

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS  
BOARD ACTION SUMMARY

DEPT: Public Works

BOARD AGENDA #: \*C-2

AGENDA DATE: November 22, 2016

**SUBJECT:**

Approval to Adopt an Urban Speed Hump Program

**BOARD ACTION AS FOLLOWS:**

No. 2016-587

On motion of Supervisor O'Brien, Seconded by Supervisor Chiesa  
and approved by the following vote,

Ayes: Supervisors: O'Brien, Chiesa, Withrow, DeMartini, and Chairman Monteith

Noes: Supervisors: None

Excused or Absent: Supervisors: None

Abstaining: Supervisor: None

1)        Approved as recommended

2)        Denied


3) X Approved as amended

4)        Other:

**MOTION:** Adopted the Stanislaus County Urban Speed Hump Program, and amended the Petition portion of Section C Procedures for Installation to read as follows: "A petition signed in support of the speed humps by legal residents of at least 66% of the residential dwelling units on the street and adjacent streets that may be impacted as determined by the Department of Public Works. Each business is to be considered equivalent to one residential unit for the purposes of this poll. Unanimous consent must be received from properties on the same street and within 150-feet of a speed hump location in a 15 mph zone and; within 250-feet of a speed hump location in a 25 mph zone; and within 350-feet in a 35 mph zone."

**This Item was removed from the consent calendar for discussion and consideration.**

ATTEST:

  
ELIZABETH A. KING, Clerk of the Board of Supervisors

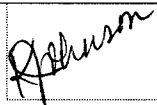
File No.

**THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS  
AGENDA ITEM**

DEPT: Public Works

Urgent

Routine



BOARD AGENDA #: \*C-2

AGENDA DATE: November 22, 2016

CEO CONCURRENCE: \_\_\_\_\_

4/5 Vote Required: Yes  No

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**SUBJECT:**

Approval to Adopt an Urban Speed Hump Program

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**STAFF RECOMMENDATIONS:**

1. Adopt the Stanislaus County Urban Speed Hump Program.
2. Authorize the Director of Public Works to make program modifications under the authority as Road Commissioner.

**DISCUSSION:**

Speeding in urban residential zones is one of the most common complaints the Department of Public Works Traffic Engineering division receives. In the past, there were limited tools to control residential speeds, which are by statute, 25 miles per hour. One method used was enforcement in conjunction with California Highway Patrol; however, this is temporary as resources are limited. Another method that was used is temporary or permanent speed feedback signs that report a driver's speed in flashing lights. Speed humps are used on public streets in residential areas to reduce traffic speeds. Speed humps are 12 feet wide and 3 inches to 4 inches high. Their parabolic shape is designed to permit vehicles to traverse them at reasonable speeds without significant discomfort to the passengers.

Currently, the County does not have any published guidelines for speed humps, which attempt to reduce vehicle speeds in residential zones. Speed humps are not intended for use on all streets. They are permitted on residential streets that have at least 1,200 feet of uninterrupted length between stop signs or traffic signals where the posted or prima facie speed limit is 25 mph. They are not permitted on arterial streets or on streets that serve as a primary route for emergency vehicles without Board of Supervisors approval. The proposed Urban Speed Hump Program (Program) details requirements for speed hump installation or removal, and identifies which parties are responsible for the cost.

The Program allows residents to request speed humps on local, urban roads which have a posted speed limit of 25 miles per hour (mph) or less and where 15% of vehicles exceed the speed limit by 7 mph or more. The request for speed humps includes a neighborhood petition asking the neighbors for concurrence with the speed hump installation. Applications will require review from local law and fire agencies and will only be allowed on roads that are classified as local roads.

