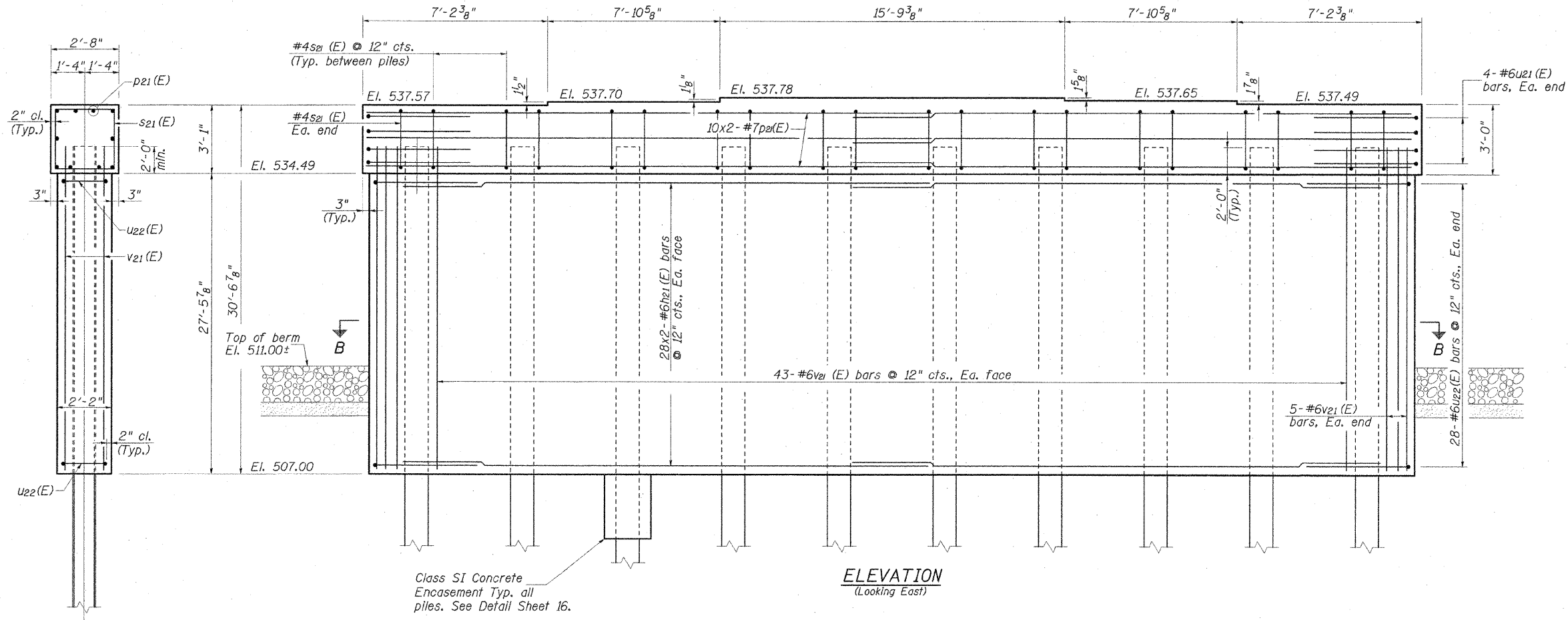


BILL OF MATERIAL

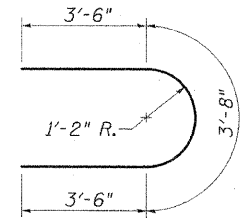
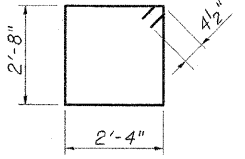
Bar	No.	Size	Length	Shape
h ₂₁ (E)	112	#6	23'-0"	—
p ₂₁ (E)	20	#7	23'-5"	—
s ₂₁ (E)	38	#4	10'-9"	□
u ₂₁ (E)	8	#6	10'-8"	—
u ₂₂ (E)	56	#6	8'-5"	—
v ₂₁ (E)	96	#6	29'-4"	—
Structure Excavation		Cu. Yd.	164	
Concrete Structures		Cu. Yd.	113.4	
Concrete Encasement		Cu. Yd.	3.5	
Reinforcement Bars, Epoxy Coated		Pound	10,170	
Furnishing Steel Piles, HP 12x63		Foot	320	
Driving Piles		Foot	320	
Test Pile Steel HP12x63		Each	1	
Pile Shoes		Each	10	



