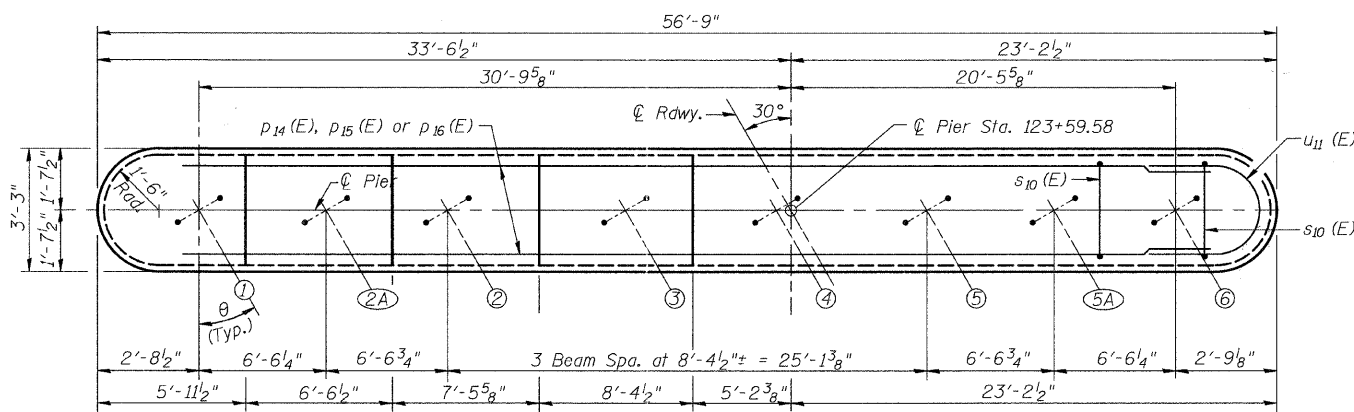
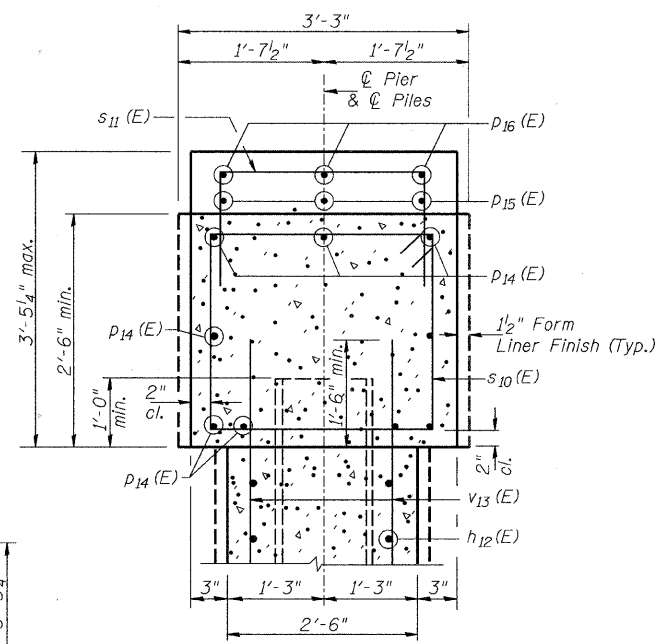


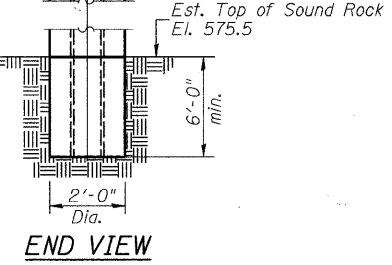
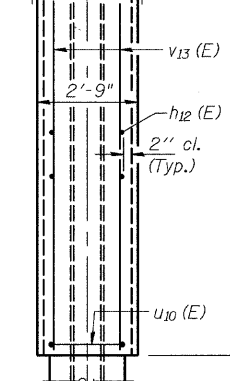
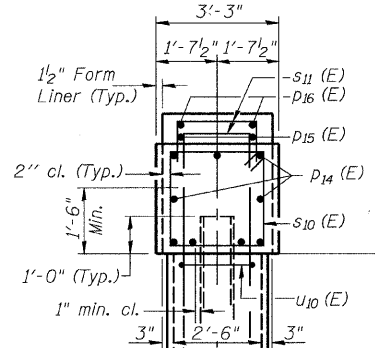
Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 For details of piles, see sheet 50 of 60.



