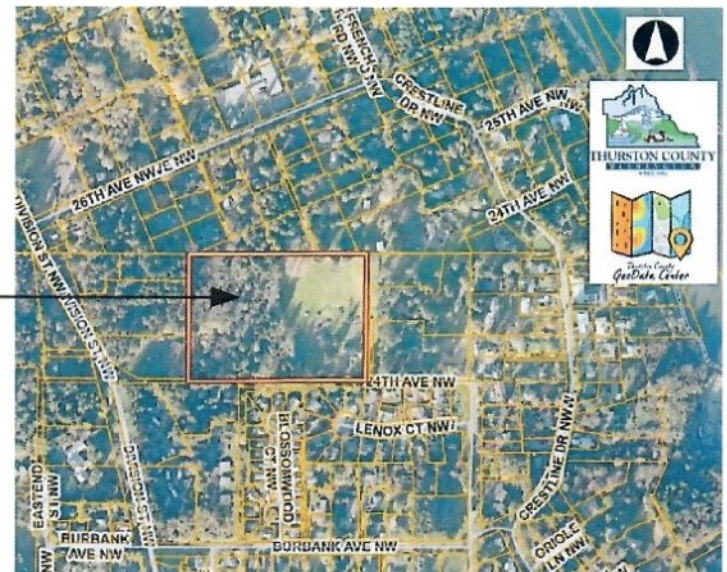
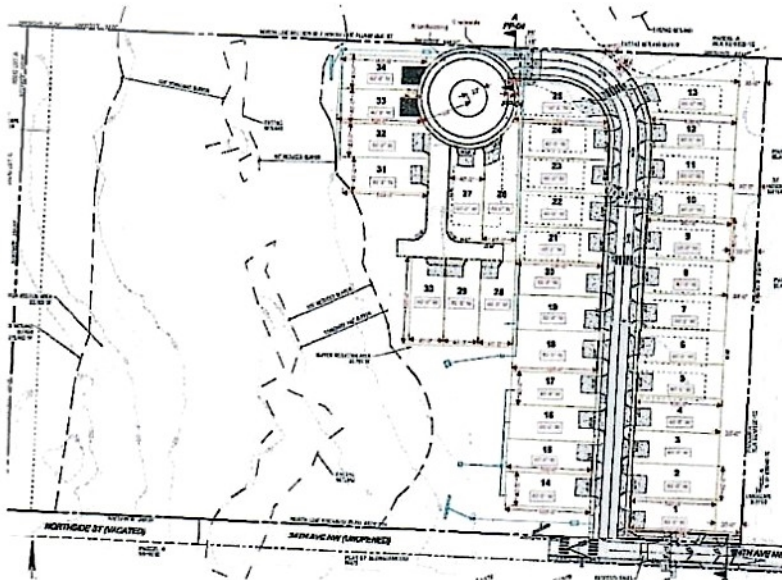


Thurston County
(Land Use Case #2023100649)

**24TH AVENUE PLAT
TRANSPORTATION MEMORANDUM**

March 23, 2024



JTE . Jake Traffic Engineering, Inc.

Mark J. Jacobs, PE (OR and WA), PTOE, President

2614 39th Ave. SW - Seattle, WA 98116 - 2503

Tel. 206.762.1978 - Cell 206.799.5692

E-mail jaketraffic@comcast.net





March 23, 2024

THURSTON COUNTY
Attn: Kraig Chalem, Senior Planner
3000 Pacific Avenue SE
Olympia, WA 98501

Re: 24th Avenue Plat – Thurston County (Land Use Case #2023100649)
Transportation Memorandum

Dear Mr. Chalem,

I am pleased to provide this Transportation Memorandum for a 34 lot (33 - net new) 24th Avenue Plat project located at 2000 24th Avenue Northwest. The site is the Olympia UGA of unincorporated Thurston County. Access to the site would be via 24th Avenue Northwest.

Below is an aerial view of the site obtained from Thurston County GeoData Center:



THURSTON COUNTY
Attn: Kraig Chalem, Senior Planner
March 23, 2024
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The site is currently developed with a SFDU and attendant structures, see the County Assessor data below:

Residential Structures				
Year Built	1942	Fireplaces/Wood Stoves	1	
Construction	1 1/2 STORY	Heat Type	BASEBOARD-HT	
Construction Quality	AVERAGE	Fuel Type	ELECTRIC	
Physical Condition	GOOD	Foundation Type	CONCRETE	
Number of Bedrooms	3	Exterior Wall Type	WOOD-SIDING	
Full Baths	2	Roofing Material	COMPOSITION	
Partial Baths	1			
Residence Square Footage				
Main Finished Area	1545			
Upper Finished Area	1464			
Attached Garage Square Footage				
Built-in Garage Area	1205			
Misc Structures				
Covered Porch	224			
Wood Deck	144			
Patio	75			
Detached Structures				
Structure	Year Built	Square Feet	Quality	Condition
BARN-NO LOFT	1990	1728	AVERAGE	AVERAGE
BARN-NO LOFT	2001	575	AVERAGE	AVERAGE
CARPORT	2001	230	AVERAGE	AVERAGE
CARPORT	2016	644	AVERAGE	AVERAGE

I was retained by the project applicant to conduct site Traffic Consulting work on the project and ascertain the projected future traffic to be generated by the future residents of the proposed project. The work included review of the City of Olympia's Traffic Impact Analysis requirements, Reference Chapter 4 Appendix 7 in the City of Olympia Engineering Design and Development Standards, in response to their request that a TIA be conducted. I reviewed the City's requirements and ascertained that the project traffic affect is less than the City's threshold to require a TIA be conducted. A technical e-mail was submitted to Zulaika Kim, Engineering Plans Examiner, City of Olympia on 06.22.2023.

Subsequent to my initial site work the scope of the project has refined from the initially proposed 60 residential units (30 SFDU each with an ADU unit). The refined project is significantly smaller, a 34 lot SFDU project (33 net new).

Per our correspondence this Transportation Memorandum documents the following:

- Project Description
- Street System
 - Traffic Volumes
 - Pedestrian facilities
 - Alternative Transportation
- Site Traffic Generation/Distribution
- Access Inspection
- Incident/Safety History
- Traffic Operational Inspection
- Traffic Impact Mitigation
- Summary and Recommendations

A copy of the Preliminary Site Plan prepared by LDC Surveying, Engineering Planning plotted March 2024 is attached. The site plan shows the 34 lots for SFDU's, internal road circulation with a cul-de-sac turn around at the north end and access to 24th Ave. NW to the south.

THURSTON COUNTY
 Attn: Kraig Chalem, Senior Planner
 March 23, 2024
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Street System

A portion of Street Classifications map from the City of Olympia Transportation Master Plan dated February 21, 2021 is below:



The site access to the County/City Road/Street system is via 24th Ave. NW that connects to Milroy St. NW to the east. Milroy Street Northwest connects to 20th Ave. NW to the south a Major Collector. The **general** street geometrics are:

- 24th Ave. NW is a 13 to 14' wide street between the site and Milroy St. NW and currently serves three SFDU's
- Milroy St. NW between 20th and 24th Avenues NW is generally 16 to 20' wide with some pedestrian sidewalks on the east side.
- Burbank Avenue is about 16' wide with one ~140' section of sidewalk on the north side of the street starting about 240' west of Milroy St. NW
- 20th Ave. NW (Elliott Av. NW) is a 2-lane Major Collector with a posted speed limit of 25 MPH between Cooper Point Rd. NW and Division Street Northwest. Traffic speeds are calmed by several speed humps that exist on this corridor. Limited pedestrian facilities exist on the corridor.
- 26th Ave. NW is a 2-unclassified road that per the double yellow center striping functions as a neighborhood collector with sidewalks on the north side of the street from the west side of LP Brown Elementary School to French Rd. NW to the east. A

THURSTON COUNTY
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about 8' wide paved shoulder on the north side from the school to Division St. NW to the west also exists.

