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TRANSPORTATION IMPACT ANALYSIS

To
Columbia County and ODOT

For
NEXT Renewable Fuels

Dated
January 14, 2021

Project Number
2200315.00

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I. INTRODUCTION

This Transportation Impact Analysis (TIA) has been prepared in support of the proposed NEXT Renewable Fuels facility at Port Westward in Columbia County, Oregon. Figure 1 in Appendix A presents a vicinity map indicating the project location.

Project Description

NEXT Renewable Fuels is proposing a renewable diesel production facility at Port Westward Industrial Park near Clatskanie, south of the Portland General Electric (PGE) Beaver and Port Westward power stations. The facility will convert recycled organic materials into renewable diesel. The finished product will leave the site primarily by ship and via pipelines to the dock. A small percentage of the product will be shipped out of the site via rail.

The site is located at 81009 Kallunki Road and comprises Columbia County Tax Lots 8422-00-00100, 8422-00-00200, and 8422-00-00300. The site is approximately 109 acres and is zoned Resource Industrial – Planned Development (RIPD).

The site will have access to Hermo Road with secondary, emergency access to Kallunki Road. Single-unit and semi-trucks will access the site daily. The facility is also proposing to utilize an offsite rail spur. Site traffic will impact the Lower Columbia River Highway (U.S. Highway 30) which is an Oregon Department of Transportation (ODOT) facility. Figure 2 presents the proposed site plan.

Scope of Analysis

This TIA has been prepared in accordance with the 2017 Columbia County Transportation System Plan (TSP) and ODOT's *Analysis Procedures Manual* (APM), Version 2. Per the County's TSP, a TIA is required for any projects estimated to generate 25 or more trips during the AM or PM peak hour, or more than 400 daily trips. The County also requires a TIA for any projects that will have a projected increase of five daily trips made by vehicles exceeding 26,000 pounds, or an increase of 10% of daily traffic by vehicles exceeding 26,000 pounds.

This study includes a summary of existing traffic conditions, crash review, proposed trip generation, and an analysis of intersection operations, sight distance, and queuing. The TIA scope was discussed with County staff at a November 5, 2020 meeting. A TIA scoping letter dated November 30, 2020 was submitted to County and ODOT staff. The scope was approved by ODOT staff in a memo dated December 1, 2020 and by County staff in an email dated December 10, 2020. Minor adjustments to trip generation and existing traffic volumes were requested by ODOT. The TIA scoping letter and associated correspondence are provided in Appendix B for reference.

Study Area

The County does not publish guidelines for determining the study area for a TIA. As previously noted, the TIA scope, including the study area, was determined through a meeting with County staff. The study area includes the following intersections:

1. Highway 30/Nehalem Street
2. Highway 30/NE Van Street
3. Highway 30/Loop Ramp to Swedetown Road

4. Swedetown Road/Highway 30 Loop Ramp
5. NE 5th Street/Stimson Mill Road/N Nehalem Street
6. NE 5th Street/NE Van Street

All intersections along Highway 30 are maintained by ODOT. A review of roadway conditions on Hermo Road is also presented in this TIA.

Analysis Scenarios

Analysis is provided for all study area intersections during the AM and PM peak hours. This TIA addresses transportation conditions for the following analysis scenarios:

- 2020 Existing
- 2024 Pre-Development without NEXT Renewable Fuels
- 2024 Post-Development with NEXT Renewable Fuels

II. EXISTING CONDITIONS

The existing conditions analysis is based on a current year inventory of transportation facilities and 2020 traffic data.

Site Conditions

The project site is located at Port Westward in Columbia County, Oregon. The approximately 109-acre site comprises Columbia County Tax Lots 8422-00-00100, 8422-00-00200, and 8422-00-00300. The site is currently undeveloped. Wetlands are present over the majority of the property.

Vehicular Transportation Facilities

The study area presented in this TIA includes roadways under Columbia County, ODOT, and City of Clatskanie jurisdiction. Figure 3 presents the existing lane configurations and traffic control devices for the study area intersections. Functional classifications are listed as presented by the City's and County's respective TSPs, as well as ODOT's Oregon Highway Plan (OHP).

TABLE 1 – ROADWAY CHARACTERISTICS

Roadway	Jurisdiction	Functional Classification	Posted Speed (mph)	Travel Lanes	Bike Lanes	On-Street Parking	Sidewalks
Highway 30	ODOT	Principal Arterial/ Statewide Highway	30	3/5	Yes	No	Partial
Swedetown Road	Columbia County	Major Collector	25	2	No	No	No
NE Van Street	City of Clatskanie	Major Collector	None	2	No	No	Partial
Nehalem Street	City of Clatskanie	Minor Collector/ Major Collector	20	2	No	Yes	Yes
NE 5th Street	City of Clatskanie	Arterial	25	2	No	Yes	Partial
Beaver Falls Road	Columbia County	Major Collector	40	2	No	No	No
Quincy Mayger Road	Columbia County	Major Collector	40	2	No	No	No
Hermo Road	Columbia County	Local	None	2	No	No	No
Kallunki Road	Columbia County	Local	40	2	No	No	No

As noted in Table 1, Highway 30 is a state highway facility. NE 5th Street, Beaver Falls Road, Quincy Mayger Road, and Kallunki Road are designated resource routes. Designated resource routes are intended to

"facilitate the movement of truck freight between major destinations and state highways", as noted in the County's 2017 TSP.

Pedestrian and Bicycle Facilities

Sidewalks are mostly available along both sides of Highway 30 between NE Van Street and SW Orchard Street. On NE Van Street a sidewalk is available on the west side of the roadway between Highway 30 and NE 5th Street. On NE 5th Street sidewalks are available on at least one side of the roadway between NE Van Street and the Stimson Mill Road intersection where NE 5th Street turns into NW 5th Street. NW 5th Street has a sidewalk on the south side of the roadway, which continues on the north side of the roadway for approximately 580 feet north of the marked crosswalk at the Gateway Worship Center.

Clearly marked bicycle lanes are available on both sides of Highway 30 between SW Orchard Street and NE Van Street. There is a clearly marked bike lane on the west side of NE Van Street between Highway 30 and NE 5th Street. No other bike facilities are currently available within the study area.

Transit Facilities

The study area is served by the Sunset Empire Transportation District. A fixed route of the Sunset Empire Transportation District provides transit service between the Astoria Transit Center and Portland's Union Station. Headways are four-and-a-half hours, with three trips between Astoria and Portland, daily. The transit schedule is provided in Appendix C for reference.

