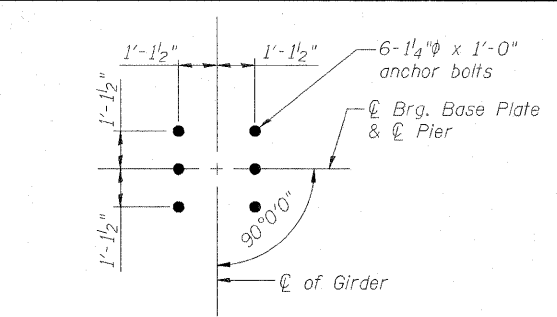
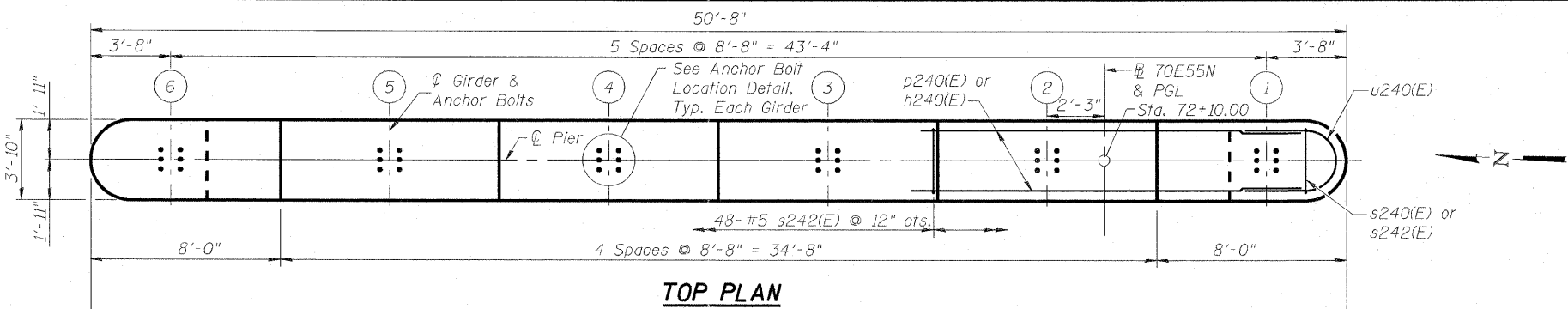


Notes:
 1. Space reinforcement in cap to miss anchor bolts.
 2. Pour steps monolithically with cap.
 3. For details of piles, see sheet S-187 of S-234.
 4. ϕ of Pier is radial to ϕ 70E55N at Sta. 72+10.00.
 5. #5 sp240(E) spiral, each column
 1) Provide $1\frac{1}{2}$ extra turns, shop welded together per AWS D1.4 top and bottom. Extend spiral 2" into pier cap & crashwall. Provide 4-#4 spacers or equivalent.
 2) When splicing spiral reinforcement is necessary, the spirals shall be provided with $1\frac{1}{2}$ extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate with a 135° standard hook.



