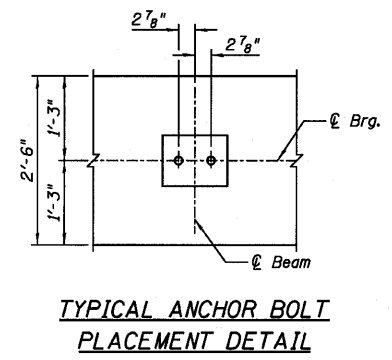
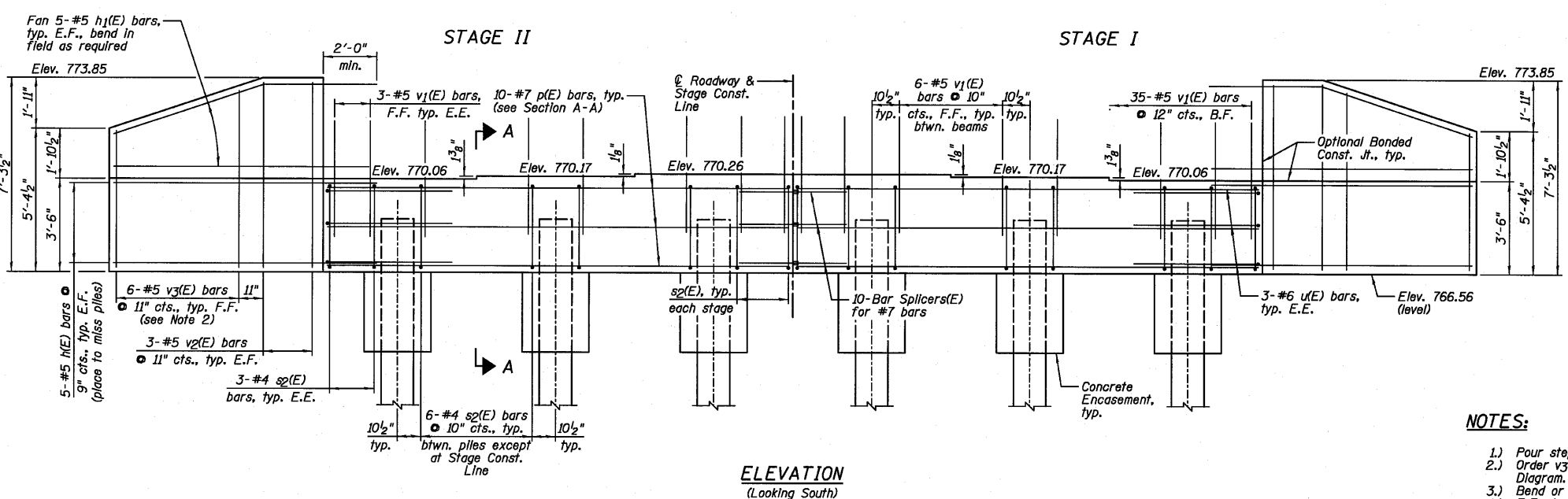
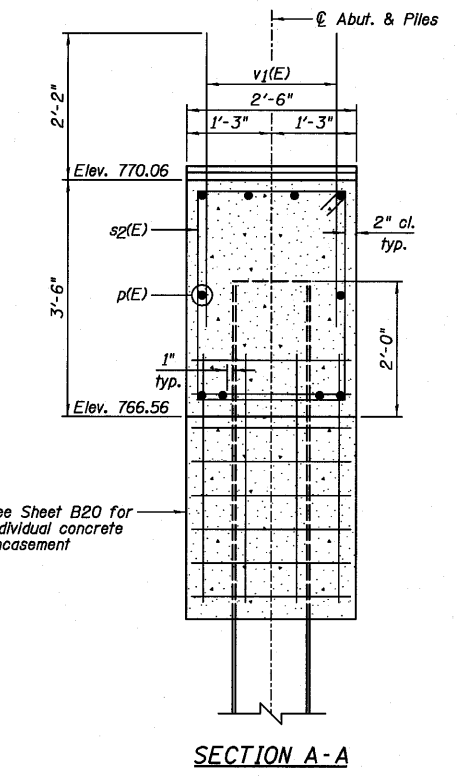
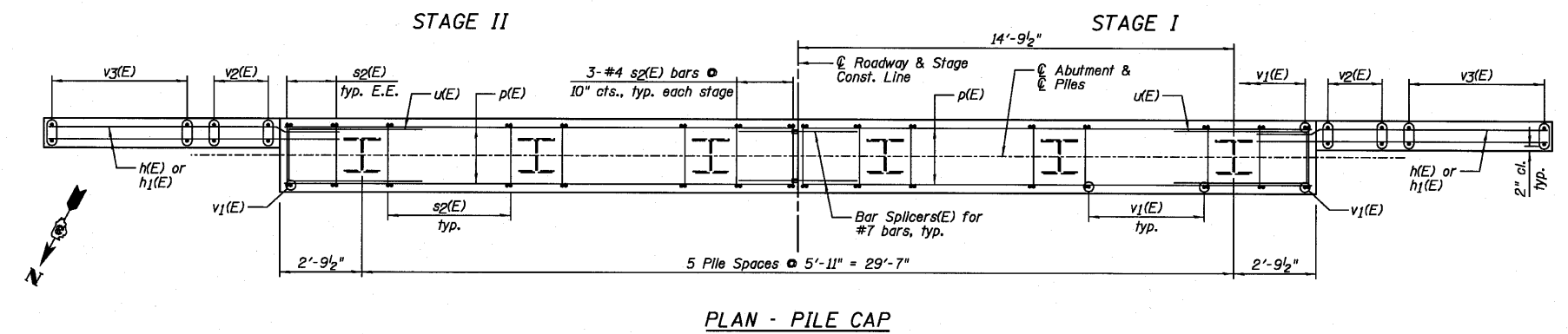
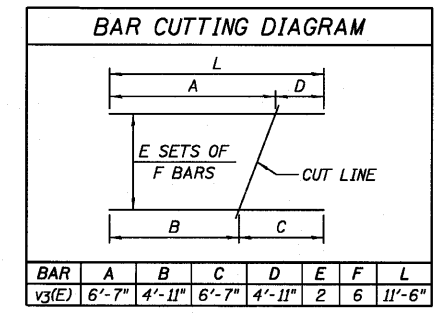
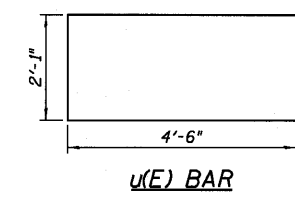
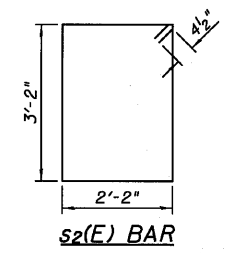
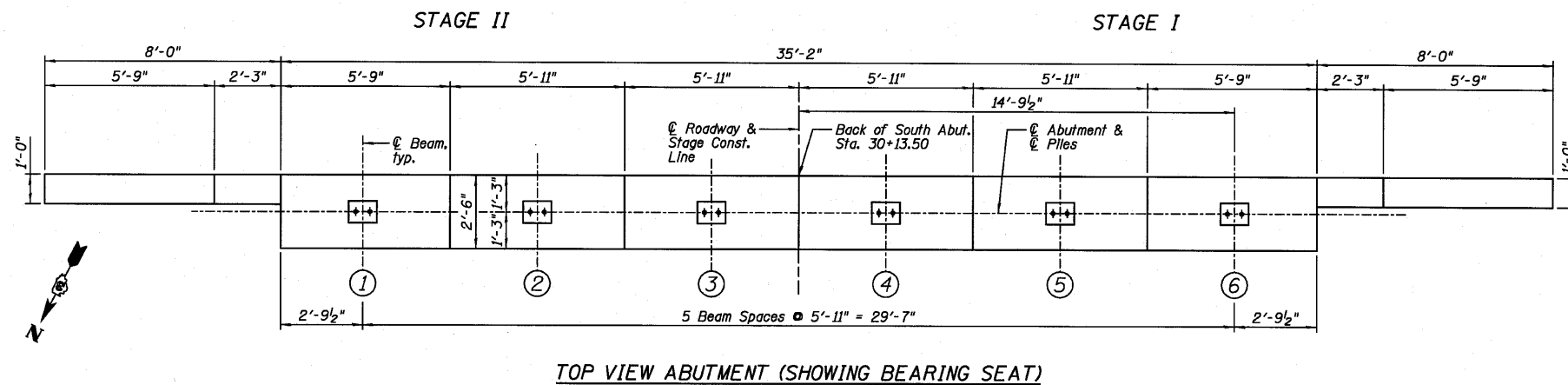


