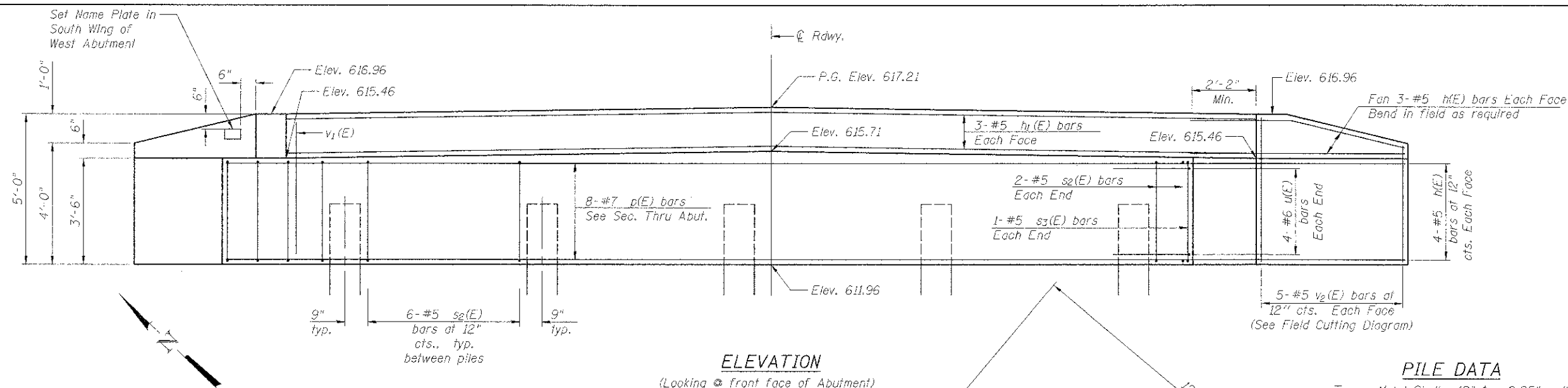


**TWO ABUTMENTS  
BILL OF MATERIAL**

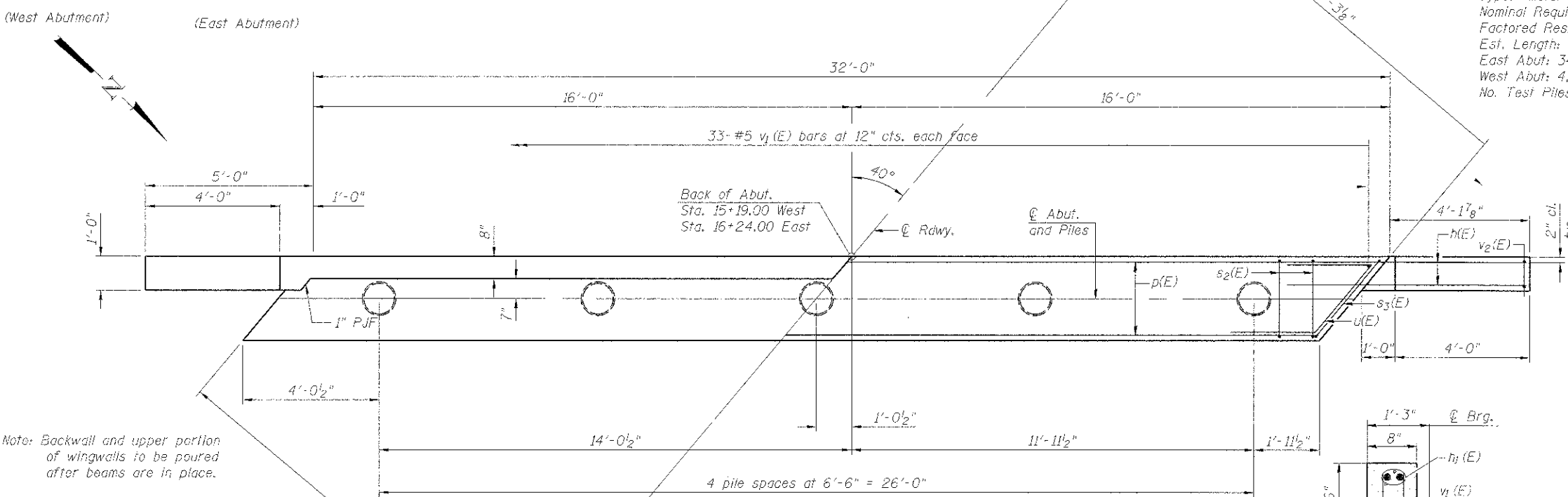
Bar	No.	Size	Length	Shape
m(E)	56	#5	7'-3"	—
h <sub>1</sub> (E)	12	#5	31'-8"	—
p(E)	16	#7	31'-8"	—
s <sub>2</sub> (E)	56	#5	11'-7"	□
s <sub>3</sub> (E)	4	#5	12'-11"	□
u(E)	16	#6	7'-7"	┘
v <sub>1</sub> (E)	132	#5	4'-4"	—
v <sub>2</sub> (E)	20	#5	8'-4"	—
Structure Excavation			Cu. Yd.	28.0
Concrete Structures			Cu. Yd.	26.8
Reinforcement Bars, Epoxy Coated			Pound	3,540
Furnishing				
Metal Shell Piles			Foot	290
Driving Piles			Foot	290
Test Pile, Metal Shell			Each	1
Name Plates			Each	1

