

**LIST II-31.1 - PORTABLE BARRIERS  
 MASH COMPLIANT**

NAME	MANUFACTURER	PEB #	PAY ITEM #	APPROVED DATE	APPROVED TYPE	BABA COMPLIANT	Notes
MOBILE BARRIERS	Mobile Barriers, LLC. 24918 Genesee Trail Rd; Golden, CO 80401 303-526-5995 <a href="http://mobilebarriers.com/contact.htm">http://mobilebarriers.com/contact.htm</a>	2390	726_	8/6/2012	NCHRP-350 TL-2 & TL-3 <b>MASH TL-3 &amp; TL-3</b>	Y2	
ZONEGUARD	Hill & Smith 987 Buckeye Park Road; Columbus, OH 43207 614-340-6294 <a href="http://www.hillandsmith.com/zoneguard/">http://www.hillandsmith.com/zoneguard/</a>	2063	726_	2/1/2016	NCHRP-350 TL-3 & TL-4 <b>MASH TL-3</b>	Y2	Approved for temporary installations in Construction Work Zones
HV2 SAFETY BARRIER	Saferoads 288 Paynes Depot Road, Lexington, KY 40511 859-469-0364 <a href="https://www.saferoads.com.au/">https://www.saferoads.com.au/</a>	4955	726_	4/13/2020	<b>MASH TL-4</b>	Y2	
J-J HOOKS	Easi-Set Worldwide 5119 Catlett Road, Midland, VA 22728 800-547-4045 <a href="http://www.EasiSet.com">http://www.EasiSet.com</a>	4869	726_	7/10/2018	<b>MASH TL-3</b>	Y2	
J-J HOOKS (PIN DOWN / BOLT DOWN)	Easi-Set Worldwide 5119 Catlett Road, Midland, VA 22728 800-547-4045 <a href="http://www.EasiSet.com">http://www.EasiSet.com</a>	4240	726_	6/4/2019	<b>MASH TL-3</b>	Y2	
J-J HOOKS (20 FT LENGTH)	Easi-Set Worldwide 5119 Catlett Road, Midland, VA 22728 800-547-4045 <a href="http://www.EasiSet.com">http://www.EasiSet.com</a>	5048	726_	3/2/2020	<b>MASH TL-3</b>	Y2	F-Shape Free-Standing only
T-LOK (12 FT LENGTH)	Rockingham Precast 3330 Kratzer Road, Harrisonburg, VA 22802 540-433-8282 <a href="https://www.rockinghamprecast.com/">https://www.rockinghamprecast.com/</a>	5278	726_	6/8/2021	<b>MASH TL-3</b>	Y2	F-Shape Free-Standing only
ZONEBLOC (Rebloc 80SAH_12)(freestanding) & (Rebloc 80SAH_12_8B)(anchored)	Hill & Smith 987 Buckeye Park Road; Columbus, OH 43207 614-340-6294 <a href="http://www.hillandsmith.com/zoneguard/">http://www.hillandsmith.com/zoneguard/</a>	5523	726	11/6/2023	<b>MASH TL-3</b>	Y2	Free-standing and Pinned