## Approval to Adopt an Urban Speed Hump Program

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Due to department financial constraints and the volume of requests received for such devices, Public Works is recommending that residents privately fund the application fees and construction of speed humps in their neighborhoods. At the time of the request, staff will provide a cost estimate for the engineering studies necessary to determine if speed humps or other traffic calming measures are feasible at the location requested. The neighborhood Homeowners Association or other interested parties will need to fund the engineering studies and subsequent installation of the speed humps. The estimate for the engineering study may include the need to deploy traffic counters. County Staff will analyze the data and determine if the location meets the guidelines. The fee will vary based on hourly rates in the Board approved department fee schedule, which currently is \$95 per hour, but the total fee may range from \$200-\$1,000 depending on staff time involved and the number of traffic counters needed for the locations requested.

The installation of Speed humps may cost upwards of \$4,000 each, with most implementations requiring 2-3 speed humps spaced approximately 200-300 feet from each other. This configuration will encourage drivers to maintain slower speeds as opposed to intermittent acceleration and braking. In addition to the speed hump construction cost, County Engineering staff may require the residents to provide additional signs, markings, and street lighting at their expense, if it is determined there is a need. Ideal locations of speed humps will be near existing street lighting.

Residents will be required to hire a licensed and insured contractor to install the speed humps through the encroachment permit process. A neighborhood could expect a cost of approximately \$10,000 per street to effectively slow traffic. The Program also allows for the removal of speed humps in the future as described in the Program.

Applications will require review from local law and fire agencies and will only be allowed on roads that are classified as local roads.

On-going maintenance of the speed hump material will be provided by the Department of Public Works.

### **POLICY ISSUE:**

Currently, there is no speed hump policy within the County. This proposed program will set the guidelines and parameters of installing speed humps within the County. If the Board of Supervisors does not approve this program, neighborhoods will not be able to install speed humps.

The Director of Public Works is authorized by Streets and Highways Code section 2009 while acting as the County's Road Commissioner to make changes as seen fit to administer the program as approved by the Board of Supervisors.

### **FISCAL IMPACT:**

Implementation of an Urban Speed Hump Program will be revenue neutral as staff is proposing to utilize the Public Works Engineering Plan Checking fee that was adopted by the Board of Supervisors on May 19, 2015, to recover actual costs of implementing the program.

**BOARD OF SUPERVISORS' PRIORITY:**

The recommended action is consistent with the Board's priority of A Well-Planned Infrastructure System by reducing speeds within urban neighborhoods.

**STAFFING IMPACT:**

Existing Public Works staff will manage the program.

**CONTACT PERSON:**

Matt Machado, Director of Public Works

Telephone: (209) 525-4153

**ATTACHMENT(S):**

1. Urban Speed Hump Program

ATTACHMENT 1

Urban Speed Hump Program



## County of Stanislaus

Department of Public Works  
Traffic Engineering Division  
1716 Morgan Road  
Modesto, CA 95358  
(209) 525-4130

### URBAN SPEED HUMP PROGRAM

The Department of Public Works, Traffic Engineering Division of the County of Stanislaus has developed guidelines to allow the placement of speed humps on Urban County maintained right of ways. The guidelines are broken down in the following sections:

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#### AUTHORITY

The Director of Public Works, as the County's Road Commissioner, may make changes to this document adopted by the Board of Supervisors as seen fit to effectively administer this program. This authority is granted by Streets

and Highways Code Section 2009. No changes will be made to the program for processes that require Board of Supervisors Approval, without future Board approval.

## **A. SPEED HUMPS**

### **WHAT IS THE DIFFERENCE BETWEEN A SPEED HUMP AND A SPEED BUMP?**

Speed humps are used on public streets in residential areas to reduce traffic speeds. Speed humps are 12 feet wide and 3 inches to 4 inches high. Their parabolic shape is designed to permit vehicles to traverse them at reasonable speeds without significant discomfort to the passengers.

Speed bumps are not used on public streets. They are typically found in shopping centers, apartment complexes, and other private properties. Speed bumps are usually 1 foot to 3 feet wide and 4 inches to 6 inches high. They usually cannot be traversed comfortably at speeds greater than 10 miles per hour.

### **WHAT IS THE PURPOSE OF A SPEED HUMP?**

The purpose of a speed hump is to reduce the speed of vehicles on residential streets where excessive speeding occurs. Excessive speed is defined as the following:

- The 85 percentile speed (the speed at which 85% of the drivers travel at or under) is 7 or more miles per hour above the posted speed limit.

