

TYPICAL ELEVATIONS

APPROVED BY: \_\_\_\_\_  
DIRECTOR, BUREAU OF BRIDGES AND STRUCTURES

APPROVED BY: \_\_\_\_\_  
DIRECTOR, BUREAU OF FIELD SERVICES

APPROVED BY: \_\_\_\_\_  
DIRECTOR, BUREAU OF DEVELOPMENT



DEPARTMENT DIRECTOR  
BRADLEY C. WIEFERICH, PE

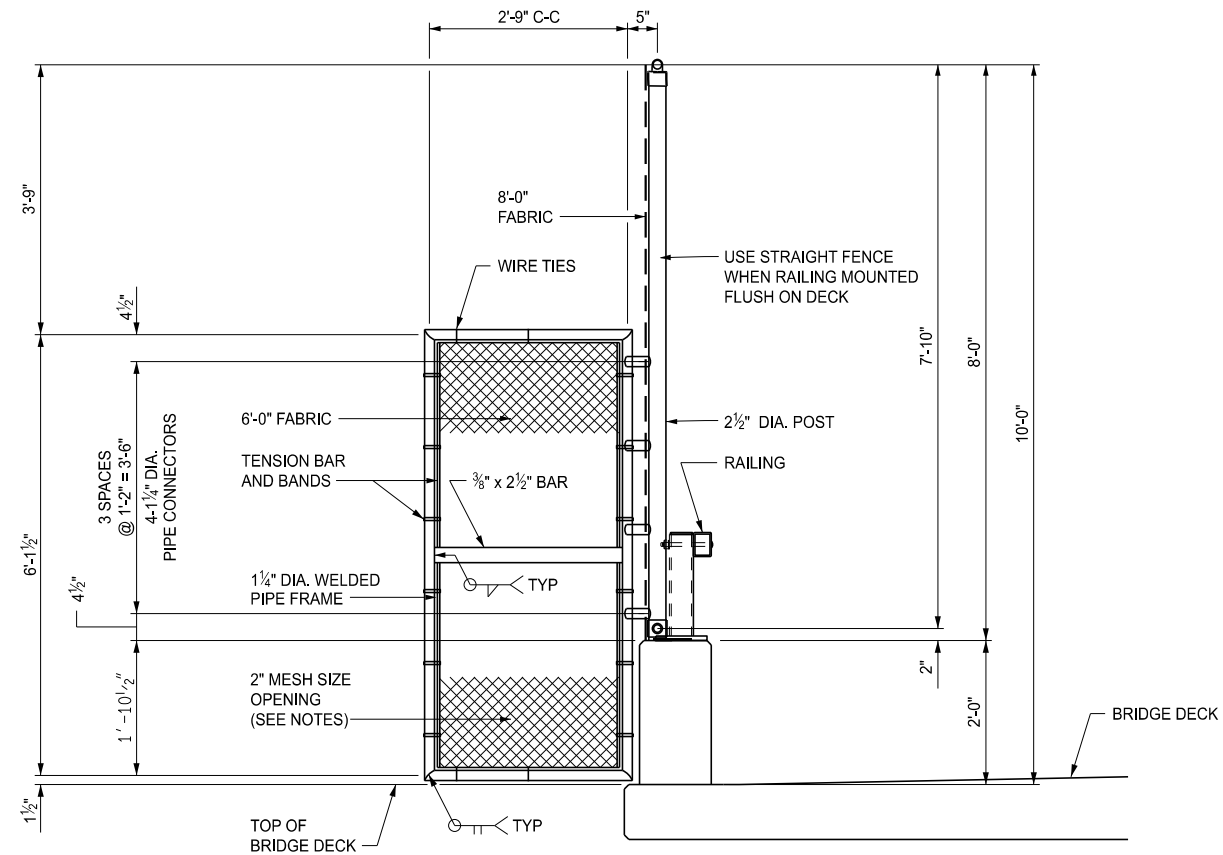
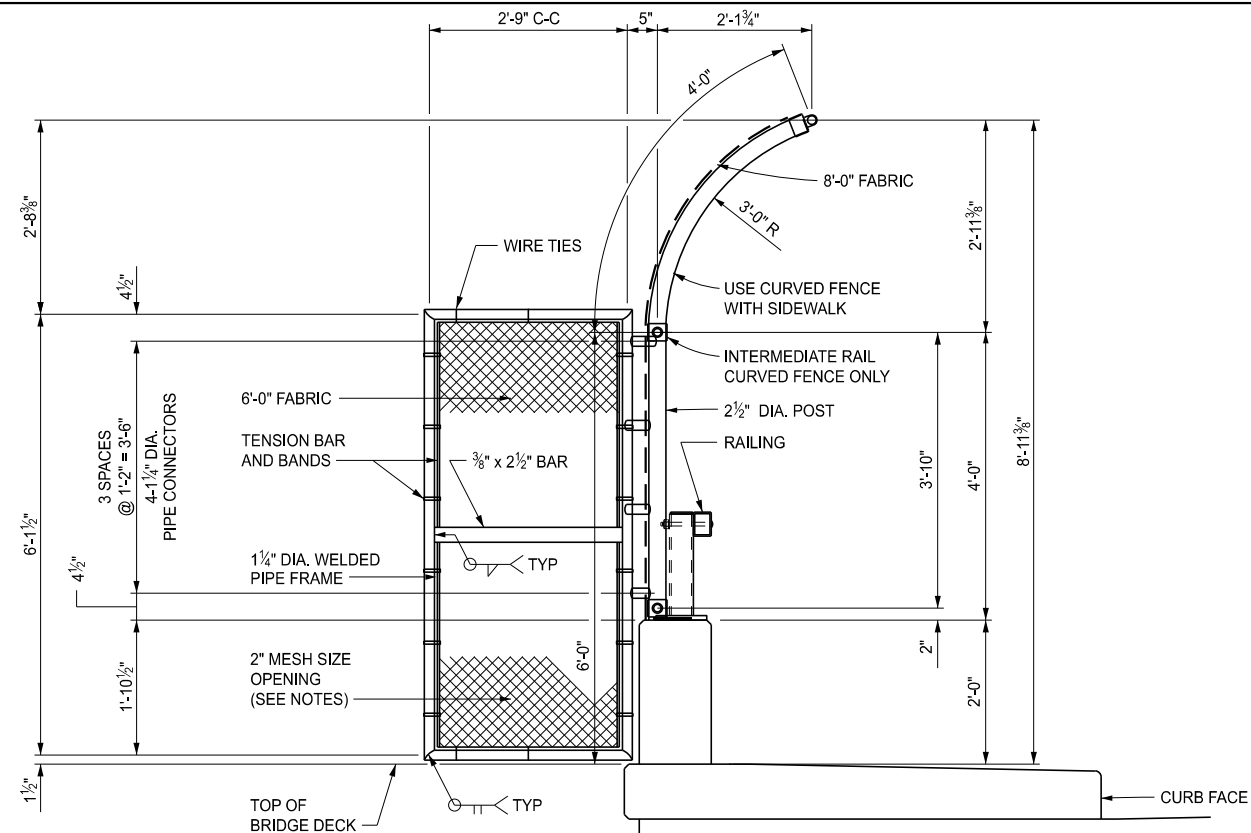
STANDARD PLAN FOR  
FENCING FOR BRIDGE RAILING,  
AESTHETIC PARAPET TUBE

