



New Construction - Transportation Guide

Traffic Calming Measures

DATE: August 21, 2014 (Reviewed and Updated June 2019)

PURPOSE: To identify traffic calming measures for roadways that are compatible with the emergency response needs and maintain acceptable emergency response times.

SCOPE: This guide shall apply to all areas served by Tualatin Valley Fire & Rescue.

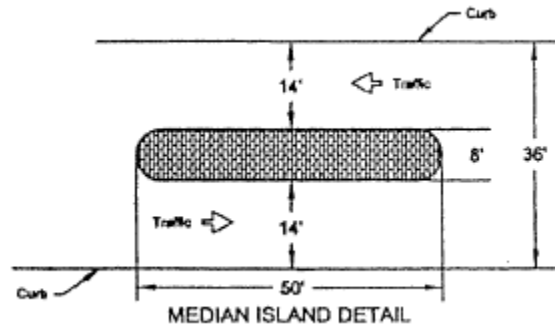
REFERENCES: Oregon Fire Code 503.4.1

Tualatin Valley Fire & Rescue recommends that any traffic calming measures, proposed for public and private roadways and drive aisles, comply with the table listed below. On portions of roadways serving specifically as fire department access (as it relates to minimum street width, emergency vehicle turning radius, and accessibility/connectivity) the guidelines shall be met. Proposed measures will be provided with special consideration based on emergency route classification, street width, speed designation, parking arrangements and traffic volume. Response routes are available through TVF&R's Planning Department.

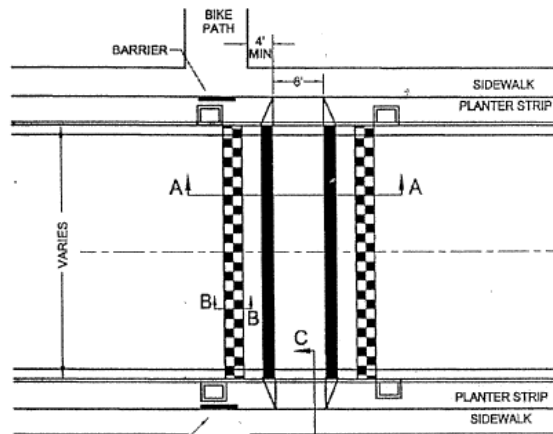
Traffic Calming Measure <i>(Defined on following pages)</i>	Route Classification		
	Primary Emergency Route <i>(Public Roads)</i>	Secondary Emergency Route <i>(Public Roads)</i>	Neighborhood and Local Streets, Private Roadways, Parking Lots and Driveways > 20 feet
Medians	Supported	Supported	Supported
Pavement Texture	Supported	Supported	Supported
Choker/Bulb-Out/Curb Extensions	Not Supported	Not Supported	Special Consideration
Speed Cushion without Median	Not Supported	Special Consideration	Special Consideration
Speed Cushion with Median	Not Supported	Special Consideration	Special Consideration
Speed Bump	Not Supported	Not Supported	Not Supported
14 - 22 Foot Speed Hump	Not Supported	Not Supported	Not Supported
Roundabout	Special Consideration	Special Consideration	Special Consideration
Traffic Circle	Not Supported	Not Supported	Special Consideration
Raised Crosswalk	Not Supported	Not Supported	Special Consideration
Diverter with Emergency Vehicle Pass-Through	Not Supported	Not Supported	Special Consideration
All Other Measures	Special Consideration	Special Consideration	Special Consideration

Traffic Calming Measures Defined:

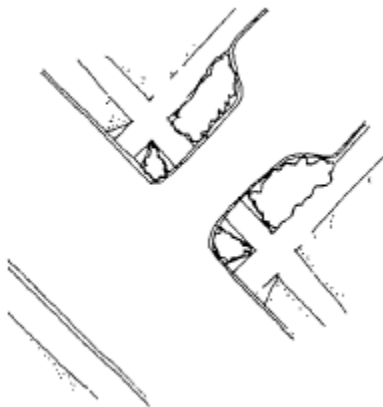
Medians – A street narrowing from the middle outward with a center median. Medians will be approved on roadways no less than 36 feet. Medians are to be no greater than 50 feet in length and must allow for 14 feet of driving surface (from curb to median) in each direction of travel.



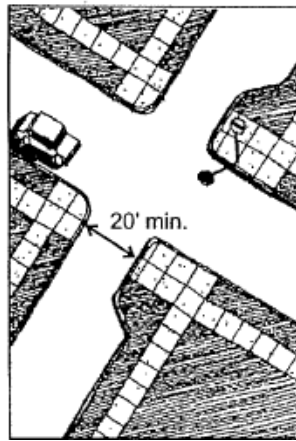
Pavement Texture – Roughness created by using raised markers, pavers, and/or colored concrete with patterns.



