**Barrier Modification for Guardrail Attachment**

**U.I.P. & Rehabilitate Existing (x', x') x Spans**

**Existing Wearing Surface**
- Guidance: (Do not show on plans)
- Substitute alternate Plan for skewed structures
- Modify details as needed to suit your structure
- Use with BEM02-2 & BEM02-3 (Bill of Reinforcing Steel)

**Estimated Quantities**

<table>
<thead>
<tr>
<th>Item</th>
<th>Bar Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrier End Modification</td>
<td>A 100</td>
<td>A 100</td>
</tr>
</tbody>
</table>

**General Notes:**
- **Design Specifications:** 2002 AASHTO LFD (17th Ed.) Standard Specifications
- **Design Unit Stress:**
  - Class B 2 Concrete: \( f'c = 4,000 \text{ psi} \)
  - Reinforcing steel (Grade 60): \( f_y = 60,000 \text{ psi} \)
- **Reinforcing Steel:**
  - Minimum clearance between reinforcing steel shall be 1 1/2'' unless otherwise shown.
  - One lane of traffic shall remain open during construction.
  - Keep roadway plans for traffic control.
  - All exposed edges of barrier shall have either a 1/2'' radius or a 3/8-inch bevel, unless otherwise shown.
- **Miscellaneous:**
  - One lane of traffic shall remain open during construction.
  - All exposed edges of barrier shall have either a 1/2'' radius or a 3/8-inch bevel, unless otherwise shown.
  - Outline of existing work is indicated by light dashed lines.
  - Heavy lines indicate new work.
  - All reinforcement in barrier modification shall be epoxy coated.
  - Bars bonded in existing concrete not removed shall be cleanly stripped and embedded into new concrete where required.

**Construction Notes:**
- **Bars bonded in existing concrete not removed shall be**
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  - **Minimum clearance between reinforcing steel shall be 1 1/2'' unless otherwise shown.**
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**Design Notes:**
- **Minimum clearance to reinforcing steel shall be 1 1/2'' unless otherwise shown.**
- **One lane of traffic shall remain open during construction.**
- **Barrier End Modification.**

**Materials:**
- Class B 2 Concrete: \( f'c = 4,000 \text{ psi} \)
- Reinforcing steel (Grade 60): \( f_y = 60,000 \text{ psi} \)

**References:**
- 2002 AASHTO LFD (17th Ed.) Standard Specifications
- Design Unit Stress:
  - Class B 2 Concrete: \( f'c = 4,000 \text{ psi} \)
  - Reinforcing steel (Grade 60): \( f_y = 60,000 \text{ psi} \)

**Notes:**
- **This drawing is not to scale. Follow dimensions.**
- **Sheet No. 1 of 3**

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**Drawing Details:**
- **Part Elevation Showing Concrete Removal**
- **Elevation**
- **Section B-B (4)**
- **Section C-C (4)**
- **BARRIER MODIFICATION FOR GUARDRAIL ATTACHMENT**

**Revisions:**
- **Effective Date:** Apr. 2024
- **Supersedes:** July 2021
Skewed Plan

BEM02-1_EndMod_WS  Alternate Details