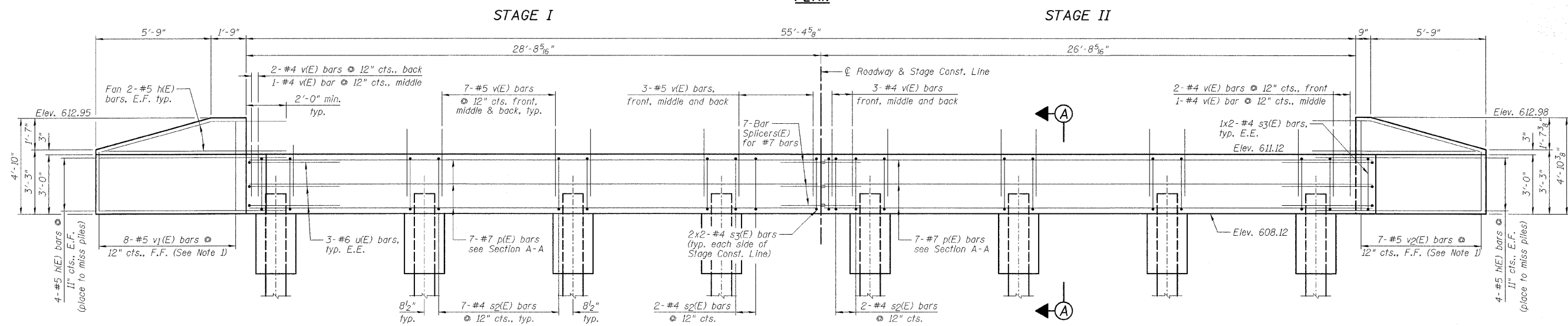
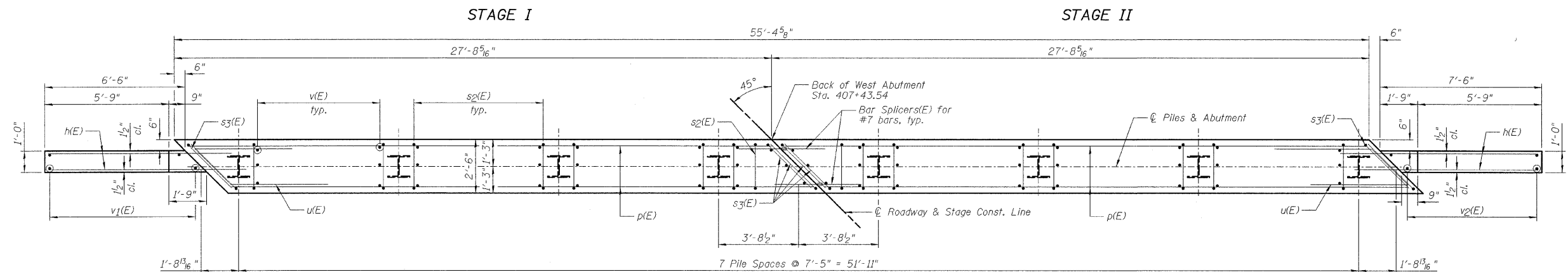


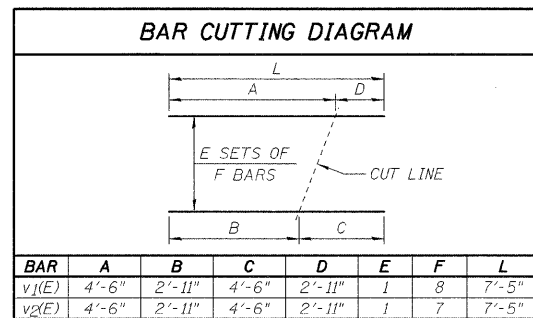
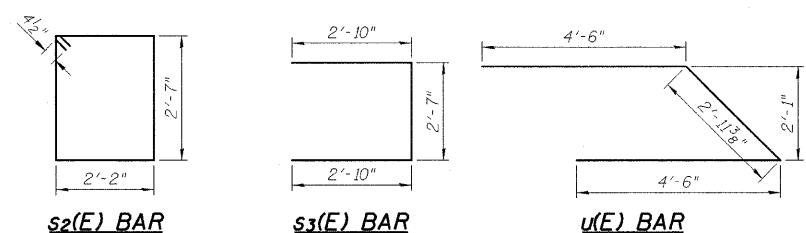
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



**WEST 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"	

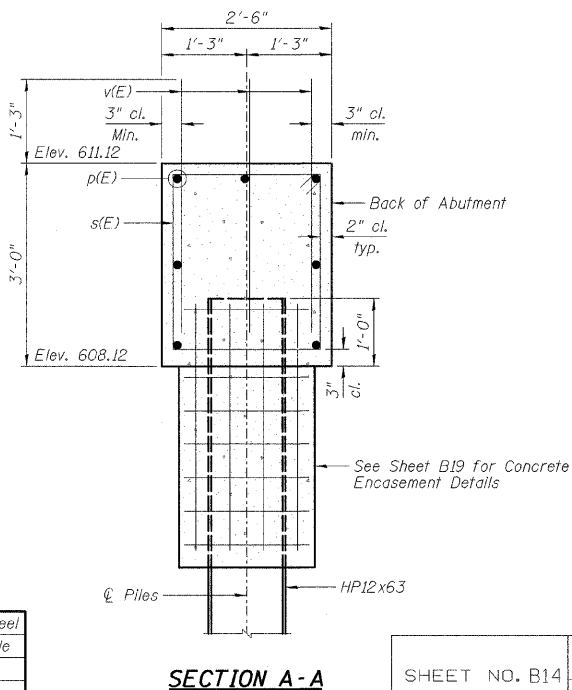
Item	Unit	Quantity
Porous Granular Embankment, Special	Cu. Yd.	42
Structure Excavation	Cu. Yd.	60
Concrete Structures	Cu. Yd.	17.6
Concrete Encasement	Cu. Yd.	2.8
Reinforcement Bars, Epoxy Coated	Pound	2,210
Furnishing Steel Piles HP12x63	Foot	210
Driving Piles	Foot	210
Test Pile Steel HP12x63	Each	1
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	30 feet
Nominal Required Bearing	256 kips
Factored Resistance Available	128 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.

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

SHEET NO. B14		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22 SHEETS		41	(15BR-3)-1	LIVINGSTON	45	25
		SN 053-0185		CONTRACT NO. 66833		
		FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		