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**SOUTH ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	20	#5	9'-10"	—
h1(E)	20	#5	10'-1"	—
p(E)	20	#7	17'-3"	—
sp(E)	36	#4	11'-5"	□
u(E)	6	#6	11'-1"	□
v1(E)	71	#5	4'-4"	—
v2(E)	12	#5	6'-11"	—
v3(E)	12	#5	11'-6"	—
Item	Unit	Quantity		
Porous Granular Embankment, Special	Cu. Yd.	58		
Structure Excavation	Cu. Yd.	73		
Concrete Structures	Cu. Yd.	15.7		
Concrete Encasement	Cu. Yd.	3.3		
Reinforcement Bars, Epoxy Coated	Pound	2,050		
Furnishing Steel Piles HP14x73	Foot	150		
Driving Piles	Foot	150		
Geocomposite Wall Drain	Sq. Yd.	33		
Pipe Underdrains for Structures 4"	Foot	69		



- NOTES:**
- 1.) Four steps monolithically with cap.
 - 2.) Order v3(E) bars full length. Cut according to Bar Cutting Diagram. Use remainder of bars in opposite face of wingwall.
 - 3.) Bend or cut h(E) bars to miss piles.
 - 4.) E.E. denotes Each End, F.F. denotes Front Face, B.F. denotes Back Face and E.F. denotes Each Face.
 - 5.) See Sheet B21 for Bar Splicer Details.

PILE DATA:

Pile Type and Size	Steel - HP14x73
Nominal Required Bearing	267 kips
Factored Resistance Available	147 kips
Estimated Pile Length	25 Feet
Number of Production Piles	6
Number of Test Piles	0

DESIGNED	SDH
CHECKED	JML
DRAWN	DJM
CHECKED	MSW

DATE 10/08/10

<p>2709 McGraw Drive Bloomington, Illinois 61704 309/663-8435, 309/663-1571 fax</p>	SHEET NO. B18	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	23 SHEETS	698	(101 BR)BR	BUREAU	47	32
CONTRACT NO. 66910						
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT		

**SOUTH ABUTMENT
STRUCTURE NO. 006-0181**