Speed humps are not designed to reduce the volume of traffic on residential streets; however, some drivers may divert to other streets to avoid the humps.

### **WHERE ARE SPEED HUMPS USED?**

Speed humps are not intended for use on all streets. They are permitted on residential streets that have at least 1200 feet of uninterrupted length between stop signs or traffic signals where the posted or prima facie speed limit is 25 mph. They are not permitted on arterial streets or on streets that serve as a primary route for emergency vehicles without Board of Supervisors approval.

### **ARE SPEED HUMPS EFFECTIVE?**

Speed humps have been shown to reduce the speed of vehicles on residential streets. Studies indicate the 85th percentile speed (that speed below which 85% of all vehicles travel) decreased by 6 to 7 miles per hour after speed humps were installed.

### **HOW MANY SPEED HUMPS DO YOU INSTALL ON A STREET?**

The number depends on the length of the street. For the humps to be effective they should be installed in a series, approximately 300 feet to 600 feet apart.

## **ARE THERE DISADVANTAGES TO HAVING SPEED HUMPS ON MY STREET OR MY NEIGHBOR'S STREET?**

- There will be more vehicle noise from shocks, loads moving, braking, and acceleration.
- Some drivers will drive closer to the curb so that only one side of the car goes over the speed hump. While this places the vehicle closer to the pedestrian areas, studies have shown these vehicles do not travel faster than other vehicles.
- Some residents feel the additional traffic signs and street painting that accompany the installation of speed humps detract from the appearance of their neighborhood and could affect the property values.
- Some drivers may speed up between the humps to make up for time lost while slowing down to go over the humps.
- There could be a diversion of traffic to adjoining parallel streets from streets where speed humps are installed.
- Emergency response times are delayed approximately 10 seconds per speed hump.

## **COUNTY MAINTAINED RIGHT OF WAYS -VS- NON-COUNTY MAINTAINED RIGHT OF WAYS**

The County does not have jurisdiction over the placement of traffic calming devices (speed humps, speed bumps, etc.) on non-County maintained rights of ways.

Under this policy, the County will only allow the placement of speed humps on County maintained right of way. The procedure is described in Section C.

## **WHO WILL PAY FOR THE COSTS TO INSTALL (OR REMOVE) THE SPEED HUMPS?**

The County of Stanislaus does not have a program to pay for the installation or the removal of speed humps.

For retrofit of existing roads, applicants/residents requesting speed humps, will be required to provide all funding for the installation. Applicants will be required to fund the entire cost of the speed hump(s), including any permitting/design/bidding costs as well as construction costs. A County encroachment permit will be required by the Licensed and Bonded contractor performing the work.

In addition, proposed projects to install speed humps will require review for compliance with the California Environmental Quality Act (CEQA). Most projects will likely be exempt from the requirement to prepare an environmental review document under CEQA. The applicant will be responsible for the cost of the CEQA review and preparation of an environmental document.

## **WHO WILL MAINTAIN THE SPEED HUMPS?**

When the speed humps are constructed on County maintained right of way to County standards, the County will then accept future maintenance responsibility for the humps. However, if the speed humps require an excessive amount of on-going maintenance, and the County finds the maintenance to be a burden, the



humps may be removed, unless otherwise funded by the neighborhood. depending on the performance of the installed humps.

