

**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	860	#5	32'-6"	—
a1(E)	688	#5	32'-0"	—
a2(E)	430	#6	6'-6"	—
a3(E)	64	#5	11'-4"	—
a4(E)	8	#5	23'-9"	—
a5(E)	40	#5	25'-9"	—
a6(E)	8	#5	4'-6"	—
a7(E)	16	#5	1'-6"	—
b(E)	924	#5	28'-5"	—
b1(E)	567	#6	18'-1"	—
b2(E)	672	#5	26'-4"	—
b5(E)	220	#4	27'-11"	—
c1(E)	287	#5	25'-6"	—
c2(E)	574	#5	1'-4"	—
d(E)	626	#5	5'-7"	—
d1(E)	626	#5	7'-8"	—
e(E)	32	#4	10'-2"	—
e1(E)	64	#4	9'-9"	—
e2(E)	84	#4	17'-7"	—
e3(E)	84	#4	19'-6"	—
e4(E)	8	#4	27'-10"	—
e5(E)	12	#4	21'-1"	—
e6(E)	8	#8	29'-6"	—
e7(E)	8	#8	9'-9"	—
e8(E)	12	#8	23'-3"	—
e9(E)	4	#8	10'-2"	—
x1(E)	120	#5	4'-1"	—
x2(E)	6	#5	6'-9"	—
x3(E)	33	#5	7'-2"	—
x4(E)	25	#5	7'-7"	—
x5(E)	16	#5	7'-11"	—
x6(E)	20	#5	8'-4"	—
x7(E)	2288	#4	3'-0"	—
x8(E)	572	#4	3'-6"	—
Reinforcement Bars, Epoxy Coated		Pound	152,790	
Concrete Superstructure		Cu. Yds.	695.7	

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

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

Non-staining gray one component non-sag elastomeric gun grade polyurethane sealant meeting the requirements of ASTM C-920, Type S, Grade NS, Class 25, use T with a 5/8" backer rod.

PARAPET JOINT DETAILS

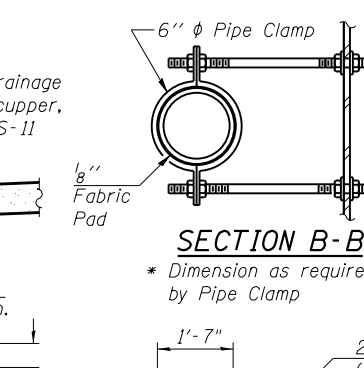
Notes:

Drains shall be located clear of all diaphragms. The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coatings Spec. SSPC-SPI prior to painting. 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.

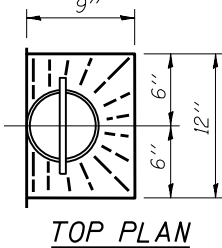
Hatched area to be poured after superstructure forms have been removed. Quantity of concrete included with Concrete Superstructure.

2" @ rt. angles 50° F
For details of expansion joint, see sheet 15 of 29.

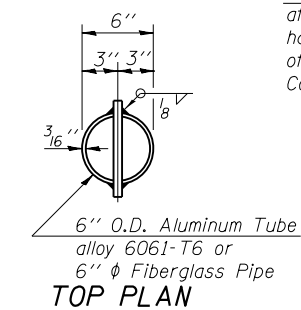
SECTION THRU PARAPET



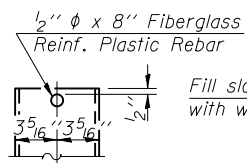
TOP PLAN



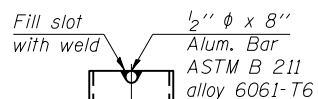
TOP PLAN



FIBERGLASS PIPE



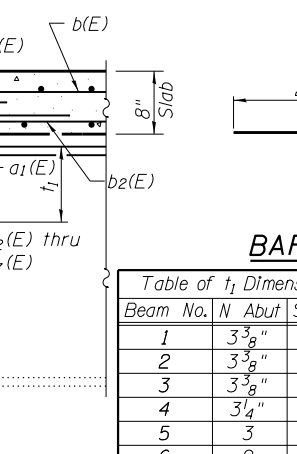
ALUMINUM TUBE



SECTION A-A

* Quantity of x7(E) & x8(E) is estimated. Actual quantities will be determined in field. b5(E) & x7(E) shall be used when fillets are ≥ 4" but < 9" b5(E) & x8(E) shall be used when fillets are > 9"

BARS x7(E) & x8(E)



BARS x2(E) THRU X6(E)

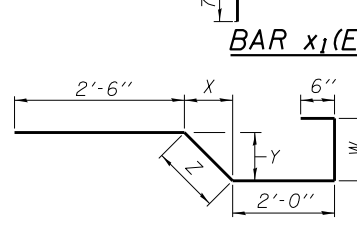


Table of t1 Dimensions

Beam No.	N. Abut	S. Abut
1	3 3/8"	3 3/8"
2	3 3/8"	3 3/8"
3	3 3/8"	3 3/8"
4	3 1/4"	3 3/8"
5	3	3
6	9	9 1/2"
7	7 1/2"	7 7/8"
8	6 8/8"	6 8/8"
9	4 1/2"	4 3/4"
10	3	3"

Table of t1 Dimensions

x bar	Dimensions				N. Abut. of Beam No.:	S. Abut. of Beam No.:	Total No. of Bars
	W	X	Y	Z			
x2(E)	10"	7 3/8"	7 3/8"	10 3/8"	10**	1**	6
x3(E)	12"	9 3/8"	9 3/8"	13 1/4"	1**,2,3,4,9	2	33
x4(E)	14"	11 3/8"	11 3/8"	16 1/8"	5***	3,4,9,10**	25
x5(E)	16"	13 3/8"	13 3/8"	18 1/8"	8	5***,8	16
x6(E)	18"	15 3/8"	15 3/8"	21 1/4"	6***,7	6***,7	20

** Indicates bars placed on only one side of beam.
*** Indicates 3 bars placed on one side of beam and 1 bar placed on opposing side.

S-D2 8-31-12
BENTON & ASSOCIATES, INC.
QUIGG ENGINEERING, INC.

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS
STRUCTURE NO. 060-0104**

SHEET NO. 11 OF 29 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	60-2HB-2	MADISON	52	29
CONTRACT NO. 76G10				

ILLINOIS FED. AID PROJECT

FILE NAME	USER NAME	DESIGNED	REVISIONS
0600104-76G10-011-SuperstructureDetails01.dgn		DRB	DRB
		MBH	MBH
		TF	TF
		JK	JK