

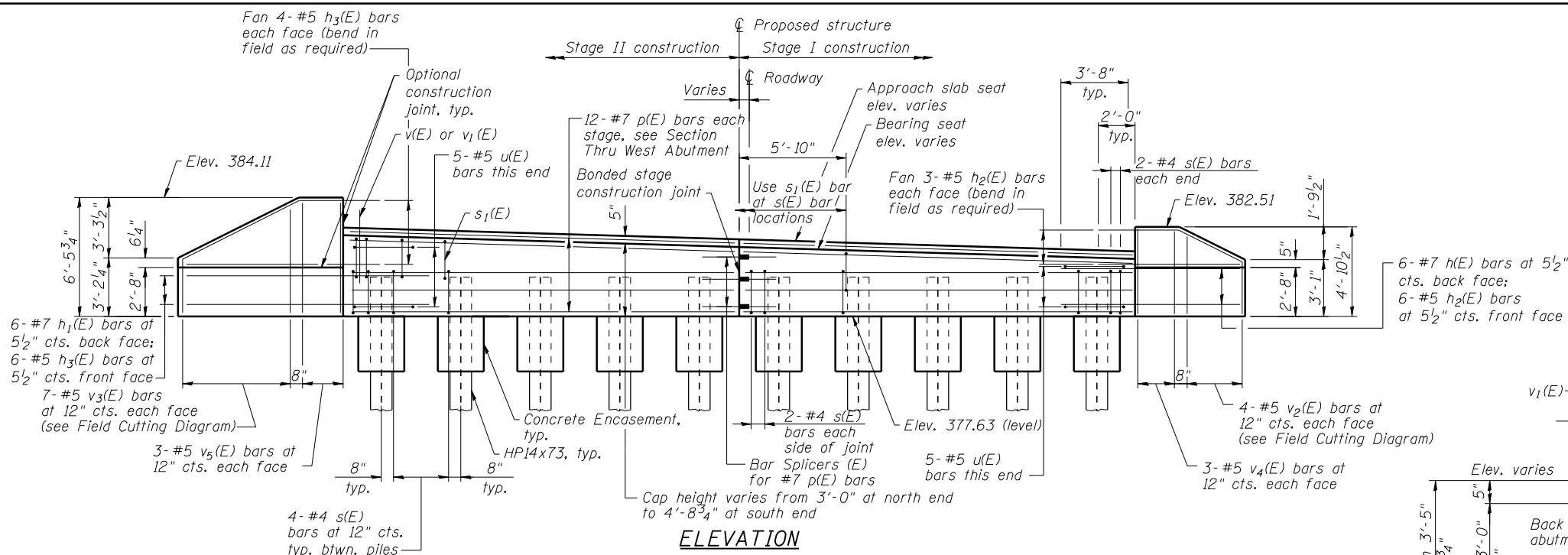
**WEST ABUTMENT  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	6	#7	9'-6"	—
h <sub>1</sub> (E)	6	#7	12'-6"	—
h <sub>2</sub> (E)	12	#5	7'-10"	—
h <sub>3</sub> (E)	14	#5	10'-10"	—
p(E)	24	#7	21'-4"	—
s(E)	40	#4	10'-1"	□
s <sub>1</sub> (E)	26	#4	7'-6"	□
u(E)	10	#5	9'-5"	□
v(E)	86	#5	3'-8"	—
v <sub>1</sub> (E)	43	#5	4'-0"	┌
v <sub>2</sub> (E)	4	#5	6'-10"	—
v <sub>3</sub> (E)	7	#5	8'-6"	—
v <sub>4</sub> (E)	6	#5	4'-5"	—
v <sub>5</sub> (E)	6	#5	6'-0"	—
Structure Excavation	Cu. Yd.		80	
Concrete Structures	Cu. Yd.		18.5	
Reinforcement Bars, Epoxy Coated	Pound		2740	
Furnishing Steel Piles, HP14x73	Foot		675	
Driving Piles	Foot		675	
Test Pile, Steel HP14x73	Each		1	
Concrete Encasement	Cu. Yd.		5.5	
Granular Backfill for Structures	Cu. Yd.		37	
Geocomposite Wall Drain	Sq. Yd.		26	
Pipe Underdrains for Structures, 4"	Foot		72	
Bar Splicers	Each		12	

