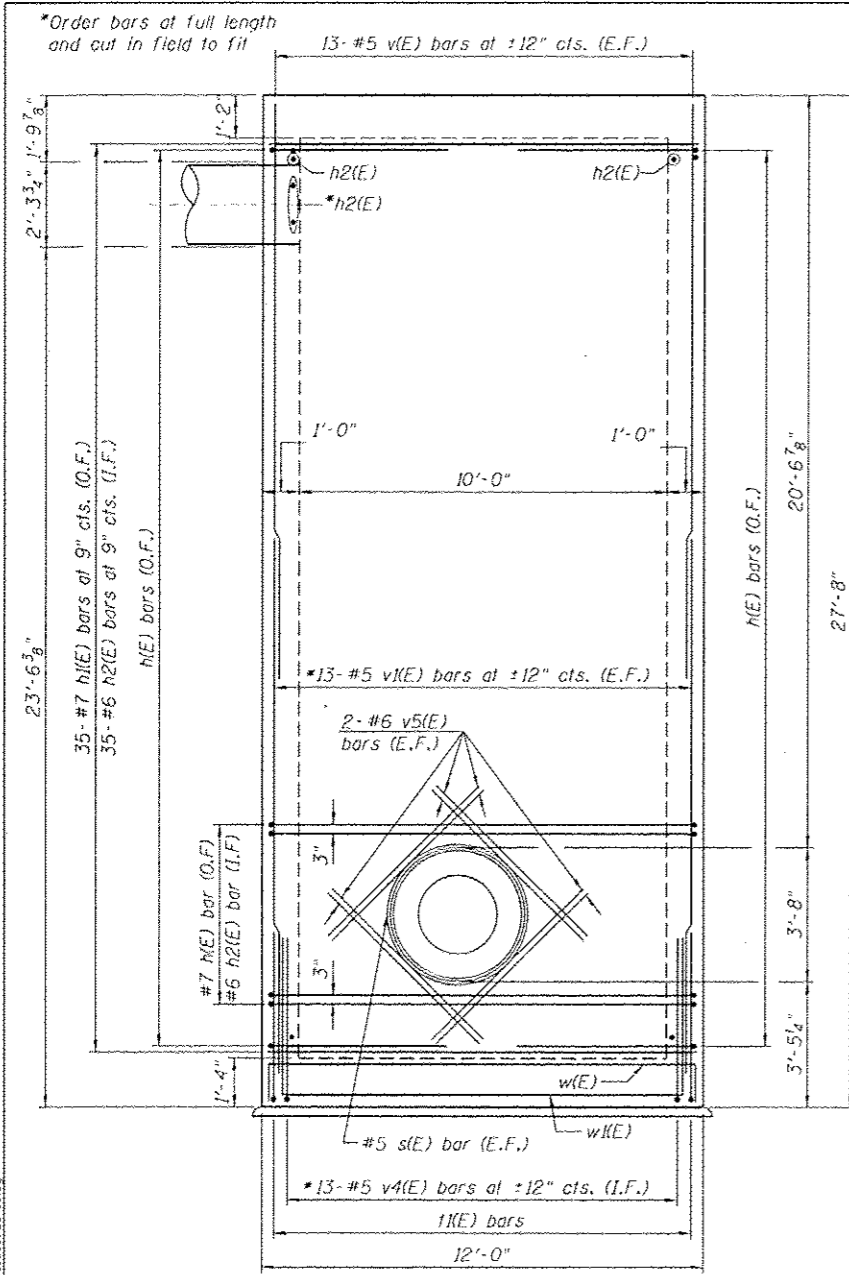
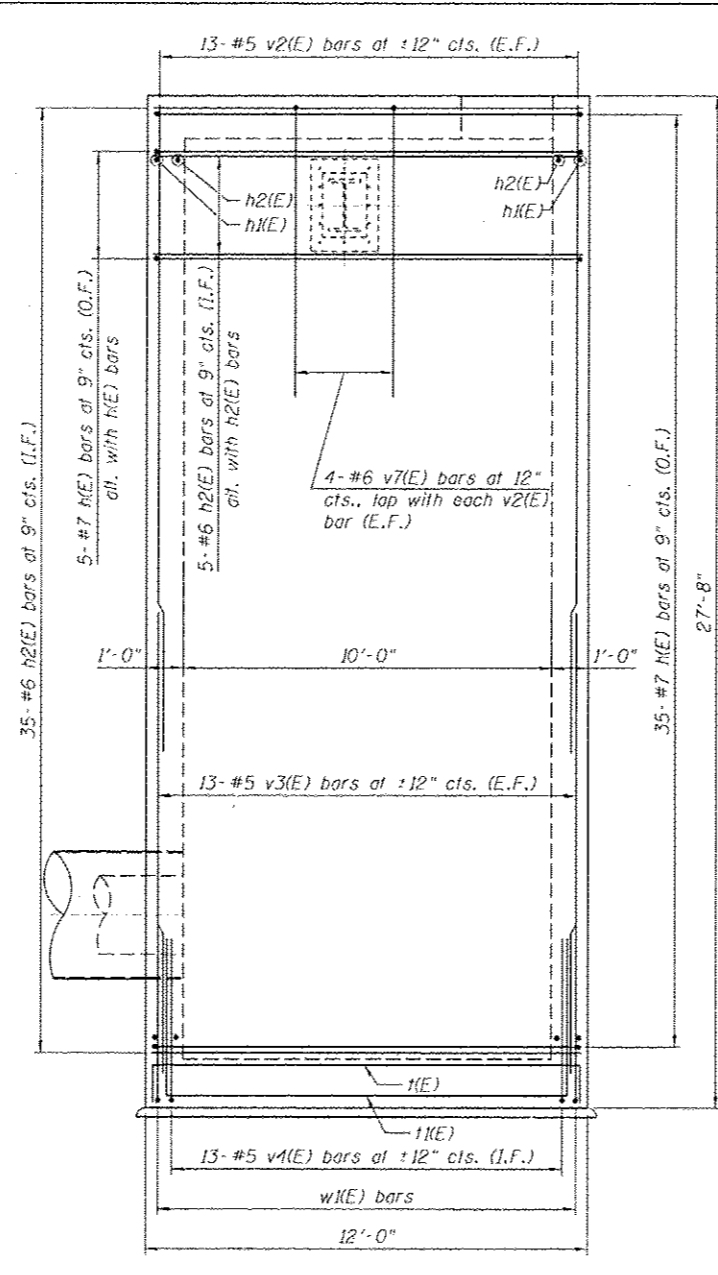


