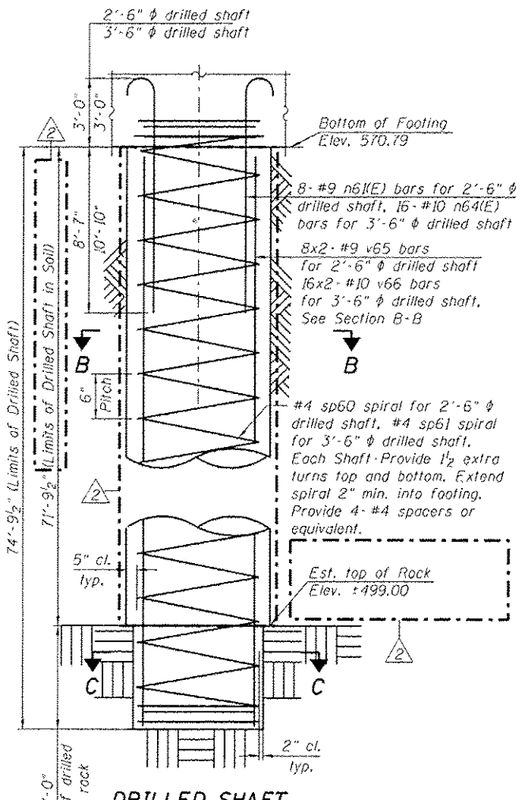
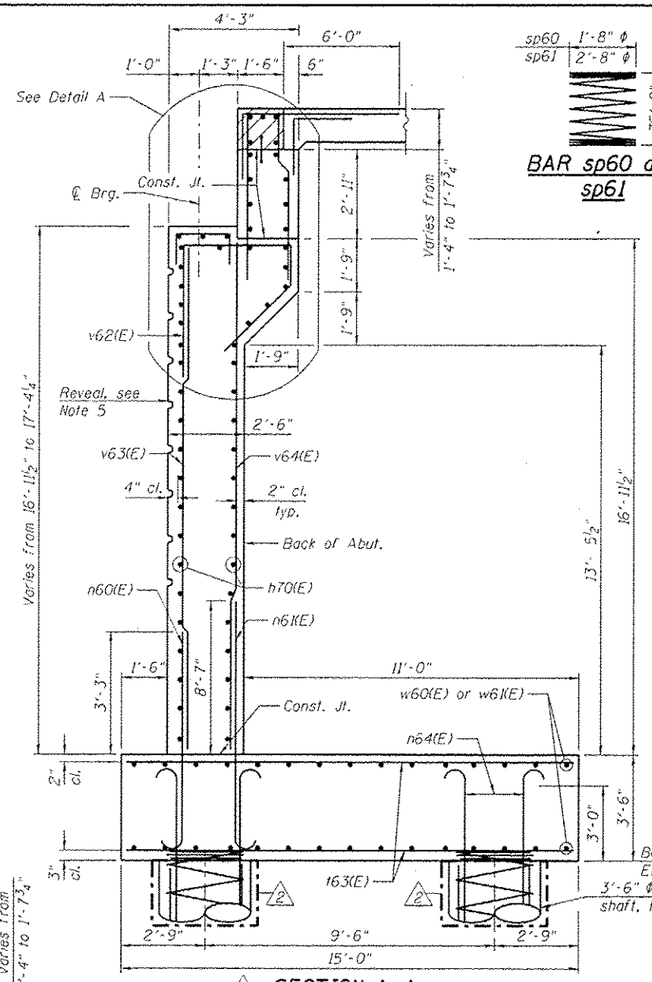
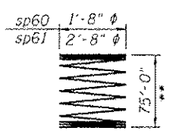


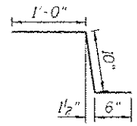
DRILLED SHAFT



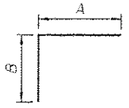
SECTION A-A



BAR sp60 and sp61

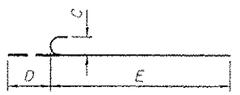


BAR c61(E)



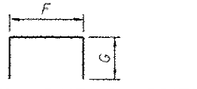
BAR h68(E), n62(E), n63(E) & v67(E)

Bar	A	B
h68(E)	5'-2"	1'-0"
n62(E)	6'-3"	10"
n63(E)	11'-7"	1'-7"
v67(E)	1'-11"	2'-0"



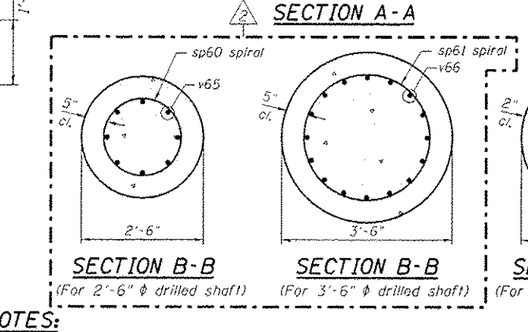
BAR n60(E), n61(E) & n64(E)

Bar	C	D	E
n60(E)	5"	7"	6'-6"
n61(E)	11¾"	1'-3"	11'-7"
n64(E)	1¼"	1'-5"	13'-10"



BAR d61(E), e64(E) & u60(E)

Bar	F	G
d61(E)	1'-1"	9"
e64(E)	2'-2"	1'-0"
u60(E)	1'-9"	1'-0"



DETAIL A

SECTION B-B (For 2'-6" ϕ drilled shaft)

SECTION B-B (For 3'-6" ϕ drilled shaft)

SECTION C-C (For 3'-6" ϕ drilled shaft)

SECTION C-C (For 2'-6" ϕ drilled shaft)

NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Apply concrete sealer to all exposed concrete surfaces of the abutment.
3. All edges shall have standard ¾" chamfer.
4. For bar cutting diagram, see Sheet S1-30.
5. For reveal details, see Sheet S1-31.

