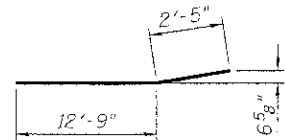
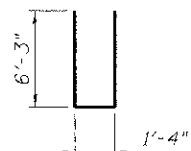


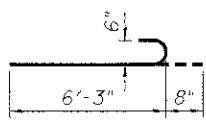
BAR h<sub>2</sub>(E)



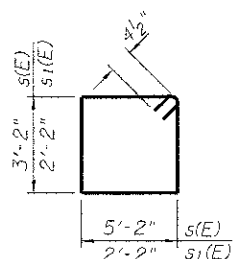
BAR h<sub>4</sub>(E)



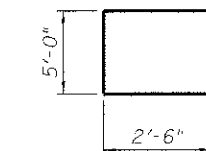
BAR n(E)



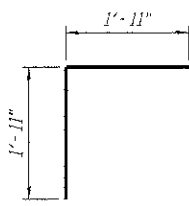
BAR n<sub>1</sub>(E)



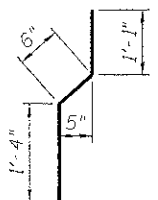
BARS s(E) & s<sub>1</sub>(E)



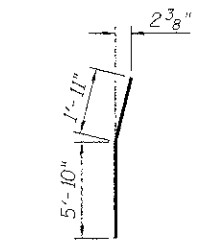
BAR u(E)



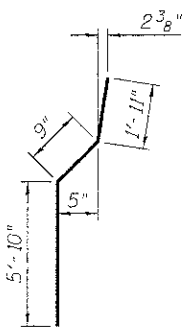
BAR v(E)



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



BAR v<sub>3</sub>(E)

