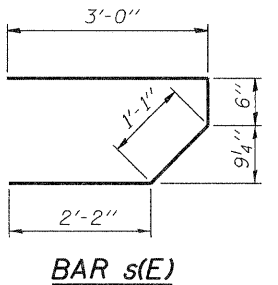
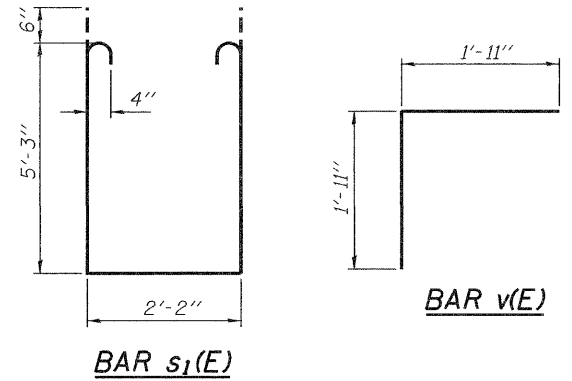


**INSIDE ELEVATION OF PARAPET**



**BAR s(E)**

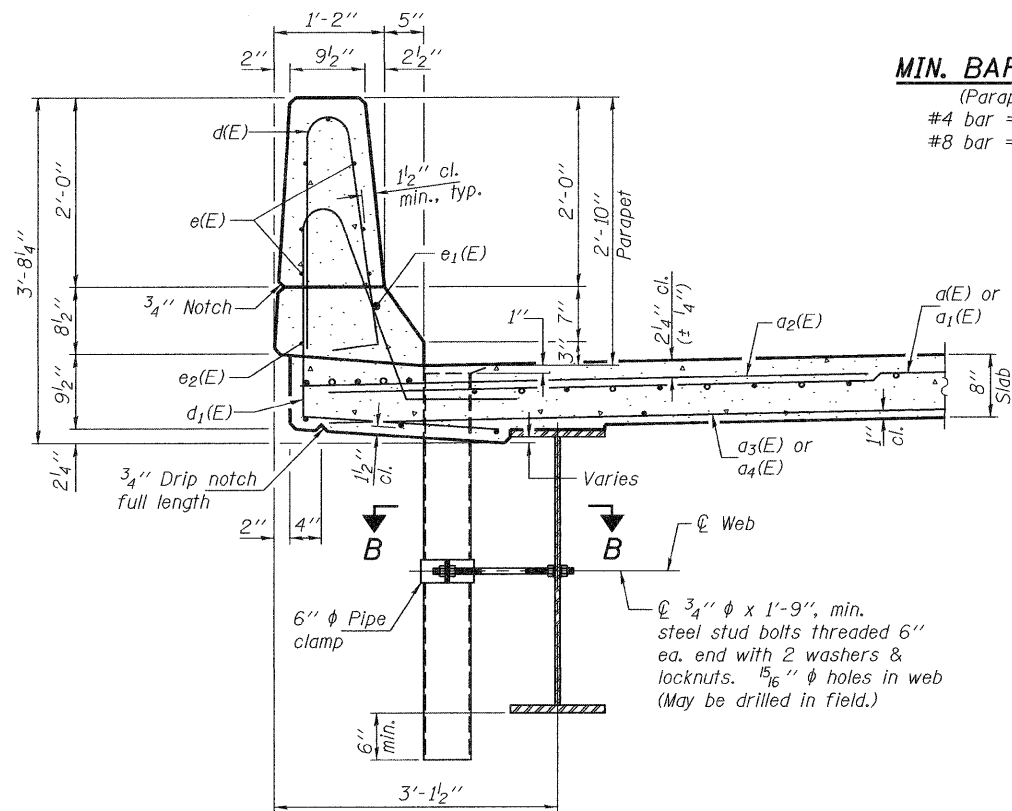


**BAR v(E)**

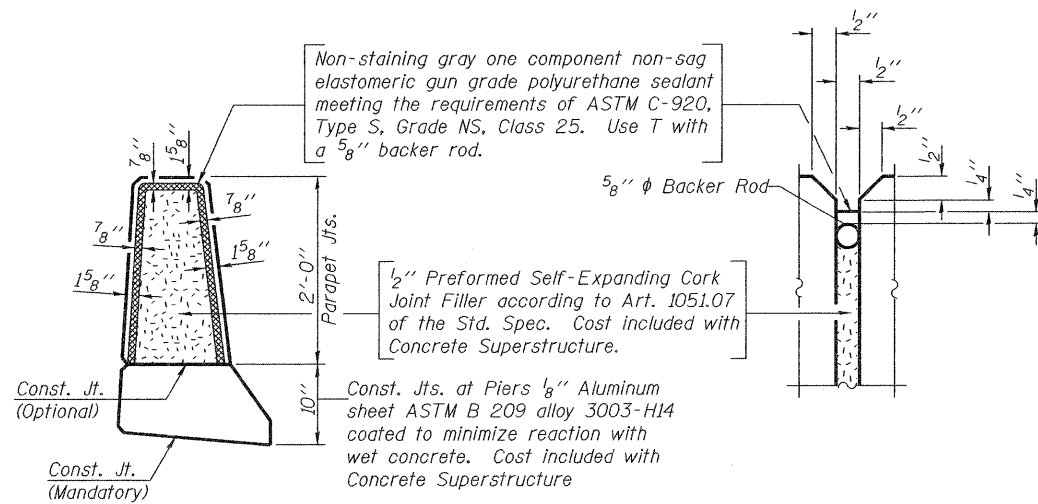
**BAR s1(E)**

**MIN. BAR LAPS**

(Parapet)  
 #4 bar = 2'-0"  
 #8 bar = 5'-2"



