

THURSTON COUNTY WASHINGTON SINCE 1852

PUBLIC WORKS

TRAFFIC MANUAL

2023

FORWARD

The Revised Code of Washington (RCW) 47.36, Traffic Control Devices, requires the Washington State Department of Transportation (WSDOT) to adopt uniform standards for traffic control devices installed along state highways. The law also requires that traffic control devices along county roads fully conform to these adopted standards.



The Washington Administrative Code, WAC 468-95-010, officially adopted the 2009 Edition of the *Manual on Uniform Traffic Control Devices (MUTCD)*. The Washington state secretary of transportation duly adopted this document published by the Federal Highway Administration and approved by the Federal Highway Administrator as the national standard for all highways open to public travel. The manual includes in part many illustrations, some of which depend on color for proper interpretation.

The purpose of these the following document and guidance is to supplement the adopted standards for use at the local level. This includes use of signage and markings, operations/maintenance of traffic control devices and traffic calming among other things. As intended by state law these procedures, policies and guidelines are intended to promote uniformity in the installation and design of traffic control devices.



This manual is not intended to provide for all situations but to be flexible in form and content. They are intended to assist but not substitute for competent work by county staff.

This document was developed by the Transportation Engineering and Operations Section of the Public Works Department and staff can be contacted by called 360-867-2300 and are located at 9605 Tilley Road SE, Olympia, WA 98512.

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Policy | POL – 808 Traffic Engineering and Operations

Effective 1/20/2011	Review Period Every 2 Years	Last Reviewed 5/22/2023	Director Jennifer D. Walker Jumfu D. Walker
Associated		4 	
Documents			

Purpose

The purpose of this policy is to set applicable standards and to establish the general duties and operations of the office of the Traffic Engineer.

Applicable Standards

Thurston County Public Works follows the <u>Manual on Uniform Traffic Control Devices (MUTCD</u>) as adopted by the State of Washington under <u>Revised Code of Washington (RCW) 47.36.030</u> and <u>Washington Administrative Code (WAC) 468-95-010</u>.

Office of the Traffic Engineer duties established:

As defined by WAC 308-330-260, the duties of the Traffic Engineer include the following:

- to determine the installation and maintenance of traffic control devices,
- to conduct engineering investigations of traffic conditions,
- to plan the operation of traffic on the roadways of Thurston County,
- to cooperate with other officials in the development of ways and means to improve traffic conditions, and
- to carry out the additional powers and duties imposed by any ordinances or policies of the county.

The Traffic Engineer may establish criterion, guidance, policies, or procedures to supplement the MUTCD for use at the local level. This includes use and design of signage and markings, operations/maintenance of traffic control devices, and material specifications.

In the absence of the Traffic Engineer, the County Engineer may serve as Traffic Engineer and exercise the powers and duties with respect to traffic as provided herein.

Definitions

Attachments

Policy I POL – 808 Traffic Engineering and Operations

Revision History

Revision #	Implementation Date	Description of Changes	Completed By
001	9/15/2015	Policy assigned new number. Former policy number was 1103.	
002	12/6/2022	Format updated	MaryBeth King
003	05/19/2023	Updated "Traffic Engineer Duties" information and links	Becky Conn



PUBLIC WORKS DEPARTMENT

SIGN AND MARKING PROCEDURES AND GUIDELINES

2022

FORWARD

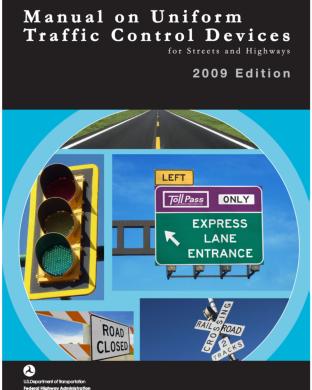
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The Washington Administrative Code, WAC 468-95-010, officially adopted the Manual on Uniform Traffic Control Devices (MUTCD). The Washington state secretary of transportation duly adopted this document published by the Federal Highway Administration and approved by the Federal Highway Administrator as the national standard for all highways open to public travel. The manual includes in part many illustrations, some of which depend on color for proper interpretation.

The purpose of the following is to supplement the adopted standards for use at the local level. As intended by state law these procedures and guidelines are intended to promote uniformity in the installation and design of traffic control devices in Thurston County (TC).

These guidelines and procedures are not intended to provide for all situations but to be flexible in form and content. They are intended to assist but not substitute for competent work by design professionals.

This document was developed by the Transportation Engineering and Operations Division of the Public Works Department and staff can be contacted by called 360-867-2300 and are located at 9605 Tilley Bo



called 360-867-2300 and are located at 9605 Tilley Road SE, Olympia WA 98512.

The following procedures and guidelines are for use by public and private entities for the purposes of designing and installing traffic control devices within Thurston County.

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GENERAL REQUIREMENTS

All traffic control devices shall be designed, manufactured, and installed in accordance with the Manual on Uniform Traffic Control Devices, the Washington State Department of Transportation (WSDOT) Sign Fabrication Manual, WSDOT Standard Specifications, WSDOT Standard Plans and County policies, procedures and guidelines. If conflicts arise between these procedures and the most current MUTCD the most current MUTCD adopted by the State of Washington will apply.

SIGNS

SIGN SIZES

The following represent minimum sizes for use on roads within Thurston County and applies to new or replaced signs. MUTCD as adopted by the State of Washington may have larger sizes for specific uses, signs, or types of roadways.

LARGER SIGNS MAY BE REQUIRED AND THE USER WILL NEED TO REVIEW THE MUTCD AND WASHINGTON STATE AMENDMENTS DURING THE SIGN SELECTION PROCESS TO ENSURE THE PROPER SIGN SIZE IS SELECTED.

Note: Some existing signs may not match the sizing referenced herein. Those signs will be updated as part of capital projects, development related improvements or at the end of the normal service life of the sign.

	Regulatory Signs		
Sign or Plaque	Sign Designation	Reference	Size (Minimum) ¹
Stop Sign	R1-1	MUTCD/TC	30"

1 Sign size is based on sign location. 30" signs shall be used internal to developments and at intersections with roadways less than 30 mph, otherwise 36" shall be used

School Area Signs			
Sign or Plaque	Sign or Plaque	Sign or Plaque	Sign or Plaque
School	School	School	School
School Bus Stop or Turn Ahead	S3-1 & S3-2	MUTCD	36"x36"

Warning Signs				
Sign or Plaque	Sign Designation	Reference	Size (Minimum)	
Chevron Alignments	W1-8	MUTCD	24"x30"	
All Diamond Warning Signs		MUTCD	36"x36"	
Dead End w/ arrow (plaque)	W14-1p	WSDOT	36"x12"	
No Outlet w/ arrow (plaque)	W14-2p	WSDOT	36"x12"	
Downward Diagonal Arrow	W16-7p	WSDOT	30"x18"	
Advanced Street Name (1-line)	W16-8p or D3-201	MUTCD/WSDOT	Varies x 12"	
Ahead (plaque)	W16-9p	MUTCD	30"x18"	

Street Name Signs ¹				
Sign or Plaque	Sign Designation	Reference	Size (Minimum)	
Overhead	D3	MUTCD	Varies x 24"	
Multi-Lane Roads	D3	MUTCD	Varies x 15"	
2-lane conventional Roads (post mounted)	D3	MUTCD	Varies x 12"	
Residential Subdivisions (post mounted)	D3	MUTCD	Varies x 9"	
Historical Street Names	D3-Historical	Thurston County	Varies x 9"	

1 Contact Traffic Engineer or designee for street name signs that require or need multiple road names.

SIGN SHEETING TYPE AND COLOR

SIGN SHEETING

The values in the following table represent minimum sheeting types to be used for materials. Exceeding these specifications is acceptable. This is applicable only to new permanent sign installations or replacement of existing permanent signing.

Retroreflective Sheeting Materials (min.)			
Sign or Plaque	Sign Designation	ASTM D4956-09 Specification	
Overhead	All	XI	
Ground Mounted	All excepted as noted below	IV	
School Zone	S-Series & W16-Series Placards (i.e., W16-7p, W16-9p, etc)	XI	
Bicycle, Trail Crossing, Pedestrian and Playground Signs	W11-1, W11-2, W11-15, W15-1 & & W16-Series Placards (i.e., W16-7p, W16-9p, etc)	XI	

SIGN COLOR

The values in the following table represent sheeting color types for specific signing applications. This is applicable only to new permanent sign installations.

Sign Colors			
Sign or Plaque	Sign Designation	Color	
School Zone	S-Series & W16-Series Placards (i.e., W16-7p, W16-9p, etc)	Florescent Yellow/Green	
Bicycle, Trail Crossing and Non-Vehicular Warning Signs	W11-1, W11-2, W11-15, W15-1 & W16-Series Placards (i.e., W16-7p, W16-9p, etc)	Florescent Yellow/Green	

SIGN MOUNTING MATERIALS AND APPLICATION

For larger signs where a single post is not sufficient, timber or steel post and anchor systems shall be used. See WSDOT Standard Plan Details G22.10-04 and G24.40-07. All multi-post systems must be approved by the County Traffic Engineer prior to installation.

Tops of all foundations shall be finished to the final ground line unless otherwise shown in the plans or staked by engineer.

SIGN APPLICATIONS -POSTS/BASES

Posts/Bases by Installation Type					
Installation Type	Part	Materials	Reference		
Single-Post Installation	Post	2.5" Square perforated steel tube (12 gauge)	WSDOT Standard Specification 9-06.16		
		Precast Concrete Base	See County Details		
	Base ¹ – in native surfaces	3" Square Steel Tube (7 gauge) 36" length (4" exposed) Option: 24" length (4" exposed) ²	See County Details & WSDOT Standard Specification 9-06.16		
	Base – in hardscaped areas	Slip base – SB-3A	WSDOT Standard Plans G- 24.40-07 and WSDOT Standard Specification 9-06.16		

Posts/Bases by Installation Type				
Installation Type	Part	Materials	Reference	
	Post	Contact Traffic Engineer's Office	WSDOT Standard Specification 9-06.16	
	Base – in	Precast Concrete Base	See County Details	
Multi-Post Installation native surface		3" Square Steel Tube (7 gauge) 36" length (4" exposed) Option: 24" length (4" exposed) ²	See County Details & WSDOT Standard Specification 9-06.16	
	Base – in hardscaped areas	Slip base – SB-3A	WSDOT Standard Plans G- 24.40-07 and WSDOT Standard Specification 9-06.16	
Banded to Post Installation - For use when attached to streetlight posts.	Hardware	Stainless steel clamps, brackets, bolts, bands, washers etc.	See County Details	
Wood Post Installation – For use in temporary/construction situations	Post	Contact Traffic Engineer's Office	WSDOT Standard Plan G- 22.10-04 & WSDOT Standard Specification 9-28.14(1)	
	Base – Direct Bury	Compacted Native Backfill	WSDOT Standard Plan G- 22.10-01, G-22.10-02 & WSDOT Standard Specification 9-28.14(1)	

1 Flat face on base should face traffic

2 24" option for use with small signs and site-specific applications only

SIGN AND MOUNTING MATERIALS

Signs, Post and Mounting Materials					
Description	Materials	Reference			
Signs	0.125 Aluminum Alloy (signs larger than 36") 0.080 Aluminum Alloy (signs 20"-36") 0.063 Aluminum Alloy (signs below 20")	WSDOT Standard Specifications 9-28.8			
	Standard radius on all corners, standard holes (centered top and bottom), ³				
Hardware	5/16" washers, 5/16" stainless steel bolts, aluminum rivets, etc.	WSDOT Standard Specification 9-06.16			

3 Except for Chevrons

VISI-SHIELD ON POST

Visi-shields shall be placed on sig posts only at the recommendation of the County Traffic Engineer. These locations shall have a recorded crash history.

Visi-Shield Materials						
Description	Materials	Reference				
Visi-Shield	Type IV sheeting on 0.020 Aluminum Alloy Type XI sheeting on 0.020 Aluminum Alloy ¹	ASTM D4956-09 Specification				

1 Type XI sheeting for use with fluorescent yellow/green signs

SIGN PLACEMENT

Sign placement shall conform to the MUTCD and/or as directed by the Thurston County Traffic Engineer or designee.

Signs are not to be located within the sidewalk without approval of the engineer. If signs are in the sidewalk they shall be placed at the back of the walkway unless determined otherwise and approved by the engineer.