Traffic Volumes

The City of Olympia provided traffic volume and speed data, April 2018, for Milroy Street north of Burbank Avenue. Review/comparison of Google Aerial data from 06.2017 and 04.2023 showed the same number of homes, ~27 SFDU's, being served by Milroy Street Northwest, thus the April 2018 data would still be applicable. The data identifies about 182 daily trips using the street with about 16 occurring in the PM peak hour from 1700 to 1800.

The speed data showed an average (mean) speed of 20.6 MPH, the maximum observed speed was 31.9 MPH.

Alternative Transportation

The City of Olympia is served by Intercity Transit. Route #41 serves Division Street with weekday headways of 30 minutes operating from 0600 to 2130. See attached route map effective September 2023.

Site Traffic Generation

Definitions

A vehicle trip is defined as a single or one direction vehicle movement with either the origin or destination (exiting or entering) inside the proposed development.

Traffic generated by development projects consists of the following types:

Pass-By Trips:	Trips made as intermediate stops on the way from an origin to a primary trip destination.
Diverted Link Trips:	Trips attracted from the traffic volume on a roadway within the vicinity of the generator but which require a diversion from that roadway to another roadway in order to gain access to the site.
Captured Trips:	Site trips shared by more than one land use in a multi-use development.
Primary (New) Trips:	Trips made for the specific purpose of using the services of the project.

Site Trip Generation

The future residents of the proposed 34 SFDU's (33 net new) of the 24th Avenue Plat project is expected to generate the vehicular trips during the average weekday, street traffic AM and PM street peak hours as shown in Table 1. The trip generation for the project is calculated

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 Attn: Kraig Chalem, Senior Planner
 March 23, 2024
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using trip rates from the Institute of Transportation Engineers (ITE) Trip Generation, 11th Edition, for the Single Family Housing (ITE Land Use Code 210). All site trips made by all vehicles for all purposes, including commuter, visitor, and service and delivery vehicle trips are included in the trip generation values.

TABLE 1 - VEHICULAR TRIP GENERATION 24TH AVENUE PLAT (West Olympia) - THURSTON COUNTY TRANSPORTATION MEMORANDUM										
Time Period	Size (X)	TG Rate	Enter %	Enter Trips	Exit %	Exit Trips	Total (T)	Pass-by %*	Pass-by Trips	Net Total
Proposed: Single-Family Detached Housing - General Urban/Suburban (ITE LUC 210; 33 - net new units)										
Weekday	33	9.43	50%	156	50%	156	311	-	-	-
AM peak hour	33	0.7	26%	6	74%	17	23	-	-	-
PM peak hour	33	0.94	63%	20	37%	11	31	-	-	-

Where X = number of units or sf and T = Trips; parenthesis (xx) denote negative values

* - Pass-by rates per ITE, local Agency data and Traffic Engineering Experience, residential trips are typically considered new thus for analysis no pass-by to account for service/delivery type trips is taken

Trip rates per the Institute of Transportation Engineers Trip Generation Manual 11th Edition

Note: Due to rounding some values may not add up

The Trip Generation indicates that the future residents of the proposed project would generate about 31 new PM peak hour trips; about one trip every two minutes.

Note: The City data collected on Milroy Street indicates that residents in this area generate less traffic than ITE data would indicate (182 daily trips versus 254 per ITE and 16 PM peak hour trips versus 25 per ITE data).

Trip Distribution

Site traffic will use 24th Ave. NW to Milroy St. NW that provides access to 20th Ave. NW a Major Collector where the traffic would disperse to the east and west. A small amount, less than 5%, a trip or two during the PM peak hour, may use Burbank Ave. NW to access Division St. NW to the east.

Access Inspection

Access to the project is proposed via 24th Avenue Northwest. The project applicant will be adding a sidewalk on the south side from the site entrance to Milroy St. NW to the east.

Incident/Safety History

Incident data was reviewed using the WSDOT accident data portal available online at <https://remoteapps.wsdot.wa.gov/highwaysafety/collision/data/portal/public/>. This portal was used to review incidents in the site vicinity for the years 2019 to 2023. The WSDOT data is attached.

Review of the data on Milroy Street between 24th Ave. NW and Elliott Ave. NW showed one property damage crash in the five years inspected.

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Attn: Kraig Chalem, Senior Planner
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Summarizing - Safety inspection near the site did not reveal any apparent safety issue.

Traffic Operational Inspection

Traffic volumes on the nearby streets are well below the LOS 'D' capacity of a typical narrow 2-lane street, ~7,000 to 8,000 vehicles per day. The projected daily traffic volume with the added traffic from the residents of the 24th Avenue Plat would be about 500 vehicles per day (182 VPD existing residents + 311 VPD future residents). Via Traffic Inspection the traffic operations in the site vicinity meet the City's operational standard¹ and the addition of 31 PM peak hour trips would have negligible affect.

Traffic Impact Mitigation

The City has requested two traffic calming devices with one on Milroy Street and the other on Burbank Avenue. The project applicant will work with the City to locate the requested traffic calming devices.

Summary and Recommendations

This Traffic Letter documents the Traffic Generation and provides a discussion of traffic safety and operations in the site vicinity. The addition of 31 PM peak hour trips to the City's street grid would have negligible affect to traffic operations. No safety issue is noted.

Based on my project review, I recommend that the 24th Avenue Plat project be allowed with the following traffic impact mitigation measures.

- Construct site in accordance with applicable County/City requirements.
- Coordinate with the City on locating two traffic calming devices.
- Ascertain the feasibility of installing a pedestrian path within the 20' County ROW between the site and 26th Avenue Northwest.

Please contact me at 206.762.1978 or email me at jaketraffic@comcast.net if you have any questions.



Sincerely,

Mark J. Jacobs, PE, PTOE, President
JAKE TRAFFIC ENGINEERING, INC

¹ - Reference Engineering Design and Development Standards that identifies the City's LOS standard at LOS 'D' with LOS 'E' acceptable in High Density Residential corridor and core areas of the City.



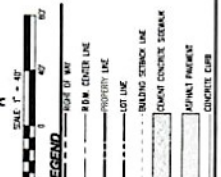
TABLE OF CONTENTS	
1	PP-01 PRELIMINARY PLAT MAP
2	PP-02 PRELIMINARY DRAINAGE AND TERC PLAN
3	PP-03 PRELIMINARY WATER AND SEWER PLAN
4	PP-04 PRELIMINARY PLAT DETAILS AND NOTES
5	PP-05 PRELIMINARY PLAT DETAILS AND NOTES

DISCLAIMER

The foregoing survey was prepared by WINDQUEST, LLC. In December 2022, any CHANGES TO THE SIZE AFTER THIS DATE WILL BE REFLECTED IN THE PLANS AND OCCURRENCES AS LONG AS IT REMAINS WITHIN THE SAME CATEGORY OF USE. ANY CHANGES TO THE SIZE OF THE BUILDING OR THE NUMBER OF UNITS SHALL BE NOTICED BY THE OWNER.

