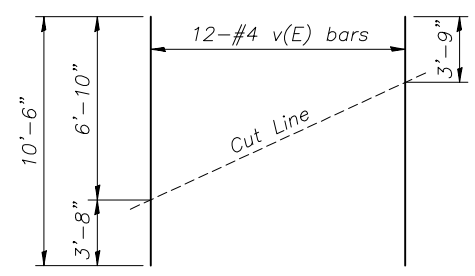
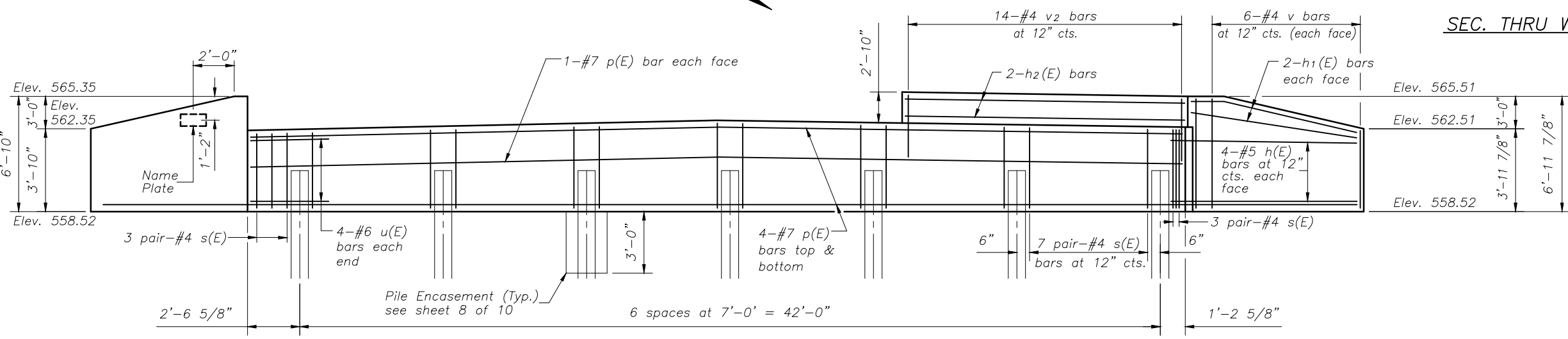
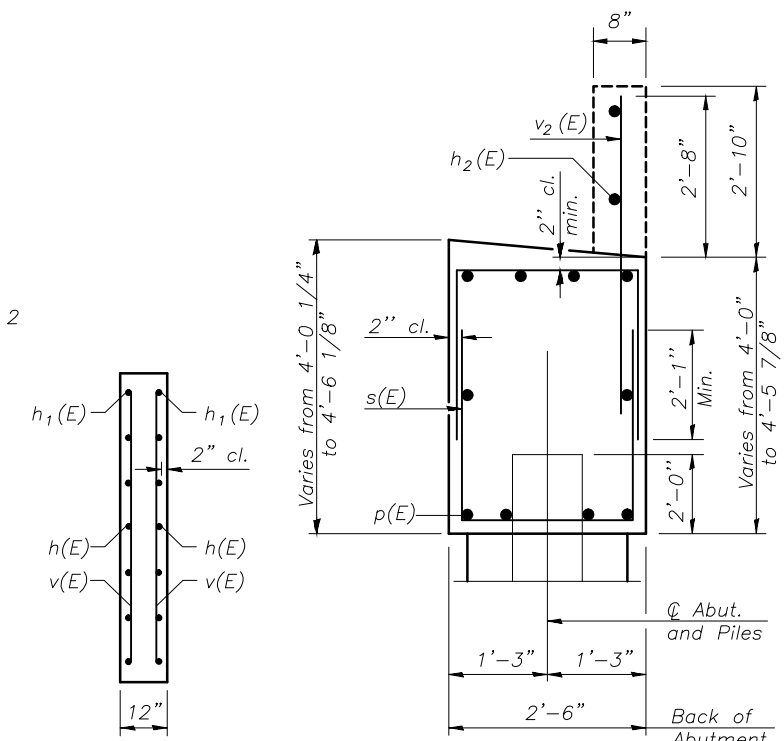
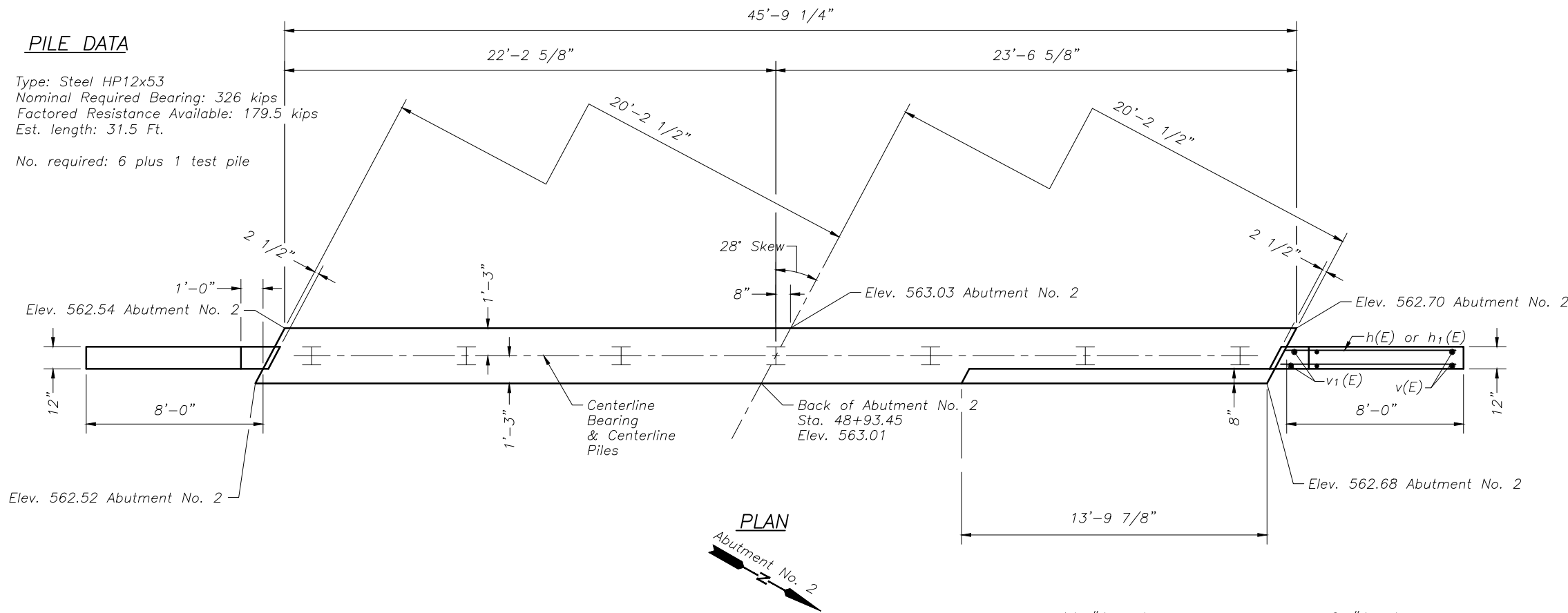


