

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h90(E)	4	#5	30'-9"	—
h91(E)	16	#6	24'-7"	—
h92(E)	10	#8	24'-7"	—
h93(E)	4	#5	29'-1"	—
h94(E)	16	#6	22'-11"	—
h95(E)	10	#8	22'-11"	—
h96(E)	2	#5	25'-9"	—
h97(E)	2	#5	27'-5"	—
n90(E)	112	#9	15'-5"	—
p90(E)	10	#9	30'-9"	—
p91(E)	5	#9	24'-3"	—
p92(E)	10	#9	16'-1"	—
p93(E)	4	#5	5'-8"	—
p94(E)	10	#9	29'-1"	—
p95(E)	5	#9	22'-3"	—
p96(E)	4	#5	4'-0"	—
sp90	190	#6	12'-2"	□
s91(E)	112	#6	6'-11"	□
s92(E)	64	#5	3'-8"	□
s93(E)	64	#5	5'-5"	□
s94(E)	64	#5	8'-0"	□
s95(E)	97	#6	24'-4"	□
sp90	8	#4	81'-7"	■
u90(E)	8	#6	9'-10"	□
u91(E)	12	#4	7'-4"	□
u92(E)	20	#6	10'-8"	□
v90(E)	56	#8	15'-11"	—
v91	336	#9	32'-9"	—

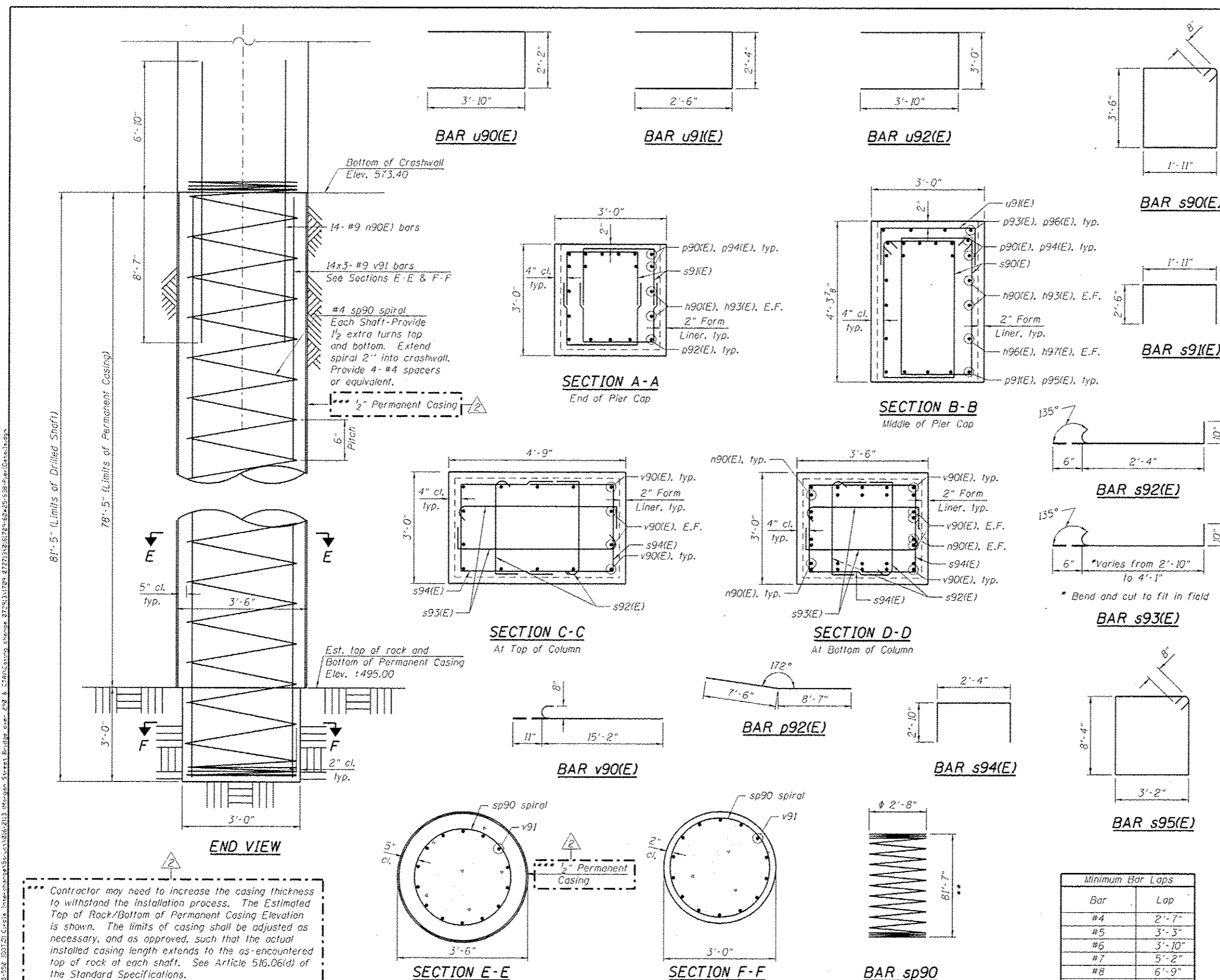
Structure Excavation	Cu Yd	28
Concrete Structures	Cu Yd	94.6
Reinforcement Bars	Pound	44,870
Reinforcement Bars, Epoxy Coated	Pound	24,260
Permanent Casing	Foot	628
Drilled Shaft in Soil	Cu Yd	224
Drilled Shaft in Rock	Cu Yd	7
Concrete Sealer	Sq Ft	2,247
Granular Backfill for Structures	Cu Yd	27

\*\*Length is height of spiral

**NOTES:**

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Bars noted thus, 14x3-#5 indicates 14 lines of bars with 3 lengths of bars per line.
3. Bars equally spaced, unless otherwise noted.
4. Apply concrete sealer to all exposed concrete surfaces of the pier.
5. All edges shall have standard 3/4" chamfer.
6. Spirals are measured vertically.

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



Contractor may need to increase the casing thickness to withstand the installation process. The Estimated Top of Rock/Bottom of Permanent Casing Elevation is shown. The limits of casing shall be adjusted as necessary, and as approved, such that the actual installed casing length extends to the as-encountered top of rock at each shaft. See Article 516.06(d) of the Standard Specifications.

Entire sheet revised

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

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PIER 1 SECTIONS AND DETAILS  
 STRUCTURE NO. 016-1709

SCALE:	SHEET 51-38 OF 51 SHEETS	STA. TO STA.	F.A.J. RTE. 90/94/290	SECTION 2013-007R	COUNTY COOK	TOTAL SHEETS 317	SHEET NO. 182
						CONTRACT NO. 60W25	
ILLINOIS FED. AID PROJECT							