E)	31	#4	9'-4"	———
v_1(E)	31	#4	10'-8"	———
v_2(E)	31	#4	11'-11"	———
v_3(E)	31	#4	13'-2"	———
v_4(E)	31	#4	14'-3"	———
v_5(E)	31	#4	15'-0"	———
v_6(E)	31	#4	15'-9"	———
v_7(E)	62	#4	8'-2"	———
v_8(E)	62	#4	8'-3"	———
v_9(E)	62	#4	8'-5"	———
v_{10}(E)	31	#4	18'-3"	———
v_{11}(E)	31	#4	18'-9"	———
v_{12}(E)	62	#4	9'-5"	———
v_{13}(E)	31	#4	18'-5"	———
v_{14}(E)	31	#4	17'-2"	———
v_{15}(E)	31	#4	15'-2"	———
v_{16}(E)	31	#4	13'-6"	———
v_{17}(E)	31	#4	12'-2"	———
v_{18}(E)	31	#4	10'-7"	———
v_{19}(E)	31	#4	8'-9"	———
Protective Coat			SQ YD	505
Reinforcement Bars, Epoxy Coated			POUND	17,500
Concrete Structures			CU YD	190
Furnishing Soldier Piles (W Section)			FOOT	2,626
Drilling and Setting Soldier Piles (in Soil)			CU FT	12,754

Reinforcement bars designated (E) shall be epoxy coated.

LAP SPLICES

Bar	Lap
#4	1'-8"
#5	2'-2"
#6	2'-7"
#8	4'-6"

TYLIN INTERNATIONAL

REVISIONS	
NAME	DATE
REVISED	04/15/05

SHEET 7 OF 17

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 94 (DAN RYAN EXPRESSWAY)
RETAINING WALL ALONG LAFAYETTE AVE.
AT 97TH ST.
WALL 68

PILE LAYOUT, DETAILS & BILL OF MATERIAL

S.N. 016-W967 DESIGNED BY: MI, DJR
SCALE: N.T.S. DRAWN BY: DJR, MAF
DATE: MARCH 25, 2005 CHECKED BY: TD, MI

$TIME$
$DATE$