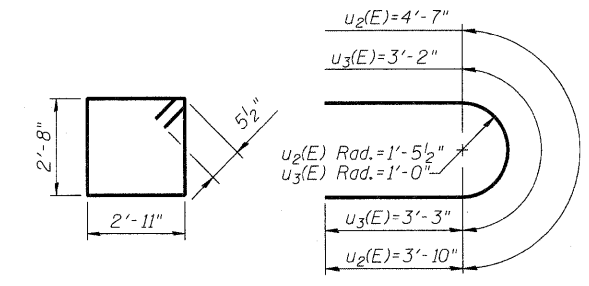
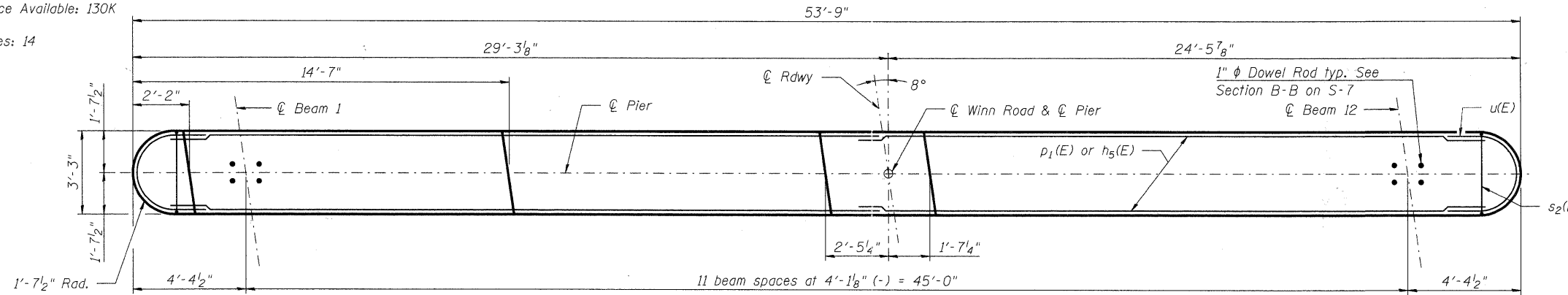


PILE DATA

Type and Size: Metal Shell - 14 in. dia. x 0.25 in. walls
 Nominal Required Bearings: 390K
 Factored Resistance Available: 130K
 Est. Length: 58'
 No. Production Piles: 14
 No. Test Piles: 1



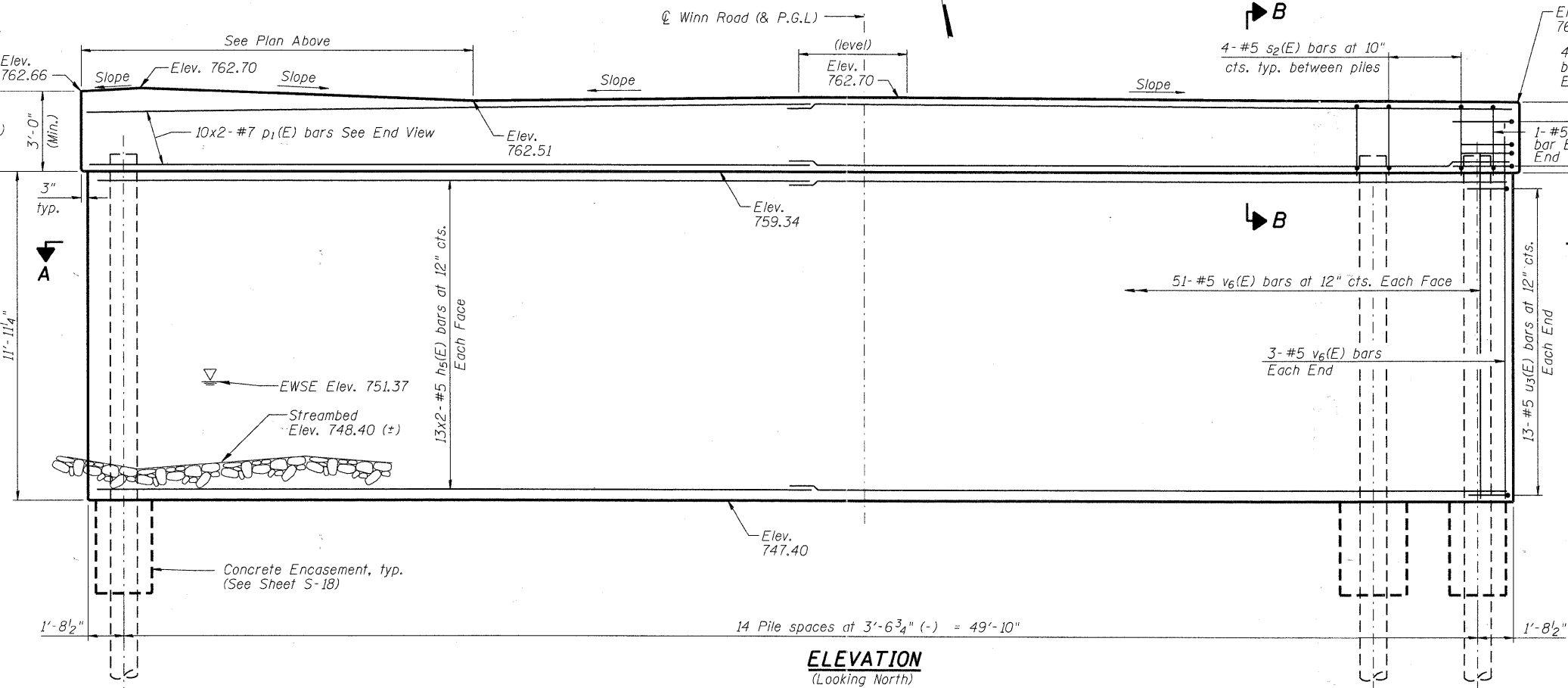
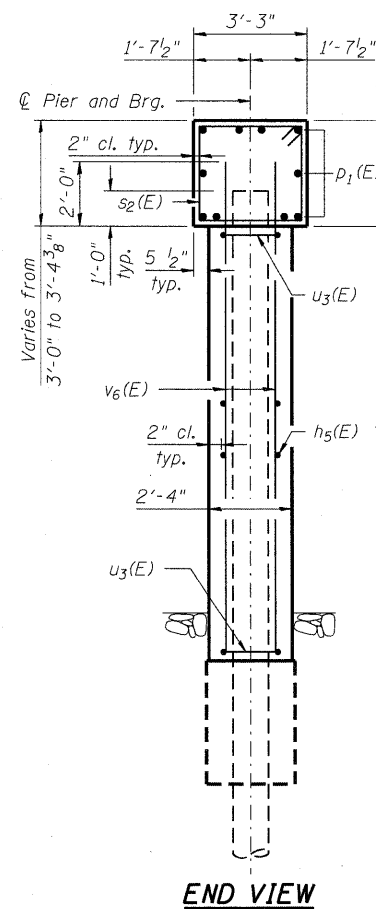
BAR s₂(E) **BARS u₂(E) & u₃(E)**

MINIMUM BAR LAP

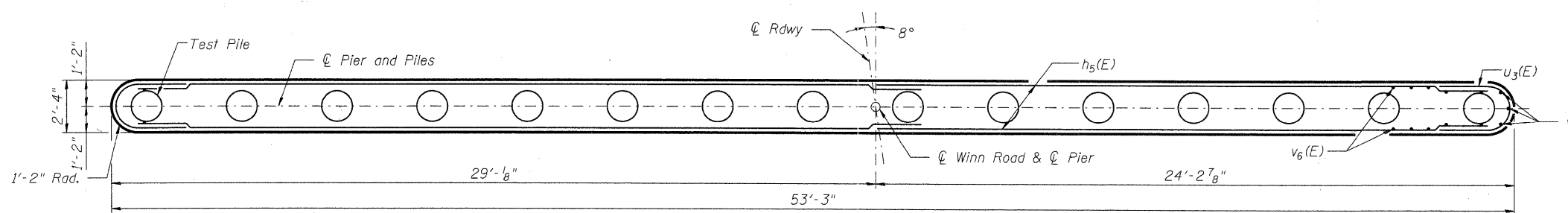
#5 bar = 2'-11"
 #7 bar = 4'-8"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₅ (E)	52	#5	26'-11"	—
p ₁ (E)	20	#7	27'-7"	—
s ₂ (E)	58	#5	12'-1"	□
u ₂ (E)	8	#6	12'-3"	U
u ₃ (E)	26	#5	9'-8"	U
v ₆ (E)	108	#5	13'-9"	—
Structure Excavation		Cu. Yd.	9	
Concrete Structures		Cu. Yd.	77.1	
Reinforcement Bars, Epoxy Coated		Pound	5,280	
Concrete Encasement		Cu. Yd.	7.7	
Furnishing Metal Shell Piles - 14" x 0.250"		Foot	812	
Driving Piles		Foot	812	
Underwater Structure Excavation Protection, Special - Location 1		Each	1	
Test Pile, Metal Shells		Each	1	



ELEVATION
(Looking North)



SECTION A-A

**PIER 1 DETAILS
 WINN ROAD
 OVER NIPPERSINK CREEK
 F.A.U. ROUTE 0157
 SECTION NO. 07-00012-00-BR
 MCHENRY COUNTY
 STATION 30+56.78
 STRUCTURE NO. 056-6123**

Notes:
 Space reinforcement in cap to miss dowel rods.
 For details of pile and Concrete Encasement, see Sheet S-18.
 See "Underwater Structure Excavation Protection Special" special provision.
 Bars indicated thus 20 x 2-#4 etc. indicates 20 lines of bars with 2 lengths per line.

DESIGNED	JMW
CHECKED	RGD
DRAWN	RCB
CHECKED	RGD



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 • McHenry, IL • Yorkville, IL • New Lenox, IL • Chicago, IL

SHEET NO. S-16 S-20 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	0157	07-00012-00-BR	McHENRY	41	28
CONTRACT NO. 63544					
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT BRM-8003 (921)	

DATE: 6/23/11