

SECTION 01425**DRUMS FOR WARNING AND CHANNELIZATION****01425.01 GENERAL****A. Description**

This work shall consist of furnishing and installing, complete in place-reflectORIZED drums for traffic warning and channelization of traffic during construction. The drums shall be used to provide reflective delineation for channelizing traffic through the construction areas or detours as indicated on the approved Traffic Control Plan (TCP) or as directed by the Engineer.

B. Related Work Included Elsewhere

Traffic control plan; Section 01411.

C. Quality Assurance

1. The Engineer will inspect all materials before and/or after installation to ensure compliance with the Contract Documents.
2. Certification of color conformance for reflectORIZED sheeting shall be made.

01425.02 MATERIALS**A. Materials Furnished by the County**

The County will not furnish any materials for drums for warning and channelization installations.

B. Contractor's Options

Not applicable.

C. Detailed Material Requirements

1. Drums
 - a. Drums shall be manufactured of materials, which will withstand impact without damage to themselves or to vehicles.
 - b. Drums shall be 36 inches in height and 18 inches in diameter.
 - c. Drums shall be reflectORIZED by horizontal, circumferential strips alternating orange and white in color. There shall be a minimum of two orange and two

white strips per drum with the top strip orange. Strips shall be a minimum of 6 inches in width.

- d. All drums shall be new or like new condition.
- e. Portions of drums not covered by reflective strips shall be painted or otherwise colored orange.

2. Reflectorized Strips

- a. Reflective sheeting used for the strips shall be the encapsulated lens type meeting the latest requirements of Federal Highway Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects.
- b. Color shall be matched visually and be within the color tolerance limits shown on the appropriate Highway Color Tolerance Charts issued by the Federal Highway Administration utilizing the instruction thereon.
- c. Minimum reflective intensity values for encapsulated lens sheeting shall be as follows:

Observation Angle (°)	Entrance Angle (°)	<u>Color</u>	
		Silver- White	Orange
0.2	-4	250	100
0.2	+30	150	60
0.5	-4	95	30
0.5	+30	65	25

- d. Reflectorized sheeting shall be applied to the drums in strict accordance with the sheeting manufacturer's recommendations.

01425.03 EXECUTION

A. Installation

Drums shall be set and/or reset as indicated on the approved TCP or as directed by the Engineer.

B. Maintenance

- 1. Drums that become faded or otherwise difficult to see fully shall be replaced. Drums that are not new will be permitted to be used provided their reflective intensity meets at least 60 percent of the values indicated in Section 01425.02, Article C, Item 2.c. over at least 90 percent of the reflectorized surface area.

2. Drums shall be checked daily by the Contractor and drums damaged by traffic shall be replaced by the Contractor at his expense.

C. Removal

After the drums have served the intended purpose, the Contractor shall completely remove the drums from the Project site and perform any necessary surface restoration required to return the site to a condition satisfactory to the Engineer.

01425.04 METHOD OF MEASUREMENT

Measurement for furnishing temporary drums for traffic warning and channelization of traffic during construction will be made of the number of drums satisfactorily furnished and installed in place as shown on the TCP and accepted by the Engineer.

01425.05 BASIS OF PAYMENT**A. Installation**

Payment for temporary drum installations will be made at the price bid per each. Payment will be made of 75 percent of the price bid per each on the first monthly estimate subsequent to the satisfactory installation at each location. The remaining 25 percent will be paid on the first monthly estimate after satisfactory removal and surface restoration. Payment will be full compensation for the use of the drums for the duration of the Project including furnishing, painting, reflective stripping, setting, resetting, cleaning and removing the drums and for all materials, labor, equipment and incidentals necessary for the satisfactory use.

B. Replacement of Damaged Drums

Any Drums which have been set and are subsequently damaged so as to be unfit for use, and in the Engineer's opinion must be replaced, will be paid for at the unit price bid per each unless the drums have been damaged by the Contractor's neglect.

C. Ownership of Removed Materials

The drums and all associated parts, when satisfactorily removed from the Project site, shall become the property of the Contractor.