

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

330'-6" End to end parapet

Parapet joint spacing

16'-1"

4-Parapet Joint Spaces at 16'-2" = 64'-8"

18'-6"

18'-6"

5-Parapet Joint Spaces at 19'-0" = 95'-0"

Centerline of Bridge (Symmetrical)

361- #5 d(E) bars at 11" cts.

Cut 3- #5 d(E) bars to fit taper, typ.

2'-0" typ.

7- #4 e4(E) bars See Section thru Parapet

7- #4 e(E) bars See Section thru Parapet

7- #4 e(E) bars See Section thru Parapet

7- #4 e7(E) bars in 5 parapet panels. See Section thru Parapet

1- #8 e1(E) bar Front Face

1- #8 e1(E) bar Front Face

1- #4 e(E) bar Back Face

1- #4 e(E) bar Back Face

1 x 3- #8 e3(E) bar, Front Face

1 x 3- #4 e2(E) bar, Back Face

1 x 4- #8 e6(E) bar, Front Face

1 x 4- #4 e5(E) bar, Back Face

Aluminum sheeted joints in base of parapet

Bend 1- #4 e(E) bar to fit taper, typ.

5" typ.

2'-6" typ.

3"

1'-2" 5"

Technical drawing of a parapet cross-section showing dimensions and reinforcement details. The drawing includes the following dimensions and labels:

- Overall Width:** 3'-2" (Total), with segments of 1'-2", 9 1/2", and 5".
- Vertical Dimensions:**
 - Top section: 2'-0"
 - Parapet height: 2'-10"
 - Base section: 3'-9 7/8"
 - Slab thickness: 8"
 - Base offset: 6" min.
- Reinforcement Details:**
 - Top Reinforcement:** d(E), e(E), e4(E) or e7(E), e1(E), e3(E) or e6(E).
 - Bottom Reinforcement:** e(E), e2(E) or e5(E), d1(E), a2(E), a(E) or a3(E), a1(E) or a4(E).
 - Bar Spacing:** 1 1/2" cl. min., typ.
 - Bar Size:** 1 x 3 #4 ez(E) Bar, Buck Face.
 - Other Labels:** 3/4" Drip notch full length, 3/4", 3/4", 2", 4", 1 1/2" cl., 2 1/4" cl. (± 1/4"), 1" cl., 3", 2", 4", 3'-1 1/2".

The image contains three technical drawings of reinforcement bars, each with its dimensions and name labeled below it.

- BAR d(E)**: A U-shaped bar with a top radius of $2\frac{5}{8}''$ Rad. The total height is $2'-2\frac{5}{8}''$. The top horizontal segment is $7\frac{7}{8}''$. The vertical segment is $2'-2\frac{3}{4}''$. The bottom horizontal segment is $9''$. The bottom vertical segment is $5\frac{3}{4}''$.
- BAR d1(E)**: A U-shaped bar with a top radius of $2\frac{1}{2}''$ Rad. The total height is $1'-11''$. The top horizontal segment is $7''$. The vertical segment is $1'-10\frac{1}{2}''$. The bottom horizontal segment is $2'-1''$. The bottom vertical segment is $3\frac{3}{4}''$. The bottom horizontal segment is $1'-2''$. The bottom vertical segment is $1'-11''$.
- BAR s1(E)**: A U-shaped bar with a top radius of $6''$. The total height is $4'-7''$. The top horizontal segment is $4''$. The bottom horizontal segment is $2'-2''$.

#4 bar = 1'-8"
#5 bar = 2'-2"
#6 bar = 2'-7"
#8 bar = 4'-6"

The figure contains two technical drawings illustrating bridge pier joint details.

- Left Drawing:** A cross-sectional view of a pier joint. It shows a central core of "Non-staining gray one component non-sag elastomeric gun grade polyurethane sealant" meeting ASTM C-920 requirements. This sealant is surrounded by a layer of " $\frac{1}{2}$ " Preformed Self-Expanding Cork Joint Filler". The entire assembly is encased in a concrete superstructure. Dimensions include a total height of 2'-0" for the main section, a 10" base section, and various thicknesses for the sealant ($\frac{7}{8}$ ", $\frac{5}{8}$ ") and filler ($\frac{7}{8}$ ". Labels indicate "Const. Jts. at Piers $\frac{1}{8}$ " Aluminum sheet" and "ASTM B 209 alloy 3003-H14 coated to minimize reaction with wet concrete.".
- Right Drawing:** A side elevation view showing the joint's profile. It features a "5/8" ϕ Backer Rod" and dimensions for the joint width ($\frac{1}{2}$ " and $\frac{1}{4}$ ") and depth ($\frac{1}{2}$ ").

1'-7"

2- #5 a5(E) bars at 4" cts.
(1'-6" long) tied to bottom of
top reinforcement mat. typ.

2" cl.
typ.

PROFESSIONAL DESIGN FIRM LICENSE #184-001084



HANSON
Hanson Professional Services Inc.

29 SHEETS

TEST NO.	38436
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SUPERSTRUCTURE DETAILS
F.A.P. 614 (IL 78) OVER WOLF LAKE
(PUBLIC BODY OF WATER)
SECTION 144 (B-2)
MASON COUNTY
STA. 862+41.25
STRUCTURE NUMBER 063-0500

Bar	No.	Size	Length	Shape
a1(E)	610	#5	17'- 7"	—
a1(E)	397	#5	16'- 11"	—
a2(E)	1220	#6	6'- 0"	—
a3(E)	610	#5	20'- 7"	—
a4(E)	397	#5	19'- 11"	—
a5(E)	48	#5	1'- 6"	—
b(E)	833	#5	32'- 0"	—
b1(E)	234	#6	24'- 4"	—
b2(E)	72	#5	17'- 1"	—
d(E)	722	#5	5'- 7"	
d1(E)	722	#5	7'- 9"	
e(E)	64	#4	18'- 2"	—
e1(E)	8	#8	18'- 2"	—
e2(E)	12	#4	27'- 11"	—
e3(E)	12	#8	29'- 10"	—
e4(E)	140	#4	15'- 9"	—
e5(E)	8	#4	24'- 11"	—
e6(E)	8	#8	27'- 1"	—
e7(E)	70	#4	18'- 8"	—
m(E)	4	#6	16'- 10"	—
m1(E)	6	#6	17'- 9"	—
m2(E)	24	#6	9'- 4"	—
m3(E)	8	#6	6'- 2"	—
m4(E)	4	#6	2'- 11"	—
m5(E)	2	#6	1'- 5"	—
m6(E)	4	#6	19'- 10"	—
m7(E)	6	#6	20'- 9"	—
m8(E)	2	#6	4'- 5"	—
s(E)	82	#5	6'- 0"	
s1(E)	72	#4	12'- 4"	
v(E)	76	#5	3'- 4"	
Reinforcement Bars, Epoxy Coated			Pound	106070
Concrete Superstructure			Cu. Yds.	444.5

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