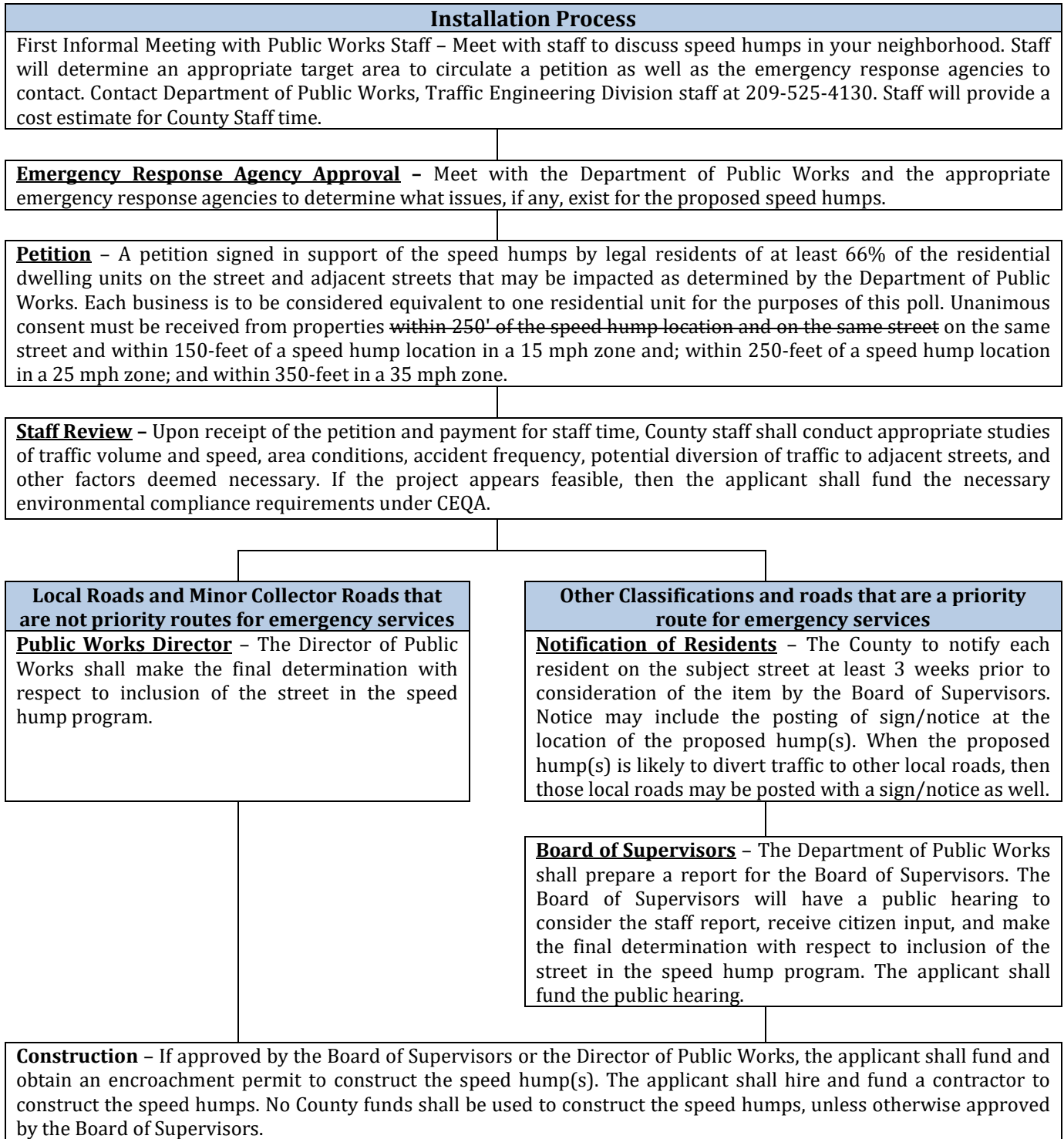
## **B. ELIGIBLE STREETS**

A road being proposed for speed humps shall meet all of the following criteria, unless an exception is otherwise approved by the Board of Supervisors:

1. Road Classification - The road shall be designated as a Local urban or Minor Collector road by the Department of Public Works.
2. Width - The road shall not have more than two (2) through lanes for vehicular travel.
3. Residential - The majority (at least 51%) of abutting development shall be residential uses.
4. Minimum Length Uninterrupted by Stop Signs or Traffic Signals - 1,200 feet.
5. Minimum Speed Profile - 85th percentile speed must be or exceed 32 miles per hour.
6. Emergency Services - The road shall not be a priority route for emergency services without emergency service agency approval.
7. Transit - The road shall not be a transit bus route without transit agency approval.
8. Traffic Volume - The road shall not have an average daily traffic count (total of both directions) above 5,000.
9. Traffic Safety - The placement of speed humps must not result in a traffic safety hazard.

