



BARS s24(E), s25(E) & s35(E)

Bar	A
s24(E)	2'-6 1/2"
s25(E)	2'-2"
s35(E)	2'-8"

BARS s23(E), s26(E), s31(E), s33(E) & s34(E)

Bar	B	C
s23(E)	3'-5"	2'-7"
s26(E)	5'-8"	5'-0"
s31(E)	3'-7 1/4"	2'-7"
s33(E)	3'-3 1/2"	2'-7"
s34(E)	3'-6 1/2"	2'-7"

MINIMUM BAR LAP

- #5(E) Bar = 3'-3"
- #6(E) Bar = 3'-10"
- #7(E) Bar = 5'-2"
- #8(E) Bar = 6'-9"

Cast steps monolithically with cap. Space cap reinforcement to miss anchor bolts. ** Length is height of spiral.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h20(E)	24	#5	25'-9"	
h21(E)	48	#6	22'-8"	
p20(E)	32	#8	31'-9"	
p21(E)	16	#8	20'-9"	
p22(E)	8	#7	33'-2"	
p23(E)	16	#7	24'-0"	
p24(E)	8	#5	12'-7"	
p27(E)	8	#5	11'-5"	
s23(E)	16	#5	12'-11"	
s24(E)	32	#5	7'-8"	
s25(E)	16	#5	6'-11"	
s26(E)	61	#5	22'-3"	
s31(E)	20	#5	13'-4"	
s33(E)	28	#5	12'-8"	
s34(E)	60	#5	13'-2"	
s35(E)	40	#5	7'-11"	
sp(E)	5	#5	47'-9"	
u20(E)	6	#5	25'-5"	
u21(E)	6	#5	11'-10"	
u22(E)	10	#5	15'-4"	
v20(E)	50	#11	24'-0"	
v21(E)	50	#11	25'-7"	
v25(E)	100	#11	29'-1"	
v26(E)	50	#11	21'-0"	
v27(E)	50	#11	28'-7"	
Structure Excavation		Cu. Yd.	48.0	
Concrete Structures		Cu. Yd.	319.3	
Reinforcement Bars, Epoxy Coated		Pound	54,250	
Mechanical Splicers		Each	100	
Drilled Shaft in Soil		Cu. Yd.	149.1	
Drilled Shaft in Rock		Cu. Yd.	14.7	

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CMT
CRAWFORD MURPHY & TILLY, INC.
CONSULTING ENGINEERS
SPRINGFIELD, IL ■ ALBANY, IL ■ ST. LOUIS, MO
ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

USER NAME = Gary Davis	DESIGNED - MCC	REVISED -
	CHECKED - ATI	REVISED -
PLOT SCALE =	DRAWN - GLD	REVISED - 2/24/12
PLOT DATE = 1/31/2012	CHECKED - ATI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS
STRUCTURE NO. 100-0094 (E.B.)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(IX)-11VB-1	WILLIAMSON	367	199
			CONTRACT NO.	98859
ILLINOIS FED. AID PROJECT				