

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 773 IL 121	(109B) B-1	CUMBERLAND	96	78
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		

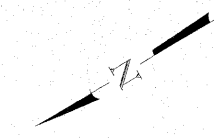
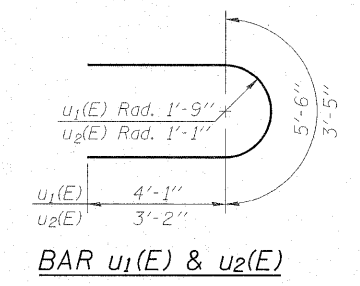
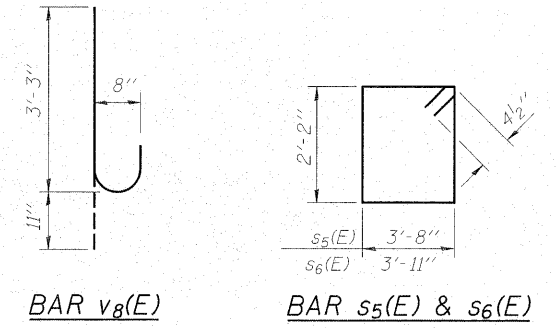
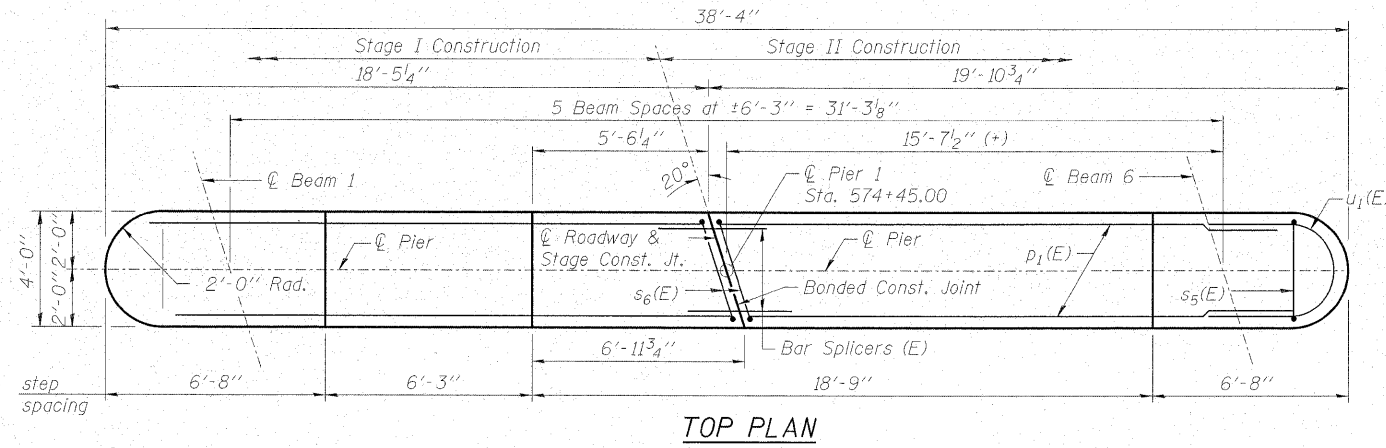
SHEET NO. 21
25 SHEETS

Contract # 74237

Notes:
Pour steps monolithically with cap.
For details of piles, see sheet 23 of 25.
For details of Bar Splicers, see sheet 24 of 25.
Space reinforcement to miss side retainer anchor bolts.
* Estimated pile length has been increased by 2' to account for variability in rock elevation.