(SPECIAL DETAIL)  
FHWA APPROVAL

12/10/2025  
PLAN DATE

B-41-D

SHEET  
1 OF 3



ANTI-CLIMB / POST DETAIL

INSTALL ANTI-CLIMB SHIELD AT THE SECOND POST FROM THE END,  
AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER



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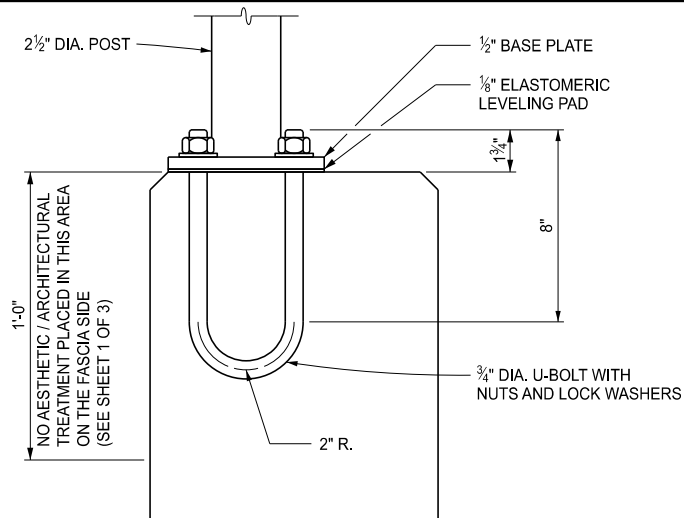
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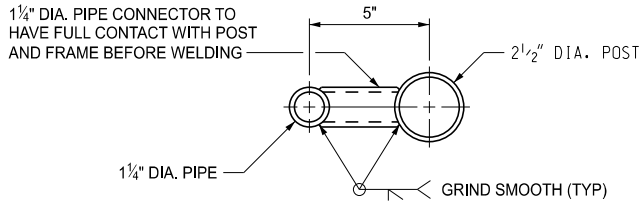
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SECT



## BASE PLATE DETAILS



## EXPANSION SLEEVE DETAIL

## PIPE CONNECTION DETAIL

USE AT ANTI-CLIMB SHIELD ONLY

USE 2½" NOMINAL (2.875" O.D.) PIPE FOR ALL FENCE POSTS. USE 1¼" NOMINAL (1.66" O.D.) PIPE FOR ANTI-CLIMB SHIELD FRAMES, ACCORDING TO ASTM F669, CLASS 1C.

