



DEPARTMENT OF PUBLIC WORKS
ROAD DIVISION
345 WEST 7TH STREET
MERCED, CALIFORNIA 95341
(209) 385-7601

SPEED HUMP PROGRAM

◆ GENERAL INFORMATION AND GUIDELINES ◆

◆ DESIGN STANDARDS ◆

◆ INSTALLATION PETITION ◆

AUGUST 5, 1997
REVISED MAY 2, 2002
REVISED MARCH 14, 2007

MERCED COUNTY DEPARTMENT OF PUBLIC WORKS
ROAD DIVISION
SPEED HUMP PROGRAM

A. BACKGROUND:

Since the time when the first speed bump appeared in a supermarket parking lot, the Department of Public Works has received requests from individuals living in residential neighborhoods throughout the County for the installation of speed bumps on their street to “slow down speeding traffic.” Historically, our response to these requests has been, “No; Speed bumps are not approved for traffic control devices. The installation of a speed bump exposes the County to undesirable liability.”

In 1993, the Institute of Transportation Engineers (ITE) prepared a booklet entitled, “Guideline for the Design and Application of Speed Humps.” As a result of the publication of this booklet, jurisdictions throughout the State have been reevaluating their position toward speed humps. (A ‘speed hump’, as conceptually designed by ITE, has a very different shape when compared to the typical ‘speed bump’ that is commonly found in many parking lots.) The Merced County Department of Public Works has closely monitored other jurisdictions and their response to the guidelines published by ITE. Over 20 California jurisdictions have adopted policies allowing the use of speed humps. Some of Central Valley jurisdictions that have successfully implemented policies allowing the use of speed humps include the City of Modesto, the City of Ceres, and the City and County of Sacramento. These jurisdictions have found that when speed humps are installed according to the guidelines developed by ITE, the speed of traffic in residential neighborhoods is significantly reduced. Recognizing the successful results of these agencies, the Merced County Board of Supervisors adopted an official policy in July 1997 for the application of speed humps on roadways maintained by Merced County.

B. PURPOSE AND RESULTING EFFECT

The primary purpose of a speed hump installation is to reduce the speed of traffic. Speed hump installations also have a secondary

benefit of discouraging the use of roadways by ‘through traffic’ as a short-cut to their destination.

The installation of speed humps has the negative effect of increasing the response time of emergency vehicles. A speed hump installation may result in increased noise to adjacent residents resulting from vehicles as they cross over the humps. Some individuals may consider a speed hump installation to be less than aesthetically pleasing.

C. SPEED HUMP INSTALLATION REQUEST PROCESS:

If you want speed humps installed in your neighborhood, the following request process has been established by Merced County:

1. Read and become familiar with the Speed Hump Placement Criteria listed in Section D, “Review of Proposed Locations.” The proposed location must satisfy all of the placement criteria. The Department of Public Works is available to assist individuals as they compare their proposed speed hump location with the placement criteria. (It is advisable to review the proposed speed hump location with the Department of Public Works before taking the time to circulate the petition.)
2. Circulate the petition that is included in this package to all of the residents living along the streets that will be affected by the speed humps. Petitions containing different wording will not be accepted. If additional petitions are needed, photocopy the petition included in this package.

REQUIRED ACCEPTANCE: Seventy-five percent (75%) of the affected residents ¹ must sign the petition and agree to the installation of the speed humps.

¹ If you are not sure which residents should be contacted, the Department of Public Works will assist you with this determination. Only one adult signature per household will be counted towards the 75% requirement.

3. Submit completed petition to the Department of Public Works – Road Division.

D. REVIEW OF PROPOSED LOCATIONS:

Upon receiving a completed petition, the Department of Public Works will review the merits of the proposed speed hump location based upon the following guidelines:

- Speed humps will be considered for placement only on Local² roadways in residential areas.³
- The volume of traffic on the roadway should be between 200 and 1,200 vehicles per day.⁴
- The speed limit on the roadway shall not be greater than 25 mph as determined in accordance with State Law.
- A visibility problem shall not exist at the proposed location that may limit an approaching drivers ability to see the speed humps and respond appropriately.
- The roadway shall not have a grade greater than 5% in the section where the speed humps are to be located.
- More than half (over 50%) of the vehicles traveling on the roadway currently exceed 25 mph.⁵

² The functional classification of roadways is designated in the Merced County General Plan.

³ For the purpose of determining the placement of speed humps, an area will be considered to be residential if property on both sides of the roadway is zoned Residential. (A-R, R-1, R-1-5000, R-2, R-3, R-4, or MH)

⁴ The Department of Public Works will take counts on the roadway to determine the actual traffic volume.

⁵ The Department of Public Works will conduct a speed study at the proposed location to determine the current speed of vehicles.

Speed humps will not be considered for placement on any of the following types of roadways:

- Roadways located outside of residential areas (agricultural areas, commercial areas, industrial areas, etc.)
- Roadways that are functionally classified in the Merced County General Plan as collectors or arterials.
- Multi-lane roadways.
- Roadways with severe vertical or horizontal alignments.
- Truck Routes, Transit Routes, or roadways that are important access roadways for emergency vehicles.
- Roadways where the installation of traffic humps will divert a significant number of vehicles to another local roadway.
- Roadways with a pavement width less than 18 feet.
- Dead end or cul-de-sac roads of lengths 600 feet or less.

