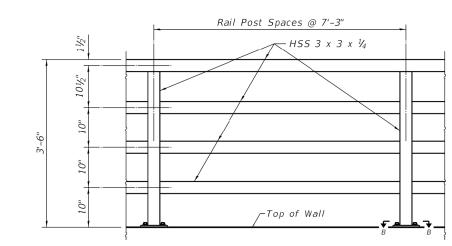


11/2"

MATERIAL SPLICE



Notes:

grade C.

grade 50.

splice inserts shown

See Special Provisions.

expansion joints.

Place reinforcement bars to miss anchor rod locations. CVN testing is not required for the HSS tubing used

All HSS tubing used for the Parapet Railing shall be CVN tested

All HSS tubing used for the Parapet Railing shall be ASTM A500

All heavy hex nuts shall be according to ASTM A 563 grade DH. All fully threaded anchor rods shall be ASTM F1554 grade 105.

Rail splice inserts may be built out of bent plates of the same

The post base plate shall be fastened to the curb snug

thicknesses and outside geometry limits as the 4 plate rail

- All steel rail elements shall be galvanized according to

Article 509.05 of the Standard Specifications. All of these elements, except the pipe handrail, chain link fence fabric and

ties, shall also be powder coated. At a minimum, the powder

wash, a gray zinc rich primer coat, and a black top coat.

be vinyl coated black according to Section 509 and Article

See sheet 12 of 18 for dimensions of concrete openings at

The galvanized chain link fence fabric and ties shall

[100,6.27(a)(1)d of the Standard Specifications.

PIPE HANDRAIL

- Chain link fabric

coating process shall consist of a zinc phosphate pretreatment/

tight and given an additional 1/8" turn.

All base plates used for the Paraper Railing shall be AASHTO M270

according to Article 1006.34(b) of the Standard Specifications.

SECTION B-B

-HSS 3 x 3 x 1/4

Top & Bottom

Typ.>_{3∕16}√

Ç ¾" Ø x 1" Self-tapping

HSS tubing and pilot holes

per manufacturer in plates

HHCS in 1/2" Ø holes in

11/5"

11/2"

P. ¾" x 1¾" x 9"

Each side

PL 3/8" x 17/8" x 9"

EXPANSION SPLICE

1/4" ○ x 1" Drive pin -

at exp. jt.

at 50° F

TABLE OF DIMENSIONS

Location	T	Α	В	С	D	Е
Over Strip Seal Jt.	≤4"	21/2"	1'-2"	2'-4"	6"	7"
Over Finger or Modular Jt.	≤9½"	5½"	1'-73/4"	3'-31/2"		
Over Finger or Modular Jt.	≤15"	8½"	2'-11/4"	4'-21/2"		

- HSS 3 x 3 x 1/4 P 3/8" x 13/8" x C

Top & Bottom

P 3/8" x 17/8" x C

Each side

; total movement based on total temperature range from -20°F to 120°F along centerline of roadway at expansion joint.

Showing Typical Panel (Galvanized Only, no Powder Coat) per manufacturer in HSS tubing, typ. Chain link fabric -31/2" Bicycle side -Bicycle side @ 50° F HSS 3 x 3 x $\frac{1}{4}$, typ. - HSS 3 x 3 x ¼, typ. Bent $P_2 V_4'' \times 8V_2'' \times 4'-0''$ long, typ. --Bent $P_2 V_4'' \times 8V_2'' \times 4'-0''$ long, typ.

SECTION A-A

¾" ⊘ x 1" Self-tapping HHCS in

1/2" ∅ holes in plates & pilot holes

Item	Unit	Quantity	
Bicycle Railing	Foot	100	
Parapet Railing	Foot	100	
Pipe Handrail	Foot	37	

BILL OF MATERIAL

(Sheet 2 of 2)				
BICYCLE RAILING AND PARAPET RAILING				
STRUCTURE No. 098-3751				

SHEET 11 OF 18 SHEETS

RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEE	
nd St	HC BRIDGE REPAI	WHITESIDE	37	25		
			CONTRACT No. 46944			
	ILLINOIS	FED. A	ID PROJECT			

VEENSTRA & KIMM INC. A Kleinfelder Company

Typ. $>_{3/16}V$

USER NAME = 10/24/2025 DESIGNED - DHC REVISED CHECKED - MAH REVISED DRAWN JEB REVISED PLOT DATE = 8/22/2025 CHECKED - MAH/DHC REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION **DEPARTMENT OF NATURAL RESOURCES**

/2\ REV. 10/24/25

10/24/2025 1:13:17 PM