UTILITY NOTE
THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

SURVEY INFORMATION
 HORIZONTAL - MAGNETIC SLANT PLANE COORDINATES, SOUTH ZONE, NAD 83
 VERTICAL - BASED ON GPS TIES TO THURSTON COUNTY MONUMENTS 1562 AND
 1563, MAG 88 ELEVATION 162.25
 219



APPENDIX



December 6, 2023

Kraig Chalem
Senior Planner
Thurston County Community Planning & Economic Development Department
3000 Pacific Ave SE
Olympia, WA 98501

SUBJECT: City of Olympia comments
PROJECT NAME: WEST OLYMPIA (24TH AVE) PLAT
PROJECT NO.: 23-6919
ADDRESS/LOCATION: 2000 24TH AVE NW
PARCEL NUMBER(S): 09750029001
FILE NUMBER: County Land Use Case # 2023100649

Dear Kraig Chalem,

The plans provided 11/17/2023 were used for the review of this project. The City of Olympia Engineering Division's review of the land use application is complete, and comments are listed below.

General

The City will review for approval and permitting of water, sewer, streetlighting systems and portions of frontage and stormwater within city limits (24th Ave NW).

Design review, approval, permitting and subsequent improvements installed shall be in conformance with the current Engineering Design and Development Standards (EDDS) of the City of Olympia. Following Land Use approval and prior to construction, the applicant shall submit detailed engineering design drawings to the Community Planning and Development Department for detailed technical review, approval and permitting.

Water Mains (2.050.B)

The City of Olympia water system has capacity for this proposed development project. Water is currently available to the site from an existing 8-in PVC main at the end of Milroy St and an existing 8-in PVC main that extends from the cul-de-sac of Lenox Ct to 24th Ave. In compliance with the Water Comprehensive Plan and the current EDDS to supply water to this project will require the following improvements:

1. Extend and loop the existing water mains from Milroy St and 24th Ave (from Lenox Ct) along 24th Ave and through the development to serve all lots.
2. Following preliminary plat approval, show on engineering plans for review and permitting fire hydrants at appropriate spacing for adequate fire suppression needs complete with valve configuration, size and type of pipe for all water main sections, services, meters and plan profiles.

Sewer Mains (2.050.A)

The City of Olympia's sanitary sewer system has capacity for this proposed project. City sewer is currently available to the site from an existing 8-in PVC main at the end of Milroy St and an existing 8-in PVC main that

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extends from the cul-de-sac of Lenox Ct to 24th Ave.. In compliance with the Sewer Comprehensive Plan and the current EDDS to supply sewer to this project will require the following improvements:

1. Extend sewer throughout the development from the existing sewer main in 24th Ave (from Lenox Ct). Gravity sewer will extended as far as possible with the rest of the development served via grinder force main.
2. Following preliminary plat approval, show on the engineering plans for review and permitting size and type of pipe for all sewer main sections, sewer stubouts with cleanout at the ROW line, plan profiles, pig port at the end of the grinder force main and the maintenance hole where the force main discharges and the next maintenance hole downstream will be PVC lined to prevent corrosion.

Transportation – Streets and Alleys (2.040)

The subject property is within the City of Olympia's Urban Growth Area therefore any frontage improvements and internal streets are to be constructed to standards set forth in the current City of Olympia EDDS.

1. Please revise the trip generation estimate in a traffic letter and qualitatively describe the level of impact to the surrounding neighborhood to satisfy the neighborhood concerns. Please include a trip distribution in the revised trip generation estimate. Note: a neighborhood petition received by the City of Olympia on 12/1/2023 (enclosed) would like a Traffic Impact Analysis done. City will provide the most current traffic count data on Milroy St.
2. Public Works (PW) Transportation is recommending two traffic calming devices – one on Milroy St and another on Burbank Ave to mitigate speed and safety issues. PW is not opposed to additional traffic calming device on 24th Ave. Because the 90 degree corners on 24th Ave act as traffic calming, only one device is recommended. Intersections can provide similar effects. Typically traffic calming devices need to be spaced 250 to 500 feet and start at least 150 feet from an intersection.
3. No private access lane permitted per EDDS 2.040(B)2 - Sufficient space is available with lot reconfiguration.
4. The cul-de-sac needs to be designed to EDDS std. dwg. 4-5. Currently missing sidewalk, planter, solid waste container pad and traffic island. Please see attached.
5. The proposed local access street Road A is to be designed per EDDS std. dwg. 4-2J. Local access streetlighting is needed on Road A and 24th Ave. Please note, streetlighting within the development will be private and maintained by the HOA until the area is annexed into city limits.
6. Local access street stubs needed to all undeveloped parcels greater than one acre with potential to add lots under current zoning (R4-9). Local Access stub to the east. If the unopened 24th Ave to the west runs through a wetland, no street stub is needed to the west.
7. Maintain the Local Access Street connection to the unopened ROW adjacent to parcel # 83009300700 for future street/bike/pedestrian connection to the north.
8. No marked crosswalks on any of the roads.
9. Directional ramps are needed on the NE corner of intersection of 24th Ave and Road A along with a minimum 50 ft radius curve.

Stormwater

1. With frontage improvements within city ROW (24th Ave) are to be installed and portions of the stormwater system for the development proposal are within city ROW, these elements will need to comply with the City of Olympia's 2022 Drainage Design and Erosion Control Manual (DDECM). Please use Guidesheet 1C as reference guide for what is required for stormwater review by the City of Olympia. This should be separate from stormwater plans reviewed and approved by Thurston County.

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2. A stormwater scoping meeting will be required. This requires Guidesheet 1B to be completed and submitted to the city at the time of meeting request. This will need to be done prior to the submittal of revisions to the County.

Park Mitigation Fees

This project is subject to City of Olympia Parks SEPA Mitigation costs of development as a condition of final approval. In order to determine the total of Parks SEPA Mitigation fees the following will need to be addressed:

1. Please provide clarification on the number of units of each housing type (i.e. single family homes, townhomes, apartments, ADUs, etc.). Per plan sheets PPO-1 through PP-03, it appears there are a total of 34 individual lots. However, on plan sheet L1.00, Lots #24 and #25 are labeled as a duplex; Lots #26 through #29 are labeled as a fourplex; and Lots #31 through #34 are labeled as a fourplex. As depicted in plan sheets PP-01 through PP-03 the city would consider these single family style townhomes on their own lots and shared wall.
2. Parks SEPA Mitigation fees will be calculated upon further clarification.

If you have any questions, do not hesitate to contact me.