Existing Traffic

Existing turning movement counts were collected on Tuesday, November 17, 2020 for the AM and PM peak hours. As required by ODOT's APM, a system-wide peak for both the AM and PM peak hours is required for analysis. The common AM peak hour for intersections along Highway 30 was determined to be 7:15 to 8:15 AM. The common PM peak hour for intersections along Highway 30 was determined to be 4:15 to 5:15 PM. The individual intersection peak hour was utilized for all remaining intersections not under ODOT jurisdiction.

Figure 4 presents the existing 2020 AM and PM peak hour volumes. Raw traffic volume summaries are provided in Appendix D for reference.

Roadway volumes, classification and speed were counted on Quincy Mayger Road just south of Hermo Road between Tuesday, November 17, 2020 and Thursday, November 19, 2020. The majority of existing traffic at this location is assumed to travel to and from Port Westward via Kallunki Road. Raw data summaries are included in the appendix.

COVID-19 Adjustment

The traffic impacts of the COVID-19 pandemic on several corridors in the state have been closely monitored by ODOT, which has been releasing traffic monitoring reports comparing 2019 and 2020 traffic volumes for corridors, including traffic data for Highway 30 west of Rainier Road obtained from Automatic Traffic Recorder (ATR) #05-006, located on Lower Columbia River Highway (Highway 30) about one mile west of Rainier Road. The ATR report dated December 4, 2020 shows that for the week of November 16, 2020, traffic on Highway 30 was approximately 8% lower in 2020 compared to 2019. Therefore, we applied

a 1.08 adjustment factor to existing 2020 traffic volumes to account for the lower traffic conditions associated with COVID-19. ODOT's summary sheet is included in Appendix E.

Seasonal Adjustment

Highway 30 is a state facility. Per ODOT's APM, a seasonal adjustment must be applied to existing traffic volumes on the state highway. Existing 2020 through volumes on Highway 30 were seasonally adjusted to evaluate conditions for the 30th highest hour of annual traffic. A seasonal adjustment factor of 1.32 reflecting a summer trend from ATR # 05-006 was developed. This seasonal adjustment factor was applied to the 2020, COVID-adjusted traffic volumes. The seasonal adjustment calculation is included in Appendix E for reference.

Figure 6 presents the 2020 seasonally adjusted traffic volumes for the AM and PM peak hours.

Crash Analysis

Historical crash data reported for the study area intersections were evaluated for safety. Crash data for the five-year period of 2014 through 2018 were obtained from ODOT's online crash data system. The crash data reports were used to review crash patterns and estimate crash rates at each study area intersection. The crash rates were compared with ODOT's 90th percentile crash rates as presented in Chapter 4 of the APM.

The crash evaluation for the study area intersections is summarized in Table 2. The raw crash data is provided in Appendix F for reference.

TABLE 2 – INTERSECTION CRASH RATES

Intersection (Traffic Control Type)	Number of Crashers in Year					Total Crashes	Average Daily Traffic (ADT)	Crash Rate	ODOT's 90th Percentile Rate (Intersection Type)
	2014	2015	2016	2017	2018				
Highway 30/ Nehalem Street (Signalized)	3	0	1	3	2	9	8,400	0.59	0.860 (4SG)
Highway 30/ NE Van Street (TWSC)	4	1	2	1	1	9	7,000	0.70	0.408 (4ST)
Highway 30/ Loop Ramp to Swedetown Road (TWSC)	0	0	0	0	0	0	6,400	0.00	0.293 (3ST)
Swedetown Road/ Highway 30 Loop Ramp (TWSC)	0	0	0	0	0	0	1,000	0.00	0.293 (3ST)
NE 5th Street/Stimson Mill Road/ N Nehalem Street (AWSC*)	0	0	1	0	0	1	2,500	0.22	0.408 (4ST)

TABLE 2 – INTERSECTION CRASH RATES									
Intersection (Traffic Control Type)	Number of Crashers in Year					Total Crashes	Average Daily Traffic (ADT)	Crash Rate	ODOT's 90th Percentile Rate (Intersection Type)
	2014	2015	2016	2017	2018				
NE 5th Street/ NE Van Street (TWSC)	0	0	0	0	0	0	1,800	0.00	0.408 (4ST)

* This intersection does not have a STOP control on the northbound approach. However, for purposes of this study, we have evaluated this intersection as an AWSC intersection due to software limitations , resulting in comparable operations results to TWSC operations with STOP control on the eastbound and westbound approaches.

4SG – four-leg, signalized intersection

4ST – four-leg, unsignalized intersection

3ST – three-leg, unsignalized intersection

Crash Data Summary

There were 19 crashes in the study area between 2014 and 2018. No fatal or Injury Type "A" (incapacitating) crashes were reported during this time period. Four (4) crashes resulting in an Injury Type "B" ("visible injury") were reported in the study area. Nine (9) crashes resulting in an Injury Type "C" ("non-visible injury") were reported in the study area. The remaining six (6) crashes reportedly resulted in no injury, or "Property Damage Only" (PDO).

One (1) of the Type B crashes involved a motorcyclist at the intersection of Highway 30/Nehalem Street. The crash was reported as a phantom/non-contact crash with no other vehicles.

Two (2) of the Type B crashes were reported as turning-movement crashes at the intersection of Highway 30/Van Street. These crashes were reportedly caused by a vehicle driving too fast for the conditions and the other as a failure to yield the right-of-way.

One (1) of the Type B crashes was reported as a turning-movement crash at the intersection of NE 5th Street/Stimson Mill Road/ N Nehalem Street and was caused by a vehicle making an improper turn while driving in excess of the posted speed limit.

Six (6) of the Type C crashes were reported at the Highway 30/Nehalem Street intersection. These crashes included angled crashes, rear-end crashes, and turning-movement crashes. Only one (1) involved a truck. There appears to be no clear pattern to these crashes. These are all typical crash types associated with signalized intersections and can generally be attributed to drivers running red lights.

Three (3) Type C crashes were reported at the Highway 30/Van Street intersection. All three (3) crashes were reportedly turning-movement crashes. Two (2) crashes were caused by drivers failing to yield the right-of-way to other vehicles. One (1) crash was reportedly caused by a vehicle making an improper turn. These crash types are typical for two-way stop-controlled intersections.

