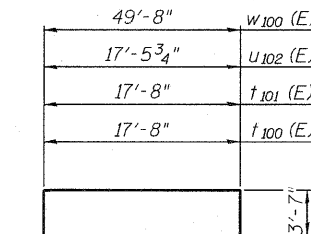
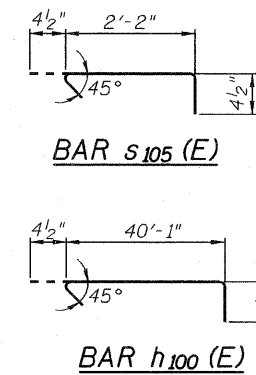
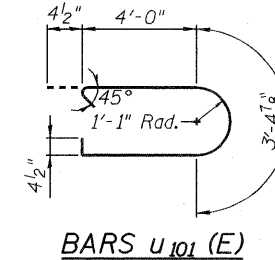
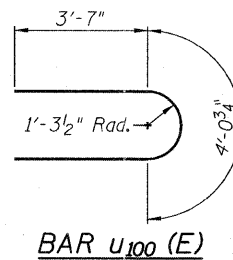
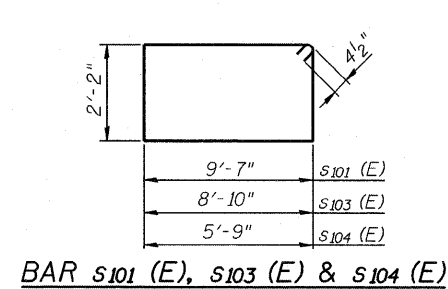
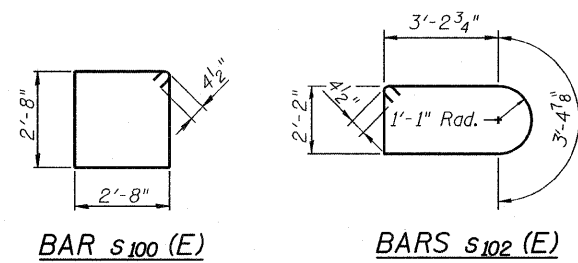


