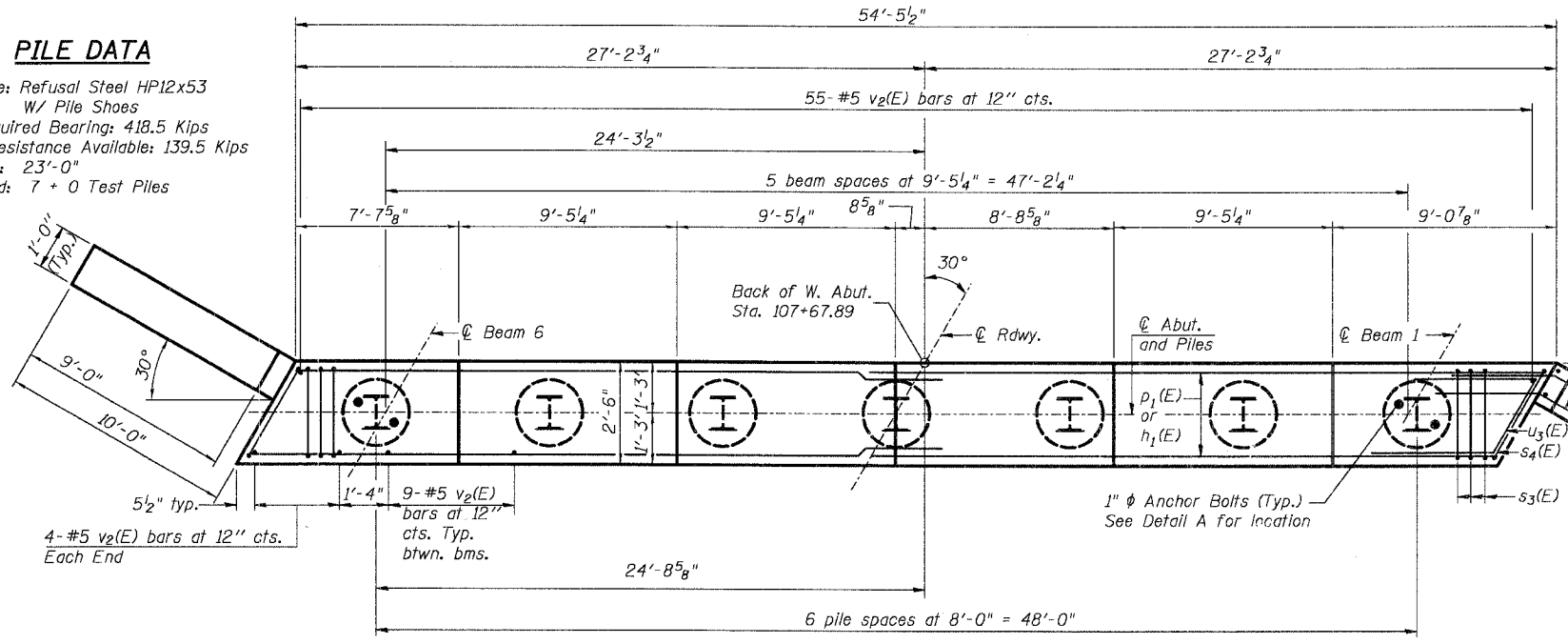


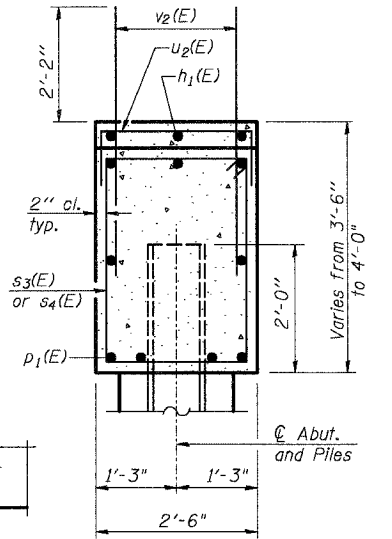
ELEVATION
(Looking West)