Best regards,



Zulaika Kim

Engineering Plans Examiner

City of Olympia – Community Planning and Development

360-709-2732

zkim@ci.olympia.wa.us

Cc: Arthur Saint arthur.saint@co.thurston.wa.us

Enclosures

Speed Grand Totals

mph	Total	0 - < 15	15 - < 20	20 - < 25	25 - < 30	30 - < 35	35 - < 40	40 - < 45	45 - < 50	50 - < 55	55 - < 60	60 - < 65	65 - < 70	70 - < 200
12:00 AM	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0.7	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	1.3	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	1.7	0.0	0.7	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 AM	3.7	0.3	1.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	3.7	0.7	0.7	2.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 AM	4.7	0.3	1.3	1.7	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	3.7	0.7	1.3	1.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:00 PM	8.0	1.0	3.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	4.7	0.3	2.3	1.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 PM	7.0	0.3	1.0	4.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	11.7	1.0	3.3	5.0	2.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 PM	7.7	0.0	2.7	4.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	10.3	0.7	3.7	5.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 PM	6.7	0.7	2.0	1.7	2.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	6.3	0.3	3.3	2.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	4.0	1.0	1.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	2.3	0.0	1.0	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 PM	1.3	0.3	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	0.7	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Daily Average	91.7	8.0	31.0	41.3	10.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pace Range 15.5 - 25.5 mph 222 vehicles (80.7%)														
Average (Mean) 20.7 mph														
Minimum 10.2 mph														
Maximum 31.9 mph														
Percentile Speeds (mph)														
10% 15.5														
15% 16.9														
50% 20.7														
85% 24.8														
90% 26.0														
Speeds Exceeded														
25 mph 17.4% (34)														
35 mph 0% (0)														
45 mph 0% (0)														
55 mph 0% (0)														
65 mph 0% (0)														
75 mph 0% (0)														
Study Grand Totals														
Total 275														
0 - 15 24 8.7%														
15 - 20 93 33.8%														
20 - 25 124 45.1%														
25 - 30 30 10.9%														
30 - 35 4 1.5%														
35 - 40 0 0.0%														
40 - 45 0 0.0%														
45 - 50 0 0.0%														
50 - 55 0 0.0%														
55 - 60 0 0.0%														
60 - 65 0 0.0%														
65 - 70 0 0.0%														
70 - 200 0 0.0%														
Nbnd	275	24	93	124	30	4	0	0	0	0	0	0	0	0

Speed Grand Totals

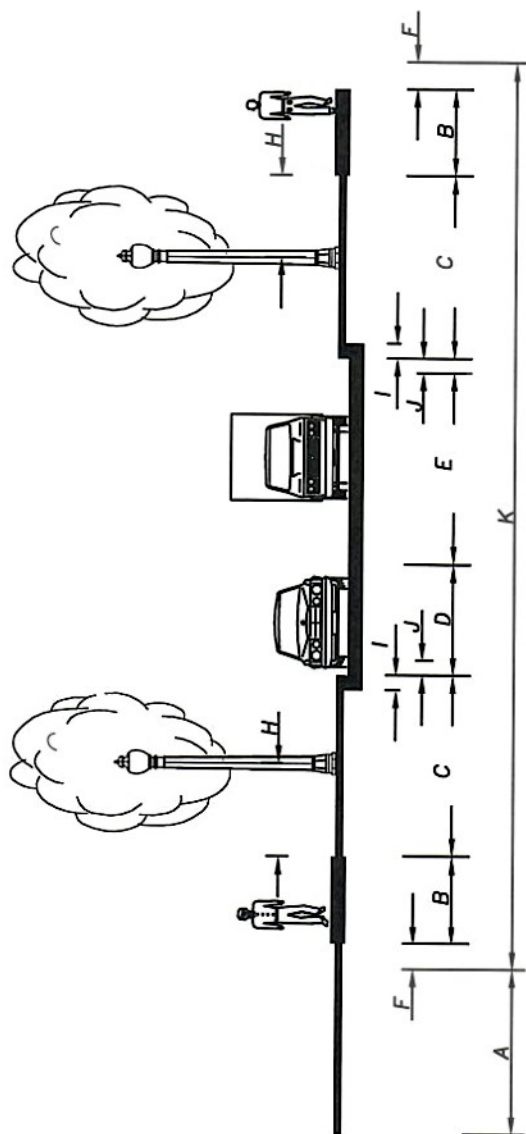
mph	Total	0 - < 15	15 - < 20	20 - < 25	25 - < 30	30 - < 35	35 - < 40	40 - < 45	45 - < 50	50 - < 55	55 - < 60	60 - < 65	65 - < 70	70 - < 200
12:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	0.7	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0.7	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	1.7	0.0	0.3	0.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	3.7	0.0	1.7	1.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	5.7	0.3	2.3	2.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	9.7	1.0	4.0	4.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 AM	9.7	0.3	3.0	5.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	6.0	1.0	2.3	2.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 AM	5.0	0.0	2.7	1.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	5.3	0.7	2.0	2.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:00 PM	7.3	0.7	2.7	3.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	4.3	0.0	2.3	1.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 PM	6.3	1.0	1.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	5.7	0.7	2.7	1.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 PM	5.0	0.0	1.7	2.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	5.3	0.3	1.7	3.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 PM	3.7	0.3	1.7	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	2.3	0.0	2.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	0.7	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 PM	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Daily Average	90.3	6.3	37.0	38.3	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pace Range 15.5 - 25.5 mph 233 vehicles (86.0%)														
Average (Mean) 20.4 mph														
Minimum 11.8 mph														
Maximum 29.4 mph														
Percentile Speeds (mph)														
10% 15.7														
15% 16.7														
50% 20.3														
90% 24.8														
Speeds Exceeded														
25 mph 9.6% (26)														
35 mph 0% (0)														
45 mph 0% (0)														
55 mph 0% (0)														
65 mph 0% (0)														
75 mph 0% (0)														
Study Grand Totals														
Total	271	19	111	115	26	0	0	0	0	0	0	0	0	0
Sbnd	271	7.0%	41.0%	42.4%	9.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Speed Grand Totals

mph	Total	0 - < 15	15 - < 20	20 - < 25	25 - < 30	30 - < 35	35 - < 40	40 - < 45	45 - < 50	50 - < 55	55 - < 60	60 - < 65	65 - < 70	70 - < 200
Hourly Averages Combined														
12:00 AM	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	0.7	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	1.3	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	1.7	0.0	0.3	0.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	5.0	0.0	1.7	2.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	6.7	0.3	3.3	2.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	11.3	1.0	4.7	5.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 AM	13.7	0.7	4.0	8.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	9.7	1.7	3.0	4.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 AM	9.7	0.3	4.0	3.3	1.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	9.0	1.3	3.3	3.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:00 PM	15.3	1.7	5.7	6.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	9.0	0.3	4.7	3.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 PM	13.3	1.3	2.7	8.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	17.3	1.7	6.0	6.7	2.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 PM	12.7	0.0	4.3	6.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	15.7	1.0	5.3	8.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 PM	10.3	1.0	3.7	3.0	2.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	8.7	0.3	5.3	2.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	5.0	1.0	2.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	3.0	0.0	1.3	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 PM	1.7	0.3	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	0.7	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Daily Average	182.0	14.3	68.0	79.7	18.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pace Range 15.5 - 25.5 mph 455 vehicles (83.3%)														
Average (Mean) 20.6 mph														
Minimum 10.2 mph														
Maximum 31.9 mph														
Percentile Speeds (mph)														
10% 15.5														
50% 20.7														
85% 24.3														
90% 25.4														
Speeds Exceeded														
25 mph 11.0% (60)														
35 mph 0% (0)														
45 mph 0% (0)														
55 mph 0% (0)														
65 mph 0% (0)														
75 mph 0% (0)														
Study Grand Totals														
Combined	546	43	204	239	56	4	0	0	0	0	0	0	0	0
		7.9%	37.4%	43.8%	10.3%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Nbnd	275	24	93	124	30	4	0	0	0	0	0	0	0	0
		8.7%	33.8%	45.1%	10.9%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sbnd	271	19	111	115	26	0	0	0	0	0	0	0	0	0
		7.0%	41.0%	42.4%	9.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Weekly Volume