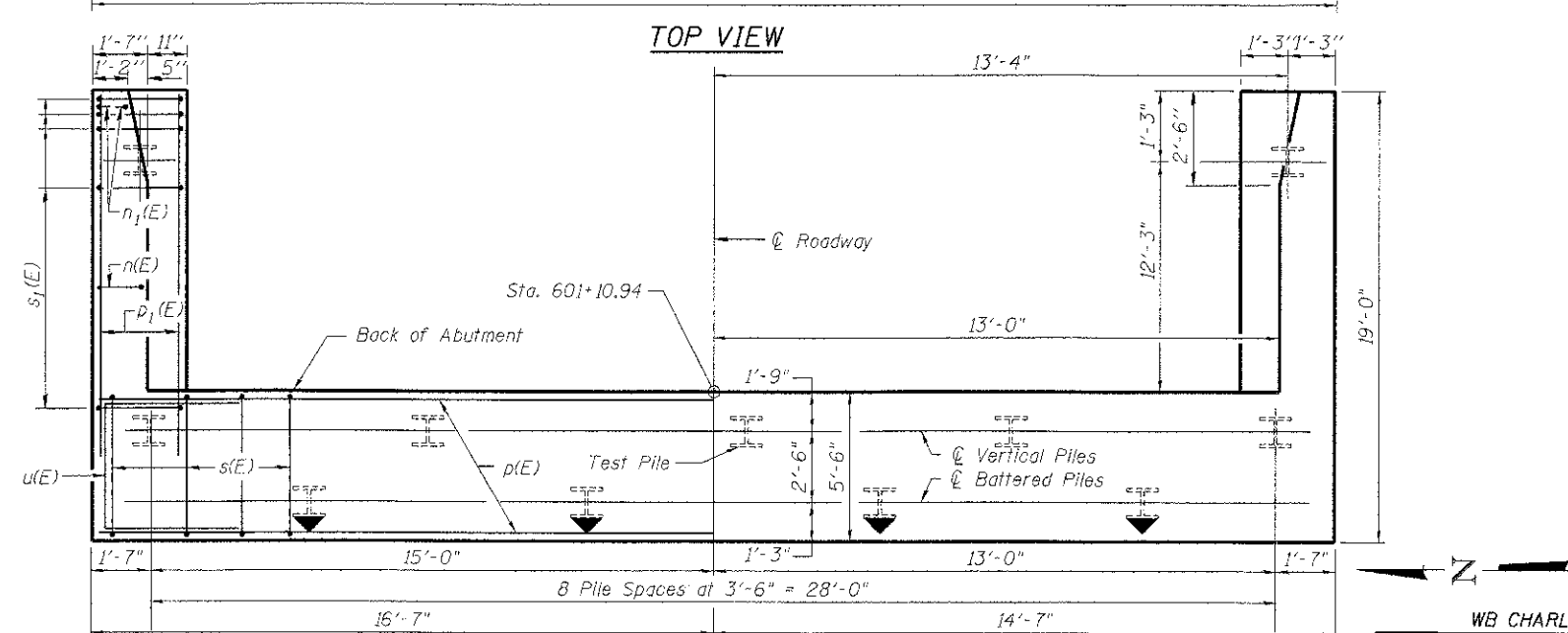
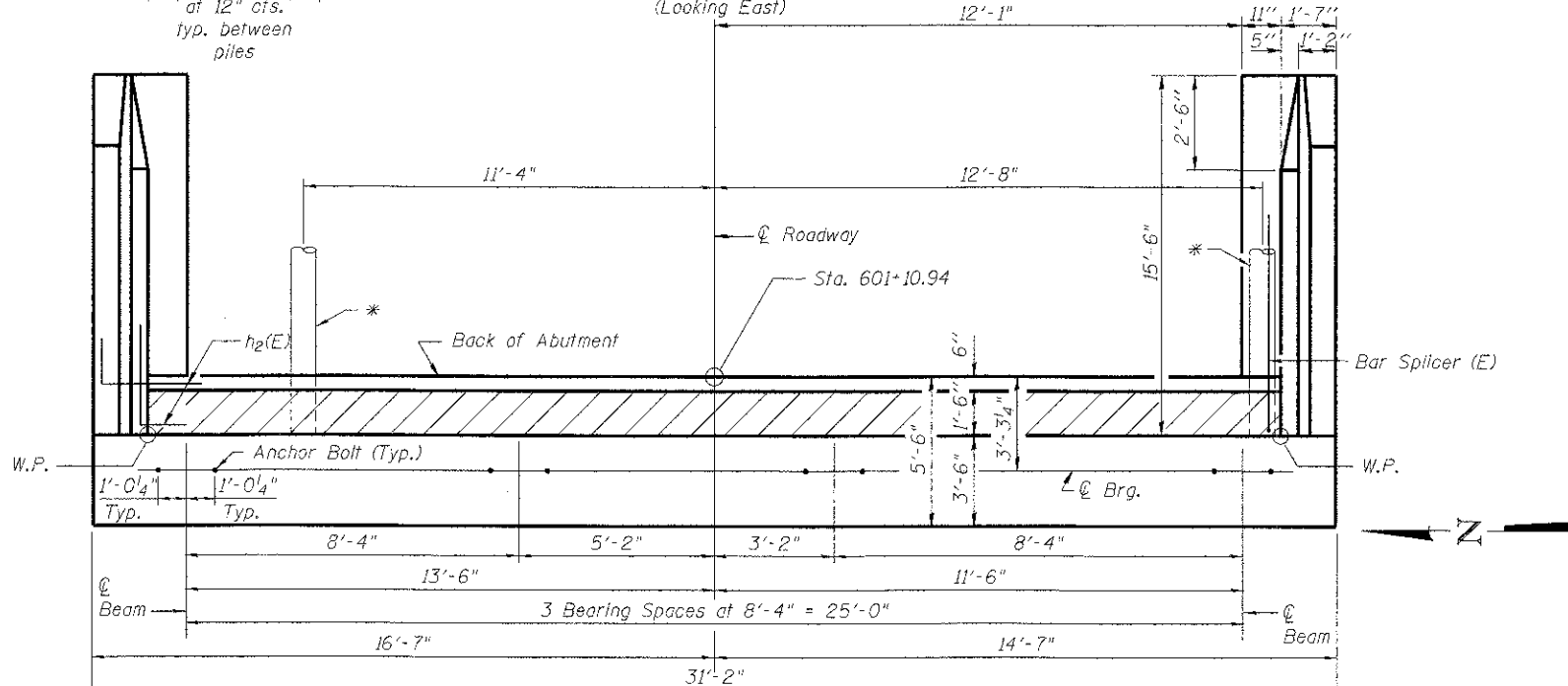
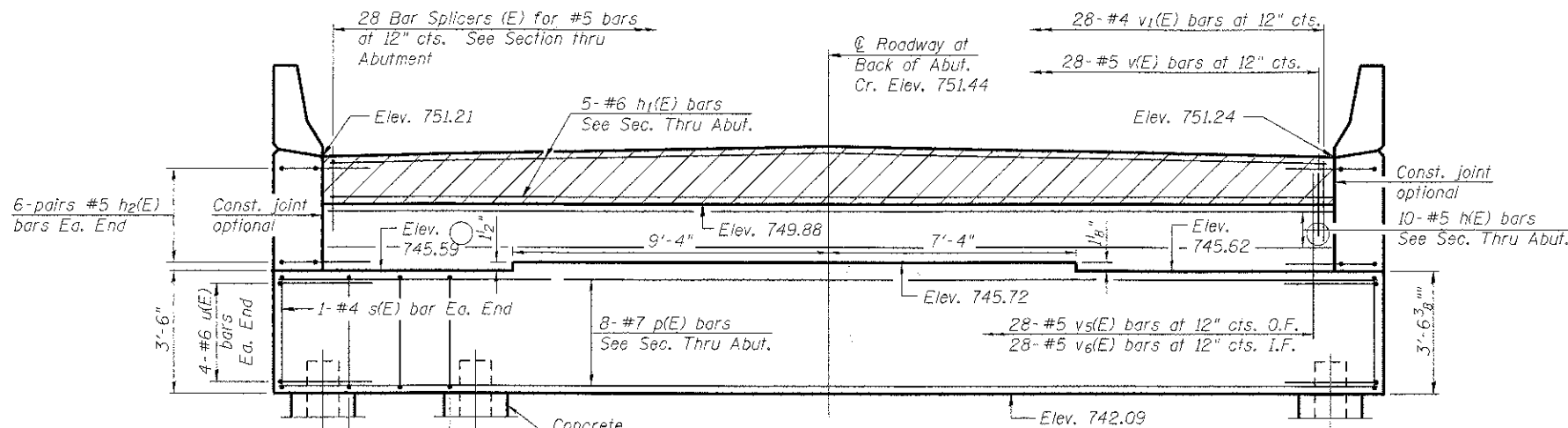


