COLORADO DEPARTMENT OF TRANSPORTATION

PRE-APPROVED PRODUCT EVALUATION REQUEST & SUMMARY

APL Reference No. 3351-15

Product Evaluation Coordinator
Colorado Department of Transportation
4670 North Holly Street, Unit A
Denver, Colorado 80216

Material code: 606.02.06.00

FOR INTERNAL CDOT USE

Material code description full name: Barrier, Cable

PART 1

Product name: Brifen WRSF TL-4, 4-Cable, 4:1 Slope	Product category: Roadway Safety\Cable Barrier\NCHRP 350 TL-4
Product representative (name & address): Attn: Jeff Shewmaker Brifen USA, Inc. 12501 N. Santa Fe Ave. Oklahoma City, OK 73114 Phone: (405) 751-8062 FAX: (405) 751-8338	Manufacturer (name & address): Attn: Bill Trousdale Brifen USA, Inc. 12501 N. Santa Fe Ave. Oklahoma City, OK 73114 Phone: (405) 751-8062 FAX: (405) 751-8338
Web-site address: www.brifenusa.com	Web-site address: www.brifenusa.com

Description of the product: (Include specific quantifiable details from tech data sheet. Advertising generalities are not appropriate.)
The Brifen Wire Rope Safety Fence is a highway safety barrier that uses tensioned wire ropes supported by weak steel posts to restrain vehicles. The post spacing varies by need and deflection requirements but cannot extend past 21 feet. Typical spacing is 10.5 feet. This TL-4 version can also be installed on slopes not exceeding 4:1 and is rated as a TL-3 device when installed on slopes between 6:1 & 4:1.

Restrictions, (installation and/or use):
Refer to the NCHRP 350 letters for restrictions to placement on slopes.

Use of the product, (be specific to CDOT highway activities only):
Median and right hand shoulders.

Benefits to CDOT, (how will your product enhance quality, improve safety, save money, be a better value then other manufacturer's products):
The system costs less to install and maintain versus w-beam guardrail and concrete barrier. The barrier is also less harmful to occupants in vehicles that strike the barrier.

Specifications, (listing those applicable is required) **& Certificate of Compliance** (required to certify compliance with listed specifications):

- [x] CDOT : Standard Specifications, Section 606
- [ ] ASTM :
- [ ] AASHTO :
- [x] FHWA : NCHRP 350 TL-4
- [ ] other :

Product testing, (from national/independent laboratories or universities) **& Certified Test Report** (CTR required to validate all claims):

- [ ] NTPEP-AASHTO :
- [x] FHWA : Letter of Acceptance per NCHRP 350 TL-4, HSA-10/B-82-B1 (for TL4),-10/B82-B1 (for 4:1), HSSD/B-82D (for 21')
- [x] other : MIRA (2-18 & 2-23-2005), SRI (3-29-2006), SRI (5-2010)
- [x] other : Certificate of Verification (7-23-2015)

State DOT Approvals, (current documentation required):

Sample submitted: [ ] yes [ ] no [x] n/a | Materials Safety Data Sheets (MSDS): [ ] yes [ ] no [x] n/a

Notes/Additional Comments
Motor Industry Research Association (MIRA): MIRA-04-1007578, MIRA-05-1008159
Southwest Research Institute (SRI): SwRI Project No. 18.12156 (BCR-2, BCR-4, BCR-5), SwRI Project No. 18.15611 (B-2)

Both the NCHRP 350 TL-3 and TL-4 have been installed in the State of Colorado and have been proven to be very successful.