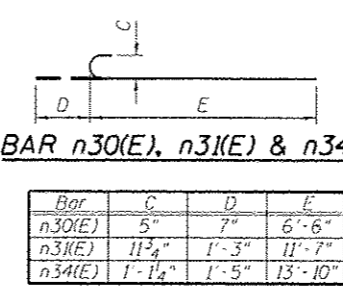


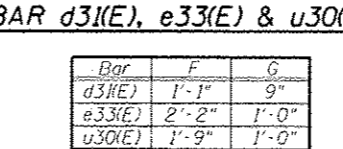
BAR d30(E), d32(E), d34(E), d35(E), h38(E), n32(E), n33(E) & v37(E)

Bar	A	B
d30(E)	4'-10"	6"
d32(E)	5'-10"	6"
d34(E)	4'-10"	6"
d35(E)	5'-10"	6"
h38(E)	4'-0"	1'-0"
n32(E)	6'-6"	10"
n33(E)	11'-10"	1'-7"
v37(E)	1'-11"	1'-10"



BAR n30(E), n31(E) & n34(E)

Bar	C	D	E
n30(E)	5"	7"	6'-6"
n31(E)	11'-2 1/2"	1'-3"	11'-7"
n34(E)	1'-1 1/4"	1'-5"	13'-10"



BAR d31(E), e33(E) & u30(E)

Bar	F	G
d31(E)	1'-1"	9"
e33(E)	2'-2"	1'-0"
u30(E)	1'-9"	1'-0"

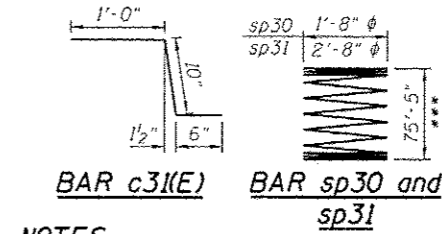
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
b30(E)	11	#5	1'-2"	—
c30(E)	3	#5	9'-6"	—
c31(E)	3	#5	2'-4"	—
d30(E)	42	#5	5'-4"	—
d31(E)	60	#5	2'-7"	—
d32(E)	4	#5	6'-4"	—
d33(E)	14	#5	5'-9"	—
d34(E)	76	#7	5'-4"	—
d35(E)	6	#7	6'-4"	—
d36(E)	26	#7	7'-8"	—
e30(E)	8	#4	19'-11"	—
e31(E)	8	#4	21'-3"	—
e32(E)	8	#4	11'-10"	—
e33(E)	4	#4	4'-2"	—
h30(E)	26	#5	31'-3"	—
h31(E)	46	#5	11'-9"	—
h32(E)	2	#5	11'-10"	—
h33(E)	8	#5	20'-3"	—
h34(E)	8	#5	21'-6"	—
h35(E)	8	#5	1'-11"	—
h36(E)	24	#5	7'-7"	—
h37(E)	12	#5	6'-0"	—
h38(E)	48	#5	5'-0"	—
h39(E)	3	#5	9'-8"	—
h40(E)	84	#5	32'-2"	—
n30(E)	62	#5	7'-1"	—
n31(E)	139	#9	12'-10"	—
n32(E)	13	#5	7'-4"	—
n33(E)	25	#9	13'-5"	—
n34(E)	224	#10	15'-3"	—
sp30	2	#4	75'-5"	—
sp31	14	#4	75'-5"	—
l30(E)	39	#9	16'-8"	—
l31(E)	4	#9	15'-10"	—
l32(E)	165	#9	14'-8"	—

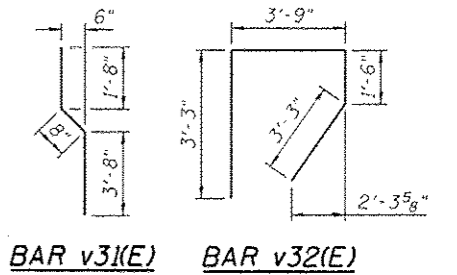
BILL OF MATERIAL (CONT'D)

Bar	No.	Size	Length	Shape
u30(E)	11	#4	3'-9"	—
v30(E)	61	#5	6'-1"	—
v31(E)	61	#5	6'-0"	—
v32(E)	61	#5	11'-9"	—
v33(E)	62	#5	16'-11"	—
v34(E)	123	#9	16'-11"	—
v35	32	#9	41'-9"	—
v36	448	#10	42'-11"	—
v37(E)	61	#5	3'-9"	—
v38(E)	13	#5	21'-9"	—
v39(E)	25	#9	21'-9"	—
v40(E)	6	#5	6'-1"	—
v41(E)	36	#5	4'-3"	—
w30(E)	64	#7	35'-5"	—
w31(E)	8	#7	11'-8"	—
Concrete Structures		Cu Yd	278.5	
Concrete Superstructure		Cu Yd	12.7	
Protective Coat		Sq Yd	25	
Reinforcement Bars		Pound	96,570	
Reinforcement Bars, Epoxy Coated		Pound	59,000	
Drilled Shaft in Soil		Cu Yd	388	
Drilled Shaft in Rock		Cu Yd	12	
Concrete Sealer		Sq Ft	1,953	
Geocomposite Wall Drain		Sq Yd	171	
Braced Excavation		Cu Yd	1,300	
Granular Backfill for Structures		Cu Yd	225	
Pipe Underdrains for Structures 6"		Foot	84	

Length is height of spiral



- NOTES:**
- Reinforcement bars designated (E) shall be epoxy coated.
 - Bars noted thus, 3x2-#5 indicates 3 lines of bars with 2 lengths of bars per line.
 - Apply concrete sealer to all exposed concrete surfaces of the abutment.
 - All edges shall have standard 3/4" chamfer.
 - For reveal details, see Sheet S1-36.



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"

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DESIGNED - MI, MAF	REVISED - 07/19/2013 MI, LAB
DRAWN - LAB, MAF	REVISED - 07/30/2013 MI, LAB
CHECKED - MAI, MI, WM	REVISED -
DATE - 6/17/2013	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT SECTIONS AND DETAILS
 STRUCTURE NO. 016-1709
 SCALE: SHEET S1-34 OF 51 SHEETS STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-007R	COOK	317	178
CONTRACT NO. 60W25			ILLINOIS FED. AID PROJECT	