Street name signs are typically posted at all intersections and on all sides of the post and attached with a minimum of two rivets. For example, each street name will have two sign blades mounted to either side of the post. See details for further information. Double sided road name signs mounted on post caps are <u>NOT</u> allowed.

All posts shall be installed in a straight and plumb position.

STREET NAME SIGN REQUIREMENTS

Description	Requirements		
Lettering Style	Mixture of upper- and lower- case Letters		
Lettering Type	Alphabet B		
Background Color	Green for public Roads Blue for Private Roads (lanes)		
Legend (lettering or copy) & Boarder Color	White, ½"		

Road naming shall comply with Chapter 13.44 of the <u>Thurston County Code</u>. The Thurston County Addressing Official shall approve all street names, block numbers and addresses. Please call 360-786-7590 to begin the

process. The addressing official will need a site plan of the proposed project with proposed road names clearly identified.

Public St 1000

Private Ln

NW

1000

PRIVATE ROAD SIGNING

Thurston County does not furnish, install, or maintain stop signs or street name signs for private roadways that intersect with county roads. Citizens may install their own signs at such intersections, in accordance with the MUTCD and applicable county standards and policies (Public Works Policy 809)

FUTURE ROAD EXTENSIONS

Road stub outs in new subdivisions intended to be extended in the future should have a sign installed indicating the intent to extend the roadway. See County Details.

END OF COUNTY ROAD SIGNING

End of County Road Signs are used to mark the end of the publicly maintained portion of a roadway. Typically, they would be considered for installation in instances where there is no appreciable difference in the physical makeup of the roadway or at the discretion of the Traffic Engineer or designee.

SPEED LIMIT SIGNS

SPEED LIMIT AND RESTRICTIONS

See Chapter 12.105 of the Thurston County Code

RESIDENTIAL DEVELOPMENTS OR PLATTED SUBDIVISIONS

Speed Limit signs are generally only posted at the entry points to the subdivision.

WARNING SIGNS

DEAD END SIGNS

The Dead-End sign may be used at the entrance of a single road or street that terminates in a dead end or cul-de-sac. If used, the W14-1a (i.e., placard) shall be used unless otherwise specified.

NO OUTLET SIGNS

The No Outlet sign may be used at the entrance to a road or road network from which there is no other exit. In these instances, Dead End signs would not be used on the road network beyond the No Outlet Sign. If used the 14-2a, (i.e., placard) shall be used unless otherwise specified.

PAVEMENT MARKINGS

STRIPING

Long line striping shall have a 5" gap between parallel yellow lines.

RAISED PAVEMENT MARKERS

Raised or recessed reflective pavement markers are typically only installed on arterial and collector roadways to supplement existing painted markings. When used the spacing is as follows:

Centerline – 80' Rural, 40' Urban

Changes in alignment (i.e., horizontal or vertical curves) - 20'

Turn lanes/Gore/Tapers/Transitions - 10'

Wide Lines - 10'

Adjacent Medians (raised or painted) - 10'

Two-way-left-turn-lanes (TWLTL) - 40'

STOP LINES

Stop lines shall be used in the following situations:

- At all approaches to signalized intersections
- On all approaches to multi-way stop intersections
- On all approaches where channelization exists
- At railroad crossings as required by the MUTCD
- Stop lines may be required at other locations as directed by the County Traffic Engineer or when otherwise required by the MUTCD.

When used stop lines shall be solid 24" white lines at intersections with collectors and arterials roadways, signalized intersections, multi-way stops and approaches with channelization, otherwise 12" stop lines are acceptable.

CROSSWALKS

Crosswalk markings, when required, shall be longitudinal (parallel to traffic flow) lines (see figure 3B-16 in the MUTCD).

Other pavement markings required for projects shall also match requirements of the MUTCD as adopted by the State of Washington, current versions of WSDOT Standard Plans and Standard Specifications and/or as directed by the Thurston County Traffic Engineer.

ARROWS

Arrow symbols for High-Speed Roadways, per WSDOT Standard Plan M-24.20-02, shall be used on all roadways requiring arrow channelization.

PAVEMENT MARKING MATERIALS

Materials shall be from approved materials listed in the Washington Department of Transportation (WSDOT) Qualified Products List (QPL), unless otherwise specified.

Pavement Marking Materials						
Description	Materials	Reference				
Long Line Striping (i.e., Yellow centerline and white edge line)	Low Voc Waterborne Paint	WSDOT Standard Specifications 9-34.2(5).				
Dashed, Dotted Lines and Wide Lines in Channelized Areas, painted islands, lines adjacent to raised islands or curbing.	WSDOT Extruded Type A or Type B Pre-Formed Fused Thermoplastic	WSDOT Standard Specifications 9-34. Accepted Materials for Type B is Premark [®] by Flint Trading Company				
Traffic symbols, stop lines, crosswalks, or similar type	Type B Pre-Formed Fused Thermoplastic	WSDOT Standard Specification 9-34.3(2)				
markings	Skid Resistance (use on all symbols, stop bars or similar type markings)	0-07.0(<i>2)</i>				
Raised Rumble Bars	WSDOT Type B Heat Fused Plastic	Use Premark [®] Rumble Bars by Flint Trading Company.				

ITS DEVICES

SCHOOL BEACON SYSTEMS

Signing within an established school zone shall conform with Chapter 7 of the MUTCD. The following table outlines the requirements of the flashing beacons used when a School Speed Limit (S5-1) sign is included within the established school zone.

School Beacon Specifications				
Manufacture	TAPCO – Traffic and Parking Control Co., Inc			
Beacon Type ¹	Three Amber Beacons: Two 12" Beacons in front and one 8" Beacon in back			

1 Beacon Type may be altered based on engineering judgement and if approved by the Traffic Engineer

RRFB CROSSING SYSTEMS

At crossings where RRFB crossing equipment has been approved by the Traffic Engineer, the equipment shall meet the requirements outlined in the table below.

RRFB Crossing Specifications				
Manufacture	TAPCO – Traffic and Parking Control Co., Inc			
Flasher Type	Back to Back RRFB Amber light bars			

When a crossing is located within a school zone, the Traffic Engineer will use engineering judgement to determine if equipment should be included that would allow the School Beacons to communicate with the RRFB's as further warning to the public of the crossing.

TRAFFIC CALMING

See Policy Public Works Policy 816

TRAFFIC CONTROL DEVICES PLANS

For projects requiring an engineered plan, traffic control devices plans shall be prepared by an engineer, licensed in the State of Washington, and contain the following elements:

Show locations of all traffic control devices on a sheet(s) designated for this purpose (markings, signs, etc...).

Provide a traffic control devices schedule that will clearly identify the type of device, location, and material requirements. For signs this would also include street names, block numbers, quadrant, and size.

For projects that do not require engineered plan, a simplified approach may be used as follows:

If the roadway to be named runs north/south or nearly so, then submit a written street name and assignment of addressing request to the addressing official.

Upon acceptance the Addressing Official and Public Works will provide a completed form with information necessary to order and install any required signing (see exhibits for an example).

If the roadway to be named runs east/west or nearly so, then submit a written request for addressing assignment and road number. Upon acceptance the Addressing Official and Public Works will provide a completed form with information necessary to order and install any required signing (see exhibits for an example).

Road naming shall comply with **Chapter 13.44** of the <u>Thurston County Code</u>. The Thurston County Addressing Official shall approve all street names, block numbers and addresses. Please call 360-786-7590 to begin the process. The addressing official will need a site plan of the proposed project with proposed road names clearly identified.

PLEASE NOTE ALL PUBLIC ROADS IN NEW DEVELOPMENTS SHALL BE NAMED REGARDLESS OF THE NUMBER OF LOTS SERVED.

The approved street names and other traffic control devices shall appear on the record drawings certified by the design engineer.

A note shall be added to this plan sheet requiring a pre-construction conference prior to installation.

REFERENCES

Manual on Uniform Traffic Devices: Hard copies or CD Versions of the Manual on Uniform Traffic Devices and cost information are available from the following organizations:

American Association of State Highway Organizations at: https://bookstore.transportation.org/

Institute of Traffic Engineers at: http://ecommerce.ite.org/IMIS/iCommerce/Bookstore/Search_BookStore/iCommerce/Orders/SearchBookStore.aspx

American Traffic Safety Services Association at: http://www.atssa.com/

Washington Department of Transportation Publications. Copies of WSDOT publications may downloaded at by visiting their website at http://www.wsdot.wa.gov/publications/manuals/

Sign Fabrication Manual

Standard Plans

Standard Specifications for Road, Bridge and Municipal Construction

Qualified Product List

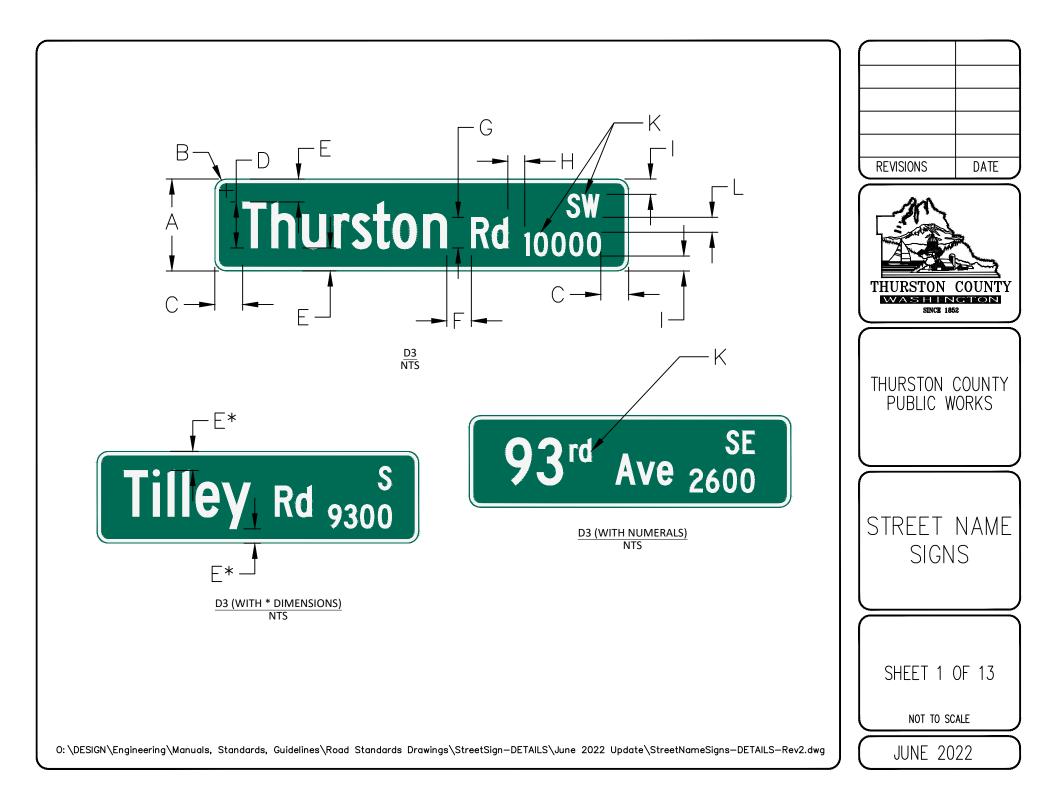
Washington State Administrative Code, WAC 468-95.