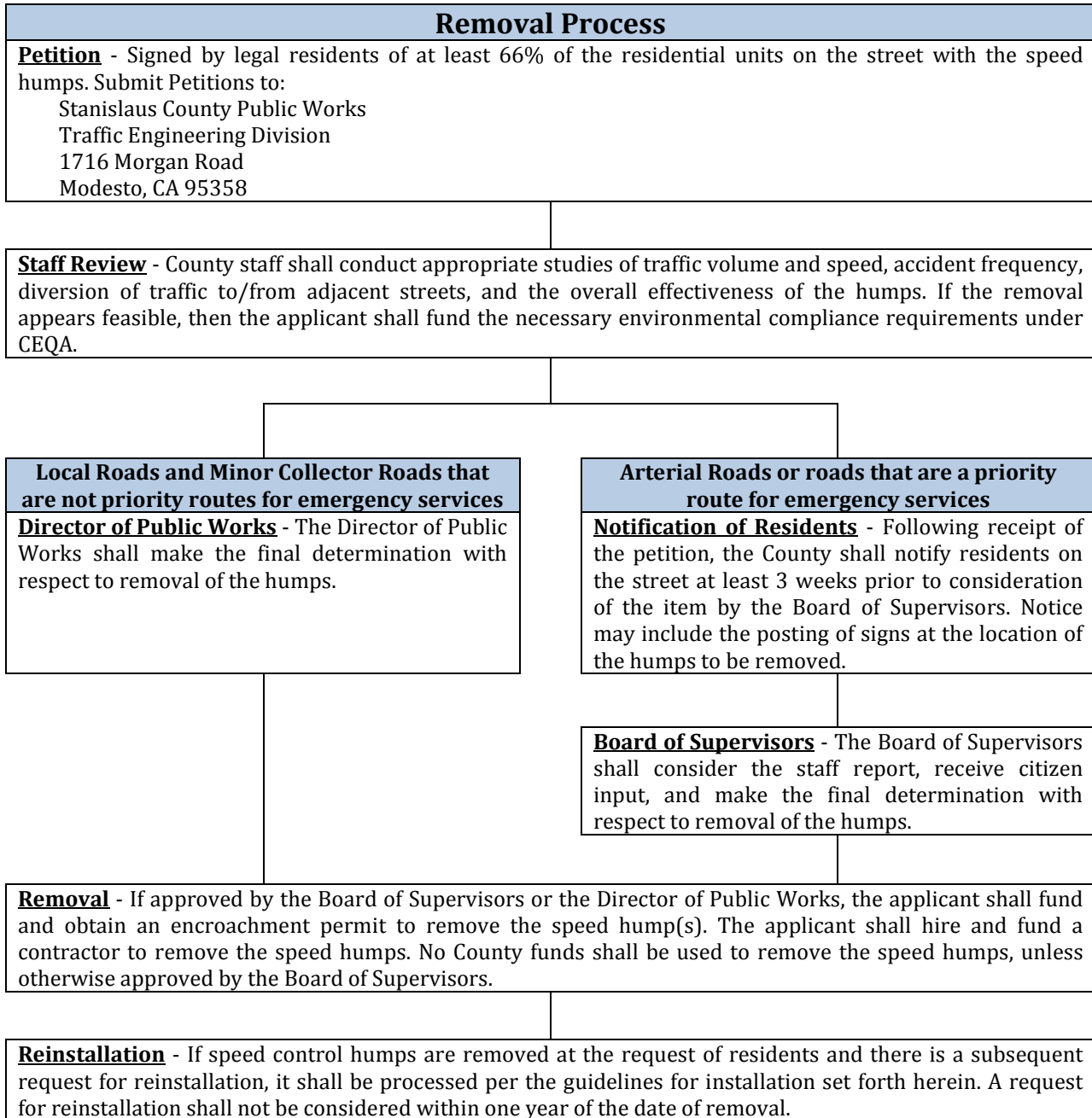
### C. PROCEDURES FOR INSTALLATION

When an individual or neighborhood group desires to have a series of speed humps installed on a County maintained road, then the following procedure shall be used.