**NON-MASH COMPLIANT**

NAME	MANUFACTURER	PEB #	PAY ITEM #	APPROVED DATE	APPROVED TYPE	BABA COMPLIANT	Notes
ARMORGUARD GATE SYSTEM (Formerly Safeguard Gate System)	Lindsay Transportation Solutions, LLC 180 River Road; Rio Vista, CA 94571-1208 707-374-6800 <a href="http://www.lindsayafricagb.com/armorguard-steel-barrier-gate">http://www.lindsayafricagb.com/armorguard-steel-barrier-gate</a>	1535	726_	7/6/2004	NCHRP-350 TL-3	Y2	
ARMORGUARD LINK SYSTEM (Formerly Safeguard Gate System)	Lindsay Transportation Solutions, LLC 180 River Road; Rio Vista, CA 94571-1208 707-374-6800 <a href="http://www.lindsayafricagb.com/armorguard-steel-barrier-gate">http://www.lindsayafricagb.com/armorguard-steel-barrier-gate</a>	1411	726_	6/30/2003	NCHRP-350 TL-2, TL-3	Y2	
BARRIERGUARD	Lindsay Transportation Solutions, LLC 180 River Road; Rio Vista, CA 94571-1208 707-374-6800 <a href="http://www.lindsay.com/road-safety-products">http://www.lindsay.com/road-safety-products</a>	1645	726_	10/3/2005	NCHRP-350 TL-3, TL-4	Y2	
BARRIERGUARD 800 GATE	Highway Care 7068 Fire Opal Drive; Las Vegas, NV 89131 702-204-0732 (Contact: Sam Arnold) <a href="http://highwaycareusa.com/traffic.php?page=barrierguard800_gate">http://highwaycareusa.com/traffic.php?page=barrierguard800_gate</a>	2619	726_	6/5/2012	NCHRP-350 TL-3	Y2	
BARRIERGUARD 800 GATE VLB (VARIABLE LENGTH BARRIER)	Highway Care 7068 Fire Opal Drive; Las Vegas, NV 89131 702-204-0732 (Contact: Sam Arnold) <a href="http://highwaycareusa.com/traffic.php?page=barrierguard800_gate">http://highwaycareusa.com/traffic.php?page=barrierguard800_gate</a>	2620	726_	6/5/2012	NCHRP-350 TL-3	Y2	
DRAGNET VEHICLE ARRESTING SYSTEM	Entwistle Mfg. Co. 6 Biglow Street; Hunson, MA 01749-2649 508-481-4000 <a href="http://www.entwistleco.com/defense/danville/dragnet.htm">http://www.entwistleco.com/defense/danville/dragnet.htm</a>	781	726_	12/3/1990		Y2	
SAFE-T-CURVE (STCR02-100110)	Lindsay Transportation Solutions, LLC 180 River Road; Rio Vista, CA 94571-1208 707-374-6800 <a href="http://www.lindsayafricagb.com/safe-t-curve">http://www.lindsayafricagb.com/safe-t-curve</a>	2235	726_	8/1/2011	NCHRP-350 TL-2, TL-3	Y2	
VULCAN BARRIER	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.energyabsorption.com/products/products_vulcan_tl3.asp">http://www.energyabsorption.com/products/products_vulcan_tl3.asp</a>	2018	726_	6/8/2009	NCHRP 350, TL-2, TL-3, TL-4	Y2	
VULCAN GATE	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.energyabsorption.com/products/products_vulcan_tl3.asp">http://www.energyabsorption.com/products/products_vulcan_tl3.asp</a>	2017	726_	6/8/2009	NCHRP 350 TL-2, TL-3, TL-4	Y2	

**LIST II-31.2 - IMPACT ATTENUATORS**

**GROUND MOUNTED IMPACT ATTENUATORS (MASH COMPLIANT)**

NAME	MANUFACTURER	PEB #	PAY ITEM #	*IMPACT FREQUENCY	APPROVED TYPE	BABA COMPLIANT	Notes
DELTA	Traffix Devices, Inc. 160 Avenida La Pata, San Clemente, CA 92673 949-573-9228 <a href="https://www.traffixdevices.com/">https://www.traffixdevices.com/</a>	5365	720_ 726_	Moderate	TL-3 MASH	Y2	Bi-Directional Permanent or Workzone
QUADGUARD M10	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.energyabsorption.com/products/products_quadguardM10.asp">http://www.energyabsorption.com/products/products_quadguardM10.asp</a>	2982	720_ 726_	Moderate	TL-2 TL-3 MASH	Y2	Bi-Directional Permanent or Workzone
QUADGUARD M WIDE	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.energyabsorption.com/products/products_quadguardM10.asp">http://www.energyabsorption.com/products/products_quadguardM10.asp</a>	5218	720_ 726_	Moderate	TL-2 TL-3 MASH	Y2	Bi-Directional Permanent or Workzone
QUADGUARD ELITE M10	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.energyabsorption.com/products/products_quadguardM10.asp">http://www.energyabsorption.com/products/products_quadguardM10.asp</a>	4224	720_ 726_	High	TL-2 TL-3 MASH	Y2	Bi-Directional Permanent or Workzone
QUADGUARD ELITE M10 WIDE	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.energyabsorption.com/products/products_quadguardM10.asp">http://www.energyabsorption.com/products/products_quadguardM10.asp</a>	5219	720_ 726_	High	TL-2 TL-3 MASH	Y2	Bi-Directional Permanent or Workzone
REACT M	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.energyabsorption.com/products/products_quadguardM10.asp">http://www.energyabsorption.com/products/products_quadguardM10.asp</a>	5381	720_ 726_	High	TL-3 MASH	Y2	Bi-Directional Permanent or Workzone
SCI (SCI100GM)	Work Area Protection Corporation 2500 Production Drive; St. Charles, IL 60174 800-327-4417 <a href="https://hillandsmith.com/products/smart-cushion/">https://hillandsmith.com/products/smart-cushion/</a>	1523	720_ 726_	High	TL-3 MASH	Y2	Bi-Directional Permanent or Workzone
SCI (SCI70GM)	Work Area Protection Corporation 2500 Production Drive; St. Charles, IL 60174 800-327-4417 <a href="https://hillandsmith.com/products/smart-cushion/">https://hillandsmith.com/products/smart-cushion/</a>	1523	720_ 726_	High	TL-2 MASH	Y2	Bi-Directional Permanent or Workzone
TAU-M	Lindsay Transportation Solutions, LLC 180 River Road; Rio Vista, CA 94571-1208 707-374-6800 <a href="http://www.barriersystemsinc.com/tau-m-crash-cushion">http://www.barriersystemsinc.com/tau-m-crash-cushion</a>	4961	720_ 726_	Moderate	TL-2 TL-3 MASH	Y2	Bi-Directional Permanent or Workzone

APPROVED ROADSIDE SAFETY DEVICES -  
PORTABLE BARRIERS, IMPACT ATTENUATORS, END ANCHORS, GUIDERAILS, MISC.

