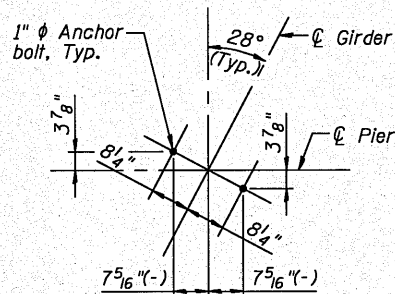
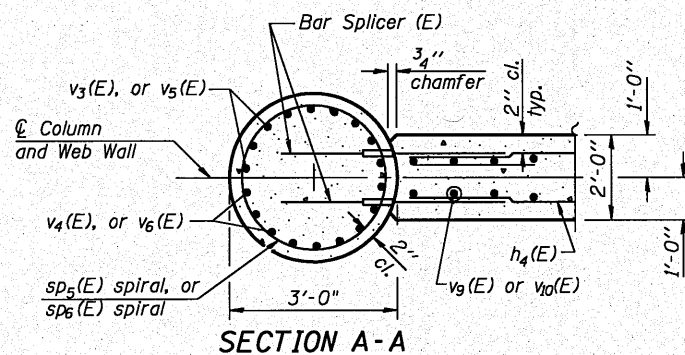


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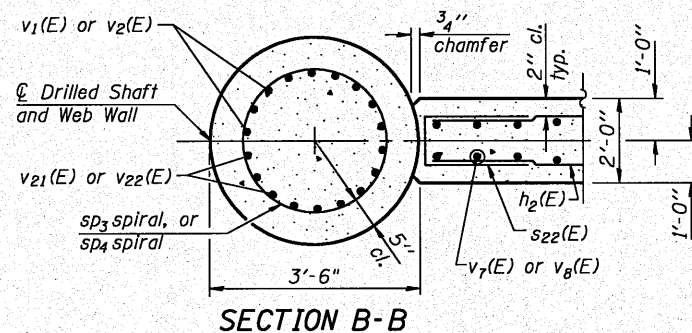
TWO PIERS
BILL OF MATERIAL



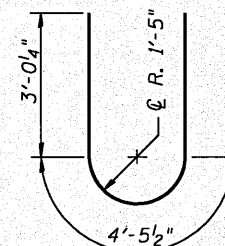
ANCHOR BOLT
LOCATION PLAN



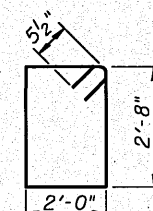
SECTION A-A



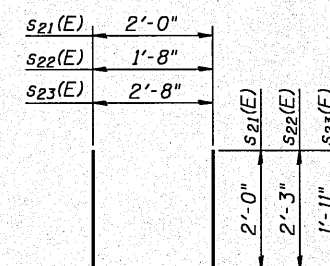
SECTION B-B



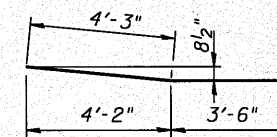
BAR u(E)



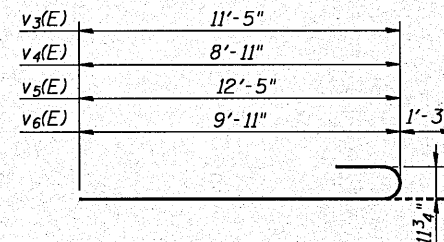
BAR s20(E)



