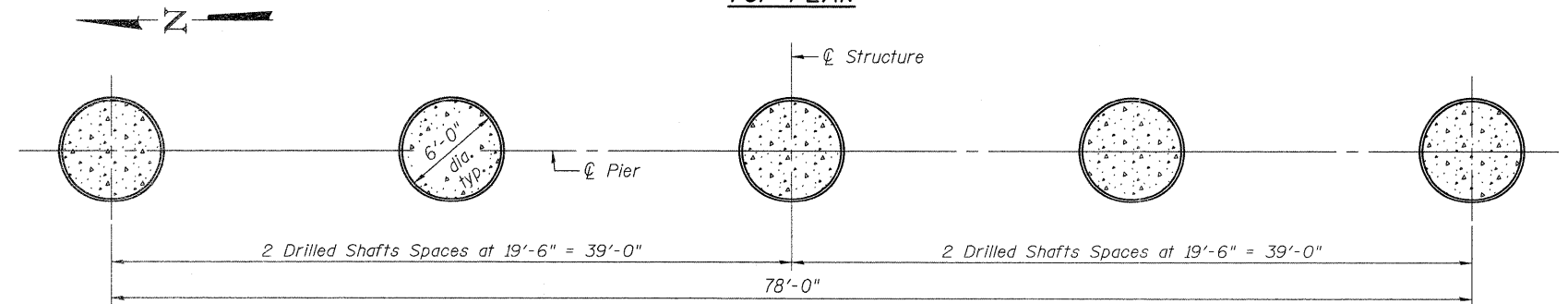
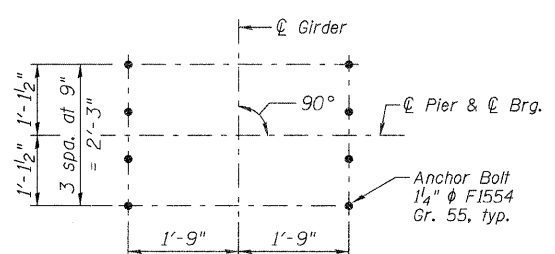


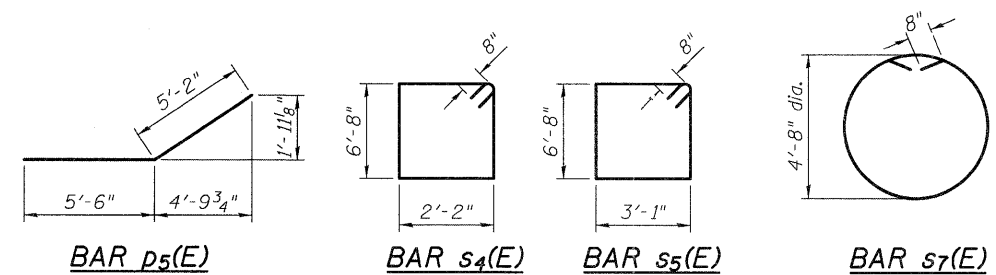
TOP PLAN



DRILLED SHAFT LAYOUT



TYPICAL ANCHOR BOLT LAYOUT



BAR p₅(E) BAR s₄(E) BAR s₅(E) BAR s₇(E)

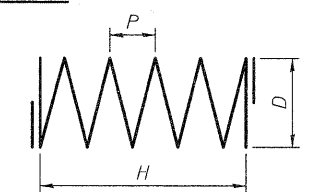
BARS

Bar	A	B
s(E)	3'-1"	4'-11"
s ₁ (E)	2'-2"	4'-11"
s ₂ (E)	6'-8"	1'-0"
s ₃ (E)	5'-8"	1'-0"
s ₆ (E)	5'-8"	2'-6"
u(E)	5'-6"	8'-0"

A & B DIMENSIONS

Bar	A	B
p(E)	48'-3"	2'-0"
p ₁ (E)	57'-0"	2'-0"