HERCULES	SMA Road Safety s.r.l Via E. De Filippo n 1, Casalnuovo di Napoli Italy 80013 330-477-4800 <a href="mailto:info@smaroadsafety.com">info@smaroadsafety.com</a>	5390	720_ 726_	High	TL-2 TL-3 MASH	Y2	Bi-Directional Permanent or Workzone
DELTA CRASHCUSHION	Traffix Devices, Inc. 160 Avenida La Pata, San Clemente, CA 92673 949-573-9228 <a href="https://www.traffixdevices.com/">https://www.traffixdevices.com/</a>	5673	720_ 726_	High	TL-2 MASH	Y2	Bi-Directional Permanent or Workzone
SMARTPOD	Hill & Smith 987 Buckeye Park Road; Columbus, OH 43207 614-340-6294 <a href="http://www.hillandsmith.com">http://www.hillandsmith.com</a>	5685	720_ 726_	High	TL-2 TL-3 MASH	Y2	Bi-Directional Permanent or Workzone

\* **Approximate Impact Frequency:** + Intended to be the predominant category used unless local knowledge dictates

Frequency      Estimated Impact Rate  
Very High      3 or more major impacts per year where self-restoration is a consideration

High              2 major impacts every year  
+Moderate      1 major impact every 2 to 3 years  
Low                1 impact every 5 years

**GROUND MOUNTED IMPACT ATTENUATOR MANUFACTURERS CHART**  
**WORKZONE USE ONLY - DO NOT USE IN PERMANENT SITUATIONS**

MASH Sunset Deadline 1-1-2025. (After MASH sunset date, non-MASH compliant devices will not be approved for inclusion in any projects.)  
 Non-MASH compliant attenuators purchased before 1-1-2020 may be used as a work zone device through their useful life or until the sunset date, whichever comes first.

NAME	MANUFACTURER
ABSORB 350	Lindsay Transportation Solutions, LLC 180 River Road; Rio Vista, CA 94571-1208 707-374-6800 <a href="https://www.lindsay.com/usca/en/infrastructure/brands/barrier-systems/solutions/crash-cushions/absorb/">https://www.lindsay.com/usca/en/infrastructure/brands/barrier-systems/solutions/crash-cushions/absorb/</a>
ABSORB M	Lindsay Transportation Solutions, LLC 180 River Road; Rio Vista, CA 94571-1208 707-374-6800 <a href="https://www.lindsay.com/usca/en/infrastructure/brands/barrier-systems/solutions/crash-cushions/absorb/">https://www.lindsay.com/usca/en/infrastructure/brands/barrier-systems/solutions/crash-cushions/absorb/</a>
ACZ- 350	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.energyabsorption.com/products/products_acz.asp">http://www.energyabsorption.com/products/products_acz.asp</a>
COMPRESSOR SYSTEM	Traffix Devices, Inc. 3780 Paul Samuel Rd; Kennesaw, GA 30152 770-778-8281 (Contact: David Evans) <a href="http://www.traffixdevices.com/products/attenuators/compressor/">http://www.traffixdevices.com/products/attenuators/compressor/</a>
HEART	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://trinityhighway.com/products/heart.html">http://trinityhighway.com/products/heart.html</a>
QUADGUARD	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.energyabsorption.com/products_permanent.asp">http://www.energyabsorption.com/products_permanent.asp</a>
QUADGUARD II	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.energyabsorption.com/products_permanent.asp">http://www.energyabsorption.com/products_permanent.asp</a>
QUADGUARD ELITE	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.energyabsorption.com/products_permanent.asp">http://www.energyabsorption.com/products_permanent.asp</a>