* Space h69(E) bars to miss anchor bolts.

2 Entire sheet revised

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
b60(E)	22	#5	1'-2"	
c60(E)	6	#5	9'-6"	
c61(E)	6	#5	2'-4"	
d60(E)	38	#5	5'-9"	
d61(E)	46	#5	2'-7"	
d62(E)	80	#7	7'-8"	
d63(E)	8	#5	6'-10"	
d64(E)	12	#7	8'-9"	
e60(E)	4	#4	17'-4"	
e61(E)	4	#4	20'-7"	
e62(E)	4	#4	19'-6"	
e63(E)	4	#4	22'-6"	
e64(E)	8	#4	4'-2"	
h60(E)	26	#5	30'-6"	
h61(E)	24	#5	17'-4"	
h62(E)	24	#5	21'-5"	
h63(E)	24	#5	19'-6"	
h64(E)	24	#5	23'-3"	
h65(E)	16	#5	1'-11"	
h66(E)	24	#5	9'-5"	
h67(E)	12	#5	7'-9"	
h68(E)	96	#5	6'-2"	
h69(E)	3	#5	9'-8"	
h70(E)	84	#5	32'-0"	
n60(E)	62	#5	7'-1"	
n61(E)	187	#9	12'-10"	
n62(E)	40	#5	7'-1"	
n63(E)	89	#9	13'-2"	
n64(E)	256	#10	15'-3"	
sp60	8	#4	75'-0"	
sp61	16	#4	75'-0"	
t60(E)	13	#9	8'-2"	
t61(E)	7	#9	22'-8"	
t62(E)	4	#9	22'-8"	
t63(E)	186	#9	14'-6"	
t64(E)	4	#9	35'-10"	
t65(E)	7	#9	35'-10"	
t66(E)	7	#9	21'-2"	
t67(E)	11	#9	10'-8"	
t68(E)	4	#9	28'-2"	
t69(E)	7	#9	28'-2"	

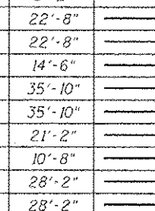
2 ** Length is height of spiral

BILL OF MATERIAL (CONT'D)

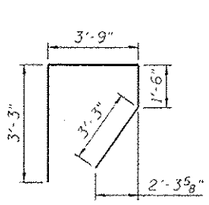
Bar	No.	Size	Length	Shape
u60(E)	11	#4	3'-9"	
v60(E)	59	#5	6'-2"	
v61(E)	59	#5	6'-0"	
v62(E)	59	#5	11'-9"	
v63(E)	62	#5	16'-10"	
v64(E)	123	#9	16'-10"	
v65	128	#9	41'-7"	
v66	512	#10	42'-8"	
v67(E)	59	#5	3'-11"	
v68(E)	40	#5	21'-9"	
v69(E)	90	#9	21'-9"	
v70(E)	12	#5	6'-1"	
v71(E)	36	#5	4'-4"	
w60(E)	42	#7	29'-4"	
w61(E)	60	#7	33'-1"	
w62(E)	16	#7	17'-2"	
w63(E)	2	#7	16'-3"	
w64(E)	2	#7	17'-4"	
w65(E)	2	#7	24'-9"	

Concrete Structures	Cu Yd	349.6	
Concrete Superstructure	Cu Yd	10.9	
Protective Coat	Sq Yd	18	
Reinforcement Bars	Pound	130,130	
Reinforcement Bars, Epoxy Coated	Pound	77,410	
2			
Drilled Shaft in Soil	Cu Yd	515	
Drilled Shaft in Rock	Cu Yd	16	
Concrete Sealer	Sq Ft	2,483	
Geocomposite Wall Drain	Sq Yd	220	
Braced Excavation	Cu Yd	1,606	
Granular Backfill for Structures	Cu Yd	280	
Pipe Underdrains for Structures 6"	Foot	119	

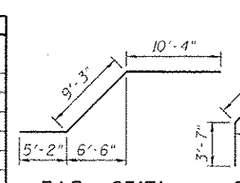
Minimum Bar Laps	
Bar	Lap
#4	2'-7"
#5	3'-3"
#6	3'-10"
#7	5'-2"
#8	6'-9"
#9	8'-7"
#10	10'-10"



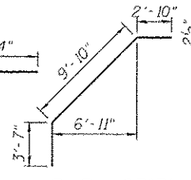
BAR v61(E)



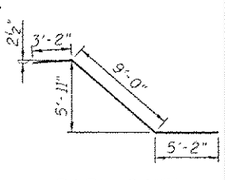
BAR v62(E)



BAR w65(E)



BAR w63(E)



BAR w64(E)

HBM ENGINEERING GROUP, LLC. CONSULTING & DESIGN INSPECTION & RATING RESEARCH & TESTING
4415 WEST HARRISON ST. SUITE 331 HOLLISTON, IL 60162 PHONE: (708) 236-0900 FAX: (708) 236-0901

01617001-60W25-S29-SouthAbutment3.dgn	DESIGNED - MI, MAF	REVISED - 1	07/19/2013 MI, LAB
USER NAME = lisakallemeyn	DRAWN - LAB, MAF	REVISED - 2	07/30/2013 MI, LAB
PLOT SCALE = 60.0000 '/ in.	CHECKED - MAI, MI, JJS	REVISED -	
PLOT DATE = 7/30/2013	DATE - 6/17/2013	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT SECTIONS AND DETAILS
STRUCTURE NO. 016-1709

SCALE: | SHEET S1-29 OF S1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-00TR	COOK	317	173
		CONTRACT NO. 60W25		
		ILLINOIS FED. AID PROJECT		

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