Intersection Crash Rates

When evaluating the relative safety of an intersection, consideration is given not only to the total number and types of crashes occurring, but also to the number of vehicles entering the intersection. This concept,

referred to as a “crash rate”, is usually expressed in terms of the number of crashes occurring per one million entering vehicles (MEV) for the intersection per year. Intersections having a crash rate higher than 1.0 crashes/MEV should be reviewed for opportunities to improve safety.

The intersection crash rate is calculated by dividing the average number of crashes per year by the MEV per year. A daily traffic volume was estimated by dividing the PM peak hour volume by a peak-to-daily, or k-factor, of 0.12. This k-factor was derived from ODOT’s Average Annual Daily Traffic (AADT) summary for the segment of Highway 30 between Nehalem Street and Swedetown Road.

The crash rates for all study area intersections were calculated to be below 1.0 crashes/MEV. All study area intersections exhibit a five-year crash rate below ODOT’s 90th percentile rates, except the Highway 30/Van Street intersection. We note this intersection is the start of the truck route through Clatskanie. However, of the nine (9) crashes reported at this intersection, only one (1) involved a truck. Left-turning vehicles were reportedly at fault for six (6) of the crashes and appear to account for most of the crashes at this location. Specifically, four (4) of the nine (9) crashes at this location were reportedly caused by drivers attempting to make a southbound left turn, which is an allowed movement, but is also the most common type of crash at this location. There appears to be adequate sight distance to both the east and west along Highway 30 from the north leg of the intersection. Therefore, there is no readily apparent reason for the high occurrence of these crash types at this location. Because the crash rate does not exceed 1.0 crashes/MEV, we do not recommend further analysis.

III. PRE-DEVELOPMENT CONDITIONS

The pre-development condition reflects a build-out year scenario without the proposed development. This scenario includes traffic from the existing 2020 condition, a seasonal adjustment factor, background growth to year 2024, and in-process traffic from other approved developments that have not yet been constructed.

Planned Transportation Improvements

The applicant proposes to fund improvements to Hermo Road between Quincy Mayger Road to just west of the existing rail spur south of the PGE site as part of a Development Agreement with the County. Improvements denoted in the design previously prepared by the County's consultant include paving the existing gravel roadway to provide 12-foot travel lanes and shoulders ranging from about six (6) feet to approximately 11 feet. The roadway improvements are intended to allow Hermo Road to be the primary access to Port Westward.

It is assumed Hermo Road improvements will be completed concurrent with construction of the NEXT Renewable Fuels facility. An analysis of future roadway volumes for Hermo Road was prepared to reflect the future paved conditions which will attract additional Port Westward traffic.

Background Traffic Growth

Background traffic growth is applied to existing volumes to forecast future traffic demand. The future growth rate on Highway 30 was established using ODOT's 2038 Future Volume Table which estimates a 0.2% annual growth rate for Highway 30 between Swedetown Road and Mist-Clatskanie Highway (OR 47). As a conservative estimate, we applied a 0.5% annual growth rate to seasonally-adjusted, existing traffic volumes to estimate 2024 background traffic conditions. Background growth was applied to all movements at all intersections.

Figure 7 presents the background growth traffic volumes for the AM and PM peak hours.

In-Process Traffic

In-process traffic volumes account for developments that have been approved or that are under construction at the time existing traffic counts are conducted. These traffic volumes account for traffic that will be added to the external roadway network before build-out of the proposed development. No in-process trips were identified by County staff. Therefore, no in-process trips were included in the analysis.

Pre-Development Traffic

The 2024 pre-development analysis scenario is a combination of 2020 existing traffic, a seasonal adjustment, and a 0.5% annual background growth rate over four (4) years. The pre-development traffic without the project trips will indicate if traffic issues are anticipated to be present before the addition of the proposed development.

Figure 8 presents the 2024 pre-development traffic volumes for the AM and PM peak hours.

IV. SITE DEVELOPMENT

The trip-making characteristics of the proposed NEXT Renewable Fuels facility are described below.

Trip Generation

NEXT Renewable Fuels provided its projected staffing and schedule for the proposed facility, as well as projections of truck trips per day. The facility will have 25 management staff, 9 office/clerical staff, 13 operators, and 36 maintenance staff working between 8 AM and 5 PM on a typical weekday. There will be two (2) weekday and weekend shifts of two (2) processing shift managers, two (2) security staff, and 31 operators; the first shift will be between 6 AM and 6 PM, and the second shift will be between 6 PM and 6 AM. The total staff count will be 223.

In reviewing the staffing schedules, the proposed fuel production facility will have trip rates consistent with those presented in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual,* 10th Edition for a "Manufacturing" (ITE LUC 140) facility on a "per employee" basis. Per ITE, the number of employees is "the total number of persons employed at a facility, not just those in attendance at the particular hour or day the data are collected."

Table 3 presents the trip generation estimates for the proposed NEXT Renewable Fuels facility.

TABLE 3 – TRIP GENERATION ESTIMATES

Land Use	ITE LUC	Size	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Manufacturing	140	223 employees	67	24	91	33	51	84	667

As presented in Table 3, the facility is estimated to generate 91 AM peak hour, 84 PM peak hour, and 667 daily trips.

Truck Trips

This trip generation summary provided in Table 3 includes truck trip estimates. NEXT Renewable Fuels expects up to 20 trucks to access the site daily. Most of the 20 trucks are expected to be single-unit trucks making deliveries. Up to five (5) semi-trucks will carry clay to the site per day, and one (1) additional semi-truck will account for an additional delivery per day, for a total of six (6) semi-trucks per day.

Trip Distribution and Traffic Assignment

Trip distribution for the proposed renewable fuels facility was based on information provided by the user on the origin of employees and trucks. The following trip distribution was utilized:

- 90% to/from the east on Highway 30
- 10% to/from the west on Highway 30

Figure 9 presents the trip distribution and traffic assignment for project trips during the AM and PM peak hours.

Post-Development

Post-development traffic volumes are the sum of site trips and the pre-development traffic volumes. Figure 10 presents the 2024 post-development traffic volumes for the AM and PM peak hours.

V. SITE ACCESS AND CIRCULATION

The on-site evaluation of traffic access and circulation is presented below.

Site Access

Vehicular access to the site will be provided via Hermo Road. A rail line spur connecting to the existing rail to the northeast currently serving the PGE stations will be provided.