QUEST System	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.energyabsorption.com/products_permanent.asp">http://www.energyabsorption.com/products_permanent.asp</a>
REACT-350	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.energyabsorption.com/products_permanent.asp">http://www.energyabsorption.com/products_permanent.asp</a>
REACT-350 II	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.energyabsorption.com/products_permanent.asp">http://www.energyabsorption.com/products_permanent.asp</a>
SLED END TREATMENT SYSTEM (MASH)	Traffix Devices, Inc. 3780 Paul Samuel Rd; Kennesaw, GA 30152 770-778-8281 (Contact: David Evans) <a href="http://www.traffixdevices.com/products/attenuators/sled/">http://www.traffixdevices.com/products/attenuators/sled/</a>
MINI SLED END TREATMENT SYSTEM (MASH) TL-2	Traffix Devices, Inc. 3780 Paul Samuel Rd; Kennesaw, GA 30152 770-778-8281 (Contact: David Evans) <a href="http://www.traffixdevices.com/products/attenuators/sled/">http://www.traffixdevices.com/products/attenuators/sled/</a>
TAU-II	Lindsay Transportation Solutions, LLC 180 River Road; Rio Vista, CA 94571-1208 707-374-6800 <a href="http://www.barriersystemsinc.com/tau-ii-crash-cushion">http://www.barriersystemsinc.com/tau-ii-crash-cushion</a>
TRACC	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://trinityhighway.com/products/tracc.html">http://trinityhighway.com/products/tracc.html</a>
UNIVERSAL TAU-IIR	Lindsay Transportation Solutions, LLC 180 River Road; Rio Vista, CA 94571-1208 707-374-6800 <a href="http://www.barriersystemsinc.com/tau-ii-crash-cushion">http://www.barriersystemsinc.com/tau-ii-crash-cushion</a>
X-TENUATOR	Lindsay Transportation Solutions, LLC 180 River Road; Rio Vista, CA 94571-1208 707-374-6800 <a href="https://www.lindsay.com/usca/en/infrastructure/brands/barrier-systems/solutions/crash-cushions/x-tenuator-crash-cushion/">https://www.lindsay.com/usca/en/infrastructure/brands/barrier-systems/solutions/crash-cushions/x-tenuator-crash-cushion/</a>
ARMABUFFA	Valtire, Inc. 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://trinityhighway.com/products.html">http://trinityhighway.com/products.html</a>

GROUND MOUNTED IMPACT ATTENUATOR SELECTION CHART<sup>Note 1</sup>

**WORKZONE ONLY - NOT TO BE USED IN PERMANENT APPLICATIONS**

MASH Sunset Deadline 1-1-2025. (After MASH sunset date, non-MASH compliant devices will not be approved for inclusion in any projects.)

Y <sup>1</sup> Product Name	TL-2	TL-3	Φ <sup>2</sup> Work Zone	Permanent	Bi-Directional	Note 4 <sup>3</sup> Width	Note 5 <sup>4</sup> Impact Frequency	Gores	Gating	MASH Compliant?	Pay Item #	PEB#	Approved Date
Absorb 350	Yes	Yes	Yes	No	No <sup>Note 3</sup>	2'-0"	N/A	No	Yes	No	726D	1258	2/8/2009
ABSORB M	Yes	Yes	Yes	No	No <sup>Note 3</sup>	2'-0"	N/A	No	Yes	Yes	726D	5051	2/1/2021
ACZ 350	Yes	Yes	Yes	No	No <sup>Note 3</sup>	2'-0"	N/A	No	Yes	No	726D	2115	7/6/2009
Compressor System	Yes	Yes	Yes	No	Yes	2'-0" & Wider	Very High	Yes	No	No	726D	3055	2/4/2013
QUADGUARD	Yes	Yes	Yes	No	Yes	2'-0" to 7'-6"	Moderate	Yes	No	No	726D	2148	9/14/2009
QUADGUARD II	Yes	Yes	Yes	No	Yes	2'-0" to 7'-6"	Moderate	Yes	No	No	726D	2148	9/14/2009
QUADGUARD ELITE	Yes	Yes	Yes	No	Yes	2'-0" to 8'-0" for TL-2 & 3, 2'-0" to 3'-0" for 70 mph	High	Yes	No	No	726D	4224	7/6/2015
Quest	Yes	Yes	Yes	No	Yes	2'-0"	Low	Yes <sup>Note 2</sup>	No	No	726D	1742	5/1/2006
REACT-350 II	Yes	Yes	Yes	No	Yes	3'-0"	Very High	Yes	No	No	726D	2659	10/3/2011
SLED END TREATMENT	Yes	Yes	Yes	No	No <sup>Note 3</sup>	1'-10.5"	N/A	No	Yes	Yes	726D	3056	2/4/2013
TAU-II	Yes	Yes	Yes	No	Yes	2'-0" to 8'-0"	Moderate	Yes	No	no	726D	2744	8/16/2012
TRACC	Yes	Yes	Yes	No	Yes	2'-0" & Wider	Moderate	Yes	No	No	726D		
UNIVERSAL TAU-IIR	Yes	Yes	Yes	No	Yes	2'-0" to 8'-0"	High	Yes	No	No	726D	2744	8/16/2012
X-TENUATOR	Yes	Yes	Yes	No	Yes	2'-0"	Moderate	Yes	No	No	726D	2414	5/4/2012
ARMABUFFA	Yes	Yes	Yes	No	No	1'-8"	Moderate	No	Yes	Yes	726D	5615	4/1/2023