BARS



SPIRALS

H, D & P DIMENSIONS

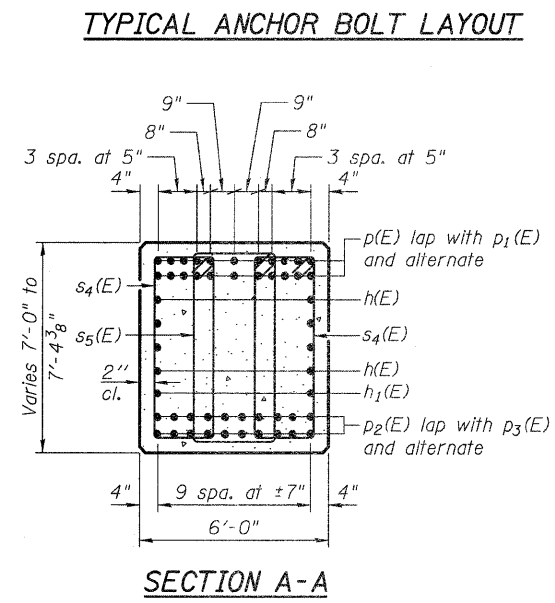
Bar	H	D	P	L*
sp ₁	40'-0"	5'-2"	3"	2,646'
sp ₃ (E)	24'-10"	4'-8"	4"	1,137'
sp ₄	129'-0"	5'-2"	6"	4,237'

* Length calculated as continuous bar (ignoring splices).

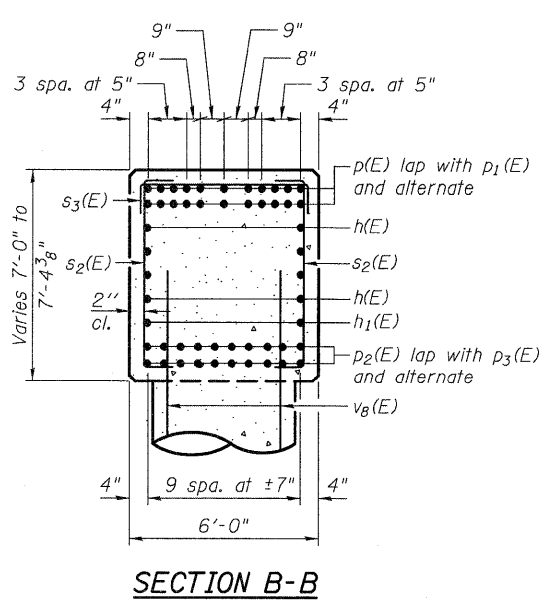
**PIER 4
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	16	#8	50'-8"	—
h ₁ (E)	4	#8	48'-2"	—
p(E)	22	#11	50'-3"	—
p ₁ (E)	22	#11	59'-0"	—
p ₂ (E)	20	#11	36'-8"	—
p ₃ (E)	20	#11	57'-6"	—
p ₄ (E)	22	#11	18'-10"	—
p ₅ (E)	20	#8	10'-8"	—
s(E)	60	#6	12'-11"	□
s ₁ (E)	120	#6	12'-0"	□
s ₂ (E)	80	#6	8'-8"	□
s ₃ (E)	40	#6	7'-8"	□
s ₄ (E)	240	#6	19'-0"	□
s ₅ (E)	120	#6	20'-10"	□
s ₆ (E)	78	#6	10'-8"	□
s ₇ (E)	35	#6	18'-0"	○
sp ₁	5	#6	2646'-0"	⋈
sp ₃ (E)	5	#6	1137'-0"	⋈
sp ₄	5	#6	4237'-0"	⋈
u(E)	8	#8	21'-6"	□
v ₁	80	#11	50'-0"	—
v ₂	40	#11	55'-0"	—
v ₃	40	#11	57'-6"	—
v ₈ (E)	140	#11	35'-2"	—
v ₉	40	#11	57'-4"	—
v ₁₀	40	#11	57'-4"	—
v ₁₁	40	#11	56'-8"	—
v ₁₂	40	#11	54'-2"	—
Structure Excavation		Cu. Yd.	41.3	
Concrete Structures		Cu. Yd.	229.9	
Reinforcement Bars		Pound	144,780	
Reinforcement Bars, Epoxy Coated		Pound	81,020	
Permanent Casing		Foot	720.0	
Drilled Shaft in Soil		Cu. Yd.	754.0	
Drilled Shaft in Rock		Cu. Yd.	110.0	
Crosshole Sonic Logging		Each	5	
Mechanical Splicers		Each	160	