## D. PROCEDURES FOR REMOVAL

After the speed humps are installed, residents along the road may decide that the speed humps were not an appropriate solution for the road. The following process shall be used for the removal of speed humps.



## E. INSTALLATION GUIDELINES

1. **Hump Dimensions** – In general, speed humps should be 3 inches to 4 inches in height, 12 ft width; the full height of the speed hump shall extend to 1 foot from gutter and taper to join existing pavement at the edge of gutter. The exact specifications shall be provided by the Department of Public Works.
2. **Product Materials** - The hump may be made out of a variety of materials as approved by the County. Typical materials may be Asphalt Concrete, Portland Cement Concrete, or durable rubber/plastic.
3. **Spacing** – Typical spacing is 300 feet to 600 feet between humps; 25 feet to fire hydrants and manholes; unless otherwise approved by the Department of Public Works.
4. **Signs and Markings** – Signs and markings shall be installed in accordance with the most current edition of the Manual of Uniform Traffic Control Devices (MUTCD) adopted by the State of California.
5. **Street Lighting** – Based upon the specific location of the speed hump, the Department of Public Works may require the installation and maintenance of street lighting. The applicant is responsible for all costs and arrangements necessary to have the street lighting installed. Applicants may be required to establish a lighting assessment district to fund the street lighting. If necessary, the Department of Public Works will not authorize the construction of speed humps until the street lighting is in place and energized. Ideal locations for humps will be located near existing street lights.
6. **Notification** – Residents on the street shall be notified of the planned hump installation at least 3 weeks prior to construction. Notice may include posting of temporary signs.

## F. CONSTRUCTION COST ESTIMATE (2015 DOLLARS)

The construction cost for one (1) speed hump is approximately \$4,000 for concrete type materials. Applicants will be required to receive their own bids/quotes from a licensed and bonded Contractor.

The following fees apply, regardless of the number of speed humps to be constructed:

- The cost for a preliminary environmental compliance review by County staff for a proposed speed hump project is \$57. Most projects will likely be exempt from further evaluation under CEQA. If a project is not exempt from CEQA, the environmental document typically required for speed hump installation or removal is a negative declaration. The cost to prepare and execute a negative declaration is approximately \$2,500.
- A public hearing by the Board of Supervisors is approximately \$200.00, if required.

## **G. PETITION REQUESTING INSTALLATION OF SPEED HUMPS**



## H. VERIFICATION STATEMENT

The Department of Public Works will require a verification statement substantially similar to the following:

There are a total of \_\_\_\_\_ properties in the project target area as defined by the Department of Public Works associated with the petition for a speed hump(s) on \_\_\_\_\_ (street) between \_\_\_\_\_ (street) and \_\_\_\_\_ (street). There are \_\_\_\_\_ (number of signatures) valid signatures on the speed hump petition which represent \_\_\_\_\_ % (number of signatures / number of properties) properties within the target project area. I certify that the signatures on the speed hump petition are valid; and that only one signature per dwelling unit has been considered in the above percentage.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## **I. LIST OF ROADS NOT SUITABLE FOR SPEED HUMPS WITHOUT BOARD OF SUPERVISORS APPROVAL**

All County Maintained roads categorized as Other Principal Arterials, Minor Arterials, or Major Collectors, and roads posted at a speed greater than 30 miles per hour. Call the Stanislaus County Traffic Engineering Division at (209) 525-4130 to determine if the road you are concerned about is eligible.

## **J. ROADS APPROVED BY THE BOARD OF SUPERVISORS**

The following list of roads has been approved by the Board of Supervisors for inclusion in this speed hump policy:

*No roads have yet been approved by the Board of Supervisors.*