GENERAL NOTES

(6) TENSION BANDS AND BRACE BANDS SHALL BE 3/8 INCH X 1 INCH DIAMETER X 5/8 INCH GALVANIZED BOLTS. ONE TENSION BAND SHALL BE SUPPLIED FOR EACH TENSION PLATE. BANDS SHALL BE GALVANIZED ACCORDING TO 711.02.

(7) LUNCH RAIL CLAMPS OR BOULETTES SHALL BE STAINLESS STEEL FOR USE IN PROPOSED FRAMEWORK. STAINLESS STEEL CLAMPS SHALL BE SIZED TO 105% OF FACTORED LOAD AND MARKED TO IDENTIFY INTERIOR POSTS. INSTALL USING 1/4 INCH X 8 INCH LAMINATE BOLTS, GALVANIZED ACCORDING TO 711.02.

(8) MALLEABLE OR CAST IRON FITTINGS SHALL BE USED FOR END POST CAPS, HALF-ROUND AND LINE POST CAPS AND LINE OR TOP RAIL ENDS. ALL FITTINGS SHALL BE GALVANIZED ACCORDING TO 711.02.

(9) TENSION WIRE SHALL BE ALUMINIZED 0.177 INCH DIAMETER STEEL COIL SPRING WIRE, MORE CORRECTING TO GALVANIZED. ALL TENSION WIRE IS FLEXIBLE BUT NOT MORE THAN 3 INCHES MAXIMUM. THE MAXIMUM SAG IN THE WIRE SHALL BE 3/4 INCH TENDED.

(10) FABRIC TIES AND HOG RINGS SHALL BE 0.080 INCH GALVANIZED PVC COATED STEEL WIRE, 9/16 INCH LONG. TO CONNECT THE FABRIC TO THE TENSION WIRE USING 1/4 INCH HOG RINGS ON 12 INCH CENTER. THE FABRIC TIES SHALL NOT EXCEED 1/2 INCH BETWEEN POLES. THE PVC COATING MUST BE GREY IN COLOR CLOSELY APPROACHING FEDERAL STANDARD 595A.

(12) ADJUSTABLE TRUSS RODS: IF THE FENCE IS TO COMPLIES ALONG A STRUCTURAL EXPANSION JOINT INSTALL ADJUSTABLE TRUSS RODS ONLY ALONG THE PANELS ON EACH 4 FEET FOR EACH HORIZONTAL RAIL. THE PVC COATING SHALL BE 3 INCH DIAMETER STEEL GALVANIZED ACCORDING TO 711.02.

(13) DOUBLE WRAP FABRIC TIES SHALL BE 0.091 INCH DIAMETER ALUMINUM 3/4 INCH X 1 INCH DEPTH COATING WIRE, 5/8 INCH LONG. TO CONNECT THE FABRIC TO THE POSTS AT 12 INCH SPACING NOT TO EXCEED 1/2 INCH BETWEEN POLES. THE PVC COATING SHALL BE GREY IN COLOR CLOSELY APPROACHING FEDERAL STANDARD 595A.

(14) FABRIC: SHALL CONSIST OF A 1 INCH DIAMETER WIRE USING 0.055 INCH DIAMETER WIRE WITH SNAP CONNECTING TO AEMET 69A Classification 36B OR 50B, 2 INCHES HIGH OR WIDER. THE PVC COATING SHALL BE GREY IN COLOR CLOSELY APPROACHING FEDERAL STANDARD 595A.

(20) EXPANSION SLEEVES: PROVIDE EXPANSION SLEEVES AT LEAST 6 INCHES LONG ON ALL BASE PLATES AND POST PARAPETS ACCORDING TO AASHTO M181. THE SLEEVES SHALL BE MADE OF PVC COATED STEEL. THE PVC COATING SHALL BE 15 INCHES LONG. TO CONNECT THE FABRIC TO THE TOP RAILS OF CURVED FENCES TO THE PVC COATING.

(22) SPECIAL DESIGNS: ARE REQUIRED FOR BUILDINGS WITH 50 FEET ABOVE OR陡50 FEET ABOVE THE NORMAL TERRAIN LEVEL.

(23) PROJECT PLANS: THE DESIGNER SHALL SPECIFY THE TYPE OF FENCE TO BE USED AND PROVIDE A SCHEMATIC DECK PLAN SHOWING THE FENCE POST SPACING.

