

September 10, 2007

1200 New Jersey Avenue, SE. Washington, DC 20590

In Reply Refer To: HSSD/CC-92A

Mr. Bill Neusch, President Gibraltar 320 Southland Road Burnet, TX 78611

Dear Mr. Neusch:

In your letter of May 17, 2007, you requested the Federal Highway Administration's (FHWA) acceptance of a driven socket design of the anchor and terminal posts for use with the previously accepted Gibraltar Cable Barrier Terminal (FHWA acceptance letter CC-92 of June 23, 2005). The design details of the driven socket design of the system are provided in the enclosure.

It is the FHWA's current position to consider driven posts and socketed posts set in concrete footings or driven steel sockets to be equivalent and, thus interchangeable when used in any configuration (i.e., post spacing) that was physically tested or at a spacing that lies between two spacings that were physically tested. Therefore, any post embedment type (i.e., driven posts, concrete-socketed posts, and driven steel tube socketed posts) for any post spacing that you have physically tested may be considered acceptable. The assumed design deflection for any alternative embedment design used would be the maximum deflection noted in any test with the same post spacing, even though a different embedment detail was used in the actual crash test.

Since you have successfully tested your Gibraltar Cable Barrier Terminal with terminal posts set 15" (381 mm) into 42" (1067 mm) deep x 12" (305 mm) diameter reinforced concrete footings, we can agree that terminal posts set 15" (381 mm) into a 3/16" (4.8 mm) thick 3"x 4" (76 mm x 102 mm) steel sockets driven 42" (1067 mm) deep into the ground would be expected to perform satisfactorily as well. Also, since you have successfully tested your Gibraltar Cable Barrier Terminal with anchor post set 30" (762 mm) into 72" (1829 mm) deep x 24" (610 mm) diameter reinforced concrete footing, we are willing to agree that anchor post set 30" (762 mm) into a 3/8" (9.5 mm) thick 8"x 8" (203 mm x 203 mm) steel socket driven 96" (2438 mm) deep into the ground would also perform satisfactorily. Further, we agree that 4"x 2" (102 mm x 51 mm) angle iron connecting the tops of four terminal post sockets to the top of the anchor provides an additional safeguard against shifting of the anchor socket in the ground and should be always used with the driven steel socket design of the anchor.



Please note that the driven socket design as described above will not be acceptable in sandy soils. When poor soil (expansive clay) is encountered the 8"x 8" (203 mm x 203 mm) steel socket should be driven deeper (120" or 3048 mm) into the ground.

Sincerely yours,

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for: George E. Rice, Jr. Acting Director, Office of Safety Design Office of Safety

Enclosure