19-OCT-2011 P:\C\26703\700cad\d\09str\039-0074978049-Pier_details.dgn 15:47

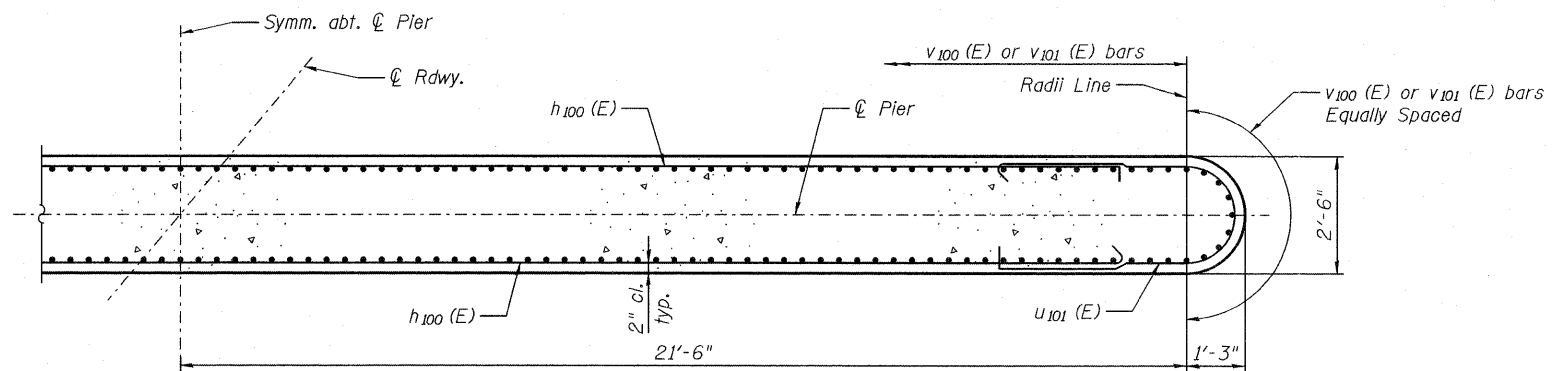


**PIER 1
BILL OF MATERIAL**

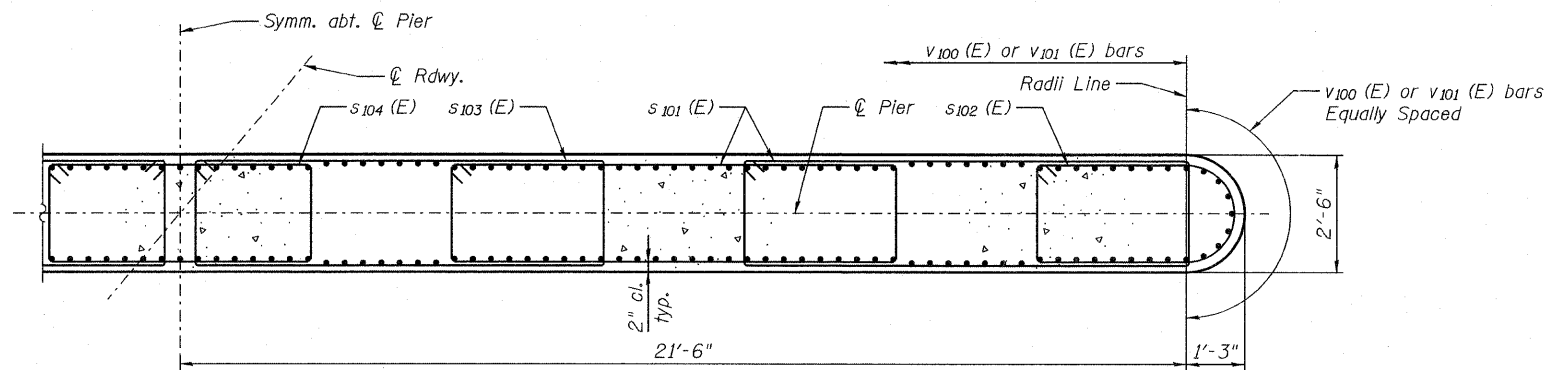
Bar	No.	Size	Length	Shape
h ₁₀₀ (E)	40	#4	40'-10"	—
h ₁₀₁ (E)	6	#7	49'-5"	—
p ₁₀₀ (E)	2	#6	47'-0"	U
p ₁₀₁ (E)	8	#6	43'-0"	—
s ₁₀₀ (E)	43	#4	11'-5"	□
s ₁₀₁ (E)	160	#4	24'-3"	□
s ₁₀₂ (E)	80	#4	12'-10"	□
s ₁₀₃ (E)	80	#4	22'-9"	□
s ₁₀₄ (E)	40	#4	16'-7"	□
s ₁₀₅ (E)	720	#4	2'-11"	U
t ₁₀₀ (E)	84	#9	24'-10"	U
t ₁₀₁ (E)	84	#7	24'-10"	U
u ₁₀₀ (E)	8	#6	11'-3"	U
u ₁₀₁ (E)	40	#4	12'-2"	U
u ₁₀₂ (E)	6	#7	24'-8"	U
v ₁₀₀ (E)	236	#11	29'-5"	U
w ₁₀₀ (E)	36	#7	57'-0"	U
Concrete Structures		Cu. Yd.	238.8	
Reinforcement Bars, Epoxy Coated		Pound	62,220	
Furnishing - Piles, HP14x73		Foot	980	
Driving Piles		Foot	980	
Test Pile, HP14x73		Each	1	
Pile Shoes		Each	21	

