For loop bars 6d1, 6d2, and 6d3, use smooth steel bars with a minimum yield strength of 60 ksi; a tensile strength of not less than 1.25 times the yield strength but a minimum of 80 ksi, a minimum 14% elongation in 8 inches, and passing a 180 degree bend test using a 3/8" pin bend diameter.  

Install loops within 3/8" of the plan dimensions.  

Use Grade 60, ASTM A615 for all other reinforcements. Do not lift or move using loop bars 6d1, 6d2 or 6d3.  

Provide for an approved monitoring schedule with a person on call and available 24 hours a day, each day of the week, to realign barrier which has been struck. Initiate service within one hour of notification of need. 

Unless stated otherwise in the plans, the barrier rail sections shall be the property of the Contractor. Remove from the site upon completion of work. 

Following removal of anchorage, fill all holes with an approved non-shrink grout. 

Tapered end section is not designed for use within 30 feet of traffic on facilities with speed limits 55 mph or greater, nor within 10 feet of traffic on facilities with speed limits 40 mph to 50 mph. 

Estimated quantity of concrete for one taper section is 0.6 cubic yards. 

Include the cost of anchorage, when required in the price bid for "Temporary Barrier Rail, Concrete". 

Permanently mark one end of each rail section with manufacturing information. The "marked end" is that end of the barrier having one loop bar at the top and two loop bars at the bottom. Include the following information in the marking: 

- Manufacturer Identification 
- Data Manufactured (Month and Year) 
- BA-401 Type A 

Lifting hole. 4 inch diameter PVC Pipe. 

1 inch radius allowed. 

Possible Contract Item: 
Temporary Barrier Rail, Concrete 

Possible Tabulation: 
108-33
**Retainer Bolt & Nut**

- Retainer bolt & nut are required for connections with 2-loop barriers (previous designs) or in conjunction with Snap Anchorage.

**Furnish and Install Barrier Markers**

- Attach to the barrier in a manner approved by the manufacturer. Markers to face oncoming traffic and match the barrier in a manner approved by the manufacturer. Maintain the markers and promptly repair or replace any damaged or missing units. Include costs for furnishing, installing and maintaining markers in the price bid for “Temporary Barrier Rail, Concrete.”

**BENT BAR DETAILS**

- Dimensions are out to out of bars unless otherwise noted.

**Per 12'-6" Barrier Section**

<table>
<thead>
<tr>
<th>Bar</th>
<th>Size</th>
<th>Shape</th>
<th>No. of Bars</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>6a1</td>
<td>4</td>
<td>6</td>
<td>12</td>
<td>8'-0&quot;</td>
<td>48.1</td>
</tr>
<tr>
<td>6a2</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>9'-0&quot;</td>
<td>26.3</td>
</tr>
<tr>
<td>6a3</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>12'-0&quot;</td>
<td>16.3</td>
</tr>
</tbody>
</table>

**LOOP ASSEMBLY**

<table>
<thead>
<tr>
<th>Bar</th>
<th>Size</th>
<th>Shape</th>
<th>No. of Bars</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>6b1</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>8'-0&quot;</td>
<td>20.3</td>
</tr>
<tr>
<td>6b2</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>7'-0&quot;</td>
<td>22.8</td>
</tr>
<tr>
<td>6b3</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>8'-0&quot;</td>
<td>20.5</td>
</tr>
</tbody>
</table>
Pre-drill holes for stakes with 1\frac{5}{16}\text{"} dia. x 5\text{"} min. (Titen HD Wedge Bolt 1\frac{5}{16}\text{"} dia. x 5\text{"} min.).

3 stakes required per rail section.

Pre-drill holes for stakes with 1\frac{5}{16}\text{"} core bit.

\* A dropoff is a slope of 2H:1V or steeper.