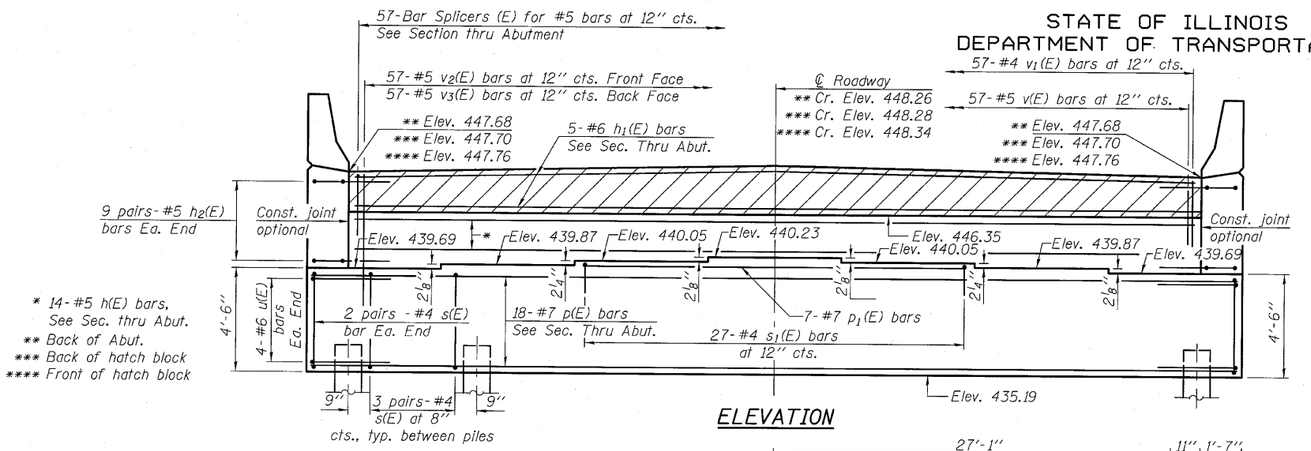
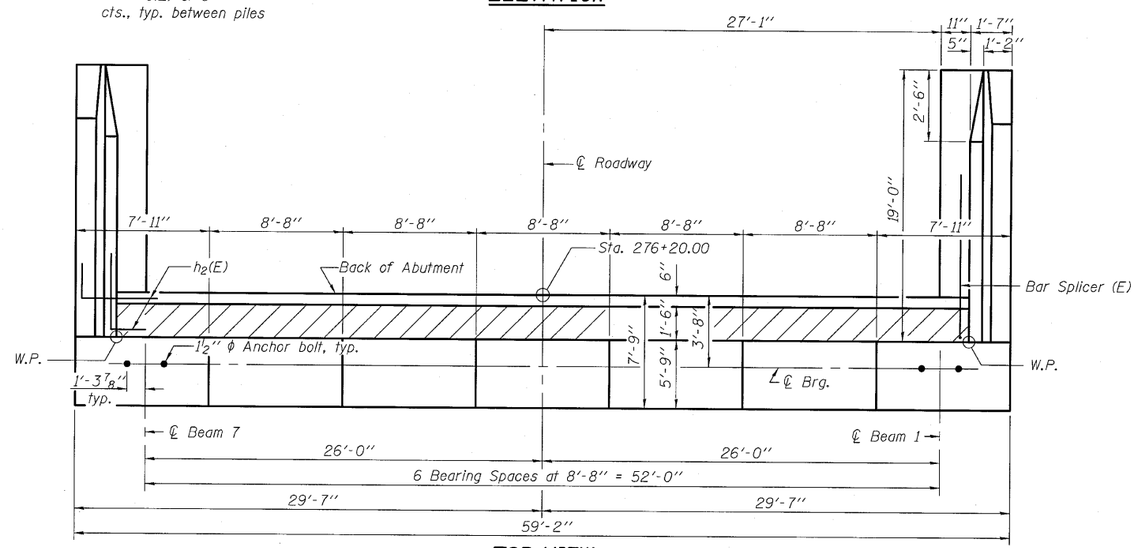
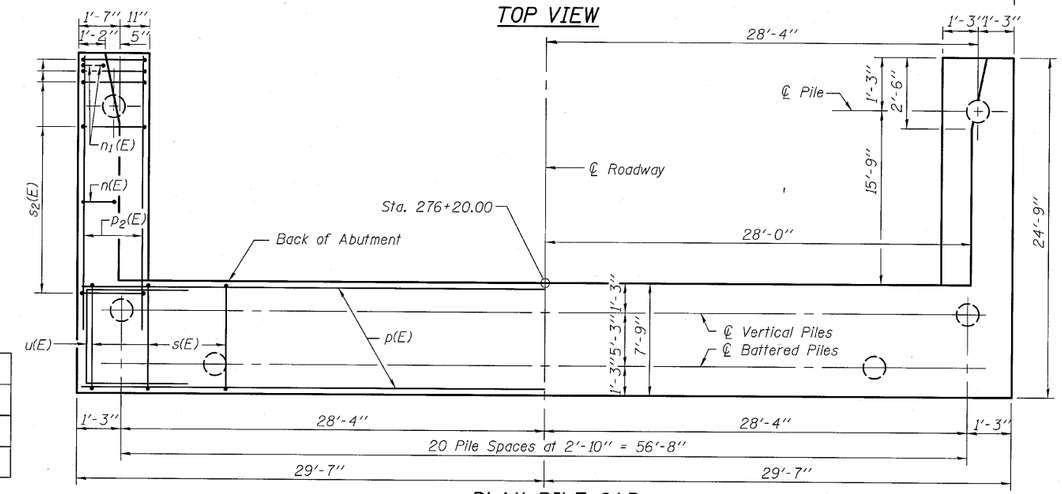
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