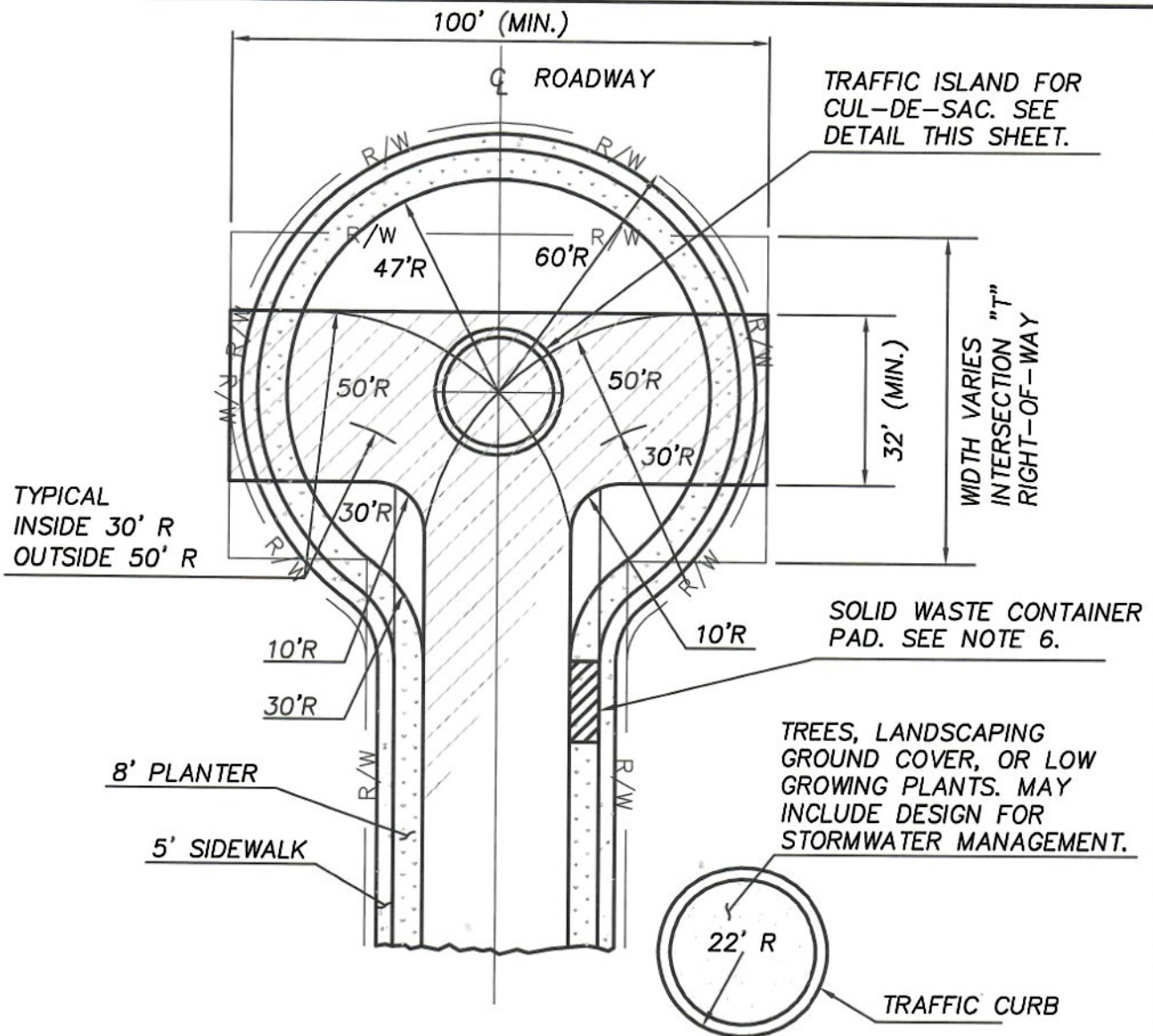
Interval	Mon 4/23/2018		Tue 4/24/2018		Wed 4/25/2018		Thu 4/26/2018		Fri 4/27/2018		Sat 4/28/2018		Sun 4/29/2018		Mon - Fri Average	
Start	Nbnd	Sbnd	Nbnd	Sbnd	Nbnd	Sbnd	Nbnd	Sbnd	Nbnd	Sbnd	Nbnd	Sbnd	Nbnd	Sbnd	Nbnd	Sbnd
12:00 AM	-	-	0	0	1	0	0	0	-	-	-	-	-	-	0.3	0.0
1:00 AM	-	-	0	0	0	1	0	0	-	-	-	-	-	-	0.0	0.3
2:00 AM	-	-	0	1	0	0	0	1	-	-	-	-	-	-	0.0	0.7
3:00 AM	-	-	1	1	1	1	0	0	-	-	-	-	-	-	0.7	0.7
4:00 AM	-	-	0	2	0	2	0	1	-	-	-	-	-	-	0.0	1.7
5:00 AM	-	-	1	2	1	3	2	6	-	-	-	-	-	-	1.3	3.7
6:00 AM	-	-	1	8	2	6	0	3	-	-	-	-	-	-	1.0	5.7
7:00 AM	-	-	1	7	2	12	2	10	-	-	-	-	-	-	1.7	9.7
8:00 AM	-	-	4	10	3	7	5	12	-	-	-	-	-	-	4.0	9.7
9:00 AM	-	-	5	8	3	6	3	4	-	-	-	-	-	-	3.7	6.0
10:00 AM	-	-	4	4	2	7	8	4	-	-	-	-	-	-	4.7	5.0
11:00 AM	-	-	2	2	7	4	2	10	-	-	-	-	-	-	3.7	5.3
12:00 PM	-	-	5	7	9	7	10	8	-	-	-	-	-	-	8.0	7.3
1:00 PM	-	-	4	4	5	4	5	5	-	-	-	-	-	-	4.7	4.3
2:00 PM	-	-	10	8	5	6	6	5	-	-	-	-	-	-	7.0	6.3
3:00 PM	-	-	9	6	13	7	13	4	-	-	-	-	-	-	11.7	5.7
4:00 PM	-	-	12	4	6	3	5	8	-	-	-	-	-	-	7.7	5.0
5:00 PM	-	-	10	5	11	4	10	7	-	-	-	-	-	-	10.3	5.3
6:00 PM	-	-	8	2	7	3	5	6	-	-	-	-	-	-	6.7	3.7
7:00 PM	-	-	3	4	7	0	9	3	-	-	-	-	-	-	6.3	2.3
8:00 PM	-	-	3	1	2	2	7	0	-	-	-	-	-	-	4.0	1.0
9:00 PM	-	-	4	0	2	1	1	1	-	-	-	-	-	-	2.3	0.7
10:00 PM	-	-	2	0	0	0	2	1	-	-	-	-	-	-	1.3	0.3
11:00 PM	-	-	1	0	0	0	1	0	-	-	-	-	-	-	0.7	0.0
Totals	0	0	90	86	89	86	96	99	0	0	0	0	0	0	91.7	90.3
Combined	0		176		175		195		0		0		0		182.0	
Split (%)	-	-	51.1	48.9	50.9	49.1	49.2	50.8	-	-	-	-	-	-	50.4	49.6
Peak Hours																
12:00 AM - 12:00 PM	-	-	9:00 AM	8:00 AM	11:00 AM	7:00 AM	10:00 AM	8:00 AM	-	-	-	-	-	-	10:00 AM	7:00 AM
Volume	-	-	5	10	7	12	8	12	-	-	-	-	-	-	4.7	9.7
12:00 PM - 12:00 AM	-	-	4:00 PM	2:00 PM	3:00 PM	12:00 PM	3:00 PM	12:00 PM	-	-	-	-	-	-	3:00 PM	12:00 PM
Volume	-	-	12	8	13	7	13	8	-	-	-	-	-	-	11.7	7.3