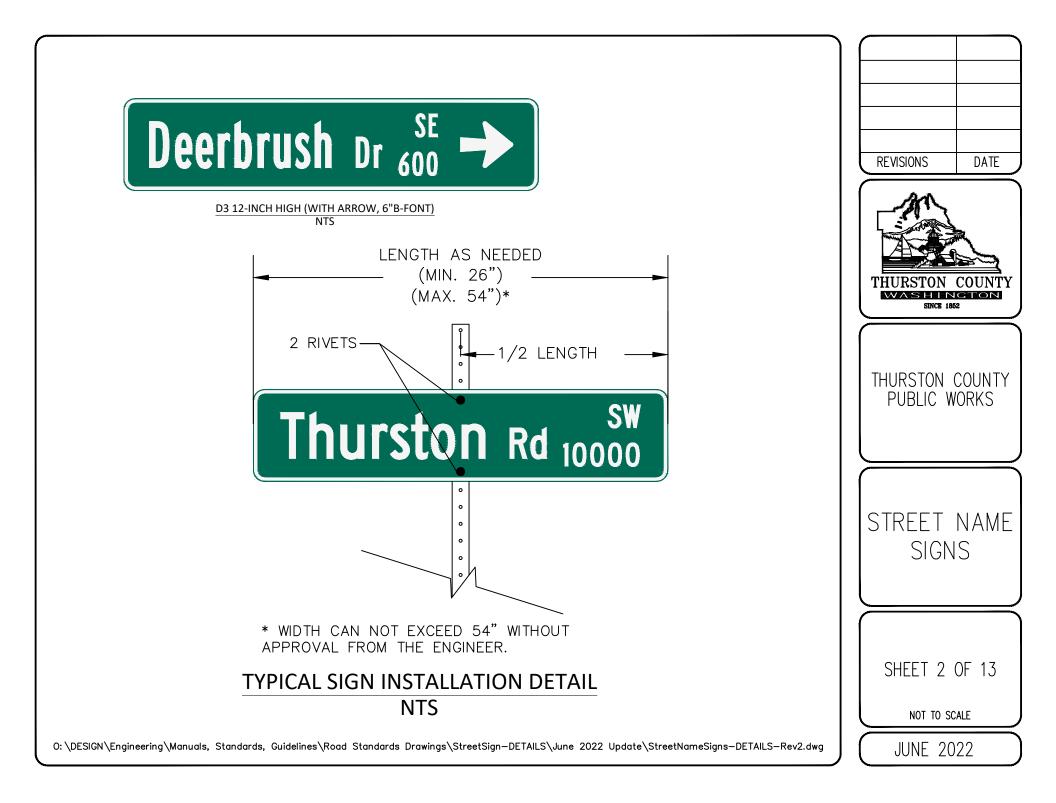
Revised Code of Washington, RCW 47.36.

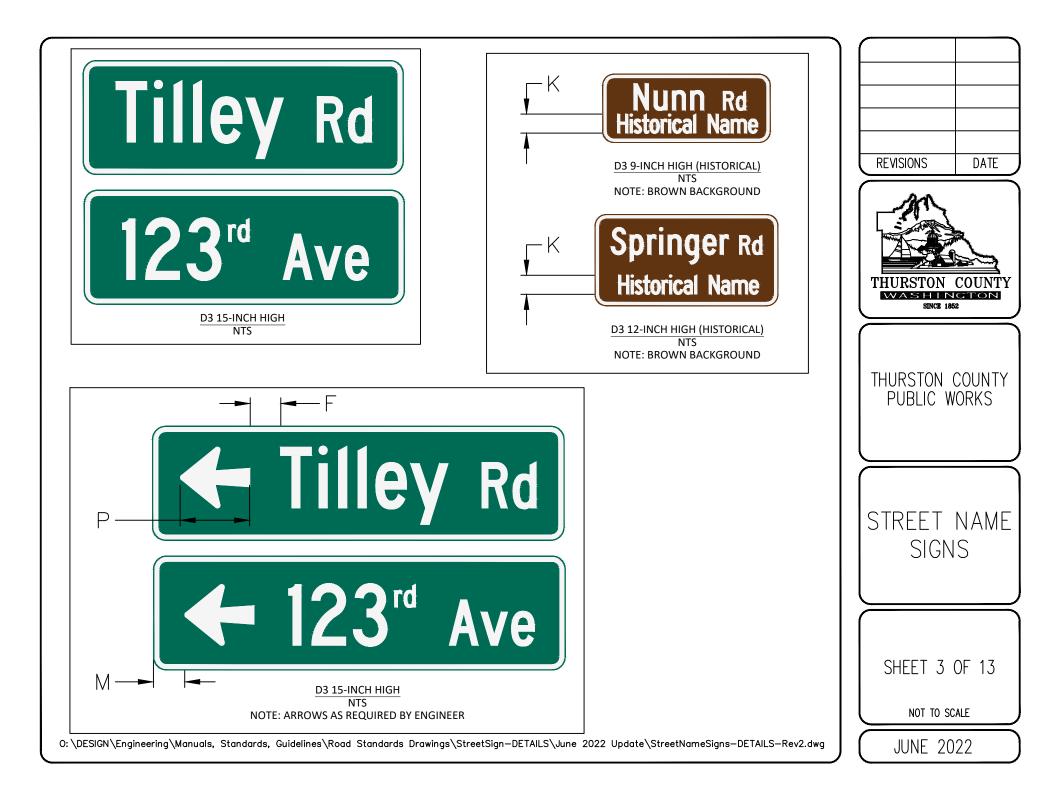
Thurston County Code, 13.44TCC. The county code may be viewed at <u>Code of Ordinances | Thurston County, WA | Municode Library</u>

Thurston County Road Standards. The county road standards may be viewed at <u>Thurston County Road Standards (thurstoncountywa.gov)</u>

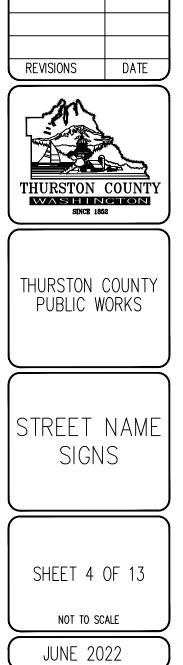
EXHIBITS







		ST	REET SIGN I	DIMENSION	TABLE (INCHE	S)			
SIGN TYPE	A (SIGN HEIGHT)	B (RADIUS) BORDE WIDTH		HORIZ. AP)		TEXT GHT)	E (VERT. GAP)	E* (VERT. GAP)	F (SPACING)
03 9-INCH HIGH #	9	1 1/2	¥2	(**)		4	2 1/2	1 ½	(***)
D3 12–INCH HIGH	12	1 1/2	1/2	(**)		6	3	2	(***)
D3 15–INCH HIGH	15	1 3/4	3⁄4	(**)		8	SEE I AND I*	SEE AND *	(***)
D3 (OVERHEAD)	21	3	1	(**)		12	SEE I AND I*	SEE AND *	(***)
FOR USE INTERNALLY	FOR USE INTERNALLY WITHIN SUBDIVISIONS ONLY									
	·	STREE	t sign dime	NSION TAE	LE (INC	HES),	CONT.			
SIGN TYPE	G (TEXT HEIGHT)	H (HORIZ. GAP)	I (VERT. GAP)	I* (VERT. GAP)	K (1 HEIG		L (VEI GAP		T. (CHEVRON SIZE)	P (ARROW SIZE)
SIGN TYPE						ЭНТ) 		RT. M (VER GAP)	^{I.} (CHEVRON	P (ARROW SIZE)
	HEIGHT)	GAP)	GAP)	GAP)	HEIG	энт) <u>2</u>	GAP) GAP)	I. (CHEVRON SIZE)	SIZE)
03 9-INCH HIGH #	HEIGHT) 4	GAP) 2	GAP) 1 ½	GAP) N/A		9 2 3	GAP 2) GAP)	I. (CHEVRON SIZE) N/A N/A	SIZE)

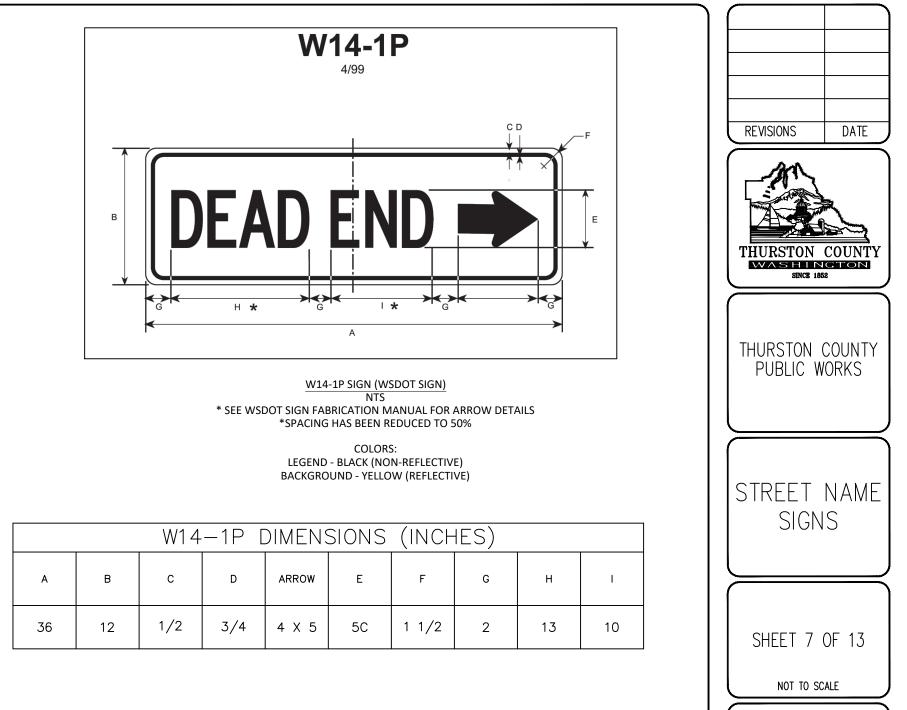


Union Mills Rd 1000 REVISIONS DATE D3 SIGN (OVERHEAD) NTS NOTE: BLOCK NUMBERS AS REQUIRED BY ENGINEER NOTES FOR STREET NAME SIGNS: 'HURSTON (*) USE FOR TEXT THAT HAS LOWER CASE G, J, P, Q AND Y. (**) DIMENSION SHOULD BE APPROX. THE SAME AS THE LETTER HEIGHT, AT MINIMUM NO LESS THAN ONE-HALF LETTER HEIGHT. (***) SEE SPACING TABLE BELOW THURSTON COUNTY PUBLIC WORKS (****) MINIMUM HALF OF THE LARGEST LETTER C-FONT SERIES IS THE DEFAULT FONT FOR STREET NAME SIGNS. IF THE REQUIRED TEXT AND ARROWS CAN NOT BE ACCOMMODATED WITHIN THE 54" MAX WIDTH OF THE SIGN, THEN B-FONT SERIES SHALL BE USED IN ORDER NOT TO EXCEED THE 54" WIDTH. DIVIDERS WIDTH, WHERE USED, SHALL BE SAME AS BORDER WIDTH. STRFFT NAME SIGN EXAMPLES SHOWN HERE ARE NOT DRAWN TO SCALE, BUT TO ILLUSTRATE THE LAYOUT OF THE I FGEND ITEMS. SIGNS (***) F=SPACING BETWEEN WORDS, D=LETTER HEIGHT **B-FONT SERIES** C-FONT SERIES SHFFT 5 OF 13 F=0.531*D F=0.625*D NOT TO SCALE

0: \DESIGN\Engineering\Manuals, Standards, Guidelines\Road Standards Drawings\StreetSign-DETAILS\June 2022 Update\StreetNameSigns-DETAILS-Rev2.dwg

