

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

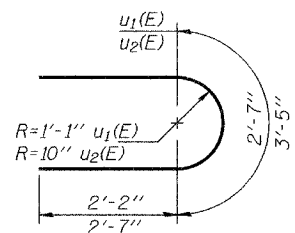
ROUTE NO.	SECTION	COUNTY	DATE	SHEET NO.
FAP 789	54BR-1	MADISON	62	42
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 18
25 SHEETS

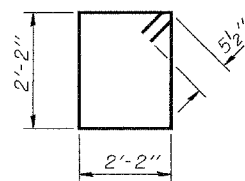
Contract #76864

PILE DATA

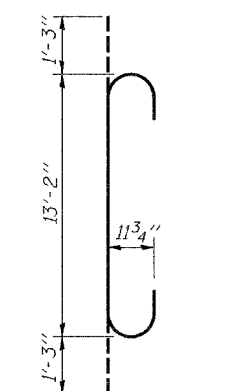
Type: Steel HP10x57
Nominal Required Bearing: 454 kips
Factored Resistance Available: 221 kips
Est. Length: 23 feet
No. Production Piles: 29
No. Test Piles: 1



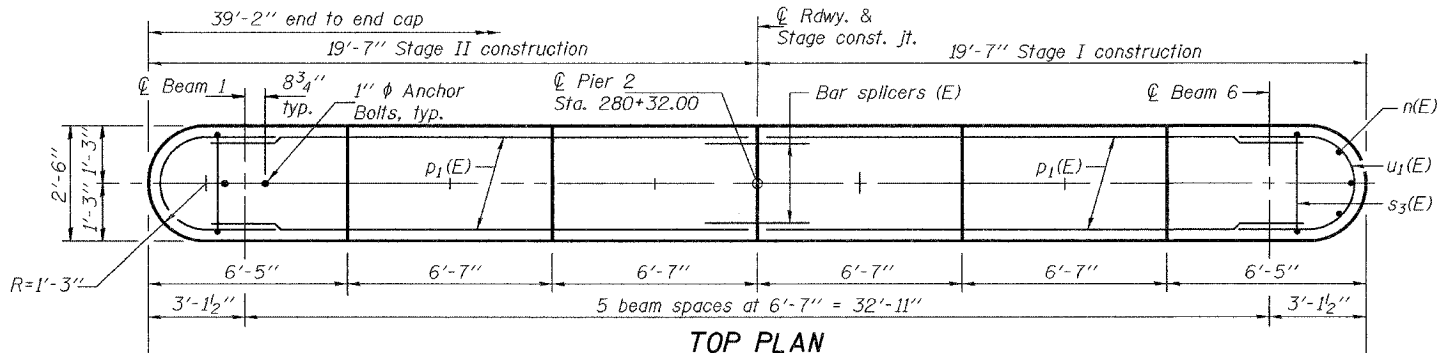
BARS $u_1(E)$ & $u_2(E)$



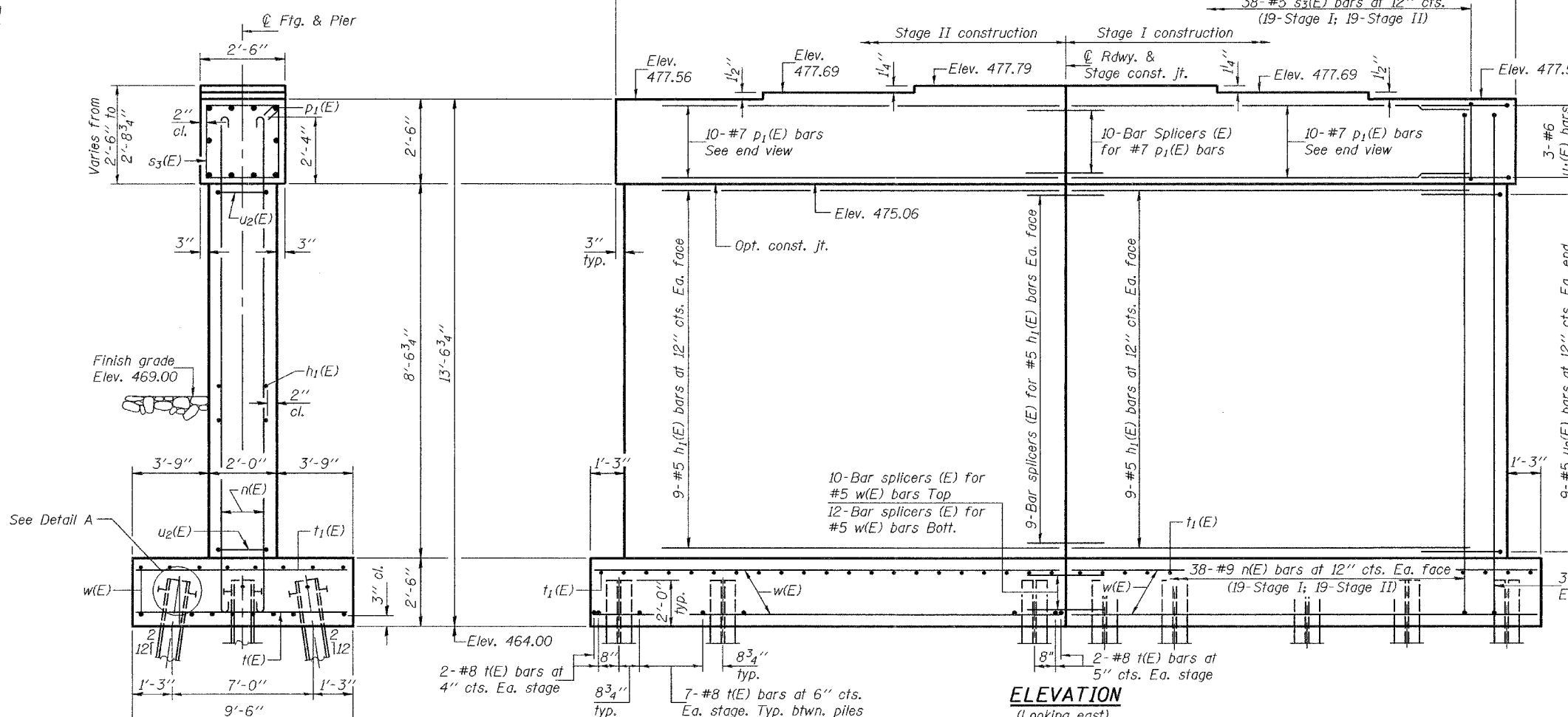
BAR $s_3(E)$



BAR $n(E)$



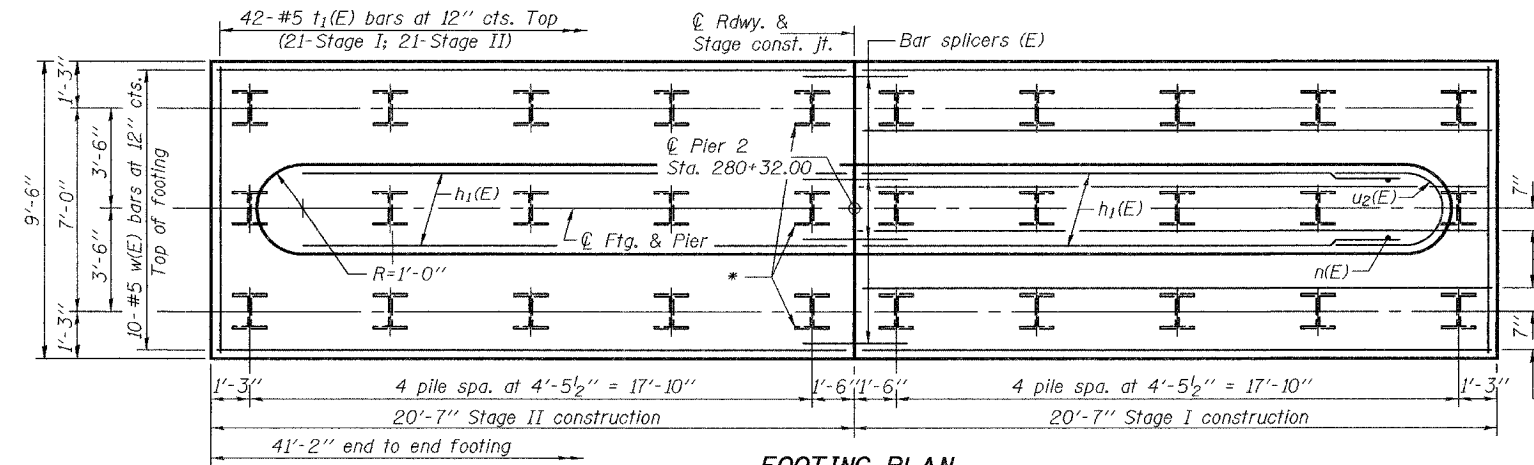
TOP PLAN



ELEVATION

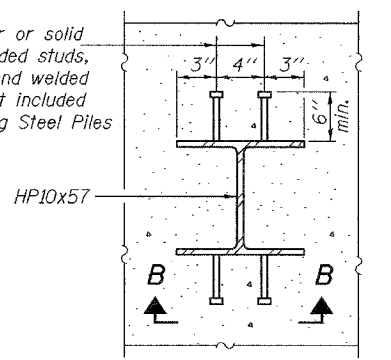


END VIEW

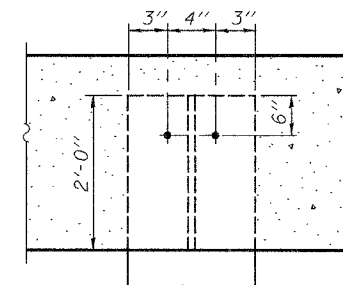


FOOTING PLAN

3/4" ϕ Granular or solid flux filled headed studs, automatically end welded to flange. Cost included with Furnishing Steel Piles HP10x57



DETAIL A



VIEW B-B

