



4455 Genesee Street, Buffalo, New York 14225 | Phone: 716.632.7500 | Fax: 716.631.8722 | www.calspan.com

Crash Data Research Center • Flight Research • Systems Engineering • Transonic Wind Tunnel • Transportation Sciences Center

August 18, 2008

To whom it may concern:

This letter is to certify that the subject barrier, the **Shallow Foundation Modular Bollard System** provided by **Barrier1 Systems Inc.**, was tested to the requirements of the ASTM standard **F-2656-07**, Standard Test Method for Vehicle Crash Testing of Perimeter Barriers, in place at the date of the test. The test was performed at Calspan Corporation on August 5, 2008. **The barrier was impacted by a truck weighing 6736 kg (14850 lbs.) travelling at 65.7kph (40.8mph).** Based on the truck mass, impact velocity and penetration into the protected zone, **the barrier rating per the ASTM standard F-2656-07 is M40 – P1.**

Respectfully,

David J. Travale
Senior Technical Manager
ASTM test director
Calspan Corporation
Transportation Research Group
(716)631-6920
david.travale@calspan.com

A handwritten signature in blue ink, appearing to read "D. Travale", written over the typed name and title.