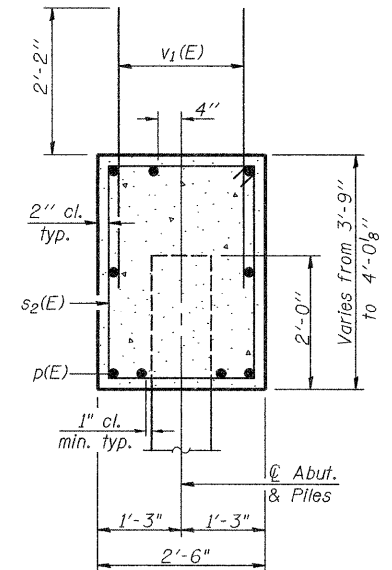
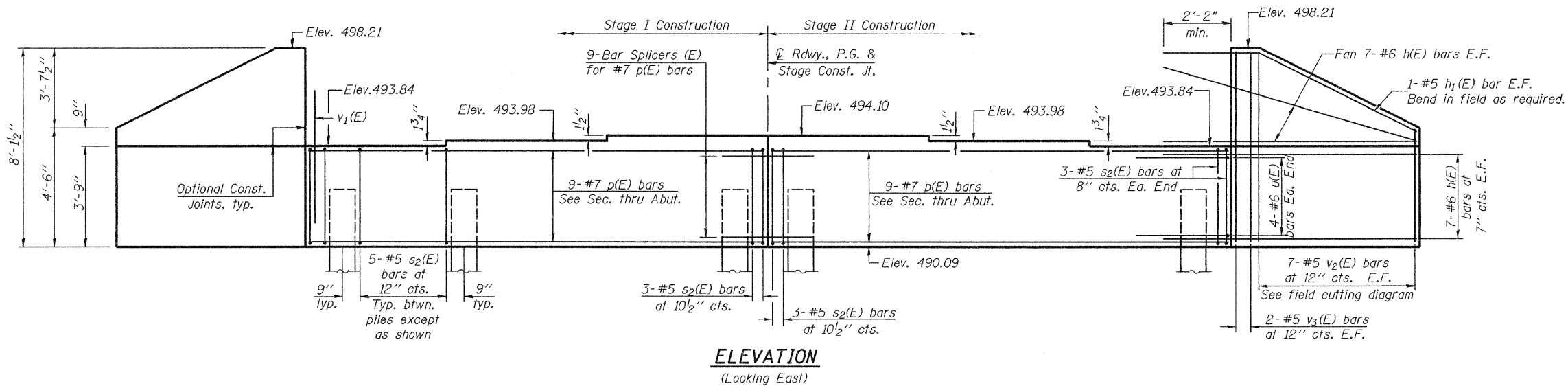


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

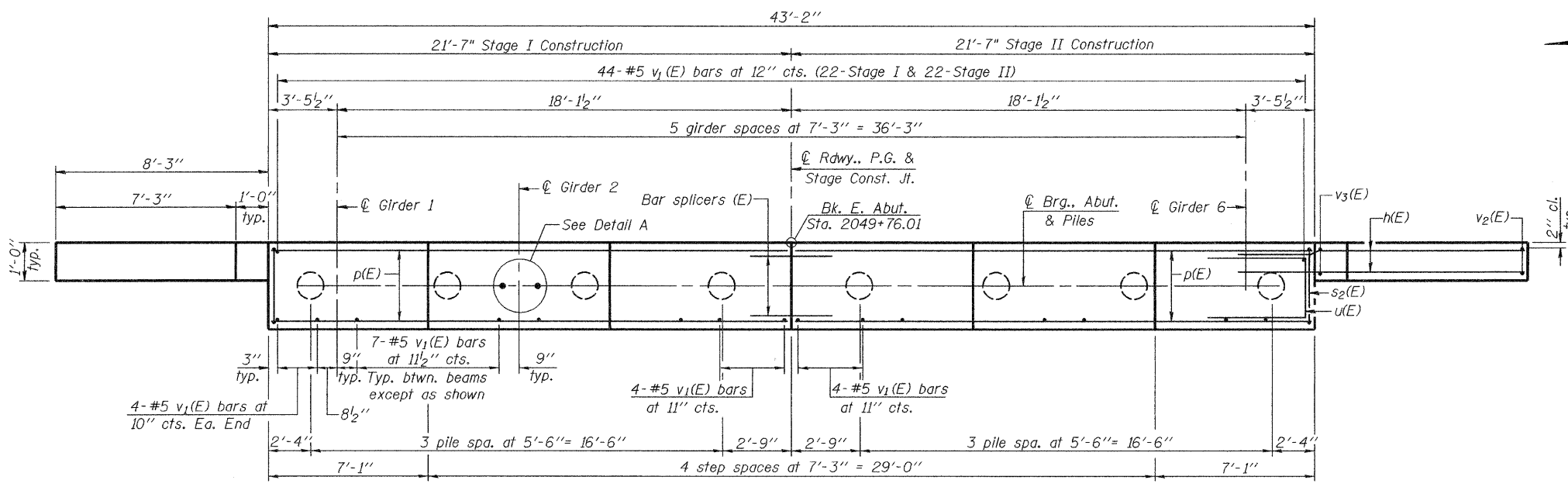
ROUTE NO.	SECTION	COUNTY	STAGE	SHEET NO.	SHEET NO. 16 19 SHEETS
F.A.P. 42	139BR	BOND	59	49	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		