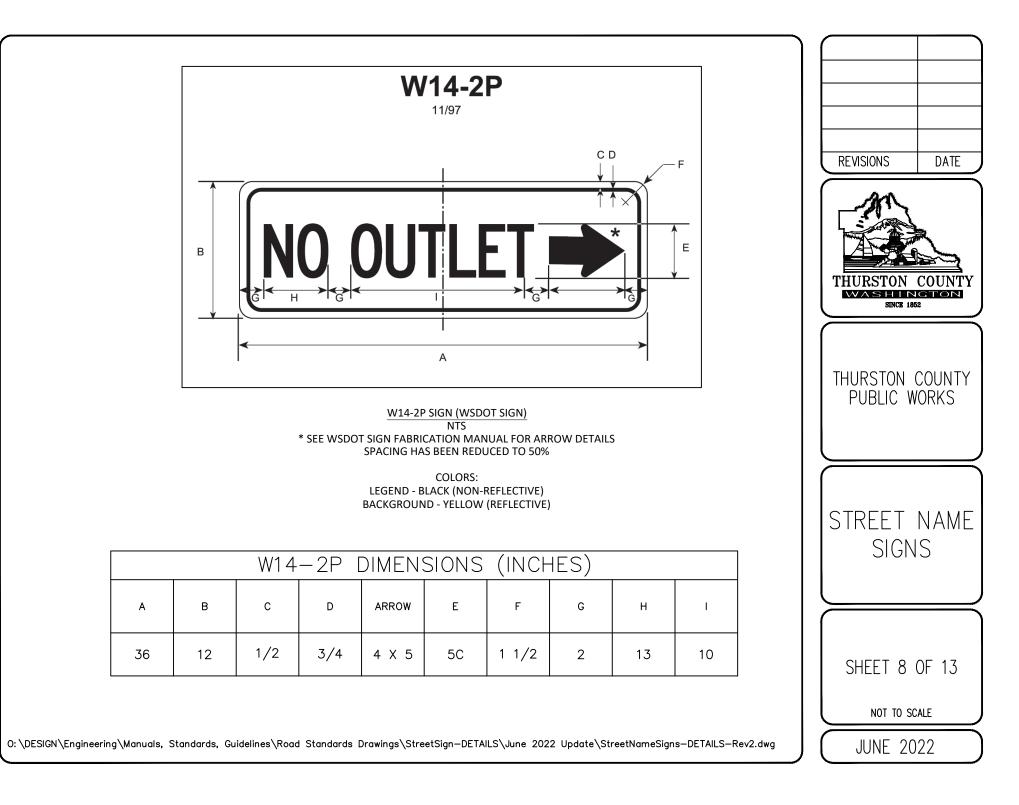
JUNE 2022

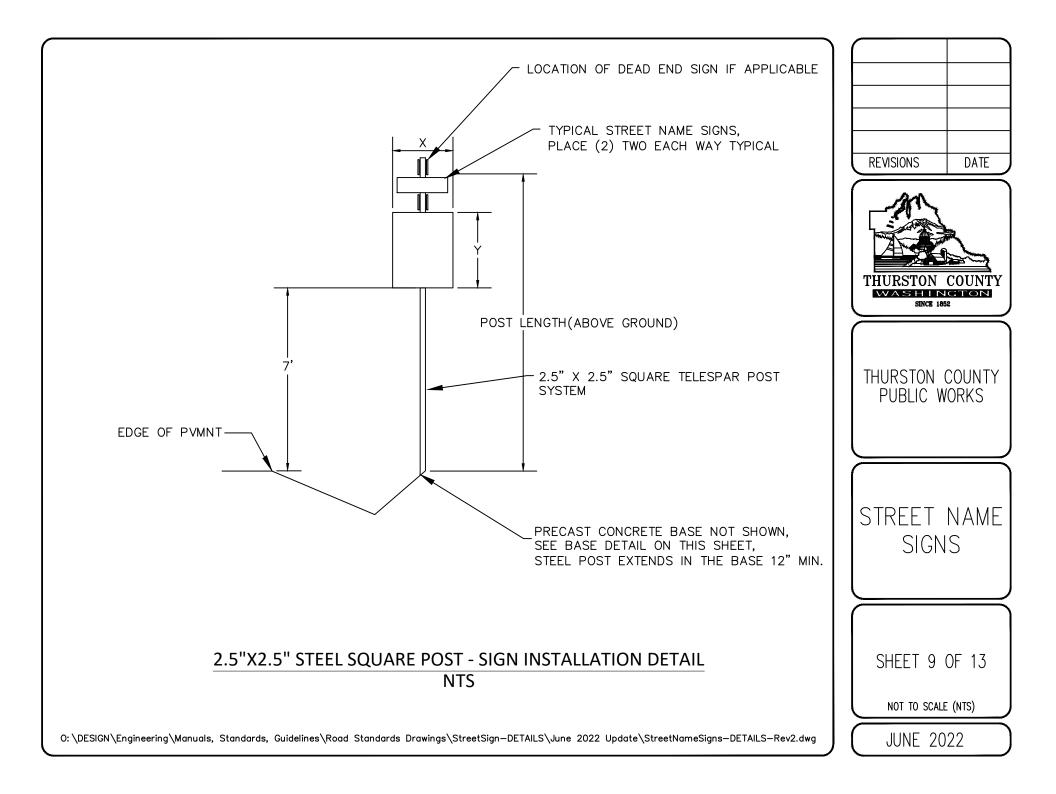
STREET SIGNS NOTES:	
LETTERING REQUIREMENTS: 1. STANDARD LETTER SERIES "B" OR "C" FOR POST MOUNTED STREET NAME SIGNS. 2. USE STANDARD ROADWAY DESIGNATIONS AND AREA ABBREVIATIONS AS INDICATED.	
SIGN MATERIAL REQUIREMENTS:	REVISIONS DATE
 3. COLOR 3.1 BACKGROUND 3.1.1 GREEN FOR PUBLIC ROADS 3.1.2 MEDIUM BLUE FOR PRIVATE ROADS 3.2 LEGEND (LETTERING OR COPY) - WHITE 3.3 BORDER (IF APPLICABLE) - WHITE 	
 4. ALUMINUM BLANKS 4.1 GROUND AND OVERHEAD MOUNTED SIGNS SHALL BE CONSTRUCTED OF 0.125" ALUMINUM ALLOY PER WSDOT STANDARD SPECIFICATIONS SECTION 9–28.8 LATEST EDITION. 	THURSTON COUNTY SINCE 1852
5. BACKGROUND AND COPY 5.1 GROUND MOUNTED SIGNS – TYPE IV SHEETING MICROPRISMATIC RETROREFLECTIVE MATERIAL 5.2 OVERHEAD MOUNTED SIGNS – TYPE IX SHEETING MICROPRISMATIC RETROREFLECTIVE MATERIAL	THURSTON COUNTY PUBLIC WORKS
GENERAL NOTATIONS 6. ALL STREET SIGNS SHALL BE SINGLE SIDED WITH DOUBLE SIGN MOUNTING. SEE DOUBLE SIDED SIGN MOUNTING DETAIL FOR GROUND MOUNTED SIGNS. OVERHEAD SIGNS MOUNTING DETAILS PER WSDOT STANDARD PLAN G-30.10-00.	
7. ALL SIGNING MATERIALS AND HARDWARE SHALL CONFORM TO THE LATEST EDITIONS OF MUTCD AND WSDOT STANDARD SPECIFICATIONS.	STREET NAME
8. ALL HARDWARE AND FASTENERS SHALL BE STAINLESS STEEL UNLESS OTHERWISE SPECIFIED.	SIGNS
9. STEEL SIGN POSTS AND SLEEVES SHALL BE SQUARE, PRE-PUNCHED, GALVANIZED STEEL TUBING, UNISTRUT, TELESPAR OR APPROVED EQUAL FOUND IN THE WSDOT QUALIFIED PRODUCTS LIST (WSDOT QPL).	
10. FOR OVERHEAD ATTACHMENT DETAILS SEE THE LATEST EDITION OF WSDOT STANDARD PLANS.	
11. ENGINEER SHALL APPROVE FACE COPY PRIOR TO FABRICATIONS.	SHEET 6 OF 13
	NOT TO SCALE
D: \DESIGN\Engineering\Manuals, Standards, Guidelines\Road Standards Drawings\StreetSign—DETAILS\June 2022 Update\StreetNameSigns—DETAILS—Rev2.dwg	JUNE 2022

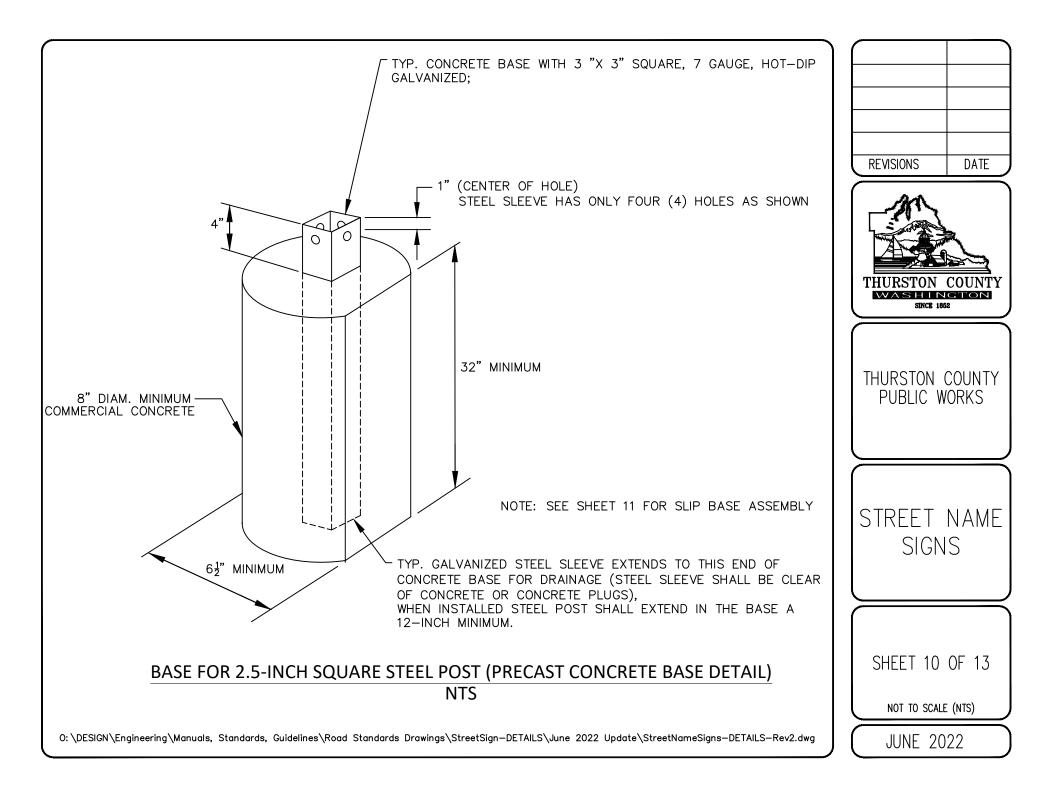


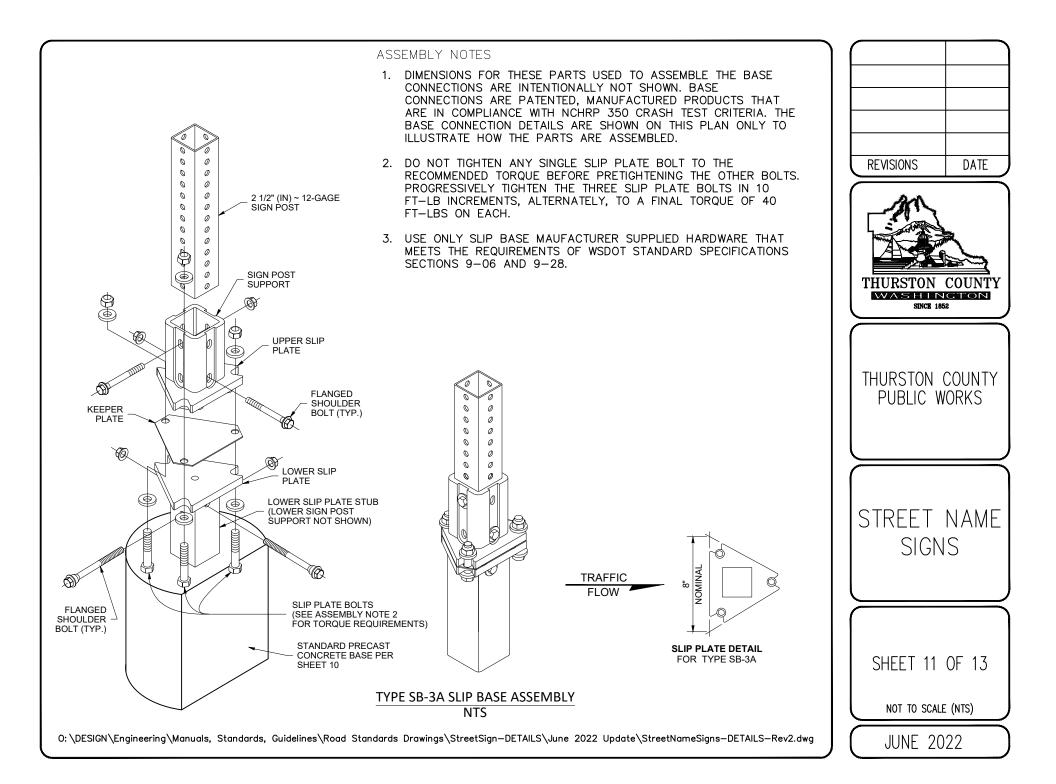
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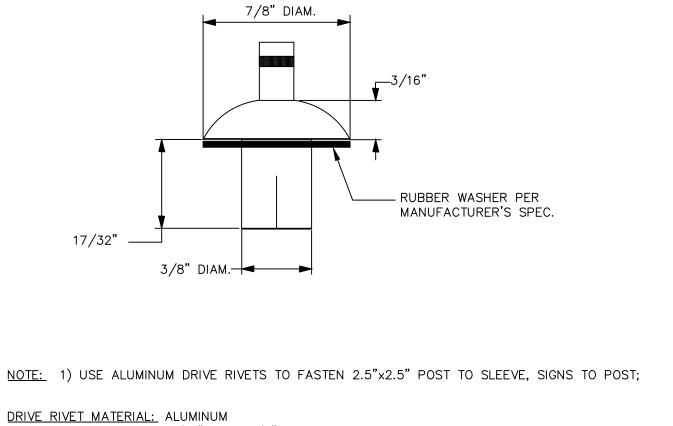


CONSTRUCTION NOTES

1. FOR CODE REFERENCES AND STANDARD SIGN LAYOUT DETAILS SEE WASHINGTON STATE "SIGN FABRICATION MANUAL" AND MUTCD LATEST EDITIONS.

