

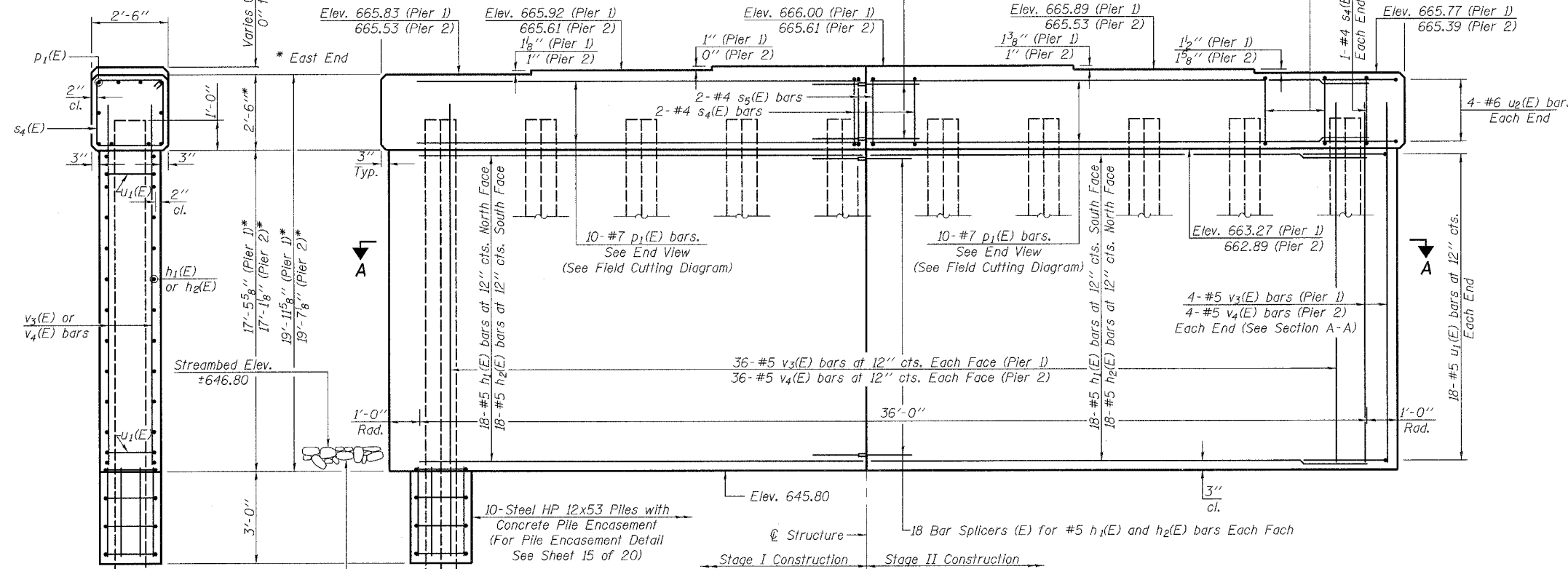
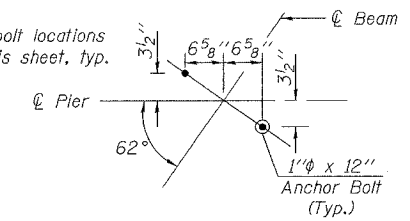
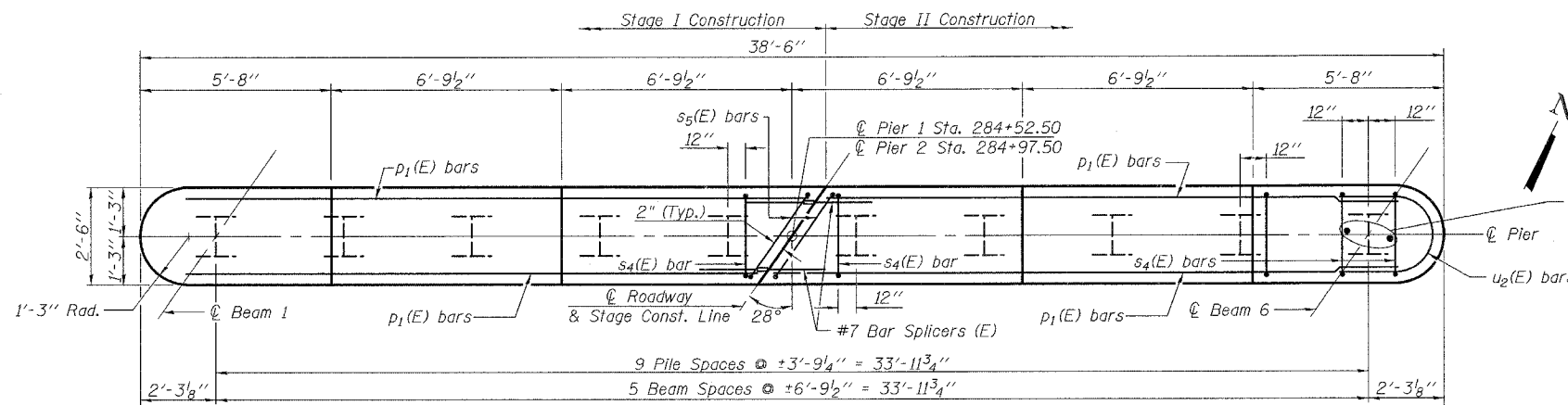
Notes: Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 For bearing details and anchor bolt installation, see sheet 12 of 20.
 All edges shall have standard $\frac{3}{4}$ " chamfers.
 For Bar Splicer Details, see sheet 16 of 20.
 For Pile Details, see sheet 15 of 20.
 The Steel H-Piles shall be according to AASHTO M270 Grade 50.
 U.N.O.=Unless noted otherwise

