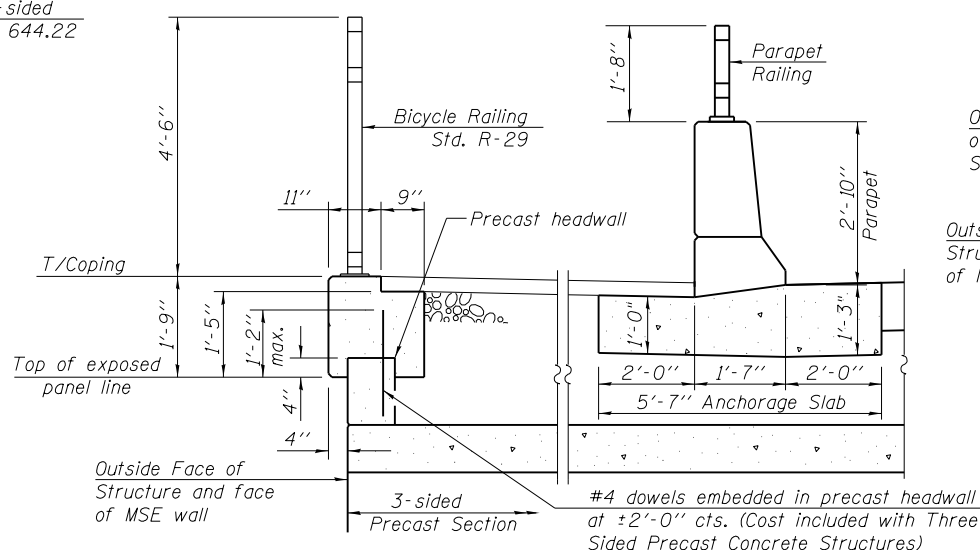
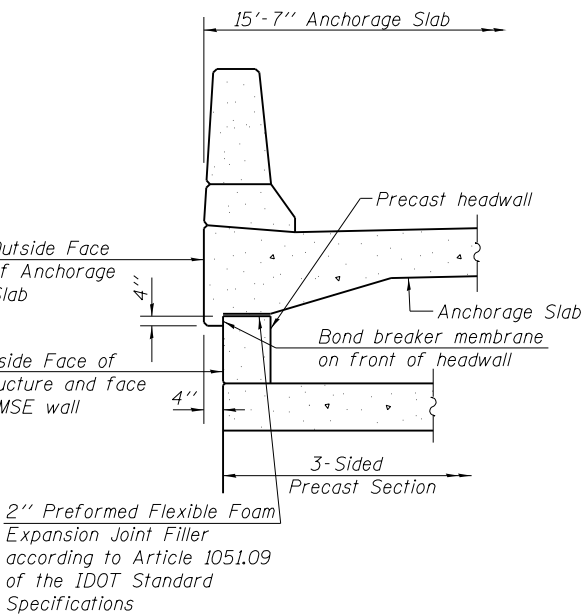


**HEADWALL ELEVATION**  
(Hy-Span shown, may vary depending on the Manufacturer of the three-sided precast)

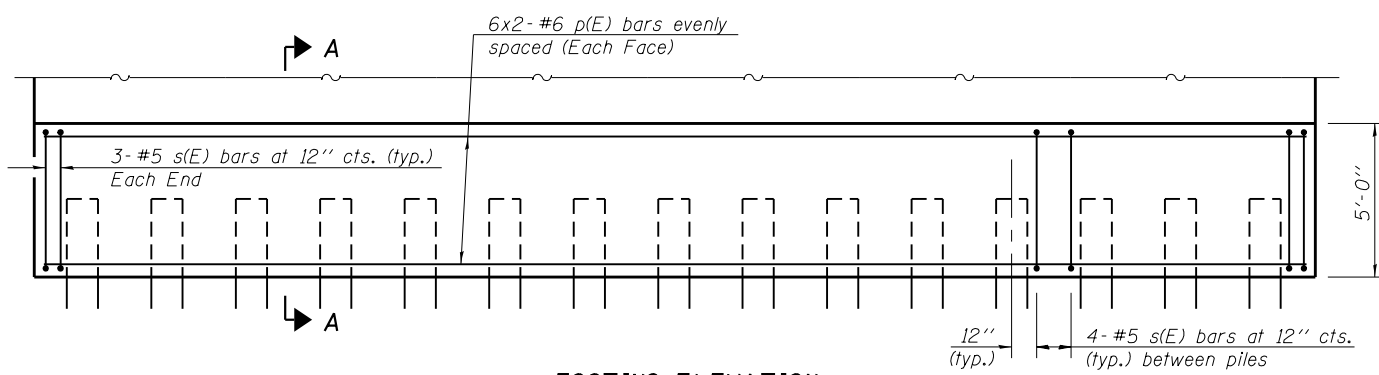
T/Headwall  
Elev. 648.31 (SE)  
Elev. 648.12 (SW)  
  
