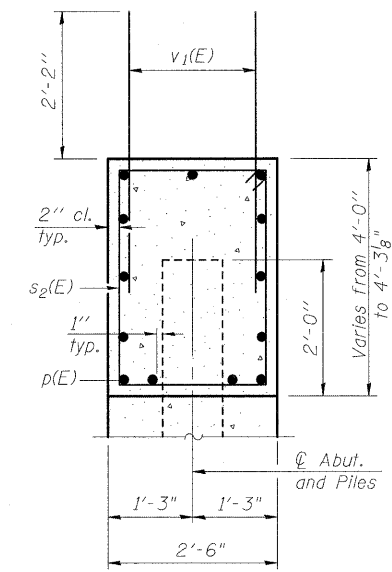
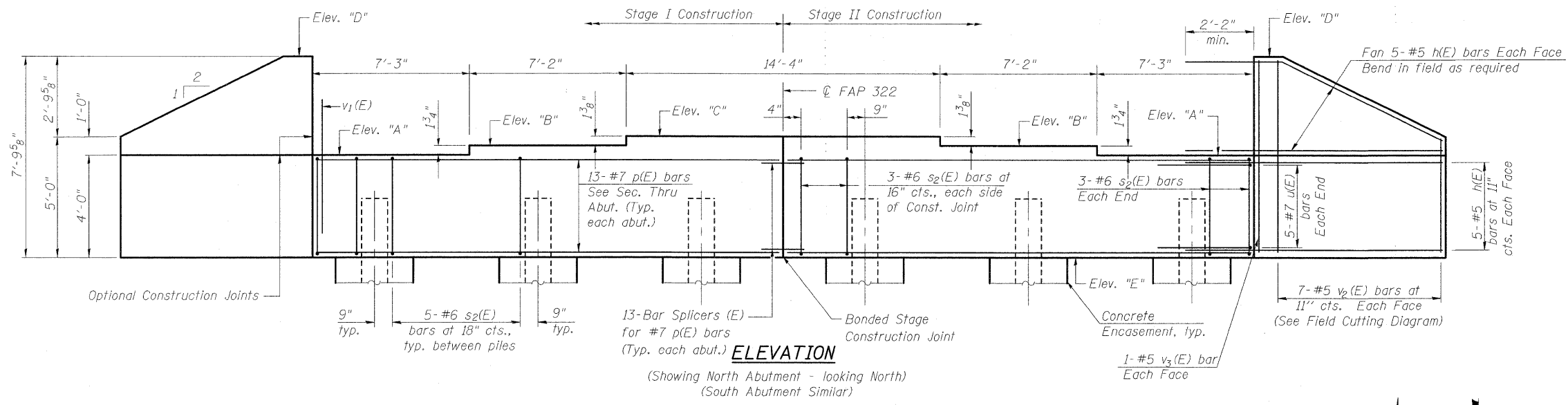


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



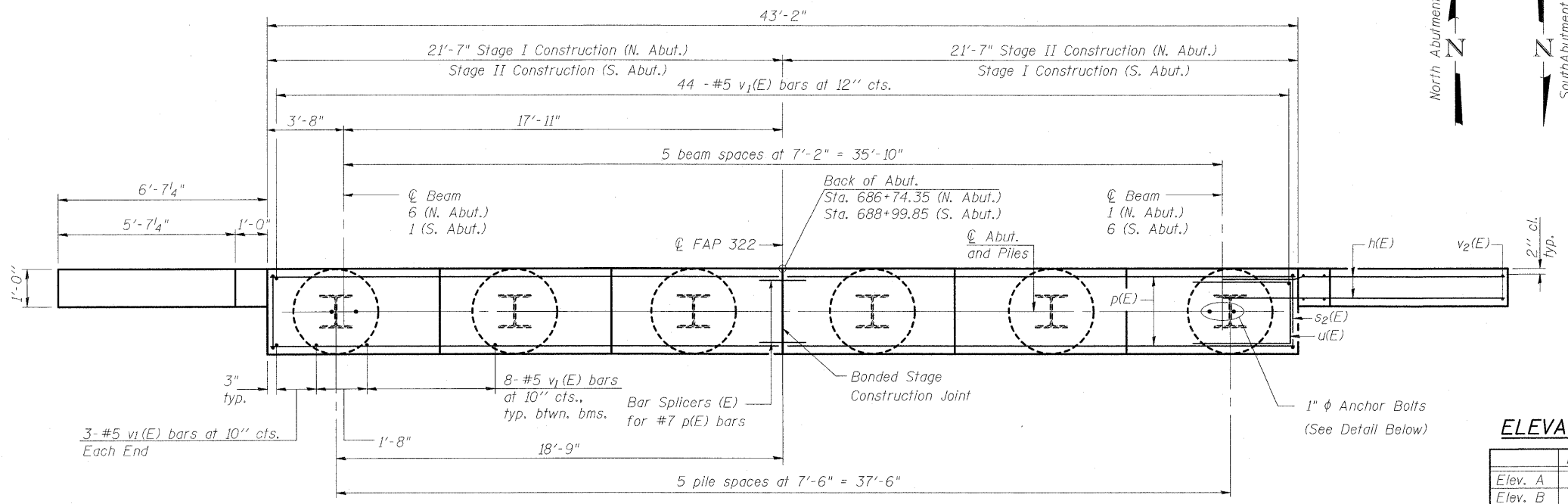
SEC. THRU ABUT.