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO. 14
FAP 840	123BR-2	IROQUOIS	67	31
FED. ROAD DIST. NO. 7		ILL. INDEX	FED. AID PROJECT	

Contract #66612

PILE DATA

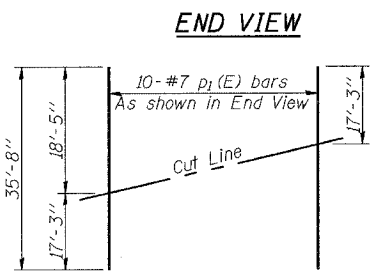
Type & Size: Steel HP 12x53
 Nominal Required Bearing: 283 kips (North Pier), 259 kips (South Pier)
 Allowable Resistance Available: 72 kips
 Est. Length: 53' (North Pier), 68' (South Pier)
 No. Req'd: 9 (North Pier), 9 (South Pier)
 No. Test Pile Req'd: 1 (North Pier), 1 (South Pier)



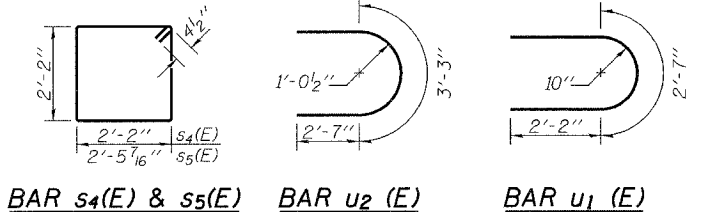
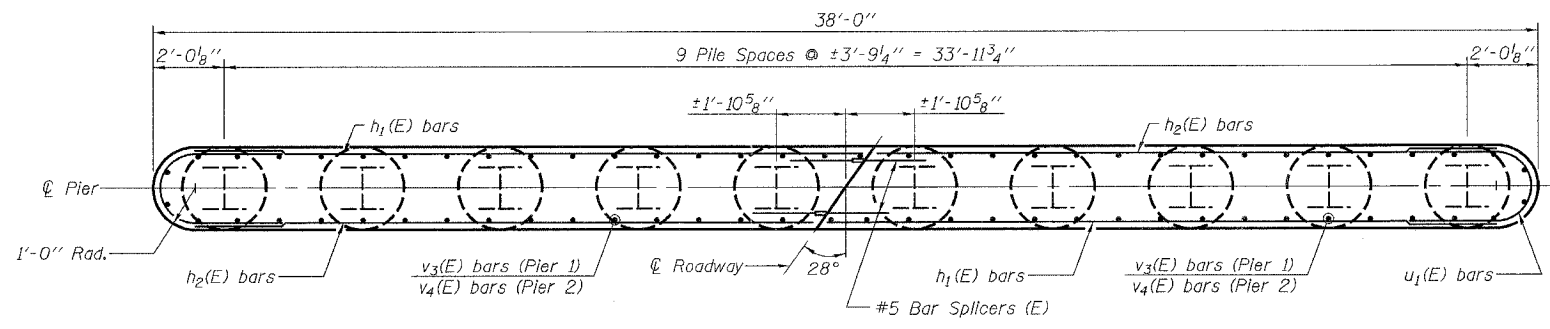
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₁ (E)	72	#5	18'-4"	—
h ₂ (E)	72	#5	17'-4"	—
p ₁ (E)	20	#7	35'-8"	—
s ₄ (E)	56	#4	9'-5"	□
s ₅ (E)	4	#4	10'-0"	□
u ₁ (E)	72	#5	6'-11"	U
u ₂ (E)	16	#6	8'-5"	U
v ₃ (E)	80	#5	18'-6"	—
v ₄ (E)	80	#5	18'-2"	—
Concrete Structures	Cu. Yd.		114.7	
Furnishing Steel Piles HP 12x53	Foot		1089	
Driving Piles	Foot		1089	
Test Pile Steel HP 12x53	Each		2	
Reinforcement Bars, Epoxy Coated	Pound		8300	
** Structure Excavation	Cu. Yd.		18.6	
Underwater Structure Excavation Protection, Location 1	Each		1	
Underwater Structure Excavation Protection, Location 2	Each		1	
Bar Splicers	Each		92	
Concrete Encasement	Cu. Yd.		7.0	

**Structure Excavation for Pier 1 = 9.3 Cu. Yd., Pier 2 = 9.3 Cu. Yd.



FIELD CUTTING DIAGRAM
 Order p₁(E) full length. Cut as shown and use remainder of bars in Stage II.



rjngroup
 Excellence through Ownership
 200 West Front Street
 Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
 PIERS
 IL RT. 49 OVER PIGEON CREEK
 FAP RTE 840 - SECTION 123 BR-2
 IROQUOIS COUNTY
 STATION 284+75.00
 STRUCTURE NO. 038-0217
 DATE: 8/7/2007
 DRAWN BY: JMT
 CHECKED BY: WJV