\*T/3-sided  
Elev. 644.22



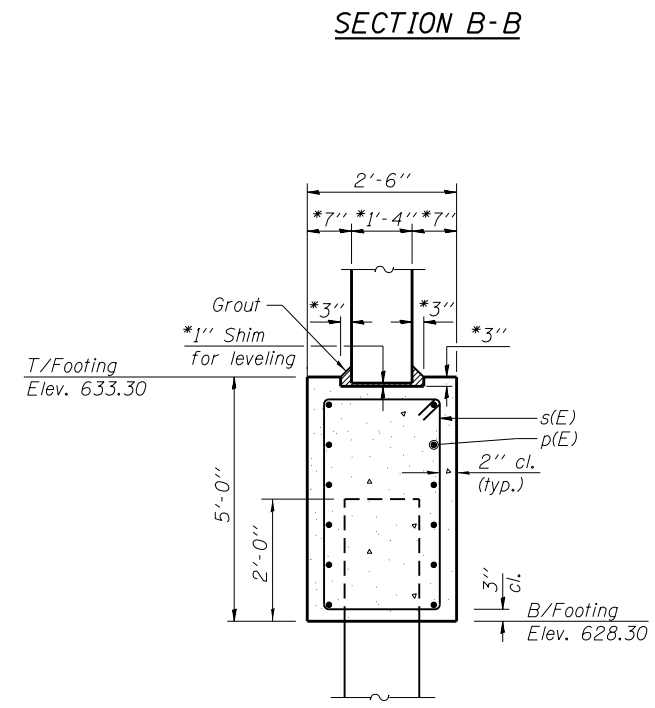
**SECTION B-B**



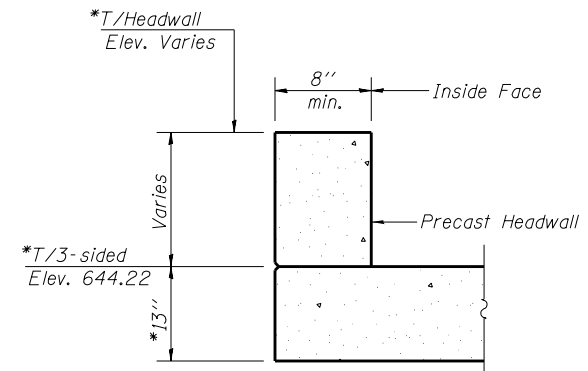
**SECTION A-A**



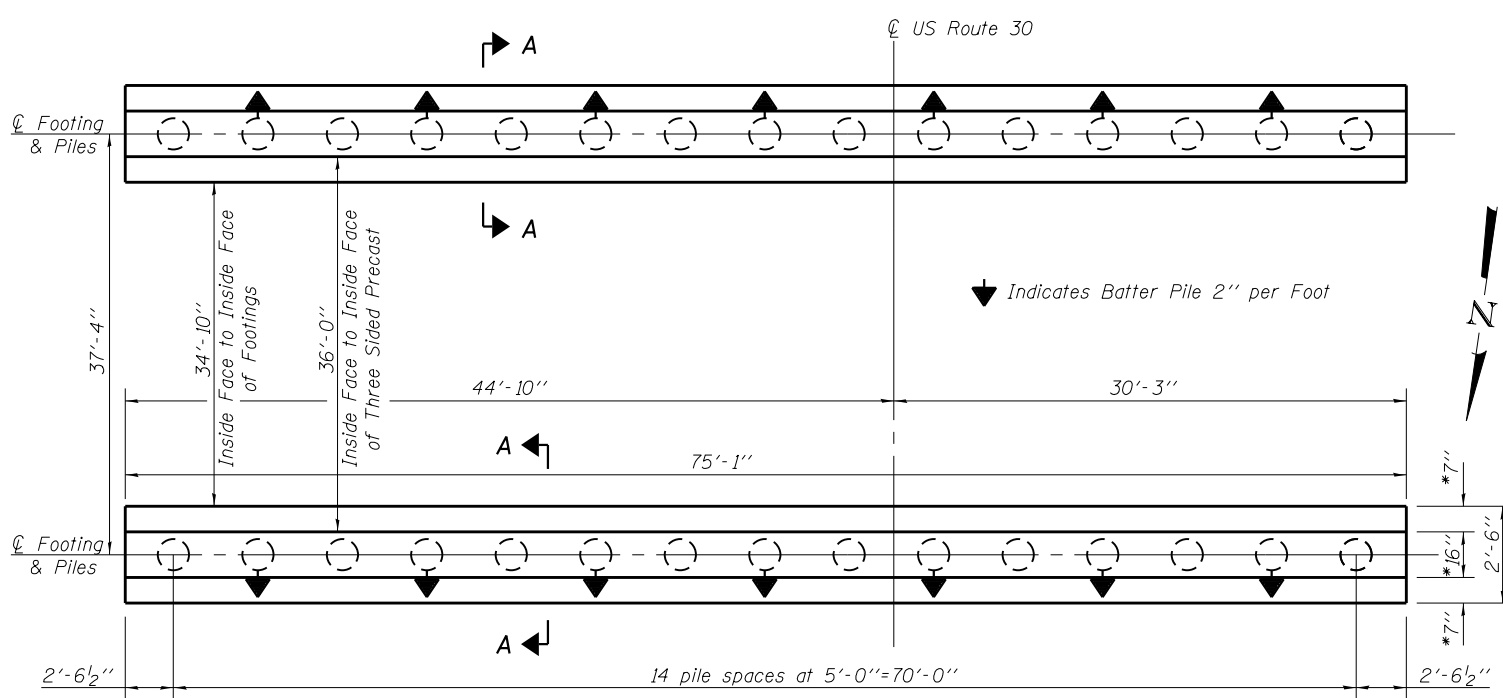
**FOOTING ELEVATION**



**SECTION A-A**



**SECTION C-C**



**FOOTING PLAN**

**PILE DATA**

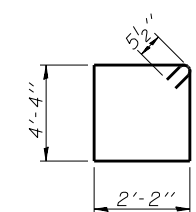
Type: Metal Shell-14 in. dia. x .25 in. walls  
Nominal Required Bearing: 364 kips  
Factored Resistance Available: 200 kips  
Est. Length: 60'  
No. Production Piles: 29  
No. Test Piles: 1

\*Based on a Hy-Span section.  
May vary depending on manufacturer's specifications.

**Notes:**

Piles shall be driven through 18" diameter precored holes extending to elevation 618.00 according to Article 512.09(c) of the Standard Specifications. Cost included in driving piles. Cost of Precast Headwalls is included in the cost of Three Sided Precast Concrete Structures. Bars indicated thus 6x2-#6 etc. indicates 6 lines of bars with 2 lengths per line. Cost of coping, railings, parapets and anchorage slabs included with MSE wall drawings.

**BAR s(E)**

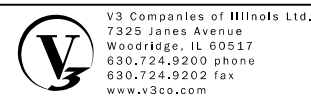


**MINIMUM BAR LAP**

#6 = 3'-10"

**TWO FOOTINGS  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
p(E)	48	#6	39'-4"	
s(E)	124	#5	13'-11"	□
Concrete Structure			Cu. Yd.	69.5
Reinforcement Bars, Epoxy Coated			Pound	4,640
Furnishing Metal Shell Piles, 14" x 0.25"			Foot	1,740
Driving Piles			Foot	1,740
Test Pile, Metal Shell			Each	1



USER NAME =	DESIGNED - WJV	REVISOR
PLOT SCALE =	CHECKED - CJB	REVISION
PLOT DATE =	DRAWN - WJV	REVISION
	CHECKED - CJB	REVISION

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FOOTING AND HEADWALL DETAILS  
STRUCTURE NO. 016-1415  
SHEET NO. 2 OF 7 SHEETS**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
353	11-Y-A	COOK	354	282
CONTRACT NO. 60R19				
ILLINOIS FED. AID PROJECT				