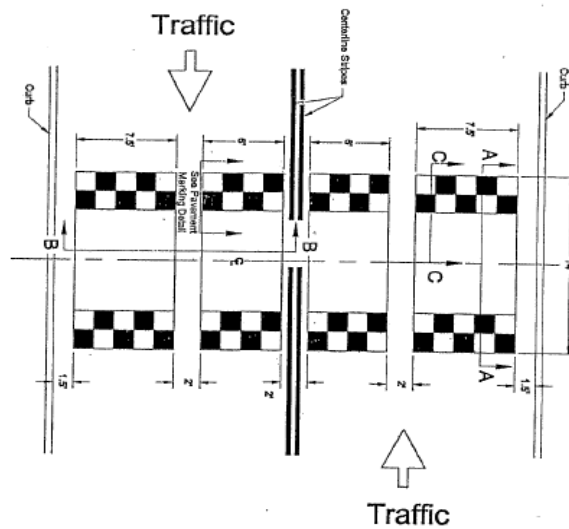
Choker – A choker narrows the mouth of an intersection to one lane using bulb-outs or curb extensions.



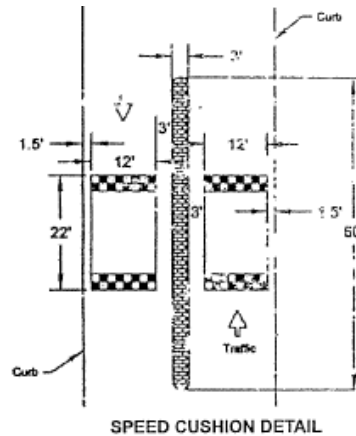
Bulb-Out/Curb Extension – Extension of the curb into the intersection.



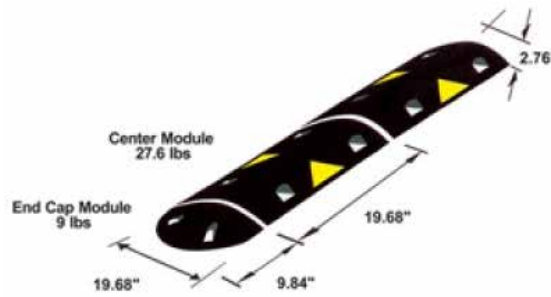
Speed Cushion without Median - Similar to speed humps in design, except they are shaped to allow the wider axles of emergency apparatus to pass without hitting the raised cushion.



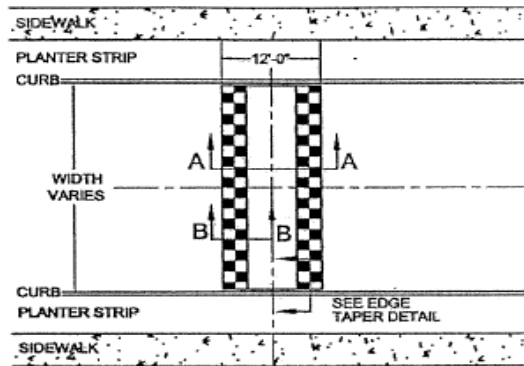
Speed Cushion with Median – Similar to speed humps in design, except they are shaped to allow the wider axles of emergency apparatus to straddle the median and to pass without hitting the raised cushion.



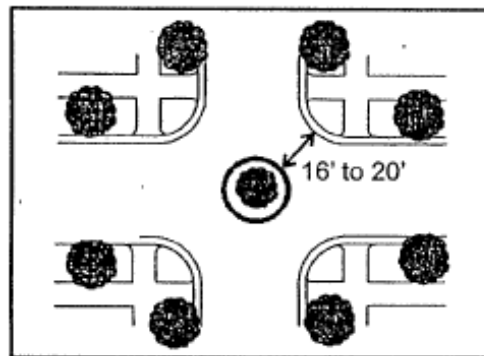
Speed Bump – Bumps have an abrupt mound of any material in varying heights and widths which intend to slow vehicular traffic.



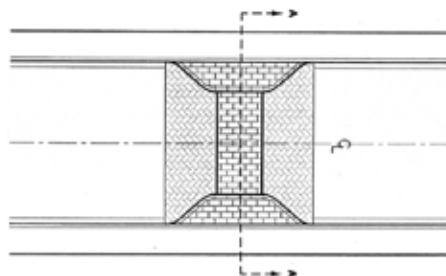
14 - 22 Foot Speed Hump – Humps have an abrupt and parabolic shaped mound of pavement surface three (3) inches high spread over 14 to 22 feet.



