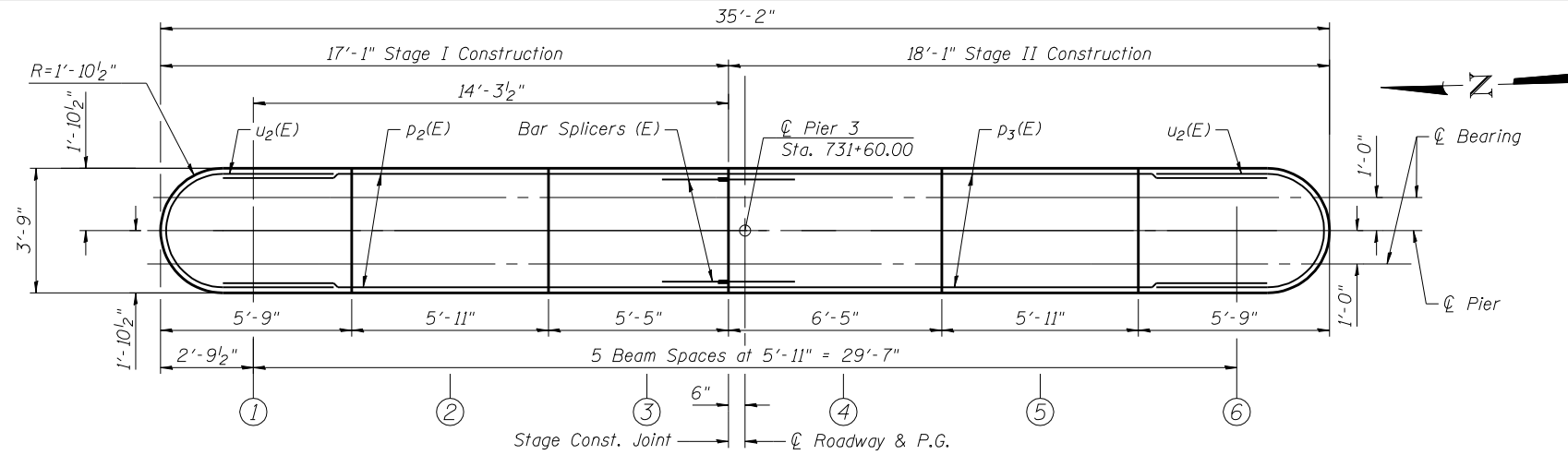


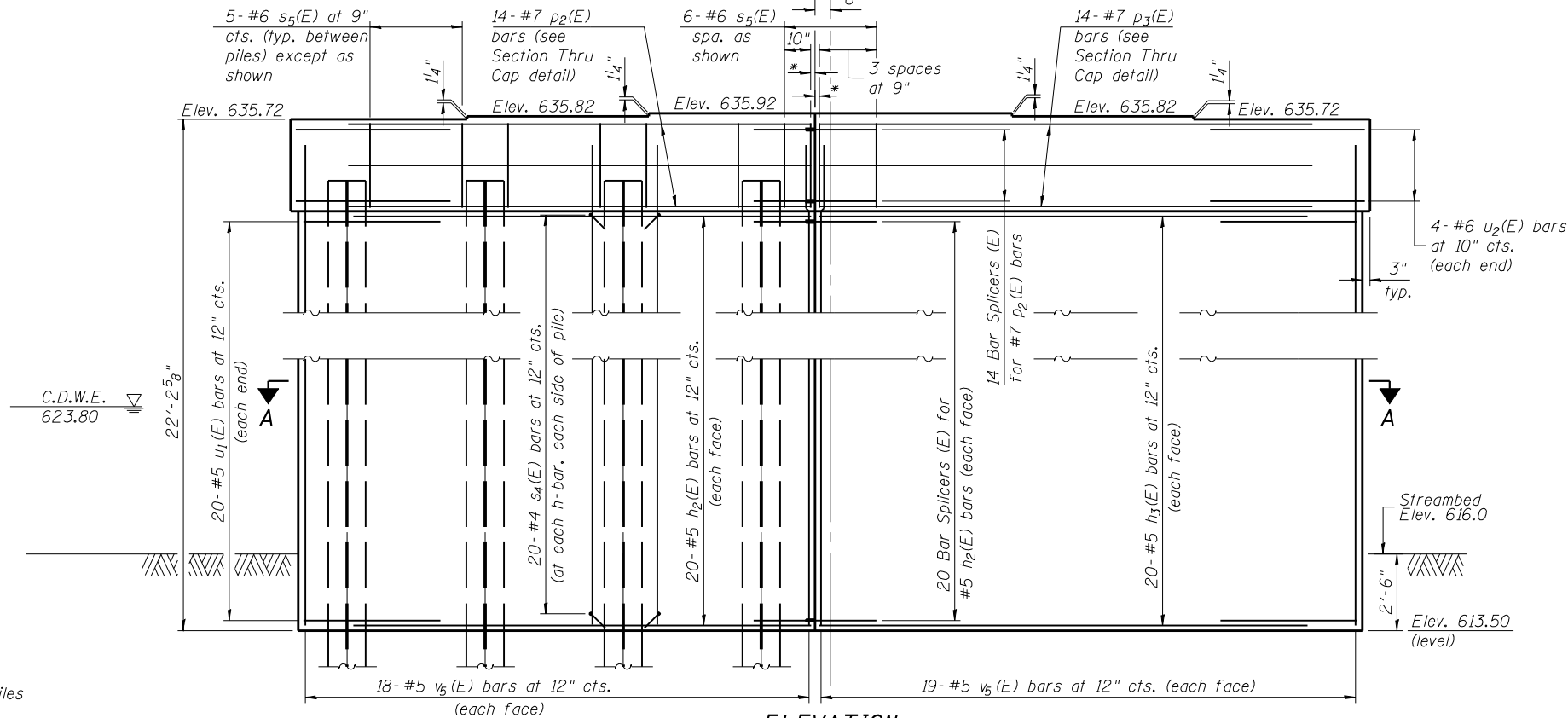
Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 For details of piles, see sheet 29 of 33.
 For spacing of v₃(E) bars, see sheet 15 of 33.
 For section thru cofferdam, see sheet 4 of 33.
 For anchor bolt locations, see sheet 15 of 33.

