General Specifications for All Guard Rail & Parts:

Link below to the 2016 Edition NHDOT Standard Specifications for Road & Bridge Construction, Section 606:

Link Below to NHDOT Standard Plans for Road & Bridge Construction:

(All links to follow represent updates since 2010 and 2016.)

Steel Beam Guardrail and Parts

Standard Plans/Drawings:


Steel Posts –


Memo with additional direction -
http://www.nh.gov/dot/org/projectdevelopment/highwaydesign/standardplans/documents/gr_1_gr_2_gr_2a_revised_08282105.pdf

Guardrail EAGRT Units

AMENDMENT TO SECTION 606 -- GUARDRAIL

Item 606.1254 - Beam Guardrail (Terminal Unit Type EAGRT, TL 3) (Steel Post)
Item 606.1255 - Beam Guardrail (Terminal Unit Type EAGRT, TL 2) (Steel Post)
Item 606.12551 - Beam Guardrail (Terminal Unit Type EAGRT, TL 2 – 25’) (Steel Post)
Item 606.1454 - Beam Guardrail (Terminal Unit Type EAGRT, TL 3)
Item 606.1455 - Beam Guardrail (Terminal Unit Type EAGRT, TL 2)

Amend 2.12.1 as follows:

2.12.1 Terminal unit EAGRT shall be an energy absorbing tangent type end unit selected from one of the following (Test Level 3 shall be a fixed-head or through-anchored-head energy absorbing tangent type end unit, no substitutions allowed):

<table>
<thead>
<tr>
<th>Terminal Name</th>
<th>Manufacturer and/or US Distributor</th>
<th>Test Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trend®350 Tangent</td>
<td>Trinity Highway Products, LLC</td>
<td>TL2 / TL3</td>
</tr>
<tr>
<td>X-LITE®</td>
<td>Lindsay Corporation/Barrier Systems, Inc.</td>
<td>TL 3</td>
</tr>
<tr>
<td>Softstop®</td>
<td>Trinity Highway Products, LLC</td>
<td>TL 2 / TL 3</td>
</tr>
</tbody>
</table>
X-Tension™

Lindsay Corporation/Barrier Systems, Inc.

Road Systems, Inc.

TL 3

TL 2 Only

2.12.1.1 The EAGRT shall be FHWA eligible and meet the NCHRP 350 test level required, at a minimum. MASH certification of a terminal for the same or greater test level meets the NCHRP 350 requirement.

2.12.1.2 The EAGRT designated “TL 2 – 25’” shall be a FHWA eligible, minimum NCHRP 350, Test Level 2 EAGRT unit 25’ in length or less.

Add to 3.3 the following:

3.3.3 The first 12.5’ of the EAGRT unit is assumed gating and the length of need begins at the 3rd post. In addition, the Test Level 3 EAGRT is assumed to require a 50 foot length and the Test Level 2 EAGRT is assumed require a 37.5 foot length. If a terminal of a length other than indicated is selected, or the gating length is other than indicated, then extend or shorten the rail run to maintain the coverage of length-of-need redirective rail. Refer to the FHWA website [http://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware/listing.cfm?code=cushions](http://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware/listing.cfm?code=cushions) for the Letters of Acceptance (Eligibility) indicating the beginning of length-of-need for the terminals.

3.3.4 The EAGRT terminal unit designated “TL 2 – 25’” shall only be installed in specific situations as shown on the plans or as ordered by the Engineer.

Add to 4.1:

4.1.4 Any additional standard rail required to maintain the coverage of the length-of-need (Section 3.3.3) for an EAGRT will not be measured.

Add to 5.1:

5.1.2 Any additional standard rail required to maintain the coverage of the length-of-need (Section 3.3.3) will be subsidiary to the EAGRT unit.

