

## **CITY OF BELLE ISLE**

### **Speed Hump Policy**

#### **1. GENERAL**

The purpose of this policy is to provide guidelines for the application of speed humps. A "speed hump" is a gradual rise and fall of pavement surface across the width of the roadway. Two common designs of speed humps include 1) circular humps - 12 feet long with a maximum height of three or four inches and 2) flat-topped humps - 22 feet long having a 10-foot long and three to four-inch plateau with six-foot long circular arc approaches. A speed hump differs from a "speed bump", which is more abrupt, having a height of three to four inches over a length of one to three feet. Due to gentle vehicle rocking, speed humps may cause some drivers discomfort and result in most vehicles slowing down at humps and between properly spaced successive humps.

Research has shown that speed humps can be effective in safely reducing speeds along a roadway. There is, however, a potential for traffic diversion onto neighboring streets as a result of motorists avoiding the speed hump street.

In order for speed hump installation to be effective, their provisions should be in accordance with established transportation engineering criteria and documented facts. As is the case with all traffic control devices, proper installation will encourage compliance and safe driving practices. This policy provides criteria and procedures for installation of safe and effective speed humps.

The city reserves the right to change any or all of the criteria and procedures in these guidelines if deemed necessary.

Speed humps already in place at the time this policy is adopted will remain.

#### **2. ELIGIBILITY REQUIREMENTS**

All of the following criteria shall be satisfied for a street to be considered eligible for speed hump installation.

##### **A. INITIAL REQUEST**

Individual residents or neighborhood associations can initiate requests for speed hump installation by completing the request form and either mailing it to City Manager, 1600 Nela Ave., Belle Isle, FL 32809, or email to: [bfrancis@belleislefl.gov](mailto:bfrancis@belleislefl.gov). (Exhibit A)

##### **B. PETITION**

1. A petition from the residents documenting that at least 75% of all households adjacent to the project street support the installation of speed humps. (Exhibit B)
2. A verification statement from the contact person confirming that the signatures on the speed hump petition are valid and represent at least 75% of the households adjacent to the project street (refer to attached verification statements – Exhibit C).

3. A statement from the neighborhood association endorsing speed hump installation on the project street. In the absence of a neighborhood association, the petition area may be extended to include nearby streets that may see an increase in traffic as a result of this project. Staff will determine the petition area. (Exhibit C)
4. The determination of satisfying the City's policy will be the completion of the Speed Hump Criteria Checklist. (Exhibit D)

**B. OPERATIONAL AND GEOMETRIC CHARACTERISTICS OF THE STREET (CRITERIA)**

1. The street shall provide access (via driveway or on-street parking) to abutting residential and/or commercial properties (residential local or collector streets). Residential properties include multiple dwellings such as apartment complexes.
2. The street shall consist of one lane of travel in each direction, but not have more than one traffic lane in each direction.
3. The street shall have a regulatory speed limit of 25 mph or less as determined in accordance with State Law.
4. The 85<sup>th</sup> percentile speed on the street section must be at least 30 mph or 60% of the measured speeds are in excess of 25 mph.
5. The speed humps should not be located on a horizontal curve, on vertical curves where visibility of the hump is restricted, or on the approaches to these curves; at least ¼ mile in length; uninterrupted by stop signs; shall be visible for at least 200 feet; and not on short (less than 800 feet) cul-de-sac.
6. The street should have curb and gutter; however considerations may be given to streets without curb and gutter. In such cases, special care should be used to accommodate drainage and prevent vehicle run-arounds.
7. The street must be approved by the Belle Isle Police Department and Orange County Fire Department for installation of speed humps (i.e., not an important access route for emergency vehicles).
8. The street must have a 24-hour traffic volume of at least 1000 vehicles but not greater than 3500 vehicles.
9. Speed humps will not be used on streets functionally classified by the City or Orange County as collector streets or arterial streets.
10. Street width is 40 feet or less.
11. Speed humps will not be installed on streets where it is anticipated that traffic will be diverted to another local residential street unless those streets are included on the petition.

12. The street is not scheduled for resurfacing during the next 18 months.

**3. PROJECT PRIORITIZATION**

Speed hump projects are prioritized on a city-wide basis. This ensures proper allocation of the City's resources. The projects will be ranked according to the criteria developed by the staff.