2. ALL SIGN INSTALLATION HARDWARE SHALL BE TAMPER-RESISTANT.

3. ALL STEEL POSTS SHALL BE 2.5" X 2.5" SQUARE, 12 GAUGE STEEL TUBE, TELESPAR POST SYSTEM.



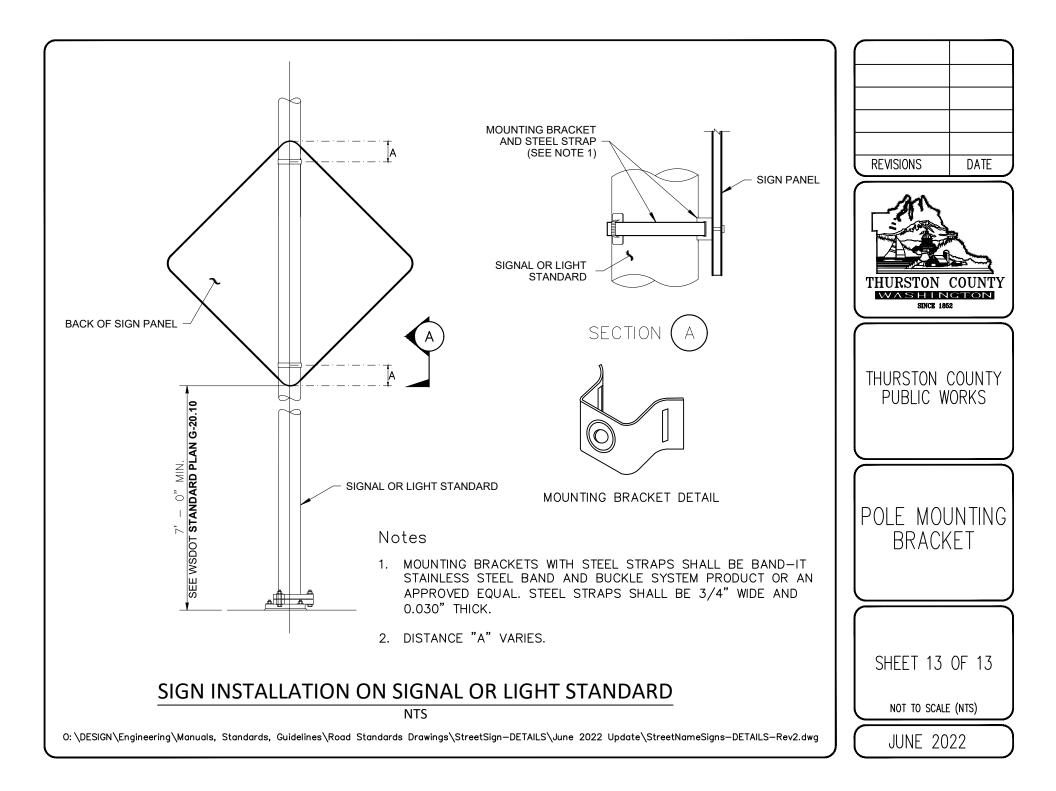
<u>GRIP RANGE:</u> NOMINAL 3/16" IN A 3/8" DIA HOLE

TYPICAL ALUMINUM DRIVE RIVET DETAIL

NTS

0: \DESIGN\Engineering\Manuals, Standards, Guidelines\Road Standards Drawings\StreetSign-DETAILS\June 2022 Update\StreetNameSigns-DETAILS-Rev2.dwg

REVISIONS	DATE
THURSTON SINCE 18	
THURSTON PUBLIC W	COUNTY VORKS
STREET SIGN	
SHEET 12	
JUNE 20	=



Policy I POL – 809 Special Signs in Public Rights of Way

Effective	Review Period	Last Reviewed	Director
11/8/2010	Every 2 Years	5/03/2023	Jennifer D. Walker Jumfn D. Walker
Associated	PRO-825 Wate	r Crossing Namin	ig Process
Documents		 A set of the set of	

Purpose

This policy establishes rules regarding the use of specialty signage in the county rights of way. Requests for specialty signage may be denied in whole or part due to department priorities, budget, and/or at the discretion of the Public Works Director, County Engineer, or designee.

Exceptions to this policy may be granted by the Director upon submittal of a formal request.

Specialty Signs

1. Deaf Child, Blind Child, and Child at Play or Similar Signs

Thurston County does not install or allow the installation of "Deaf Child", "Blind Child", "Children at Play" warning signs, or other similar signs in the county rights of way.

Neighborhoods are encouraged to participate in the Public Works traffic calming program as an effective way to address speeding or traffic concerns on residential streets. See <u>Public Works Policy 816</u>.

2. Political, Realty, or Advertising Signs

Generally, requests to remove realty, political, or advertising signs are considered a low priority unless they present a safety concern to the traveling public. Sign concerns will be forwarded to the Development Review office in Public Works. Development Review is responsible for zoning code compliance including political, realty, and advertising signage in the county rights of way.

Public Works staff will respond to requests to investigate these types of signs in the county rights of way if there is a possible roadway nuisance issue or safety concern. If appropriate, Public Works staff will take corrective action.

3. Fire District Boundary Signs

Fire district boundary signs may be installed within the county rights of way. Installations shall meet the placement and material requirements of Thurston County. Thurston County Public Works does not furnish, install, or maintain fire district boundary signs.

Policy | POL – 809 Special Signs in Public Rights of Way

4. Motorist Information Signs (Directional Signs)

See <u>Chapter 20.40.038</u> of the Thurston County Code.

Also see <u>Section 2.6</u> of the Washington State Department of Transportation (WSDOT) Traffic Manual for signs related to gas stations, food, lodging, or privately owned recreational facilities.

5. Historical Street Name Signs

Historical street name signs may be installed on county rights of way. All requests must first be approved by the Thurston County Historical Commission and all costs associated with the installation are the responsibility of the sponsor. On-going maintenance is the responsibility of Public Works.

6. Heritage/Historical Marker Signs

Heritage marker signs are used to guide motorists to historical or heritage interpretive features located on county rights of way. All requests must first be approved by the Thurston County Historical Commission and all costs associated with the installation are the responsibility of the sponsor. On-going maintenance is the responsibility of Public Works.

7. Neighborhood Watch Signs

Neighborhood watch signs may be installed on county rights of way. All requests must first be approved by the Thurston County Sheriff's Office and all costs associated with the installation and on-going maintenance are the responsibility of the sponsor.

8. Municipal Wellhead Protection Signs

Wellhead protection signs may be installed on county rights of way. All requests must first be approved by the Thurston County Health Department and all costs associated with the installation and on-going maintenance are the responsibility of the sponsor.

9. Private Road Name Signs

Thurston County Public Works does not furnish, install, or maintain traffic control devices for private roads. This includes stop signs or street name signs for private roadways which intersect with county roads.

Policy | POL – 809 Special Signs in Public Rights of Way

Private road street name signs must have a blue background and white lettering. All costs associated with the installation and on-going maintenance are the responsibility of the sponsor. An encroachment permit is required if a sign is placed in the county rights of way.

10.Waterbody Name Signs

Thurston County Public Works may install signs with the official name of Thurston County waterbodies which cross unincorporated Thurston County roads provided:

- The waterbody has an official name; and
- Upon maintenance or construction of a county waterbody crossing; or
- Upon formal request; or
- At the discretion of the Public Works Director, County Engineer, or designee.

Waterbody crossing naming process will use the website provided by the U.S. Board on Geographic Names (USBN) at <u>https://geonames.usgs.gov/</u>. See Public Works procedure <u>PRO-825 Water Crossing Naming Process</u> for further instructions.

Waterbody crossings without an official name will not receive signs.

Definitions

Attachments

Revision History

Revision #	Implementation Date	Description of Changes	Completed By
001	11/8/2010	Initial publication	
002	03/30/2015	Update	
003	05/30/2017	Update	
004	11/17/2022	Format Update – Update the purpose and sections 1, 2, 5, 6, 9, & 10	Becky Conn

Policy | POL – 811 School Area Traffic Control Devices

Effective 12/1/2010	Review Period Every 2 Years	Last Reviewed 5/03/2023	Director Jennifer D. Walker
Associated			V
Documents			

Purpose

The best way to achieve effective traffic control at all school locations is through uniform application of policies, practices, and standards. This policy is intended to provide staff with guidance for traffic control devises incorporated into school areas within unincorporated Thurston County.

The installation of traffic control devices will largely depend upon the needs of the school and the county's review of the associated roadway conditions. The goal is to promote a cooperative partnership with each school district to provide for the safety of the children. The following are regulations, rules and operational guidance used by Thurston County in evaluating traffic control devices in school zones:

1. Federal, State and County Regulations

- a. Revised Code of Washington 46.62.440 Maximum speed limit when passing school or playground crosswalks.
- b. Thurston County Code 12.105.040 School Zones.
- c. Thurston County Code 12.105.090 Maximum speed limit when passing school or playground crosswalks.
- d. Part 7 of the Manual of Uniform Traffic Control Devices (MUTCD), current edition.

2. Traffic Control Devices

The Traffic Engineer may develop procedures for use of traffic control devices in school zones to supplement the MUTCD and to provide guidance to staff.

3. Flashing Beacons

It is the County's policy to include flashing beacons at all new reduced school speed zones. A study completed by the Washington State Traffic Safety Commission identified flashing yellow beacons/lighting as an effective way to reduce vehicle speeds in school zones.

a. Locations:

Policy | POL – 811 School Area Traffic Control Devices

Beacons may be installed on other school area signs if approved by the Traffic Engineer regardless of whether there is a reduced speed zone or crosswalk. All new and refurbished installations must be approved by the Traffic Engineer.

- Material or Equipment Specifications:
 The Traffic Engineer may establish material specifications for school zone beacons necessary to meet the department's operational needs.
- c. Maintenance:

Flashing beacons will be owned and operated by Thurston County. Exceptions include Griffin School and Rochester Elementary. Those beacons are currently operated by the respective school district.

4. Traffic Calming

If a school district is concerned about speeding within their school area, Thurston County encourages the school to do the following:

- a. Participate in the county's traffic calming program (see POL-816).
- b. Contact the Thurston County Sheriff's Office to get targeted speeding enforcement.

5. Parking

Thurston County will review parking concerns in school areas upon request by the school district.

Definitions

Attachments

Revision History

Revision #	Implementation Date	Description of Changes	Completed By
001	12/1/2010	Initial publication	
002	9/15/2015	Update	
003	11/17/2022	Update Format - Update sections 3 &	Becky Conn
		4	

RESOLUTION NO. 10192

A RESOLUTION amending the policy regarding the establishment of and alteration to speed limits on Thurston County roads, and repealing Resolution 12083.

WHEREAS, State law requires that establishment of and alterations to speed limits on county roads be based upon engineering and traffic investigations; and

WHEREAS, it is desirable to establish guidelines for the nature and content of such engineering and traffic investigations; and

WHEREAS, it is desirable to periodically reevaluate speed limits due to citizen concerns and changes in the road environment; and

WHEREAS, it is desirable to involve the enforcement agency and the public early in the process to identify alternatives to speed limit revisions; and

WHEREAS, it has come to the Board of Thurston County Commissioners' (Board) attention that section (4) of Resolution 12083 should be revised to allow for more engineering judgment in the establishment of speed limits; and

WHEREAS, it has come to the Board's attention that section (5) of Resolution 12083 should be revised to direct the public to view the Public Works website to obtain speed limit process information, and that the clarification is a minor housekeeping measure; and

WHEREAS, it has come to the Board's attention that Resolution 12083 should be revised to recognize that Thurston County Public Works was restructured, and the Roads and Transportation Services Department is now the Office of the County Engineer for the purposes of this Resolution, and that the clarifications are minor housekeeping measures; and

WHEREAS, the Board desires to repeal Resolution 12083 and replace it with this Resolution reflecting the changes to section (4) and the minor housekeeping measures.