**PERMANENT INSTALLATIONS (MAY BE USED IN WORKZONES ALSO)**

DELTA		Yes	Yes	Yes	Yes	2'-6"	Moderate	Yes	No	Yes	720A, 726D	5365	9/7/2021
QUADGUARD M10	Yes	Yes	Yes	Yes	Yes	2'-0"	Moderate	Yes	No	Yes	720A, 726D	2982	7/19/2012
QUADGUARD M WIDE	Yes	Yes	Yes	Yes	Yes	5'-9"	Moderate	Yes	No	Yes	720A, 726D	5218	11/2/2020
QUADGUARD ELITE M10	Yes	Yes	Yes	Yes	Yes	2'-0"	High	Yes	No	Yes	720A, 726D	4224	6/9/2015
QUADGUARD ELITE M10 WIDE	Yes	Yes	Yes	Yes	Yes	5'-9"	High	Yes	No	Yes	720A, 726D	5219	11/2/2020
REACT M		Yes	Yes	Yes	Yes	2'-6"	Very High	Yes	No	Yes	720A, 726D	5381	4/4/2022
SCI	Yes	Yes	Yes	Yes	Yes	2'-0"	High	Yes	No	Yes	720A, 726D	1523	11/4/2019
TAU-M	Yes	Yes	Yes	Yes	Yes	2'-3 1/2"	Moderate	Yes	No	Yes	720A, 726D	4961	5/29/2019
HERCULES	Yes	Yes	Yes	Yes	Yes	2'-6"	High	Yes	No	Yes	720A, 726D	5390	5/1/2023
DELTA CRASH CUSHION	Yes	No	Yes	Yes	Yes	2'-6"	High	Yes	No	Yes	720A, 726D	5673	9/3/2024
SMART POD	Yes	Yes	Yes	Yes	Yes	3'-2"	High	Yes	No	Yes	720A, 726D	5685	9/3/2024

**Note 1** - This Chart is based on a benefit/cost evaluation with the predominant impacts being head-on hits. Consideration is made for maintenance efforts and duration.

**Note 2** - May be used in gores greater the 20' from either traveled way.

**Note 3** - May be used on a roadway with 2-way traffic if it is on the roadside and not separating traffic. It must be at least 40 feet from opposite direction of traffic, not seperating traffic.

**Note 4** - Wider Systems increase Impact Attenuator Length.

**Note 5** - Approximate Impact Frequency

Frequency	Estimated Impact Rate
Very High	3 or more major impacts per year where self-restoration is a consideration
High	2 major impacts every year
* Moderate	1 major impact every 2 to 3 years
Low	1 impact every 5 years

<sup>Y</sup> See Ground Mounted Impact Attenuator Manufacturers Chart

<sup>Φ</sup> Also approved for temporary applications

\* Intended to be the predominant category used unless local knowledge dictates

**LIST II-31.3 - END ANCHORS**  
**MASH COMPLIANT END ANCHORS**

NAME	MANUFACTURER	PEB #	PAY ITEM #	APPROVED DATE	BABA COMPLIANT	APPROVED TYPE
MFLEAT (TL-3)	Road Systems, Inc. 3616 Old Howard County Airport Road; Big Springs, TX 79720 432-263-2435 <a href="http://www.roadsystems.com">www.roadsystems.com</a>	5007	630C	11/4/2019	Y2	Type 10 Series MASH TL-3
SOFTSTOP SYSTEM (TL-2)	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://trinityhighway.com/products/SoftStop.html">http://trinityhighway.com/products/SoftStop.html</a>	4702	630C	7/10/2017	Y2	Type 20 Series MASH TL-2
SOFTSTOP SYSTEM (TL-3)	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://trinityhighway.com/products/SoftStop.html">http://trinityhighway.com/products/SoftStop.html</a>	4701	630C	7/10/2017	Y2	Type 20 Series MASH TL-3
MSKT (TL-3)	Road Systems, Inc. 3616 Old Howard County Airport Road; Big Springs, TX 79720 432-263-2435 <a href="http://www.roadsystems.com">www.roadsystems.com</a>	4599	630C	8/7/2017	Y2	Type 20 Series MASH TL-3
MAX-TENSION (TL-2)	Lindsay Transportation Solutions, LLC 180 River Road; Rio Vista, CA 94571-1208 707-374-6800 <a href="http://www.lindsay.com/">http://www.lindsay.com/</a>	4915	630C	11/5/2018	Y2	Type 20 Series MASH TL-2
MAX-TENSION (TL-3)	Lindsay Transportation Solutions, LLC 180 River Road; Rio Vista, CA 94571-1208 707-374-6800 <a href="http://www.lindsay.com/">http://www.lindsay.com/</a>	4738	630C	1/8/2018	Y2	Type 20 Series MASH TL-3
SGET (TL-3)	SPIG Industries 14675 Industrial Park Road, Bristol, VA 24202 276-644-9510 <a href="https://spigindustry.com/">https://spigindustry.com/</a>	4928	630C	4/13/2020	Y2	Type 20 Series MASH TL-3
MATT	Valtire 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://trinityhighway.com/products.html">http://trinityhighway.com/products.html</a>	5437	630C	7/10/2023	Y2	Type 22 series MASH TL-3
NextGen Terminal (Model No. NGT)	NextGen Safety, LLC 2092 Attala Rd. 2202; Kosciusko, MS 39090 662-289-6338 <a href="http://www.nextgensafety.net">http://www.nextgensafety.net</a>	5728	630C	3/3/2025	Y2	Type 20 Series MASH TL-3

