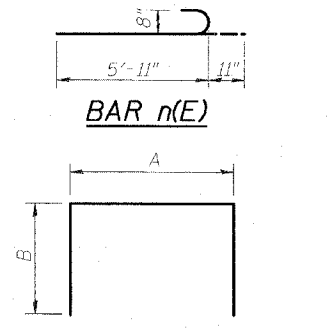


**BILL OF MATERIAL
NORTHBOUND PIER**

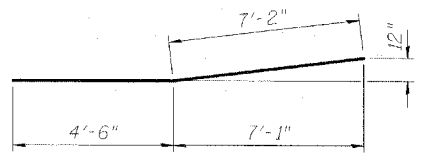
Bar	No.	Size	Length	Shape
h ₃ (E)	2	#5	21'-2"	
h ₁₀ (E)	2	#5	18'-1"	
h ₁₁ (E)	4	#5	36'-0"	
h ₁₂ (E)	6	#5	43'-3"	
h ₁₃ (E)	8	#5	29'-0"	
h ₁₄ (E)	8	#5	36'-4"	
h ₁₈ (E)	4	#9	29'-0"	
h ₁₉ (E)	4	#9	36'-4"	
n(E)	100	#8	6'-10"	
p ₄ (E)	6	#9	37'-7"	
p ₅ (E)	12	#9	17'-4"	
p ₆ (E)	12	#7	11'-8"	
p ₇ (E)	6	#9	28'-11"	
p ₈ (E)	6	#9	44'-10"	
p ₉ (E)	6	#9	36'-2"	
s ₃ (E)	40	#5	6'-3"	
s ₄ (E)	56	#5	6'-11"	
s ₅ (E)	98	#5	10'-5"	
s ₆ (E)	60	#6	10'-11"	
s ₇ (E)	90	#6	10'-4"	
s ₈ (E)	50	#6	9'-10"	
s ₉ (E)	40	#6	9'-5"	
s ₁₀ (E)	40	#6	8'-11"	
s ₁₁ (E)	70	#6	8'-7"	
s ₁₂ (E)	89	#5	6'-9"	
s ₁₃ (E)	79	#8	14'-5"	
s ₁₄ (E)	120	#4	3'-9"	
s ₁₅ (E)	120	#4	3'-9"	
s ₁₆ (E)	55	#4	3'-2"	
s ₁₇ (E)	55	#4	3'-2"	
t(E)	88	#9	13'-2"	
t ₁ (E)	69	#5	10'-0"	
u ₂ (E)	6	#6	7'-7"	
u ₃ (E)	85	#5	3'-9"	
v ₃ (E)	100	#7	13'-1"	
w(E)	20	#5	30'-4"	
w ₁ (E)	20	#5	37'-7"	
Concrete Structures	Cu. Yds.	131.3		
Structure Excavation	Cu. Yds.	160		
Reinforcement Bars, Epoxy Coated	Pound	28,270		
Furnishing Steel Piles, HP12x53	Foot	500		
Driving Piles	Foot	500		
Test Pile Steel, HP12x53	Each	1		
Bar Splicers	Each	50		



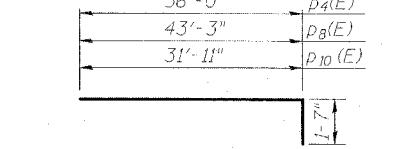
BARS s₃(E), s₄(E), s₁₂(E), s₁₃(E), u₂(E), u₃(E) or t(E)

A & B DIMENSIONS

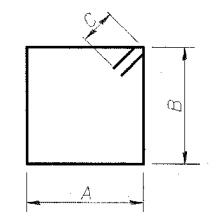
Bar	A	B
s ₃ (E)	1'-7"	2'-4"
s ₄ (E)	1'-7"	2'-8"
s ₁₂ (E)	2'-5"	2'-2"
s ₁₃ (E)	2'-5"	6'-0"
t(E)	10'-0"	1'-7"
u ₂ (E)	2'-5"	2'-7"
u ₃ (E)	2'-5"	9"



BAR p₆(E)



BARS p₄(E), p₈(E) or p₉(E)

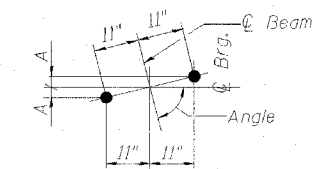


BAR s₅(E), s₆(E), s₇(E), s₈(E), s₉(E), s₁₀(E) or s₁₁(E)

A, B & C DIMENSIONS

Bar	A	B	C
s ₅ (E)	1'-7"	3'-2"	5 1/2"
s ₆ (E)	1'-8"	3'-1 1/2"	8"
s ₇ (E)	1'-8"	2'-10"	8"
s ₈ (E)	1'-8"	2'-7"	8"
s ₉ (E)	1'-8"	2'-4 1/2"	8"
s ₁₀ (E)	1'-8"	2'-1 1/2"	8"
s ₁₁ (E)	1'-8"	1'-11 1/2"	8"

*Note:
Space cross ties with closed stirrup ties.