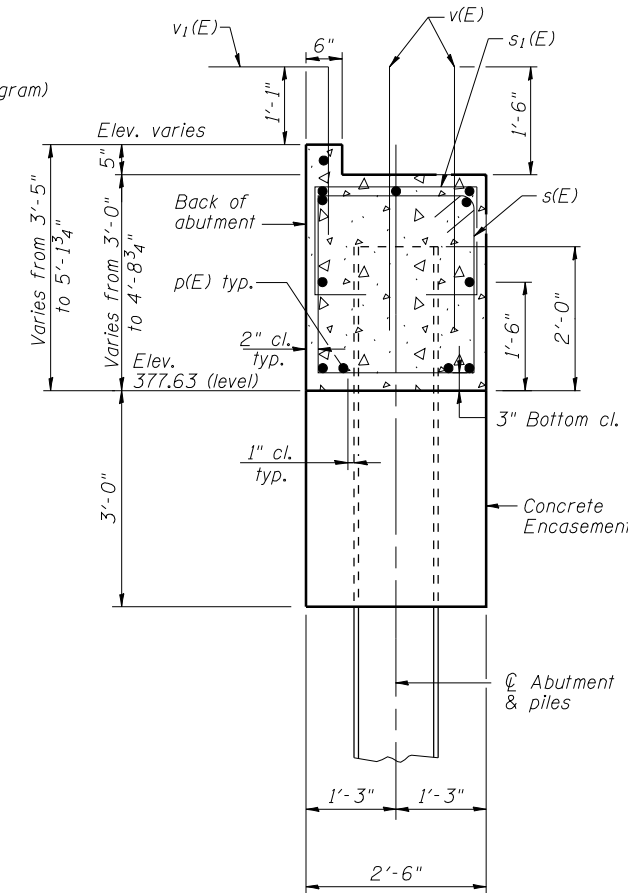
For details of piles and Concrete Encasement, see sheet 20 of 23.  
For details of Bar Splicers, see sheet 21 of 23.