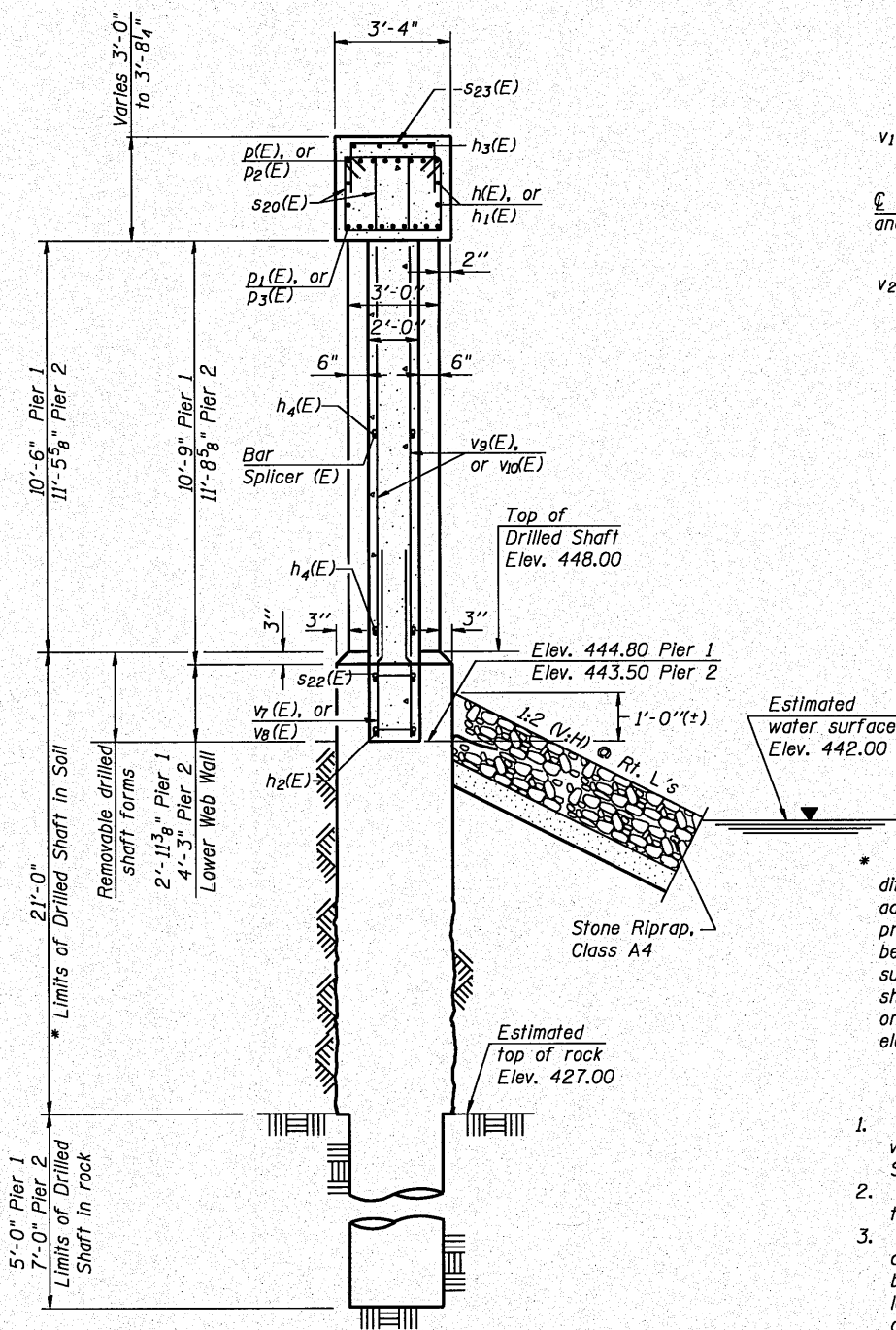
BARS s21(E), s22(E) & s23(E)



BAR p4(E)



BARS v3(E) THRU v6(E)



SECTION C-C

* If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailed are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

CONSTRUCTION SEQUENCE FOR WEB WALL:

- Excavate between shafts to elevation of web wall base and set lower web wall forms through water to bear on the circular edge of drilled shafts. Secure in place with fill, struts or tie forms together as required.
- Place the lower web wall reinforcement cage into the forms using spacers to maintain proper clearances.
- If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and tainted concrete out the top of the forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.
- Construct Columns.
- Construct upper web walls.

Bar	No.	Size	Length	Shape
h(E)	16	#5	28'-2"	—
h1(E)	16	#5	30'-0"	—
h2(E)	126	#5	10'-10"	—
h3(E)	8	#5	32'-11"	—
h4(E)	322	#5	11'-4"	—
h5(E)	8	#5	24'-7"	—
p(E)	32	#9	31'-8"	—
p1(E)	36	#9	31'-2"	—
p2(E)	32	#9	33'-8"	—
p3(E)	36	#9	33'-2"	—
p4(E)	36	#5	7'-9"	—
s20(E)	700	#5	10'-3"	□
s21(E)	96	#4	6'-0"	U
s22(E)	126	#5	6'-2"	U
s23(E)	118	#5	6'-6"	U
u(E)	12	#5	10'-6"	U
v1(E)	72	#9	27'-6"	—
v2(E)	72	#9	29'-6"	—
v3(E)	72	#9	12'-8"	—
v4(E)	72	#9	10'-2"	—
v5(E)	72	#9	13'-8"	—
v6(E)	72	#9	11'-2"	—
v7(E)	168	#5	5'-9"	—
v8(E)	168	#5	7'-0"	—
v9(E)	168	#5	10'-7"	—
v10(E)	168	#5	11'-6"	—
v21(E)	72	#9	30'-0"	—
v22(E)	72	#9	32'-0"	—
Concrete Structures		Cu. Yd.	317.7	
Reinforcement Bars		Pound	10,000	
Reinforcement Bars, Epoxy Coated		Pound	83,650	
Bar Splicers		Each	686	
Drilled Shaft in Soil		Cu. Yd.	120	
Drilled Shaft in Rock		Cu. Yd.	26	
Underwater Structure Excavation Protection Location 1		Each	1	
Underwater Structure Excavation Protection Location 2		Each	1	
Mechanical Splicers		Each	288	

** Length is height of spiral.

NOTES

- Work this sheet with Sheet S28 of 39.
- Cast steps monolithically with cap.
- Space cap reinforcement to miss anchor bolts.
- When splicing of spiral reinforcement is necessary, the spirals shall be provided with 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.
- Bars indicated thus 8 x 2 - #9 etc. indicates 8 lines of bars with 2 lengths per line.

PIER DETAILS

U.S. ROUTE 24 & IL ROUTE 9 OVER LA MARSH CREEK
STATION 337+89.89 STRUCTURE NO. 072-0228

SHEET NO.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S29 OF 39 SHEETS	317	45BR-2	PEORIA	122	77
			CONTRACT NO. 68719		
			ILLINOIS FED. AID PROJECT		

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CHECKED	J.J.G.
DRAWN	B.L.M.
CHECKED	J.J.G.