NON-MASH COMPLIANT END ANCHORS						
NAME	MANUFACTURER	PEB #	PAY ITEM #	APPROVED DATE	BABA COMPLIANT	APPROVED TYPE
* FLEAT-350	Road Systems, Inc. 3616 Old Howard County Airport Road; Big Springs, TX 79720 432-263-2435 <a href="http://www.roadsystems.com">www.roadsystems.com</a>		630C		Y2	Type 10 series
* FLEAT-SP	Road Systems, Inc. 3616 Old Howard County Airport Road; Big Springs, TX 79720 432-263-2435 <a href="http://www.roadsystems.com">www.roadsystems.com</a>	4553	630C	7/11/2016	Y2	Type 10 series NCHRP 350
* SRT-350	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://trinityhighway.com/products/et-srt350.html">http://trinityhighway.com/products/et-srt350.html</a>	NA	630C		Y2	Type 10 series
* SRT-350-HBA	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://trinityhighway.com/products/et-srt350.html">http://trinityhighway.com/products/et-srt350.html</a>	NA	630C		Y2	Type 10 series
* SRT-27SP	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://trinityhighway.com/products/et-srt350.html">http://trinityhighway.com/products/et-srt350.html</a>	2093	630C	9/14/2009	Y2	Type 10 series
** ET-PLUS	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://trinityhighway.com/products/etplus.html">http://trinityhighway.com/products/etplus.html</a>	NA	630C		Y2	Type 20 series
** SKT-350	Road Systems, Inc. 3616 Old Howard County Airport Road; Big Springs, TX 79720 432-263-2435 <a href="http://www.roadsystems.com">www.roadsystems.com</a>	NA	630C		Y2	Type 20 series
** SKT-SP	Road Systems, Inc. 3616 Old Howard County Airport Road; Big Springs, TX 79720 432-263-2435 <a href="http://www.roadsystems.com">www.roadsystems.com</a>	4552	630C		Y2	Type 20 Series TL 2 & TL 3

* C-A-T	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://trinityhighway.com/products/cat350.html">http://trinityhighway.com/products/cat350.html</a>	713	630C		Y2	Type 22 Series TL 2 & TL 3
* FLEAT-MT	Road Systems, Inc. 3616 Old Howard County Airport Road; Big Springs, TX 79720 432-263-2435 <a href="http://www.roadsystems.com">www.roadsystems.com</a>	1302	630C		Y2	Type 22 Series TL 2 & TL 3

**Notes:**

1. NA - These are systems with FHWA approval letters and have been allowed by ALDOT for several years and are considered approved.
2. FLEAT 350 may or may not have an assigned PEB number.

**\* MASH Compliance Deadline 6-30-2018. (After MASH Compliance date, these devices will not be approved for inclusion in contract projects on NHS Routes.)**

**\*\* MASH Compliance Deadline 1-1-2018. (After MASH Compliance date, these devices will not be approved for inclusion in contract projects on NHS Routes.)**

**LIST II-31.4 - CABLE GUIDERAIL SYSTEMS**

**NON-MASH COMPLIANT**

NAME	MANUFACTURER	PEB #	PAY ITEM #	APPROVED DATE	BABA COMPLIANT	NOTES
BRIFEN WIRE ROPE SAFETY FENCE	Brifen USA, Inc. 12501 North Sante Fe; Oklahoma City, OK 73114 866-422-4336 <a href="http://brifenusacom/">http://brifenusacom/</a>	2785	624A	2/9/2012	Y2	NCHRP-350
NUCOR US CABLE BARRIER HIGH TENSION, (TL-4)	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://trinityhighway.com/products/cb.html">http://trinityhighway.com/products/cb.html</a>	1971	624A	7/6/2009	Y2	NCHRP-350
CASS CABLE SAFETY SYSTEM	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://trinityhighway.com/products/cassTL4.html">http://trinityhighway.com/products/cassTL4.html</a>	2976	624A	9/18/2012	Y2	NCHRP-350
SAFENCE HIGH TENSION CABLE BARRIER	Gregory Industries, Inc. 4100 13th St SW; Canton, OH 44710 330-477-4800 <a href="https://www.gregorycorp.com/index.htm">https://www.gregorycorp.com/index.htm</a>	2376	624A	6/5/2012	Y2	NCHRP-350
GIBRALTAR CABLE BARRIER SYTEM TL-4 (4-Cable)	Gibraltar Global, LLC. 1208 Houston Clinton Dr.; Burnet, TX 78611 833-715-0810 <a href="https://gibraltarglobal.com/">https://gibraltarglobal.com/</a>	4548	624A	9/6/2016	Y2	NCHRP-350

