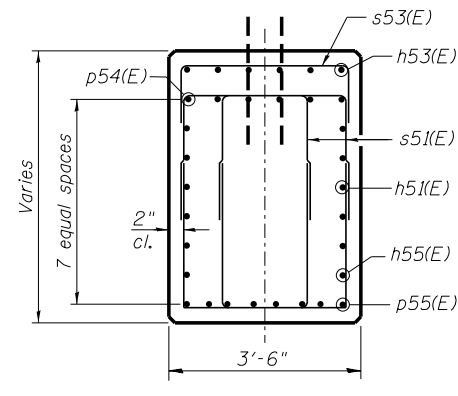
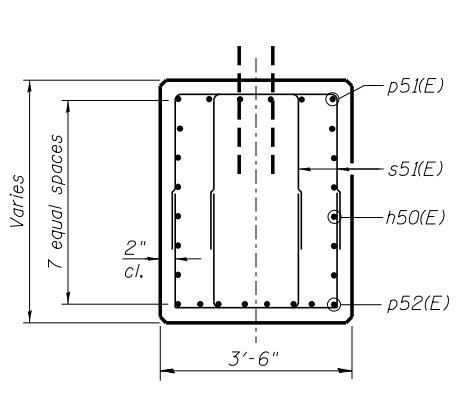