Contract #76391

Notes: Four steps monolithically with cap.  
For bar splicer assembly details, see sheet 18 of 19.  
For details of piles, see sheet 17 of 19.  
If h(E) bars interfere with Metal Shell Piles, cut h(E) bars to fit.



SEC. THRU ABUT.



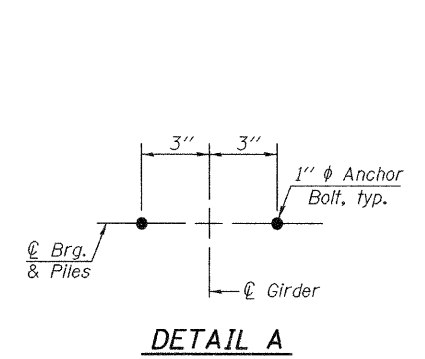
PLAN

PILE DATA

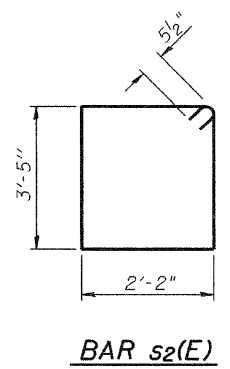
Type: 14"  $\phi$  Metal Shell Pile with 0.25" wall  
Nominal Required Bearing: 353 Kips  
Factored Resistance Available: 176 Kips  
Estimated Pile Length: 55'  
No. Production Piles: 7  
No. Test Piles: 1

DESIGNED	Phillip R. Litchfield
CHECKED	Nick R. Barnett
DRAWN	R. Sommer
CHECKED	P.R.L./N.R.B.

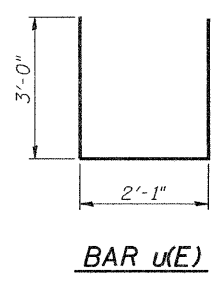
November 7, 2008  
EXAMINED *Thomas J. Domagalaki*  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES



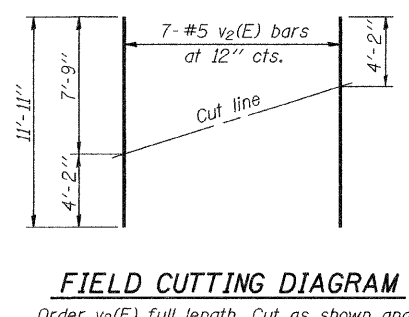
DETAIL A



BAR s2(E)



BAR u(E)



FIELD CUTTING DIAGRAM

Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	56	#6	10'-5"	—
h(E)	4	#5	11'-4"	—
p(E)	18	#7	21'-3"	—
s2(E)	42	#5	12'-1"	□
u(E)	8	#6	8'-1"	—
v1(E)	88	#5	4'-4"	—
v2(E)	14	#5	11'-11"	—
v3(E)	8	#5	7'-9"	—
Concrete Structures		Cu. Yd.	19.5	
Reinforcement Bars, Epoxy Coated		Pound	2970	
Structure Excavation		Cu. Yd.	123	
Furnishing Metal Shell Piles 14" $\phi$ x 0.25"		Foot	385	
Driving Piles		Foot	385	
Test Pile Metal Shell		Each	1	
Anchor Bolts, 1"		Each	12	

EAST ABUTMENT  
F.A.P. ROUTE 42 - SECTION 139BR  
BOND COUNTY  
STATION 2049+33.51  
STRUCTURE NO. 003-0061