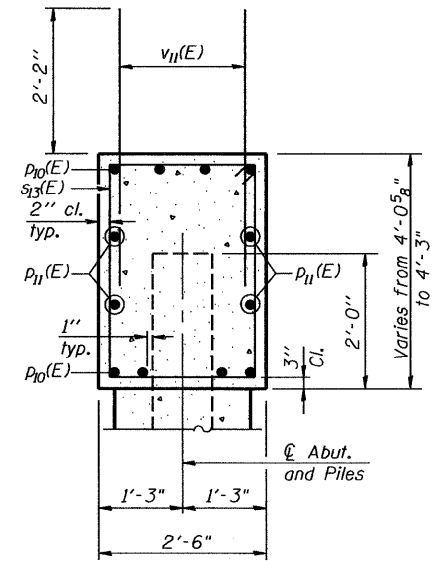
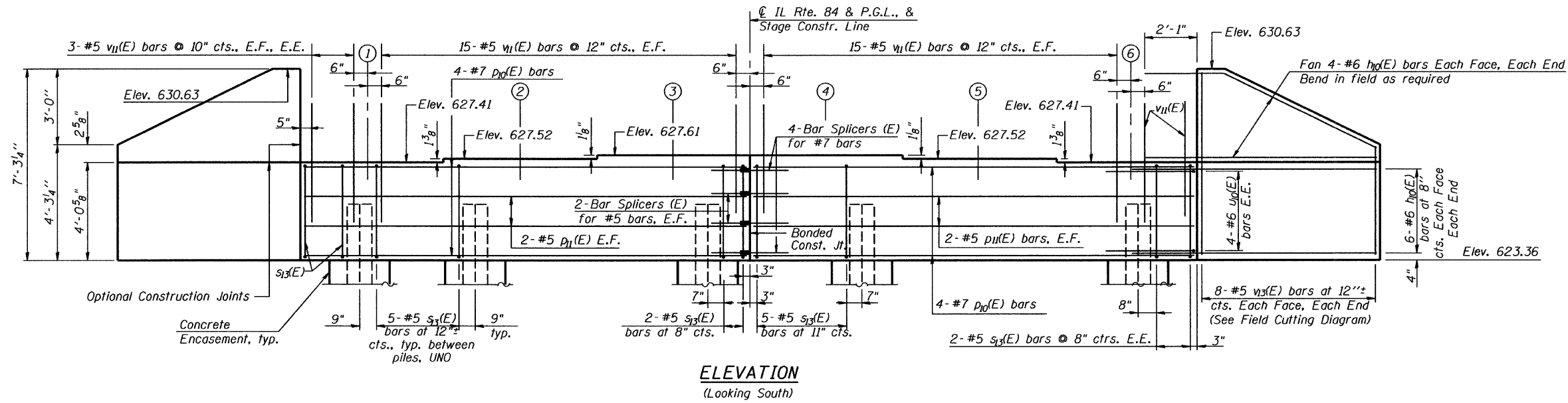
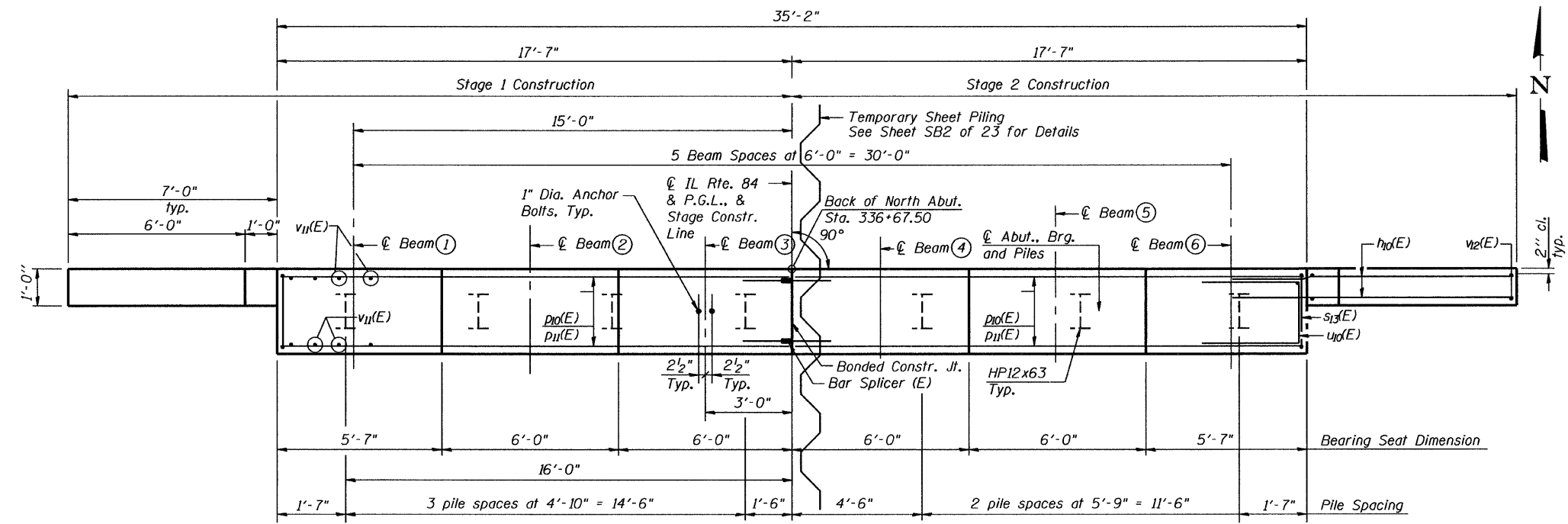