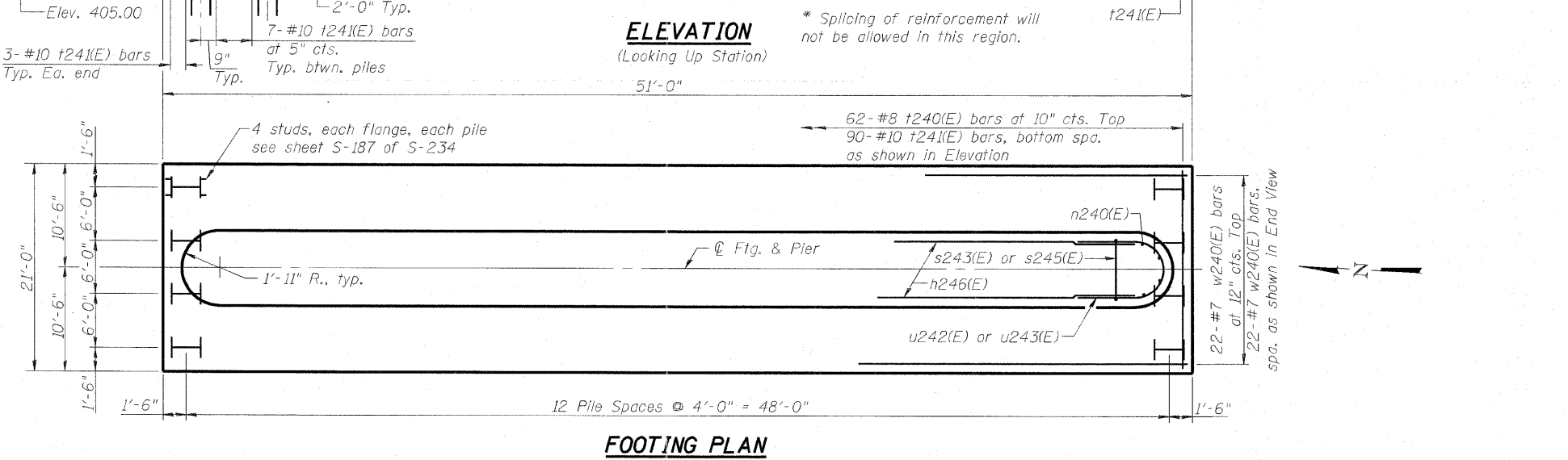
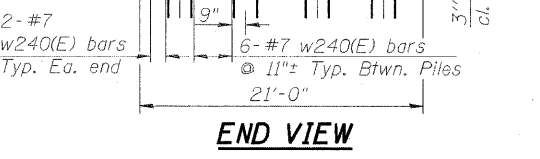
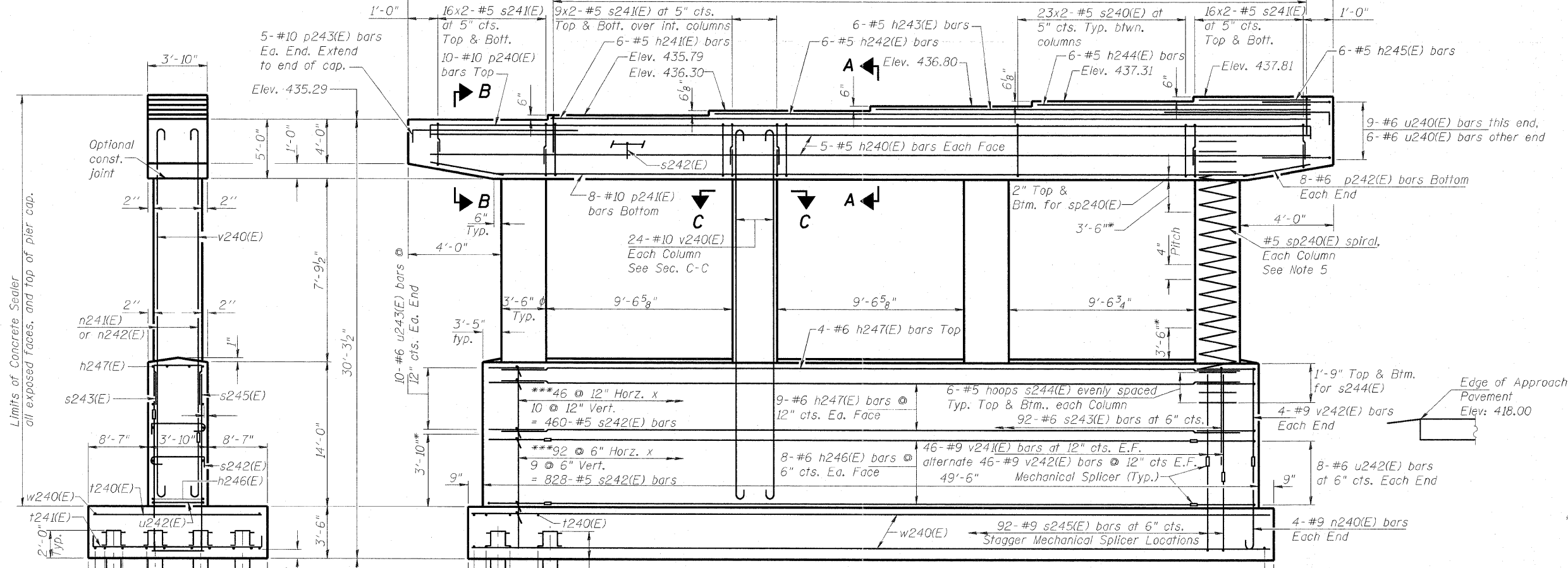
ANCHOR BOLT LOCATION DETAIL