DIMENSIONS = FEET

NUMBER OF LANES	SEE STANDARD DRAWING 4-6A FOR MINIMUM STRUCTURAL DESIGN AND STREET CROSS SLOPE DESIGN									
	SEE MINIMUM STREET DESIGN STANDARDS TABLE FOR ADDITIONAL DESIGN ELEMENTS									
	ADT									
	0-500									
	SEE STANDARD DRAWING 4-13B									
	A 100' NO PARKING ZONE IN THE CENTER OF THE BLOCK IS REQUIRED FOR EMERGENCY VEHICLE ACCESS (EDDS 4C.070)									
	A= PRIVATE UTILITY EASEMENT									
	* - BLOCK SPACING >350' PARKING BULB-OUTS ARE REQUIRED (STANDARD DRAWING NO. 4-13B)									
	A 100' NO PARKING ZONE IN THE CENTER OF THE BLOCK IS REQUIRED FOR EMERGENCY VEHICLE ACCESS (EDDS 4C.070)									

APPROVED BY	REVISED DATE	CITY OF OLYMPIA	STD. DWG. NO.
FRAN R. EIDE, PE	8/10/2015	LOCAL ACCESS STREET	4-2J
CITY ENGINEER			



NOTES:

1. INTERSECTION "T" PERMITTED ONLY IN SINGLE FAMILY DEVELOPMENTS AND ON DEDICATED RIGHT-OF-WAY. THE "T" SEGMENT ORIENTATION MAY VARY TO MATCH LOCAL CONDITION.
2. THE TEMPORARY TEE CONFIGURATION MAY ONLY BE USED UPON WRITTEN APPROVAL FROM THE PUBLIC WORKS DEPARTMENT.
3. CUL-DE-SACS AND INTERSECTION "T" MUST BE FREE OF OBSTRUCTIONS AND SIGNED "NO PARKING ANY TIME".
4. R/W IS DEPENDENT UPON ROADWAY WIDTH REQUIREMENTS.
5. TRAFFIC ISLAND IS REQUIRED WITH CUL-DE-SAC CONSTRUCTION.
6. LENGTH OF PAD = $2.3'(X) + (X-1)2' + 6'$; X = NUMBER OF UNITS IN CUL-DE-SAC.

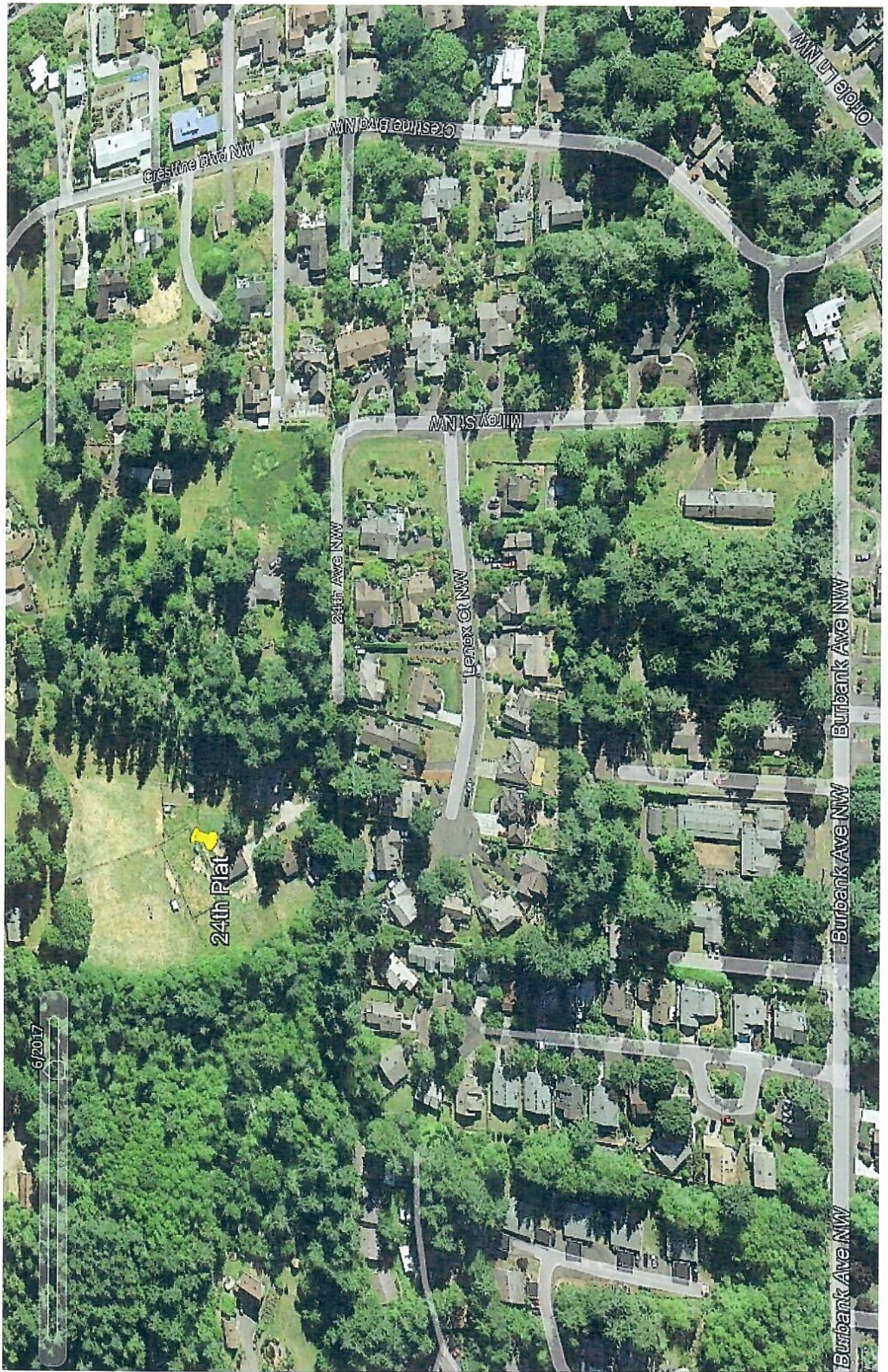
LEGEND:

