

## CONSTRUCTION STANDARDS

### SECTION CS 12

#### TRAFFIC STRIPES, PAVEMENT MARKINGS AND PAVEMENT MARKERS

**CS 12-01 GENERAL:** Traffic Stripes, Pavement Markings, and Pavement Markers shall be furnished and installed at the locations shown on the Project Plans and shall be in conformance with the CALTRANS Standard Plans and Standard Specifications Section 84, Traffic Stripes and Pavement Markings and Section 85 Pavement Markers except as modified by Section CS 12 of the City Standard Specifications and the Standard Drawings.

- A. Centerlines and lane lines shall be installed with reflectorized and non reflectorized pavement markers in accordance with the CALTRANS Standard Specifications and Standard Plans unless otherwise noted on the Project Plans.
- B. All other pavement markings including but not limited to legends, arrows, crosswalks, and stop limit, bike lane and right edge lines shall be installed with thermoplastic in accordance with CALTRANS Standard Specifications and Standard Plans unless otherwise noted on the Project Plans.
- C. The Contractor shall ensure that the appropriate striping and pavement markings are in place at all times. Temporary striping and pavement markings shall be installed to replace any existing striping and marking which have been removed. Any conflicting striping and pavement markings shall be removed by the contractor prior to opening the street to traffic.
- D. A blue raised retroreflective bidirectional pavement marker shall be installed 2 feet off of the street centerline or median curb at each fire hydrant, on the fire hydrant side of the roadway.

#### CS 12-02 PREPARATION

- A. The Contractor shall notify the Inspector a minimum of 48 hours prior to the day of layout and cat tracking of the proposed striping and pavement markings.
- B. The Contractor shall be responsible for layout and cat tracking of all proposed striping and pavement markings. The Director of Public Works must approve the layout and cat tracking of the proposed striping and pavement markings.

**CS 12-03 INSTALLATION:**

- A. Proposed striping and pavement markings shall be installed the same day as the removal of the conflicting striping and pavement markings except as allowed below. Temporary signing, striping, and pavement markings may be installed to replace any existing signing striping and marking which have been removed.
- B. Stop limit lines shall be installed on the pavement at all stop sign locations. These limit lines shall consist of twelve (12) inch white thermoplastic material and be in conformance with CALTRANS Standard Specifications and Standard Plans. The limit lines shall be located four (4) feet behind the prolongation of the gutter flow line of the intersecting street except where an accessible ramp is present. At locations with accessible ramps the limit line shall be located in accordance with the Standard Drawings.

**CS 12-04 TRAFFIC STRIPES, PAVEMENT MARKERS, AND PAVEMENT MARKINGS REMOVAL:**

- A. The Contractor shall be responsible for thoroughly removing all existing striping, pavement markers, and pavement markings, in conflict with proposed striping, pavement markers and pavement markings by grinding.
- B. The entire area to be removed shall be ground such that the traffic stripe, pavement marker, and pavement markings are no longer visible or identifiable.
- C. The Contractor shall be responsible for adhering to all NPDES rules and regulations for this type of work.
- D. Pavement shall be repaired if damaged with the removal of striping, pavement markers, or pavement markings.

**CS 12-05 TEMPORARY PAVEMENT DELINEATION:** Temporary pavement delineation shall be furnished, placed, maintained, and removed in accordance with the provisions in Section 12-3.01, "General," of the CALTRANS Standard Specifications except as modified by this section of the City Standard Specifications.

- A. Nothing in these specifications shall be construed as to reduce the minimum standards specified in FHWA's "Manual on Uniform Traffic Control Devices" and its California Supplement, or as relieving the Contractor from his responsibility, as provided in Section 7-1.09, "Public Safety," of the CALTRANS Standard Specifications.
- B. Whenever the work causes obliteration of pavement delineation, temporary or permanent pavement delineation shall be in place prior to opening the traveled way to public traffic. Lane line and centerline pavement delineation shall be provided at all times for traveled ways open

to public traffic. In addition, crosswalks, stop bars, and pavement arrows shall be delineated prior to opening the roadway to public traffic as directed by the Director of Public Works or required by this section of the Standard Specifications.

- C.** All work necessary to establish satisfactory lines for temporary pavement delineation shall be performed by the Contractor. Surfaces on which temporary pavement delineation is to be applied shall be cleaned of all dirt and loose material, and shall be dry when the pavement delineation is applied. Temporary pavement delineation shall not be applied over existing pavement delineation.
- D.** Temporary pavement delineation shall be maintained until replaced with permanent pavement delineation. Temporary pavement delineation shall be removed as soon as the permanent pavement delineation is placed, or when no longer required as determined by the Inspector. When temporary pavement delineation is required to be removed, all lines and marks used to establish the alignment of the temporary pavement delineation shall be removed.
- E.** Temporary pavement delineation shall consist of temporary reflective raised pavement markers placed on lane lines and centerlines at longitudinal intervals of not more than 24 feet apart, or 12 feet apart on radii, and reflective tape to establish obliterated pavement markings including, but not limited to, crosswalks, stop bars and turn arrows. Temporary reflective raised pavement markers and temporary reflective tape shall be the same color as the lane line, centerline, or pavement marking the markers/tape replace.
- F.** Temporary reflective raised pavement markers shall be, approved by the Inspector.
- G.** Temporary reflective raised pavement markers shall be placed in accordance with the manufacturer's instructions. Temporary reflective raised pavement markers shall be cemented to the surfacing with the adhesive recommended by the manufacturer, except epoxy adhesive shall not be used to place temporary reflective raised pavement markers in areas where removal of the markers will be required.