Section 6: STRIPING and PAVEMENT MARKINGS

6.1 Temporary Pavement Markings

Temporary markers and/or markings must be installed by the Contractor for any existing crosswalk line, limit line, arrow, and other legend or traffic lane line removed or damaged by the work activity prior to the end of the work shift and before opening the lanes for traffic.

The following temporary retroreflective pavement striping and marking products are acceptable for use as defined in Table 4 below.

A. Temporary Removable Pavement Tape

The Contractor must use any one of the following removable foil-backed tapes or approved equal:

SUPPLIER	MODEL
Swarco	Visa-Line
Brite-Line	Series 100
Flex-O-Line	Series 200/300

B. Temporary Reflective Overlay Pavement Markers

The Contractor must use any one of the following or approved equal:

SUPPLIER	SUPPLIER
PEXCO, Davidson	Model TOM Temporary Overlay Marker with
Traffic Control	retroreflective sheeting;
Products	Model TRPM Chip Seal Markers
Apex	Model 932 Chip Seal/Overlay Markers
Hi-Way Safety Inc.	Model Chip Seal Markers with
	retroreflective sheeting

Table 6.1: Requirements for Placing Temporary Pavement Markings

Existing Striping	Temporary Striping
12 or 24-inch limit lines and Stop	1 – 12 inch white solid stripe **
Bars ***	
Transverse Crosswalks	2 - 12 inch lines**
(crosswalks formed by two	
parallel lines) ***	
Continental Crosswalks	Use 12 inch lines as follows**:
(crosswalks resembling piano	a. If less than half of the crosswalk is removed,
keys) ***	crosswalk must be filled in by replacing the
	continental bars (piano keys). Contractor may extend
	missing portions of remaining bars or install bars at

	 5 foot centers. b. If <u>half or more</u> is removed a temporary transverse crosswalk may be installed.
8-inch solid white line	1 – 8 inch white solid stripe **
8-inch broken white	1 – 4 inch white stripe (typically 7' long, 17' gaps*)
4-inch broken white	1 – 4 inch white stripe (typically 7' long, 17' gaps*)
4-inch broken yellow	1 – 4 inch yellow stripe (typically 7' long, 17' gaps*)
Double yellow	2 – 4 inch yellow solid stripes 3 inches apart

* Dimensions for broken lines on streets with posted speed limits of 35 MPH or less. For streets with posted speed limits of 40 MPH or more, use 12' long stripes with 36' gaps. (See Chapter 3 of the California MUTCD).

** 8 and 12 inch wide lines must be made by putting together either 2 or 3 strips of 4 inch tape to make the appropriate widths.

*** Pavement markers or chip seals may not be used for these lines. Stop bars and crosswalk lines must be aligned with projections of the property line and the face of curb (unless otherwise indicated on SFMTA striping drawings or directed by the traffic engineer). Crosswalks must span the full width of the roadway and stop bars must span from the curb to the centerline (or yellow stripe).

6.2 Temporary Pavement Black-out Markings

The Contractor must use black-out tape to obscure pavement markings, messages and stripes that are in conflict with temporary traffic or bicycle lane channelization (when lanes are relocated). Black-out tape must be black in color, non-reflective and matte finish. Black-out tape used to obscure messages and arrows must cover the original markings using rectangular pieces so that the original arrows and messages are not shown to the driver in black. Black-out lines and markings must not reflect light back to the driver via vehicle headlights from road users or reflect glare from distant light sources. Depending upon the condition of the original striping underneath, the contractor may be required to replace the original lines following construction.

6.3 Laying Out Temporary Striping (Cat Tracking)

Prior to installing traffic tape for lane lines (typically when lanes are shifted), the Contractor must lay out the temporary traffic pattern using rope and spray paint to mark the proposed layout in the street. The SFMTA Traffic Engineer reserves the right to require an inspection for approval prior to marking the layout with temporary tape.

6.4 Permanent Pavement Marking Restoration

Restoration of permanent roadway striping damaged during utility excavation must be by the SFMTA Paint Shop. The contractor must submit the following documents to trafficpermits@sfmta.com with the subject line "Pavement Restoration":

- 1. Completed Pavement Restoration/Restriping Request Form: <u>https://www.sfmta.com/sites/default/files/reports-and-</u> <u>documents/2021/02/pavement_restoration-restriping_request_form_3_3.pdf</u>
- 2. Plan showing the street, the location and details of striping requiring restoration: Use an SFMTA Striping Drawing as a base (available at www.sfmta.com/striping), or another source if no Striping Drawing is available, and show:
 - a. Streets requiring restoration (with street and cross-street names labelled). Include the entire block in which restoration is required.
 - b. Roadway Striping (Show the dimensions (in feet) and types of all pavement marking requiring restoration on each street.
- 3. Photos of streets requiring striping restoration. Mark up photos with pavement marking types and locations.

The Contractor should install temporary markings for damaged and/or missing striping using temporary tape (as specified in section 6.2.1). SFMTA will prepare an invoice for striping restoration and e-mail to contractor. The Contractor should follow-up with SF Public Works after payment for invoice.

6.5 Muni Markings

The Contractor is responsible for taking inventory of all Muni markings in the work area before doing any work. Markings include yellow "Coach Stop" bars painted on the pavement, yellow "pole stop" bands painted on the sign poles or utility poles, and yellow "breaker marking" dots painted on the pavement. If any Muni marking is damaged or paved over, the Contractor must immediately email <u>constructionrequest@sfmta.com</u> so that the SFMTA Paint Shop will restore the markings. If any pole with a yellow "pole stop" band is removed from its location, the Contractor must not install that same pole at a different location without first removing the yellow band. If any pole with a yellow "pole stop" band is replaced with a new pole, the Contractor must notify Muni Service Planning at <u>constructionrequest@sfmta.com</u> immediately after the new pole is installed.