**4. COST RESPONSIBILITY**

The city has a designated fund for traffic calming including speed humps; however, the cost for speed hump installation (including humps, signs, pavement markings and if necessary, special features) may be shared between the City and the residents if the City Council determines that this is a special benefit for those in the area and a special assessment district is established according to F.S. 170.

**5. SPEED HUMP LOCATION**

A speed hump shall not be located in front of a property if the occupant objects to its placement or, in the case of multiple dwellings, if a majority of the households on the property object to its placement. Fulfillment of this requirement is the responsibility of the applicant(s).

**6. DESIGN, CONSTRUCTION AND MAINTENANCE**

The City Engineer shall prepare design standards and installation procedures for speed humps and related features such as signs and pavement markings. The Public Works Department will administer construction of speed humps. The Public Works Department will maintain the speed humps and all related features. Depending on the location and characteristics of the area, the City Engineer or City Manager may determine that it is more cost effective and suitable to install premanufactured speed humps

**7. SPEED HUMP REMOVAL AND ALTERATION**

The process for speed hump alteration or removal requested by the residents is the same as the process for installation. A petition approved by the neighborhood association, documenting that at least 75% of all households adjacent to the speed hump street are in favor of speed hump removal, will be required. This includes speed humps that were "grandfathered" to remain in place when this policy was adopted.

## ***Speed Hump Installation Procedure***

The following items describe the procedure to be followed for speed hump installation.

### **1. PROJECT REQUEST**

- A. Individual residents or neighborhood associations can initiate requests for speed hump installation. A written request must be made to City Manager, 1600 Nela Ave., Belle Isle, FL 32809, or email to: [bfrancis@belleislefl.gov](mailto:bfrancis@belleislefl.gov). (Exhibit A)
- B. After a request for speed humps has been received, a petition packet consisting of the speed hump petition, a verification statement for the contact person, and an endorsement statement for the neighborhood association, if applicable, will be provided to the requestor(s). The project requestor(s) will be responsible for circulating the petition in the petition area.
- C. Signatures representing 75% of all the households within the petition area must be in favor of speed hump installation for the study to proceed further. Multi-family dwellings with more than four units will be counted as one household, with the property owner or manager representing the household.

### **2. PRELIMINARY REVIEW**

- A. The sponsor of the petition is required to contact every resident of the abutting properties of the subject street. If a resident is against the speed humps, the word "OPPOSED" will be noted on the petition signature space. If the sponsor is unable to contact a resident, "NO CONTACT" will be noted on the petition signature space with dates and times that the contact was attempted. It is required that the sponsor make at least two attempts on separate days to contact a resident. Any petitions submitted prior to the eligibility determination by City staff will not be processed ahead of schedule and shall be subject to return, if all required information on the installation of speed humps is not included thereon. "NO CONTACT" will be considered as "OPPOSED".
- B. After a petition with the required signatures has been received, City staff will conduct an initial investigation and collect data to determine the street's eligibility in regards to the operational and geometric characteristics (criteria). This eligibility process includes approval from the emergency services departments.
- C. The cut-off date for receiving requests for speed hump projects to be undertaken during a particular fiscal year will be February 1 of the preceding fiscal year, the cut-off date for receiving the approved petition, verification statement, and endorsement statement will be May 1 of the preceding fiscal year for inclusion in the next year budget.

- D. If the approved petition, completed verification statement, and endorsement statement from the neighborhood association (if applicable) is received by the specified date, City staff will prepare an agenda item for consideration by the City Council. City staff will notify the surrounding area of the proposal for speed humps on a particular street. Such notification may include letters, postcards, City E-Alerts, newsletters when available, and/or posting special signs on the subject street. The City Council will then hold a hearing on the request and either approve or disapprove the request.
- E. If the operational and geometric requirements for eligibility are not met, the street will not be considered for speed humps. Upon determination that a street is not eligible for speed humps, the resident of the street will be notified in writing giving the reason why the street is not eligible.
- F. If the request or appeal is approved, the street will be placed on the list of streets eligible for speed hump installation. A priority ranking will be assigned to the street according to the project prioritization criteria, which may include location, traffic counts, and other criteria determined by the City staff .

### **3. FUNDING**

Funding is approved by City Council allowing for a specific amount of money to be allocated to speed hump installation in the next fiscal year budget. Cost sharing criteria may be used to determine the residents' share of the installation cost if the Council determines that the area receives a special benefit according to F.S. 170.

### **4. SPEED HUMP INSTALLATION**

Upon receipt of residents' share (if any) and allotment of City's share (if any), speed humps will be installed as scheduling permits. The construction of humps and the placement of signs and marking will conform to the current design standards as established by the City Engineer and City Public Works Department.