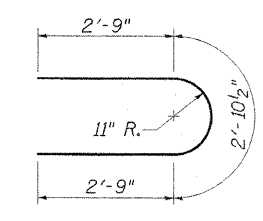
MIN. BAR LAP

#6 bar = 2'-7"

#7 bar = 3'-5"



BAR u₂₁(E)



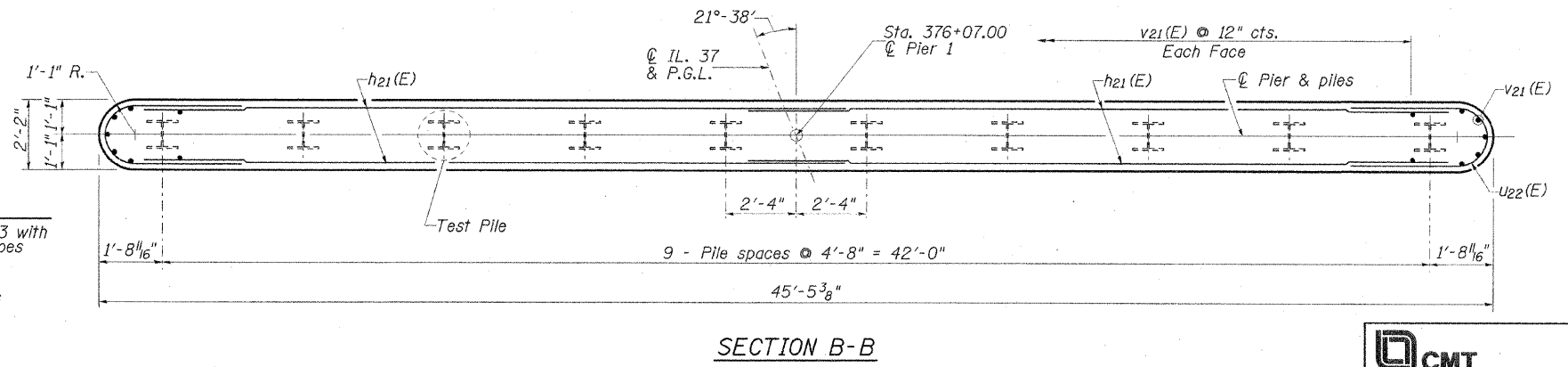
BAR u₂₂(E)

NOTES

1. Pour steps monolithically with cap.
2. Space reinforcement in cap to miss anchor bolts.
3. See Sheet 16 of 18 for steel H-pile details.

PILE DATA

PILE TYPE AND SIZE:	HP 12x63 with Metal Shoes
NOMINAL REQUIRED BEARING:	497 kips
FACTORED RESISTANCE AVAILABLE:	248 kips
ESTIMATED PILE LENGTH:	35.5 Ft.
NUMBER OF PRODUCTION PILES:	9
NUMBER OF TEST PILES:	1



CMT
CRAWFORD MURPHY & TILLY, INC.
CONSULTING ENGINEERS
SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO
ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PIER 1

F.A.S. ROUTE 2905 (IL. RTE. 37)

ILLINOIS ROUTE 37 OVER

BN/SF RAILROAD

SECTION 113B-1 STA. 376+46.00

STR. NO. 100-0090 - WILLIAMSON COUNTY

SCALE: NONE

DATE: 12/14/07

DRAWN BY: GLD

CHECKED BY: WLB

L:\DOT\060660\SNL\000090\Draw\Sheet\PIER 1.DWG 12/5/2007