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 Joints 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 Match Line see Sheets 3 & 4.
For Section A-A see Sheet 2.
For Traffic Railing Notes and Details see Index No. 470.

TYPICAL TREATMENT OF RAILING ALONG BRIDGE

PARTIAL ELEVATION OF INSIDE FACE OF RAILING

PARTIAL PLAN OF RAILING

Guardrail Post Assembly with Offset Block (Typ.)  
Existing Curb  
Gutter Line  
Existing Bridge Deck  
Direction of Traffic  

THREE-BEAM GUARDRAIL

Existing Bridge Deck  

PARTIAL PLAN OF RAILING

\( \frac{1}{4} \) Post Bolts and Match Line (Approach End) (See Sheets 3 and 4)

\( \frac{1}{4} \) Post Bolts and Match Line (Trailing End) (See Sheets 3 and 4)

6'-3" spacing (Typ. except as noted along Bridge, see Note 2)

1'-6" Min. for non skewed joints. For treatment of skewed Intermediate Deck Joints see Skew Detail Index No. 470, Sheet 2 (Typ.)

\( \frac{1}{4} \) Post  
COPING  

\( \frac{1}{4} \) Post Bolts  

Intermediate Deck Joint  
(See Note 2)  

Asphalt Overlay when present (Varies)

Final Riding Surface  

Thrie-Beam Guardrail

Top of Existing Curb  

Existing Curb  

Existing Bridge Deck  

Guardrail Post Assembly with Offset Block (Typ.)  

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 Joints 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 Match Line see Sheets 3 & 4.
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

<table>
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<tr>
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BAR BENDING DIAGRAM

DOWEL BAR 4L

NOTE: All bar dimensions are out to out.

SECTION B-B (SCHEME 2)
TYPICAL SECTION THRU RAILING ALONG APPROACH SLAB

*Shim with washers around Anchor Bolts and Anchors as required to maintain tolerance.

**Offset may vary ± 1" for Adhesive-Bonded Anchors to clear existing curb reinforcing and provide minimum edge clearance. Offset shall be consistent along length of bridge.

CROSS REFERENCES:
For location of Section A-A see Sheet 1 and 3. For location of Section B-B see Sheet 3. For application of Dim. A see Post Dimension Table on Index 470, Sheet 3.
**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 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) INTERMEDIATE CURB**

**INDEX NO.** 474

**SHEET NO.** 3 of 4
PARTIAL PLAN OF RAILING

- **Guardrail Post Assembly with Offset Block (Typ.)**
- **Intermediate Deck Joint (See Note 2, Sheet 1)**
- **Existing Approach Slab**
- **Existing Bridge Deck**
- **Traffic Railing (Thrie-Beam Retrofit) Limits of Payment**

### PARTIAL ELEVATION OF INSIDE FACE OF RAILING

**SCHEME 3**

**RAILING END TREATMENT FOR FLARED WING WALLS**

- **Existing Bridge Deck**
- **Front Face of Back wall & Begin or End Bridge**
- **Existing Curb**
- **Existing Approach Slab**

**SCHEME 3 NOTE:**

1. A single $\frac{1}{2}$" Ø x 8" Adhesive-Bonded Anchor may be omitted as shown when 2" clear cover cannot be provided (see Section C-C).

**CROSS REFERENCE:**

For application of Dim. A see Post Dimension Table on Index 470, Sheet 3.