— R/W — DEDICATED RIGHT-OF-WAY

— PAVING

DEPICTS THE TEMPORARY "T" CONFIGURATION

APPROVED BY	REVISED DATE	CITY OF OLYMPIA	STD. DWG. NO.
FRAN R. EIDE, PE	8/1/2021	CUL-DE-SAC OR TEMPORARY INTERSECTION "T"	4-5
CITY ENGINEER			





4/2023

24th Plat

24th Ave NW

Lenox Ct NW

Wiley St NW

Crestline Blvd NW

Crestline Blvd NW

Burbank Ave NW

Burbank Ave NW

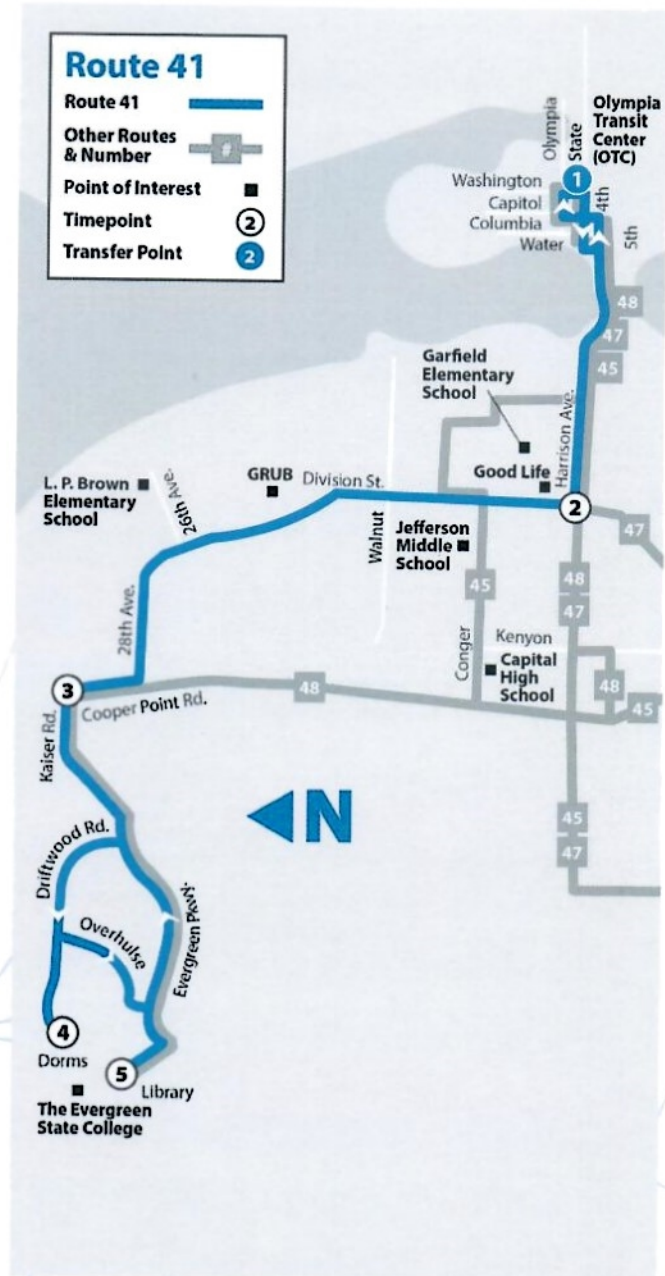
Burbank Ave NW

Ortega Ln NW

Route 41

INTERcity TRANSIT
Schedule effective September 3, 2023

EVERGREEN				41			
to Evergreen				to Olympia Transit Center			
DEPART OTC (Bay F)	Division at Harrison	Kaiser at Cooper Point	Evergreen Dorms	Evergreen Library Loop	Kaiser at Cooper Point	Harrison at Division	ARRIVE OTC
1	2	3	4	5	3	2	1
Weekdays & Weekends							
—	—	—	—	6:03	6:07	6:14	6:25
6:00	6:07	6:13	6:18	6:33	6:37	6:44	6:55
6:30	6:37	6:43	6:48	7:03	7:07	7:14	7:25
7:00	7:07	7:13	7:18	7:33	7:37	7:44	7:55
7:30	7:37	7:43	7:48	8:03	8:07	8:14	8:25
8:00	8:07	8:13	8:18	8:33	8:37	8:44	8:55
8:30	8:37	8:43	8:48	9:03	9:07	9:14	9:25
9:00	9:07	9:13	9:18	9:33	9:37	9:44	9:55
9:30	9:37	9:43	9:48	10:03	10:07	10:14	10:25
10:00	10:07	10:13	10:18	10:33	10:37	10:44	10:55
10:30	10:37	10:43	10:48	11:03	11:07	11:14	11:25
11:00	11:07	11:13	11:18	11:33	11:37	11:44	11:55
11:30	11:37	11:43	11:48	12:03	12:07	12:14	12:25
12:00	12:07	12:13	12:18	12:33	12:37	12:44	12:55
12:30	12:37	12:43	12:48	1:03	1:07	1:14	1:25
1:00	1:07	1:13	1:18	1:33	1:37	1:44	1:55
1:30	1:37	1:43	1:48	2:03	2:07	2:14	2:25
2:00	2:07	2:13	2:18	2:33	2:37	2:44	2:55
2:30	2:37	2:43	2:48	3:03	3:07	3:14	3:25
3:00	3:07	3:13	3:18	3:33	3:37	3:44	3:55
3:30	3:37	3:43	3:48	4:03	4:07	4:14	4:25
4:00	4:07	4:13	4:18	4:33	4:37	4:44	4:55
4:30	4:37	4:43	4:48	5:03	5:07	5:14	5:25
5:00	5:07	5:13	5:18	5:33	5:37	5:44	5:55
5:30	5:37	5:43	5:48	6:03	6:07	6:14	6:25
6:00	6:07	6:13	6:18	6:33	6:37	6:44	6:55
6:30	6:37	6:43	6:48	7:03	7:07	7:14	7:25
7:00	7:07	7:13	7:18	7:33	7:37	7:44	7:55
7:30	7:37	7:43	7:48	8:03	8:07	8:14	8:25
8:00	8:07	8:13	8:18	8:33	8:37	8:44	8:55
8:30	8:37	8:43	8:48	9:03	9:07	9:14	9:25
9:00	9:07	9:13	9:18	9:33	9:37	9:44	9:55
9:30	9:37	9:43	9:48	10:03	10:07	10:14	10:25





Report Category: **Summary Reports** | Report Name: **Total Crashes**

Report Year: **2019** | Location: **Thurston County** | Jurisdiction: **(All)**

Run Report

Search | Portal FAQs | Feedback

Summary Reports - Total Crashes

Report Year: **2019**
Location: **Thurston County**
Jurisdiction: **(All)**

Under 23 U.S. Code 148 and 23 U.S. Code 407, safety data, reports, surveys, schedules, list compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such report, surveys, schedules, lists, or data.



1 - suspected minor
1 - property

Data | Charts | Notes

Most Severe Injury per Crash

Fatal	19
Suspected Serious Injury	77
Suspected Minor Injury	280
Possible Injury	815
No Apparent Injury	3,328
Total Crashes	4,519



Summary Reports - Total Crashes

Report Category: **Summary Reports** | Report Name: **Total Crashes**

Report Year: **2020** | Location: **Thurston County** | Jurisdiction: **(All)**

Under 23 U.S. Code 148 and 23 U.S. Code 407, safety data, reports, surveys, schedules, list compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such report, surveys, schedules, lists, or data.

