



Sacramento Metropolitan Fire District

Community Risk Reduction Division

www.metrofire.ca.gov

10545 Armstrong Ave., Suite 310 • Mather, CA 95655 • Phone (916) 859-4330 • Fax (916) 859-3717

TODD HARMS
Fire Chief

SACRAMENTO METROPOLITAN FIRE DISTRICT			
FIRE PREVENTION STANDARD			
STANDARD TITLE:	Traffic Calming Devices		
STANDARD NUMBER:	18	EFFECTIVE DATE:	05/04/12 REVISION DATE: 07/12/19

TRAFFIC CALMING DEVICES

SCOPE

This standard is for the construction, location and identification of Speed Bumps on Fire Apparatus Access Roads and is pursuant to the 2016 California Fire Code and Local Ordinance. The Sacramento Metropolitan Fire Districts requirements are not to be construed as abrogating more restrictive requirements by other agencies having jurisdiction.

Note: Traffic Calming Devices such as speed bumps are neither endorsed nor recommended by the Sacramento Metropolitan Fire District, due to extending emergency response times. (CFC 503.4.1) However, if these devices are deemed necessary to improve traffic and pedestrian safety, the following are acceptable to the Fire District:

DEFINITIONS

Speed Bump – Asphalt mounds, parabolic in shape, covering 12 feet of street with a height between 3 ¼ and 3 ¾ inches. When cutouts are provided the center mound or bump, has a width of 5 ½ feet to accommodate the wheelbase of fire apparatus. The bumps adjacent to the center bump vary in width to accommodate the street width. Depending on the street width, a 5 ½ foot bump may be placed in each travel lane (see attached detail drawings). Speed bumps may be approved by the Fire District for use on a case by case basis.

Speed Table – An elongated speed hump, incorporating a 10-foot flat surface in the middle and covering a total of 22 feet of street, with a height between 3 ¼ and 3 ¾ inches (see attached detail drawings). Speed tables may be approved by the Fire District for use on a case by case basis



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SPECIFICATIONS

1. Construction Specifications (Speed Bumps with Cut Outs)

Upon installation of speed bumps, the asphalt concrete speed bumps will have a width of 12 feet, a minimum height of three and one-quarter inches and a maximum height of three and three-quarters inches (3 ¼" to 3 ¾"), and a vertical curvature as shown in the Detail drawings. The center bump (or bumps if the design requires one bump in each travel lane) will be five and one-half (5 ½') feet across. There will be a gap between bumps of one foot – three inches (1' - 3") to accommodate the wheelbase of fire apparatus. The outside speed bumps will extend from the center bump to the lip of gutter. There will be a two-foot (2') horizontal taper originating at the crest of the speed bump and converging at the lip of curb or pavement.

2. Construction Specifications (Speed Tables)

Upon installation of speed tables, the asphalt concrete speed tables will have a width of 22 feet, made up of a 6' long vertical curvature reaching a minimum height of three and one-quarter inches and a maximum height of three and three-quarters inches (3 ¼" to 3 ¾") on each end of a 10 foot long flat surface. There will be a two-foot (2') horizontal taper originating at the crest of the speed table and converging at the lip of curb or pavement.

3. Location Selection Guidelines

In selecting precise locations for the speed bump installation, the following guidelines shall be adhered to:

- a. Speed bumps shall not be located over manholes, water valves, or street monuments, or whenever possible, within ten (10) feet of fire hydrants, as they may prevent/impede access to these facilities.
- b. Speed bumps should be located five to ten feet away from driveways, whenever possible, to minimize their effect on driveway access.



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- c. Speed bumps should be located on or near property lines, whenever possible, to minimize the impact on (access to) individual properties.
- d. Speed bumps should be located near streetlights, whenever possible, in order to enhance their visibility at night.
- e. Speed bumps should be located a minimum distance of 200 feet from the end of the segment, whenever possible, and should never be located within a corner radius.
- f. No speed bumps shall be located on any horizontal curve(s) with less than a 650 foot radius.
- g. Speed bumps shall be spaced at a minimum interval of 250 feet.
- h. Speed bumps shall not be placed on grades exceeding 8% at points within 150 feet of roadway intersections or where there is limited sight distance.
- i. Speed bumps shall extend the full length of the driving surface when sidewalks are present.

4. Signs and Markings

Two types of advanced warning devices shall be used to alert motorists of upcoming speed bumps: street signs and pavement markings.

a. Street Signs

The signing includes a 30-inch sign stating "SPEED BUMP" in four-inch (4") letters and a second line with an advisory speed of 15 MPH. Above this text is a pictorial of a speed bump.

