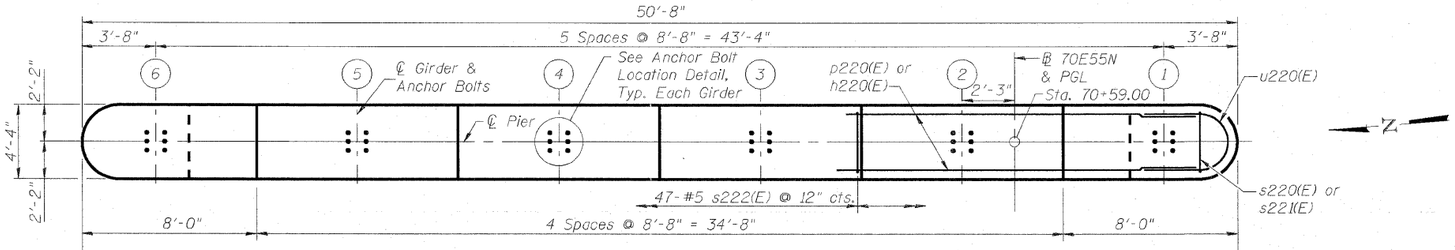
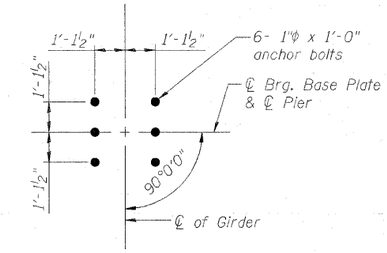
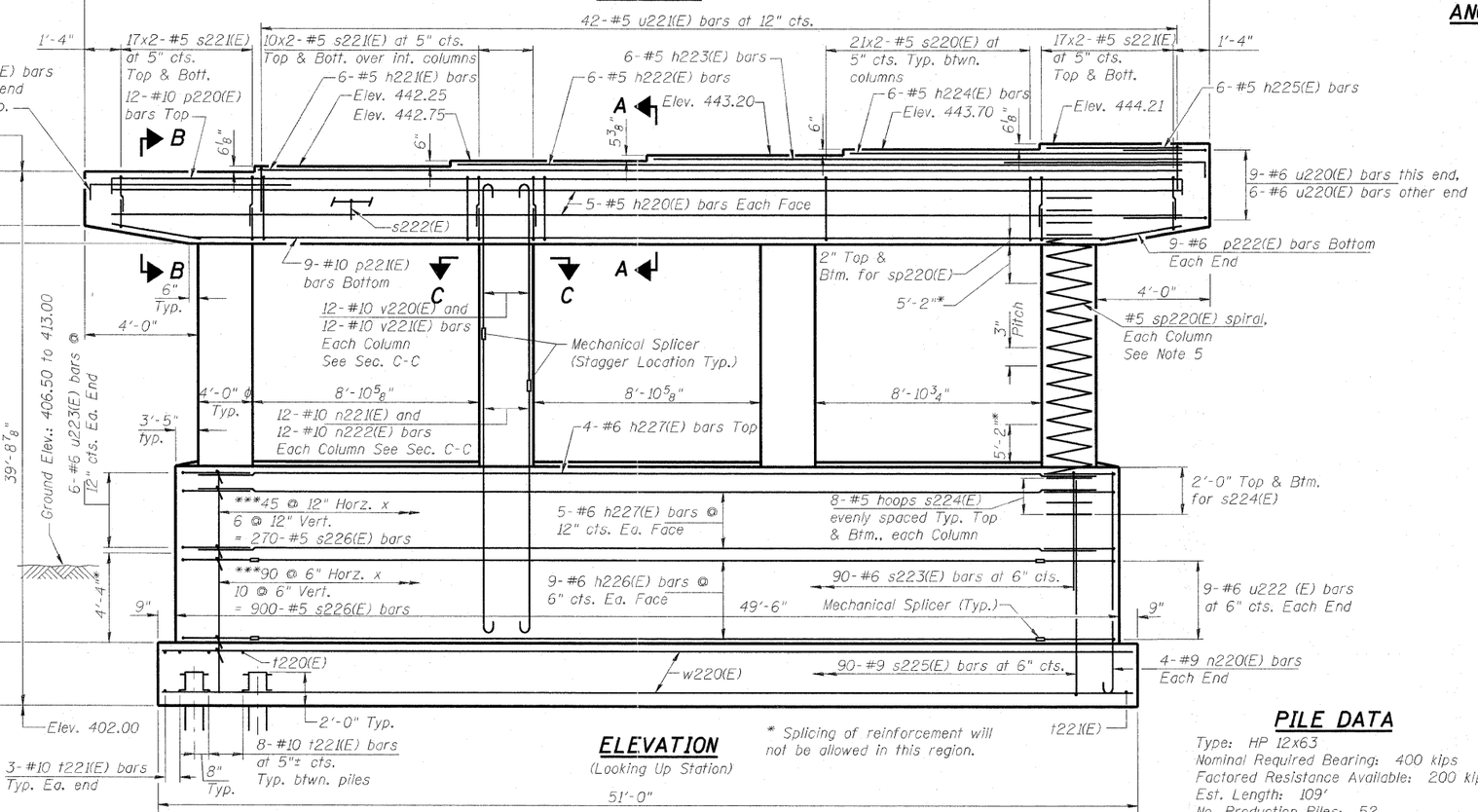
Notes:
1. Space reinforcement in cap to miss anchor bolts.
2. Pour steps monolithically with cap.
3. For details of piles, see sheet S-187 of S-234.
4. ℄ of Pier is radial to ℄ 70E55N at Sta. 70+59.00.
5. #5 sp220(E) spiral, each column
   1) Provide 1½ extra turns, shop welded together per AWS D1.4 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 1½ 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.
6. Contractor shall use Mechanical Splicers in columns that will fit between spirals.



