



ADMINISTRATIVE REPORT

TO: PUBLIC WORKS COMMISSION

FROM: Brad B. Underwood, Public Works Director

PREPARED BY: Aaron Lam, Associate Engineer

MEETING DATE: Wednesday, March 9, 2016

SUBJECT: Update – High Visibility Crosswalk Striping Pattern

RECOMMENDATION

To receive an update regarding the implementation of triple four striping pattern as the City's preferred high visibility crosswalk.

BACKGROUND

High visibility crosswalks have been shown to increase motorist yielding and channelization of pedestrians, leading the Federal Highway Administration (FHWA) to conclude that high-visibility pedestrian crosswalks have a positive effect on pedestrian and driver behavior. Because of the low approach angle at which pavement markings are viewed by drivers, the use of longitudinal stripes, in addition to or in place of the standard transverse markings, can significantly increase the visibility of a crosswalk to oncoming traffic.

The City's Pedestrian Master Plan was adopted in February 2012. Section 5.3, "Intersection and Crossing Improvements" of the Master Plan identifies high visibility crosswalks as an important measure where there is existing or anticipated high pedestrian activity, where slower pedestrians are expected, at uncontrolled crossings, and where high numbers of pedestrian related collisions have occurred. The Master Plan recommended the adoption of the "continental" crosswalk as the single high visibility crosswalk design.

Since the adoption of the Master Plan, the development and implementation of the "triple four" high visibility crosswalk has seen a recent increase. Caltrans has since included the "triple four" crosswalk as part of their standard plans, as shown in Attachment 1. Various cities have also adopted and implemented this crosswalk striping pattern, including the Cities of Sacramento, Richmond, El Cerrito, and Vallejo.

The “triple four” crosswalk offers multiple benefits. In addition to providing similar noticeability to drivers, this crosswalk style provides a center channel that is more skid resistant and provides a path of travel for wheelchair users to experience fewer vibrations. Due to less amount of striping, as compared to the continental crosswalk, there is a lower installation cost. The specific “triple four” pattern results in reduced travel on the thermoplastic striping which leads to less wear and tear and reduces ongoing maintenance costs.

Implementation of the “triple four” crosswalks will predominantly be incorporated into the upcoming Citywide High Visibility Crosswalk project.

NOTICE PROVIDED:

All meeting noticing requirements were met.

ATTACHMENTS

Attachment 1 – 2015 Caltrans Standard Plan A24F, “Pavement Markings – Crosswalks”

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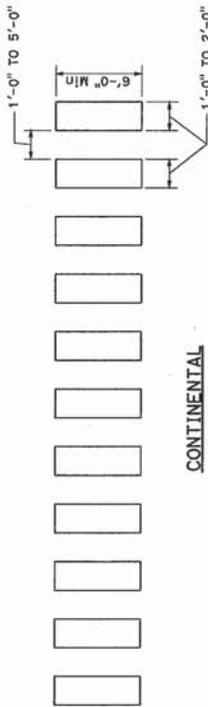
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

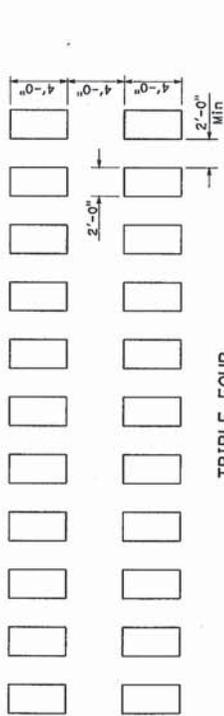
REGISTERED CIVIL ENGINEER
Alfonso Ferraz
 REGISTERED CIVIL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
Alfonso Ferraz
 PROFESSIONAL ENGINEER
 LICENSE NO. 35311-T
 STATE OF CALIFORNIA
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR COPIES OF THIS PLAN SHEET.

NOTES:

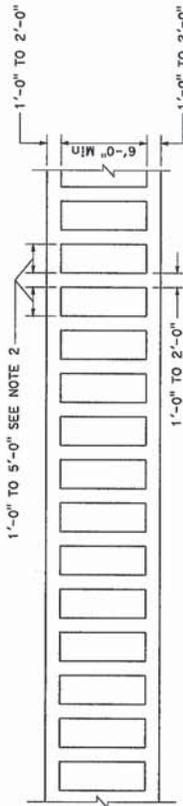
1. Spaces between markings must be placed in wheel tracks of each lane.
2. Spacings not to exceed 2.5 times width of longitudinal line.
3. All crosswalk markings must be white except those near schools must be yellow.



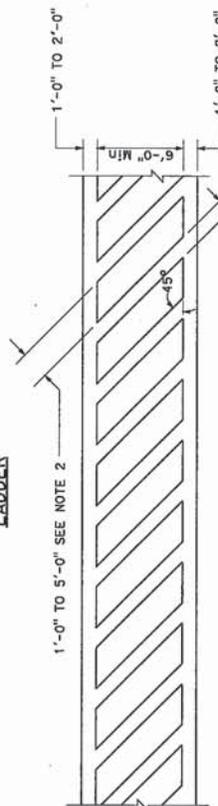
CONTINENTAL
See Note 1



TRIPLE FOUR
See Note 1



LADDER



DIAGONAL

HIGHER VISIBILITY CROSSWALKS



BASIC

Attachment 1

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**PAVEMENT MARKINGS
CROSSWALKS**

NO SCALE

A24F