**PILE DATA**

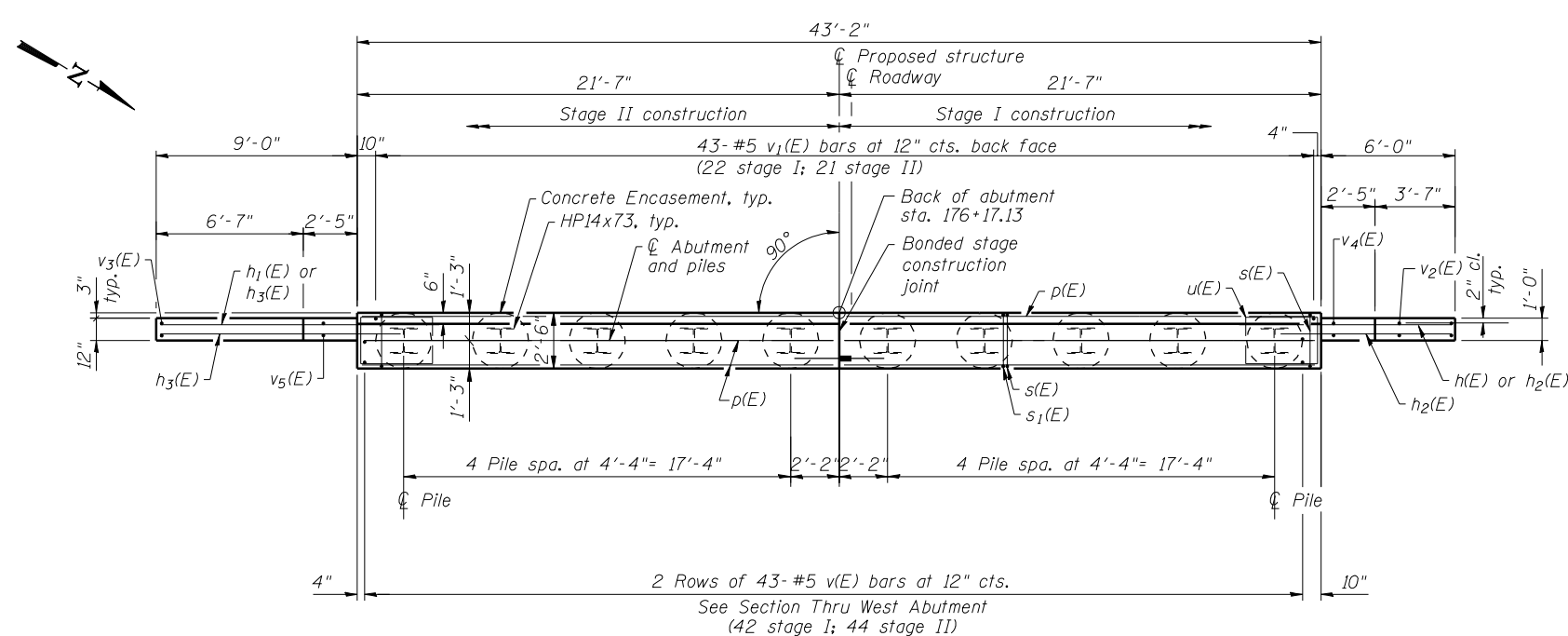
Type: Steel HP14x73  
Nominal Required Bearing: 578 kips  
Factored Resistance Available: 318 kips  
Estimated Length: 75'  
No. of Production Piles: 9  
No. of Test Piles: 1



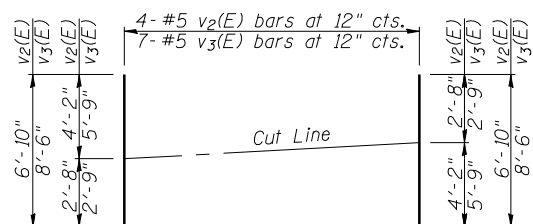
**ELEVATION**



**SECTION THRU WEST ABUTMENT**



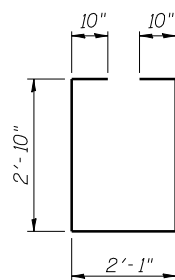
**PLAN**



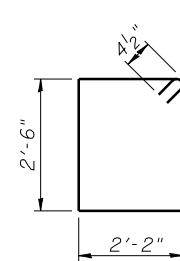
**BARS v<sub>2</sub>(E) & v<sub>3</sub>(E)**

**FIELD CUTTING DIAGRAM**

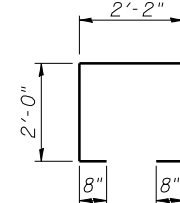
Order v<sub>2</sub>(E) and v<sub>3</sub>(E) full length. Cut as shown and use remainder of bars in opposite face.



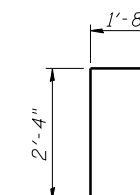
**BAR u(E)**



**BAR s(E)**



**BAR s<sub>1</sub>(E)**



**BAR v<sub>1</sub>(E)**



USER NAME = hos	DESIGNED - ELH 08/12	REVISED -
ESCA PROJECT NO. 988.11	CHECKED - RDP 10/12	REVISED -
PLOT SCALE = 0.2" = 1' / IN.	DRAWN - DWH 08/12	REVISED -
PLOT DATE = 10/31/2012 7:15:46 AM	CHECKED - ELH 10/12	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WEST ABUTMENT  
STRUCTURE NO. 097-0078**

SHEET NO. 13 OF 23 SHEETS

F.A.P. RTE. 332	SECTION 4B-1	COUNTY WHITE	TOTAL SHEETS 70	SHEET NO. 34
ILLINOIS FED. AID PROJECT AID			CONTRACT NO. 78154	