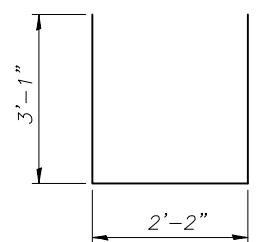
**PILE DATA**

Type: Steel HP12x53  
 Nominal Required Bearing: 326 kips  
 Factored Resistance Available: 179.5 kips  
 Est. length: 31.5 Ft.  
 No. required: 6 plus 1 test pile

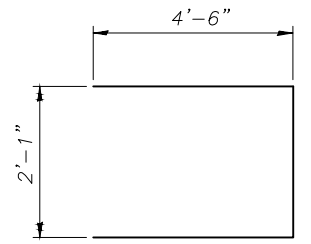


**FIELD CUTTING DIAGRAM**  
 Order v(E) full length. Cut as shown and use remainder of bars in opposite wingwall.

**ELEVATION**  
 (Looking West)



**BAR s(E)**



**BAR u(E)**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	8	#5	7'-9"	—
h <sub>1</sub> (E)	8	#5	10'-0"	—
h <sub>2</sub> (E)	2	#5	13'-6"	—
p(E)	10	#7	45'-6"	—
s(E)	96	#4	8'-4"	U
u(E)	8	#6	11'-1"	□
v(E)	12	#4	10'-6"	—
v <sub>1</sub> (E)	4	#4	6'-7"	—
v <sub>2</sub> (E)	14	#4	5'-8"	—
Concrete Structures			Cu. Yd.	22.7
Reinforcement Bars, Epoxy Coated			Pound	1930
Furnishing Steel Piles HP12x53			Foot	189
Driving Piles			Foot	189
Test Pile, Steel HP12x53			Each	1
Concrete Encasement			Cu. Yd.	2.4

For details of piles and Concrete Encasement, see sheet 8 of 10.

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 Drawing Name: H:\A08\11\1002-B6\PERU BRIDGE PLANS\002-6-7-ABUTS.dwg Last Modified: Mar 06, 2013 - 2:18pm Plotted on: Mar 06, 2013 - 3:34pm by marib

DRAWN BY: LAG	LEVEL	BY	DATE	REVISIONS	DESCRIPTION
CHECKED BY: JKC	1	MAB	3/8/13	REVISED PER IDA COMMENTS	
DATE: 12/12					

**CHAMLIN & ASSOCIATES**  
 PERU MORRIS ILLINOIS

**MORRIS AIRPORT ACCESS ROAD**  
 CITY OF MORRIS, GRUNDY COUNTY, ILLINOIS

**ABUTMENT NO. 2**  
**STRUCTURE NO. 032-7013**  
 SHEET NO. 7 OF 10 SHEETS

**APPROVED FOR CONSTRUCTION**  
 CURRENT AS OF: 3/8/13  
 SCALE: AS NOTED SHEET 28  
 FILE NO.: 1002.86 OF 38