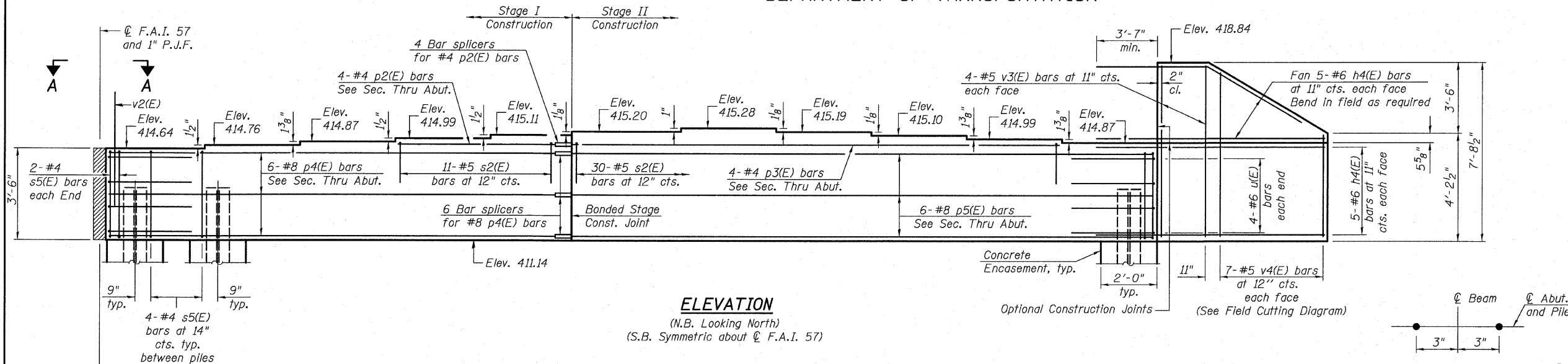
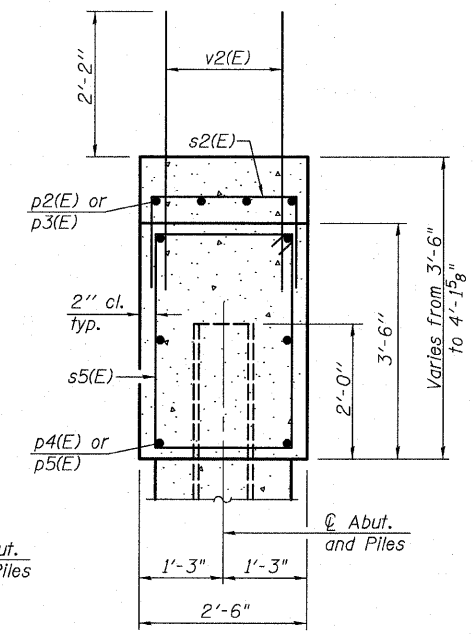


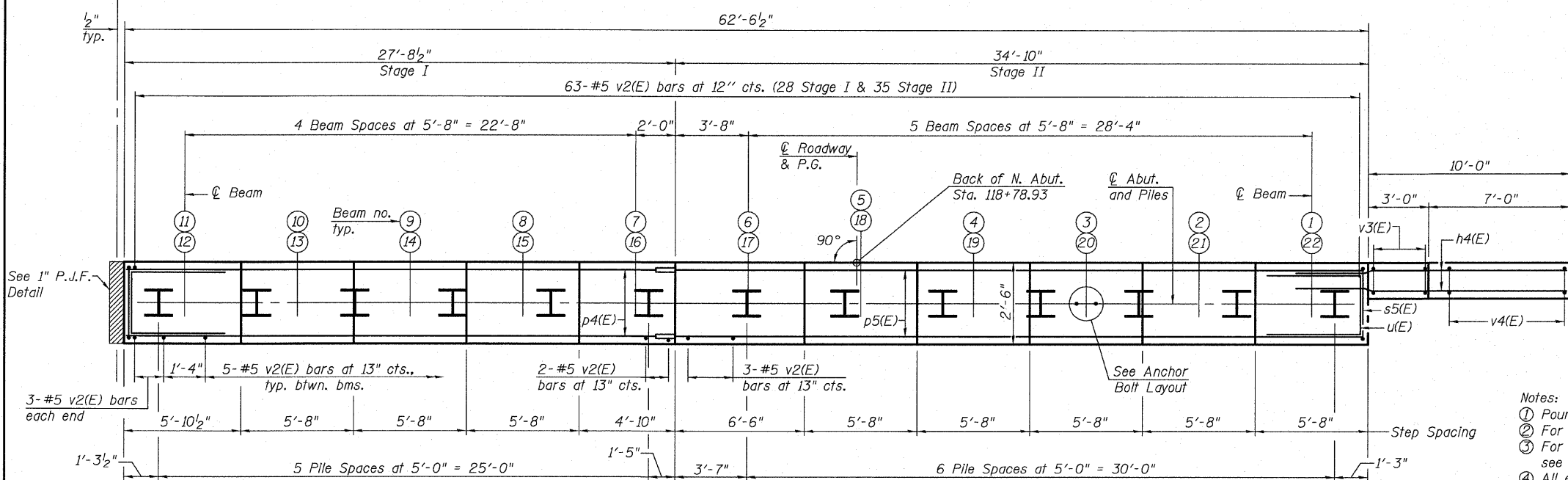
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**ELEVATION**  
(N.B. Looking North)  
(S.B. Symmetric about  $\bar{C}$  F.A.I. 57)