BAR v<sub>4</sub>(E)

**PILE DATA**

Type: Steel-HP 10x42  
 Nominal Required Bearing: 285 kips  
 Factored Resistance Available: 137 kips  
 Est. Length: 45 ft.  
 No. Production Piles: 10  
 No. Test Piles: 1

Note:  
 Piles for East Abutment shall be driven through 18 inch diameter pre-cored holes extending 12 inches into the existing grade, considering removal of topsoil, according to Article 512.09(c) of the Standard Specifications. Cost included in Driving Piles.



\* Storm Sewer, Class B, Type 2, 8" PVC.  
 Invert Elev. of Backwall = 747.70  
 See East Approach Slab Plans (S-09) for Layout. Coordinate W/8" PVC on Deck Drainage Plan, End Cross Frame and Trough Detail.  
 Pitch at 4%.

**ABUTMENT BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h (E)	10	#5	27'- 8"	—
h <sub>1</sub> (E)	5	#6	27'- 8"	—
h <sub>2</sub> (E)	24	#5	4'- 4"	┌
h <sub>3</sub> (E)	24	#4	15'- 2"	—
h <sub>4</sub> (E)	16	#4	15'- 2"	—
n (E)	26	#6	13'- 10"	┌
n <sub>1</sub> (E)	12	#6	6'- 11"	┌
p (E)	8	#7	30'- 10"	—
p <sub>1</sub> (E)	12	#7	18'- 8"	—
s (E)	26	#4	17'- 5"	┌
s <sub>1</sub> (E)	34	#4	9'- 5"	┌
u (E)	8	#6	10'- 0"	┌
v (E)	28	#5	3'- 10"	┌
v <sub>1</sub> (E)	28	#4	2'- 11"	┌
v <sub>2</sub> (E)	32	#6	8'- 2"	┌
v <sub>3</sub> (E)	6	#6	7'- 7"	┌
v <sub>4</sub> (E)	26	#6	8'- 4"	┌
v <sub>5</sub> (E)	28	#5	5'- 8"	┌
v <sub>6</sub> (E)	28	#5	7'- 4"	┌
Structure Excavation		Cu. Yd.	15	
Concrete Structures		Cu. Yd.	51.4	
Reinforcement Bars, Epoxy Coated		Pound	4,610	
Furnishing Steel Piles HP10X42		Foot	450	
Driving Piles		Foot	450	
Test Pile Steel HP10X42		Each	1	
Concrete Encasement		Cu. Yd.	3.9	
Concrete Sealer		Sq. Ft.	392.2	

For details of Bar Splicers, see sheet S-34 of S-41.  
 For details of piles and Concrete Encasement, see sheet S-35 of S-41.

**EAST ABUTMENT PLAN AND ELEVATION STRUCTURE NO. 056-3190**

DESIGNED	SSM
CHECKED	RGD
DRAWN	WJH
CHECKED	RGD

**PLAN-PILE CAP**



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WB CHARLES J. MILLER ROAD BRIDGE		DATE: 7/23/12	
SHEET NO. S-28	F.A.U. RTE. 3860	SECTION 09-00372-00-PW	COUNTY McHENRY
S-41 SHEETS	TOTAL SHEETS 252		SHEET NO. 151
CONTRACT NO. 63633		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	