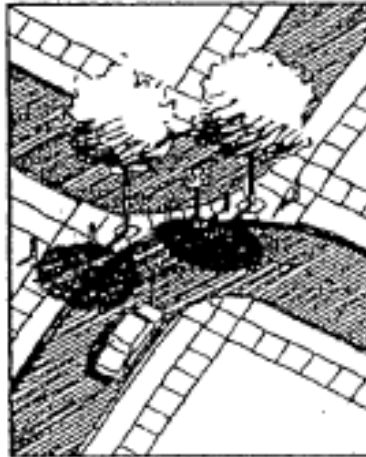
Traffic Circle – A round median in the middle of an intersection.



Raised Crosswalk – Typically created by blending pavement texture for marking with speed humps.

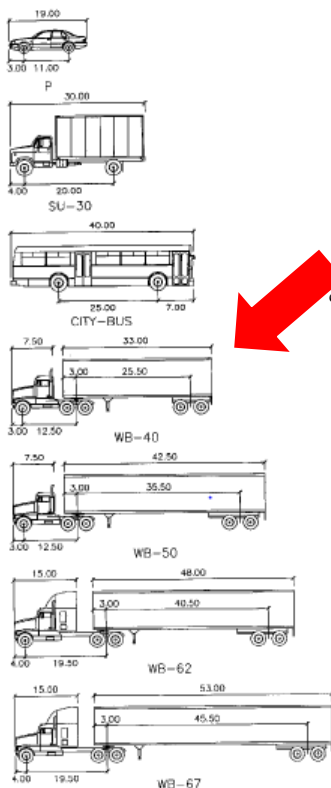


Diverter with Emergency Vehicle Pass-Through – Diverters create channelization or islands extending across an entire intersection to manage traffic access through induced left or right turns. Diverters may allow direct restricted access to emergency vehicles through the use of narrow gaps, raised hurdles, or automatic bollards.

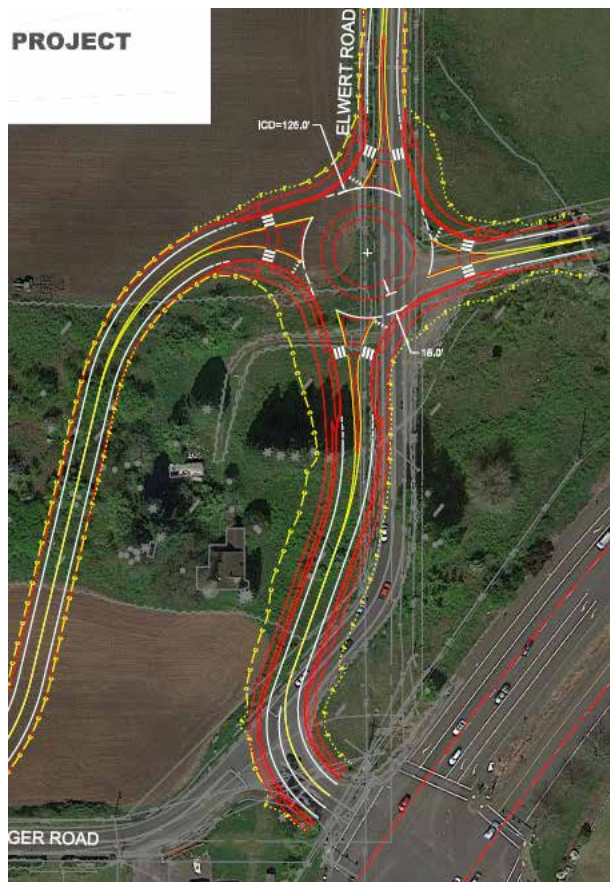


Roundabout – Typically created by blending a traffic circle with diverters. Emergency apparatus will have no issues negotiating a roundabout if it is designed to DB-67 standards and is 126 feet.

Figure 2
Truck Types/Design Vehicles



Red arrow pointing to WB-40: PFB currently uses WB-40 as a comparably designed vehicle to a fire engine.



http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=0ahUKEwiry eqdVP3LAhUiniMKHVX5DxsQFggpMAI&url=http%3A%2F%2Fnacto.org%2Fdocs%2Fusdg%2Fdesigning_truck_movements_large_vehicles_portland_portland.pdf&usq=AFQjCNGOAdhkMoXSqgZ5Rtm43xFe0-tzcw&sig2=bJL2t4la2itPBuh_t8ukkg (see pages 11-13)

Roundabout (modern)

