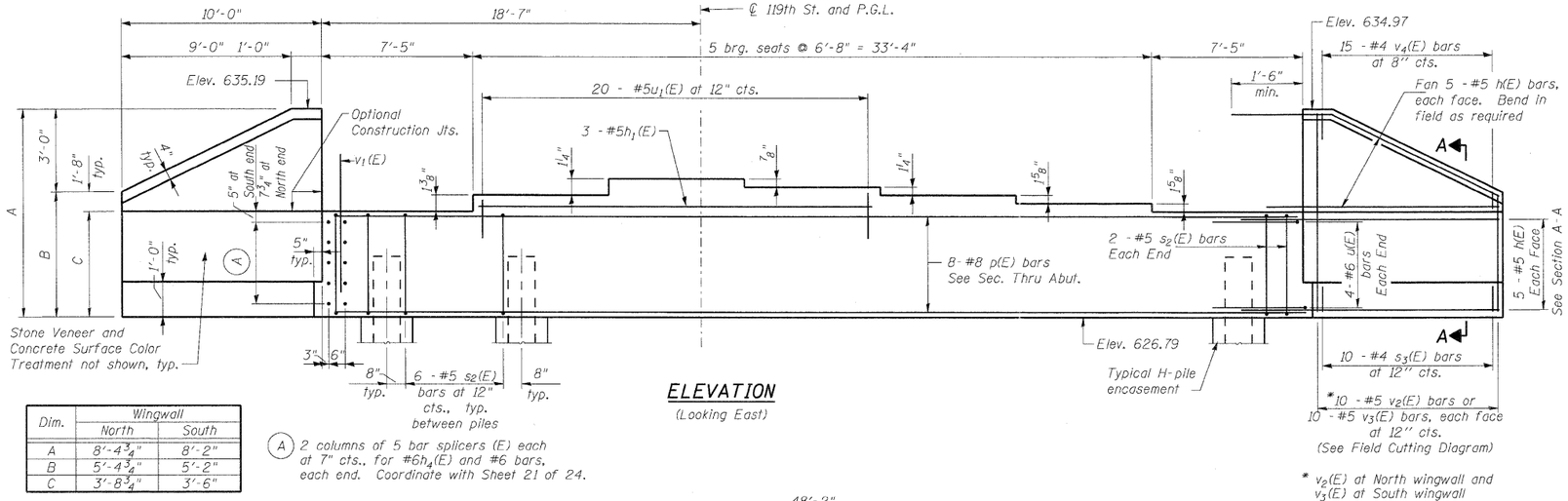
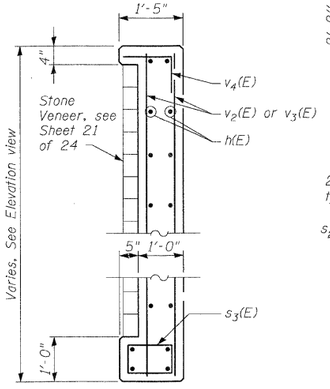


Dim.	Wingwall	
	North	South
A	8'-4¾"	8'-2"
B	5'-4¾"	5'-2"
C	3'-8¾"	3'-6"

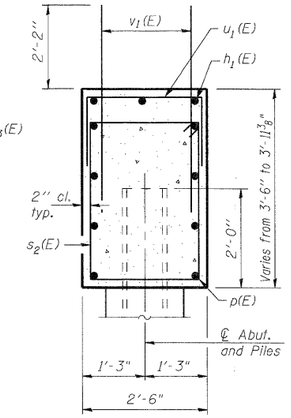
(A) 2 columns of 5 bar splicers (E) each at 7" cts., for #6h4(E) and #6 bars, each end. Coordinate with Sheet 21 of 24.

ELEVATION
(Looking East)