PILE DATA
 Type: HP 12x63
 Nominal Required Bearing: 400 kips
 Factored Resistance Available: 200 kips
 Est. Length: 107'
 No. Production Piles: 52
 No. Test Piles: 0

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h240(E)	10	#5	46'-10"	—
h241(E)	6	#5	40'-7"	—
h242(E)	6	#5	31'-11"	—
h243(E)	6	#5	23'-3"	—
h244(E)	6	#5	14'-7"	—
h245(E)	6	#5	5'-11"	—
h246(E)	16	#6	33'-8"	—
h247(E)	22	#6	45'-8"	—
n240(E)	8	#9	20'-3"	U
p240(E)	10	#10	50'-6"	
p241(E)	8	#10	43'-8"	
p242(E)	16	#6	5'-6"	
p243(E)	10	#10	11'-10"	
s240(E)	138	#5	14'-11"	□
s241(E)	200	#5	10'-4"	□
s242(E)	1336	#5	5'-0"	□
s243(E)	92	#6	7'-10"	□
s244(E)	48	#5	9'-11"	□
s245(E)	92	#9	21'-4"	□
sp240(E)	4	#5	8'-2"	W
t240(E)	62	#8	20'-8"	—
t241(E)	90	#10	24'-3"	—
u240(E)	17	#6	17'-4"	U
u241(E)	42	#5	12'-6"	U
u242(E)	16	#6	17'-6"	U
u243(E)	20	#6	14'-10"	U
v240(E)	96	#10	27'-8"	□
v241(E)	92	#9	9'-0"	□
v242(E)	100	#9	7'-0"	□
w240(E)	44	#7	50'-8"	—
Structure Excavation		Cu. Yd.	305.6	
Concrete Structures		Cu. Yd.	290.7	
Reinforcement Bars, Epoxy Coated		Pound	64,920	
Furnishing Steel Piles HP12x63		Foot	5,564	
Driving Piles		Foot	5,564	
Pile Shoes		Each	52	
Mechanical Splicers		Each	224	
Concrete Sealer		Sq. Ft.	2926	

** Length is height of spiral.
 See next sheet for Bar Details and Sections.



***Both hooks of s242(E) bars shall engage horiz. & vert. bars and 90° hook on two successive s242(E) bars on same vert. bar shall be alternated end for end. Includes row of s242(E) bars on the top mat of pile cap.



USER NAME =	DESIGNED - DDB	REVISED -
PLOT SCALE = 3/16" = 1' / IN.	DRAWN - BRD	REVISED -
PLOT DATE = 6/30/2011	CHECKED - LLV	REVISED -
	DATE - 07-01-11	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PIER - UNIT 4 - PIER 12 - PLANS & ELEVATIONS
 I-70E OVER I-55, CSX & KCS RAILROADS
 SCALE: SHEET S-171 OF S-234 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	82-1-B-2	ST. CLAIR	399	298
S.N. 082-0322 & S.N. 082-0324		CONTRACT NO. 76C76		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		