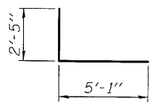
ELEVATION



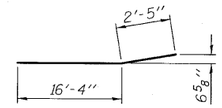
TOP VIEW



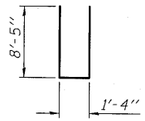
PLAN-PILE CAP



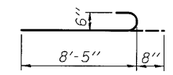
BAR h2(E)



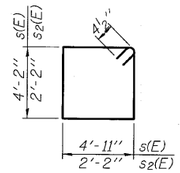
BAR h4(E)



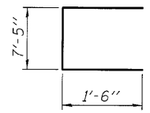
BAR n(E)



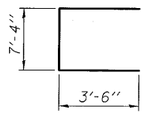
BAR n1(E)



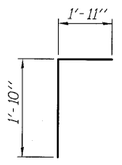
BARS s(E) & s2(E)



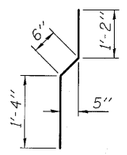
BAR s1(E)



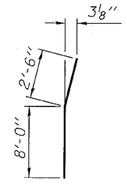
BAR u(E)



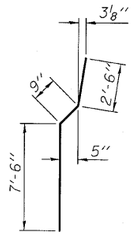
BAR v(E)



BAR v1(E)



BAR v5(E)



BAR v6(E)

PILE DATA

Type: Metal Shell - 14" ϕ x 0.312" wall
Nominal Required Bearing: 360 Kips
Factored Resistance Available: 180 Kips
Est. Length: 82 ft.
No. Production Piles: 22
No. Test Piles: 1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	14	#5	55'-9"	
h1(E)	5	#6	55'-9"	
h2(E)	36	#5	7'-6"	
h3(E)	34	#4	18'-9"	
h4(E)	22	#4	18'-9"	
n(E)	34	#6	18'-2"	
n1(E)	12	#6	9'-1"	
p(E)	18	#7	58'-11"	
p1(E)	7	#7	25'-9"	
p2(E)	12	#9	24'-5"	
s(E)	128	#4	18'-11"	
s1(E)	27	#4	10'-5"	
s2(E)	40	#4	9'-5"	
u(E)	8	#6	14'-4"	
v(E)	57	#5	3'-9"	
v1(E)	57	#4	3'-0"	
v2(E)	57	#5	9'-6"	
v3(E)	57	#5	8'-5"	
v4(E)	40	#6	10'-1"	
v5(E)	6	#6	10'-6"	
v6(E)	34	#6	10'-9"	

Structure Excavation	Cu. Yd.	405
Concrete Structures	Cu. Yd.	133.9
Reinforcement Bars, Epoxy Coated	Pound	11,730
Bar Splicers	Each	57
Furnishing Metal Shell Piles 14" x 0.312"	Foot	1,848
Driving Piles	Foot	1,848
Test Pile Metal Shells	Each	1
Concrete Sealer	Sq. Ft.	1,051

For details of Bar Splicers, see sheet 43 of 48.
For details of metal shell piles, see sheet 42 of 48.
For Section thru Abut., see sheet 38 of 48.

DESIGNED	KAK
CHECKED	EML
DRAWN	AJF
CHECKED	EML

NORTH ABUTMENT
STRUCTURE NO. 082-0038

HORNER & SHIFRIN, INC.
ENGINEERS

SHEET NO. 36	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
48 SHEETS	312	64-1VBR	ST. CLAIR	259	88
			CONTRACT NO. 76882		
		ILLINOIS	FED. AID PROJECT		