TOP PLAN



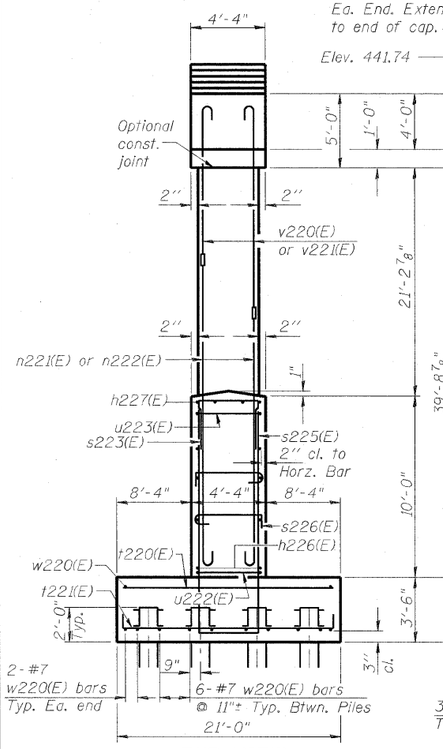
ANCHOR BOLT LOCATION DETAIL



ELEVATION
(Looking Up Station)

* Splicing of reinforcement will not be allowed in this region.

FOOTING PLAN



END VIEW

***Both hooks of s226(E) bars shall engage horiz. & vert. bars and 90° hook on two successive s226(E) bars on same vert. bar shall be alternated end for end. Includes row of s226(E) bars on the top mat of pile cap.

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h220(E)	10	#5	46'-4"	
	h221(E)	6	#5	40'-4"	
	h222(E)	6	#5	31'-8"	
	h223(E)	6	#5	23'-0"	
	h224(E)	6	#5	14'-4"	
	h225(E)	6	#5	5'-8"	
	h226(E)	18	#6	33'-2"	
	h227(E)	14	#6	45'-2"	
	n220(E)	8	#9	14'-3"	
	n221(E)	48	#10	17'-5"	
	n222(E)	48	#10	19'-5"	
	p220(E)	12	#10	50'-0"	
	p221(E)	9	#10	43'-8"	
	p222(E)	18	#6	5'-3'	
	p223(E)	12	#10	11'-10"	
	s220(E)	126	#5	15'-7"	
	s221(E)	216	#5	10'-8"	
	s222(E)	47	#5	5'-5"	
	s223(E)	90	#6	8'-4"	
	s224(E)	64	#5	11'-6"	
	s225(E)	90	#9	29'-10"	
	s226(E)	1170	#5	5'-6"	
**	sp220(E)	4	#5	21'-7"	
	t220(E)	62	#8	20'-8"	
	t221(E)	102	#10	24'-3"	
	u220(E)	15	#6	18'-2"	
	u221(E)	42	#5	13'-0"	
	u222(E)	18	#6	18'-3"	
	u223(E)	12	#6	15'-7"	
	v220(E)	48	#10	19'-8"	
	v221(E)	48	#10	17'-8"	
	w220(E)	44	#7	50'-8"	

Structure Excavation	Cu. Yd.	407.4
Concrete Structures	Cu. Yd.	305.8
Reinforcement Bars, Epoxy Coated	Pound	70,880
Furnishing Steel Piles, HP 12x63	Foot	5,668
Driving Piles	Foot	5,668
Pile Shoes	Each	52
Mechanical Splicers	Each	132

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

PILE DATA

Type: HP 12x63
Nominal Required Bearing: 400 kips
Factored Resistance Available: 200 kips
Est. Length: 109'
No. Production Piles: 52
No. Test Piles: 0

AECOM

USER NAME =	DESIGNED - DDB	REVISED -	
	DRAWN - BRD	REVISED -	
PLOT SCALE = 0.166667 ' / IN.	CHECKED - LLV	REVISED -	
PLOT DATE = 8/15/2011	DATE - 08-12-11	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER – UNIT 4 – PIER 11 – PLANS & ELEVATIONS
I-70E OVER I-55, CSX & KCS RAILROADS

SCALE: | SHEET S-169 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	296
S.N. 082-0322 & S.N. 082-0324		CONTRACT NO. 76C76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

K:\projects\60046069\sn082-0322 & 0324 flyover\900_cad\901_drawings\76c00_master_consolidated\structural\082-0322\sheet\082-0322-0324-76C76-S022.dgn