**SECTION THRU PARAPET**



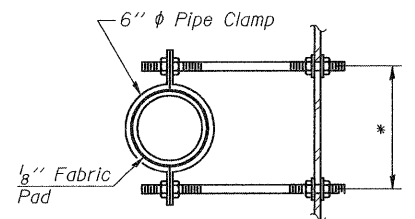
**PARAPET JOINT DETAILS**

Notes:  
 Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.  
 Galvanize clamping device according to AASHTO M232. Cost of clamping device and inserts is included with Floor Drains.  
 Floor drains need not be painted.

**SUPERSTRUCTURE BILL OF MATERIAL**

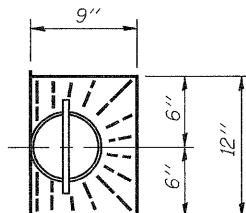
Bar	No.	Size	Length	Shape
d(E)	215	#5	17'-6"	—
a1(E)	215	#5	20'-9"	—
a2(E)	430	#6	6'-6"	—
a3(E)	140	#5	20'-1"	—
a4(E)	140	#5	16'-8"	—
b(E)	172	#5	31'-5"	—
b1(E)	185	#5	25'-9"	—
d(E)	254	#5	5'-7"	—
d1(E)	254	#5	7'-8"	—
e(E)	84	#4	19'-0"	—
e1(E)	8	#8	32'-10"	—
e2(E)	10	#4	24'-9"	—
m(E)	10	#6	17'-7"	—
m1(E)	10	#6	20'-10"	—
m2(E)	10	#6	6'-4"	—
m3(E)	4	#6	2'-10"	—
m4(E)	8	#6	8'-2"	—
m5(E)	12	#6	10'-5"	—
m6(E)	4	#6	6'-9"	—
s(E)	82	#5	6'-9"	—
s1(E)	74	#4	13'-8"	—
v(E)	82	#5	3'-10"	—
Reinforcement Bars, Epoxy Coated		Pound		36790
Concrete Superstructure		Cu. Yds.		179.7

Bars indicated thus 1 x 3-#5 etc. indicates 1 line of bars with 3 lengths per line.

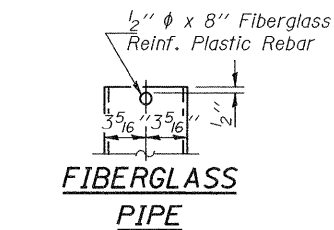


**SECTION B-B**

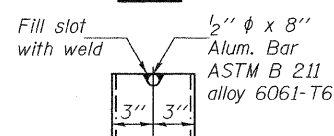
\*Dimension as required by Pipe Clamp



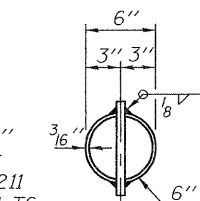
**TOP PLAN**



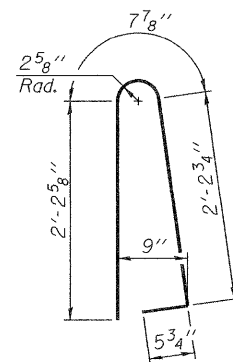
**FIBERGLASS PIPE**



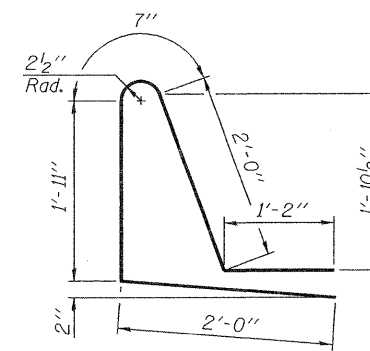
**ALUMINUM TUBE**



**TOP PLAN (Showing Aluminum Tube)**



**BAR d(E)**



**BAR d1(E)**

DESIGNED - Michael D. Rolape  
 CHECKED - Jessica C. Forrest  
 DRAWN - h.f. duong  
 CHECKED - MDR/JCF

EXAMINED - *Thomas J. Damagala*  
 ENGINEER OF BRIDGE DESIGN  
 PASSED - *h.f. duong*  
 ENGINEER OF BRIDGES AND STRUCTURES

DATE - 5/10/2011

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS STRUCTURE NO. 073-0036**  
 SHEET NO. 12 OF 24 SHEETS

F.A.P. RTE. 869	SECTION 1B-2	COUNTY PERRY	TOTAL SHEETS 299	SHEET NO. 116
			CONTRACT NO. 98797	
ILLINOIS FED. AID PROJECT				