PILE DATA

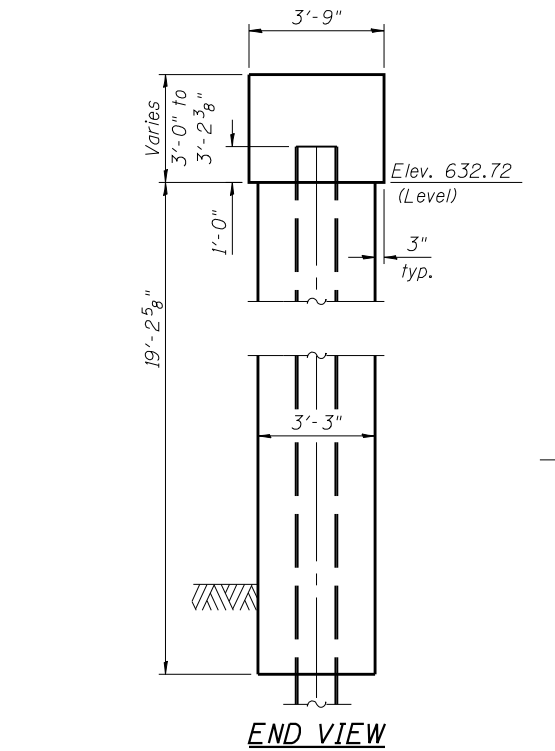
Type: HP14x89
 Nominal Required Bearing: 595 kips
 Factored Resistance Available: 303 kips
 Est. Length: 69 feet
 No. Production Piles: 7
 No. Test Piles: 1



