

**TAPERED CRASHWALL EXTENSION (THREE CIRCULAR COLUMN PIER) (WORK WITH SHEET 83)**

STRUCTURE		DIMENSION					CONCRETE STRUCTURES	BAR				BAR				BAR				BAR													
STATION		B (FT)	C (FT)	D (FT)	E (FT)	F (FT)	(CU YD)	BAR	QTY	SIZE	LENGTH	SHAPE	LBS	BAR	QTY	SIZE	LENGTH	SHAPE	LBS	BAR	QTY	SIZE	LENGTH	SHAPE	LBS	BAR	QTY	SIZE	A	I	LENGTH	SHAPE	LBS
092-0099 1727+30.31		1'-8"	2'-4"	0'-3"	2'-6"	10'-5"	12.45	h(E)	72	#5	2'-9"		206.5	h6(E)	42	#5	10'-1"		441.7	s(E)	84	#5	2'-0"		175.2	s11(E)	42	#5	1'-4"	2'-8"	8'-11"		390.6
092-0126 1742+16.65 LOC.		1'-9"	2'-3"	0'-3"	2'-6"	9'-2"	10.96	h(E)	72	#5	2'-9"		206.5	h7(E)	42	#5	8'-10"		387.0	s(E)	72	#5	2'-0"		150.2	s12(E)	36	#5	1'-5"	2'-8"	9'-1"		341.1
092-0087 1917+83.25	MED	1'-11"	2'-1"	0'-2"	2'-2"	16'-6"	6.03	h(E)	24	#5	2'-9"		68.8	h8(E)	14	#5	16'-2"		236.1	s(E)	44	#5	2'-0"		91.8	s13(E)	22	#5	1'-7"	2'-2"	8'-5"		193.1
	EB	1'-11"	2'-1"	0'-2"	2'-2"	16'-6"	6.03	h(E)	24	#5	2'-9"		68.8	h8(E)	14	#5	16'-2"		236.1	s(E)	44	#5	2'-0"		91.8	s13(E)	22	#5	1'-7"	2'-2"	8'-5"		193.1
092-0129 1971+24.72 LOC.		1'-11"	2'-1"	0'-3"	2'-6"	9'-3"	14.43	h(E)	72	#5	2'-9"		206.5	h9(E)	42	#5	8'-11"		390.6	s(E)	84	#5	2'-0"		175.2	s14(E)	42	#5	1'-7"	2'-8"	9'-5"		412.5
092-0084 2001+44.74	WB	1'-6"	2'-6"	0'-3"	2'-6"	9'-6"	3.4	h(E)	24	#5	2'-9"		68.8	h10(E)	14	#5	9'-2"		133.9	s(E)	28	#5	2'-0"		58.4	s15(E)	14	#5	1'-2"	2'-8"	8'-7"		125.3
	MED	1'-6"	2'-6"	0'-3"	2'-6"	9'-6"	3.4	h(E)	24	#5	2'-9"		68.8	h10(E)	14	#5	9'-2"		133.9	s(E)	28	#5	2'-0"		58.4	s15(E)	14	#5	1'-2"	2'-8"	8'-7"		125.3
	EB	1'-6"	2'-6"	0'-3"	2'-6"	9'-6"	3.4	h(E)	24	#5	2'-9"		68.8	h10(E)	14	#5	9'-2"		133.9	s(E)	28	#5	2'-0"		58.4	s15(E)	14	#5	1'-2"	2'-8"	8'-7"		125.3
CONCRETE STRUCTURES =							61.1	LBS =				963.5	LBS =				2093.2	LBS =				859.4	LBS =				1906.3	REINFORCEMENT BARS (EPOXY COATED) =				5822.4	

**CRASHWALL EXTENSION (THREE CIRCULAR COLUMN PIER) (WORK WITH SHEET 84)**

STRUCTURE		DIMENSION		CONCRETE STRUCTURES	BAR				BAR				BAR				BAR												
STATION		B (FT)	C (FT)	(CU YD)	BAR	QTY	SIZE	LENGTH	SHAPE	LBS	BAR	QTY	SIZE	LENGTH	SHAPE	LBS	BAR	QTY	SIZE	LENGTH	SHAPE	LBS	BAR	QTY	SIZE	LENGTH	SHAPE	LBS	
010-0089 762+00.00		1'-10"	2'-2"	24.3	h(E)	72	#5	2'-9"		206.5	h11(E)	42	#5	12'-3"		536.6	s(E)	108	#5	2'-0"		225.3	s16(E)	54	#5	12'-3"		689.9	
CONCRETE STRUCTURES =				24.3	LBS =				206.5	LBS =				536.6	LBS =				225.3	LBS =				689.9	REINFORCEMENT BARS (EPOXY COATED) =				472.5
																									REINFORCEMENT BARS (EPOXY COATED) =				2130.8

**CRASHWALL EXTENSION (FIVE CIRCULAR COLUMN PIER) (WORK WITH SHEET 86)**

STRUCTURE		DIMENSION					CONCRETE STRUCTURES	BAR				LOCATION				BAR				BAR												
STATION		B (FT)	C (FT)	F (FT)	G (FT)	H (FT)	(CU YD)	BAR	QTY	SIZE	LENGTH	SHAPE	LBS	LOCATION	BAR	QTY	SIZE	LENGTH	SHAPE	LBS	BAR	QTY	SIZE	LENGTH	SHAPE	LBS	BAR	QTY	SIZE	LENGTH	SHAPE	LBS
092-0051 1697+22.5		1'-10"	2'-2"	10'-3"	11'-2"	9'-3"	42.9	h(E)	144	#5	2'-9"		413.0	F	h12(E)	21	#5	9'-11"		217.3	u1(E)	72	#5	12'-6"		938.7						
														G	h13(E)	21	#5	10'-10"		237.3												
CONCRETE STRUCTURES =							42.9	LBS =				413.0	LBS =				850.0	LBS =				1110.0	REINFORCEMENT BARS (EPOXY COATED) =				3672.0					

NOTE:  
WORK TO BE DONE TO ALL PIERS AT EACH STRUCTURE EXCEPT AS NOTED.  
MED INDICATES MEDIAN PIER.  
EB INDICATES EAST BOUND PIER.

▲ REVISED 2/27/08