**SEC. THRU ABUT.**



**PLAN**  
(N.B. Structure)  
(S.B. Symmetric About  $\bar{C}$  F.A.I. 57)

**ANCHOR BOLT LAYOUT** ©

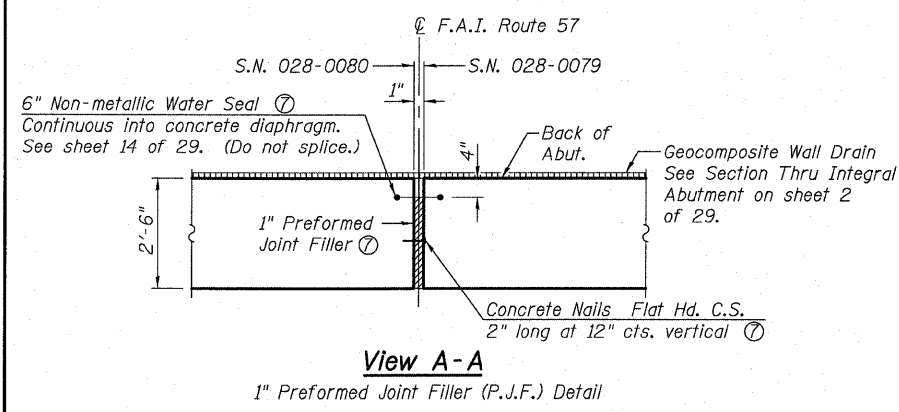
**PILE DATA**

Type: Steel HP12x53  
Nominal Required Bearing: 419 kips  
Allowable Resistance Available: 139 kips  
Est. Length: 106'  
No. Production Piles: 25 (Both Structures)  
No. Test Piles: 1

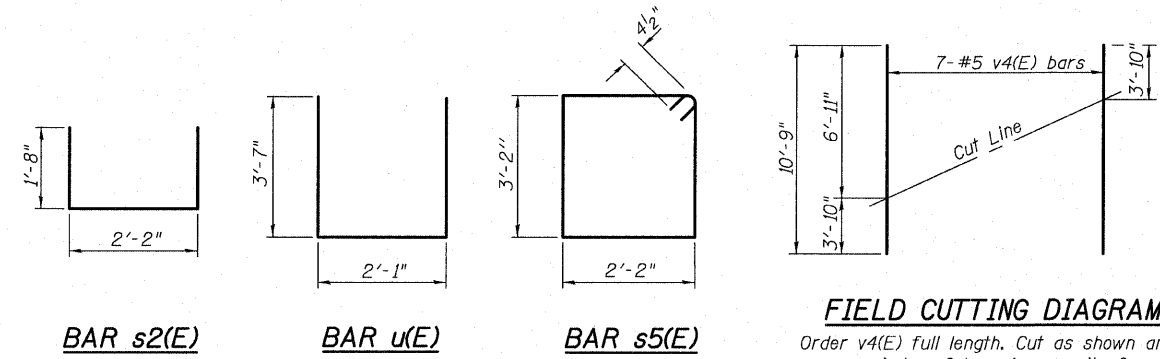
**BILL OF MATERIAL**  
(Both Structures)

Bar	No.	Size	Length	Shape
h4(E)	40	#6	13'-5"	—
p2(E)	8	#4	10'-2"	—
p3(E)	8	#4	28'-10"	—
p4(E)	12	#8	27'-4"	—
p5(E)	12	#8	34'-6"	—
s2(E)	82	#5	5'-6"	U
s5(E)	104	#4	11'-5"	U
u(E)	16	#6	9'-3"	U
v2(E)	238	#5	4'-4"	—
v3(E)	16	#5	7'-4"	—
v4(E)	14	#5	10'-9"	—
Structure Excavation			Cu. Yd.	122
Concrete Structures			Cu. Yd.	49.5
Concrete Encasement			Cu. Yd.	9.1
Reinforcement Bars, Epoxy Coated			Pound	5,840
Furnishing Steel Piles, HP12x53			Foot	2,650
Driving Piles			Foot	2,650
Test Pile, HP12x53			Each	1
Pile Shoes			Each	26

- Notes:
- ① Pour steps monolithically with cap.
  - ② For details of Bar Splicers, see sheet 22 of 29.
  - ③ For details of piles and Concrete Encasement, see sheet 21 of 29.
  - ④ All edges shall have standard  $\frac{3}{4}$ " chamfer.
  - ⑤ Place v2(E) bars to clear flange of beam.
  - ⑥ Space reinforcement in cap to miss anchor bolts.
  - ⑦ Cost to be included with Concrete Structures.




**View A-A**  
1" Preformed Joint Filler (P.J.F.) Detail



**FIELD CUTTING DIAGRAM**  
Order v4(E) full length. Cut as shown and use remainder of bars in opposite face.

**NORTH ABUTMENT DETAILS**  
**STRUCTURE NO. 028-0079 (N.B.)**  
**STRUCTURE NO. 028-0080 (S.B.)**

SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
18	57	(28-5)VB-1	FRANKLIN	81	41
SHEETS 29					
CONTRACT NO. 78157					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					


**GATES ASSOCIATES**  
Consulting Engineers  
 Eastport Business Center 1  
 100 Lanter Court, Suite 1  
 Collinsville, Illinois 62234  
 618-345-2200  
 Design Firm License No. 184.001115

DESIGNED JAD  
 CHECKED NEL  
 DRAWN JAD  
 CHECKED NEL