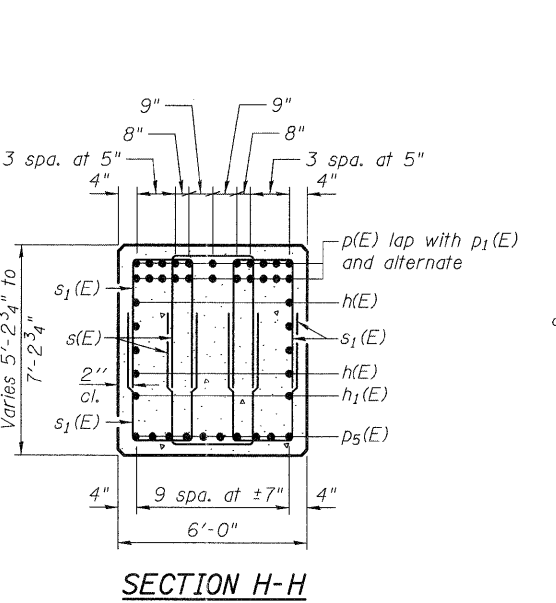
Bars indicated thus 1 x 4-#8 etc. indicates 1 line of bars with 4 lengths per line.



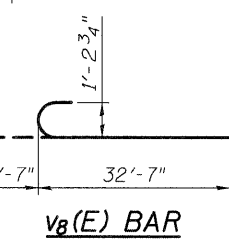
SECTION A-A



SECTION B-B

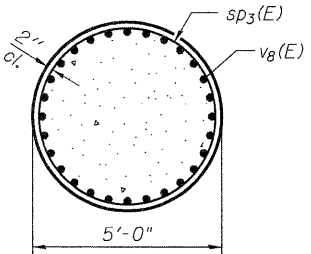


SECTION H-H

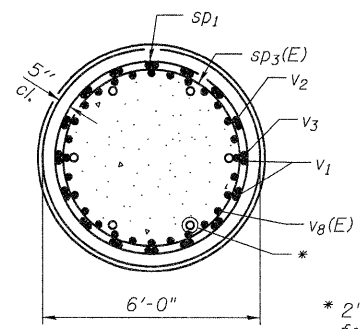


v₈(E) BAR

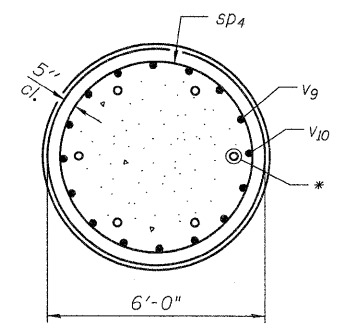
SECTION C-C



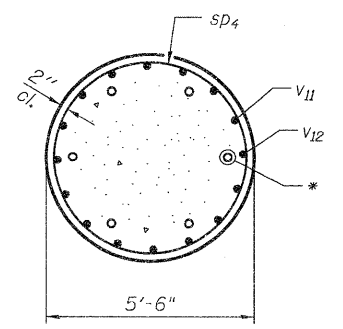
SECTION E-E



SECTION D-D



SECTION F-F



SECTION G-G

* 2" I.D. Steel Pipe for Crosshole Sonic Logging, typ. (6 each shaft)

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USER NAME = jmgus	DESIGNED - PJC	REVISED - LGP 4/20/2011
FILE NAME = 0600345-76A91-099-PRD.DGN	CHECKED - CAS	REVISED -
PLOT SCALE = NONE	DRAWN - JM	REVISED -
PLOT DATE = 3/18/2011	CHECKED - BSK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 4 - PLANS & BILL OF MATERIAL
STRUCTURE NO. 060-0345

BRIDGE SHEET NO. 99 OF 133 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
270	60-1B-1	MADISON	712	478
				CONTRACT NO. 76A91
ILLINOIS FED. AID PROJECT				