Off-Site Circulation

Site traffic will rely on access via Hermo Road to Quincy Mayger Road, Beaver Creek Falls Road, and 5th Street to route to and from Highway 30. Trucks will utilize the truck route, which routes truck traffic through the City of Clatskanie from Highway 30 via Van Street and 5th Street to the County truck facilities (Beaver Creek Falls Road and Quincy Mayger Road).

Sight Distance Evaluation

Intersection sight distance was evaluated at the site access on Hermo Road. The American Association of State Highway and Transportation Officials' (AASHTO) *A Policy on Geometric Design of Highways and Streets*, 7th Edition, provides recommendations for intersection sight distance (ISD) based on roadway design speed. At minimum, stopping sight distance (SSD) must be provided.

The sight distance recommendations and requirements are based on roadway design speeds and adjustments for grades greater than 3%. The designated design speed for Hermo Road, a Local Road, is 25 mph per the County's Road Standards. The County's design plans for the Hermo Road improvements show the grade north and south of the site access will be relatively flat. Therefore, no adjustment for grade was applied to the intersection sight distance calculation.

Time gaps of 7.5 and 11.5 seconds were assumed for passenger cars and combination trucks completing a left turn from stop on a minor approach (driveway), respectively. The recommendations for ISD have been noted for left turns from stop on a stop-controlled minor approach, or driveway. The sight distance evaluation is presented in Table 4.

TABLE 4 – SIGHT DISTANCE EVALUATION

Access Location	Design Speed (mph)	Design Vehicle	Recommended ISD (feet)	Required SSD (feet)	Available Sight Distance (feet)	
					To North	To South
Hermo Road	25	Passenger Vehicles	280	155	>1,000	>1,000
		Combination Trucks	425			

As presented in Table 4, more than the recommended ISD is available to the north and south of the site access on Hermo Road. Sight distance in excess of 1,000 feet is available to the north and south along Hermo Road from the proposed site access. There are no existing trees or shrubbery that block these sight

lines. Elevation profiles in Google Earth Pro indicate that the grade descends slightly to the north and south from site access location along Hermo Road. The improvement plans for Hermo Road indicate the grade will remain relatively the same after the roadway is regraded. Therefore, sight distance will be met in the future after Hermo Road is improved.

VI. OPERATIONAL ANALYSIS

Two (2) aspects of operation analysis were evaluated at the study area intersections: 1) intersection operations analysis, which evaluates how well an intersection processes traffic demand, and 2) queuing analysis, which compares intersection queues with available storage for different travel lanes.

Intersection Operation Analysis

Intersection operations are generally measured by three (3) mobility standards: volume-to-capacity (v/c) ratio, level of service (LOS), and delay (measured in seconds). Signalized and all-way, stop-controlled (AWSC) intersections are measured by one overall v/c ratio, LOS, and delay. Two-way, stop-controlled (TWSC) intersections are typically measured by a single v/c ratio, LOS, and delay representative of the worst stopped movement.

Performance Measures

Depending on the roadway, study area intersections lie within City of Clatskanie, Columbia County, or ODOT jurisdiction.

Columbia County

The County's adopted TSP includes mobility targets for intersections under County jurisdiction. The following mobility standards apply:

- LOS E or better and a v/c of 0.85 for signalized and AWSC intersections
- LOS E or better and a v/c of 0.90 at TWSC intersections with more than 20 vehicles per approach

City of Clatskanie

The City's 2008 TSP does not include mobility targets for intersections under City jurisdiction. Therefore, we will defer to ODOT and County standards.

ODOT

The *Oregon Highway Plan* (OHP) designates US Highway 30 a Statewide Highway at NE Van Street. Within Clatskanie city limits, US Highway 30 is a Federally Designated Truck Route. Based on the classification and posted speed of 30 mph, Table 6 of the OHP establishes a v/c target of 0.85 for the Highway 30 intersections with NE Van Street and NE Nehalem Street.

Methodology

The intersection capacity analyses were conducted in accordance with ODOT's APM and using ODOT's Synchro template, which assumes a 1,750 vehicle/hour/lane saturation flow rate as well as other specific parameters. Intersection operations were analyzed with the use of Synchro 10 software, which utilizes the Transportation Research Board's (TRB) *Highway Capacity Manual* (HCM) 2000, HCM 2010, and HCM 6 methodologies. Capacity results for the signalized Highway 30/Nehalem Street intersection were presented using HCM 2000 reports. Capacity results for all other study area intersections were presented using HCM 6 reports. Signal timing information was obtained from ODOT staff and is provided in Appendix G for reference.

Findings

The critical movements (either overall intersection for signalized or worst movement for TWSC) for the AM and PM peak hours are provided in Table 5. Synchro intersection operation summaries are presented in Appendix H for reference.

TABLE 5 – PEAK HOUR INTERSECTION OPERATIONS

Intersection (Traffic Control Type)	Mobility Target (Jurisdiction)	Peak Hour	Analysis Results (v/c-LOS-Delay (in seconds))		
			2020 Adjusted	2024 Pre-Development	2024 Post-Development
Highway 30/ NE Nehalem Street (Signalized)	0.85 v/c	AM	0.31-A-9.8	0.32-A-9.8	0.35-A-10.3
		PM	0.39-B-12.2	0.39-B-12.3	0.43-B-12.9
Highway 30/ NE Van Street (TWSC)	0.85 v/c	AM	0.08-C-1.6	0.11-B-1.6	0.12-B-1.6
		PM	0.16-D-1.8	0.17-D-1.9	0.22-D-2.0
Highway 30/ Loop Ramp to Swedetown Road (TWSC)	0.85 v/c	AM	0.05-B-0.5	0.05-B-0.5	0.06-B-0.5
		PM	0.05-B-0.3	0.05-B-0.3	0.07-B-0.4
Swedetown Road/ Highway 30 Loop Ramp (TWSC)	0.85 v/c	AM	0.02-A-3.0	0.02-A-3.0	0.02-A-2.9
		PM	0.06-A-3.8	0.06-A-3.8	0.06-A-3.6
NE 5th Street/Stimson Mill Road/ N Nehalem Street (AWSC*)	LOS E, 0.85 v/c	AM	0.13-A-7.7	0.13-A-7.7	0.17-A-8.1
		PM	0.17-A-7.9	0.18-A-7.9	0.22-A-8.4
NE 5th Street/ NE Van Street (TWSC)	LOS E, 0.90 v/c	AM	0.06-A-5.6	0.07-A-5.9	0.13-B-6.6
		PM	0.12-A-5.7	0.18-B-6.3	0.21-B-6.4

* This intersection does not have a STOP control on the northbound approach. However, for purposes of this study, we have evaluated this intersection as an AWSC intersection due to software limitations, resulting in comparable operations results to TWSC operations with STOP control on the eastbound and westbound approaches.

