702 ATTENUATION DEVICES

Permanent installations of energy absorbing terminals are usually placed on a reinforced concrete pad. Unless otherwise specified on the project plans, the paved pad must be 4-inch (100-millimeter) thick utility concrete or asphalt. The type of bolt and anchorage called for in the installation instructions must be used as specified since the effectiveness of the attenuator depends on the anchorage being strong enough to withstand the design impact stresses. The inspector should verify the attenuation device is on the Department's current Approved Products or obtain approved from ADOT Traffic Group.

Alignment and slope of the attenuator are important for reasons of aesthetics and for the proper functioning of the unit. When permanent attenuators are constructed with salvaged material, or material that was obtained from a replacement package, all parts should be carefully examined for damage and compatibility with the existing attenuator parts. Field modifications of parts are not to be made unless they are approved by ADOT Traffic Group and the attenuator manufacturer.

The Standard Drawings give the dimensions, weights, and layout criteria for typical sand barrel installations. These layouts are to be used unless the Project Plans contain a separate detail for a given location.

The angles and weights shown in the drawings for the installation of sand barrels are not to be changed. The details shown in the drawings have been developed through calculations and testing to provide maximum protection for the design vehicle within a reasonable range of speeds. Any change in layout criteria may seriously affect the performance of the sand barrel array. As an aid to maintenance, it is helpful to paint the outline of each barrel and its sand weight on the concrete base. The placement of temporary sand barrels on pallets should not be allowed unless the manufacturer specifically approves this.