Signage for a speed table includes a 30-inch sign stating "SPEED TABLE" in four-inch (4") letters and a second line with an advisory speed of 20 MPH. Above this text is a pictorial of a speed table.



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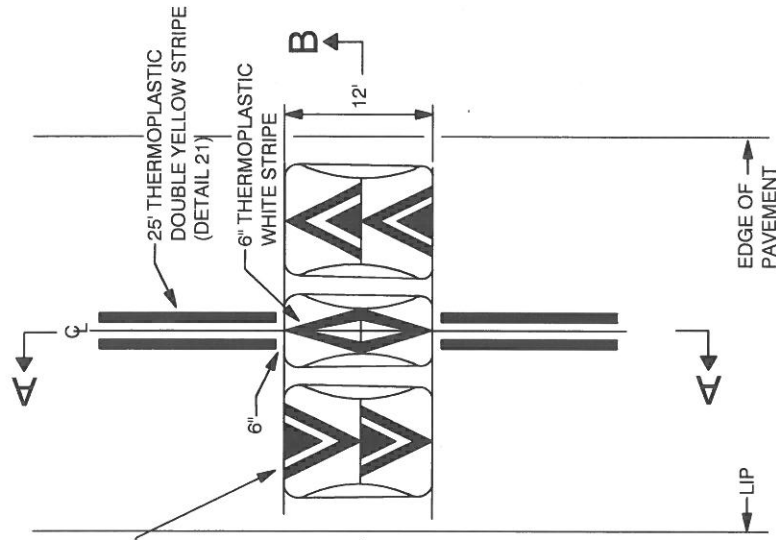
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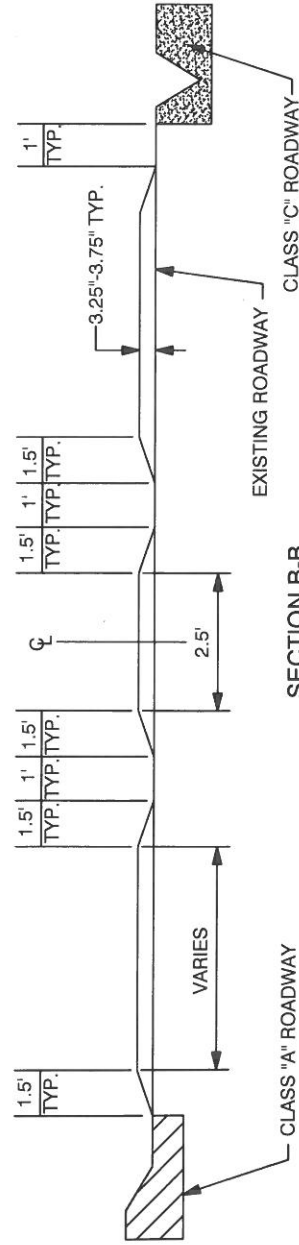
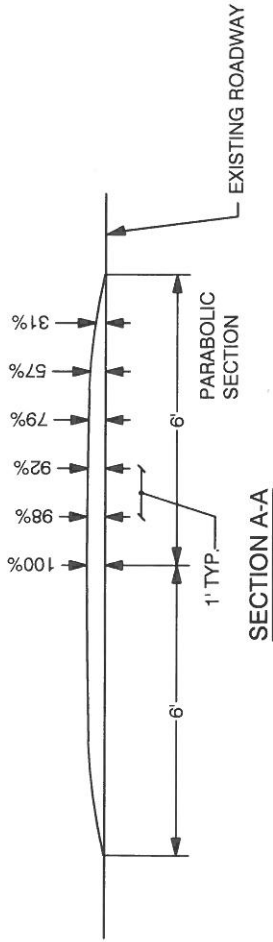
b. Pavement Markings

Pavement markings for speed bumps shall include diamond striping on the center bump(s) and chevron markings on the side bumps. A reflective pavement marker will indicate the middle of the center bump(s) to assist fire apparatus drivers to center their vehicle over the bump (see attached detail drawings).

Pavement markings for speed tables shall include twelve-inch (12") wide stripes, forming a chevron, extending six feet (6') from the approach edge of the speed table to the apex of the table and centered in each travel lane.



