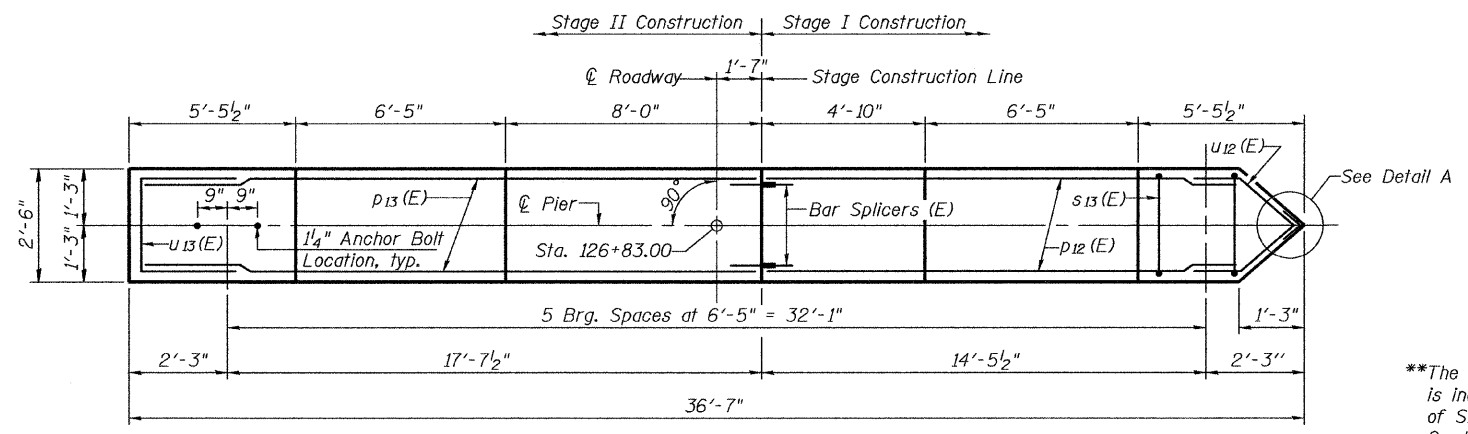
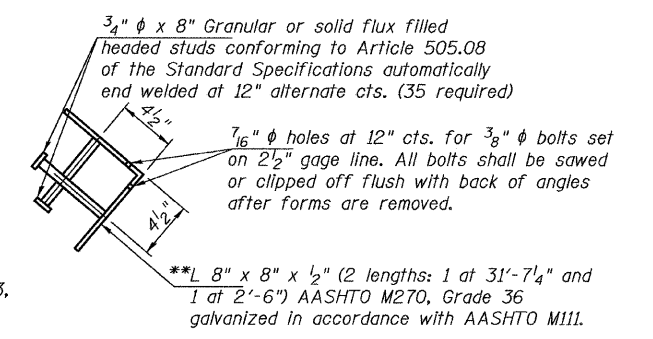


Notes:  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 For details of piles, see sheet 21 of 25.