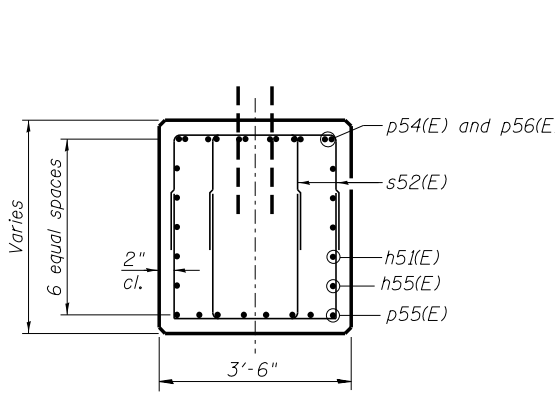
**SECTION A-A**



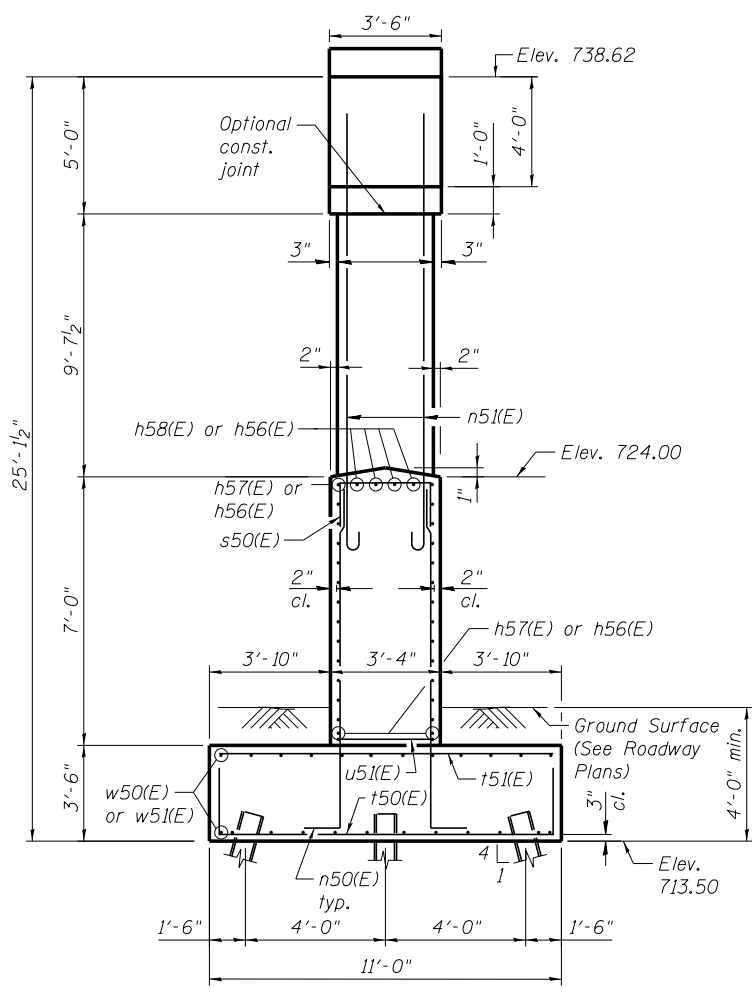
**SECTION B-B**



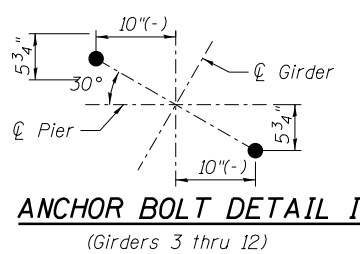
**SECTION C-C**



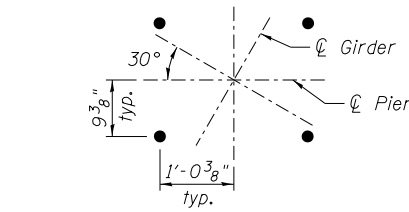
**SECTION D-D**



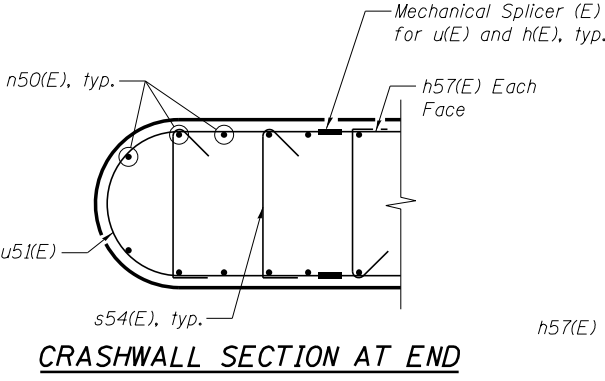
**END VIEW**  
(Looking North)



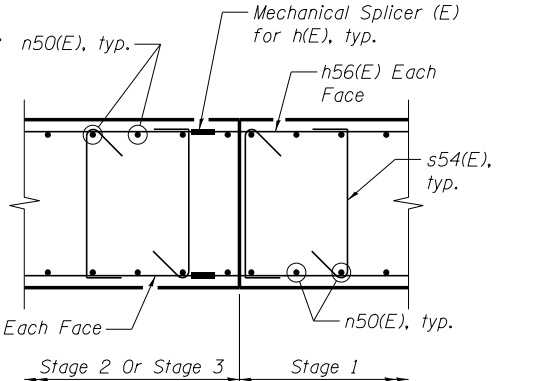
**ANCHOR BOLT DETAIL I**  
(Girders 3 thru 12)



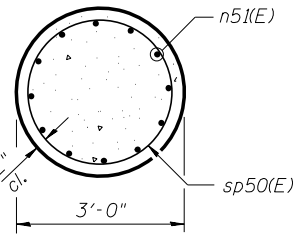
**ANCHOR BOLT DETAIL II**  
(Girders 1, 2, 13 & 14)



**CRASHWALL SECTION AT END**



**CRASHWALL SECTION AT STAGE CONST. LINE**



**SECTION E-E**

**PILE DATA**

Type: HP14x89  
 Nominal Required Bearing: 339 kips  
 Factored Resistance Available: 187 kips  
 Est. Length: 56 ft  
 No. Production Piles: 77  
 No. Test Piles: 1