INSTALL THERMOPLASTIC MARKING AS SPECIFIED IN THE CALIFORNIA MUTCD FIGURE 3B-29, OPTION B

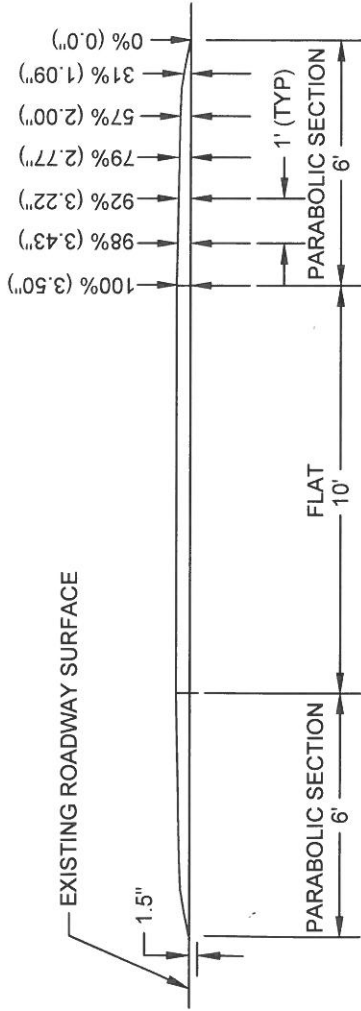
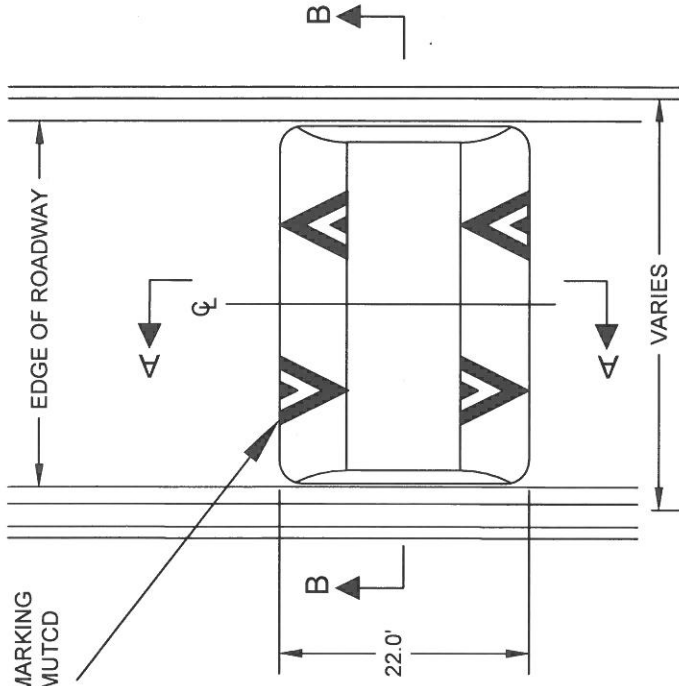