USE 1¼" NOMINAL (1.66" O.D.) PIPE FOR HORIZONTAL RAILS, ACCORDING TO ASTM F669, CLASS 1C OR ASTM F1083.

GALVANIZE ALL FENCE COMPONENTS, UNLESS OTHERWISE INDICATED, ACCORDING TO THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

FURNISH ALL POSTS, ANTI-CLIMB SHIELDS, AND OTHER FABRICATED COMPONENTS AS "BLACK" PIPE, THEN GALVANIZE THEM AFTER FABRICATION.

REPAIR DAMAGED GALVANIZED SURFACES (NEW AND EXISTING) ACCORDING TO THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

USE #9 GAUGE MESH FOR FENCE FABRIC. GALVANIZE OR ALUMINUM-COAT THE FABRIC. ACCORDING TO THE STANDARD SPECIFICATIONS FOR CONSTRUCTION, PROVIDE A 2" MESH SIZE OPENING UNLESS THE TRAFFIC AND SAFETY DIVISION APPROVES A 1" MESH SIZE OPENING AND NOTES IT ON THE DESIGN PLANS. APPLY ALL DETAILS FROM THE STANDARD PLAN REGARDLESS OF MESH SIZE.

INSTALL GALVANIZED  $\frac{3}{8}$ " DIAMETER TRUSS RODS DIAGONALLY FROM THE TOP CONNECTION CLIP AT EACH TENSION BAR TO THE ADJACENT POST, EXCEPT ACROSS EXPANSION JOINTS AND AT LIGHT STANDARDS WITH A CURVED FENCE DETAIL. INSTALL TRUSS RODS WHEN TWO OR MORE CONTINUOUS PANELS OF FABRIC ARE PRESENT.

INSTALL ALL POSTS PLUMB AND IF NEEDED, SHIM THEM USING NON-METALLIC SHIMS  
APPROVED BY THE ENGINEER. INCLUDE ALL SHIMMING COSTS IN THE PAY ITEM  
"FENCE, STRUCTURE."

PLACE THE GROUNDING CABLE IN A NON-METALLIC CONDUIT, FROM THE END POST CONNECTION TO THE GROUND ROD CONNECTION. SECURE THE CONDUIT TO THE STRUCTURE USING EITHER EXPANSION BOLTS OR ADHESIVE-ANCHORED BOLTS WITH GALVANIZED METAL STRIPS, AS APPROVED BY THE ENGINEER.

IF INSTALLING A GROUND ROD IS IMPRACTICAL, CONNECT THE GROUNDING CABLE TO THE NEAREST LIGHT STANDARD USING A MECHANICAL CLIP. OBTAIN PERMISSION FROM THE LOCAL PUBLIC LIGHTING AUTHORITY BEFORE MAKING THIS CONNECTION.


USE THE MANUFACTURER'S STANDARD OVERSIZED SLEEVES, CRIMPED IN THE MIDDLE FOR HORIZONTAL RAIL EXPANSION JOINTS.

DO NOT USE SLIP FORMING FOR BRIDGE RAILING, AESTHETIC PARAPET TUBE. CAST ALL RAILINGS IN PLACE.

POSITION U-BOLTS FOR FENCING BASE PLATES ACCURATELY ACCORDING TO THE PLANS  
HOLD THEM FIRMLY IN PLACE USING A TEMPLATE.

DO NOT INSTALL THE HSS 2" x 2" x 1/8" RAIL ON BRIDGE RAILING, AESTHETIC PARAPET  
TUBES USED IN COMBINATION WITH PEDESTRIAN FENCING.

INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO INSTALL PEDESTRIAN FENCING IN THE PAY ITEM "FENCE, STRUCTURE."

 <b>MDOT</b> Michigan Department of Transportation	STANDARD PLAN FOR <b>FENCING FOR BRIDGE RAILING,          AESTHETIC PARAPET TUBE</b>		
	(SPECIAL DETAIL) FHWA APPROVAL	12/10/2025 PLAN DATE	<b>B-41-D</b>  SHEET 3 OF 3