NOW, THEREFORE, the Board of County Commissioners of Thurston County, State of Washington, does resolve as follows:

<u>Section 1.</u> Establishment of and alterations to speed limits on county roads shall be based upon engineering and traffic investigations conducted by the Office of the County Engineer which shall include but not be limited to the following:

- (a) Field measurement of prevailing vehicle speeds. Results calculated to show the general distribution of speeds including that speed which 85% of the measured traffic was traveling at or below, and the 10 mile per hour pace-speed (the 10 mile per hour range within which most vehicle speeds are observed).
- (b) Field review of physical features, including, but not limited to, the design speed of the street, the roadway surface and cross-section characteristics, spacing of intersections, amount of roadside activity, horizontal and vertical curvature.
- (c) Accident history.

- (d) Traffic characteristics such as volumes, pedestrian activity, commercial activity, and trucks.
- (e) Combination, whenever possible, of varying speed zones into one speed zone, thus preventing different speed zones over short sections of roadway.

Section 2. In the course of conducting an engineering and traffic investigation, the Office of the County Engineer will notify the Sheriff's Department and invite comments on the subject of the investigation which will be included in the final report.

Section 3. In the course of conducting an engineering and traffic investigation, the Office of the County Engineer will make reasonable efforts to notify individuals and organizations which are likely to be directly affected by the speed limits under investigation and will invite their written comments which will be included in the final report.

Section 4. The speed limit typically should be established within the first five (5) mile per hour increment at or below the 85% speed, unless analysis of the considerations in (1) (b) to (e) above provides justification to establish the speed limit at the second five mile per hour increment below the 85% speed. The speed limit generally should not be established below the lower limit of the 10 mile per hour pace speed. Establishment of a speed limit outside these boundaries shall be based upon the engineering judgment of the County Engineer.

Section 5. Information describing why speed limits are established based on the above criteria and the process by which speed limits are established will be provided on the Public Works website.

Section 6. Alternatives to speed limit revisions will be considered based on the results of traffic studies.

Section 7. Resolution 12083 is hereby repealed and replaced by this Resolution.

ADOPTED: April 12, 2022

ATTEST:

k of the Board

APPROVED AS TO FORM:

Jon Tunheim PROSECUTING ATTORNEY

Karen Harau

Karen Horowitz **Deputy Prosecuting Attorney**

BOARD OF COUNTY COMMISSIONERS Thurston County, Washington Chair Vice-Chair

Signals

Effective 11/1/2010	Review Period Every 2 Years	Last Reviewed 7/21/2023	Director Jennifer D. Walker Jeumon D. Walker
Associated			V
Documents		-	

Purpose

Traffic control signals are power-operated traffic control devices that warn or direct motorists to take a specific action. They are used to control the assignment of right of way at locations where conflicts with motorists, bicyclists, and pedestrians exist or where passive devices such as signs and markings do not provide the necessary flexibility of control to move all roadway users in an efficient manner.

The decision to construct a new traffic signal is made by the Board of County Commissioners as part of the Capital Facilities Plan. The purpose of this policy is to ensure traffic signal design and operations are being conducted consistently and equitably in Thurston County.

1. Federal and State Regulations

- Americans with Disabilities Act of 1990 (ADA) (23 CFR Part 36, Appendix A)
- Manual of Uniform Traffic Control Devices (MUTCD) as adopted by the State of Washington.
- Revised Code of Washington
 - RCW 36.86.040, Uniform standard for signs, signals, guideposts Railroad grade crossings
 - o RCW 46.04.450, Railroad sign or signal
 - o RCW 46.04.600, Traffic control signal
 - o RCW 46.04.62250, Signal preemption device
 - o RCW 46.61.050, Obedience to and required traffic control devices
 - o RCW 46.61.055, Traffic control signal legend
 - o RCW 46.61.060, Pedestrian control signals
 - o RCW 46.61.065, Flashing signals
 - o RCW 46.61.070, Lane-direction-control signals
 - o RCW 46.61.072, Special traffic control signals Legend
 - o RCW 46.61.075, Display of unauthorized signs, signals, or markings
 - RCW 46.61.080, Interference with official traffic-control devices or railroad signs or signals
 - RCW 46.61.085, Traffic control signals or devices upon city streets forming part of state highways – Approval by department of transportation
 - o RCW 46.61.340, Approaching train signal
 - o RCW 47.36.020, Traffic control signals

- RCW 47.36.025, Vehicle-activated traffic control signals Detection of motorcycles and bicycles
- o RCW 47.36.060, Traffic devices on county roads and city streets
- Washington Administrative Code (WAC):
 - WAC 468-18-040 Design standards for rearranged county roads, frontage roads, access roads, intersections, ramps and crossings
 - o WAC 468-95 Manual of Uniform Traffic Control Devices

2. Signal Warrants

The satisfaction of a MUTCD traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal. For a list of the traffic signal warrants and information on how to use them, see Chapter 4 of the MUTCD.

3. Alternatives

See Public Works Modern Roundabout Policy No. 1101.

See Section 4B.04 MUTCD

4. Operations & Maintenance

Thurston County does not directly maintain traffic signals in unincorporated Thurston County. Thurston County contracts with other public agencies to provide routine, nonroutine maintenance, and after-hours call-out response among other things. The following is a list of agencies that maintain signals in Thurston County:

- Lacey Urban Growth Area City of Lacey
- Olympia Urban Growth Area City of Olympia
- Tumwater Urban Growth Area City of Tumwater
- Fire Station 95 Mclane-Black Lake Fire Department

5. Design Guidance

The design of the traffic signal will depend in part on the location of the traffic control system, maintenance responsibilities, location and needs of the particular intersection. Signal systems design should consider guidelines as set forth by the Institute of Transportation Engineers (ITE), American Association of Highway Transportation Officials (AASHTO), and the Washington Department of Transportation (WSDOT). The following is a partial list of documents that may be used in any design but is not intended to be a complete listing of design references.

• WSDOT Design Manual, Standard Plans, Standard Specifications

- Olympia Urban Growth Area City of Olympia Engineering Design and Development Standards (EDDS)
- Lacey Urban Growth Area City of Lacey Development Guidelines and Public Works Standards
- Tumwater Urban Growth Area City of Tumwater Development Guide

6. Vehicle Preemption and Priority

New and reconstructed traffic control signals shall provide for emergency vehicle preemption. Type of preemption equipment shall be determined by the agency that will be responsible for contracted maintenance once the traffic control signal installation is complete.

Traffic control equipment that has the capability to provide transit priority should be considered in new or reconstructed traffic control signal installation. Consideration of such equipment would be in cooperation with other adjacent local agencies.

7. Vehicle Detection

All new or retrofitted traffic signals shall be outfitted with video vehicle detection equipment.

This type of equipment has demonstrated cost effectiveness since above ground installation implies that there is no need for road closures in order to install/maintain detectors into the road surface; detection zones can easily be moved or adapted to a change traffic situation; single camera can provide multiple lanes of detection; low maintenance cost of cameras (i.e., cleaning the cameras is the major item); and long life-time of cameras and electronics.

Video detection equipment also can detect bicycles in travel and bicycle lanes making new and retrofitted traffic signal systems more accessible to other modes of travel.

8. Pedestrian Control Features

- Accessible Pedestrian Signals (APS)
 - o APS systems will be installed at all new traffic signals
 - APS systems will be installed on alteration projects consistent with WSDOT Design Manual Pedestrian Facilities Chapter
 - o Installations not covered by above will be made on a case-by-case basis
- Countdown Pedestrian Displays
 - o Count Down Displays will be installed at all new traffic signals
 - Count Down Displays will be installed on alteration projects consistent with WSDOT Design Manual Pedestrian Facilities Chapter
 - o Installations not covered by above will be made on a case-by-case basis

9. Signal Timing

Signal timing plans are kept by the specific agencies contracted to maintain each traffic signal system. Timing plans may be modified if the intersection changes, to provide regional coordination or for other reasons as determined by the responsible official. Such modifications may be initiated by Thurston County or the agency contracted for traffic signal maintenance.

10. Emergency-Vehicle Traffic Control Signals.

An emergency-vehicle traffic control signal may be installed at a location that does not meet other traffic signal warrants such as at an intersection or other location to permit direct access from building(s) housing emergency vehicles. See Chapter 4G of the MUTCD for further guidance.

The installation for a traffic control signal may be a land use permit requirement or may be requested by individual fire districts. Typically, the installation of a traffic control signal as a first option is not desired for any new or updated emergency facility. An emergency-vehicle traffic control signal may be considered provided the following is provided to the Public Works Department for review:

- Demonstrate need for traffic control signal.
- Demonstrate a commitment for on-going maintenance by:
 - \rightarrow Entering into an intergovernmental agreement with Thurston County to assume responsibility for signal system,
 - → Entering into long-term contract/agreement with neighboring public agency (i.e., Olympia or WSDOT), and
 - → Setting a funding program for long-term preservation of traffic control system (i.e., electronics, signal heads, mast arms, etc.).
- Demonstrate commitment to construct a traffic control signal meeting Public Works Standards and Policies.

11. Materials

Thurston County contracts out the maintenance and operations of traffic signals to the cities in the applicable Urban Growth Area (UGA). As a result, signal system items (i.e., signal controllers, software, cabinets and associated hardware) must be synchronized with existing systems and compatible with city standards since they will be responsible for maintenance and operations. Therefore, traffic signal components, software and hardware shall be compliant with city standards, specifications, policies and procedures except where authorized by the County Traffic Engineer.

12. Decorative Traffic Signal Standards

Decorative signal standards are not used on county projects. Please refer to WSDOT standard plans for signal standards and mast arm details.

13. Span Wire Systems

Span wire traffic control systems may be used for temporary traffic control signals used during construction or other short-term uses authorized by the Public Works Department. Span wire traffic control signals shall not be used for new permanent or long-term use situations. Exceptions may be considered by the director of Public Works upon submittal of a formal request.

Definitions

Attachments

Revision History

Revision #	Implementation Date	Description of Changes	Completed By
001	11/1/2010	Initial publication	
002	7/14/2015	Revised	
003	7/29/2022	Updated format, revised Pedestrian	Becky Conn
		Control Features section	

Policy | POL – 807 Modern Roundabout Consideration

Effective 05/20/2010	Review Period Every 2 Years	Last Reviewed 5/03/2023	Director Jennifer D. Walker Junify P. Walker
			/7 0
Associated			
Documents			

Purpose

Thurston County Public Works will select roundabouts when engineering analysis suggests they are an appropriate option in lieu of a traffic signal or other intersection traffic control improvements.

This policy provides background on the consideration of roundabouts as an intersection traffic control improvement and applies to intersection design and evaluation in Thurston County.

Background

- Modern roundabouts are circular intersections at grade. They are an effective intersection type with fewer conflict points and lower speeds. In addition to providing easier decision making than conventional intersections, they also require less maintenance than traffic signals and less work during power outages. Welldesigned roundabouts have been found to reduce fatal and severe injury crashes, reduce traffic delays, fuel consumption, and air pollution. They also have a trafficcalming effect.
- Selection of a roundabout is based on an engineering analysis which examines traffic volumes, traffic patterns, space needs, benefit/cost analysis, and right of way availability. Modern roundabouts differ from older circular intersections in three ways: they have splitter islands which provide entry deflection to slow down entering vehicles; they have yield-at-entry which requires entering vehicles to yield to vehicles in the roundabout to allow free flow of circulating traffic; and they have a smaller diameter which constrains circulating speeds.

Definitions

Attachments

Policy I POL – 807 Modern Roundabout Consideration

Revision History

Revision #	Implementation Date	Description of Changes	Completed By
001	5/20/2010	Initial publication	
002	12/6/2022	Format update	MaryBeth King
003			

Chapter 13.48 of the Thurston County Code outlines the policy for placing streetlights in Thurston County, as well as guidance on:

- Installation, maintenance and design;
- Location criteria; and
- Payment of costs.