As presented in Table 5, all intersections currently meet, and are projected to continue to meet County and ODOT mobility standards with the proposed project trips.

Intersection Queuing Analysis

An intersection queuing analysis was conducted for the study area intersections for the AM and PM peak hours. The 95th percentile queues were estimated using SimTraffic software. Queue demand results were rounded to the nearest 25 feet to represent average vehicle spacing lengths.

Because queues are based on an average of five (5) traffic simulations using random arrivals, some fluctuation in results can be anticipated, particularly for movements that are near or projected to be over capacity.

Methodology

Available queue storage lengths were estimated using Google Earth Pro software and rounded to the nearest five (5) feet. For turn lanes, two (2) available storage values are stated: the first represents the stripe storage; the second is the effective storage, or the length physically available regardless of striping, such as a center turn lane upstream of a striped left-turn lane at an intersection. Although through travel lanes have no storage defined by striping, two (2) values are reported for storage: the first is the distance to an upstream driveway; the second is the distance to an upstream public street intersection.

Findings

The AM and PM peak hour 95th percentile queues are presented in Table 6 below. SimTraffic output sheets are provided in Appendix I.

TABLE 6 – 95TH PERCENTILE QUEUING ANALYSIS

Intersection (Traffic Control Type)	Approach/ Movement	Striped/Effective Storage (feet)	Queue in feet (AM/PM)		
			2020 Adjusted	2024 Pre-Development	2024 Post-Development
Highway 30/ NE Nehalem Street (Signalized)	EB Left	190	75/125	50/100	75/75
	EB Thru+Right	185	50/125	50/100	50/50
	WB Left	190	50/75	75/75	75/75
	WB Thru+Right	45/190	100/125	100/125	100/100
	NB	170/315	75/75	75/75	75/75
	SB Thru+Left	100/400	75/75	75/100	75/75
	SB Right	0/100	50/50	50/75	50/50
Highway 30/ NE Van Street (TWSC)	EB Left	200/375	25/50	25/50	25/25
	WB Right	660	0/0	0/0	0/0
	NB	0/90	0/0	0/0	0/0
	SB Thru+Left	545	50/50	50/50	75/50
	SB Right	270/300	0/0	0/0	0/0
Highway 30/ Loop Ramp to Swedetown Road (TWSC)	NBR	615	0/0	0/0	0/0

TABLE 6 – 95TH PERCENTILE QUEUING ANALYSIS					
Intersection (Traffic Control Type)	Approach/ Movement	Striped/Effective Storage (feet)	Queue in feet (AM/PM)		
			2020 Adjusted	2024 Pre-Development	2024 Post-Development
Swedetown Road/ Highway 30 Loop Ramp (TWSC)	WB Left	625	0/0	0/0	0/0
	NB	700	50/25	50/25	50/50
NE 5th Street/Stimson Mill Road/ N Nehalem Street (AWSC*)	EB	280/650	0/0	0/25	0/0
	WB	230/430	50/50	75/75	75/50
	SB	300/660	125/50	25/50	50/125
NE 5th Street/ NE Van Street (TWSC)	EB Left	375/790	0/0	0/0	0/0
	WB Left	220/390	0/25	0/0	25/0
	NB	525	75/50	75/50	75/75
	SB	150/360	25/25	25/25	25/25

* This intersection does not have a STOP control on the northbound approach. However, for purposes of this study, we have evaluated this intersection as an AWSC intersection due to software limitations, resulting in comparable operations results to TWSC operations with STOP control on the eastbound and westbound approaches.

As presented in Table 6, existing queues are currently accommodated within the available storage. Future queues are also projected to be accommodated within existing storage areas.

Hermo Road Capacity

We collected road tube counts on Quincy Mayger Road just south of Hermo Road between Tuesday, November 17, 2020 and Thursday, November 19, 2020. The average daily volume was found to be 752 vehicles. This compares with the 2014 volume of 880 as presented in the County's Transportation System Plan, and may be lower due to COVID-19 impacts. Table 7 presents a summary of the existing bidirectional, daily traffic volumes on Quincy Mayger Road by vehicle classification.

TABLE 7 – BIDIRECTIONAL, DAILY TRAFFIC VOLUMES ON QUINCY MAYGER ROAD				
Vehicle Class	**Day 1 (November 17, 2020)**	**Day 2 (November 18, 2020)**	**Day 3 (November 19, 2020)**	**3-Day Average**
Class 1: Motorcycles	1	1	2	1
Class 2-3: Passenger Vehicles	584	649	600	611
Class 4: Buses	16	21	10	14
Class 5: Two-axle Trucks	116	113	126	115
Class 6-7: >2-Axle Single-Unit Trucks	0	1	4	1
Class 8-10: Single-Trailer Trucks	15	11	8	10
Class 11-12: Multi-trailer Trucks	0	0	0	0
Class 13: >6-Axle Trucks	0	0	0	0
Total	**732**	**796**	**750**	**752**

A portion of existing traffic at this location is assumed to be traveling to and from Port Westward via Kallunki Road. With the improvement of Hermo Road, these trips will instead be routing to the Port via Hermo Road. We have estimated 40% of the vehicles at this location, or about 300 per day, will use Hermo Road in the future.

With the addition of 667 daily trips from Next Renewable Fuels, the volume on Hermo Road is estimated to be approximately 970 vehicles per day. With the proposed 12-foot travel lanes and 6-foot shoulders, the roadway is designed to accommodate safe movement of goods and volumes of over 3000 vehicles per day. Therefore, the planned improvements will provide sufficient capacity on Hermo Road to accommodate both site traffic and rerouted background traffic from Port Westward.

VII. MITIGATION AND RECOMMENDATIONS

All study area intersections are projected to operate within ODOT and Columbia County operations standards during the AM and PM peak hours with the addition of project trips. Therefore, no mitigation strategies are proposed.

With the planned improvements, Hermo Road will have adequate capacity to safely accommodate the volumes and truck traffic generated by the site, as well as traffic currently traveling to Port Westward.

