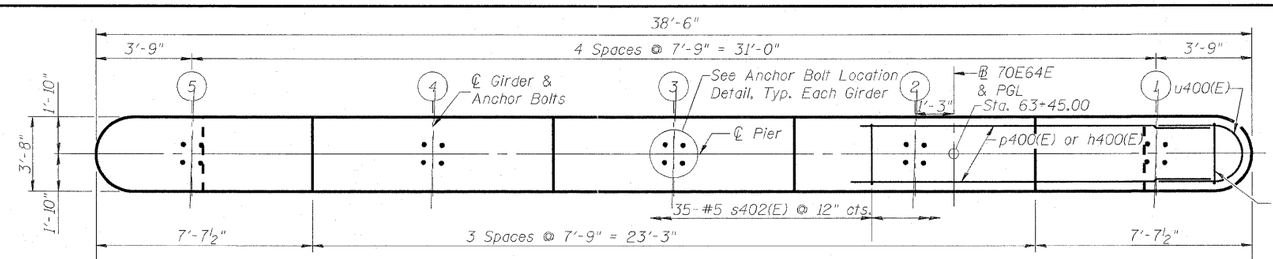
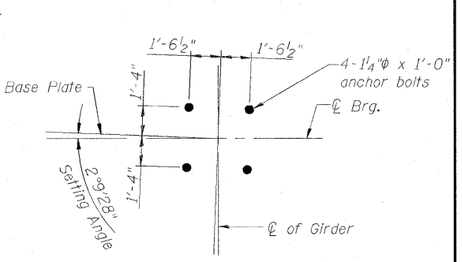
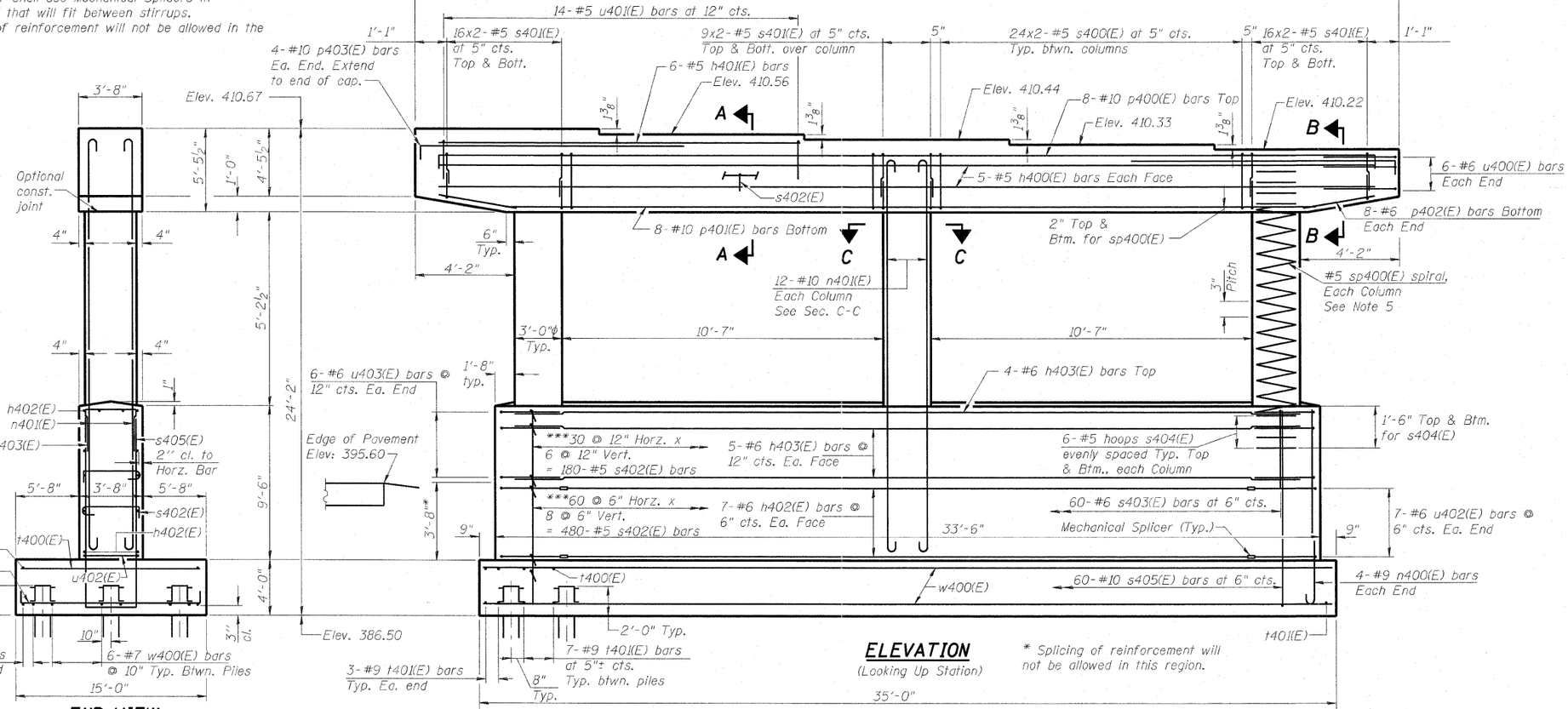
Notes:
1. Space reinforcement in cap to miss anchor bolts.
2. Pour steps monolithically with cap.
3. For details of piles, see sheet S-187 of S-234.
4. ℄ of Pier is perpendicular to ℄ 70E64E at Sta. 63+45.00.
5. #5 sp400(E) spiral, each column
   1) Provide 1½ extra turns, shop welded together per AWS 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 crashwall that will fit between stirrups.
7. Splicing of reinforcement will not be allowed in the columns.