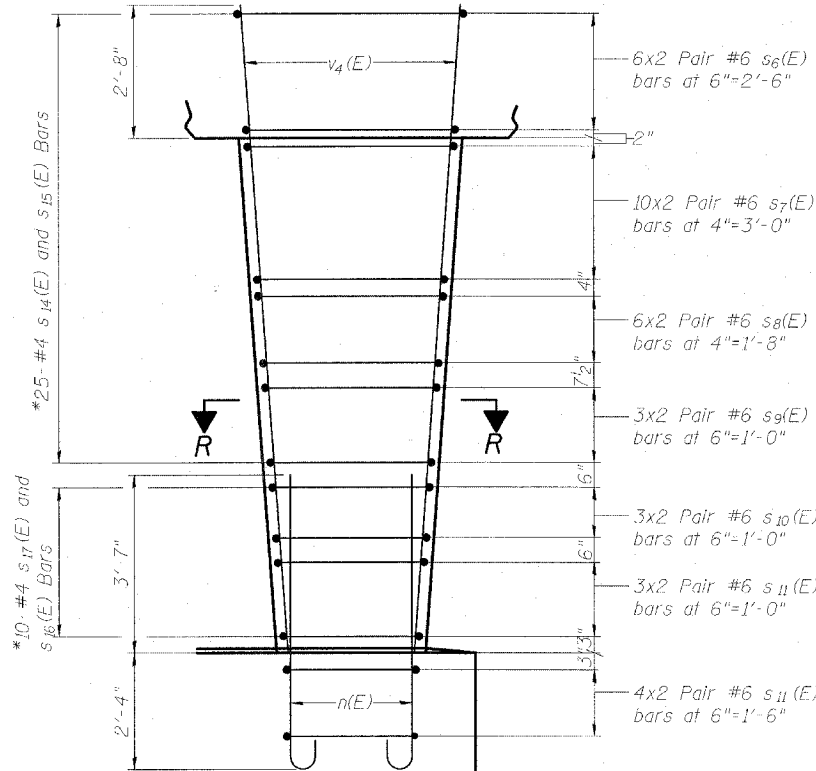


**ANCHOR BOLT LAYOUT
NORTH PIER**

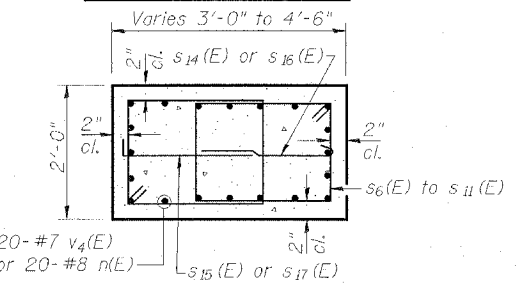
BEAMS	ANGLE	A
1	91°-04'-28"	3 1/16"
2	90°-18'-04"	1 1/16"
3	89°-31'-39"	1 1/16"
4	88°-45'-15"	1 1/4"
5 Thru 12	87°-58'-53"	3 9/16"