**MASH COMPLIANT**

BRIFEN WIRE ROPE SAFETY FENCE (O-POST) (level terrain)	Brifen USA, Inc. 12501 North Sante Fe; Oklahoma City, OK 73114 866-422-4336 <a href="http://brifenusacom/">http://brifenusacom/</a>	5237	624A	1/6/2021	Y2	MASH TL-3 6:1 or flatter
BRIFEN MASH TERMINAL (level terrain)	Brifen USA, Inc. 12501 North Sante Fe; Oklahoma City, OK 73114 866-422-4336 <a href="http://brifenusacom/">http://brifenusacom/</a>	5237	624B	1/6/2021	Y2	MASH TL-3 6:1 or flatter
CASS S3 M10 (4:1 or flatter) <b>cable only, does not include anchors</b>	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://trinityhighway.com/products/cassTL4.html">http://trinityhighway.com/products/cassTL4.html</a>	5220	624A		Y2	MASH TL-3 <b>cable only, not anchors</b> 4:1 or flatter 4' from top of slope break only
CASS S3 M10 (10:1 or flatter) <b>cable only, does not include anchors</b>	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://trinityhighway.com/products/cassTL4.html">http://trinityhighway.com/products/cassTL4.html</a>	5220	624A		Y2	MASH TL-4 <b>cable only, not anchors</b> 10:1 or flatter

**LIST II-31.5 - POLYMER & COMPOSITE BLOCKOUTS \***

**MASH TL-3 COMPLIANT**

PRODUCT	PRODUCER	PEB #	APPROVED DATE	Notes
MONDO 8" BLOCK GB14SH (1)	Mondo Polymers Technologies, Inc. 27620 State Route 7 North, Box 250 Reno, OH 45773 740-376-9396 <a href="https://www.mondopolymer.com/">https://www.mondopolymer.com/</a>	1310	2/11/2019	
MONDO 8" BLOCK GB14SH (2)	Mondo Polymers Technologies, Inc. 27620 State Route 7 North, Box 250 Reno, OH 45773 740-376-9396 <a href="https://www.mondopolymer.com/">https://www.mondopolymer.com/</a>	4900	2/11/2019	
MONDO 12" BLOCK MGS14SH	Mondo Polymers Technologies, Inc. 27620 State Route 7 North, Box 250 Reno, OH 45773 740-376-9396 <a href="https://www.mondopolymer.com/">https://www.mondopolymer.com/</a>	4901	2/11/2019	
8" KING MASH16 COMPOSITE BLOCK	Trinity Highway Products, LLC 2525 Stemmons Freeway Dallas, TX 75207 205-473-2664 <a href="https://trinityhighway.com/">https://trinityhighway.com/</a>	5213	10/5/2020	

**MASH TL-3 ADJUSTABLE HEIGHT COMPLIANT**

PRODUCT	PRODUCER	PEB #	APPROVED DATE	Notes
MONDO 8" BLOCK GB14SH (1)	Mondo Polymers Technologies, Inc. 27620 State Route 7 North, Box 250 Reno, OH 45773 740-376-9396 <a href="https://www.mondopolymer.com/">https://www.mondopolymer.com/</a>	1310	2/11/2019	

**\* Wood blockouts meeting AASHTO PDB01a-b are allowed.**

<b>NCHRP-350 COMPLIANT</b>			
<b>PRODUCT</b>	<b>PRODUCER</b>	<b>APPROVED DATE</b>	<b>Notes</b>
MONDO BLOCK	Mondo Polymers Technologies, Inc. 27620 State Route 7 North, Box 250 Reno, OH 45773 740-376-9396 <a href="https://www.mondopolymer.com/">https://www.mondopolymer.com/</a>	5/5/2003	
TIMBEREX OFFSET BLOCKOUT	Mobile Chemical P O Box 5445 Norwalk, CT 06856	4/5/1993	
"CENTRAL" RECYCLE PLASTIC BLOCK	Central Fabricators P O Box 930 Kosciusko, MS 39090 662-289-2958	8/3/1998	
CAMCO PLASTIC BLOCKOUT	Camco, Inc. 1800 Greenbrier Road Anniston, AL 36207	5/8/2000	
VALLEY RUBBER 6" BLOCKOUT	Valley Rubber, LLC P O Box 1209 Hartselle, AL 35640 256-784-5231 <a href="https://www.valleyrubber.solutions/">https://www.valleyrubber.solutions/</a>	1/2/2001	
VALLEY RUBBER 8" BLOCKOUT	Valley Rubber, LLC P O Box 1209 Hartselle, AL 35640 256-784-5231 <a href="https://www.valleyrubber.solutions/">https://www.valleyrubber.solutions/</a>	4/2/2001	