TOP PLAN

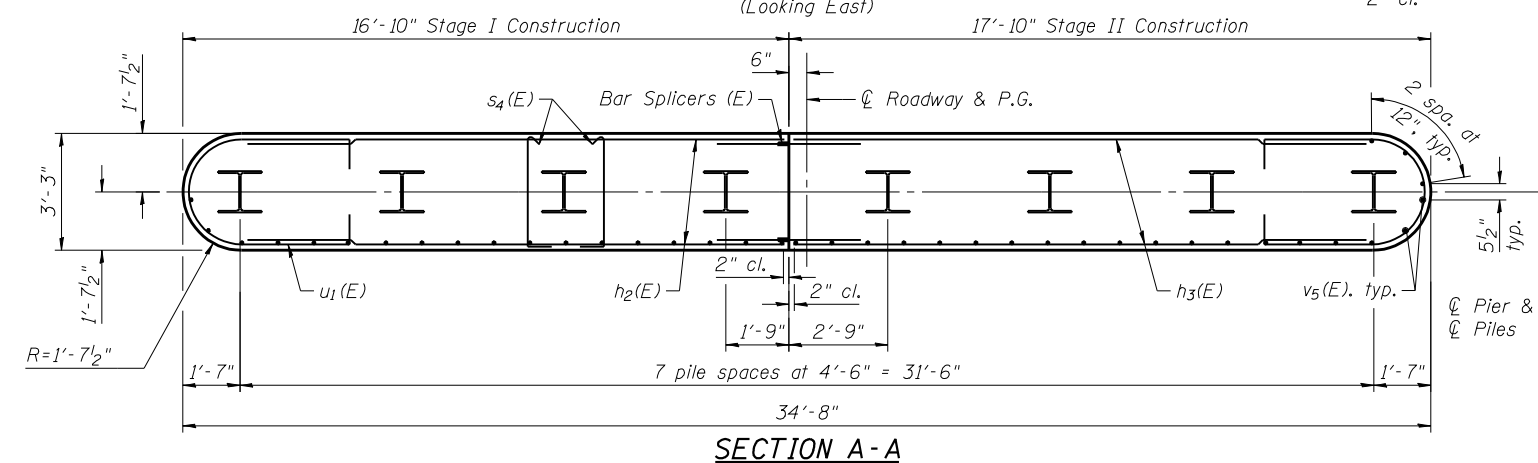


ELEVATION
(Looking East)

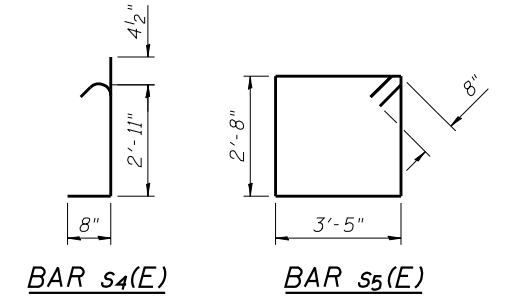


END VIEW

SECTION THRU CAP

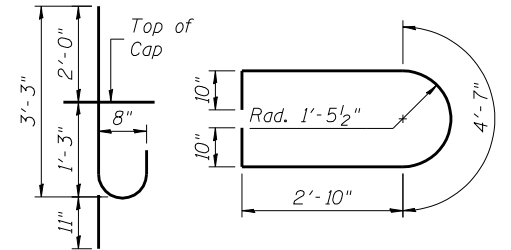


SECTION A-A



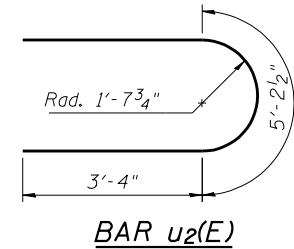
BAR s4(E)

BAR s5(E)



BAR v3(E)

BAR u1(E)



BAR u2(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₂ (E)	40	#5	15'-1"	—
h ₃ (E)	40	#5	16'-1"	—
p ₂ (E)	14	#7	15'-1"	—
p ₃ (E)	14	#7	16'-1"	—
s ₄ (E)	320	#4	4'-0"	U
s ₅ (E)	36	#6	13'-6"	□
u ₁ (E)	40	#5	11'-11"	U
u ₂ (E)	8	#6	11'-10"	U
v ₃ (E)	32	#8	4'-2"	U
v ₅ (E)	74	#5	21'-1"	—
Cofferdam Excavation		Cu. Yd.	94	
Cofferdam (Type 2) (Location - 2)		Each	1	
Concrete Structures		Cu. Yd.	93.5	
Seal Coat Concrete		Cu. Yd.	31.1	
Reinforcement Bars, Epoxy Coated		Pound	6400	
Furnishing Steel Piles, HP14x89		Foot	483	
Driving Piles		Foot	483	
Test Pile, Steel HP14x89		Each	1	

EFK Moen, LLC
 Civil Engineering Design
 331 Salem Place, Suite 225
 Fairview Heights, IL 62208
 Phone 618-206-4250

USER NAME = cdl	DESIGNED - CTW	REVISED -
PLOT SCALE = 0/2" = 1' / IN.	CHECKED - CDL	REVISED -
PLOT DATE = 3/24/2014	DRAWN - CTW	REVISED -
	DATE - 3/24/2014	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 DETAILS
STRUCTURE NO. 092-0207

SHEET NO. 28 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116BR-1	VERMILION	84	58
CONTRACT NO. 70614				
ILLINOIS FED. AID PROJECT				

PRINT DATE: 3/24/2014 4:48:26 PM Z:\10053301\1119_sver_Vermilion\pdr\Bridges\Final\Plotsheets\0920207-70614-028-Pier-3.dgn