NOTES:

1. On approach end provide Index No. 402 (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 Joint Detail, Index No. 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.

CROSS REFERENCES:
For Section A-A see Sheet 2. For Traffic Railing Notes and Details see Index No. 470.
**SECTION A-A**

TYPICAL SECTION THRU RAILING ON BRIDGE DECK

**BILL OF REINFORCING STEEL**

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<tr>
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<td>3-7'</td>
</tr>
<tr>
<td>L</td>
<td>4</td>
<td>4'-1'</td>
</tr>
<tr>
<td>H</td>
<td>4</td>
<td>2'-8'</td>
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**BAR BENDING DIAGRAMS**

- DOWEL BAR 4D
  - 1'-7"
  - 2'-9"

- DOWEL BAR 4L
  - 3'-8"
  - 4'-0"

**SECTION B-B**

TYPICAL SECTION THRU RAILING ALONG APPROACH SLAB (SCHEMES 5 AND 6 SHOWN, SCHEMES 3 AND 4 SIMILAR)

**BILL OF REINFORCING STEEL**

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<td>H</td>
<td>4</td>
<td>2'-8&quot;</td>
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</table>

**BAR BENDING DIAGRAMS**

- DOWEL BAR 4D
  - 1'-7"
  - 2'-9"

- BAR 4M

**NOTE:** All bar dimensions are out to out.

**VIEW C-C**

**DETAIL "A"**

- Control Line
- Front of Curb
- Top of Curb

**CROSS REFERENCES:**

- For location of Section A-A see Sheet 1 and 3.
- For location of Section B-B see Sheet 4.
- For location of View C-C see Sheet 3.
- For Traffic Railing Notes and Details see Index No. 470.
TRAFFIC RAILING - (THRIE-BEAM RETROFIT)

WIDE STRONG CURB TYPE 2

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

SCHEME 1

RAILING END TREATMENT FOR PERPENDICULAR OR ANGLED WING WALLS

SCHEME 1 NOTES:
1. Provide Transition Block (as shown) or Curb if existing Approach Slab does not have a curb, see Roadway Plans. 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 within Transition Block as required to maintain 2" top and side clearance and 3" bottom clearance.

SCHEME 2

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

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 or tilt Dowel Bars 4D and Bars 4M within Transition Block as required to maintain 2" top and side clearance and 3" bottom clearance.

TRAFFIC RAILING (Thrie-Beam Retrofit) Limits of Payment (See Note 1, Sheet 1)

TRAFFIC RAILING (Thrie-Beam Retrofit) Limits of Payment (See Note 1, Sheet 1)

PARTIAL PLAN OF RAILING

PARTIAL PLAN OF RAILING

PARTIAL ELEVATION OF INSIDE FACE OF RAILING

PARTIAL ELEVATION OF INSIDE FACE OF RAILING

RAILING END TREATMENT FOR PERPENDICULAR OR ANGLED WING WALLS

RAILING END TREATMENT FOR PERPENDICULAR OR ANGLED WING WALLS

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

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

TRAFFIC RAILING - (THRIE-BEAM RETROFIT)

WIDE STRONG CURB TYPE 2

TRAFFIC RAILING - (THRIE-BEAM RETROFIT)

WIDE STRONG CURB TYPE 2

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WIDE STRONG CURB TYPE 2

TRAFFIC RAILING - (THRIE-BEAM RETROFIT)

WIDE STRONG CURB TYPE 2
PARTIAL PLAN OF RAILING

Varies (6'-3" Max., 3'-0" Min.)

Additional Posts required for Scheme 4
(shown dashed, number Required varies)

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

RAILING END TREATMENT FOR FLARED INTEGRAL CURBS

SCHEMES 3 AND 4

RAILING END TREATMENT FOR PARALLEL INTEGRAL CURBS

SCHEMES 5 AND 6

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.

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

TRAFFIC RAILING - (THRIE-BEAM RETROFIT)
WIDE STRONG CURB TYPE 2

INDEX NO. 473

SHEET No. 4 of 4