For details of piles see sheet 8 of 10.

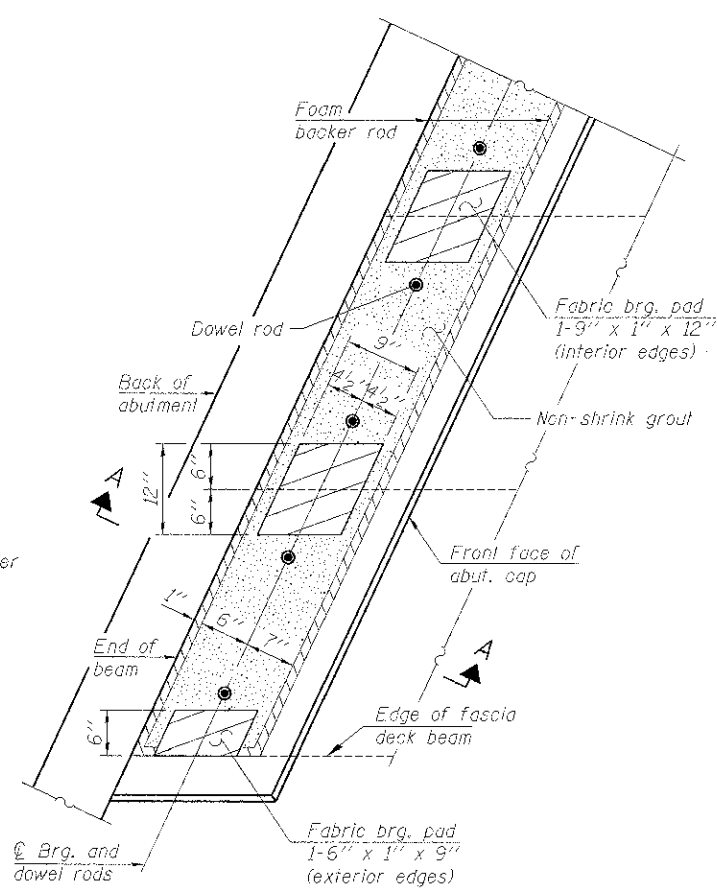


**ELEVATION**  
(Looking @ front face of Abutment)

**PILE DATA**  
Type: Metal Shells, 12" φ x 0.25" wall  
Nominal Required Bearing: 165 Kips  
Factored Resistance Available: 91 Kips  
Est. Length: West Abut: 30', East Abut: 34' No. Production Piles: West Abut: 4, East Abut: 5  
No. Test Piles: 1 (West Abut.)



