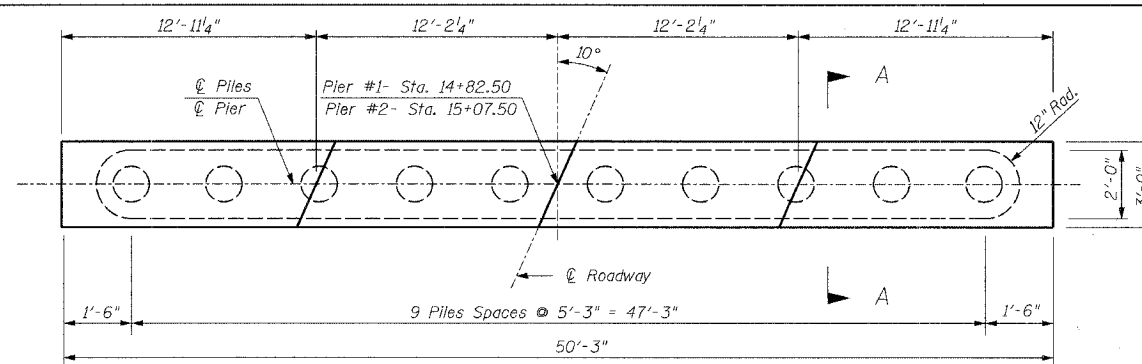
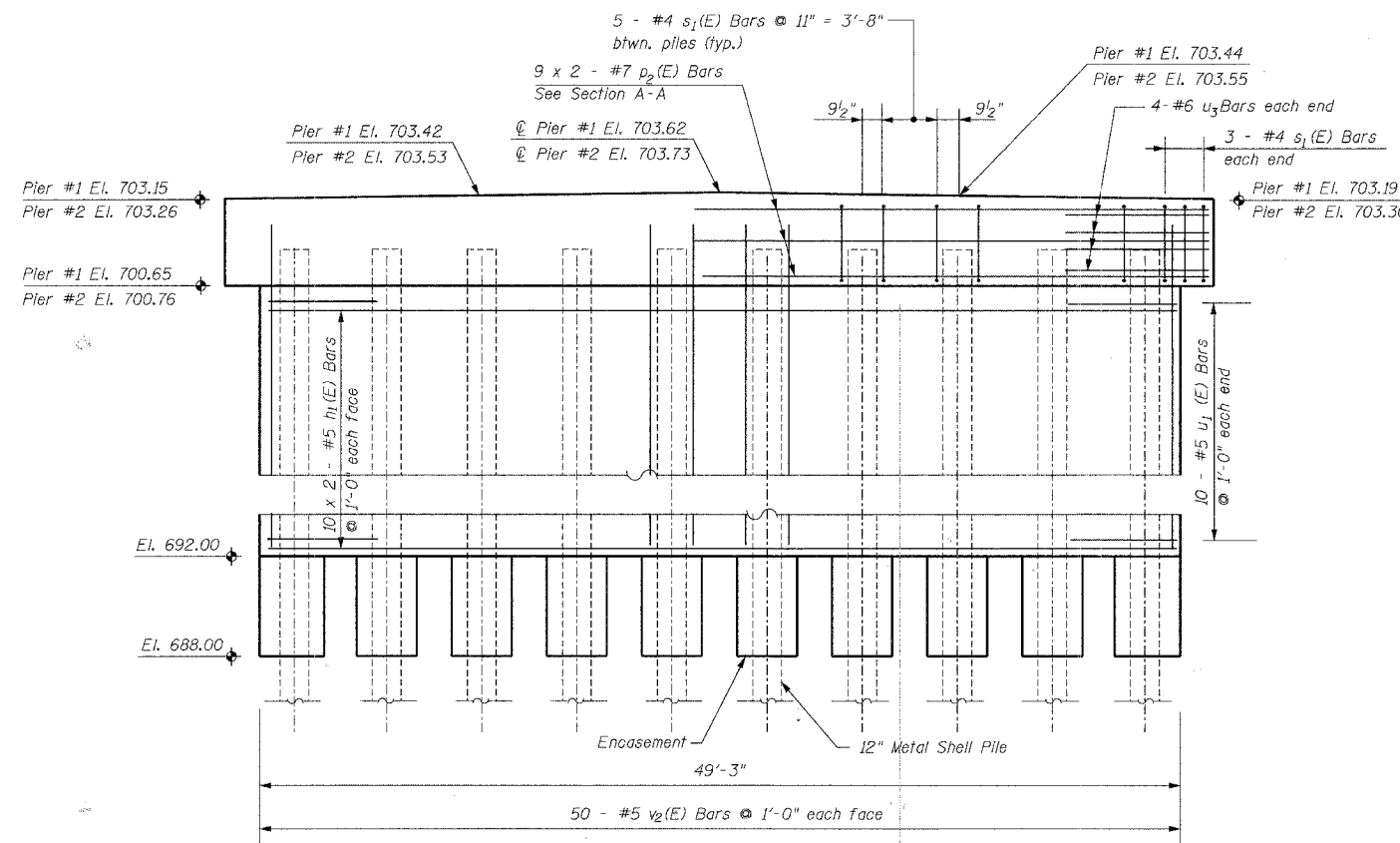


RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9th	05-00142-00-BR	COLES	16	13
STA. 14+00			TO STA.15+80	

Sheet 8 of 10 Sheets

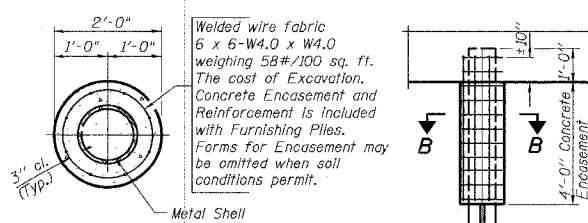


PLAN



ELEVATION

(Looking in direction of Increasing Station)



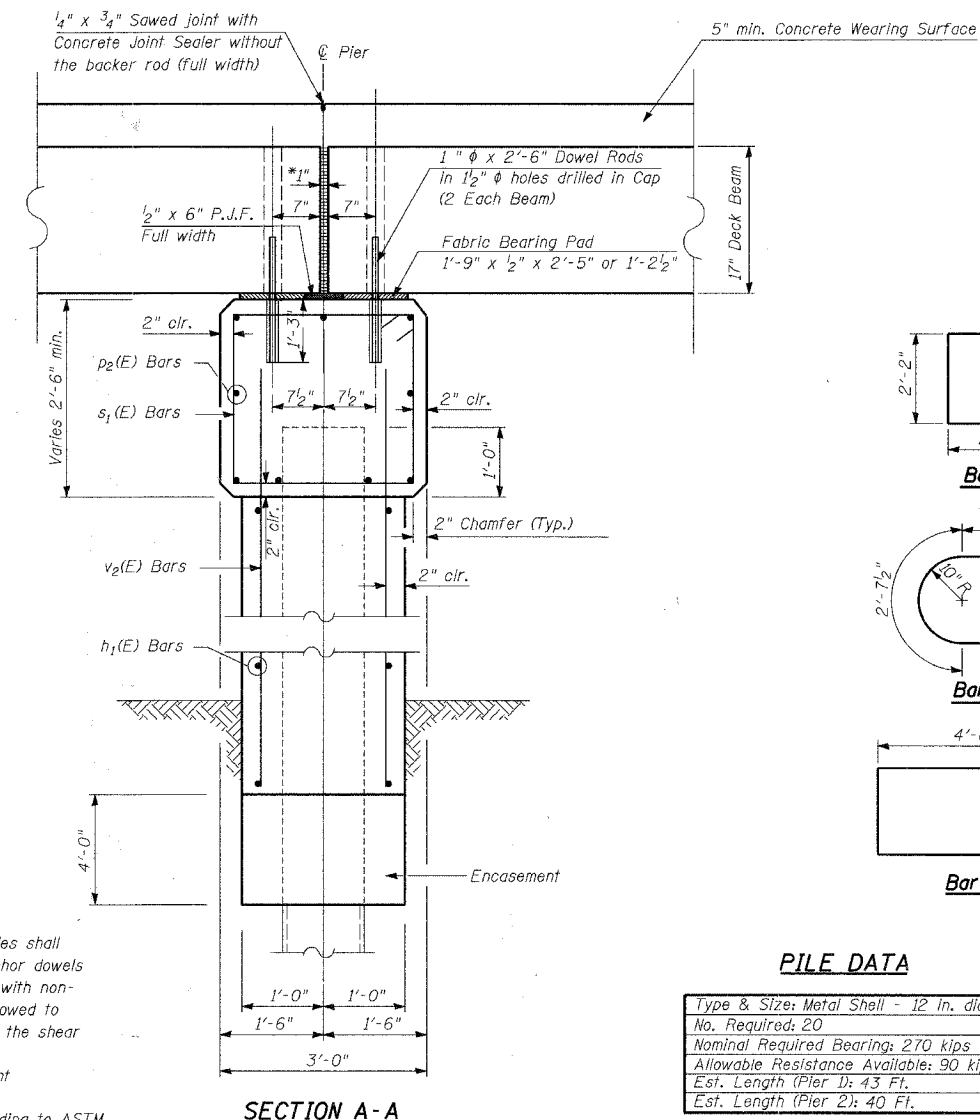
SECTION B-B

PILE ENCASEMENT DETAIL

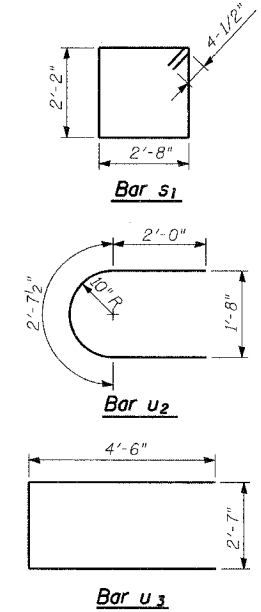
BILL OF MATERIAL

(INCLUDES BOTH PIERS)

Bar	No.	Size	Length	Shape
$h_1(E)$	80	#5	24'-6"	—
$p_2(E)$	18	#7	26'-4"	—
$s_1(E)$	102	#4	10'-5"	□
$u_1(E)$	40	#5	6'-8"	U
$u_2(E)$	16	#6	11'-7"	U
$v_2(E)$	200	#5	10'-6"	—
Concrete Structures			Cu.Yd.	84.1
Reinforcement Bars,			Lbs.	6,470
Epoxy Coated				
Furnishing Metal Shell Piles 12"			Ft.	830
Driving Piles			Ft.	830
Structure Excavation			Cu.Yd.	45
Underwater Structure Excavation			Each	1
Protection Location 1 (Pier 1)				
Underwater Structure Excavation			Each	1
Protection Location 2 (Pier 2)				
Concrete Sealer			Sq.Ft.	2690



SECTION A-A



PILE DATA

Type & Size: Metal Shell - 12 in. dia x 0.250 in. walls
No. Required: 20
Nominal Required Bearing: 270 kips
Allowable Resistance Available: 90 kips
Est. Length (Pier 1): 43 Ft.
Est. Length (Pier 2): 40 Ft.

Notes:
 After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
 All horizontal dimensions are at right angles to beam ends.
 The metal shell piles shall be according to ASTM A252 Grade 3.
 Reinforcement bars indicated thus 9 x 2-#7 etc. indicates 9 lines of bars with 2 lengths per line.
 Space cap reinforcement to miss dowel rods.
 Concrete Sealer shall be applied to all exposed areas of piers.

* 1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PIER DETAILS
 9th St. Over Kickapoo Creek
 SECTION 05-00142-00-BR
 CITY OF MATTOON STA. 14+95
 STRUCTURE NO. 015-6339

SCALE: N.T.S. DRAWN BY ALB
 DATE CHECKED BY

PLOT DATE = 10/25/2007
 FILE NAME = PAC:\civil\mattoon\9th St. Bridge\DRAWINGS\PIER\PIER.DWG
 PLOT SCALE = 1/8" = 1'-0"
 USER NAME = USER