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_1(E)$	36	#5	18'-2"	—
$n(E)$	82	#9	15'-8"	U
$p_1(E)$	20	#7	18'-2"	—
$s_3(E)$	38	#5	9'-7"	□
$t(E)$	64	#8	9'-2"	—
$t_1(E)$	42	#5	9'-2"	—
$u_1(E)$	6	#6	8'-7"	U
$u_2(E)$	18	#5	6'-11"	U
$w(E)$	44	#5	20'-3"	—
Concrete Structures		Cu. Yd.	69.8	
Reinforcement Bars, Epoxy Coated		Pound	9280	
Structure Excavation		Cu. Yd.	136	
Furnishing Steel Piles HP10x57		Foot	667	
Driving Piles		Foot	667	
Test Pile Steel HP10x57		Each	1	
Anchor Bolts 1"		Each	12	

PIER 2
F.A.P. RTE. 789 - SEC. 54BR-1
MADISON COUNTY
STATION 280+73
STRUCTURE NO. 060-0340

Notes: Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For anchor bolt installation details, see sheet 14 of 25.
For bar splicer details, see sheet 21 of 25.
* Drive these piles during Stage I Construction.

DESIGNED	Curt M. Evoy
CHECKED	Nick R. Barnett
DRAWN	h.t. duong
CHECKED	CME/NRB

Nov. 15, 2006
EXAMINED *Thomas J. Damagala*
ENGINEER OF BRIDGE DESIGN
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES