



1200 New Jersey Avenue, SE
Washington, D.C. 20590

February 2, 2010

In Reply Refer To:
HSSD/SS-162

Mr. Rick Balboa
17211 Lake Ray Hubbard Drive
Forney, TX 75126-5050

Dear Mr. Balboa:

Thank you for your letter of December 16, 2009, requesting the Federal Highway Administration's (FHWA) acceptance of your company's Balboa 100 Traffic Warning Device as a crashworthy system for use on the National Highway System (NHS). Accompanying your letter were drawings and photographs of the system and system specifications. You requested that we find the system acceptable for use on the NHS under the provisions of the National Cooperative Highway Research Program (NCHRP) Report 350 "Recommended Procedures for the Safety Performance Evaluation of Highway Features."

Enclosed for reference is a drawing showing the device.

Weights of the significant components are:

Lights: 1.5 lbs

Sign: This system is intended to be used with any approved sign.

Controller including all electronics, battery pack, and one light: 5.5 lbs

Solar Panel: 4.5 lbs

Dimensions:

Lights: 6 inches x 2.25 inches x 1.5 inches

Sign: Any approved sign

Controller: 3.5 inches x 17.25 inches (11 inches of the controller fits inside the pole.)

Solar panel: 12 inches x 12 inches

This system is to be used with the Texas Universal Triangular 3-bolt slipbase sign support system.

Three FHWA Acceptance Letters, SS-90, dated August 18, 2000, SS-143, dated November 29, 2006, and SS-155, dated October 2, 2007, refer to systems similar to the Balboa system in that they include signs, lights, and other hardware on breakaway poles. The Balboa system detailed above is similar in weight to the systems accepted in the referenced letters. As the mass of the



additional hardware serves to increase the center of gravity of the system, it will allow the pole to rotate over the vehicle at a higher elevation but have little effect on the performance of a crashworthy breakaway base. This acceptance will be limited to the Balboa system mounted on generic breakaway slip bases or a comparable breakaway base using crashworthy frangible couplings.

Please note the following standard provisions that apply to FHWA letters of acceptance:

- This acceptance is limited to the crashworthiness characteristics of the systems and does not cover their structural features, nor conformity with the Manual on Uniform Traffic Control Devices.
- Any changes that may adversely influence the crashworthiness of the system will require a new acceptance letter.
- Should FHWA discover that in-service performance reveals unacceptable safety problems, or that the system being marketed is significantly different from the versions that were accepted, we reserve the right to modify or revoke our acceptance.
- You will be expected to supply potential users with sufficient information on design and installation requirements to ensure proper performance.
- You will be expected to certify to potential users that the hardware furnished has essentially the same chemistry, mechanical properties, and geometry as that submitted for acceptance, and that it will meet the crashworthiness requirements of the FHWA and the NCHRP Report 350.
- To prevent misunderstanding by others, this letter of acceptance is designated as number SS-162 and shall not be reproduced except in full. This letter and the test documentation upon which it is based are public information. All such letters and documentation may be reviewed at our office upon request.
- Balboa warning devices are patented products and considered proprietary. If proprietary systems are specified by a highway agency for use on Federal-aid projects, except exempt, non-NHS projects, (a) they must be supplied through competitive bidding with equally suitable unpatented items; (b) the highway agency must certify that they are essential for synchronization with the existing highway facilities or that no equally suitable alternative exists; or (c) they must be used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes. Our regulations concerning proprietary products are contained in Title 23, Code of Federal Regulations, Section 635.411.
- This acceptance letter shall not be construed as authorization or consent by the FHWA to use, manufacture, or sell any patented system for which the applicant is not the patent holder. The acceptance letter is limited to the crashworthiness characteristics of the candidate system, and the FHWA is neither prepared nor required to become involved in issues concerning patent law. Patent issues, if any, are to be resolved by the applicant.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "David A. Nicol", written in a cursive style.

David A. Nicol, P.E.
Director, Office of Safety Design
Office of Safety