**BILL OF MATERIAL FOR TWO ABUTMENTS**

Bar	No.	Size	Length	Shape
h(E)	80	#5	9'-3"	—
p(E)	52	#7	21'-3"	—
s <sub>2</sub> (E)	64	#6	13'-0"	□
u(E)	20	#7	7'-5"	—
v <sub>1</sub> (E)	180	#5	4'-4"	—
v <sub>2</sub> (E)	28	#5	12'-1"	—
v <sub>3</sub> (E)	8	#5	7'-5"	—
Structure Excavation			Cu. Yd.	349.3
Concrete Structures			Cu. Yd.	39.7
Reinforcement Bars, Epoxy Coated			Pound	5820
Furnishing Steel			Foot	888
Piles, HP 14x73			Foot	888
Driving Piles			Foot	888
Concrete Encasement			Cu. Yd.	6.5
Pile Shoes			Each	12
Bar Splicers			Each	26

For details of Bar Splicers, see sheet 19 of 23.

**NORTH & SOUTH ABUTMENTS  
STRUCTURE NUMBER 061-0094**



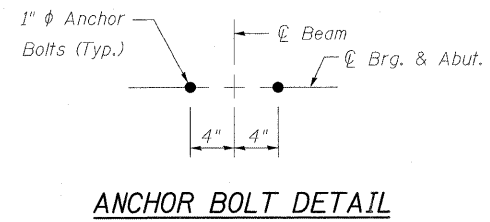
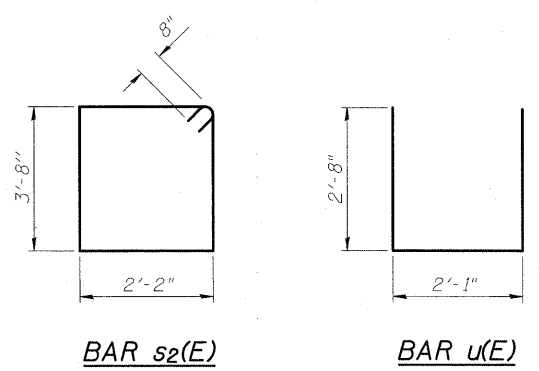
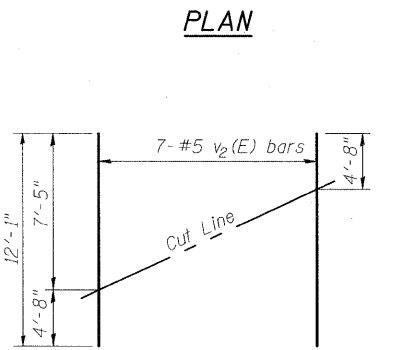
**ELEVATION DATA**

	N. Abut.	S. Abut.
Elev. A	478.12	478.22
Elev. B	478.27	478.37
Elev. C	478.38	478.48
Elev. D	481.92	482.02
Elev. E	474.12	474.22

**PILE DATA**

Type: HP 14x73 with Pile Shoes  
Nominal Required Bearing: 578 k  
Factored Resistance Available: 289 k  
Est. Length: 74'-0"  
No. Production Piles: 12  
No. Test Piles: None

**Notes:**  
Pour steps monolithically with cap.  
See sheet 2 of 23 for section thru Integral Abutment showing drainage details.  
For detail of piles and concrete Encasements see sheet 20 of 23.  
Space reinforcement in cap to miss anchor bolts.  
Backfill shall be placed behind the abutment after the superstructure has been poured and falsework removed. See Article 502.10 of the Standard Specifications.  
Piles at the North Abutment shall be driven through 2'-6" diameter precored holes extending to elevation ±466.0 according to Article 512.09(c) of the Standard Specifications.  
Cost included in driving piles.



DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



**BERNARDIN  
LOCHMUELLER &  
ASSOCIATES, INC.**

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Local (618) 288-4665  
Fax 618-288-4666

SHEET NO. 17 23 SHEETS	F.A.P. RTE. 322	SECTION 25BR-1	COUNTY MARION	TOTAL SHEETS 63	SHEET NO. 40
	SN 061-0094		CONTRACT NO. 76A83		
FED. ROAD DIST. NO. 8 ILLINOIS FED. AID PROJECT 322					

14657 PM 9/29/2009 \dgm\060094\76A83-017.dgn