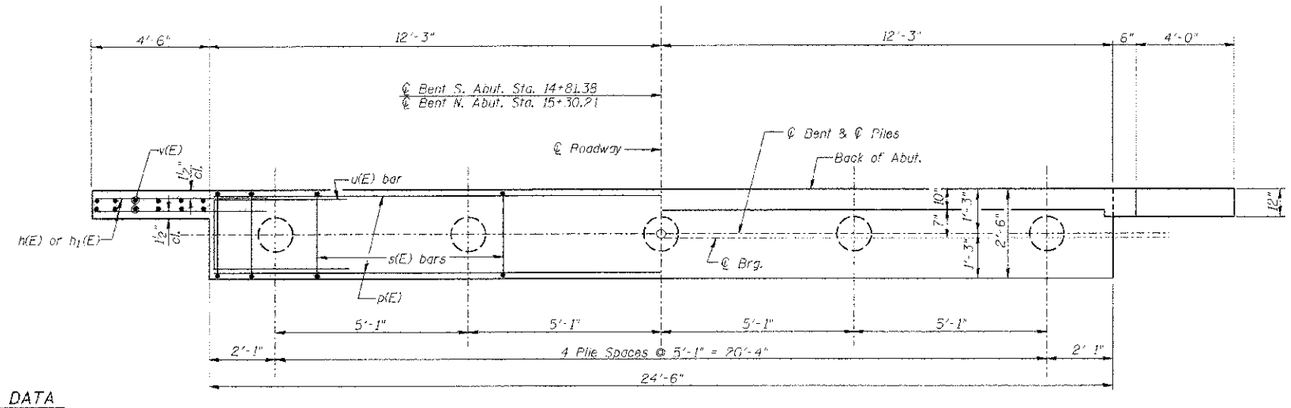
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 56	05-07161-00-BR	MACON	16	5
FED. ROAD DIST. NO.	ILLINOIS	PROJECT: BROS-0115(068)		

CONTRACT NO. 95686



PLAN

PILE DATA

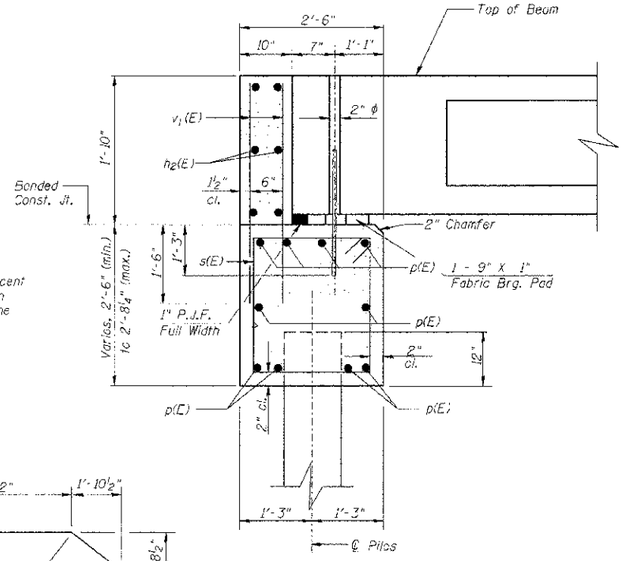
Type & Size: Metal Shell 12" dia. x 0.179 in. walls
Nominal Required Bearing: 180 Kips
Factored Resistance Available: 99 Kips
Estimated Length: 38'-0" South Abutment
56'-0" North Abutment
No. Required: South Abutment - 4 Plus 1 Permanent Test Pile
North Abutment - 4 Plus 1 Permanent Test Pile

NOTES

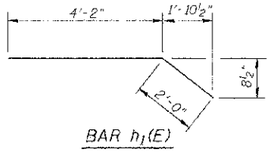
1. The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
2. 1" dia. x 2'-6" dowel rods in 1½" dia. holes drilled in cap (4 each beam). Dowel rods to be grouted after beams are in place and allowed to cure (min. 24 hrs.) prior to grouting the shear keys. The grout shall be an approved non-shrink grout.
3. Reinforcement bars designated (E) shall be Epoxy coated.
4. Reinforcement bars shall conform to the requirements of A.S.T.M A706 Grade 60. See Special Provisions.
5. Space reinforcement in cap to miss dowel rods.
6. The Metal Shell Piles shall be according to A.S.T.M. A252 Grade 3.
7. The Test Piles shall be driven to 110 Percent of the Nominal Required Bearing indicated in the Pile Data information before ordering the remainder of the piles.