PILE DATA

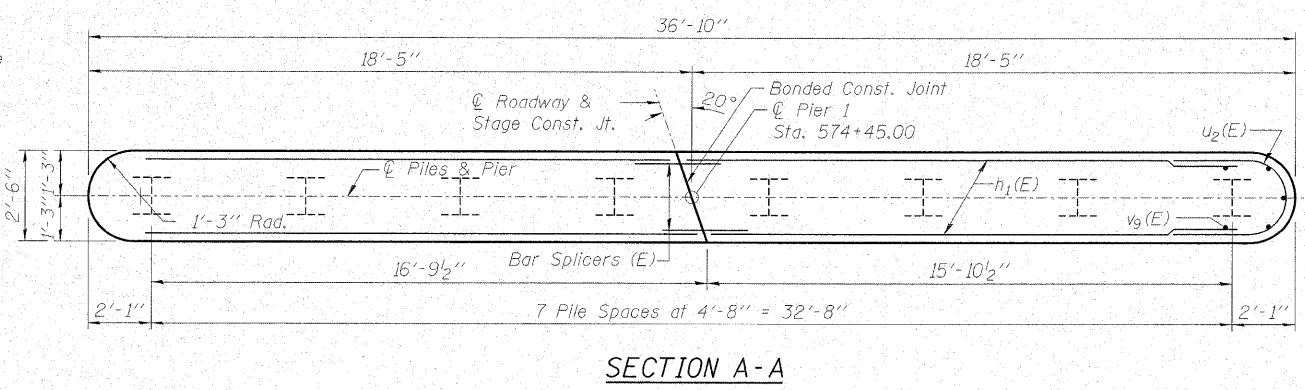
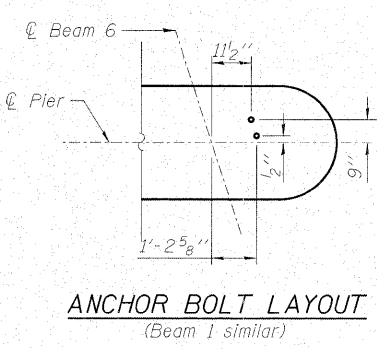
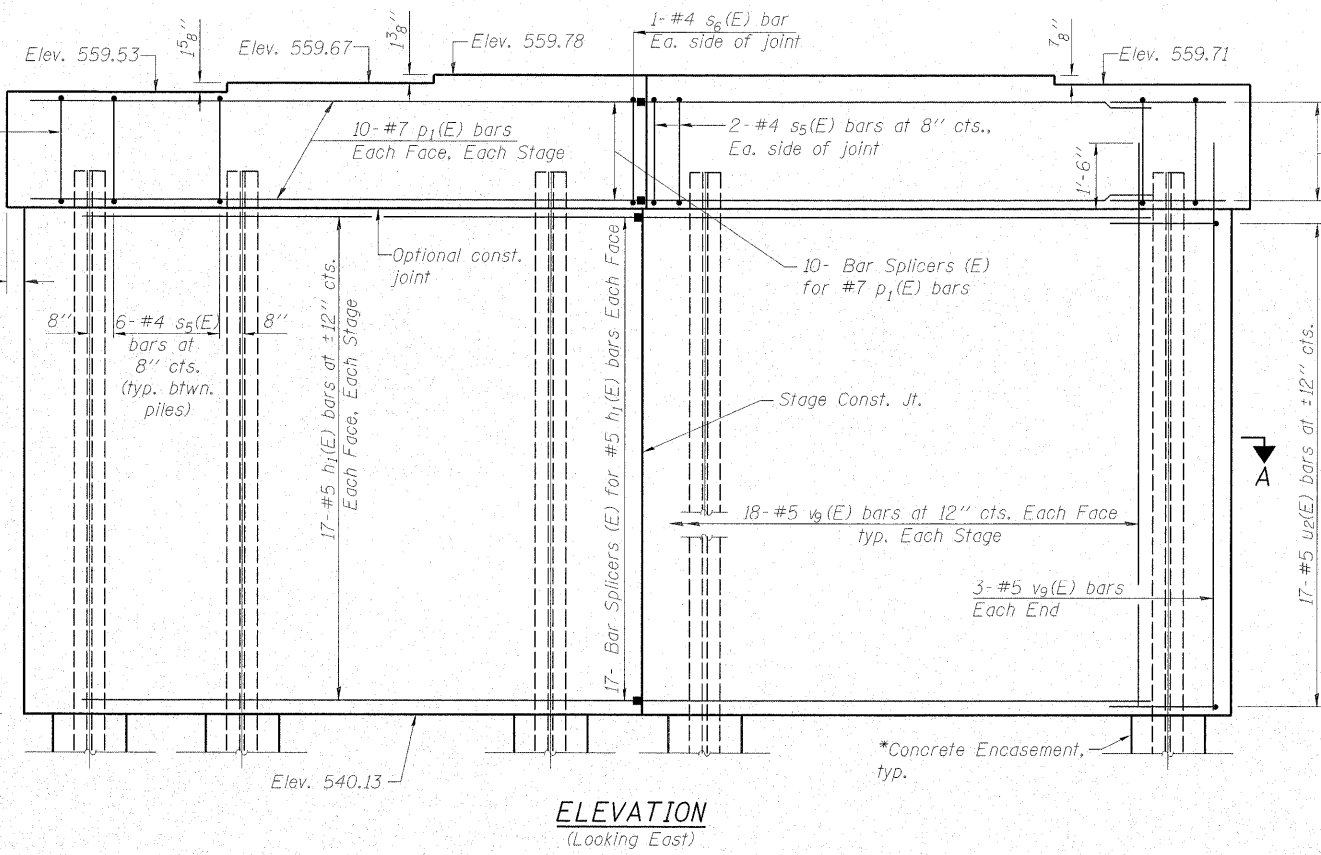
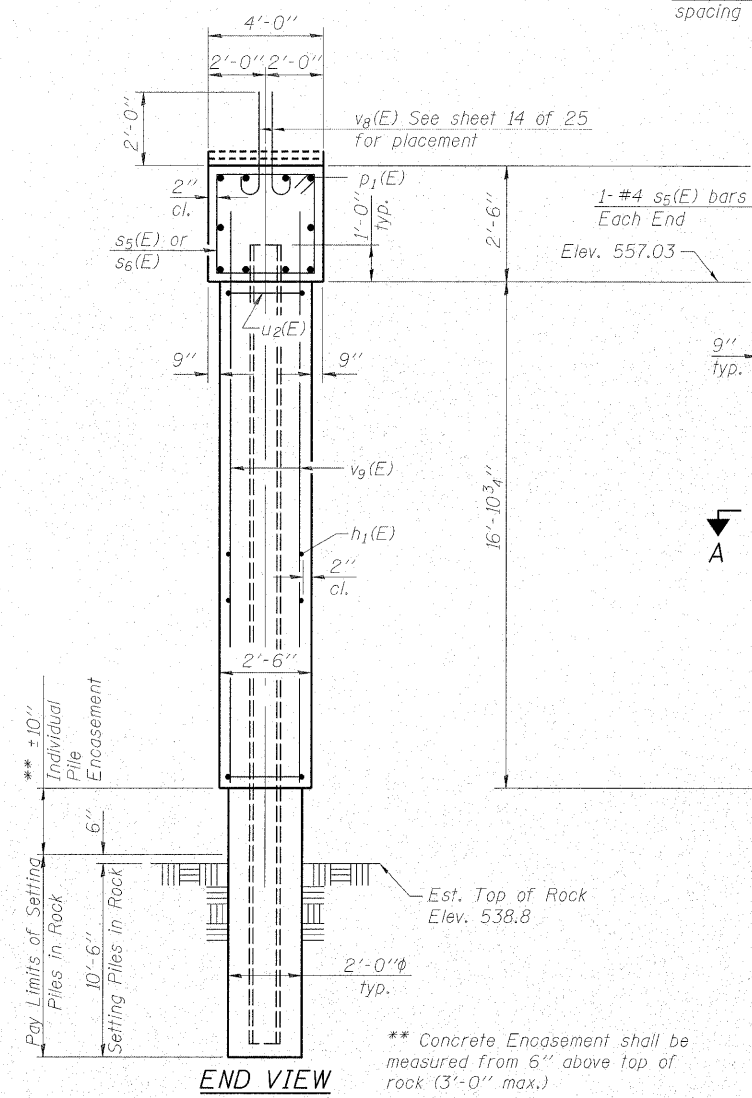
Type: Steel HP12x63
Nominal Required Bearing: Set in Rock
Factored Resistance Available: 248 kips
* Est. Length: 32'
No. Production Piles: 8
No. Test Piles: 0
Est. Top of Rock Elev: 538.8
Rock Socket Depth: 10.5 feet
Rock Socket Diameter: 2.0 feet



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.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₁ (E)	68	#5	16'-8"	—
p ₁ (E)	20	#7	16'-5"	—
s ₅ (E)	42	#4	12'-5"	□
s ₆ (E)	2	#4	12'-11"	□
u ₁ (E)	6	#6	13'-8"	U
u ₂ (E)	34	#5	9'-9"	U
v ₈ (E)	30	#8	4'-2"	U
v ₉ (E)	78	#5	18'-3"	—
Structure Excavation		Cu. Yd.	5.3	
Concrete Structures		Cu. Yd.	71.7	
Concrete Encasement		Cu. Yd.	0.8	
Reinforcement Bars, Epoxy Coated		Pound	4510	
Furnishing Steel Piles, HP12x63		Foot	256	
Setting Piles in Rock		Each	8	
Underwater Structure Excavation Protection, Location 2		Each	1	



PIER 1
IL ROUTE 121 OVER BIG MUDDY CREEK
F.A.P. RTE. 773 - SECTION (109B)B-1
CUMBERLAND COUNTY
STATION 574+84.00
STRUCTURE NO. 018-0063

MAURER STUTZ, INC.
ENGINEERS SURVEYORS

DESIGNED - BAS
CHECKED - KEF
DRAWN - LAD
CHECKED - RJA