KING BLOCK	Trinity Highway Products, LLC 2525 Stemmons Freeway Dallas, TX 75207 205-473-2664 <a href="https://trinityhighway.com/">https://trinityhighway.com/</a>	1/7/2002	
POLYLUMBER PL5814R RECYCLED PLASTIC OFFSET BLOCK	Ramco International of Delaware, LLC P O Box 56 Imperial, PA 15126	1/6/2003	
MONROEVILLE 8" COMPOSITE OFFSET BLOCK	Monroeville Industrial Molding, Inc. 75 Ontario Street Norwalk, OH 44857	6/10/2009	
POLYLUMBER PLASTIC BLOCKOUT	Ramco International of Delaware, LLC p o box 9625 Pittsburg, PA 15226	2/6/2001	

**\* Wood blockouts meeting AASHTO PDB01a-b are allowed.**

**LIST II-31.6 - MISCELLANEOUS**

NAME	MANUFACTURER	PEB #	APPROVED DATE	BABA COMPLIANT	NOTES
SHUR-TITE CABLE BARRIER DELINEATOR #SC2755	Shur-Tite Products P.O. Box 2283; Round Rock, TX 78680 512-388-0417 <a href="https://shur-tite.com/">https://shur-tite.com/</a>	2242	5/3/2012	Y2	
SAFENCE TERMINAL	Gregory Industries, Inc. 4100 13th St SW; Canton, OH 44710 330-477-4800 <a href="https://www.gregorycorp.com/index.htm">https://www.gregorycorp.com/index.htm</a>	1912	12/3/2007	Y2	
SENTRY WATER-CABLE BARRIER	Traffix Devices, Inc. 3780 Paul Samuel Rd; Kennesaw, GA 30152 770-778-8281 (Contact: David Evans) <a href="http://www.traffixdevices.com/">http://www.traffixdevices.com/</a>	2241	3/5/2012	Y2	
SAFENCE 4	Gregory Industries, Inc. 4100 13th St SW; Canton, OH 44710 330-477-4800 <a href="https://www.gregorycorp.com/index.htm">https://www.gregorycorp.com/index.htm</a>	1911	12/3/2007	Y2	
GLARE SCREEN	Flexstake, Inc. 2150 Andrea Ln; Fort Myers, FL 33912 800-348-9839 <a href="http://flexstake.com/">http://flexstake.com/</a>	1073	9/6/2005	Y2	
SAFE-HIT GLARE SCREEN	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.coralsales.com/products/highwayproducts/guardrailenddtreatments/retro rail/">http://www.coralsales.com/products/highwayproducts/guardrailenddtreatments/retro rail/</a>	1341	12/1/2003	Y2	
RETRO RAIL GUARDRAIL RETROFIT	Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.coralsales.com/products/highwayproducts/guardrailenddtreatments/retro rail/">http://www.coralsales.com/products/highwayproducts/guardrailenddtreatments/retro rail/</a>	4408	7/11/2016	Y2	MASH
GUARDIAN 5 MASH TL-5 MEDIAN AND LONGITUDINAL BARRIER	Gregory Industries, Inc. 4100 13th St SW; Canton, OH 44710 330-477-4800 <a href="https://www.gregorycorp.com/index.htm">https://www.gregorycorp.com/index.htm</a>	4978	11/4/2019	Y2	MASH

APPROVED ROADSIDE SAFETY DEVICES -  
PORTABLE BARRIERS, IMPACT ATTENUATORS, END ANCHORS, GUIDERAILS, MISC.

<p>NU-GUARD-31 (5#) MASH TL-3 MEDIAN AND LONGITUDINAL BARRIER</p>	<p>NUCOR Steel Marion, Inc. 912 Cheney Ave, Marion, OH 43302 740-223-4357 <a href="https://nucor.com/">https://nucor.com/</a></p>	<p>5010</p>	<p>3/2/2020</p>	<p>Y2</p>	<p>MASH</p>
<p>ETI-GR02-TL4 MASH TL-4 MEDIAN AND LONGITUDINAL BARRIER</p>	<p>ETI USA, Inc. 14 Ormond Park Rd., Glen Head, NY 11545 215-789-5763 <a href="https://www.etiusainc.com/">https://www.etiusainc.com/</a></p>	<p>5347</p>	<p>8/9/2021</p>	<p>NON- COMPLIANT</p>	<p>MASH TL-4</p>
<p>HIGHWAY GUARD BARRIER</p>	<p>Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.coralsales.com/products/highwayproducts/guardrailendntreatments/retro rail/">http://www.coralsales.com/products/highwayproducts/guardrailendntreatments/retro rail/</a></p>	<p>5382</p>	<p>4/4/2022</p>	<p>Y2</p>	<p>MASH TL-3 TL-4</p>
<p>HIGHWAY GUARD LDS BARRIER</p>	<p>Trinity Highway Products, LLC 2525 Stemmons Freeway; Dallas, TX 75207 205-473-2664 <a href="http://www.coralsales.com/products/highwayproducts/guardrailendntreatments/retro rail/">http://www.coralsales.com/products/highwayproducts/guardrailendntreatments/retro rail/</a></p>	<p>5383</p>	<p>4/4/2022</p>	<p>Y2</p>	<p>MASH TL-3 TL-4</p>