SPEED BUMP WITH CUT OUTS DETAIL

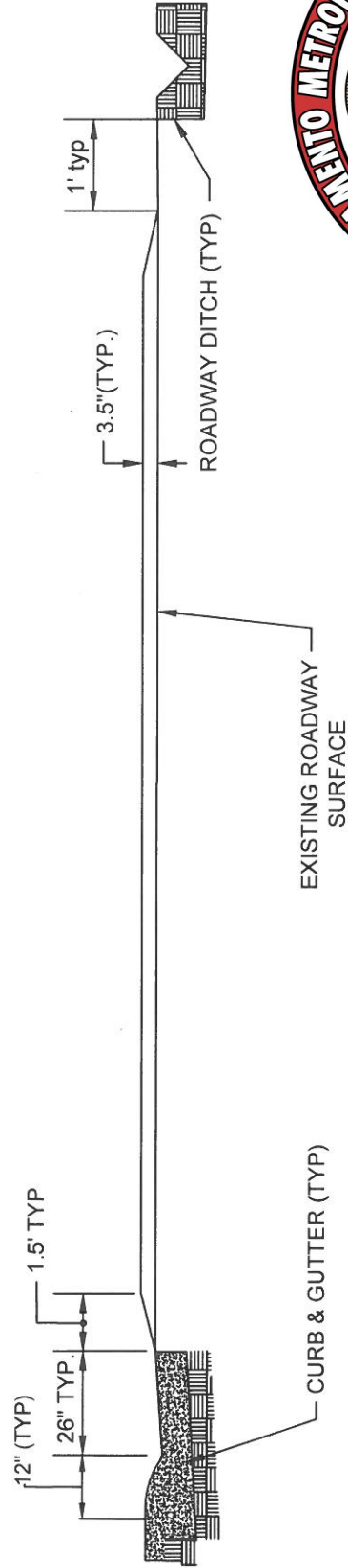
Drawing Not to Scale



INSTALL WHITE THERMOPLASTIC MARKING
AS SPECIFIED IN THE CALIFORNIA MUTCD
FIGURE 3B-30, OPTION B



Section A-A

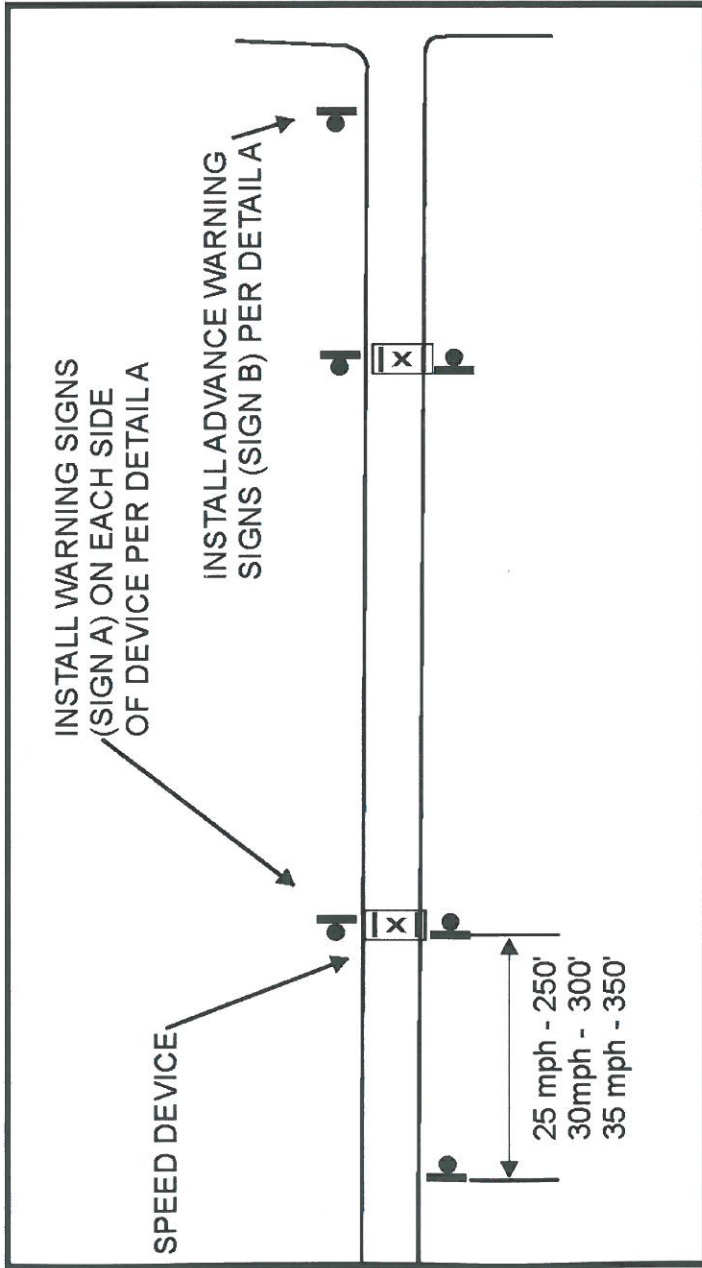


Section B-B

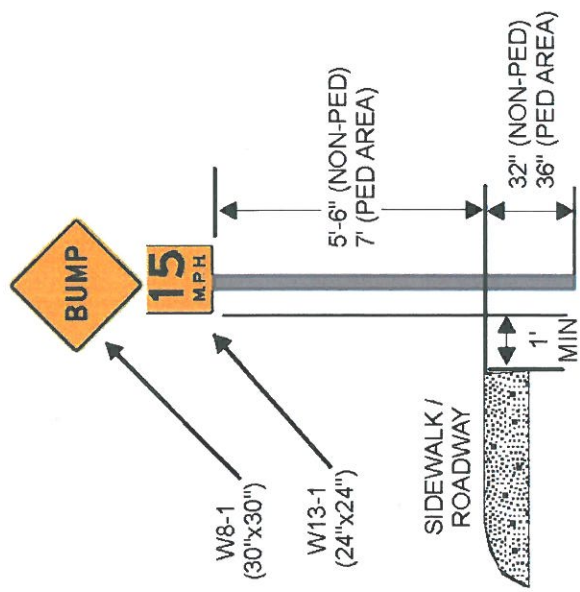


SPEED TABLE DETAIL

Drawing Not to Scale



TYPICAL SPEED DEVICE LAYOUT



NOTES:

1. INSTALL SIGNS ON 12' (NON-PED) OR 14' (PED AREA) 4"X4" WOOD POST.
2. PEDESTRIAN AREA IS WHERE ANY PORTION OF SIGN EXTENDS OVER ANY PAVED ROADWAY, SIDEWALK OR PATHWAY.
3. SIGN TYPES AND LOCATIONS ARE SHOWN ON THE PROJECT MAPS.

DETAIL A



SPEED DEVICE WARNING SIGN LAYOUT DETAIL