TOP PLAN

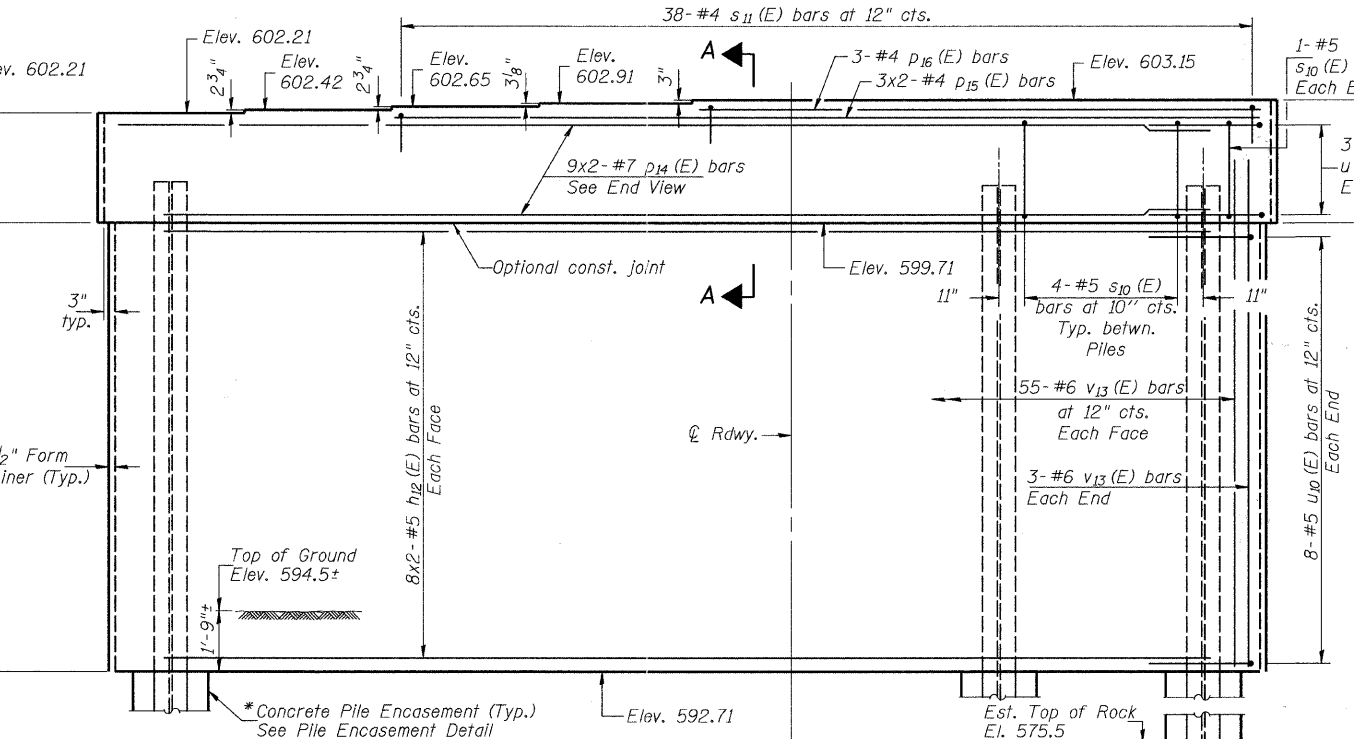


SECTION A-A

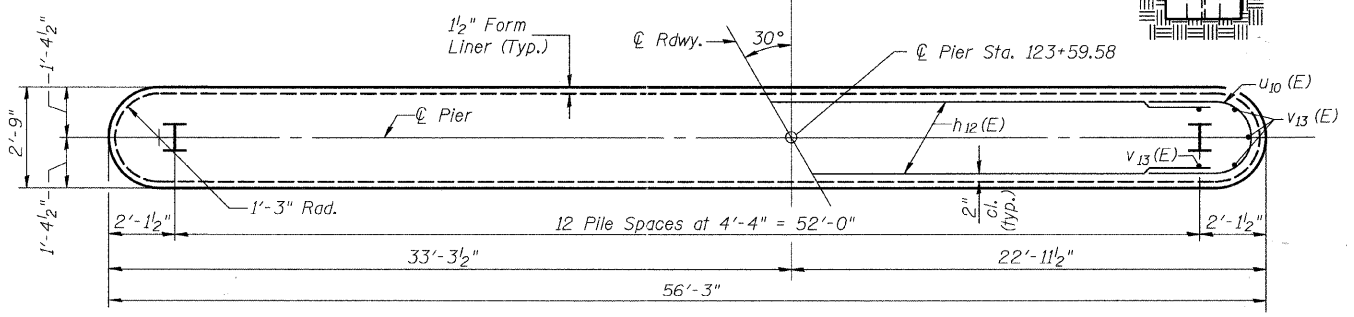


PILE DATA

Type: HP12x84 Set in Rock
 Nominal Required Bearing: 664k
 Factored Resistance Available: 332k
 Est. Length: 32'
 No. Production Piles: 13



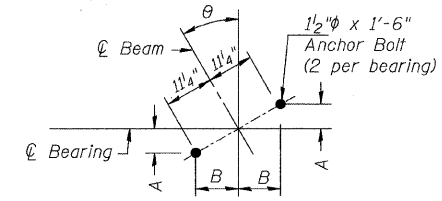
ELEVATION
(Looking East)



FOOTING PLAN

ANCHOR BOLT DIMENSIONS

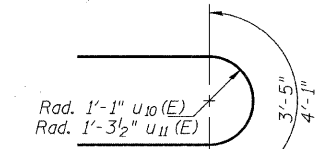
Girder No.	θ	A	B
G-1	30.99°	5 7/8"	9 5/8"
G-2A	30.49°	5 3/4"	9 3/4"
G-2 thru G-5	30°	5 5/8"	9 3/4"
G-5A	29.51°	5 1/2"	9 3/4"
G-6	28.99°	5 1/2"	9 7/8"



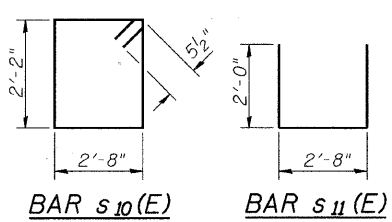
ANCHOR BOLT LAYOUT

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₁₂ (E)	32	#5	28'-0"	—
p ₁₄ (E)	18	#7	28'-6"	—
p ₁₅ (E)	6	#4	22'-6"	—
p ₁₆ (E)	3	#4	26'-6"	—
s ₁₀ (E)	50	#5	10'-7"	□
s ₁₁ (E)	38	#4	6'-8"	□
u ₁₀ (E)	16	#5	10'-5"	U
u ₁₁ (E)	6	#6	11'-1"	U
v ₁₃ (E)	116	#6	8'-6"	—
Structure Excavation		Cu. Yd.		26
Concrete Structures		Cu. Yd.		61.1
Reinforcement Bars, Epoxy Coated		Pound		4,610
Furnishing Steel Piles, HP12x84		Foot		416
Setting Piles in Rock		Each		13
Underwater Structure Excavation Protection Location No. 3		Each		1
Concrete Encasement		Cu Yd		40.6



BARS u₁₀(E) & u₁₁(E)



BAR s₁₀(E) BAR s₁₁(E)

* 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.

DESIGNED	JOH
CHECKED	BAN
DRAWN	TC
CHECKED	JOH

PIER 4
 STRUCTURE NO. 099-4105

SHEET NO. 48 60 SHEETS	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TR 55	90-16103-01-BR	WILL	255	192
SN 099-4105			CONTRACT NO. 83126		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRS-		