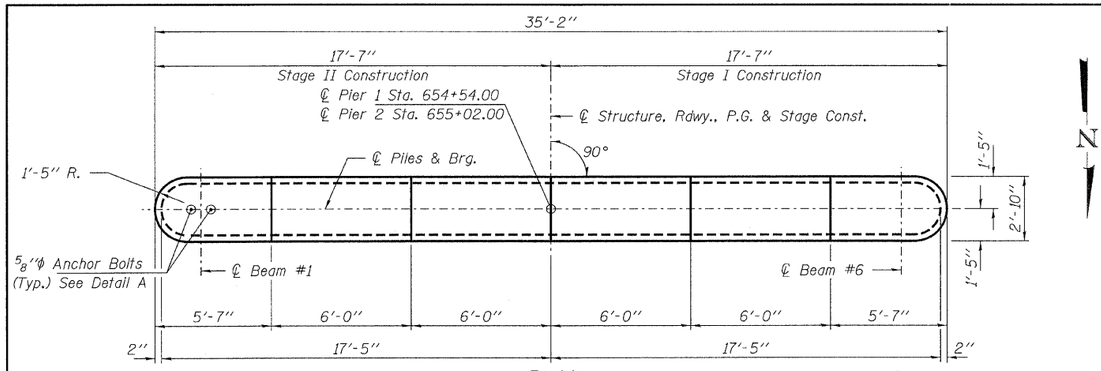
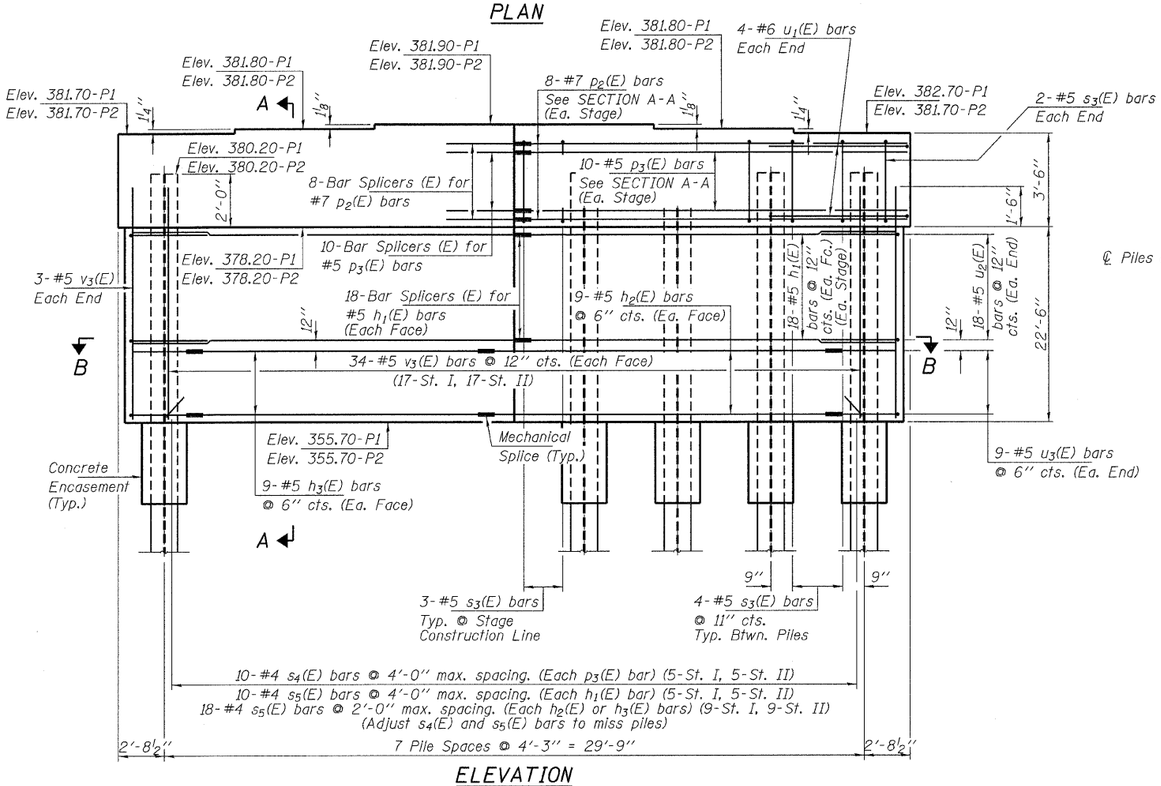
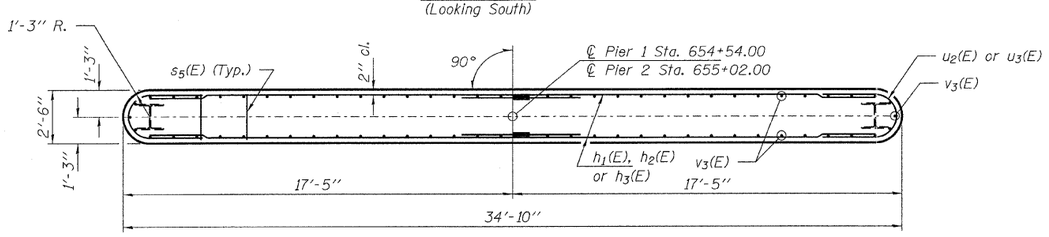