VIII. APPENDIX

Appendix A. Figures

Appendix B. Scoping Material

Appendix C. Transit Information

Appendix D. Traffic Count Summaries

Appendix E. Seasonal Adjustment Calculations

Appendix F. Crash Data

Appendix G. Signal Information

Appendix H. Operations Calculations

Appendix I. Queuing Analysis

APPENDIX A

FIGURES

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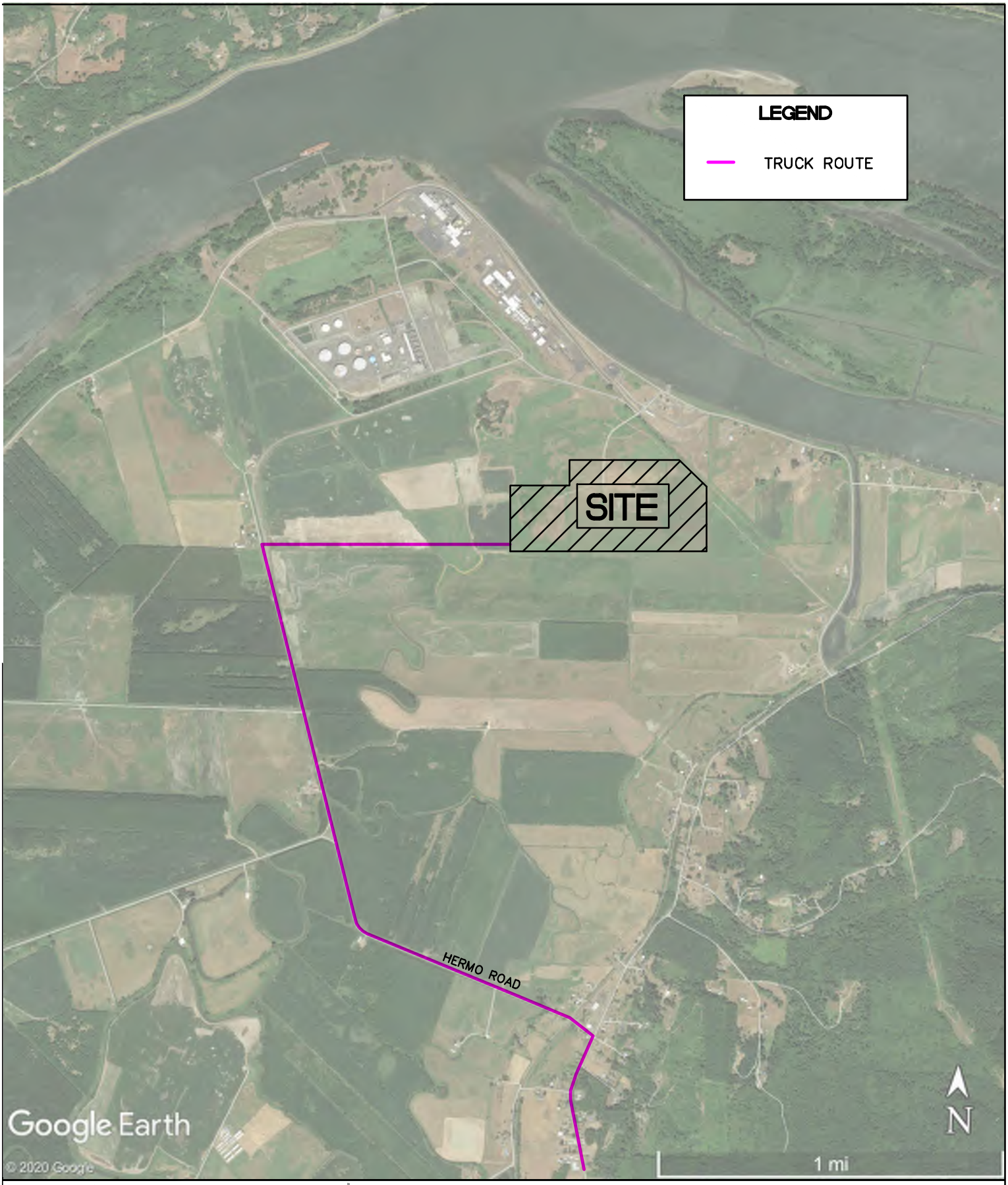
VICINITY MAP - STUDY AREA INTERSECTIONS

NEXT RENEWABLE FUELS
COLUMBIA COUNTY, OREGON

FIGURE 1A



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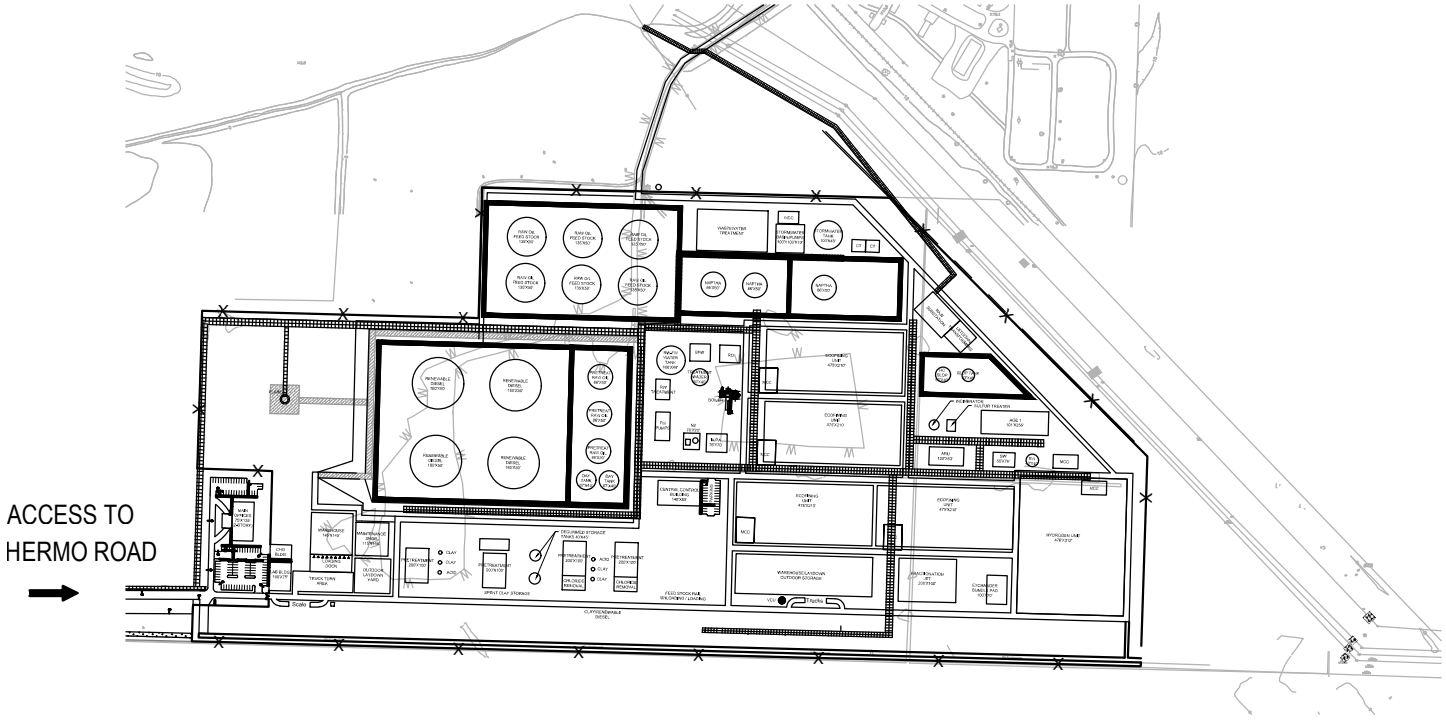
VICINITY MAP - PORT WESTWARD

