CROSS REFERENCES:
For Section A-A see Sheet 2.
For Traffic Railing Notes and Details see Index 460-470.

Existing Bridge Deck

Final Riding Surface

Existing Curb

Top of Existing Curb

Guardrail Post Assembly with Offset Block (Typ.)

Intermediate Deck Joint

Existing Traffic Railing (Type Varies)

Gutter Line

Front Face of Thrie-Beam Guardrail

Direction of Traffic

PARTIAL PLAN OF RAILING

3'-1½' spacing (Typ. except as noted along Bridge, see Note 2)

1'-2" Min. for non skewed joints. For treatment of skewed Intermediate Deck Joints (see Skew Detail Index 460-470, Sheet 2) (Typ.)

PARTIAL ELEVATION OF INSIDE FACE OF RAILING (Existing Traffic Railing not shown for clarity)

TYPICAL TREATMENT OF RAILING ALONG BRIDGE

NOTES:
1. On approach end provide Index 536-002 (as shown) or other site specific treatment, see Roadway Plans.
   For treatment of trailing end see Roadway Plans.
2. Actual joint dimension and orientation vary. For Intermediate Deck Joints use the Modified Post Spacing at Intermediate Deck Joints Detail, Index 460-470, Sheet 2, as required.
3. Areas where existing structure has been removed shall match adjoining areas and shall be finished flat by grouting or grinding as required. Exposed existing reinforcing steel shall be burned off 1" below existing concrete and grouted over.

10/14/20

REVISED

DESCRIPTION:

REVISION

LAST

REVISED

FY 2020-21

STANDARD PLANS

TRAFFIC RAILING - (THRIE-BEAM RETROFIT)

INDEX

WIDE CURB TYPE 1

01/01/08

1 of 4
Dowel Bars 4D (10" Embedment)

Section A-A

Typical Section Thru Railing on Bridge Deck

Bill of Reinforcing Steel

<table>
<thead>
<tr>
<th>MARK</th>
<th>SIZE</th>
<th>LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>4</td>
<td>3'-7&quot;</td>
</tr>
<tr>
<td>L</td>
<td>4</td>
<td>4'-1&quot;</td>
</tr>
<tr>
<td>M</td>
<td>4</td>
<td>2'-8&quot;</td>
</tr>
</tbody>
</table>

Dowel Bar 4D

Dowel Bar 4L

Bar Bending Diagrams

Control Line

Front of Curb along Bridge

Note: All bar dimensions are out to out.

Section B-B

Typical Section Thru Railing along Approach Slab

(Schemes 5 and 6 Shown, Schemes 3 and 4 Similar)

Detail "A"

Match shape of existing curb.

Asphalt Overlay when present (Varies)

Thrie-Beam Guardrail

Varies ** (1'-0" ± Min.)

Drilled Holes

Asphalt Overlay when present (Varies)

Existing Curb Overhang

Offset Block(s) as required

Heavy Hex Nuts and Washers set in drilled holes

1'-1" Min. Embedment

2 - 7/8" Ø x 8" Adhesive-Bonded Anchors with Heavy Hex Nuts and Washers set in drilled holes (1'-1" Max. Depth)

Existing Wing Post (Type Varies)

2 ~ 8" Ø x 8" Adhesive-Bonded Anchors with Heavy Hex Nuts and Washers set in drilled holes (5/16" Max. Depth)

Existing Curb

2 ~ 8" Adhesive-Bonded Anchors with Heavy Hex Nuts and Washers set in drilled holes (5/16" Max. Depth)

Existing Wing Wall

2 ~ 8" Adhesive-Bonded Anchors with Heavy Hex Nuts and Washers set in drilled holes (1'-12" or 85º Max. Depth respectively)

Existing Traffic Railing (Type Varies)

Asphalt Overlay when present (Varies)

Existing Approach Slab

VIEW C-C

CROSS REFERENCES:

For location of Section A-A see Sheet 1, 3 & 4.
For location of Section B-B see Sheet 4.
For location of View C-C see Sheet 3.
For application of Dim. A see Post Dimension Table on Index 460-470, Sheet 3.

Traffic Railing - (Thrie-Beam Retrofit) Wide Curb Type 1

FY 2020-21 Standard Plans

Traffic Railing - (Thrie-Beam Retrofit) Wide Curb Type 1

Index

460-475

2 of 4
DESCRIPTION:

SCHEME 1:

1. Provide Transition Block (as shown) or Curb if existing Approach Slab does not extend to end of Approach Slab. Shape and height of Transition Block or Curb shall match existing bridge curb. Transition Block may be omitted on trailing ends with no opposing traffic.

2. Field bend Dowel Bars 4L (10" Embedment) (See Note 2)

SCHEME 2:

1. Provide Transition Block (as shown) or Curb if existing Approach Slab Curb does not extend to end of Approach Slab. Shape and height of Transition Block or Curb shall match existing bridge curb. Transition Block may be omitted on trailing ends with no opposing traffic and on bridges with Flared Approach Slab Curb.

2. Field bend Dowel Bars 4L and Bars 4M within Transition Block as required to maintain 2" top and side clearance and 3" bottom clearance.

POST SPACING as measured to Post Bolts (Approach or Trailing End) (See Sheet 1)

1'-6" Min. (3-1/2") Max.

PARTIAL PLAN OF RAILING

RALLYING END TREATMENT FOR PARALLEL OR FLARED CURBS WITH DETACHED SIDEWALKS OR INTEGRAL SIDEWALKS LESS THAN 6" THICK

WIDE CURB TYPE 1

TRAFFIC RAILING - (THRIE-BEAM RETROFIT)

INDEX 460-475 Post)

-- Post Bolts (Last

NOTE:

1. Provide Transition Block (as shown) or Curb if existing Approach Slab Curb does not extend to end of Approach Slab. Shape and height of Transition Block or Curb shall match existing bridge curb. Transition Block may be omitted on trailing ends with no opposing traffic and on bridges with Flared Approach Slab Curb.

2. Field bend Dowel Bars 4L and Bars 4M within Transition Block as required to maintain 2" top and side clearance and 3" bottom clearance.

SCHEME 2 NOTES:

1. Provide Transition Block (as shown) or Curb if existing Approach Slab Curb does not extend to end of Approach Slab. Shape and height of Transition Block or Curb shall match existing bridge curb. Transition Block may be omitted on trailing ends with no opposing traffic and on bridges with Flared Approach Slab Curb.

2. Field bend Dowel Bars 4L and Bars 4M within Transition Block as required to maintain 2" top and side clearance and 3" bottom clearance.