Data Charts Notes

Most Severe Injury per Crash		Crashes
Fatal		18
Suspected Serious Injury		73
Suspected Minor Injury		320
Possible Injury		591
No Apparent Injury		2,416
Total Crashes		3,418

Run Report

Report Year: **2020** | Region: **(All)** | County: **Thurston** | City: **(All)** | Jurisdiction: **(All)**

Select Report Parameters





Report Category

Summary Reports

Report Name

Total Crashes

Report Year

2021

Location

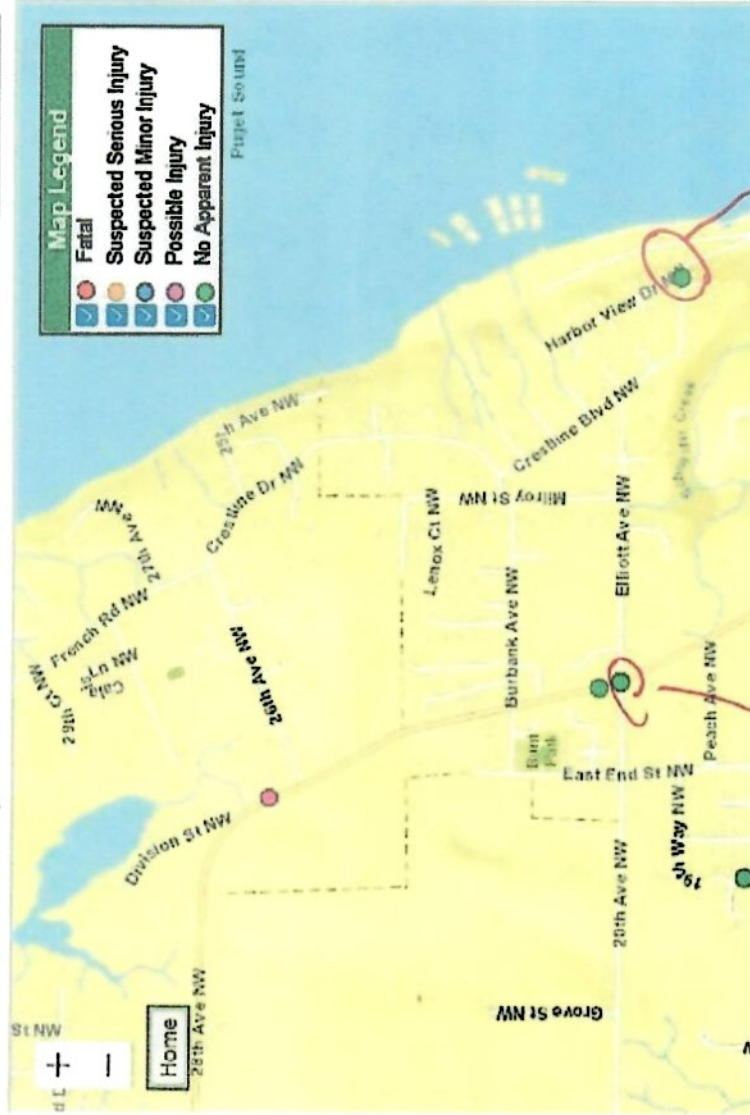
Region: (All)
County: Thurston
City: (All)

Jurisdiction

(All)

Select Report Parameters

Run Report



Search

Portal FAQs

Feedback

Summary Reports - Total Crashes

Report Year: 2021

Location: Thurston County

Jurisdiction: (All)

Under 23 U.S. Code 148 and 23 U.S. Code 407, safety data, reports, surveys, schedules, list compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such report, surveys, schedules, lists, or data.

Data	Charts	Notes
Most Severe Injury per Crash		
Fatal		Crashes
Suspected Serious Injury		20
Suspected Minor Injury		93
Possible Injury		386
No Apparent Injury		623
Total Crashes		3,266



Report Category

Summary Reports

Report Name

Total Crashes

Report Year

2022

Location

Region: (All)
County: Thurston
City: (All)

Jurisdiction

(All)

Run Report

Search

Portal FAQs

Feedback

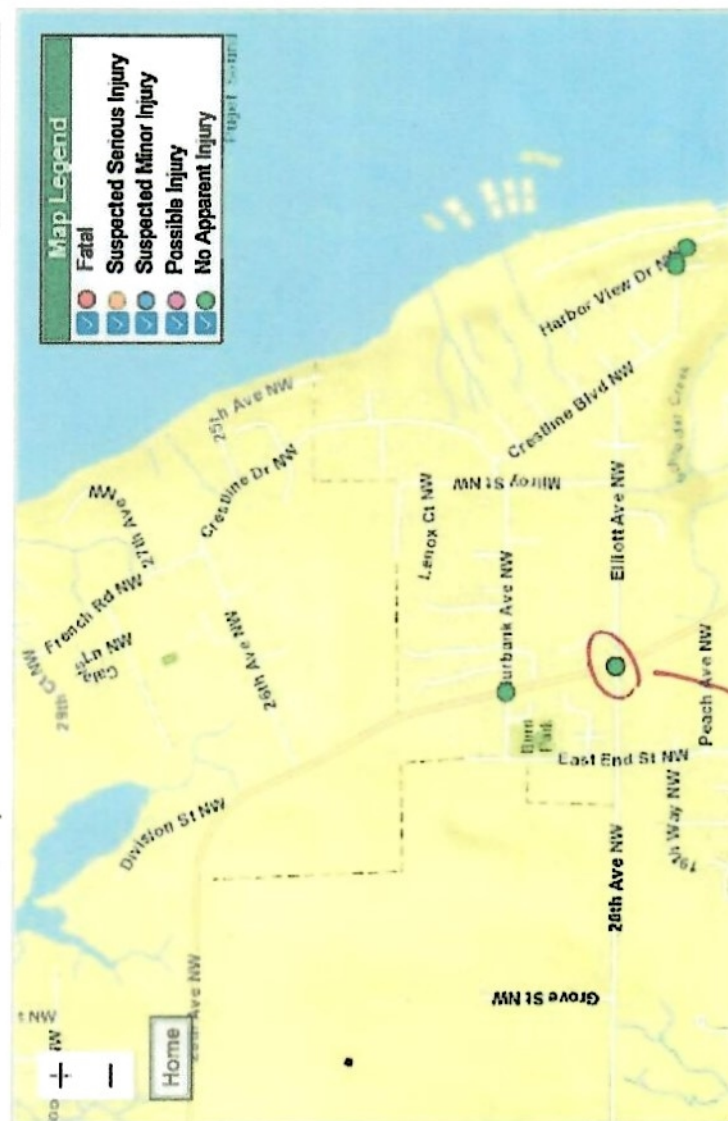
Summary Reports - Total Crashes

Report Year: 2022

Location: Thurston County

Jurisdiction: (All)

Under 23 U.S. Code 146 and 23 U.S. Code 407, safety data, reports, surveys, schedules, list compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State Court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such report, surveys, schedules, lists, or data



Data	Charts	Notes
Most Severe Injury per Crash		
Fatal		17
Suspected Serious Injury		99
Suspected Minor Injury		414
Possible Injury		572
No Apparent Injury		2,867
Total Crashes		3,969