PROJECT NAME
LOCATION

FIGURE
1B

NOT TO SCALE



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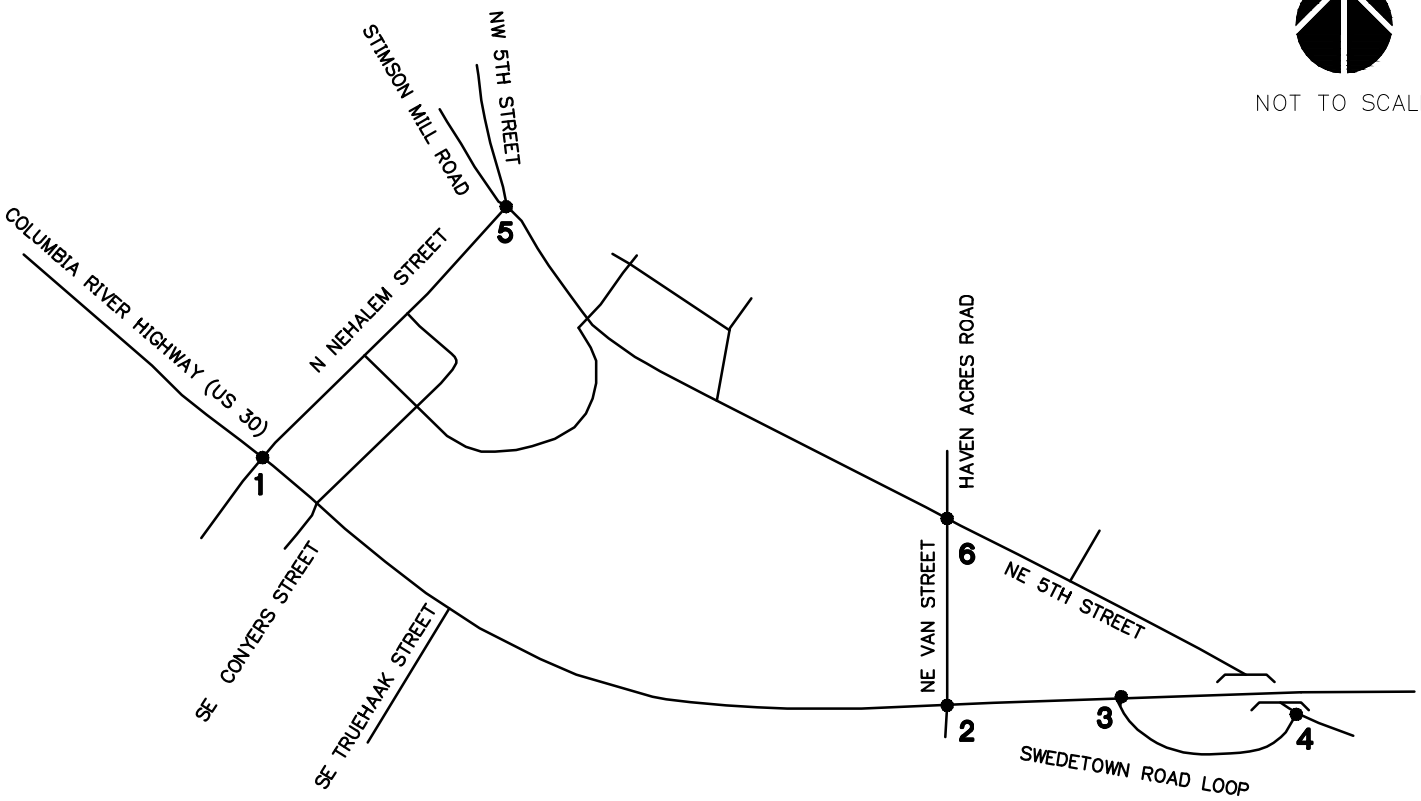
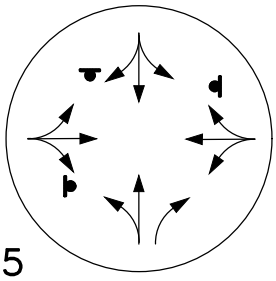
SITE PLAN