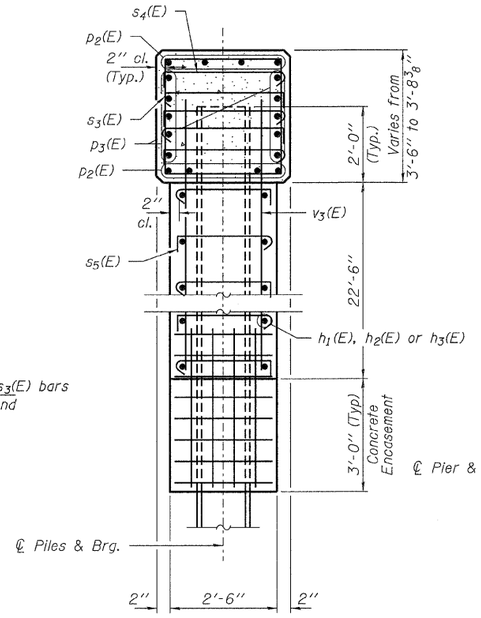
PLAN



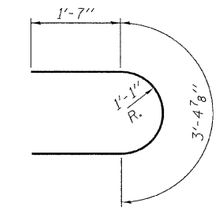
ELEVATION
(Looking South)



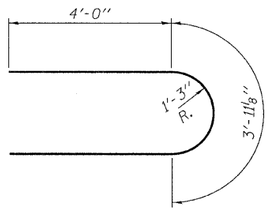
SECTION B-B



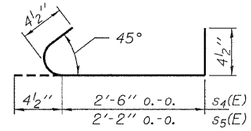
SECTION A-A



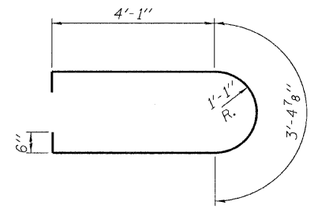
BAR u3(E)



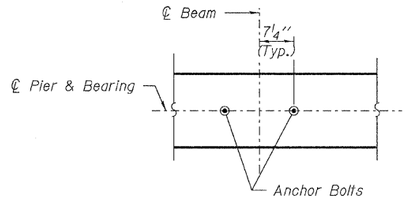
BAR u1(E)



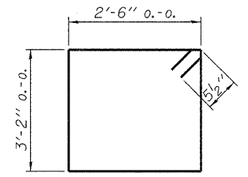
BAR s4(E) & s5(E)



BAR u2(E)



DETAIL A



BAR s3(E)

Notes:
Pour steps monolithically with cap.
If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.
$s_4(E)$ and $s_5(E)$ bars shall enclose both the veritcal and horizontal reinforcing bars. The position of the 90 and 135 degree hooked ends shall be alternated between adjacent bars as shown, both vertically and horizontally.
Space reinforcement in the cap to miss anchor bolts.
For details of Bar Splicers, see sheet 22 of 26.
For details of piles and Concrete Encasement, see sheet 24 of 26.

PILE DATA

Type: Steel HP14x73 with Pile Shoes
Nominal Required Bearing: 578 Kips/pile
Factored Resistance Available: 318 Kips/pile
Est. Length: 46' (Pier 1)
Est. Length: 42' (Pier 2)
No. Production Piles: 16

BILL OF MATERIAL - 2 PIERS

BAR	NO.	SIZE	LENGTH	SHAPE
$h_1(E)$	144	#5	15'-10"	
$h_2(E)$	72	#5	15'-7"	
$h_3(E)$	72	#5	13'-7"	
$p_2(E)$	32	#7	16'-0"	
$p_3(E)$	40	#5	16'-0"	
$s_3(E)$	68	#5	12'-3"	
$s_4(E)$	100	#4	3'-3"	
$s_5(E)$	684	#4	2'-11"	
$u_1(E)$	16	#6	12'-0"	
$u_2(E)$	72	#5	12'-7"	
$u_3(E)$	36	#5	6'-7"	
$v_3(E)$	148	#5	23'-10"	

Structure Excavation	Cu. Yd.	160
Concrete Structures	Cu. Yd.	166.8
Concrete Encasement	Cu. Yd.	8.8
Reinforcement Bars, Epoxy Coated	Pound	13,860
Furnishing Steel Piles HP14x73	Foot	704
Driving Piles	Foot	704
Pile Shoes	Each	16
Underwater Structure Excavation Protection - Loc. 1	Each	1
Underwater Structure Excavation Protection - Loc. 2	Each	1

FILE NAME = 290148-sht-bridge.dgn
USER NAME =
PLOT SCALE =
PLOT DATE = 7/13/2011

DESIGNED - A.S.L.
CHECKED - C.C.S.
DRAWN - D.A.B.
CHECKED - M.D.C.
REVISED -

HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000969

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIERS
STRUCTURE NO. 097-0076
SHEET NO. 21 OF 26 SHEETS

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	105B-1	WHITE	54	42
		CONTRACT NO. 78161		
	ILLINOIS	FED. AID PROJECT		