## ***Design Standards***

### **1. DIMENSION AND CROSS-SECTION**

Two types of speed hump designs, circular (rounded) or flat-topped (commonly known as a speed table), may be considered. The circular speed hump will be 12 feet long and have the cross section of a segment of a circle with a maximum height of 3.5 inches at the center. The flat-topped speed hump will be approximately 22 feet long consisting of a 10-foot long plateau with 6-foot long circular arc approaches on either side. This flat-topped speed hump will be 3.5 inches in height.

On streets with barrier curbs, humps should extend fully across the road from curb joint to curb joint. A 12-inch minimum taper may be considered for drainage. For humps installed on non-curbed roadways special treatment such as delineator posts should be considered to prevent vehicle run-arounds depending on the right-of-way.

### **2. SPACING AND LOCATION**

Speed humps will usually be placed between 200 feet and 600 feet apart. Other spacing may be used based upon engineering judgment. The following guidelines will be considered when determining speed hump spacing.

1. On single short blocks (300 ft. to 500 ft.) a signal hump positioned near midpoint is usually sufficient.
2. On single blocks of moderate length (500 ft. to 1000 ft.) a two-hump configuration is usually adequate.
3. On very long blocks (1000 ft. to 1600 ft.) three or more humps may be necessary.
4. 25 feet to fire hydrants and manholes
5. 200 feet to intersections.

The following points should be considered when locating speed humps.

1. A speed hump should not be located in front of a driveway or within an intersection.
2. Speed humps should not be located over, or contain manholes, or be located adjacent to fire hydrants.
3. For humps located near drainage inlets the hump should be placed just downstream of the inlet. If this is not feasible, special treatment should be considered for drainage.
4. If possible, humps should be located on property lines rather than directly in front of a residence.
5. The advantage of existing or planned street lighting should be taken into consideration when determining hump location.

### **3. TRAFFIC CONTROL**

Traffic control consisting of signs and markings should be provided to advise roadway users of the presence of a speed hump and to guide their subsequent action. Traffic signs and pavement markings should conform to Manual of Uniform Traffic Control and Devices Standards (MUTCD).

1. Warning Signs. "SPEED HUMPS AHEAD" signs shall be placed ahead of the hump.
2. Markings. "SPEED HUMP" pavement marking may be placed in advance of the hump.
3. Notifications. Each resident on the street shall be notified in writing of the planned hump installation at least three weeks prior to construction.
4. The City Engineer will develop standards for speed hump installation and markings.

**EXHIBIT A**  
**CITY OF BELLE ISLE**  
**REQUEST FOR SPEED HUMP INVESTIGATION**

The following is a request form for speed humps. Each request must contain the completed information as indicated in sections A and B. The request will be processed in accordance with the provisions of the City of Belle Isle Speed Hump Policy.

**A. STREET STUDY INFORMATION**

Each request must provide a name of the street on which a study is requested, and the boundaries of the street segment. Traffic studies will be conducted only within the boundaries indicated. Please use street names for boundary limits, not block ranges.

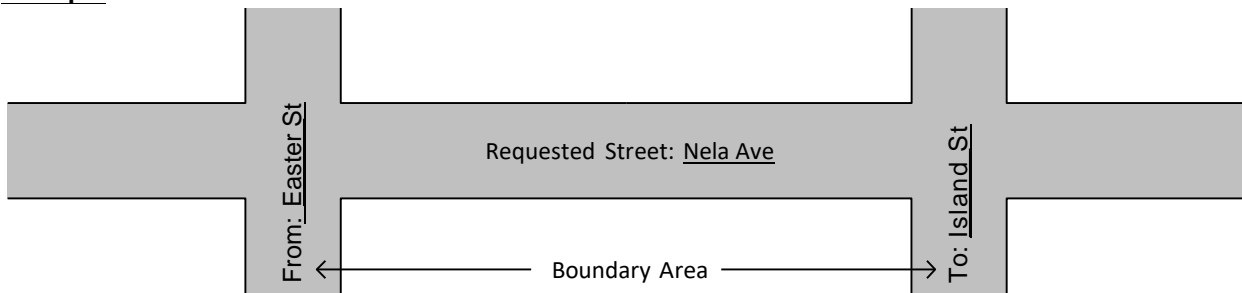
**Requested Street:** \_\_\_\_\_

**Boundary Area**

**From:** \_\_\_\_\_

**To:** \_\_\_\_\_

**Example:**



**B. CONTACT PERSON INFORMATION**

Each request must provide a contact person who represents the neighborhood association or property owners on the requested street within the study boundary area. The contact person will receive all correspondence and will be responsible for gathering evidence of support and verifying signatures on the speed hump petition.

**Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**City, State, Zip:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

**Email Address:** \_\_\_\_\_

**Neighborhood Association:** \_\_\_\_\_



**EXHIBIT B**  
**CITY OF BELLE ISLE**  
**PETITION REQUESTING INSTALLATION OF SPEED HUMP**

Please provide evidence of neighborhood support for the speed humps by securing at least 75% of the owners of households adjacent to the requested street within the boundary area.

We hereby offer our support for speed humps located on the requested street within the boundary area identified in Exhibit A. We understand that the speed hump installation, if warranted, shall meet the guidelines established in the City of Belle Isle Speed Hump Policy and must be approved by City Council.

_____ Printed Name	_____ Address	_____ Signature
_____ Printed Name	_____ Address	_____ Signature
_____ Printed Name	_____ Address	_____ Signature
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_____ Printed Name	_____ Address	_____ Signature
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_____ Printed Name	_____ Address	_____ Signature
_____ Printed Name	_____ Address	_____ Signature

(Use additional sheets if necessary)

**EXHIBIT C  
CITY OF BELLE ISLE  
VERIFICATION STATEMENT**

I, \_\_\_\_\_ (Contact Person identified in Exhibit A, Section B),  
verify that the signatures on this form are valid and represent at least 75% of the property  
owners of households adjacent to the requested street within the boundary area identified in  
Exhibit A, Section A.

**Signature:**

**Date:**

\_\_\_\_\_  
\_\_\_\_\_

We, \_\_\_\_\_ (Neighborhood Association identified in Exhibit A,  
Section B), endorse the request for speed hump installation on the requested street within the  
boundary area identified in Exhibit A, Section A. *\*In absence of a neighborhood association, the  
petition area may be extended to include nearby streets that may see an increase in traffic as a  
result of this project. Staff will determine the petition area.*

**Neighborhood Association**

**Representative:**

**Address:**

**City, State, Zip:**

**Phone:**

**Signature:**

**Date:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**SUBMITTAL**

Submit the completed form to:

City Manager  
1600 Nela Ave.  
Belle Isle, FL 23809

Or email to: [bfrancis@belleislefl.gov](mailto:bfrancis@belleislefl.gov)

If you have any questions, please contact the City Manager at (407) 851-7730 or at the email  
listed above.

**EXHIBIT D**  
**CITY OF BELLE ISLE**  
**SPEED HUMP CRITERIA CHECKLIST**

Date: \_\_\_\_\_

STREET: \_\_\_\_\_ LIMITS (To/From): \_\_\_\_\_

Guidelines	Data	Conformance			
		YES	NO	Comments	Points
Petition contains signatures of adjacent residents 75% indicating support (each household represents one vote)					
<b>Conditions – Minimum of 130 Points Required</b>					
1. The street is a local residential street and is <i>not</i> a collector or arterial street as defined by the City of Belle Isle or Orange County. (25 points)					
2. The speed limit is 25 mph or less. (10 points)					
3. Radar survey shows that the measured 85m percentile speed is 30 mph or more; or 60% of motorists exceed 25 mph. (10 points)					
4. Paved width is 40 feet or less with curb and gutter or edge control. (10 points)					
5. Street shall be no more than one lane in each direction. (10 points)					
6. Average traffic volume not less than 1,000 but greater than 3,500 vehicles per day for both directions in 24 hours on an average weekday. (10 points)					
7. Street has a longitudinal grade of 8% or less. (10 points)					
8. Street segment shall be at least 1/4 mile (1,320 feet) in length and uninterrupted by stop signs. (10 points)					
9. Must not be proposed on isolated blocks, along a continuous street or on a short cul-de-sac (less than 800 feet). (10 points)					
10. Adequate horizontal or vertical alignments and sight distance. (10 points)					
11. Street not scheduled for resurfacing within 16 months. (10 points)					
12. Street is not an important access route for emergency vehicles as determined by the emergency services departments and NCTD. (25 points)					
<b>SUMMARY</b>	<b>Qualified</b>			<b>Total Points</b>	
Accident History:					
Special Circumstances:					

