

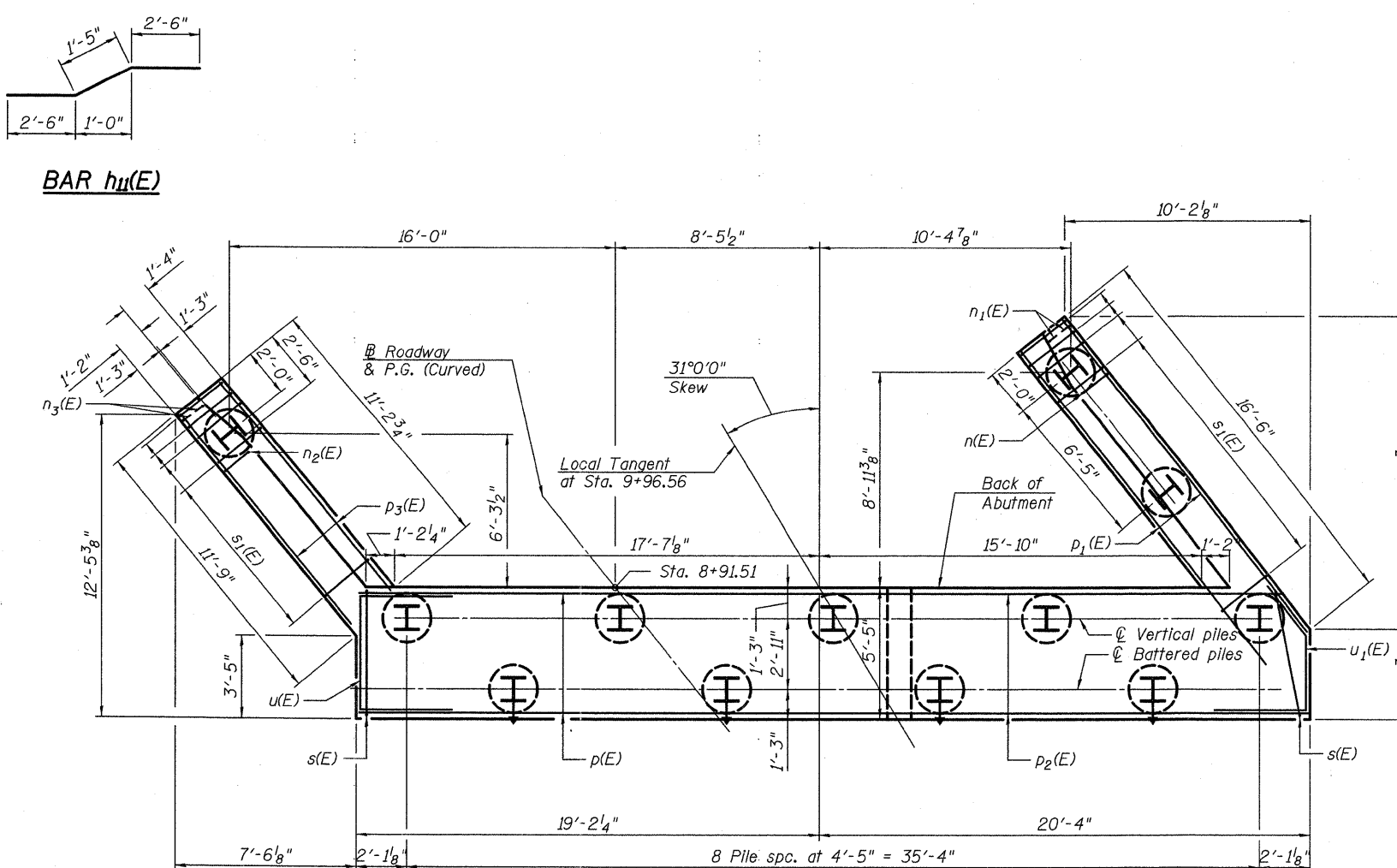
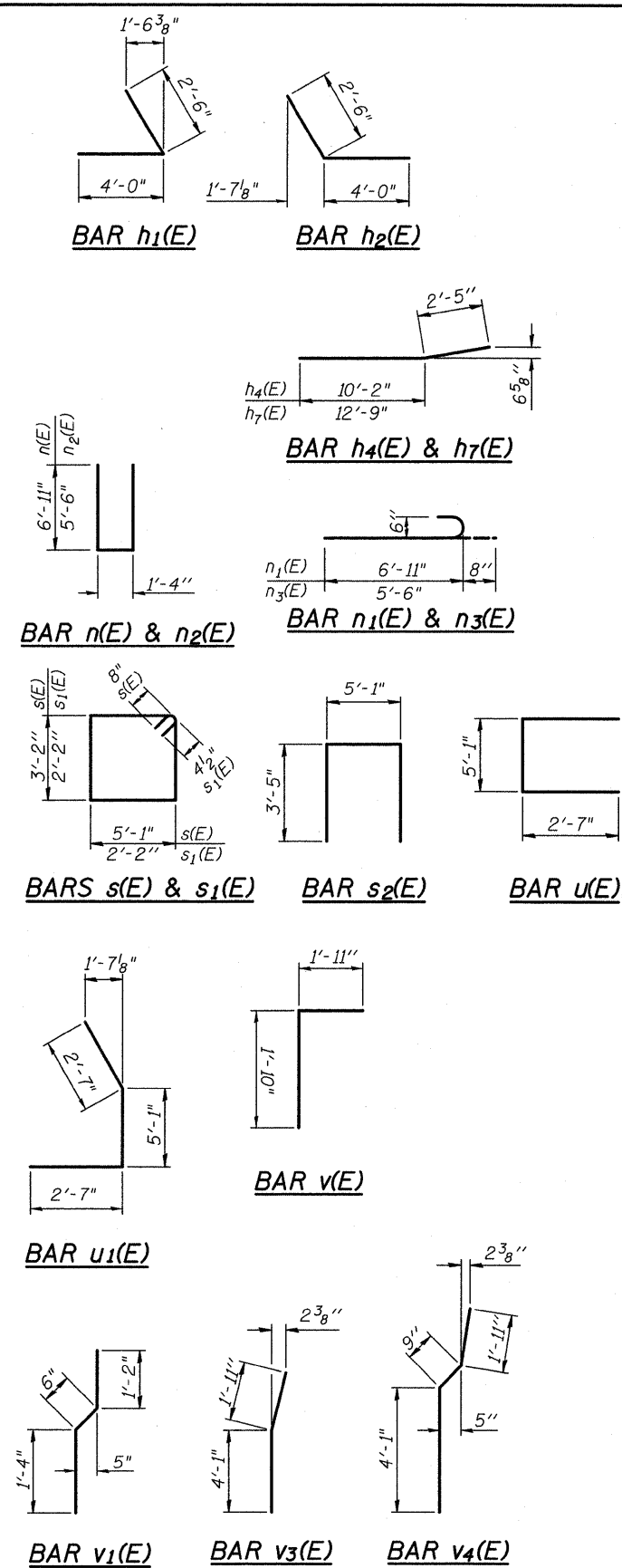
**WEST ABUTMENT  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	8	#5	35'-5"	
h <sub>1</sub> (E)	10	#5	6'-6"	
h <sub>2</sub> (E)	10	#5	6'-6"	
h <sub>3</sub> (E)	11	#4	11'-5"	
h <sub>4</sub> (E)	7	#4	12'-7"	
h <sub>5</sub> (E)	5	#6	35'-5"	
h <sub>6</sub> (E)	11	#4	16'-2"	
h <sub>7</sub> (E)	7	#4	15'-2"	
h <sub>8</sub> (E)	4	#5	29'-7"	
h <sub>9</sub> (E)	4	#5	13'-5"	
h <sub>10</sub> (E)	4	#5	5'-4"	
h <sub>11</sub> (E)	4	#5	6'-5"	
n(E)	12	#6	15'-2"	
n <sub>1</sub> (E)	6	#6	7'-7"	
n <sub>2</sub> (E)	8	#6	12'-4"	
n <sub>3</sub> (E)	6	#6	6'-2"	
p(E)	12	#8	21'-8"	
p <sub>1</sub> (E)	6	#7	16'-2"	
p <sub>2</sub> (E)	12	#8	21'-6"	
p <sub>3</sub> (E)	6	#7	11'-7"	
s(E)	44	#6	17'-10"	
s <sub>1</sub> (E)	26	#4	9'-5"	
s <sub>2</sub> (E)	30	#4	11'-7"	
u(E)	4	#6	10'-3"	
u <sub>1</sub> (E)	5	#6	10'-3"	
v(E)	36	#4	3'-9"	
v <sub>1</sub> (E)	36	#4	3'-0"	
v <sub>2</sub> (E)	29	#6	6'-6"	
v <sub>3</sub> (E)	6	#6	6'-0"	
v <sub>4</sub> (E)	23	#6	6'-9"	
v <sub>5</sub> (E)	36	#5	4'-11"	
v <sub>6</sub> (E)	36	#5	6'-3"	
Structure Excavation		Cu. Yd.	108	
Concrete Structures		Cu. Yd.	57.9	
