

SECTION 01441**TEMPORARY SAND CONTAINER CRASH CUSHIONS
FOR MAINTENANCE OF TRAFFIC****01441.01 GENERAL****A. Description**

This work shall consist of furnishing and installing, complete in place, temporary sand container crash cushion(s) for maintenance of traffic. The temporary crash cushion shall be arranged as shown on the Traffic Control Plan (TCP) and/or as directed by the Engineer and shall consist of a configuration of standard yellow plastic containers filled with varying weights of sand. They are used during the construction period to provide for safe vehicular and/or pedestrian traffic by shielding rigid objects or hazardous conditions, which cannot be removed, relocated, or made breakaway.

B. Related Work Included Elsewhere

Traffic control plan; Section 01411.

C. Quality Assurance

1. The Engineer will inspect materials before and/or after installation to ensure compliance with the Contract Documents.
2. The Contractor shall perform periodic checks at least once a week to determine that no unreported or undetected damages have occurred as well as to determine that the unit(s) are performing as required. The condition of the crash cushions shall be made at least once a week.

D. Submittals

Shop drawings shall be submitted as specified in the "General Provisions" for sand containers. The shop drawings shall include general product description, crash cushion capability, and manufacturer's design manual.

01441.02 MATERIALS**A. Materials Furnished by the County**

The County will not furnish any materials for temporary sand container type impact attenuators.

B. Contractor's Options

Not applicable.

C. Detailed Material Requirements

The temporary sand container crash cushion(s) for maintenance of traffic shall be either the Fitch Inertial Barrier System as manufactured and distributed by FIBCO, Inc., One Boston Place, Massachusetts; the Energite Inertial Barrier System, manufactured and distributed by the Energy Absorption System, Inc., One E. Wacker Drive, Chicago, Illinois; or equal as approved by the Engineer.

01441.03 EXECUTION

A. Installation

The plastic containers shall be assembled in accordance with the manufacturer's recommendation and placed in a prescribed configuration of specified weights in individual containers as shown on the TCP. The components, assembly, and filling of the individual containers shall be in accordance with the manufacturer's design manual. The designs for the temporary crash cushion(s) shown in the TCP have been selected for a specific purpose and site condition. Any request by the Contractor for deviation or modification of the configuration must have the manufacturer's written statement concurring with the change prior to submittal to the Engineer for approval.

B. Sand Container Replacement

During the intended life of the crash cushions, the Contractor shall provide the necessary maintenance in order that each individual container remains in its original and intended position. Should the container(s) become damaged or destroyed, the Contractor shall immediately replace them with those of equal weight. The Contractor shall perform any necessary regrading before placing the container(s) back into the original intended position and shall remove any debris or remnant of damaged container(s) from the Project site.

C. Removal

After the crash cushion has served its intended purpose, the Contractor shall completely remove the installation from the project site and perform any necessary regrading, cleanup, sodding, seeding, and mulching of the area to the satisfaction of the Engineer.

01441.04 METHOD OF MEASUREMENT

A. Sand Container Installation

Measurement of temporary sand container crash cushion(s) will be made only after the entire unit has been installed in place as shown on the TCP and accepted by the Engineer. The measurements will then be made for each individual sand filled container, regardless of weight, actually used to create the attenuating configuration. The complete removal of the attenuator from the project site after its intended purpose has been served and the necessary cleanup of the

area will not be measured but will be considered incidental to the measurement for the containers used.

B. Sand Container Replacement

Measurement for the replacement of damaged or destroyed container(s) will be made per each container actually replaced, regardless of weight. The regrading or leveling and the complete removal and disposal of debris or remnants of the plastic containers from the project site shall be incidental to this item of work.

01441.05 BASIS OF PAYMENT

A. Sand Container Installation

Payment for temporary sand container crash cushions for maintenance of traffic will be made at the price bid for each container actually used to construct the crash cushion. Payment will be made of 75 percent of the price bid per container on the first monthly estimate subsequent to the satisfactory installation of each container. The remaining 25 percent will be paid on the first monthly estimate after satisfactory removal and surface restoration. The price bid shall include furnishing, placing, and removing from the project site the individual weighted containers including any excavating, regrading, backfilling, embankment, stabilized material for foundation, paint, calcium chloride (anti-freezing agent), machinery, labor, or any other incidentals necessary to install the item complete in place.

B. Sand Container Replacement

Payment for replacing damaged or destroyed sand filled plastic containers will be made at the price bid per container for temporary sand container crash cushions. The price bid shall include furnishing, assembling, regrading, and placing new containers and the moving, adjusting, and leveling of adjacent containers, removing and disposing of debris or remnants of the damaged or destroyed plastic containers from the project site, all machinery, labor, and any other incidentals necessary to restore the temporary sand container crash cushions to its original intended configuration.

C. Ownership of Removed Materials

Sand containers used for temporary impact attenuators, including all associated hardware, fittings, sand, and incidentals, when satisfactorily removed from the Project site, shall become the property of the Contractor.