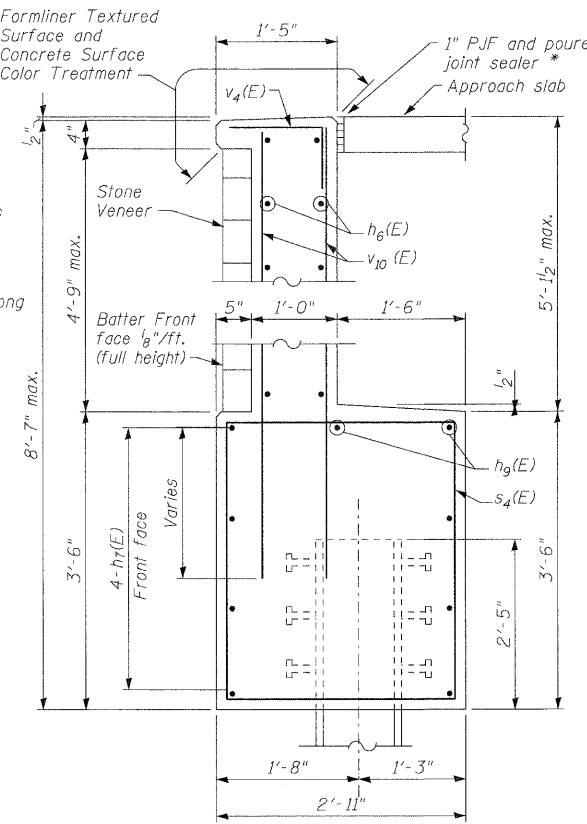
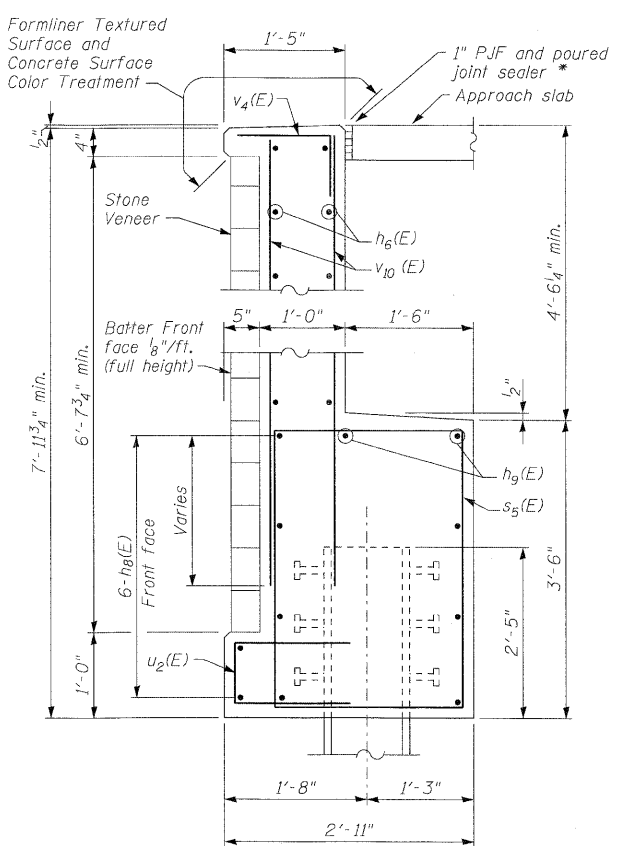