PILE DATA
 Type & Size: Refusal Steel HP12x53
 W/ Pile Shoes
 Nominal Required Bearing: 418.5 Kips
 Allowable Resistance Available: 139.5 Kips
 Est. Length: 23'-0"
 No. Required: 7 + 0 Test Piles

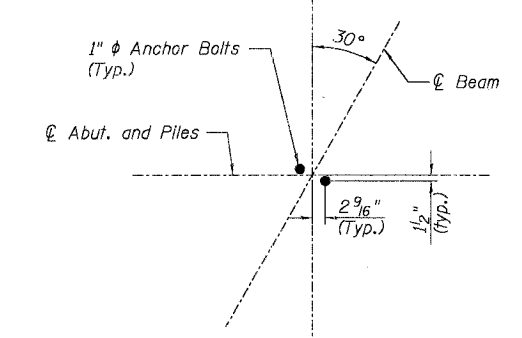


PLAN

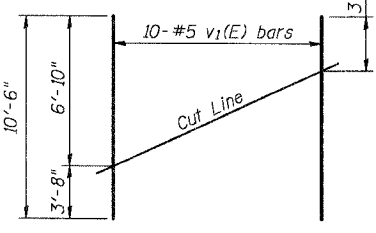
PILE ENCASEMENT DETAIL



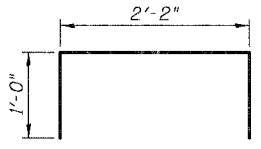
SEC. THRU ABUT.



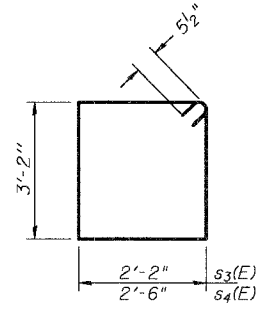
DETAIL A



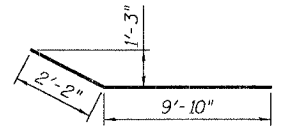
FIELD CUTTING DIAGRAM



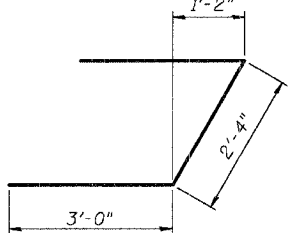
BAR u2(E)



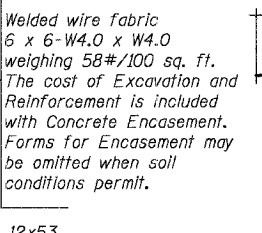
BARS s3(E) & s4(E)



BAR h2(E)



BAR u3(E)



SECTION A-A

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₁ (E)	3	#5	27'-11"	—
h ₂ (E)	48	#5	12'-0"	↘
p ₁ (E)	18	#7	29'-6"	—
s ₃ (E)	54	#5	11'-7"	□
s ₄ (E)	2	#5	12'-3"	□
u ₂ (E)	29	#4	4'-2"	□
u ₃ (E)	8	#6	8'-4"	↘
v ₁ (E)	20	#5	10'-6"	—
v ₂ (E)	108	#5	4'-4"	—
Concrete Structures		Cu. Yd.	23.7	
Reinforcement Bars, Epoxy Coated		Pound	3,340	
Structure Excavation		Cu. Yd.	179	
Furnishing Steel Piles HP 12 x 53		Foot	161	
Driving Piles		Foot	161	
Pile Shoes		Each	7	
Concrete Encasement		Cu. Yd.	2.4	

Notes: Four steps monolithically with cap. Reinforcement bars designated (E) shall be epoxy coated.

DESIGNED	KMA
CHECKED	AEU
DRAWN	MDJ
CHECKED	RGD

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WILL COUNTY DEPARTMENT OF HIGHWAYS
 WEST ABUTMENT DETAILS
 MANHATTAN-ARSENAL ROAD
 OVER JACKSON CREEK
 WILL COUNTY
 SECTION NO. 02-00117-21-BR
 STRUCTURE NO. 099-3395
 DATE 12-8-2006