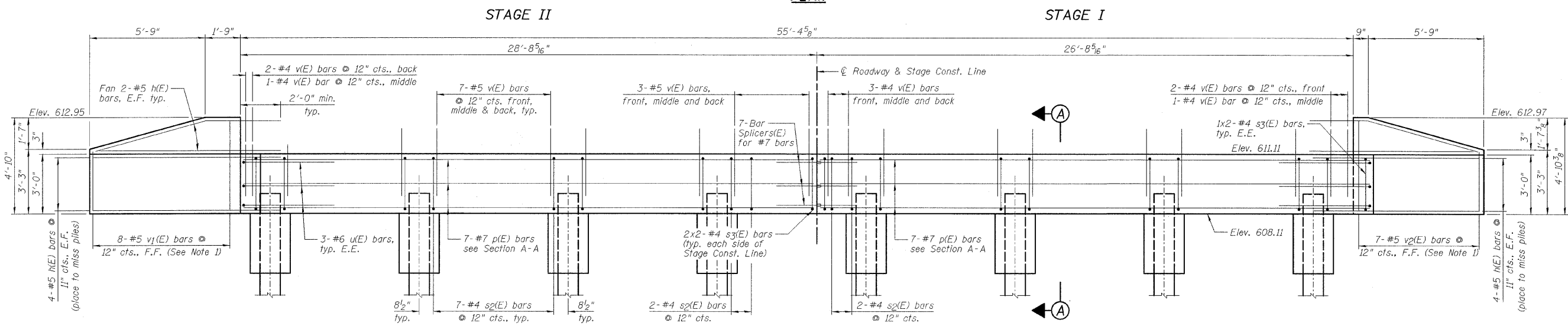
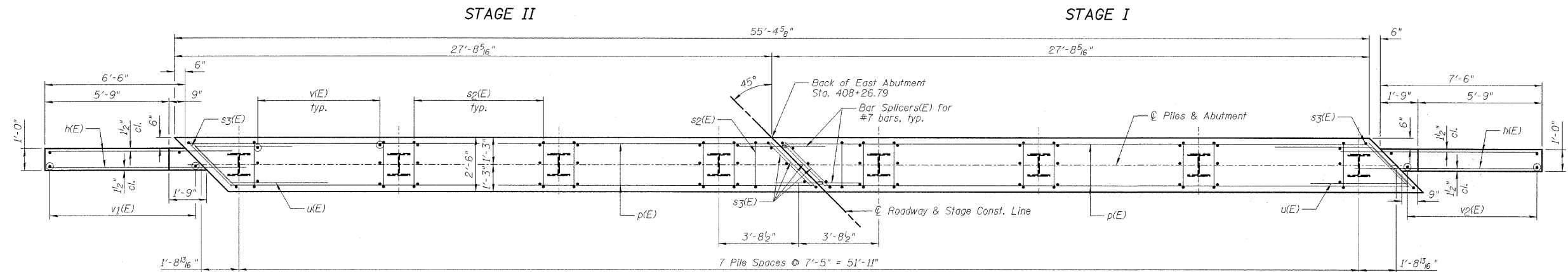


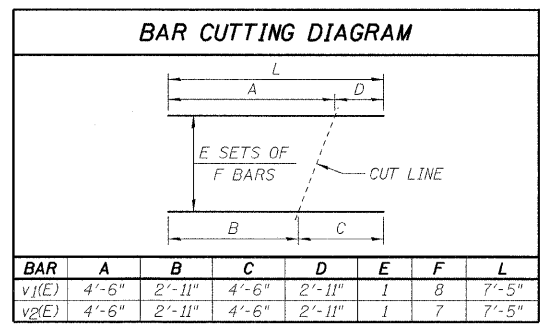
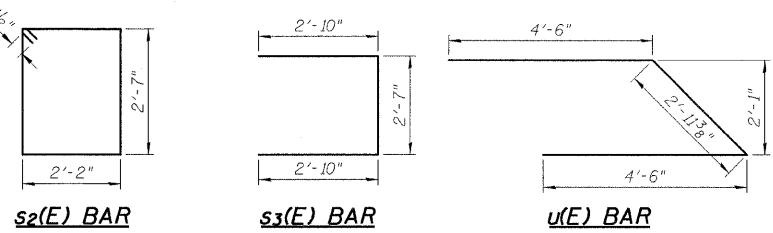
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**EAST ABUTMENT  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	24	#5	9'-4"	
p(E)	14	#7	27'-3"	
sp(E)	46	#4	10'-3"	
s3(E)	12	#4	8'-3"	
u(E)	6	#6	11'-11"	
v(E)	150	#5	3'-9"	
v1(E)	8	#5	7'-5"	
v2(E)	7	#5	7'-5"	

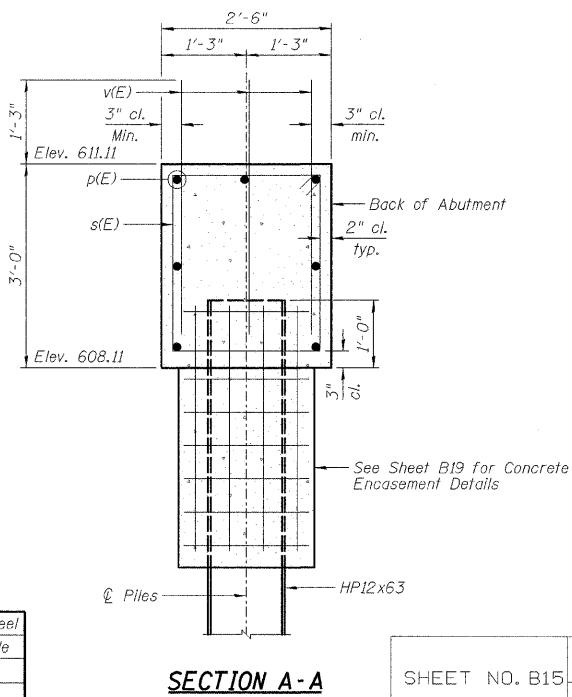
Item	Unit	Quantity
Porous Granular Embankment, Special	Cu. Yd.	42
Structure Excavation	Cu. Yd.	60
Concrete Structures	Cu. Yd.	17.6
Concrete Encasement	Cu. Yd.	2.8
Reinforcement Bars, Epoxy Coated	Pound	2,210
Furnishing Steel Piles HP12x63	Foot	224
Driving Piles	Foot	224
Test Pile Steel HP12x63	Each	1
Geocomposite Wall Drain	Sq. Yd.	25
Pipe Underdrains For Structures 4"	Foot	82
Bar Splicers	Each	7



**PILE DATA:**

Type	HP12x63 Steel
No. Req'd.	7+1 Test Pile
Est. Length	32 feet
Nominal Required Bearing	248 kips
Factored Resistance Available	124 kips

Note: Drive test pile under Stage I.



- NOTES:**
- Order v1(E) and v2(E) bars full length. Cut according to Bar Cutting Diagram. Use remainder of bars in opposite wingwall opposite face.
  - Bend or cut h(E) bars to miss piles.
  - See Sheet B20 for Bar Splicer Details.
  - E.E. denotes Each End, F.F. denotes Front Face and E.F. denotes Each Face.

**EAST ABUTMENT  
STRUCTURE NO. 053-0185**

DESIGNED	SDH
CHECKED	JML
DRAWN	JWK/DJM
CHECKED	MSW
DATE	10/07/09

SHEET NO. B15	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22 SHEETS	41	(15BR-3)-1	LIVINGSTON	45	26
		SN 053-0185	CONTRACT NO. 66833		
		FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		