**BILL OF MATERIAL
SOUTHBOUND PIER**

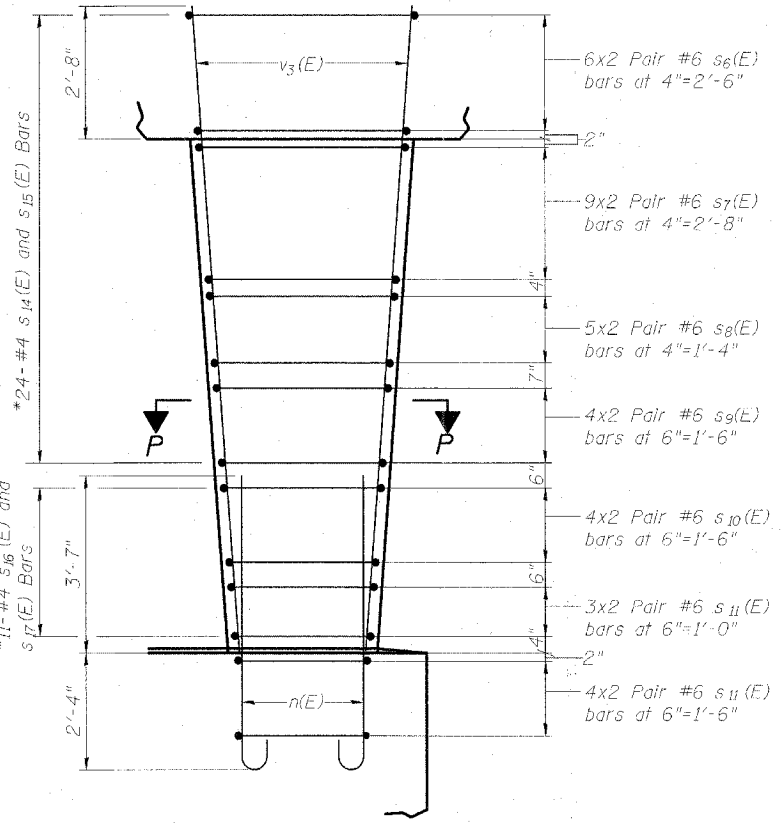
Bar	No.	Size	Length	Shape
h ₄ (E)	2	#5	18'-5"	
h ₅ (E)	2	#5	29'-11"	
h ₆ (E)	2	#5	4'-5"	
h ₁₂ (E)	6	#5	43'-4"	
h ₁₅ (E)	4	#5	31'-11"	
h ₁₆ (E)	8	#5	26'-8"	
h ₁₇ (E)	8	#5	34'-8"	
h ₂₀ (E)	4	#9	26'-8"	
h ₂₁ (E)	4	#9	34'-8"	
n(E)	100	#8	6'-10"	
p ₅ (E)	12	#9	17'-4"	
p ₆ (E)	12	#7	11'-8"	
p ₈ (E)	6	#9	44'-10"	
p ₉ (E)	6	#9	36'-2"	
p ₁₀ (E)	6	#9	33'-6"	
p ₁₁ (E)	6	#9	24'-10"	
s ₃ (E)	40	#5	6'-3"	
s ₄ (E)	56	#5	6'-11"	
s ₅ (E)	94	#5	10'-5"	
s ₆ (E)	60	#6	10'-11"	
s ₇ (E)	100	#6	10'-4"	
s ₈ (E)	60	#6	9'-10"	
s ₉ (E)	30	#6	9'-5"	
s ₁₀ (E)	30	#6	8'-11"	
s ₁₁ (E)	70	#6	8'-7"	
s ₁₂ (E)	85	#5	6'-9"	
s ₁₃ (E)	75	#8	14'-5"	
s ₁₄ (E)	125	#4	3'-9"	
s ₁₅ (E)	125	#4	3'-9"	
s ₁₆ (E)	50	#4	3'-2"	
s ₁₇ (E)	50	#4	3'-2"	
t(E)	89	#9	13'-2"	
t ₁ (E)	66	#5	10'-0"	
u ₂ (E)	6	#6	7'-7"	
u ₃ (E)	98	#5	3'-9"	
v ₄ (E)	100	#7	12'-10"	
w ₂ (E)	20	#5	28'-5"	
w ₃ (E)	20	#5	36'-5"	
Concrete Structures	Cu. Yd.	130.6		
Structure Excavation	Cu. Yd.	153		
Reinforcement Bars, Epoxy Coated	Pound	27,810		
Furnishing Steel Piles, HP12x53	Foot	500		
Driving Piles	Foot	500		
Test Pile Steel, HP12x53	Each	1		
Bar Splicers	Each	52		



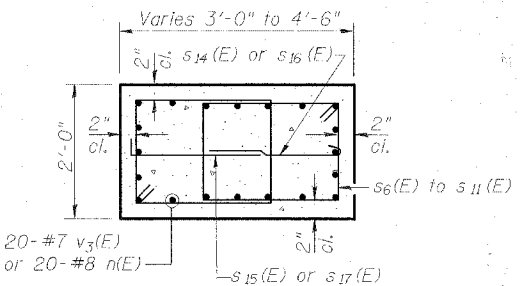
**SOUTHBOUND PIER
COLUMN ELEVATION**



SECTION R-R



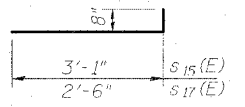
**NORTHBOUND PIER
COLUMN ELEVATION**



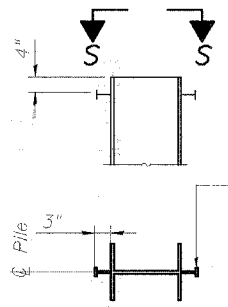
SECTION P-P



BAR s₁₄(E) or s₁₆(E)

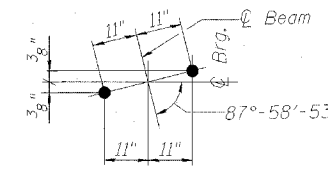


BAR s₁₅(E) or s₁₇(E)



**SECTION S-S
PILE STUD DETAIL**

3/4" φ Granular or solid flux filled headed studs automatically end welded to piling. Cost included with Furnishing Steel Piles, HP12x53.



**ANCHOR BOLT LAYOUT
SOUTH PIER**

PROJECT NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	909	38 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #98997

**PIER DETAILS,
NORTHBOUND & SOUTHBOUND**
INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

DESIGN FIRM REGISTRATION
No. 184-000450
Clark Dietz
ENGINEERS
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

REVISIONS	NAME	DATE

DESIGNED BY: SMM	PROJECT NO: 102314
DRAWN BY: MEW	DATE: 05/2005
CHECKED BY: SLD	
APPROVED BY: SMM	
ACTIVITY: DETAILS	

DRAWING NUMBER
S-25