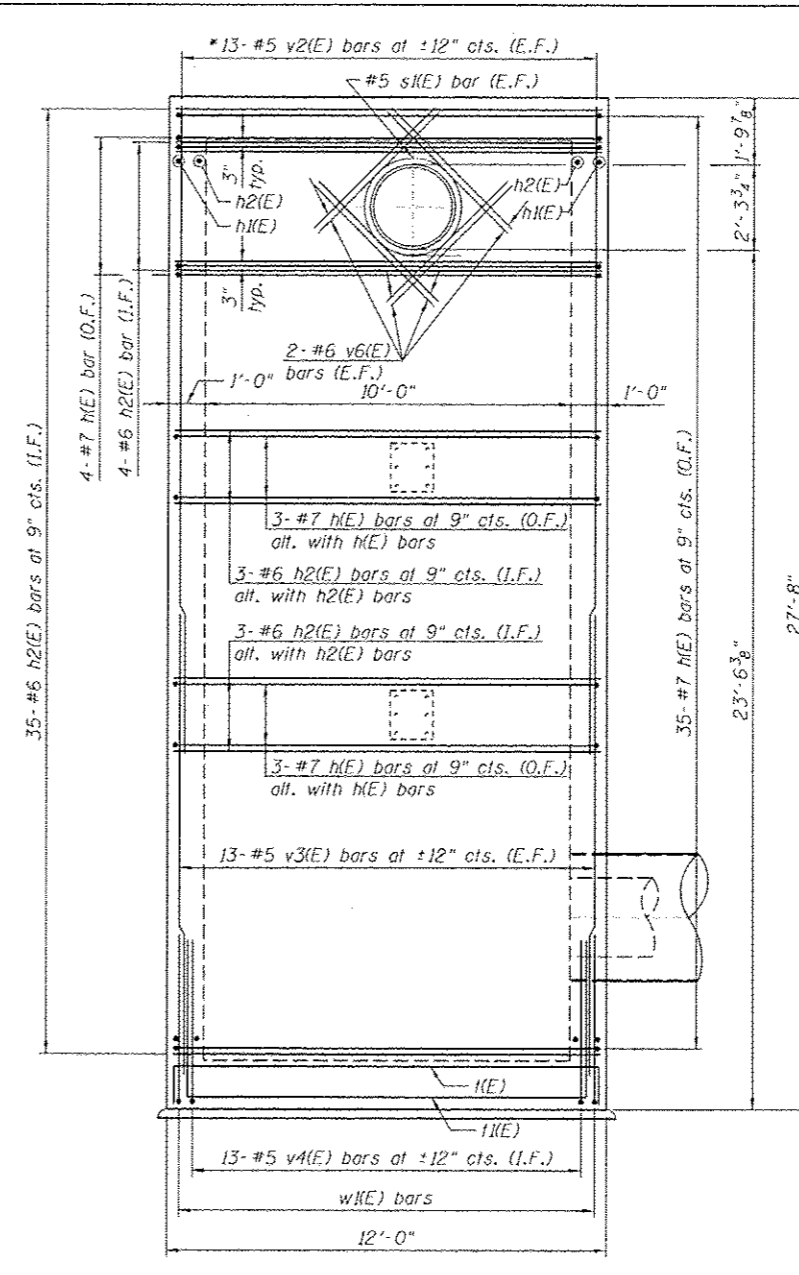
\*Order bars at full length and cut in field to fit