For the full text visit: <u>Chapter 13.48 - STREET LIGHTS | Code of Ordinances | Thurston County, WA |</u> <u>Municode Library</u>

Policy | POL – 816 Traffic Calming

Effective 4/04/2011	Review Period Every 2 Years	Last Reviewed 1/12/2023	Director Jennifer D. Walker
	5		(/ 0
Associated			V
Documents			

Purpose

Thurston County Public Works strives to reduce vehicle speeds and improve safety for pedestrians and bicyclists on existing roadways in neighborhoods through the Traffic Calming program.

Traffic Calming program project selection requirements and criteria may be established and updated periodically by the Traffic Engineer. These requirements, set forth in the Traffic Calming Program White Paper, are incorporated by reference.

The Traffic Calming Program White Paper documents the process used by Public Works to determine the overall priority of projects included in the Traffic Calming program.

Definitions

Attachments

Attachment A- Traffic Calming Program	
White Paper	

Revision History

Revision #	Implementation Date	Description of Changes	Completed By
001	November 2022		MGU
002	12/20/2022	Format update	Kori Lee
003			

TRAFFIC CALMING PROGRAM

Thurston County Public Works White Paper 012

This paper documents the process used by Thurston County Public Works to determine the overall priority of projects included in the Traffic Calming Program

CONTENTS

BACKGROUND	1
LEGAL REFERENCES	1
FUNDING SOURCES	2
CONSIDERATION	2
PRIORITY MATRIX	2
PROJECT SELECTION	3
RESPONSIBLE PUBLIC WORKS STAFF	4
APPROVED TRAFFIC CALMING MEASURES	4
REVISIONS	4
ATTACHMENT A	5

BACKGROUND

Thurston County Public Works' Traffic Calming Program addresses the safety for all roadway users, including pedestrians and bicyclists in local neighborhoods. Work is categorized into two phases:

Phase 1: Changing Driver Behavior. Traffic tools are implemented for 6 months with the goal of changing driver behavior. Some of these tools include speed feedback signs, informational yard signs, neighborhood communications, and targeted law enforcement.

Phase 2: Changing the Roadway Environment. If the tools used in Phase 1 do not alter driver behavior, physical changes to the roadway may be considered. Physical changes could include installation of speed cushions, traffic circles, medians, chicanes, or other traffic calming devices.

LEGAL REFERENCES

January 2022 Page **1** of **5** There is no legal requirement to establish or maintain a traffic calming program.

Standards include the Manual of Uniform Traffic Control Devices (MUTCD) and the County Road Standards.

FUNDING SOURCES

The Traffic Calming Program is funded by the County Road Fund. Traffic calming devices can also be privately funded if approved by Public Works.

CONSIDERATION

There are no requirements for neighborhoods to participate in Phase 1 of the Traffic Calming Program. Public Works will perform a speed study and work with the Sheriff's Office to provide targeted law enforcement if warranted. Public Works or the Sheriff's Office will also place temporary speed feedback signs in the neighborhood to educate and bring awareness of the speed limit to drivers if the 85th percentile speed is more than 5 mph greater than the posted speed limited, or if otherwise warranted.

To be considered for participation in Phase 2 of the Traffic Calming Program the following criteria must be met:

- Phase 1 of the program has been implemented for six months or more and a traffic study confirms that driver behavior has not been significantly changed.
- The neighborhood has completed a petition demonstrating that more than 50% of all residents in the neighborhood wish to participate in Phase 2 of the program. See attachment A.

A neighborhood can privately fund Traffic Calming improvements if they have participated in Phase 1 of the Traffic Calming Program and successfully completed the petition. The neighborhood will coordinate with Traffic Engineering staff to develop a traffic calming plan which must be approved by the County Traffic Engineer prior to proceeding to construction. Public Works will provide the design drawings and specifications and oversee/accept final constructed improvements.

PRIORITY MATRIX

Thurston County uses the below criteria to prioritize County funded traffic calming investments.

- Percent of persons in poverty. Information can be obtained from http://www.wsdot.wa.gov/mapsdata/tools/communityaccessibility/;
- Percent of persons over 65 years old. Information can be obtained from http://www.wsdot.wa.gov/mapsdata/tools/communityaccessibility/;
- Percent of disabled persons. Information can be obtained from <u>http://www.wsdot.wa.gov/mapsdata/tools/communityaccessibility/;</u>
- School proximity. Relative need criteria are extended to include the one-mile walk-radius school districts use as part of their walk and busing plans;
- Park proximity. Relative need criteria are extended to include a one-mile walk radius;
- Transit stop proximity. Relative need criteria are extended to include a one-mile walk radius;

January 2022 Page **2** of **5**

- Sidewalks. Presence of sidewalks and other pedestrian facilities within the defined neighborhood;
- Traffic speeds. 85th percentile speeds in relation to the posted speed limit;
- Professional judgment. Staff will use professional knowledge of the roadway network, traffic conditions, planning or pending development activity, and other factors as appropriate to make prioritization decisions.

Percent in Poverty	Score
Over 40%	5
Over 20% to 40%	3
10% to 20%	1

Percent 65 and Older	Score
Over 30%	5
Over 20% to 30%	3
10% to 20%	1

Percent Disabled	Score
Over 20%	5
Over 15% to 20%	3
10% to 15%	1

School Proximity	Score	
1/10 mile	10	
¼ mile	7	
1 mile	4	

Park Proximity	Score
1/10 mile	10
¼ mile	7
1 mile	4

Transit Stop Proximity	Score
1/10 mile	10
¼ mile	7
1 mile	4

Sidewalks	Score	Traffic Speeds	Score
None	15	More than 10 mph over Speed Limit	20
Intermittent	10	Between 7 and 10 mph over Speed Limit	10
Complete	5	Between 5 and 7 mph over Speed Limit	5

Professional Judgement	Score
Top Project	10
#2 Project	7
#3 Project	4

PROJECT OR IMPROVEMENT SELECTION

Thurston County funded traffic calming measures will be completed as part of an annual public works project within the Traffic Calming Program. All neighborhood locations that have met the requirements to proceed to Phase 2 will be evaluated in a priority array using the above criteria annually. The top-ranking projects will be selected for inclusion in the annual Public Works traffic calming project.

Privately funded traffic calming measures can be installed if overseen and approved by Public Works.

RESPONSIBLE PUBLIC WORKS STAFF

- The Traffic Engineer is authorized to prepare procedures, guidelines, specifications, and other documents to administer the Traffic Calming Program.
- The Traffic Engineer will review eligibility of neighborhoods requesting traffic calming assistance.
- The Traffic Engineer will determine and review the contents of the neighborhood traffic calming projects and their implementation.

APPROVED TRAFFIC CALMING MEASURES

Phase 1 Traffic Calming Measures:

- Speed feedback signs
- Speed feedback trailers
- Law Enforcement
- Communications (i.e. neighborhood newsletters, yard signs...etc)

Phase 2 Traffic Calming Measures:

- Speed cushions
- Lane reduction
- Road narrow points
- Traffic circles
- Raised crosswalk

Examples of Phase 2 measures can be seen in attachment B. The County Traffic Engineer will consider other traffic calming measures if requested.

REVISIONS

Date	Reason	County Engineer Signature
February 2022	Establishment	
October 2022	Minor Updates	

ATTACHMENT A

Neighborhood Traffic Calming Design and Construction Petition

January 2022 Page **5** of **5**

Neighborhood Traffic Calming Final Design and Construction Petition

On date of, the residents of the Neighborhood Petition Thurston County Public Works to authorize the construction o Traffic Calming Devices for ¹				
		······································		
		Signature:		
Address:				
Phone:				
Email:				
HOA ² President (if different from ab	ove):	_Signature:		
Address:		_		
Phone:		_		
Email:		_		

¹ This could be a road, several roads or the entire neighborhood.

² HOA – Homeowners Association

Notes: (1) a successful petition represents majority of the current households in the neighborhood where traffic calming is proposed. For example if a subdivision has 100 homes or lots then current representatives from at least 51 homes/lots must sign the petition. The number of lots in the neighborhood or subdivision is typically established by the recorded subdivision plat map. (2) This petition is the last step in the process to allow physical traffic calming devices to be installed in a neighborhood and authorizes county staff to permit a traffic calming plan to be implemented in a neighborhood.

Neighborhood: _____

Page 1 of 8

Neighborhood Traffic Calming Final Design and Construction Petition

LAST NAME	FIRST NAME	ADDRESS	PHONE	DATE	Support Traffic Calming Plan	SIGNATURE
					🗆 Yes 🗆 No	
					□Yes □ No	
					□Yes □ No	
					□Yes □ No	
					□Yes □ No	
					□Yes □ No	
					□Yes □ No	
					□Yes □ No	
					□Yes □ No	
					□Yes □ No	
					□Yes □ No	
					□Yes □ No	

Notes: (1) a successful petition represents majority of the current households in the neighborhood where traffic calming is proposed. For example if a subdivision has 100 homes or lots then current representatives from at least 51 homes/lots must sign the petition. The number of lots in the neighborhood or subdivision is typically established by the recorded subdivision plat map. (2) This petition is the last step in the process to allow physical traffic calming devices to be installed in a neighborhood and authorizes county staff to permit a traffic calming plan to be implemented in a neighborhood.

Neighborhood: _____

Page 2 of 8

Effective Date: Revised Date:		Page 1 of 2 PUBLIC WORKS TRANSPORTATION SERVICES PROCEDURE
Supersedes:	N/A	$\sim \sim $
See Also:	N/A	Approved by:

Procedure 003T - Traffic Operations – Traffic Control Devices

1. Background

To perform the fabrication, installation and maintenance of Thurston County's traffic control devices according to the County policies and the MUTCD as adopted by the State of Washington, and maintain an updated asset management inventory.

2. Inventory

Activity	Inventory System	Comments
Signs	VueWorks	In Use
Pavement Markings/Symbols	VueWorks	In Use
Long Line Striping	MS Excel	Future Addition to VueWorks
Raised Pavement Markers	MS Excel	Future Addition to VueWorks
Beacons & Flashing Lights	VueWorks	In Use
Street Lighting	VueWorks	In Use
Traffic Signals	VueWorks	Maintenance By Contract with Cities

3. Reviews

Reviews of traffic control devices are often done by staff but reviews can be initiated by other agency employees and citizen inquires.

Activity	Method	Frequency	Comments
Signs	Day	Continuous	Assigned by Crew Chief
Pavement Markings/Symbols	Day	Annual	All
Long Line Striping	NA	NA	Reviews are generated by citizen inquiries
Crosswalk Flashers	Day	Monthly	All
School Zone Beacons	Day	As notified	Reviews are generated by alerts from BlinkLink software
Street Lighting	NA	As notified	Reviews of streetlights are generated by citizen inquiries
Traffic Signals	Contract	NA	Contracted cities perform routine reviews as part of contracted duties

4. Preventative Maintenance

Activity	Methods	Frequency	Comments		
	Cleaning		Annual, reviews or other informal methods may initiate a preventative maintenance action. During the fall, winter		
Signs	Vegetation Ann	Annually	and spring the county is broken into areas for preventative maintenance responsibilities. Staff assigned		
	Re-Setting		to those areas are responsible for reviewing signs and scheduling preventative or repair/replacement actions as needed		
Pavement Markings/Symbols	Refresh	Annually	Annual reviews or other informal methods may initiate a preventative maintenance action.		
Long Line Striping	Refresh	Annually	Arterial & Collectors		
	Refresh	3 year cycle	Local Roads by thirds on rotational basis		
Beacons & Flashing Lights	See Comments	Annually	Annual reviews or other informal methods may initiate a preventative maintenance action such as battery or lens replacement, cleaning solar panel, etc		
Street Lighting	See Comments	As notified	Re-lamping and other preventative work of streetlights are generated by citizen inquiries		
Traffic Signals	Contract	NA	Contract cities perform routine reviews and maintenance as part of contracted duties		

5. Repair and Replacement

Traffic Control Devices may require repair or replacement for any one of a number of reasons including:

- Vandalism
- Hit by vehicle
- Damage by weather or other nature factors
- Reached its useful life

Repairs & replacements are often identified through annual reviews and are completed by incorporating into the following activities:

- Preventative maintenance activities
- Capital Construction Projects
- Annual Resurfacing Work; or
- Contract Services

6. Non-Routine Response Maintenance (Call-outs for repairs)

Non-scheduled events are repairs to existing field inventory and occur on an irregular basis, at any time of the day or night.