(24) METHOD OF MEASUREMENT: THE DEPARTMENT WILL MEASURE THE COMPLETED AND ACCEPTED QUANTITIES OF FABRIC TO BE MEASURED ALONG THE BOTTOM OF THE FENCE FROM CENTER TO CENTER OF END POSTS.

(25) BASIS OF PAYMENT: THE DEPARTMENT WILL PAY FOR THE COMPLETED AND ACCEPTED QUANTITIES OF MATERIALS AS FOLLOWS:

ITEM | UNIT | DESCRIPTION | SPECIAL VANDAL PROTECTION FENCE |
--- | --- | --- | --- |
601 | 6 FT STRAIGHT, COATED FABRIC | 6 FT STRAIGHT, COATED FABRIC |
602 | 8 FT STRAIGHT, COATED FABRIC | 8 FT STRAIGHT, COATED FABRIC |
603 | 10 FT CURVED, COATED FABRIC | 10 FT CURVED, COATED FABRIC |
604 | 12 FT CURVED, COATED FABRIC | 12 FT CURVED, COATED FABRIC |
RAILING TYPES

NOTE: RET. = RETIRED STANDARD BRIDGE DRAWING

AR TYPE PARAPET

SEE STANDARD BRIDGE DRAWING AR-1-57 (RET.), USE CURVED FENCE OR STRAIGHT 8'-0" HIGH FENCE; AS DETRMINED BY CURB OR SIDEWALK WIDTH, AND BASE PLATES BP-1, BP-2, BP-3 OR (BP-4).

AR TYPE ALUMINUM RAILING

SEE STANDARD BRIDGE DRAWING AR-1-57 (RET.) WITH TYPE C POSTS.

BR TYPE PARAPET

SEE STANDARD BRIDGE DRAWINGS BR-2-82, BR-2-88, BR-2-82 (RET.), BR-2-67 (RET.) AND BR-1-65 (RET.). USE CURVED FENCE OR STRAIGHT 8'-0" HIGH FENCE; AS DETERMINED BY CURB OR SIDEWALK WIDTH, AND BASE PLATES BP-1 OR BP-3.

BR TYPE RAILING

SEE STANDARD BRIDGE DRAWINGS BR-2-98, BR-2-82 (RET.), BR-2-67 (RET.) AND BR-1-65 (RET.). USE CURVED FENCE OR STRAIGHT 8'-0" HIGH FENCE, AS DETERMINED BY CURB OR SIDEWALK WIDTH, AND BASE PLATES BP-1 OR BP-3.

DEFLECTOR PARAPET

SEE STANDARD BRIDGE DRAWING BR-2-98.

ALUMINUM RAILING TYPES

WITH TYPE A POSTS

SEE STANDARD BRIDGE DRAWINGS BR-1, BR-1-65 (RET.) & SBR-1-99. USE STRAIGHT 6'-0" HIGH FENCE AND BASE PLATE BP-5.

ALUMINUM RAILING TYPES

WITH TYPE B POSTS

SEE STANDARD BRIDGE DRAWING AR-1-57 (RET.). USE CURVED FENCE OR STRAIGHT 8'-0" HIGH FENCE, AS DETERMINED BY CURB OR SIDEWALK WIDTH, AND BASE PLATES BP-1, BP-2, BP-3 OR BP-4.

ALUMINUM RAILING TYPES

WITH TYPE C POSTS
BR-1-65, BR-2-67 AND BR-2-82 RAILINGS NOT SHOWN.

RAIL FOR BR-2-82, BR-2-67 AND THEN REINSTALLED. TOP ALUMINUM PRIOR TO FENCE INSTALLATION AND EXISTING RAILS SHALL BE REMOVED.

BP-1 SHALL BE USED WITH PS-3 OR PS-4 POST SECTIONS ON CONCRETE PARAPETS WITH HORIZONTAL RAIL ELEMENTS AS SHOWN ON STANDARD BRIDGE DRAWING BR-2-34. DO NOT USE WITH PS-1 OR PS-2 POST SECTIONS. INSTALL FENCE BY REMOVING AND REINSTALLING THE HORIZONTAL RAIL ELEMENTS. BP-1 REQUIRES A SLEEVE. SEE POST SLEEVE DETAILS ON THIS SHEET.