WATER STOP DETAIL



SECTION A-A

Vertical dimensions shown at West end



SECTION B-B

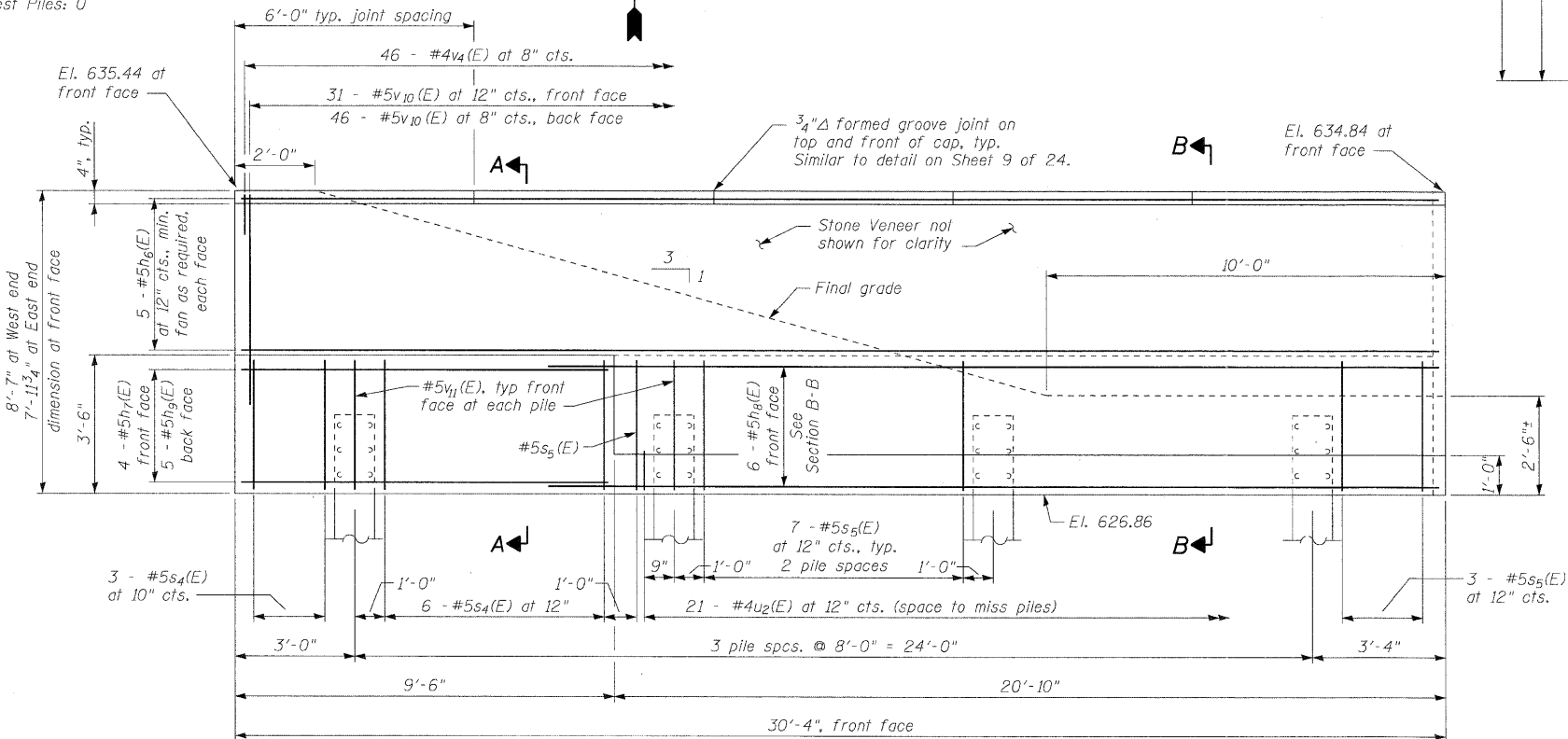
Vertical dimensions shown at East end

PILE DATA

Type: HP12x74 w/ pile shoes
 Nominal Required Bearing: 589 kips
 Allowable Resistance Available: 196 kips
 Est. Length: 44 ft.
 No. Production Piles: 4
 No. Test Piles: 0

PLAN

**Cost included in Concrete Structures

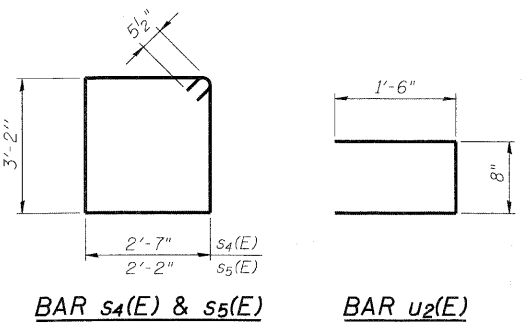


ELEVATION

BILL OF MATERIAL

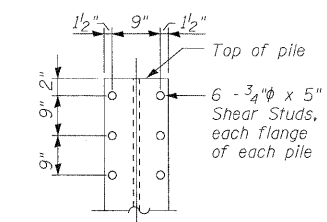
Bar	No.	Size	Length	Shape
h ₆ (E)	10	#5	29'-9"	
h ₇ (E)	4	#5	9'-2"	
h ₈ (E)	6	#5	23'-0"	
h ₉ (E)	5	#5	29'-6"	
s ₄ (E)	9	#5	12'-5"	
s ₅ (E)	18	#5	11'-7"	
u ₂ (E)	21	#4	3'-8"	
v ₄ (E)	46	#4	2'-2"	
v ₁₀ (E)	77	#5	6'-6"	
v ₁₁ (E)	4	#5	3'-2"	
Item	Unit	Quantity		
Concrete Structures	Cu. Yd.	16.1		
Reinforcement Bars, Epoxy Coated	Pound	1630		
Structure Excavation	Cu. Yd.	44		
Furnishing				
Steel Piles HP12x74	Foot	176		
Driving Piles	Foot	176		
Pile Shoes	Each	4		
Geocomposite Wall Drain	Sq. Yd	28		
Porous Granular Embankment, Special	Cu. Yd.	21		
Stone Veneer	Sq. Ft.	187		
Concrete Surface Color Treatment	Sq. Ft.	58		
Formliner Textured Surface	Sq. Ft.	58		
Pipe Underdrains for Structures, 4"	Foot	28		

*The joint behind the wall shall be placed with the approach slab and in accordance with Section 420 of the Standard Specifications. See West Bridge Approach Slab Sheet 13 & 14 of 24.



BAR s₄(E) & s₅(E)

BAR u₂(E)



SHEAR STUD DETAIL

Cost of Shear Studs shall be included in Furnishing Steel Piles HP12x74

NOTES:

See Sheet 19 of 24 for v₄(E) bar details.
 Stone Veneer, Formliner Textured Surface, and Concrete Surface Color Treatment shall be in accordance with the Special Provisions.
 Provide stainless steel masonry ties and dovetail anchor channel slots at 12" maximum centers horizontally on all surfaces that have stone veneer. (Cost included in Stone Veneer, typ.)
 See Sheet 3 of 24 for Excavation, backfill and drainage system behind wingwall. The Steel H-Piles shall be according to AASHTO M270 Grade 50.