**BILL OF MATERIAL**

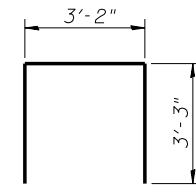
Bar	No.	Size	Length	Shape
h50(E)	12	#6	36'-9"	—
h51(E)	18	#6	49'-9"	—
h52(E)	6	#5	22'-0"	—
h53(E)	6	#5	23'-4"	—
h54(E)	6	#5	28'-1"	—
h55(E)	4	#6	47'-0"	—
h56(E)	32	#6	39'-0"	—
h57(E)	56	#6	40'-7"	—
h58(E)	8	#6	44'-10"	—
n50(E)	264	#8	11'-3"	—
n51(E)	108	#9	17'-11"	—
p50(E)	6	#9	12'-0"	—
p51(E)	6	#9	36'-9"	—
p52(E)	8	#9	36'-9"	—
p53(E)	6	#9	11'-3"	—
p54(E)	12	#9	49'-9"	—
p55(E)	16	#9	49'-8"	—
p56(E)	12	#9	21'-0"	—
s50(E)	132	#5	8'-0"	□
s51(E)	408	#5	11'-0"	□
s52(E)	272	#5	9'-8"	□
s53(E)	64	#5	9'-2"	□
s54(E)	990	#4	4'-1"	—
sp50(E)	9	#5	12'-8"	⌘
t50(E)	152	#8	16'-6"	—
t51(E)	132	#6	10'-6"	—
u50(E)	12	#6	9'-8"	—
u51(E)	28	#6	11'-3"	—
w50(E)	48	#6	46'-2"	—
w51(E)	24	#6	37'-9"	—
Structure Excavation		Cu. Yd.	593	
Concrete Structures		Cu. Yd.	429.9	
Reinforcement Bars, Epoxy Coated		Pound	59,330	
Furnishing Steel Piles HP14x89		Foot	4,312	
Driving Piles		Foot	4,312	
Test Pile Steel HP14x89		Each	1	
Pile Shoes		Each	78	

\*Length is height of spiral.

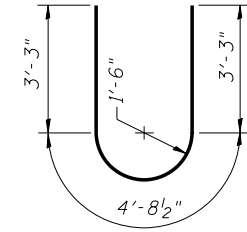
**A & B DIMENSIONS**

Bar	A	B
s50(E)	3'-0"	2'-6"
s51(E)	2'-2"	4'-5"
s52(E)	2'-2"	3'-9"
s53(E)	3'-2"	3'-0"

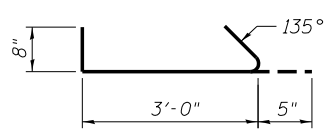
**BARS s50(E), s51(E), s52(E) AND s53(E)**



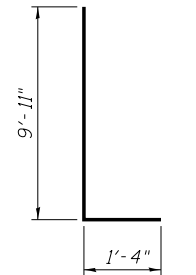
**BAR u50(E)**



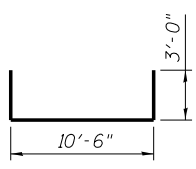
**BAR u51(E)**



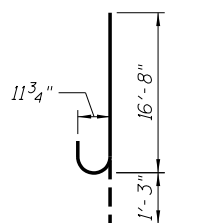
**BAR s54(E)**



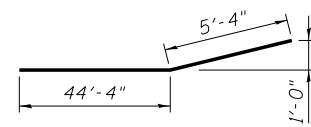
**BAR n50(E)**



**BAR t50(E)**



**BAR n51(E)**



**BAR p55(E)**

**NOTES:**

- Space reinforcement in cap to miss anchor bolts.
- Pour steps monolithically with cap.
- Dewatering may be required during structure excavation. Any costs associated with dewatering shall be included with Structure Excavation.

**benesch**  
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 Chicago, Illinois 60601  
 312-565-0450 Job No. 10056

FILE NAME =	USER NAME = mbecker	DESIGNED - SCW	REVISED -
0900169.68620.42.pier2.dgn	PLOT SCALE =	CHECKED - AMB	REVISED -
	PLOT DATE = 7/16/2012	DRAWN - CBS	REVISED -
		CHECKED - MRB	REVISED -

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

**PIER DETAILS 2 OF 2**  
**STRUCTURE NO. 090-0169**

SHEET NO. SC42 OF SC63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	90-[14R(14HB-4,14,14HB)BR]	TAZEWELL	2433	2018
				CONTRACT NO. 68620
ILLINOIS FED. AID PROJECT				

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