TOP PLAN



ANCHOR BOLT LOCATION DETAIL



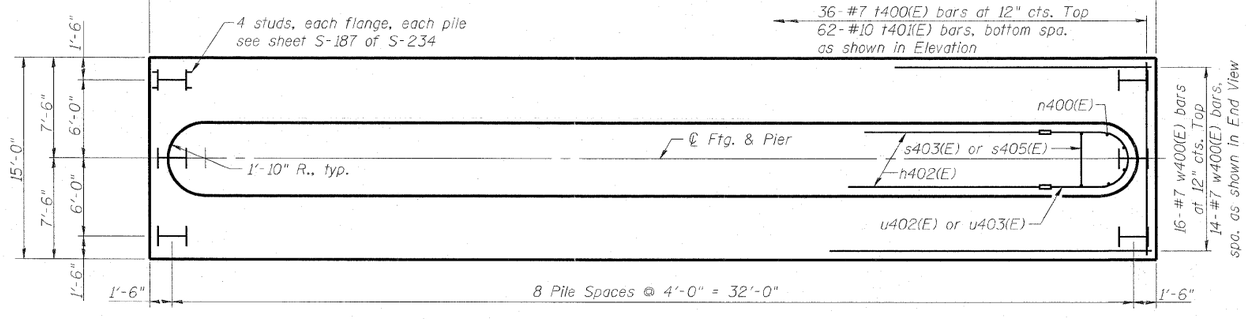
END VIEW

ELEVATION

(Looking Up Station)

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

***Both hooks of s402(E) bars shall engage horiz. & vert. bars and 90° hook on two successive s402(E) bars on same vert. bar shall be alternated end for end. Includes row of s402(E) bars on the top mat of pile cap.



FOOTING PLAN

PILE DATA

Type: HP 12x63
Nominal Required Bearing: 400 kips
Factored Resistance Available: 200 kips
Est. Length: 88'
No. Production Piles: 27
No. Test Piles: 0

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h400(E)	10	#5	34'-10"	
	h401(E)	6	#5	13'-5"	
	h402(E)	14	#6	17'-10"	
	h403(E)	14	#6	29'-10"	
	n400(E)	8	#9	13'-9"	
	n401(E)	36	#10	20'-2"	
	p400(E)	8	#10	38'-6"	
	p401(E)	8	#10	31'-2"	
	p402(E)	16	#6	5'-9"	
	p403(E)	8	#10	11'-10"	
	s400(E)	96	#5	14'-3"	
	s401(E)	164	#5	10'-0"	
	s402(E)	695	#5	4'-10"	
	s403(E)	60	#6	7'-8"	
	s404(E)	36	#5	8'-4"	
	s405(E)	60	#10	29'-2"	
**	sp400(E)	3	#5	5'-7"	
	t400(E)	36	#7	14'-8"	
	t401(E)	62	#9	18'-4"	
	u400(E)	12	#6	17'-1"	
	u401(E)	14	#5	9'-4"	
	u402(E)	14	#6	17'-3"	
	u403(E)	12	#6	14'-7"	
	w400(E)	32	#7	34'-8"	
	Structure Excavation			Cu. Yd.	260.7
	Concrete Structures			Cu. Yd.	150.6
	Reinforcement Bars, Epoxy Coated			Pound	32,000
	Furnishing Steel Piles, HP 12x63			Foot	2,376
	Driving Piles			Foot	2,376
	Pile Shoes			Each	27
	Mechanical Splicers			Each	28

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

AECOM

USER NAME =	DESIGNED - DDB	REVISED -	
	DRAWN - BRD	REVISED -	
PLOT SCALE = 0.166667 ' / IN.	CHECKED - LLV	REVISED -	
PLOT DATE = 6/30/2011	DATE - 07-01-11	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER – S.N. 082-0324 – PIER 6 – PLANS & ELEVATIONS
I-70E OVER I-55, CSX & KCS RAILROADS

SCALE: | SHEET S-185 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	312
S.N. 082-0322 & S.N. 082-0324		CONTRACT NO. 76C76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

k:\projects\60046604\en082-0322 & 0324 flyover\90b_cad\01_drawings\76c08_master consolidated\structural\082-0322\sheet\082-0322-0324_76C76_S038.dgn