U.S.Department
of Transportation
Federal Highway Administration

400 Seventh St., S.W.
Washington, D.C. 20590

September 23, 1997
Refer to: HNG-14

Mr. E. Scott Walter
President
Roadway Safety Service, Inc.
80 Remington Blvd.
Ronkonkoma, New York 11779

Dear Mr. Walter:

My June 25 letter to you acknowledged receipt of crash test data on the REACT 350 anchored on asphalt and accepted this unit as a test level 3 temporary barrier for use on the National Highway System except at locations where reverse-direction, rear-corner impacts are possible. At that time, I was concerned that vehicular snagging was likely in such a hit.

Your September 4 letter transmitted a copy of a test report prepared by the Texas Transportation Institute dated August 1997 and entitled "Reverse Direction Crash Test with Small Vehicle on the REACT 350 Anchored in Asphalt." This report documented the results of an 820-kg car striking the interface of the backup unit and the rear-most cylinder of the REACT 350 at 100 km/h and a 20-degree impact angle. This test met the National Cooperative Highway Report Program Report 350 evaluation criteria as can be seen in the enclosed test summary.

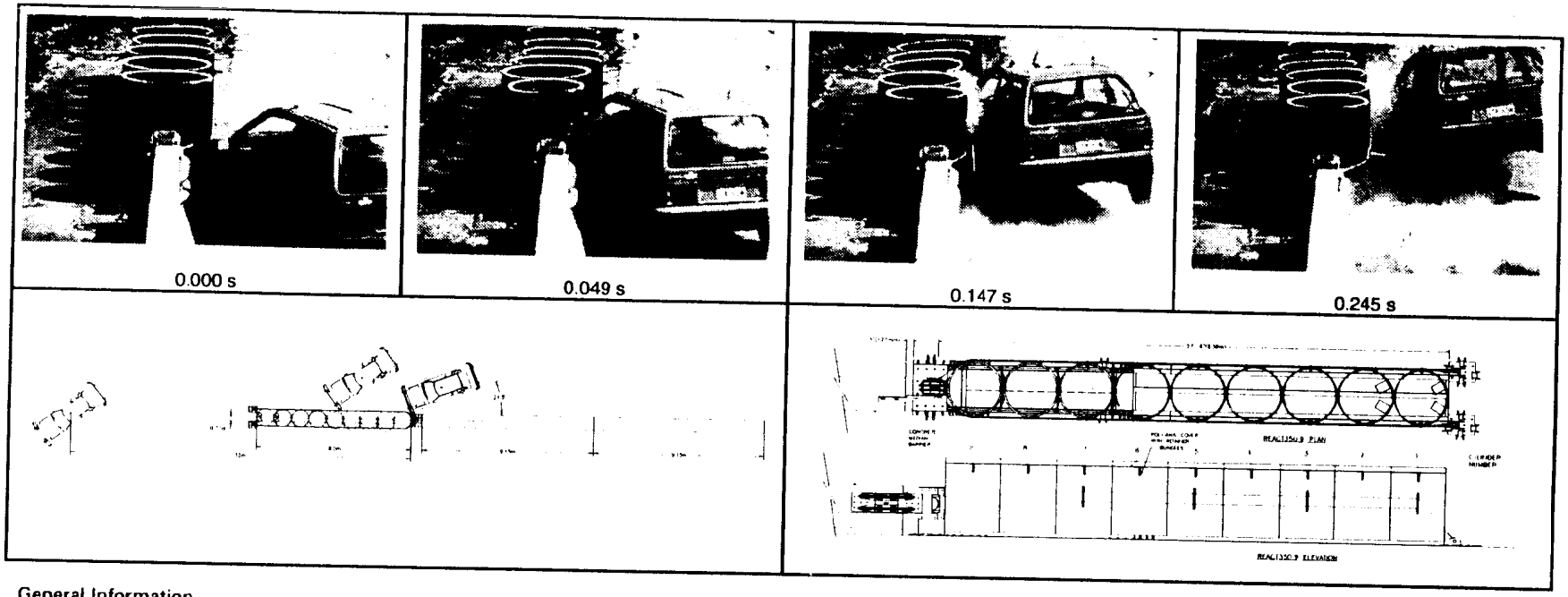
Consequently, the limitations on the REACT 350 usage noted in the aforementioned letter are rescinded. This unit may now be used as either a temporary or permanent installation for both unidirectional and bi-directional traffic when anchored and installed as tested and when selected for use by the responsible highway agency.

Sincerely yours,

Dwight A. Horne

Dwight A. Horne, Chief
Federal-Aid and Design Division

Enclosure



General Information
- Test Agency . . . . . Texas Transportation Institute
- Test No. 400001-RSS3
- Date 07/21/97

Test Article
- Type . . . . . Crash Cushion
- Name or Manufacturer . . . . REACT 350 in asphalt
- Installation Length (m) 8.0
- Size and/or dimension and material of key elements . . . . . Nine polyethylene cylinders of varying densities 1.22 m tall by 0.91 m dia

Soil Type and Condition . . . . . Asphalt pavement, dry

Test Vehicle
- Type . . . . . Production
- Designation 820C
- Model . . . . . 1992 Ford Festiva
- Mass (kg) Curb 814
  - Test Inertial 820
  - Dummy 76
  - Gross Static 896

Impact Conditions
- Speed (km/h) 98.26
- Angle (deg) 21.50

Exit Conditions
- Speed (km/h) 54.99
- Angle (deg) 13.15

Occupant Risk Values
- Impact Velocity (m/s)
  - x-direction 11.71
  - y-direction 6.45
- Ridedown Accelerations (g's)
  - x-direction . . . . . -13.70
  - y-direction 9.23
- Max. 0.050-s Average (g's)
  - x-direction . . . . . -14.64
  - y-direction 11.34
  - z-direction . . . . . -2.15

Test Article Deflections (m)
- Dynamic 0.27
- Permanent 0.10

Vehicle Damage
- Exterior
  - VDS 11LFQ4
  - CDC 11FLEW3
- Maximum Exterior Vehicle Crush (mm) 485
- Interior
  - OCDI LF0020000
- Max. Occ. Compart. Deformation (mm) 110

Post-Impact Behavior (during 1.0 s after impact)
- Max. Roll Angle (deg) . . . . -7.16
- Max. Pitch Angle (deg) . . . . -17.61
- Max. Yaw Angle (deg) 15.00

Figure 16. Summary of results for test 400001-RSS3.