

14.6 Latex Traffic Stripes and Traffic Markings

Department Policy on Traffic Stripes and Traffic Markings are as follows:

1. Placement of TRAFFIC STRIPES and TRAFFIC MARKINGS may be delayed for up to 14 days after paving. Temporary pavement markers shall be used to delineate center and lane lines on newly paved sections of roadways that need to be opened to traffic prior to the placement of TRAFFIC STRIPES.
2. TRAFFIC STRIPES LATEX and TRAFFIC MARKINGS LATEX shall be used when traffic stripes or traffic markings are required on intermediate pavement layers that need to be opened to traffic due to stage construction and shall not be in place for more than 14 days. The traffic stripes shall be calculated in linear feet for each specific width (4", 6", 8") of actual stripe (gaps are not counted) under the item TRAFFIC STRIPES, LATEX, __". Chevrons, crosswalks, and stop lines shall be calculated in linear feet for each specific width (4", 8", 12", 16", 20", 24", etc.) of actual stripe under the item TRAFFIC MARKINGS LINES, LATEX, __". Words, arrows, and other pavement symbols shall be calculated in square feet under the item TRAFFIC MARKINGS SYMBOLS, LATEX.

Temporary pavement marking tape and temporary pavement markers shall be specified when lane shifts are necessary on existing pavements not being repaved. The use of temporary pavement marking tape is not suitable for lane shifts that are estimated to last longer than one (1) week. The designer shall use TRAFFIC STRIPES, LATEX and TRAFFIC MARKINGS, LATEX instead of temporary pavement marking tape for longer than one (1) week traffic shift durations. The placement of temporary pavement markers shall be in accordance with the Construction Details. Where the exposed duration of Temporary TRAFFIC STRIPES and Temporary TRAFFIC MARKINGS is more than 14 days, RE will direct the Contractor to place Permanent TRAFFIC STRIPES and TRAFFIC MARKINGS.

When traffic stripes/markings are removed to accommodate stage construction, the removal process invariably mars the final surface. Marring is allowable on intermediate layers; however, the final surface course must not be marred.

Designers are to design the project in such a way as to ensure the final surface course does not require temporary traffic stripes or markings to be removed, or develop additional quantities for milling and paving of the final surface course marred by the removal of traffic stripes or markings.

3. TEMPORARY PAVEMENT MARKING TAPE may be used on projects that require traffic shifts of a maximum duration of one (1) week. If the project is anticipated to need traffic shifts longer than a week's time, the Designer shall design the traffic control using TRAFFIC STRIPES, LATEX and TRAFFIC MARKINGS, LATEX. The following shall be applied when using TEMPORARY PAVEMENT MARKING TAPE:
 - a. Install the tape only during dry conditions as determined by the RE and applicable specifications.
 - b. The tape shall be re-installed in the event it becomes removed, detached or otherwise non-adhesive to the pavement surface.
 - c. The Designer shall ensure that the proposed pavement surface is free of distress during the design phase, which would cause the tape not to adhere properly.
 - d. The maximum continuous length of a single section to be installed shall be limited to 20 feet. Additional multiples of 20 foot tape sections are allowed as needed to cover entire traffic shift length.

The tape shall be installed on lower speed highways not to exceed the design speed of 40 mph. The tape shall not be installed on Interstate highways. Installation of the tape shall follow the Manufacturer's specifications.

4. TRAFFIC STRIPES or TRAFFIC MARKINGS may be considered for stage construction, detours, and diversionary roads on those occasions when it can be justified based on cost considerations, site conditions, or length of time when the stripes or markings will be in place. It is important to estimate the length of striping based on all of the above factors of a project.

14.7 Lane and Roadway Closures

14.7.1 Lane Closures

Designers should modify standard sheet TCD-1 to provide a table showing specific restrictions placed on travel lanes, durations of closures and hours when work may be performed, including holidays and weekends. The closures and lane restrictions shall be evaluated in the Traffic Impact Report (see Section 14.4) and approved by the Regional Traffic Operations and Local Authorities. The following table is provided as an example of the form of presentation of this information:

| Roadway Route Designation and Direction | Type of Closure | Monday thru Thursday | Friday | Saturday | Sunday |
|---|--|----------------------|--------|----------|--------|
| | No Closure | | | | |
| | One Lane Closure | | | | |
| | Two Lane Closures | | | | |
| | Full Closures (indicate duration and type of operation) | | | | |

14.7.2 Total Roadway Closures

Total roadway closures (i.e. all lanes, single direction or two directions) required for the erection of overhead sign structures, cantilevered sign structures or bridge steel shall be performed in accordance with the following:

- The use of total roadway closures shall be specifically addressed in the Traffic Impact Report (see Section 14.4) and shall be considered only after detours have been determined to be unavailable or infeasible.
- Closures shall be approved by the Regional Traffic Operations and Local Authorities.
- Closures shall be performed during non-peak hours and with prior approval of the Engineer concerning the timing and method of operation.
- The application of nighttime operation of the closure shall be considered (see Section 14.10).
- The erection of overhead and cantilever sign support structures shall be done when the overhead electric lines have been de-energized.
- Closures shall be initiated with a slowdown of traffic 1/2 mile in advance of the work area. The slowdown shall be accomplished with the assistance of Traffic Direction, Police.
- Closures, whether single direction or two directions, shall be limited to 15 minute intervals. At the end of each 15 minute interval the work must stop, the span must be secured and traffic allowed to pass. After traffic has cleared, the roadway may again be closed for another maximum 15 minute interval (following the procedures in this section) and work may resume. Continue this procedure until all work over the roadway is complete.