Non-Routine Repair	Response Time Goal	Objective
Down Stop/Yield Sign	2 hours	Permanent/Temporary Repair
Down Street Light Pole	2 hours	Assess/secure site

Policy | POL – 826 Motorist Information Signing (MIS)

Effective 12/20/2017	Review Period Every 2 Years	Last Reviewed 7/21/2023	Director Jennifer D. Walker Jennifer D. Walker
Associated Documents			
1			

Purpose

The purpose of this policy is to outline the general requirements around motorist information signing within the Thurston County right-of-way.

Motorist Information Signs (MIS) are placed along state highways, county roads, and city streets to alert travelers about the services available at an interchange or intersection. MIS are blue, brown, or green signs and help travelers searching for gas, food, lodging, camping, recreation, tourist activities, or 24-hour pharmacies.

Federal, State, and County Regulations

Thurston County Public Works adheres to the following codes and regulations pertaining to MIS:

- <u>United States Code 23 Section 131 Control of Outdoor Advertising</u>
- Revised Code of Washington (RCW):
 - o <u>47.36 Traffic Control Devices</u>
 - o <u>47.42 Highway Advertising Control Act Scenic Vista Act</u>
- Washington Administrative Code (WAC):
 - o 468-95 Manual on Uniform Traffic Control Devices for Streets and Highways
 - o <u>468-70 Motorist Information Signs</u>
- Washington State Department of Transportation (WSDOT) Traffic Manual
- Thurston County Code (TCC) 20.40.038- Directional Signs

Definitions and Eligibility

To be eligible for placement of a business sign on a motorist information sign panel, a motorist service activity must conform to the following:

- <u>WAC 468-70-050 Motorist Information Signs Business Eligibility</u>
- <u>TCC 20.08G Agritourism Overlay District</u>

Sign Colors

 Brown- Recreational and cultural interest area signs such as heritage markers, county parks, state parks, national parks and campgrounds.



Policy I POL – 826 Motorist Information Signing (MIS)

These signs typically consist of nationally recognized symbols.

- Blue- General service signs, specific services signs and touristoriented signs.
- **Green** All other guide signs.
- Stratton 16 Limon 76



Sign Types

- Guide Signs Provided as part of normal department operations and typically consist of street name signs and distance signs to towns or cities. Other types of guide signs include those for airports, libraries, train stations, etc.
- General Service Signs
 - Services such as hospitals, police, etc. are provided upon request or may be initiated by Public Works staff. These signs are provided as part of normal department operations.
 - Services for privately operated businesses such as pharmacies, fuel stations, etc. may be provided upon request but require reimbursement to the department for installation and maintenance of signs.
- Tourist Oriented Directional Signs
 - Logos Only business names are eligible for the tourist signing program; no logos are allowed.
 - Bountiful Byway Placards may be placed on tourist sign installations for qualifying businesses. Determination of qualifying business are those which are shown on the <u>Olympia-Lacey-Tumwater Visitors & Convention Bureau Byway Map.</u>
 - Seasonal businesses will need to include the period of time the business is open (e.g., June through August). This may require a larger sign resulting in higher installation costs.
- General Requirements for Recreational, Cultural, Service, and Tourist Signs
 - o Maximum distance to eligible facilities:
 - 5 miles
 - o Maximum number of signs permitted per location:
 - A total of 2 MIS per location are permitted. If an existing location is full, a qualified business wishing to join the program is put on a waiting list. When a business on the panel leaves the program, the first business on the waiting list is given the opportunity to join the program.

<u>Design</u>

Requirements for sign design, materials, etc. are available on the <u>Thurston County Public Works</u> <u>Traffic Safety Website</u> or by contacting the Thurston County Traffic Engineer's office. Business sign examples are provided as an attachment to this policy.

Policy | POL – 826 Motorist Information Signing (MIS)

Reimbursement & Fees

Applicants shall reimburse the department for all expenses related to installing, maintaining, and repairing motorist information signs. A quote for the work is available from Public Works upon request.

Maintenance of Sign(s)

Thurston County does not maintain motorist information signs for services and tourist activities. Sign maintenance is only upon request by owner or designee.

<u>Sign Removal</u>

Sign(s) may be removed under the following conditions:

- The business of service changes and does not meet eligibility requirements outlined in the Definitions and Eligibility section above.
- The business or service closes or relocates.
- The owner or designee does not provide timely response to inquiries by Public Works staff on status of business or service.
- Signs are 10 years or older.
- Sign(s) have fallen into disrepair as determined by Public Works staff.
- At the discretion of the Public Works Director.

Program Administrator

The Thurston County Traffic Engineer is designated to administer this program including developing forms, drawings, and other documents necessary to implement the program.

Disputes

If a disagreement arises with a decision, applicants have the right to request the Public Works Director hear the issue and make a final determination. Written requests shall be submitted to:

> Thurston County Public Works Attn: Public Works Director 9605 Tilley Rd. S. Olympia, WA 98512

Policy | POL – 826 Motorist Information Signing (MIS)

Definitions

Attachments

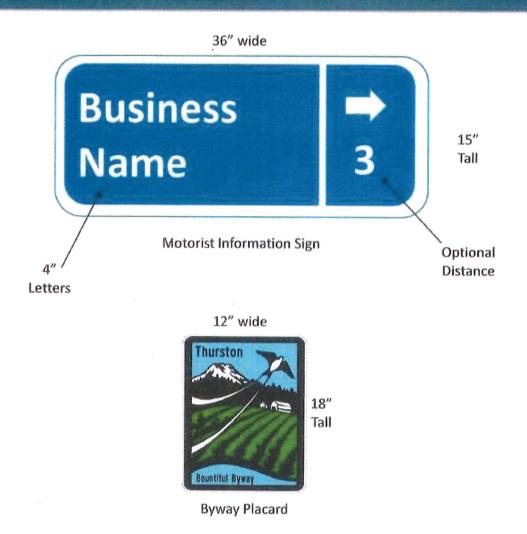
Motorist Information Sign Details

Motorist Information Sign Examples

Revision History

	Implementation Date	Description of Changes	Completed By
001	12/20/2017	Policy assigned new number. Former policy number was 1103.	
002	12/8/2022	Format updated	MaryBeth King
003	7/6/2023	Added purpose and hyperlinks, combined definitions and eligibility, separated sign types and colors, moved general requirements, and added attachments.	Kim Burnett and Matt Unzelman

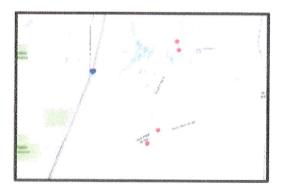
Motorist Information Sign (MIS) Details



Motorist Information Sign (MIS) Example



Example Sign Installation



Motorist Information Sign Map

RESOLUTION NO. 12215

A RESOLUTION establishing a policy dealing with the installation of driving victim memorial signs along County roads in Thurston County.

WHEREAS, establishment of a policy concerning the installation of driving victim memorial signs along Thurston County roads has been requested by local citizens; and

WHEREAS, the Board of Thurston County Commissioners has reviewed a five year evaluation of Washington State Department of Transportation (WSDOT) DWI Memorial Sign Demonstration Program dated December of 1999 to install driving victim memorial signs along state routes; and

WHEREAS, this program, and other similar programs within other jurisdictions in this State, have received meritorious accolades from motorists and citizens of Washington State; and

WHEREAS, all such signs will be similar to WSDOT DWI memorial sign standards and will be installed on Thurston County roads by Thurston County crews, and are to be paid for by the sponsor(s) of the memorial signs.

NOW, THEREFORE, the Board of County Commissioners of Thurston County, State of Washington, does resolve as follows:

Section 1. That the Roads and Transportation Services Department is hereby authorized to install driving memorial signs and plaques along County roads in Thurston County, Washington in accordance with the anty sign standards for memorial signs and plaques as set forth in Exhibit A to this Resolution. Memorial signs shall not exceed 24 by 36 inches and memorial plaques shall not exceed 12 by 24 inches.

Section 2. Driving victim memorial signs will be allowed where a fatality occurred in an accident where the driver causing the accident is convicted of vehicular homicide under RCW 46.61.520, or if the driver was fatally injured and shown to be driving under the influence based on blood toxicology reports. If this criteria has been met, a "Please Don't Drink and Drive" memorial sign may be installed. For other traffic safety-related fatalities, a "Please Drive Safely" memorial sign may be installed. Memorial signs may be supplemented by a memorial plaque displaying the message "In Memory of (Victim's Name)."

Section 3. Memorial signs and plaques shall only be approved for sponsors where the sponsor is from the immediate family. For the purpose of this Resolution, "immediate family" shall mean any blood relative residing in the victim's household and any other person determined by the Director of Roads and Transportation Services Department, or designee, to be a member of the immediate family based on the facts in a particular case.

Section 4. The County shall send written notice to the adjacent property owner prior to installation of memorial signs and plaques.

Section 5. One memorial sign post shall be placed per accident site. Sign posts shall not be located within one-half mile of each other. Memorial plaques may be added to an existing memorial sign post.

Section 6. Memorial signs and plaques may be located in the proximity of the accident site after taking into consideration safety to the traveling public.

Section 7. Memorial signs and plaques shall be installed by Thurston County crews. Installation of .norial signs and plaques shall be coordinated with the traffic or County engineer of the Thurston County Roads and Transportation Services Department. The traffic or County engineer shall be authorized to determine sign locations, to determine whether the addition of memorial signs and/or plaques would be a hazard to the traveling public, and to determine when such signs are in need of replacement.

Section 8. Memorial signs and plaques shall be placed within County rights-of-way on the back side of the ditch line or outer edge of the right-of-way if no ditch line exists.

Section 9. The entire cost for the memorial signs and plaques, including but not limited to sign fabrication and installation, shall be paid by the sponsor prior to sign fabrication.

Section 10. The traffic or County engineer may authorize the replacement of memorial signs and/or plaques which are stolen, vandalized, damaged, or which deteriorate through normal wear and tear provided that a request for replacement is made by a sponsor and the sponsor pay all replacement costs prior to replacement. Memorial signs and/or plaques damaged by Thurston County will be replaced by Thurston County.

Section 11. If it is determined by the traffic or County engineer that a memorial sign or plaque is to be removed and/or relocated for any reason, the sponsor shall pay for all costs, if any, associated with removal and/or relocation prior to placement in County rights-of-way. The traffic or County engineer shall have the authority to remove any memorial sign and plaque at any time without liability to Thurston County.

Section 12. The Board of Thurston County Commissioners shall review the driving victim memorial sign program in five years.

ADOPTED

ATTEST: Clerk of the Board

APPROVED AS TO FORM:

EDWARD G. HOLM PROSECUTING ATTORNEY

By: (

Deputy Prosecuting Attorney

BOARD OF COUNTY COMMISSIONERS Thurston County, Washington

Chairman

Commissioner

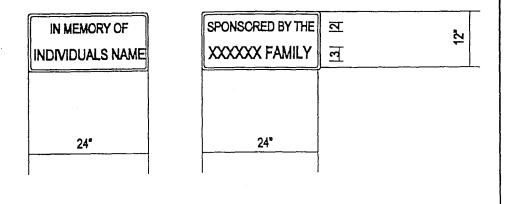
Commissioner

Thurston County Memorial Sign Standards



24"





THURSTON COUNTY DRIVING VICTIM MEMORIAL SIGN INSTALLATION SERVICE AGREEMENT

	Client
Thurston County Roads & Transportation Services Department 2404-A Heritage Court SW' Olympia, Washington, 98502-6031	
Project No	Date:
Project Name: Install "Please Don't Drink and Driv	e"/"Please Drive Safely"Signs (Select one)
Install "In Memory of (Victims Name)"	
Location: Per location established byTraffic Engine	eer.
Scope of work: Fabricate and Install Memorial Sign	and/orPlaque
Method of Payment: <u>The total cost of having the sign</u>	
Cost per this site shall be:	
Special Conditions:	
SPONSOR AGREES TO COMPLY WITH THE CONO	
Offered by:	Accepted by (Client)
(Signature)	(Signature)
	·
(Printed Name/Title)	(Printed Name/Title