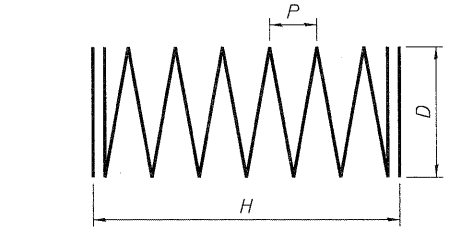
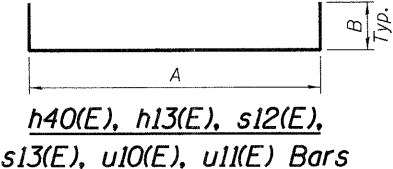


ANCHOR BOLT LAYOUT

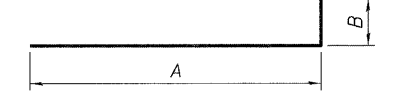


Bar	H	D	P	Length*
sp40	58'-7"	5'-10"	6"	2,179'
sp41	50'-10"	5'-10"	3"	3,741'
sp42(E)	15'-0"	4'-8"	4"	695'
sp43(E)	20'-4"	4'-8"	4"	926'
sp44(E)	19'-6"	4'-8"	4"	890'
sp45(E)	18'-9"	4'-8"	4"	858'
sp46(E)	17'-11"	4'-8"	4"	821'
sp47(E)	17'-1"	4'-8"	4"	785'

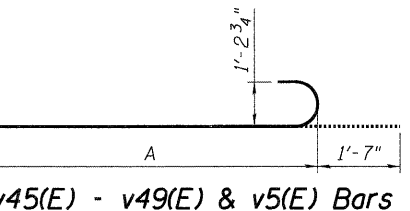
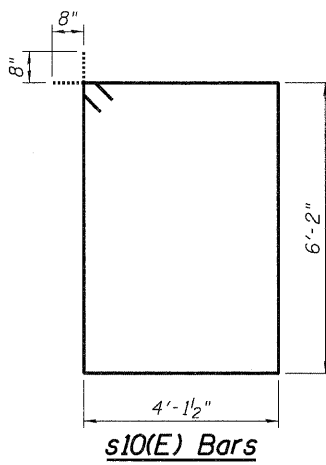
* For Information Only - length calculated as continuous bar (ignoring splices).



Bar	A	B	Length
h40(E)	9'-8"	1'-6"	12'-8"
h13(E)	7'-11"	1'-6"	10'-11"
s12(E)	6'-2"	1'-0"	8'-2"
s13(E)	6'-2"	1'-0"	8'-2"
u10(E)	6'-0"	7'-9"	21'-6"
u11(E)	6'-2"	1'-6"	9'-2"



Bar	A	B	Length
h41(E)	10'-9"	1'-6"	12'-3"
h14(E)	10'-2"	1'-6"	11'-8"
h16(E)	11'-1"	1'-6"	12'-7"
p40(E)	46'-10"	2'-0"	48'-10"
p42(E)	57'-9"	2'-0"	59'-9"



Bar	A	Length
v45(E)	28'-5"	30'-0"
v46(E)	27'-7"	29'-2"
v47(E)	26'-10"	28'-5"
v48(E)	26'-0"	27'-7"
v49(E)	25'-2"	26'-9"
v5(E)	12'-3"	13'-10"

PIER 27 BAR LIST				
Bar	No.	Size	Length	Shape
h40(E)	7	#6	12'-8"	[Diagram]
h41(E)	28	#6	12'-3"	[Diagram]
h42(E)	7	#6	11'-7"	[Diagram]
h13(E)	7	#6	10'-11"	[Diagram]
h14(E)	21	#6	11'-8"	[Diagram]
h16(E)	7	#6	12'-7"	[Diagram]
p40(E)	32	#11	48'-10"	[Diagram]
p41(E)	20	#8	54'-0"	[Diagram]
p42(E)	46	#11	59'-9"	[Diagram]
p43(E)	16	#11	33'-4"	[Diagram]
s10(E)	314	#6	21'-11"	[Diagram]
s11(E)	105	#6	16'-8"	[Diagram]
s12(E)	45	#6	8'-2"	[Diagram]
s13(E)	90	#6	8'-2"	[Diagram]
sp40	5	#6	58'-7"	[Diagram]
sp41	5	#6	50'-10"	[Diagram]
sp42(E)	5	#6	15'-0"	[Diagram]
sp43(E)	1	#6	20'-4"	[Diagram]
sp44(E)	1	#6	19'-6"	[Diagram]
sp45(E)	1	#6	18'-9"	[Diagram]
sp46(E)	1	#6	17'-11"	[Diagram]
sp47(E)	1	#6	17'-1"	[Diagram]
u10(E)	10	#8	21'-6"	[Diagram]
u11(E)	111	#6	9'-2"	[Diagram]
v40	110	#14	53'-8"	[Diagram]
v41	110	#14	55'-9"	[Diagram]
v1	110	#14	38'-10"	[Diagram]
v2(E)	45	#11	10'-6"	[Diagram]
v3(E)	45	#11	12'-6"	[Diagram]
v4(E)	90	#11	14'-6"	[Diagram]
v45(E)	18	#11	30'-0"	[Diagram]
v46(E)	18	#11	29'-2"	[Diagram]
v47(E)	18	#11	28'-5"	[Diagram]
v48(E)	18	#11	27'-7"	[Diagram]
v49(E)	18	#11	26'-9"	[Diagram]
v5(E)	90	#11	13'-10"	[Diagram]

* Length is height of spiral

PIER 27 BILL OF MATERIAL

Item	Unit	Total
Structure Excavation	Cu. Yd.	164
Concrete Structures	Cu. Yd.	271.2
Reinforcement Bars	Pound	169,210
Reinforcement Bars, Epoxy Coated	Pound	90,990
Permanent Casing	Foot	534
Drilled Shaft in Soil	Cu. Yd.	657
Drilled Shaft in Rock	Cu. Yd.	16
Mechanical Splicers	Each	200
Crosshole Sonic Logging	Each	1

- NOTES:**
- Work this sheet with Sht. S-86.
 - The quantities and reinforcement detailing shown are based on the top of shaft and estimated top of rock elevations shown and may change based on the actual elevations encountered at each shaft.
 - The cost of steel pipes, pipe caps and couplers for crosshole sonic logging shall be included in Drilled Shaft in Soil and Drilled Shaft in Rock.
 - v(E) bars in columns shall be placed as shown to provide space for p40(E) bars in cap.
 - For Anchor Bolt and bearing details, see Sht. S-74.