All of the affected residents that signed the petition will receive written notification of the results of the Department of Public Works' review of the proposed speed hump location. If the proposed location has been found to be unacceptable and the request for a speed hump has been denied, the written notification will detail the reasons behind the Department's decision.

E. CONSTRUCTION OF SPEED HUMPS:

If it has been determined that a proposed speed hump location satisfies all of the approval criteria, the Department of Public Works will schedule its construction if funding is available. It is the Department's intention to program the construction of two (2) speed hump installations every budget year.

Depending on the number of requests, the County may approve the construction of more speed hump installations than have been budgeted. In this case, the Department of Public Works will rank⁶ each approved installation based upon its potential benefit to the public. Approved speed hump installations that may not receive funding in the current budget cycle will be re-ranked the following year for potential funding. It is possible that an approved speed hump installation may never receive County funding.

If no funding is available for the construction of an approved speed hump installation, the County will accept private funds to finance the installation.⁷

Private individuals may choose to obtain an Encroachment Permit from the Department of Public Works and hire a licensed contractor to construct speed humps at an approved location. The speed humps must be constructed according to County requirements. The Department of Public Works will provide the Encroachment Permit and construction inspection at no cost to the applicant.

F. REMOVAL OF SPEED HUMPS:

A speed hump installation may be removed by the Department of Public Works if it can be determined that the problems created by the speed humps out-weigh the benefits.

Affected residents may submit a petition⁸ for the removal of a speed hump installation. Seventy-five percent (75%) of the affected residents must sign the petition and agree to the

removal of the speed humps. The Department of Public Works will remove a speed hump installation if a completed petition is received and if adequate funding is available.

The Director of Public Works, in his capacity as Merced County Road Commissioner, may, at any time, direct the removal of a speed hump installation if it is determined to be unsafe.

G. SPEED HUMP DESIGN STANDARDS

The design standards of a typical speed hump installation are attached as exhibits to this Information Package. It is strongly suggested that all petitioners for a new installation be aware of the physical characteristics of a typical speed hump installation. Petitioners should be aware that a typical installation includes the placement of signs along the road frontage preceding the actual speed humps. Please be aware that these signs may be placed in the front yard of your house.

H. QUESTIONS OR COMMENTS:

Any questions or comments that individuals may have about the Speed Hump Program should be directed to:

Curt Royer, Deputy Director
Department of Public Works
Road Division
715 Martin Luther King Jr. Way
Merced, CA 95340
(209) 385-7601

⁶ Ranking of approved locations will be based upon criteria established each year by the Director of Public Works. The following will be taken into consideration: the volume of traffic, the potential reduction in speed, and the number of speed related accidents reported to have occurred.

⁷ The cost for constructing a typical speed hump installation has been estimated to be approximately \$6,000.00.

⁸ The Department of Public Works will supply an acceptable petition form to interested individuals upon request.

PETITION REQUESTING INSTALLATION OF SPEED HUMPS

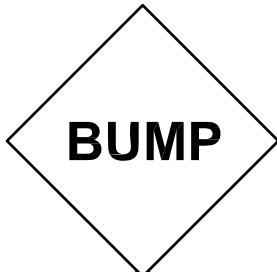
We the undersigned, residents living near _____ between
 (street on which speed humps are proposed)

_____ and _____
 (cross street) (cross street)

do hereby request that the Merced County Department of Public Works ***INSTALL SPEED HUMPS*** on the above mentioned street. We have reviewed the ***SPEED HUMP PROGRAM*** information and we understand that, if approved, the Department of Public Works will place *speed humps, warning signs and pavement markings* at appropriate locations within the block. ***We understand that these traffic control devices may be installed in front of our property.***

Print Name	Signature	Street Address	Date

ADVANCE SIGNING

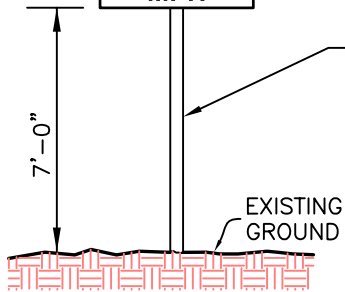


WARNING SIGN:
30" X 30" W8-1
BLACK ON YELLOW
6" SERIES "E"
LETTERS



W13-1 (15 MPH) SIGN

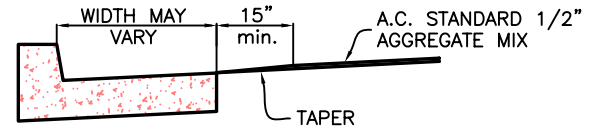
ALL SIGN POSTS SHALL
COMPLY WITH COUNTY
STANDARD MS-10B FOR
MATERIAL AND INSTALLATION.