DESIGN STRESSES

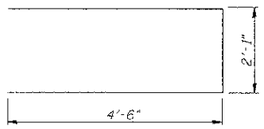
f'_c = 3,500 psi
f_y = 60,000 psi



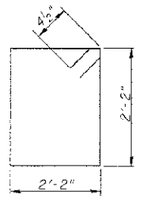
SECTION THRU ABUT.
(At Rt. Angles)



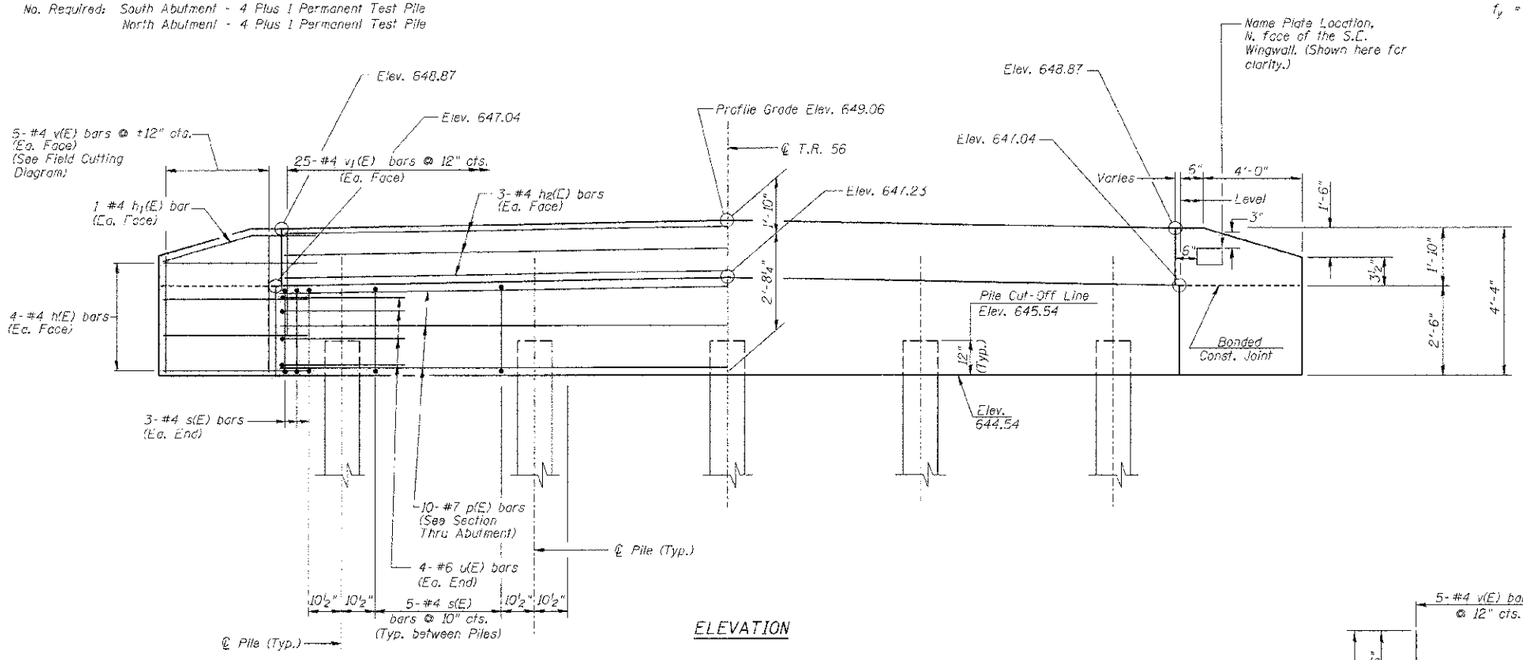
BAR h1(E)



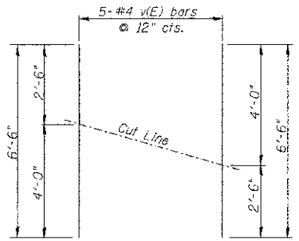
BAR u(E)



BAR s(E)



ELEVATION



FIELD CUTTING DIAGRAM

Order bars full length. Cut to fit as shown and use remainder of bars in other face.

BILL OF MATERIAL
SOUTH & NORTH ABUTMENTS

Bar	No.	Size	Length	Shape
h(E)	32	#4	6'-0"	
h1(E)	8	#4	6'-2"	
h2(E)	12	#4	24'-2"	
p(E)	20	#7	24'-2"	
s(E)	52	#4	9'-5"	
u(E)	16	#6	11'-1"	
v(E)	20	#4	6'-6"	
v1(E)	100	#4	3'-1"	
Concrete Structures			Cu. Yd.	17.0
Reinforcement Bars, Epoxy Coated			Pound	2240
Furnishing Metal Shell Piles 12" x 0.179"			Foot	376
Driving Piles			Foot	376
Test Pile Metal Shells			Each	2

SOUTH AND NORTH ABUTMENTS

Date
Revisions

Designed MJP
Drawn BKN
Checked KWB
Approved KWB

T.R. 56 OVER UNNAMED DRAINAGE DITCH
SECTION 05-07161-00-BR
MACON COUNTY
STA. 15+05.80
PROP. STR. NO. 058-3382

Sheet No. 5 of 6

Prepared by: URS 345 East Ash Avenue Decatur, Il. 62526

URS Job No. 36431683