BP-2 SHALL BE USED WITH PS-3 OR PS-4 POST SECTIONS ON CONCRETE PARAPETS WITH HORIZONTAL RAIL ELEMENTS AS SHOWN ON STANDARD BRIDGE DRAWING BR-2-67. POST SLEEVE DETAILS ARE SHOWN ON THIS SHEET.

<table>
<thead>
<tr>
<th>DEPTH (MIN.)</th>
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<tbody>
<tr>
<td>PARAPET</td>
</tr>
<tr>
<td>BASE PLATE 8&quot; x 13&quot; x 1&quot;</td>
</tr>
<tr>
<td>RAIL &amp; POST</td>
</tr>
<tr>
<td>SLEEVE</td>
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</table>

EXISTING ALUMINUM RAIL, SHALL BE REMOVED PRIOR TO FENCE INSTALLATION AND THEN REINSTALLED. TOP ALUMINUM RAIL OF BR-2-98 TYPE B HAILING IS NOT SHOWN.

POST SLEEVE PLAN
POST AND SET SCREWS NOT SHOWN

ANCHOR BOLT NECESSARY TO CLEAR SLOTTED AREA WHERE ANCHOR BOLT IS NEEDED TO CLEAR ANCHOR BOLT.

POST SLEEVE ELEVATION
POST AND SET SCREWS NOT SHOWN

END VIEW BP-1
BP-1 SHALL BE USED WITH PS-3 OR PS-4 POST SECTIONS ON CONCRETE PARAPETS WITH HORIZONTAL RAIL ELEMENTS AS SHOWN ON STANDARD BRIDGE DRAWING BR-2-34. DO NOT USE WITH PS-1 OR PS-2 POST SECTIONS. INSTALL FENCE BY REMOVING AND REINSTALLING THE HORIZONTAL RAIL ELEMENTS. BP-1 REQUIRES A SLEEVE. SEE POST SLEEVE DETAILS ON THIS SHEET.

END VIEW BP-2
BP-2 SHALL BE USED WITH PS-3 OR PS-4 POST SECTIONS ON CONCRETE PARAPETS WITH HORIZONTAL RAIL ELEMENTS AS SHOWN ON STANDARD BRIDGE DRAWING BR-2-67. POST SLEEVE DETAILS ARE SHOWN ON THIS SHEET.

BASE PLATE SHIMS
1/4", 1/8" AND 3/32" THICK

STATE OF OHIO DEPARTMENT OF TRANSPORTATION
**Van Vandal Protection Fence**

**ADM. ER ING. STRUCT. OFFICE OF RLD**

**DATE REVIEWED DESIGNED CHECKED**

**Standard Bridge Drawing**

- CURB/SIDEWALK > 3'-9"
- WIDTH > 2'-6"
- CURB/SIDEWALK MAY VARY

- Post Schematic PS-1 (12'-0" Curved Fence)
- Post Schematic PS-2 (6'-0" Curved Fence)
- Post Schematic PS-3 (6'-0" Straight Fence)
- Post Schematic PS-4 (6'-0" Straight Fence)

**Light Pole Transformer Base**

- Refer to Traffic Standards Construction Drawings for Pole Base Details, Structure Lighting Details and Additional Information. Install 1.66" O.D. Bottom Rail For post Sections PS-1, PS-2 and PS-3 Where Interference With Traffic Railing Posts Does Not Occur.

**Deflected Parapet**


**Notes:**

- See General Notes For Optional Anchorage In New Concrete.
- For Pole Base Details, Structure Lighting Fabric, 2" x 2" x (20" or 16") Galvanized Bar Reinforcement On Both Sides Of Fabric. A 8" - 22" Tension Wire. See Sheet 7-7 For Location Of Tension Wire.
FENCE FABRIC

TRAFFIC RAIL

HOG RING

SAG AT THE MIDPOINT OF THE WIRE SHALL BE 2\(\frac{1}{8}\) AFTER TENSIONING.

NOTE:

FOR TRAFFIC RAILINGS THAT WILL NOT PERMIT THE INSTALLATION OF A BOTTOM LINE RAIL, INSTALL TENSION WIRE. CONNECT TENSION WIRE TO FENCE FABRIC USING HOG RINGS AT 12" MAXIMUM SPACING. TENSION WIRE SHALL SPAN A MAXIMUM OF THREE POST SPACINGS. THE MAXIMUM SPAN AT THE MIDPOINT OF THE WIRE SHALL BE 2\(\frac{1}{8}\) AFTER TENSIONING.