**SOUTH WALL ELEVATION**  
(Looking North)



**EAST WALL ELEVATION**  
(Looking West)



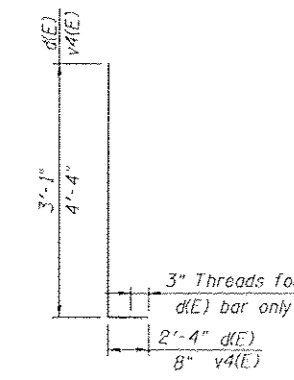
**WEST WALL ELEVATION**  
(Looking East)

**BILL OF MATERIAL**

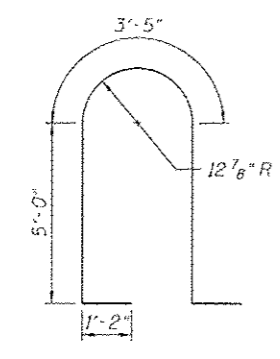
Bar	No.	Size	Length	Shape
a(E)	20	#5	13'-0"	□
a1(E)	20	#6	11'-8"	□
a2(E)	4	#6	4'-10"	□
a3(E)	8	#6	3'-10"	□
a4(E)	4	#6	2'-10"	□
b(E)	20	#5	13'-2"	□
b1(E)	20	#6	11'-8"	□
c(E)	10	#5	5'-5"	□
c1(E)	1	#7	15'-9"	□
n(E)	89	#7	22'-0"	□
n1(E)	74	#7	11'-8"	□
n2(E)	159	#6	11'-8"	□
n(E)	10	#5	4'-8"	□
n1(E)	25	#5	2'-10"	□
n2(E)	5	#5	6'-8"	□
s(E)	2	#5	16'-4"	○
s1(E)	4	#5	12'-2"	○
s2(E)	6	#5	12'-7"	○
s3(E)	8	#5	8'-4"	□
h(E)	25	#6	13'-2"	□
h1(E)	25	#6	22'-0"	□
v(E)	52	#5	15'-9"	□
v1(E)	52	#5	14'-7"	□
v2(E)	52	#5	17'-9"	□
v3(E)	52	#5	12'-7"	□
v4(E)	52	#5	5'-0"	□
v5(E)	16	#6	6'-2"	□
v6(E)	16	#6	4'-8"	□
v7(E)	8	#6	11'-10"	□
w(E)	25	#6	13'-4"	□
w1(E)	25	#6	22'-0"	□
Concrete Structures			Cu Yd	65.0
Reinforcement Bars, Epoxy Coated			Pound	16,990

