COLORADO DEPARTMENT OF TRANSPORTATION

PRE-APPROVED PRODUCT EVALUATION REQUEST & SUMMARY

APL Reference No. 2243-11

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

Material code: 606.02.03.00

FOR INTERNAL CDOT USE

Material code description full name: Guardrail, End Treatments

PART 1

Product name: Brakemaster 350

Product category: Roadway Safety\Guardrail W-Beam\Guardrail End Treatment

Product representative (name & address):
Attn: Roger N. Egan
Interwest Safety Supply, Inc.
195 South Navajo Street
Denver, CO 80223
Phone: (303) 733-8447 FAX: (303) 733-8664
Web-site address: www.energyabsorption.com

Manufacturer (name & address):
Attn:
Energy Absorption Systems, Inc.
35 East Wacker Drive
Chicago, IL 60601
Phone: (312) 467-6750 FAX: (312) 467-9625
Web-site address: www.energyabsorption.com

Description of the product: (Include specific quantifiable details from tech data sheet. Advertising generalities are not appropriate.)
Brakemaster 350 is a redirective, gating guardrail end treatment. The system's unique design consists of a framework of w-beam steel guardrail panels which move rearward during head-on impacts. The system also redirects vehicles when a side impact occurs. As a gating system, the Brakemaster 350 requires a sufficient clear zone behind the system. Brakemaster 350 is 31'6" long, 27" high, and 25" wide.

Restrictions, (installation and/or use):

Use of the product, (be specific to CDOT highway activities only):
For shielding dangerous guardrail ends at wide median & roadside sites w/ adequate clear zones, protect double-faced guardrail in bidirectional application.

Benefits to CDOT, (how will your product enhance quality, improve safety, save money, be a better value then other manufacturer's products):
Brakemaster 350 provides superior bidirectional protection and does not require a concrete anchor or pad, making it fast and easy to install. Metal diaphragm posts rest on slip bases that set right on the ground. There are no wood post holes to dig. All replacement parts are above ground for fast and easy refurbishment after an impact - no wood posts to remove. Brakemaster is available at a very competitive low price, plus additional cost savings are realized because of reduced installation time.

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-3
- [ ] other :

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

- [ ] NTPEP-AASHTO :
- [x] FHWA : FHWA Letter of Acceptance HNG-14 (June 19, 1997), CC-41
- [x] other : E-TECH Testing Serves, Inc. (April 1997)
- [ ] other :

State DOT Approvals, (current documentation required):

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

Notes/Additional Comments
A sample Brakemaster 350 could be made available if CDOT requires it to evaluate the product completely.