

**WEST ABUTMENT  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h4(E)	8	#4	18'-3"	—
h5(E)	12	#4	17'-5"	—
h17(E)	7	#4	18'-2"	—
h20(E)	20	#5	29'-9"	—
h21(E)	10	#6	31'-1"	—
h22(E)	14	#5	9'-4"	L
h23(E)	14	#5	9'-4"	J
h24(E)	7	#4	19'-1"	—
n9(E)	16	#6	16'-4"	—
n10(E)	6	#6	8'-2"	—
n11(E)	19	#6	17'-8"	—
p3(E)	12	#7	20'-0"	—
p13(E)	7	#4	22'-1"	—
p14(E)	40	#7	34'-3"	—
p15(E)	7	#4	21'-3"	—
s1(E)	43	#4	10'-5"	□
s2(E)	56	#4	9'-5"	□
s11(E)	192	#4	16'-10"	□
u(E)	11	#6	15'-2"	—
v(E)	75	#5	3'-9"	—
v1(E)	56	#4	3'-0"	—
v2(E)	18	#6	7'-6"	—
v3(E)	3	#6	7'-5"	—
v4(E)	16	#6	8'-0"	—
v5(E)	56	#5	6'-0"	—
v6(E)	56	#5	7'-4"	—
v13(E)	38	#6	5'-1"	—

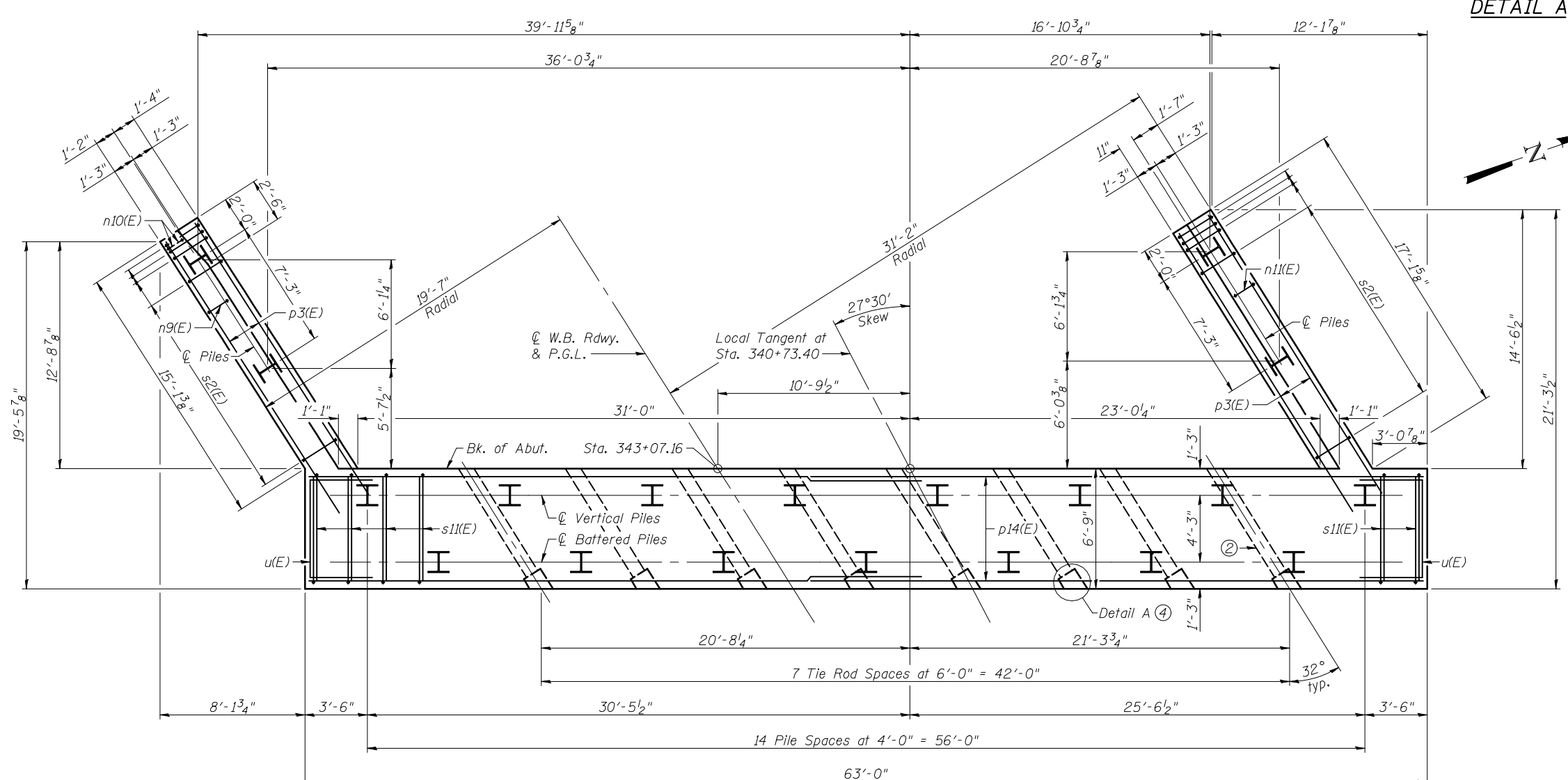
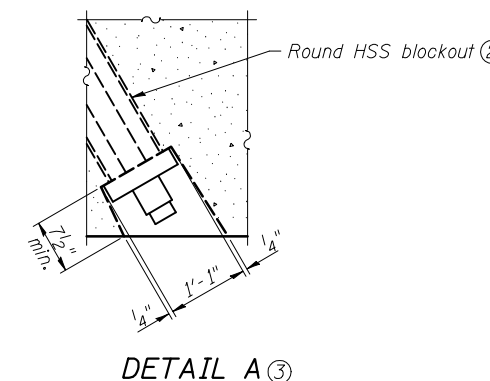
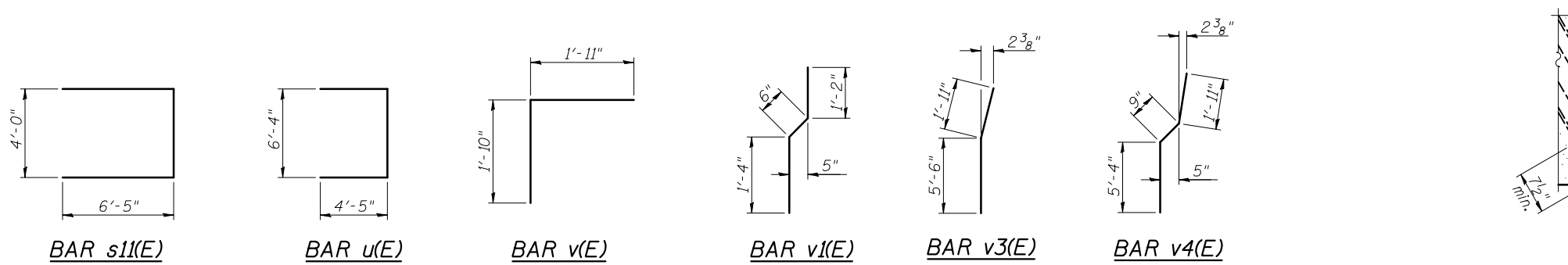
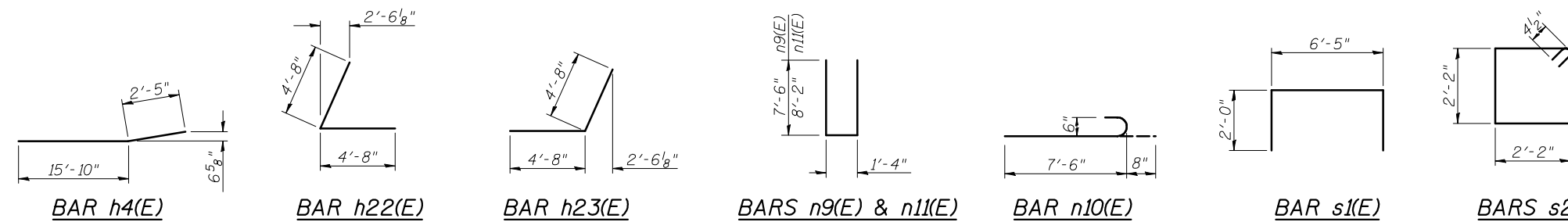
Structure Excavation	Cu. Yd.	432
Concrete Structures	Cu. Yd.	117.4
Concrete Encasement	Cu. Yd.	10.4
Reinforcement Bars, Epoxy Coated	Pound	11,200
Furnishing Steel Piles HP14x89	Foot	1,638
Driving Piles	Foot	1,638
Test Pile Steel HP14x89	Each	1
Concrete Sealer	Sq. Ft.	698