**PIER 2
BILL OF MATERIAL**

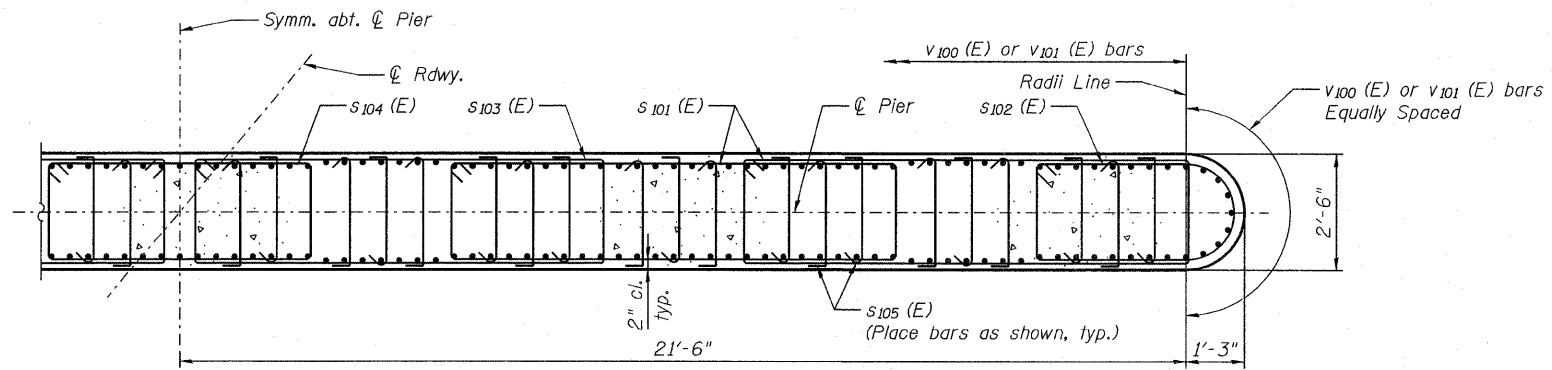
Bar	No.	Size	Length	Shape
h ₁₀₀ (E)	34	#4	40'-10"	—
h ₁₀₁ (E)	6	#7	49'-5"	—
p ₁₀₀ (E)	2	#6	47'-0"	U
p ₁₀₁ (E)	8	#6	43'-0"	—
s ₁₀₀ (E)	43	#4	11'-5"	□
s ₁₀₁ (E)	144	#4	24'-3"	□
s ₁₀₂ (E)	72	#4	12'-10"	□
s ₁₀₃ (E)	72	#4	22'-9"	□
s ₁₀₄ (E)	36	#4	16'-7"	□
s ₁₀₅ (E)	720	#4	2'-11"	U
t ₁₀₀ (E)	84	#9	24'-10"	U
t ₁₀₁ (E)	84	#7	24'-10"	U
u ₁₀₀ (E)	8	#6	11'-3"	U
u ₁₀₁ (E)	34	#4	12'-2"	U
u ₁₀₂ (E)	6	#7	24'-8"	U
v ₁₀₁ (E)	236	#11	26'-8"	U
w ₁₀₀ (E)	36	#7	57'-0"	U
Concrete Structures		Cu. Yd.	227.3	
Reinforcement Bars, Epoxy Coated		Pound	58,070	
Furnishing - Piles, HP14x73		Foot	900	
Driving Piles		Foot	900	
Test Pile, HP14x73		Each	1	
Pile Shoes		Each	21	



SECTION A-A

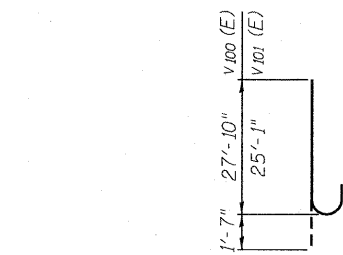


SECTION B-B

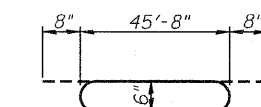


SECTION C-C

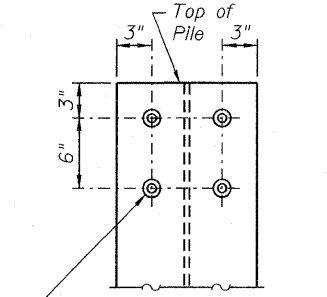
Note: Place 90° leg of s₁₀₅ (E) bar on opposite side of pier every other layer.



BAR v₁₀₀ (E) & v₁₀₁ (E)



BAR p₁₀₀ (E)



4-3/4" x 4" Granular or solid flux filled headed studs automatically end welded (Typ. each flange, each pile)

SEISMIC PILE DETAIL

Cost of 3/4" φ studs shall be included in item "Furnishing Steel Piles, HP14x73".



USER NAME =	DESIGNED - B. ERSCHEN	REVISED -
PLOT DATE = 19-OCT-2011	CHECKED - N. KHATRI	REVISED -
	DRAWN - C. SALLADE	REVISED -
	CHECKED - J. SMITH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PIER DETAILS
STRUCTURE NO. 039-0074**

SHEET NO. 28 OF 35 SHEETS

F.A.P. RTE. 686	SECTION 114B-1	COUNTY JACKSON	TOTAL SHEETS 107	SHEET NO. 114
			CONTRACT NO. 78049	
ILLINOIS FED. AID PROJECT				