



**KARCO Engineering, LLC.**  
AUTOMOTIVE RESEARCH CENTER  
9270 Holly Road  
Adelanto, CA 92301  
Tel: (760) 246-1672  
Fax: (760) 246-8112  
info@karco.com

Gibraltar Cable Barrier Systems, L.P.  
320 Southland Drive  
Burnet, TX 78611

Attention: Mr. Bill Neusch

Date: April 23, 2010

Mr. Neusch,

Based upon the testing performed on Tuesday, April 6, 2010 at KARCO Engineering, LLC., the as-tested configuration, impacted between the terminal post and the first line post of a four (4) post total installation consisting of one (1) terminal post and three (3) line posts, of the Gibraltar M50 P2 Cable Crash Fence has received an impact rating of P2 at the M50 test level, based on the ASTM F 2656-07 standard test method. The M50 test level is rated using a 6800 kg test vehicle traveling at a nominal velocity of 80.5 km/h. The P2 penetration rating is given when penetration beyond the protected side of the barrier is between 1.01 m and 7.00 m at the lower leading edge of the test vehicle's cargo bed.

The M50 P2 Cable Crash Fence completely arrested the test vehicle with a maximum dynamic penetration of 4.91 m, and a maximum static penetration of 2.42 m. The test vehicle was completely disabled by the impact with the test article.

Complete information relating to the test can be found in report number TR-P30050-01-NC from KARCO Engineering, LLC., including test article (M50 P2 Cable Crash Fence) specifications, test vehicle information, and test conditions. Also outlined in the test report are discrepancies/changes to the as-tested unit versus the supplied manufacturer drawings, and the details regarding the installation for this test. The installation of the fence for the impact test was deemed a non-standard installation with significant changes from the design.

Sincerely yours,

Frank D. Richardson  
President  
KARCO Engineering, LLC.