U.S. Department
Of Transportation
Federal Highway
Administration

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

August 8, 1996

Refer to: HNG-14

Mr. Donnie L. Reagan
Universal Anchor Systems
P.O. Box 3010
Big Spring, Texas 79721-3010

Dear Mr. Reagan:

Your August 1 facsimile transmittal to Mr. Richard Powers of my staff requested the Federal Highway Administration's acceptance of your Universal Anchor System for single and dual-legged sign supports. Subsequent telephone discussions revealed that you sought acceptance of the specific design using schedule 40 steel pipe set in concrete as shown on the right hand side of Enclosure 1. You also submitted preliminary test result summaries sent to you by the Texas Transportation Institute on August 1 (Enclosure 2).

Based on our review of these data, we will offer conditional acceptance of the Universal Anchor System, pending receipt of the final report, crash-test videos, and material specifications for the anchor. Dimensions on the final drawings should be shown in metric units.

Please be aware that this conditional acceptance is based on the summary information you have submitted and it may be rescinded or modified if the final report indicates problems or concerns that were not evident from a review of these preliminary data.

Should you have any questions, please call Mr. Nicholas Artimovich of my staff at (202) 366-1331.

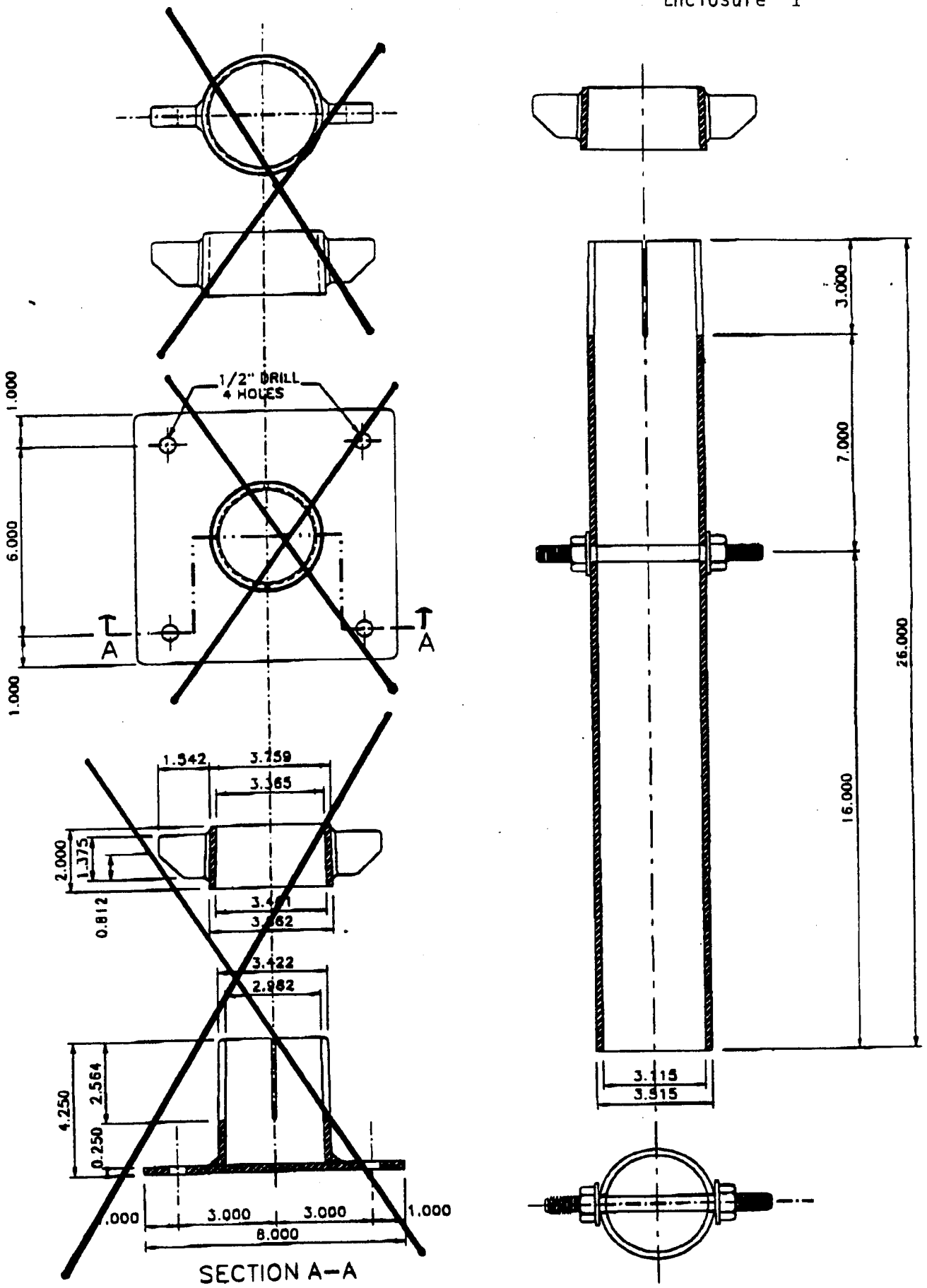
Sincerely yours,

Seppo I. Sillan, Acting Chief
Federal-Aid and Design Division

2 enclosures

Geometric and Roadside Design Acceptance Letter SS-66

Enclosure 1



UNIVERSAL ANCHOR SYSTEM

TEXAS TRANSPORTATION INSTITUTE

ENGINEERING FACTORS PROGRAM
Safety Division

Telephone: (409) 845-6376
Fax: (409) 845-6178

August 1, 1996

Donnie L. Reagan
Universal Anchor Systems
P. O. Box 3010
Big Spring, Texas 79721-3010

RE: Testing of HwyCom FRP post and Poz-loc
with Universal Systems Anchor

Dear Mr. Reagan:

Enclosed are the preliminary summaries for the testing referenced above. Briefly the occupant risk factors for each test were as follows:

Test 270687-MOR1 (3-61) with single HwyCom FRP post at 99.29 km/h
Longitudinal impact velocity — No contact
Longitudinal ridedown accel. — N/A

Test 270687-MOR2 (3-61) with dual HwyCom FRP posts at 100.43 km/h
Longitudinal impact velocity — 0.99 m/s
Longitudinal ridedown accel. — -0.42 g

Test 270687-MOR4 (3-60) with dual HwyCom FRP posts at 34.75 km/h
Longitudinal impact velocity — 3.74 m/s
Longitudinal ridedown accel. — 0.43 g

Test 270687-MOR5 (3-60) with Poz-loc at 34.91 km/h
Longitudinal impact velocity — 3.19 m/s
Longitudinal ridedown accel. — -0.43 g

Test 270687-MOR6 (3-61) with Poz-loc at 100.24 km/h
Longitudinal impact velocity — 2.64 m/s
Longitudinal ridedown accel. — 1.67 g

These results and other data collected during the testing indicate acceptable performance (according to NCHRP Report 350) in each of the tests performed. A formal report is being prepared at this time and will be forwarded to you upon completion.