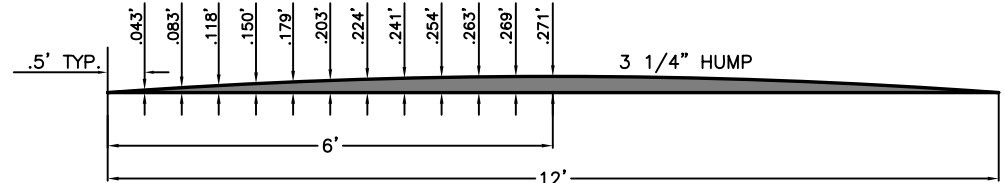
EXISTING GROUND

EXACT SIGN LOCATIONS
TO BE DETERMINED BY
PUBLIC WORKS STAFF

SECTION A-A



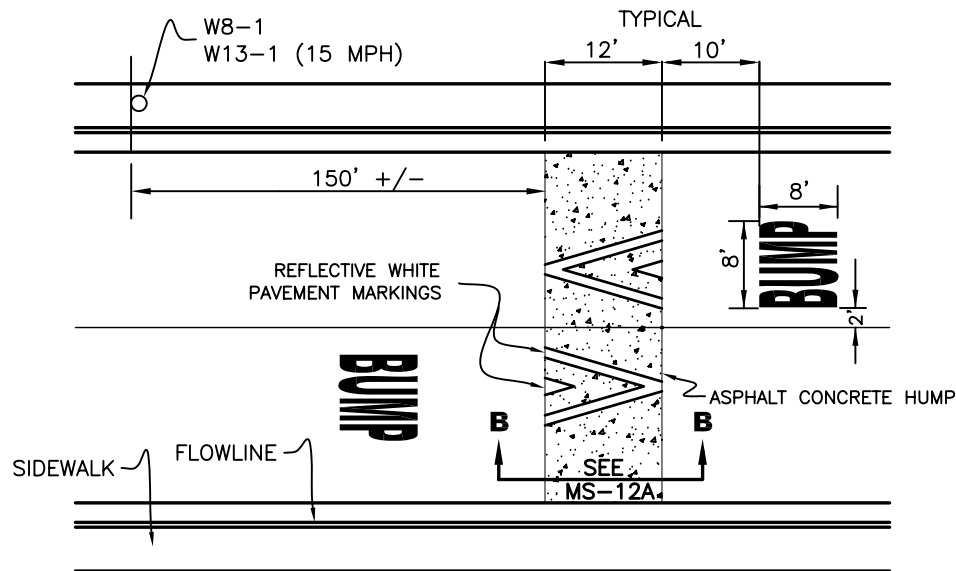
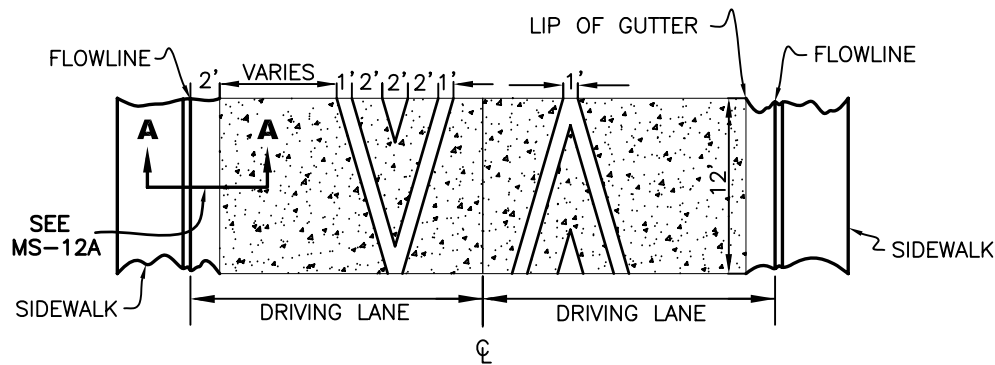
SECTION B-B



MERCED COUNTY DEPARTMENT OF PUBLIC WORKS IMPROVEMENT STANDARDS

SPEED HUMP

DRAWING MS-12A



NOTES:

1. DO NOT PLACE WITHIN 5 FEET OF ANY UTILITY STRUCTURE.
2. OUTSIDE EDGE OF HUMPS SHOULD BE 10' MINIMUM FROM DRIVEWAYS.
3. PLACE HUMPS AT PROPERTY LINES AND STREET LIGHTS WHERE POSSIBLE.
4. ASPHALT CONCRETE SHALL BE TYPE "B" WITH 1/2" AGGREGATE PER SECTION 39 OF THE CALTRANS STANDARD SPECIFICATIONS.
5. SPACING BETWEEN SERIES OF SPEED HUMPS SHOULD BE APPROXIMATELY 250' APART.
6. SPEED HUMPS SHOULD NOT BE CLOSER THAN 175' TO AN INTERSECTION.
7. FINAL LOCATION TO BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS.

MERCED COUNTY DEPARTMENT OF PUBLIC WORKS IMPROVEMENT STANDARDS

SPEED HUMP MARKING DETAILS

DRAWING MS-12B