Revise item numbers to read:

| 606.1254 | Beam Guardrail (Terminal Unit Type EAGRT, TL3) (Steel Post) Unit |
| 606.1255 | Beam Guardrail (Terminal Unit Type EAGRT, TL2) (Steel Post) Unit |
| 606.12551 | Beam Guardrail (Terminal Unit Type EAGRT, TL2 – 25’) (Steel Post) Unit |
| 606.1454 | Beam Guardrail (Terminal Unit Type EAGRT, TL3) Unit |
| 606.1455 | Beam Guardrail (Terminal Unit Type EAGRT, TL2) Unit |

Dimensions: Per attached Drawing Nos. SS-151, SS-152, and SKT-S-US.

Type: Terminal end unit (EAGRT) components shall include guardrail extruder end section, bearing plate, assembly cable, angle strut, cable anchor, and all ancillary nuts, bolts, washers, and fasteners. EAGRT units shall be successfully tested to NCHRP Report 350 TL-3 criteria or equivalent.

Alternate end units shall be approved by NHDOT prior to bid and shall meet or exceed the specified criteria.

Contractor shall provide NHDOT with copies of manufacturers documents indicating satisfactory testing in accordance with NCHRP 350 and/or its subsequent revisions, or equivalent, and of approval by the FHWA for review and approval prior to delivery.
SECTION 606 -- GUARDRAIL SPECIFICATIONS

AMENDMENT TO SECTION 606 -- GUARDRAIL

Item 606.18001 – 31” W-Beam Guardrail with 8” Offset Block (Steel Post)
Item 606.18011 – 31” W-Beam Guardrail with 8” Offset Block (8’ Steel Post)
Item 606.18021 – 31” W-Beam Guardrail with 8” Offset Blocks (9’ Steel Post)
Item 606.18041 – 31” W-Beam Guardrail with 8” Offset Block (11’ Steel Post)
Item 606.18_ - 31” W-Beam Guardrail Long Span (_’-_)"
Item 606.184 – 31” W-Beam Guardrail (Reduced Post Spacing)
Item 606.28001 – 31” Double Faced W-Beam Guardrail with 8” Offset Block (Steel Post)

This special provision provides for the installation of guardrail with a mid-way splice. All requirements as set forth in the Standard Specifications are applicable except as modified or changed herein for these items only.

Add to Materials:

2.14 31” W-Beam Guardrail. Materials/components required for installation shall be as shown in the plans or as ordered.

2.14.1 Long Span. Refer to detail for offset block sizing.

Add to Construction Requirements:

3.9 31” W-Beam Guardrail. Construction requirements shall be as shown in the plans or as ordered.

Add to pay items and units:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>606.18001</td>
<td>31” W-Beam Guardrail with 8” Offset Block (Steel Post)</td>
<td>Linear Foot</td>
</tr>
<tr>
<td>606.18011</td>
<td>31” W-Beam Guardrail with 8” Offset Block (8’ Steel Post)</td>
<td>Linear Foot</td>
</tr>
<tr>
<td>606.18021</td>
<td>31” W-Beam Guardrail with 8” Offset Block (9’ Steel Post)</td>
<td>Linear Foot</td>
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<td>606.18041</td>
<td>31” W-Beam Guardrail with 8” Offset Block (11’ Steel Post)</td>
<td>Linear Foot</td>
</tr>
<tr>
<td>606.181</td>
<td>31” W-Beam Guardrail Long Span (12’-6”)</td>
<td>Unit</td>
</tr>
<tr>
<td>606.182</td>
<td>31” W-Beam Guardrail Long Span (18’-9”)</td>
<td>Unit</td>
</tr>
<tr>
<td>606.183</td>
<td>31” W-Beam Guardrail Long Span (25’)</td>
<td>Unit</td>
</tr>
<tr>
<td>606.184</td>
<td>31” W-Beam Guardrail (Reduced Post Spacing)</td>
<td>Linear Foot</td>
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<td>31” Double Faced W-Beam Guardrail with 8” Offset Block (Steel Post)</td>
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