Gibraltar
4303 Innovation Loop
Marble Falls, TX 78654

Attention: Mr. Bill Neusch

Date: May 15, 2013

Mr. Neusch,

Based upon the test performed on Friday, March 11, 2013 at KARCO Engineering, LLC., the as-tested configuration of the Gibraltar M50 P1 28 ft. Cable Crash Fence has received an impact rating of P1 at the M50 test level, based on the ASTM F 2656-07 standard test method. This test evaluated the M50 P1 28 ft. Cable Crash Fence for an impact between the second and third line posts, 21.3 m from the terminal post.

The M50 test level of the ASTM F 2656-07 is evaluated using a 6,800 kg test vehicle traveling at a nominal velocity of 80 km/h. The P1 penetration rating is given when penetration beyond the protected side of the barrier is less than 1.0 m at the lower leading edge of the test vehicle’s cargo bed. For this test the protected side was the vertical plane created by the back (non-impacted) side of the line posts.

The M50 P1 28 ft. Cable Crash Fence completely disabled the test vehicle causing severe damage to the occupant compartment, chassis, and drivetrain. The maximum penetration was recorded dynamically on the passenger’s side of the vehicle and was 848 mm.

The M50 P1 28 ft. Cable Crash Fence sustained major damage as a result of the impact. Each terminal, line, and intermediate line post foundation shifted as a result of the impact. The intermediate line posts in the immediate vicinity of the impact sheared and their foundations were pulled from the soil. The bottom cable slipped and began to fray between line posts 2 and 3. All posts bent inwards toward the impact location. The opening remained blocked after the impact.

Complete information relating to the test can be found in report number TR-P33014-01-A and CD serial number 2013-2698 from KARCO Engineering, LLC., including test conditions, test vehicle information, test article specifications, manufacturer’s drawings and any deviations from the drawings in the as-tested configuration. This letter should not be considered complete documentation of this test without consideration of the test report and deliverable CD.

Sincerely yours,

Frank D. Richardson
President
KARCO Engineering, LLC.