**NOTES**

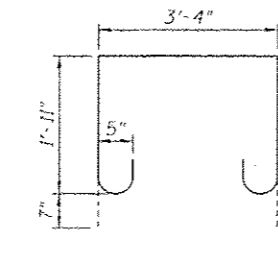
- The North Wall is similar to the east wall with the exception of the additional bars around the pipe support plate.
- The minimum concrete cover shall be 2".



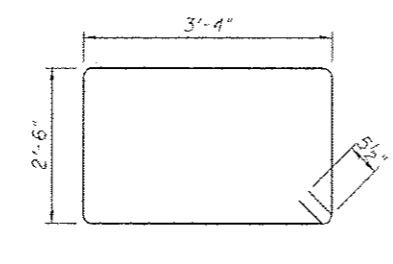
**BARS d(E), v4(E)**



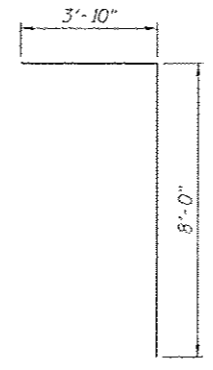
**BAR d1(E)**



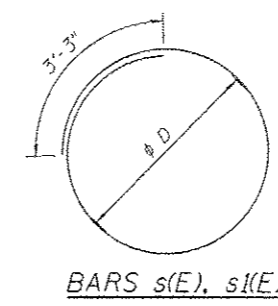
**BAR s3(E)**



**BAR s2(E)**

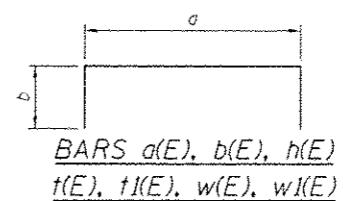


**BAR v7(E)**



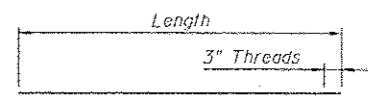
**BARS s(E), s1(E)**

Bar	φ D
s(E)	4'-2"
s1(E)	2'-10"



**BARS a(E), b(E), h(E), t(E), t1(E), w(E), w1(E)**

Bar	a	b
a(E)	11'-8"	8"
b(E)	11'-8"	9"
h(E)	11'-8"	5'-2"
t(E)	11'-8"	9"
t1(E)	11'-8"	5'-2"
w(E)	11'-8"	10"
w1(E)	11'-8"	5'-2"



**BARS n(E), n1(E), n2(E)**

**LEGEND:**

- E.F. - Each Face
- I.F. - Inside Face
- O.F. - Outside Face

**HBM**  
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DRAWN - WM  
CHECKED - MAI, MI, JJS  
DATE - 6/17/2013

REVISED - 07/19/2013 MI, WM  
REVISED -  
REVISED -  
REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**RISER SHAFT SECTIONS AND DETAILS (SHEET 3 OF 3)**  
**RETAINING WALL (STRUCTURE NO. 016-1724) AND RISER SHAFT**

SCALE: SHEET 52-10 OF 12 SHEETS STA. TO STA.

F.R.I. DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-007R	COOK	317	205

CONTRACT NO. 60W25  
ILLINOIS FED. AID PROJECT