1x STANDARD POST SPACE OF: 6’ 3” = 75” [1905]

PLAN

TYPICAL SPLICE LAP IN DIRECTION OF TRAFFIC

RTM01a-b, RTM02a-b, RTM04a-b, or RTM06a-b EACH SIDE OF POST

ELEVATION

12’ 6” = 150” [3810] THRIE-BEAM GUARDRAIL (TYP)

TOP OF RAIL HT.

39” [991]

GROUND LINE

POST LENGTH 72” [1829]

DIR OF TRAFFIC

EMBEDMENT 40 1/8” [1019]

NOTE: MINI SPACER RELEASABLE FASTENER SUPPLIED BY GREGORY HIGHWAY SAFETY PRODUCTS- NO SEPARATE DESIGNATOR.

GMS GUARDRAIL: 39” MEDIAN THRIE-BEAM

MINI SPACER RELEASABLE FASTENER EACH SIDE OF POST (SEE DETAIL A)

MINI SPACER EXPLODED VIEW

SECTION A-A

RELEASABLE FASTENER

DOME WASHER

ROUND WASHER

HEAVY HEX NUT

PWE01

12-FBB01 EACH SPLICE

24 7/8” [632] RAIL MOUNTING HT.

GROUND LINE

2011

SGM35

SHEET NO. DATE
1 of 2 11/09/2011
INTENDED USE

The Gregory Mini Spacer (GMS) Guardrail System is intended for roadside and median applications at NCHRP Report 350 and MASH Test Level 3. All GMS components are standard-only the Mini Spacer fastener component is proprietary. GMS does not require mid-span splices, blocks or backup plates. GMS does not rely upon a post bolt head pulling through and deforming a rail slot to release rail from a post during a vehicle impact. GMS instead incorporates the scientifically engineered Mini Spacer releasable mounting fastener that includes a separate deformable release element to provide an optimized release load magnitude in field installations. The same Mini Spacer fastener accommodates a range of top of rail heights of 27" [686] - 31" [787], a range of post types and spacing, and a range of rail types and gages. GMS W-beam accommodates 12'6" [3810] 2x standard post spacing, 6'3" [1905] 1x standard post spacing, narrower 3'1 ½" [953] x standard post spacing, and 1’ 6 ¼ ” [476] x standard post spacing; with respective roadside “working width” deflections of 66”[1680], 49” [1250], 44” [1120], and 35” [900]. GMS W-beam post spacing may be gradually varied in a single installation to accommodate local terrain and ADT. GMS enables cost-effective and efficient W-beam repair and upgrade retrofit. GMS Thrie-beam has 39” [991] top of rail height.

COMPONENTS

<table>
<thead>
<tr>
<th>Designator</th>
<th>Component</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTM01a-b</td>
<td>W-beam rail</td>
<td>4</td>
</tr>
<tr>
<td>or RTM02a-b</td>
<td>alternate: W-beam rail</td>
<td>2</td>
</tr>
<tr>
<td>or RTM04a-b</td>
<td>alternate: W-beam rail</td>
<td>2</td>
</tr>
<tr>
<td>or RTM06a-b</td>
<td>alternate: W-beam rail</td>
<td>2</td>
</tr>
<tr>
<td>FBB01</td>
<td>Guardrail splice bolts and nuts</td>
<td>24*</td>
</tr>
<tr>
<td>PWE01</td>
<td>Wide-flange guardrail post</td>
<td>2</td>
</tr>
<tr>
<td>Mini Spacer</td>
<td>Fastener: supplied by Gregory Highway Safety Products</td>
<td>4</td>
</tr>
</tbody>
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* 48 for RTM01a-b

APPROVALS

<table>
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<tr>
<th>Acceptance</th>
<th>Date</th>
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<tr>
<td>HSA-10/B-150</td>
<td>10/27/2006</td>
<td>GMS W-beam for roadside and median use.</td>
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<tr>
<td>HSSD/B-156</td>
<td>03/21/2007</td>
<td>GMS Thrie-beam- roadside and median use.</td>
</tr>
<tr>
<td>HSSD/CC-96</td>
<td>12/21/2007</td>
<td>Use of approved End Terminals with GMS W-beam at equal top of rail height</td>
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<td>HSSD/B-150A</td>
<td>03/26/2008</td>
<td>GMS W-beam “working width” deflections for: 1x, 1/2x, 1/4x standard 6’3” spacing</td>
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<tr>
<td>HSSD/B-150B</td>
<td>07/16/2008</td>
<td>GMS W-beam at 2x std. post spacing, ht. 27“ - 31”, for roadside or median use</td>
</tr>
<tr>
<td>HSSI/ B-150C</td>
<td>11/19/2010</td>
<td>GMS W-beam &amp; Thrie-beam: Dual NCHRP Rept. 350 and MASH acceptance</td>
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</tbody>
</table>

REFERENCES


CONTACT INFORMATION

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http://www.gregorycorp.com/highway.cfm

GMS GUARDRAIL: 39” MEDIAN THRIE-BEAM