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**ELEVATION**  
(Looking South)

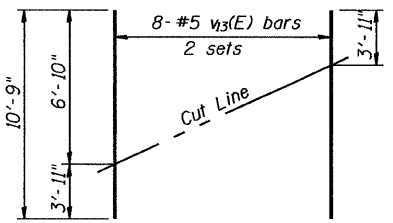
**SEC. THRU ABUT.**



**PLAN**

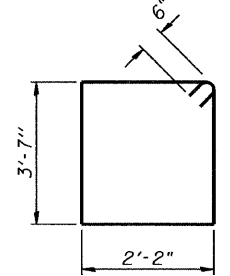
**PILE DATA**

Pile Type and Size: Steel HP 12x63 with Pile Shoes  
Nominal Required Bearing: 498 kip  
Factored Resistance Available: 152 kip  
Est. Length: 65 ft. (See Note 4)  
No. Production Piles: 6  
No. Test Piles: 1  
Estimated Top of Rock Elevation: 562.4

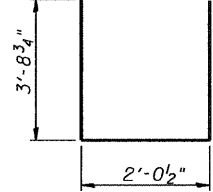


**FIELD CUTTING DIAGRAM**

Order v13(E) full length. Cut as shown and use remainder of bars in opposite face.



**BAR s13(E)**



**BAR u10(E)**

**NOTES**

1. Pour abut. steps monolithically with cap.
2. For details of Bar Splicers, see sheet SB19 of 23.
3. For details of piles and Concrete Encasement, see sheet SB18 of 23.
4. Estimated pile lengths have been increased by 2' for penetration into rock.
5. E.F. denotes each face.
6. E.E. denotes each end.
7. Piles shall be driven through 2 foot diameter precored holes extending to elevation 583.4 according to Article 512.09(c) of the Standard Specifications. Cost included in driving piles.

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h10(E)	40	#6	9'-7"	
p10(E)	16	#7	17'-3"	
p11(E)	8	#5	17'-3"	
s13(E)	36	#5	12'-6"	
u10(E)	8	#6	9'-6"	
v11(E)	72	#5	4'-4"	
v13(E)	16	#5	10'-9"	
Concrete Structures	Cu. Yd.	16.5		
Concrete Encasement	Cu. Yd.	2.4		
Reinforcement Bars, Epoxy Coated	Pound	2,370		
Bar Splicers	Each	12		
Furnishing Steel Piles HP12x63	Foot	390		
Driving Piles	Foot	390		
Test Pile Steel HP12x63	Each	1		
Pile Shoes	Each	7		

**NORTH ABUTMENT**  
Illinois Rte. 84 Over Duke Creek  
**STATION 336+42.00**      **STRUCTURE NO. 043-0079**

SHEET NO.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SB17 OF 23 SHEETS	308	103BR-3	JO DAVIESS	126	78
<b>CONTRACT NO. 64B26</b>					
10-15-2010			ILLINOIS FED. AID PROJECT		

**GRÄEF** 8501 W. Higgins Road, Suite 280  
Chicago, Illinois 60631  
(773) 399-0112

I:\Projects\2010\10-2010\SB17\Structural\Drawings\SB17\_NORTHABUTMENT.dgn  
 10/12/2010  
 DESIGNED J.Z.  
 CHECKED E.E.J.  
 DRAWN R.B.H.  
 CHECKED E.E.J.