Reinforcement Bars, Epoxy Coated		Pound	6,400	
Furnishing Steel Piles HP12x53		Foot	396	
Driving Piles		Foot	396	
Pile Shoes		Each	12	
Test Pile Steel HP12x53		Each	1	
Concrete Encasement		Cu. Yd.	4.2	
Concrete Sealer		Sq. Ft.	308	

For details of Bar Splicers, see sheet 30 of 33.  
For details of piles and Concrete Encasement, see sheet 29 of 33.

**PILE DATA**

Type: HP12x53 with Pile Shoes  
Nominal Required Bearing: 418 kip  
Factored Resistance Available: 230 kip  
Est. Length: 36'  
No. Production Piles: 11  
No. Test Piles: 1



**PLAN-PILE CAP**

**EFK Moen, LLC**  
Civil Engineering Design  
331 Salem Place, Suite 225  
Fairview Heights, IL 62208  
Phone 618-206-4250

FILE NAME = 1000098-78182-020-West_Abutment.dgn	USER NAME = cdl	DESIGNED - CTW	REVISIONS -
PLOT SCALE = 0.1/0.000 ' / IN.	CHECKED - CDL	DRAWN - DP	REVISIONS -
PLOT DATE = 9/28/2011	DATE - 9/28/2011		REVISIONS -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

(Sheet 2 of 3)  
**WEST ABUTMENT  
STRUCTURE NO. 100-0098**  
SHEET NO. 20 OF 33 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(X1-6-2)HB-2	WILLIAMSON	968	703
				CONTRACT NO. 78182
ILLINOIS FED. AID PROJECT				