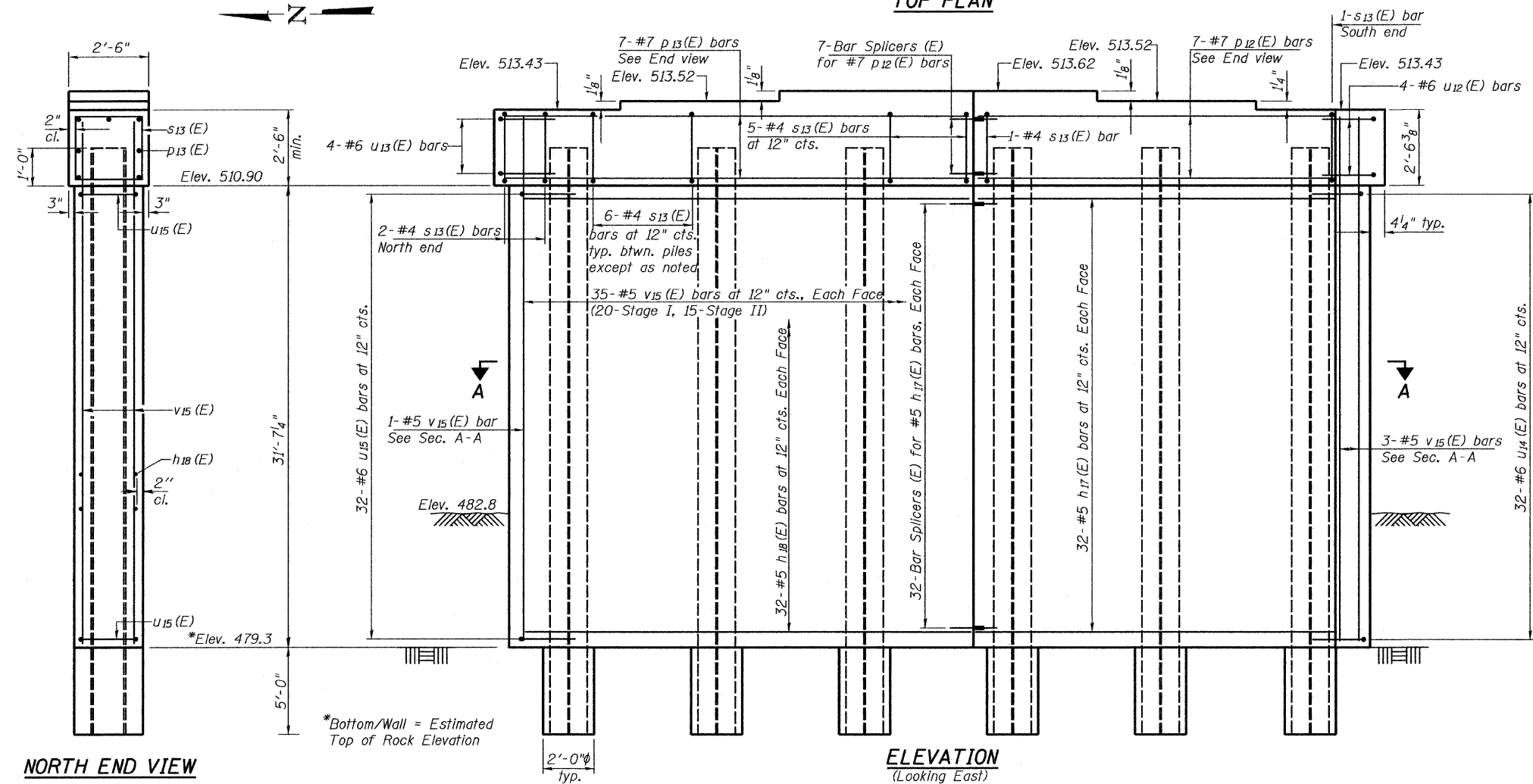


TOP PLAN



DETAIL A

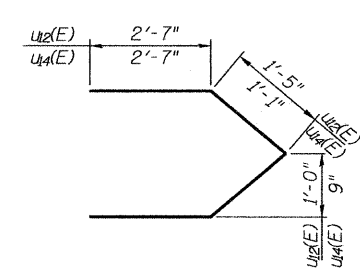
\*\*The quantity for the angle is included in the quantity of Structural Steel (M 223, Grade 36).



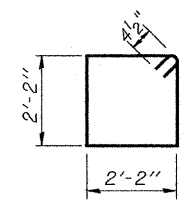
ELEVATION  
(Looking East)

NORTH END VIEW

BARS u13(E) and u15(E)



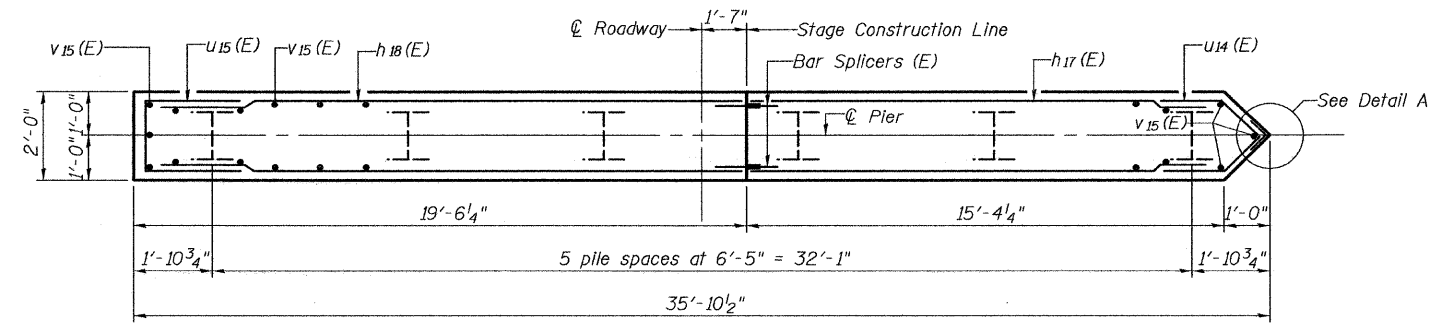
BARS u12(E) and u14(E)



BAR s13(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h17(E)	64	#5	15'-1"	—
h18(E)	64	#5	19'-2"	—
p12(E)	7	#7	15'-2"	—
p13(E)	7	#7	19'-6"	—
s13(E)	33	#4	9'-5"	—
u12(E)	4	#6	8'-0"	—
u13(E)	4	#6	7'-3"	—
u14(E)	32	#6	7'-4"	—
u15(E)	32	#6	6'-10"	—
v15(E)	74	#5	33'-6"	—
Structure Excavation		Cu. Yd.	31.1	
Concrete Structures		Cu. Yd.	93.7	
Reinforcement Bars, Epoxy Coated		Pound	6350	
Bar Splicers		Each	71	
Furnishing Steel Piles HP12x84		Foot	234	
Setting and Driving Piles in Rock		Each	6	
Underwater Structure Excavation Protection - Location 2		Each	1	
Stud Shear Connector		Each	35	



SECTION A-A

PILE DATA

Type: HP12x84  
 Nominal Required Bearing: 664 k  
 Allowable Resistance Available: 221 k  
 Est. Length: 39'  
 No. Production Piles: 6  
 No. Test Piles: 0

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET TITLE: PIER 2

PROJECT: F.A.S. RT. 287 (C.H. 29)  
 SECTION 05-00039-03-BR  
 GRUNDY COUNTY  
 STATION 126+42.00  
 STRUCTURE NO. 032-3101

PROJECT NO. 05042  
 SCALE: AS SHOWN  
 DATE: 10/21/09  
 DRAWN BY: TFG  
 CHECKED BY: MCB/CME  
 DRAWING NO. 20

COOMBE-BLOXDORF P.C.  
 Engineers / Land Surveyors  
 Springfield, Illinois  
 Design Firm License No. 184-002703

OF 25 SHTS