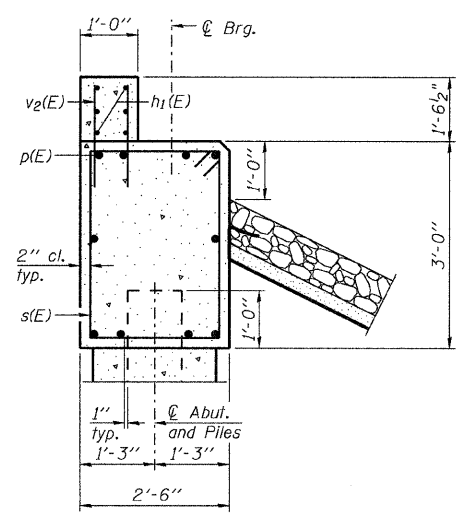
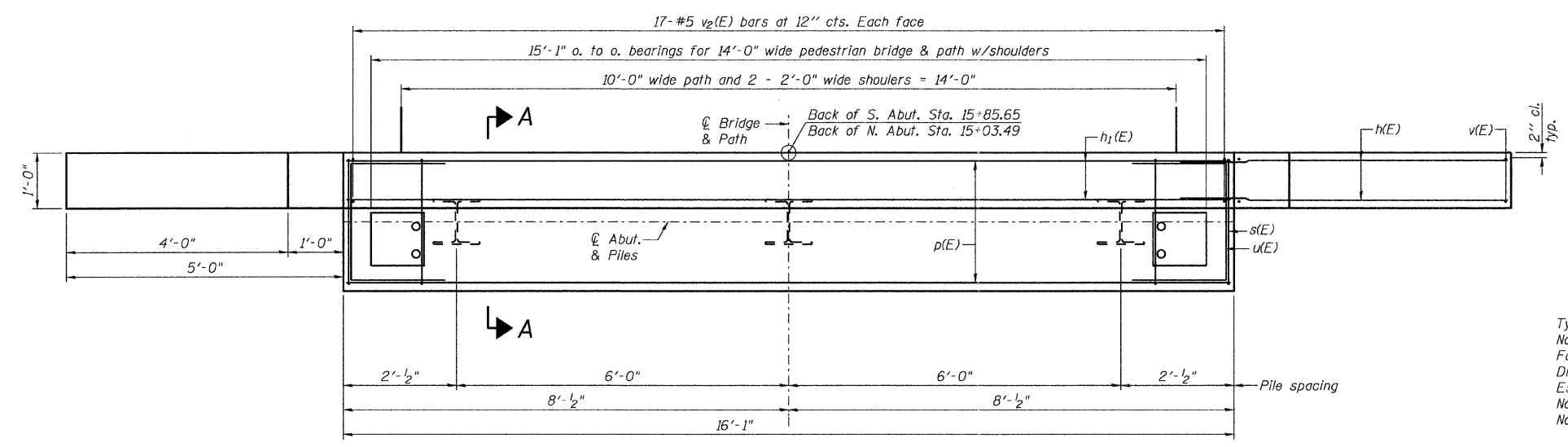


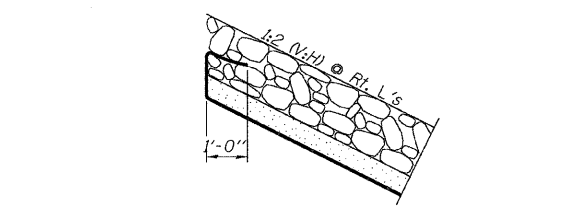
ELEVATION



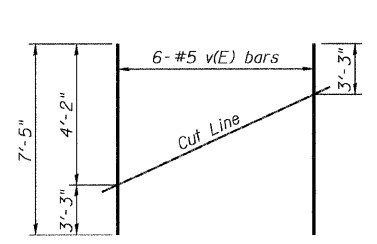
SECTION A-A



PLAN

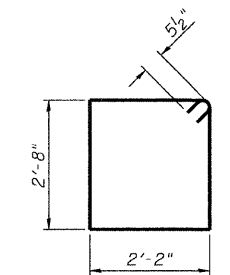


SLOPE PROTECTION DETAIL AT ABUTMENTS

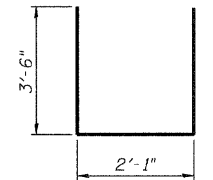


FIELD CUTTING DIAGRAM

Order v(E) bars full length. Cut as shown and use remainder of bars in opposite face.



BAR s(E)



BAR u(E)

NOTES

For details of piles and Concrete Encasement, see sheet S3 of S3. Space reinforcement in cap to miss anchor bolts. All pile activity shall be monitored by an ECS Geotechnical Engineer or representative. See soils report by ECS LLC dated June 16, 2009 for more information regarding pile foundation details.

**PILE DATA
NORTH ABUTMENT**

Type: HP 10x42 w/ metal shoes
Nominal Required Bearing: 335 kips
Factored Resistance Available: 184 kips
Driven to Refusal in Bedrock
Est. Length: 24 feet
No. Production Piles: 2
No. Test Piles: 1

SOUTH ABUTMENT

Type: HP 10x42 w/ metal shoes
Nominal Required Bearing: 335 kips
Factored Resistance Available: 184 kips
Driven to Refusal in Bedrock
Est. Length: 21 feet
No. Production Piles: 2
No. Test Piles: 1

**BILL OF MATERIAL
TWO ABUTMENTS**

Bar	No.	Size	Length	Shape	
h(E)	64	#6	8'-1"	—	
h1(E)	12	#5	15'-8"	—	
p(E)	20	#7	15'-8"	—	
s(E)	36	#5	10'-7"	□	
u(E)	16	#6	9'-1"	□	
v(E)	24	#5	7'-5"	—	
v2(E)	34	#5	2'-10"	—	
Concrete Structures				Cu. Yd.	13.9
Concrete Encasement				Cu. Yd.	2.1
Reinforcement Bars, Epoxy Coated				Pound	2520
Furnishing Steel Piles HP10x42				Foot	90
Driving Piles				Foot	90
Test Pile Steel HP10x42				Each	2
Pile Shoes				Each	6