* v2(E) at North wingwall and v3(E) at South wingwall



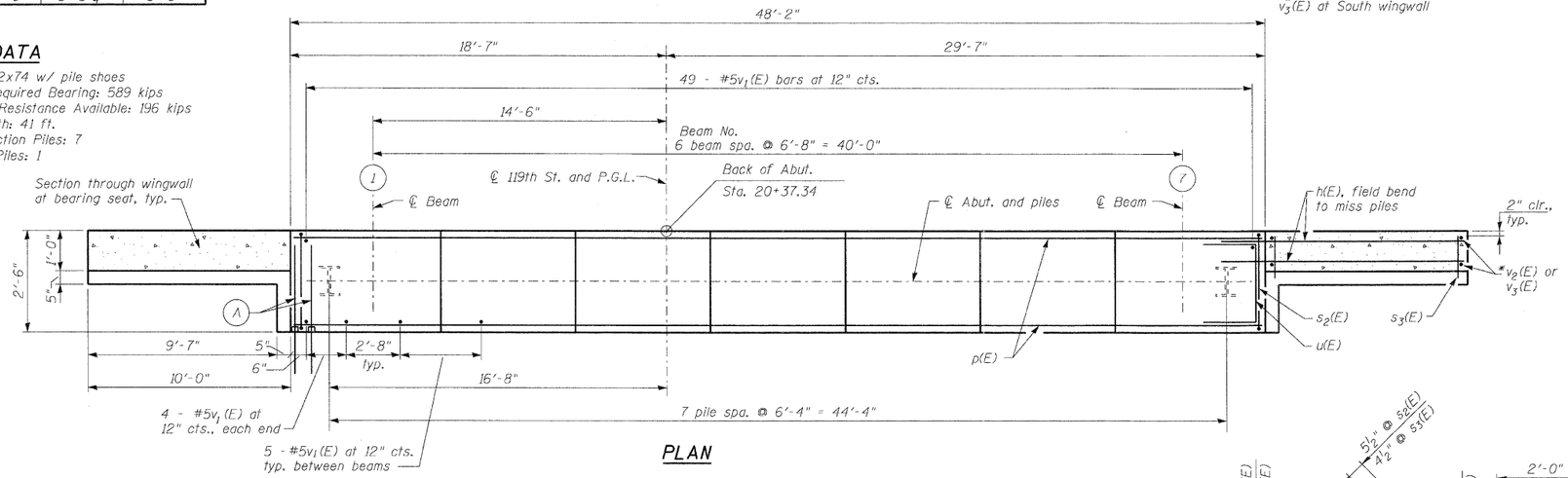
SECTION A-A
Typical each wingwall



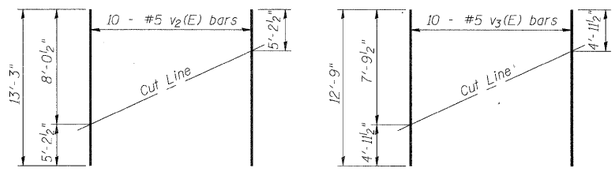
SECTION THROUGH ABUTMENT

PILE DATA

Type: HP12x74 w/ pile shoes
Nominal Required Bearing: 589 kips
Allowable Resistance Available: 196 kips
Est. Length: 41 ft.
No. Production Piles: 7
No. Test Piles: 1



PLAN



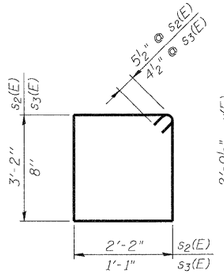
FIELD CUTTING DIAGRAMS
Order v2(E) and v3(E) full length. Cut as shown and use remainder of bars in opposite face.

NOTES:

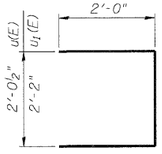
Pour steps monolithically with cap.
See Sheet 21 of 24 for details of the Stone Veneer, Formliner Textured Surface, and Concrete Surface Color Treatment to be applied to the wingwalls.
Provide stainless steel masonry ties and dovetail anchor channel slots at 12" maximum centers horizontally on all surfaces that have stone veneer. (Cost included in Stone Veneer, typ.)
See sheet 23 of 24 for pile encasement details.
The Steel H-Piles shall be according to AASHTO M270 Grade 50.
The test pile shall be driven to 110 percent of the Nominal Required bearing indicated in the pile data information.

BEARING SEAT ELEVATIONS

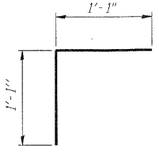
Beam No.	East Abut.
1	630.52
2	630.64
3	630.74
4	630.67
5	630.57
6	630.43
7	630.29



BAR s2(E) & s3(E)



BAR u(E) & u1(E)



BAR v4(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	40	#5	11'-10"	
h1(E)	3	#5	19'-8"	
p(E)	8	#8	47'-10"	
s2(E)	46	#5	11'-7"	
s3(E)	20	#4	4'-3"	
u(E)	8	#6	6'-1"	
u1(E)	20	#5	6'-2"	
v1(E)	87	#5	4'-4"	
v2(E)	10	#5	13'-3"	
v3(E)	10	#5	12'-9"	
v4(E)	30	#4	2'-2"	

Item	Unit	Quantity
Concrete Structures	Cu. Yd.	22.4
Concrete Encasement	Cu. Yd.	2.8
Reinforcement Bars, Epoxy Coated	Pound	3100
Structure Excavation	Cu. Yd.	164
Bar Splicers	Each	20
Furnishing Steel Piles HP12x74	Foot	287
Driving Piles	Foot	287
Pile Shoes	Each	8
Test Pile Steel HP12x74	Each	1
Geocomposite Wall Drain	Sq. Yd	29
Porous Granular Embankment, Special	Cu. Yd.	116
Pipe Underdrains for Structures, 4"	Foot	94