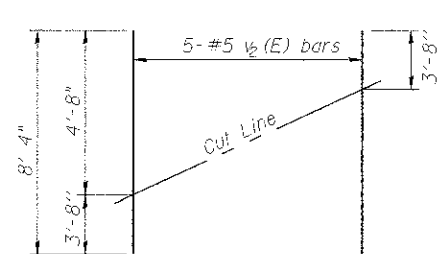
**PLAN**



**PLAN**

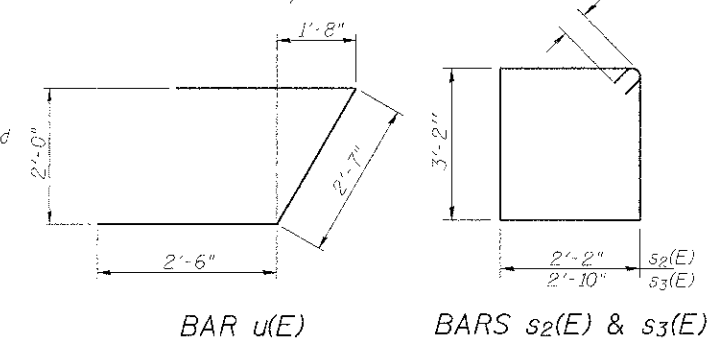
Notes:  
The bearing seat surfaces shall be adjusted by shimming the bearing to assure firm and even bearing prior to placement of grout. 2-1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shown shall be provided for each bearing.

Note: Backwall and upper portion of wingwalls to be poured after beams are in place.



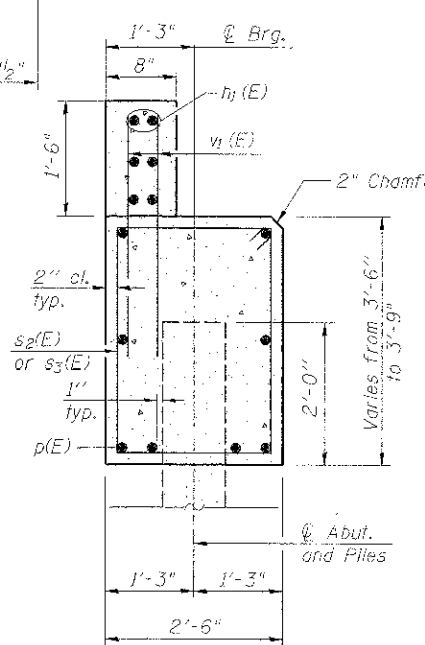
**FIELD CUTTING DIAGRAM**

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

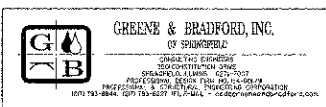


**TYP. SEC. AT BEARINGS**

Note: All horizontal dimensions are at right angles to beam ends.



**SEC. THRU ABUT.**



AI-R 7-1-10

FILE NAME =	USER NAME = amandah	DESIGNED - NIEWINSKI	REVISED - AH 4/20/11
J:\2002\2\CADD\CAD\sheds\NBN 011-3417\09024118-09029-sh1-Abut.dgn		CHECKED - TRELLO	REVISED - AH 9/09/11
PLOT SCALE = 2x8 1/2" = 1'		DRAWN - VERENSKI	REVISED -
PLOT DATE = 12/15/2011		CHECKED - TRELLO	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ABUTMENTS  
STRUCTURE NO. 011-3417**

T.R. RTE. 301A	SECTION 08-0411B-00-BR	COUNTY CHRISTIAN	TOTAL SHEETS 26	SHEET NO. 14
CONTRACT NO. 93567			ILLINOIS FED. AID PROJECT: BROS-0021 (1/26)	