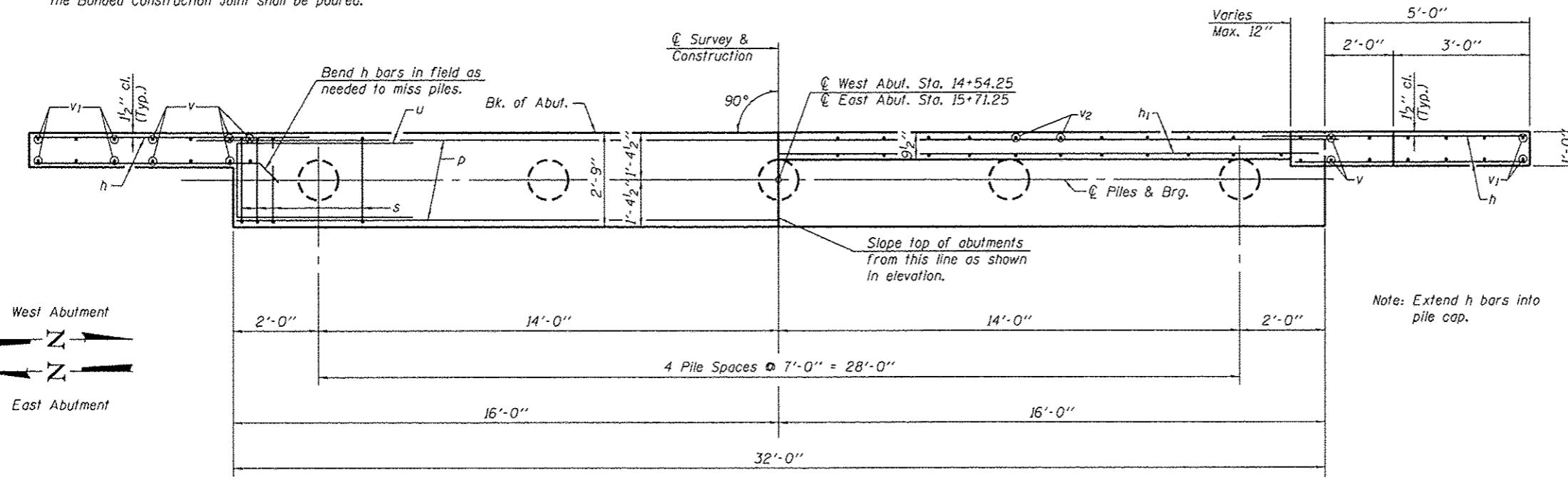


**ELEVATION**

Note: After beams are in place and dowel rods grouted, the backwall and the portions of the wingwalls above the Bonded Construction Joint shall be poured.

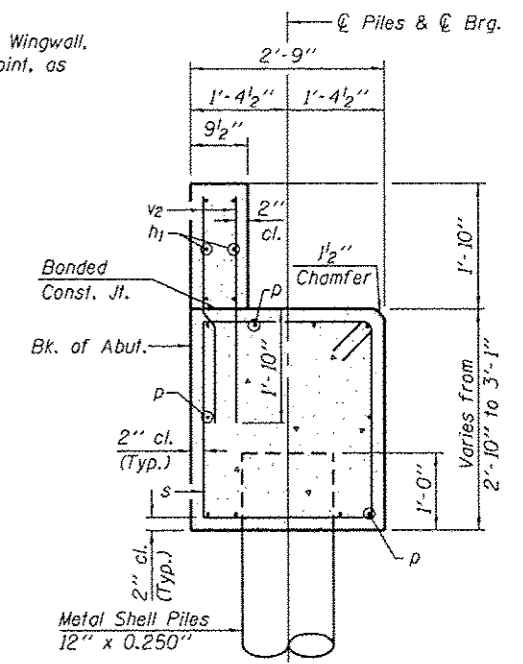


**PLAN**

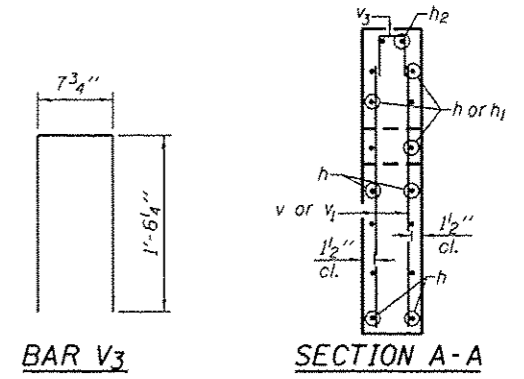
**PILE DATA**

Type & Size.....Metal Shell Pile 12" x 0.250"  
 No. Req'd. (2 Abut.).....10\*  
 Nominal Required Bearing.....219 kips  
 Factored Resistance Available.....120 kips  
 Estimated Length.....46'

\*Includes 1 Test Pile to be driven to 110% of the nominal required bearing in a permanent location at the West abutment.



**SECTION THRU ABUT.**



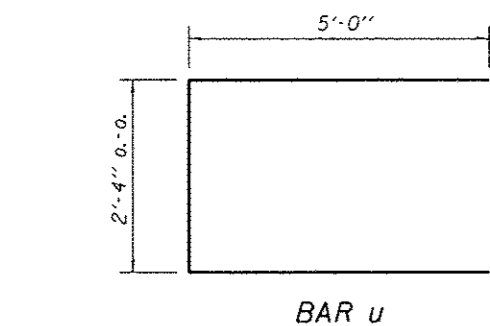
**BAR V3**

**SECTION A-A**

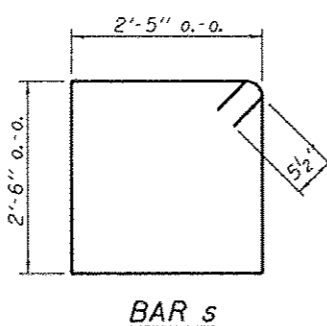
**2 ABUTMENTS  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape	
h	56	#5	8'-0"	—	
h1	12	#4	33'-0"	—	
h2	12	#4	2'-3"	—	
p	20	#7	31'-8"	—	
s	68	#5	10'-9"	□	
u	16	#6	12'-4"	—	
v	40	#4	4'-9"	—	
v1	32	#4	4'-3"	—	
v2	120	#4	3'-4"	—	
v3	12	#4	3'-8"	□	
Concrete Structures				Cu. Yd.	25.9
Reinforcement Bars				Pound	3620
Name Plates				Each	1
Metal Shell Piles 12" x 0.250"				Foot	414
Driving Piles				Foot	414
Test Pile 12"				Each	1
Metal Shells				Each	1
Permanent Survey Markers, Special				Each	1

See Sheet 12 of 15 for Pile Details.



**BAR u**



**BAR s**

FILE NAME = ABUT-0-BW.DGN  
 12-548-ABUTMENTS.dgn

USER NAME = rfixzenko  
 PLOT SCALE = #SCALE#  
 PLOT DATE = 3/23/2013

DESIGNED - J.A.M.  
 CHECKED - A.R.K.  
 DRAWN - A.D.S.  
 CHECKED -

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**FEHR GRAHAM**  
 ENGINEERING & ENVIRONMENTAL  
 ILLINOIS DESIGN FIRM NO. 124-00320

FREEDPORT, IL ROCKFORD, IL  
 ROCHELLE, IL SPRINGFIELD, IL  
 MONROE, WI

**ABUTMENTS**  
 S.N. 004-3096

SHEET NO. 10 OF 15 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
33	12-08120-00-BR	BOONE	26	16

CONTRACT NO. 85589  
 ILLINOIS FED. AID PROJECT