**PILE DATA**

Type: Steel HP 14x89  
 Nominal Required Bearing: 705 kips  
 Factored Resistance Available: 390 kips  
 Est. Length: 91 ft  
 No. Production Piles: 18  
 No. Test Piles: 1

**Notes:**

- ① For details of piles and Concrete Encasement, see sheet 47 of 53.
- ② Round HSS9.625x0.188 conforming to the requirements of ASTM A500 Grade B cast into cap for Tie Rod. Cost included with Concrete Structures. Adjust location as necessary to miss anchor bolts and adjust corresponding approach bent location.
- ③ For details of Tie Rod, see sheet 40 of 53.
- ④ Cut piles as necessary to provide clearance for blockouts.



**PLAN-PILE CAP**

**BATES ASSOCIATES**  
 Engineering + Architecture  
 11400  
 Eastport Business Center 1  
 100 Lamar Court, Suite 100  
 Columbia, S. C. 29204  
 Tel: 818.545.2200  
 Fax: 818.545.7200  
 www.batesassociates.com

USER NAME =	DESIGNED - JAD	REVISED -
	CHECKED - DGL	REVISED -
PLOT SCALE =	DRAWN - JAD	REVISED -
PLOT DATE =	CHECKED - MAG	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**WEST ABUTMENT DETAILS  
 STRUCTURE NO. 039-0076 (W.B.)**

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-11B-1)	JACKSON	200	150
CONTRACT NO. 78056				
ILLINOIS FED. AID PROJECT				

SHEET NO. 38 OF 53 SHEETS