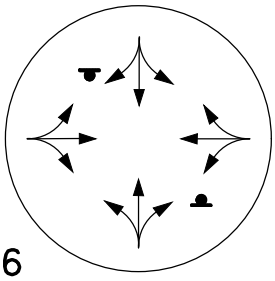
NEXT RENEWABLE FUELS
COLUMBIA COUNTY, OREGON

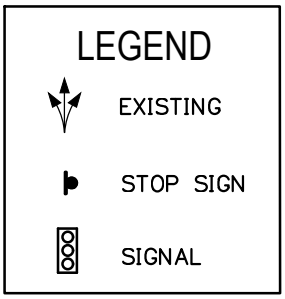
FIGURE
2

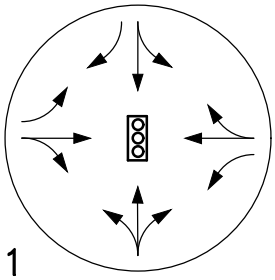
NOT TO SCALE

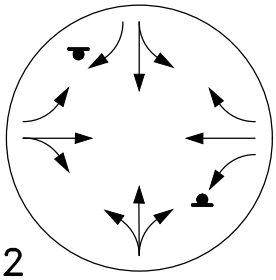


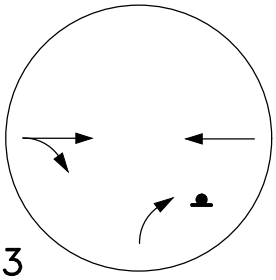


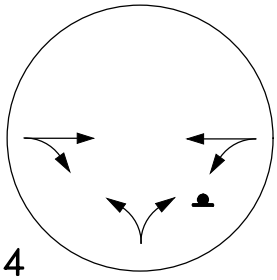












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EXISTING TRAFFIC CONTROL DEVICES + LANE CONFIGURATIONS

NEXT RENEWABLE FUELS
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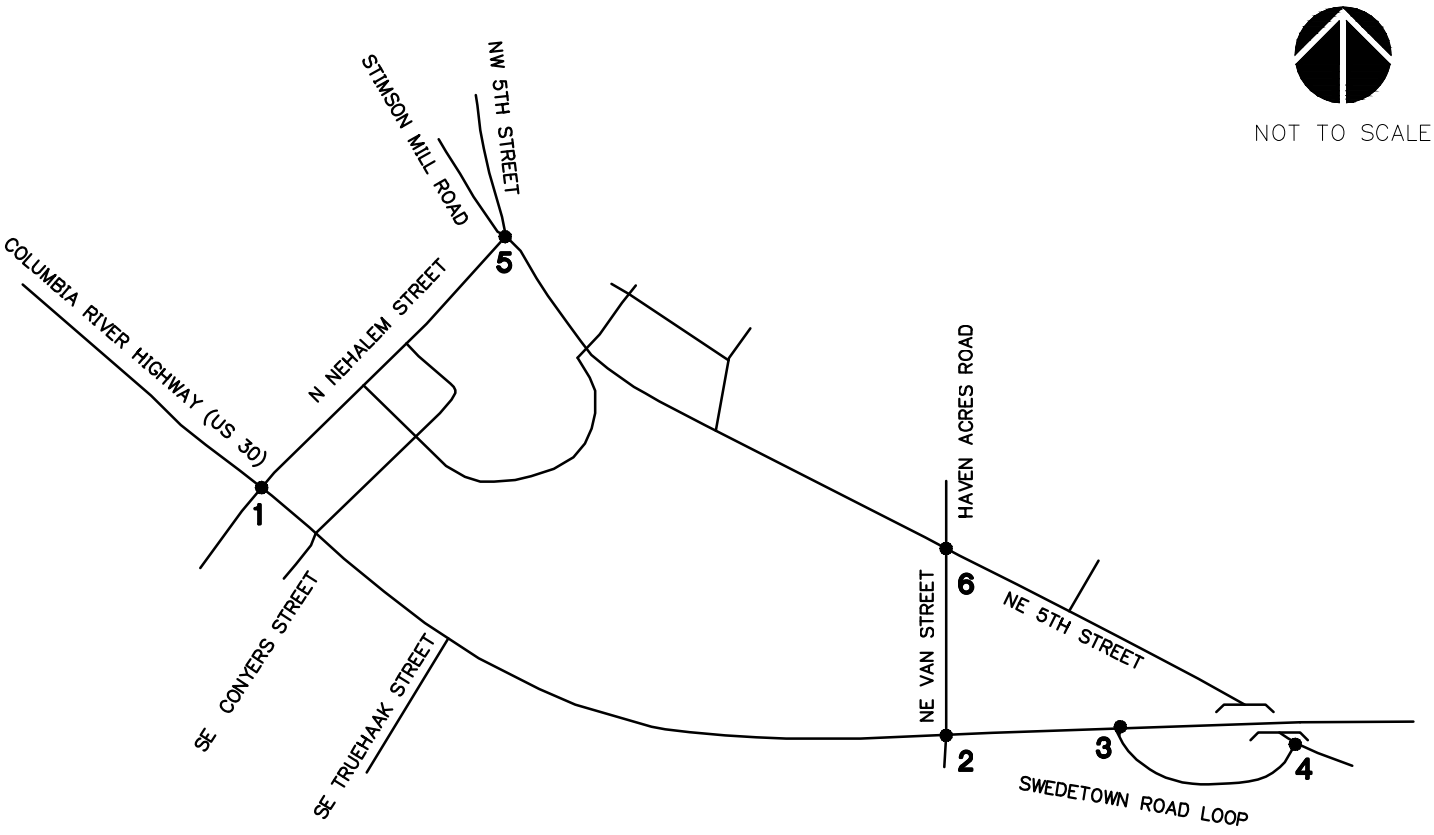
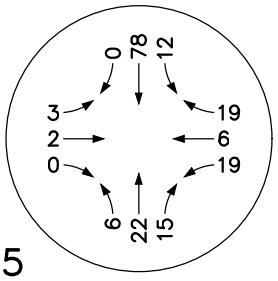
FIGURE 3





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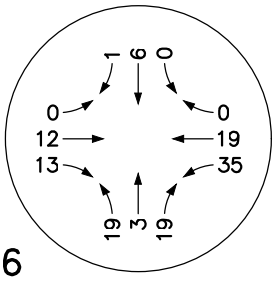

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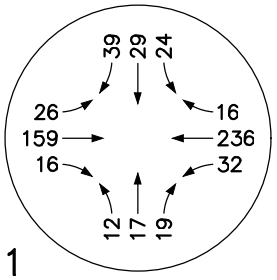

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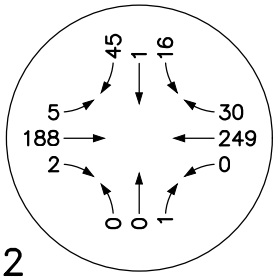

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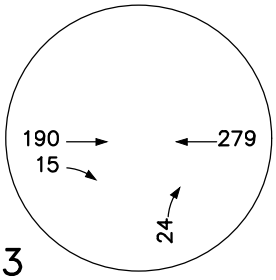

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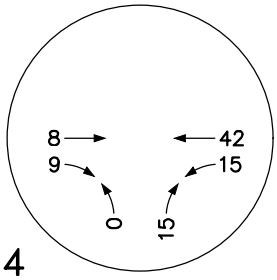

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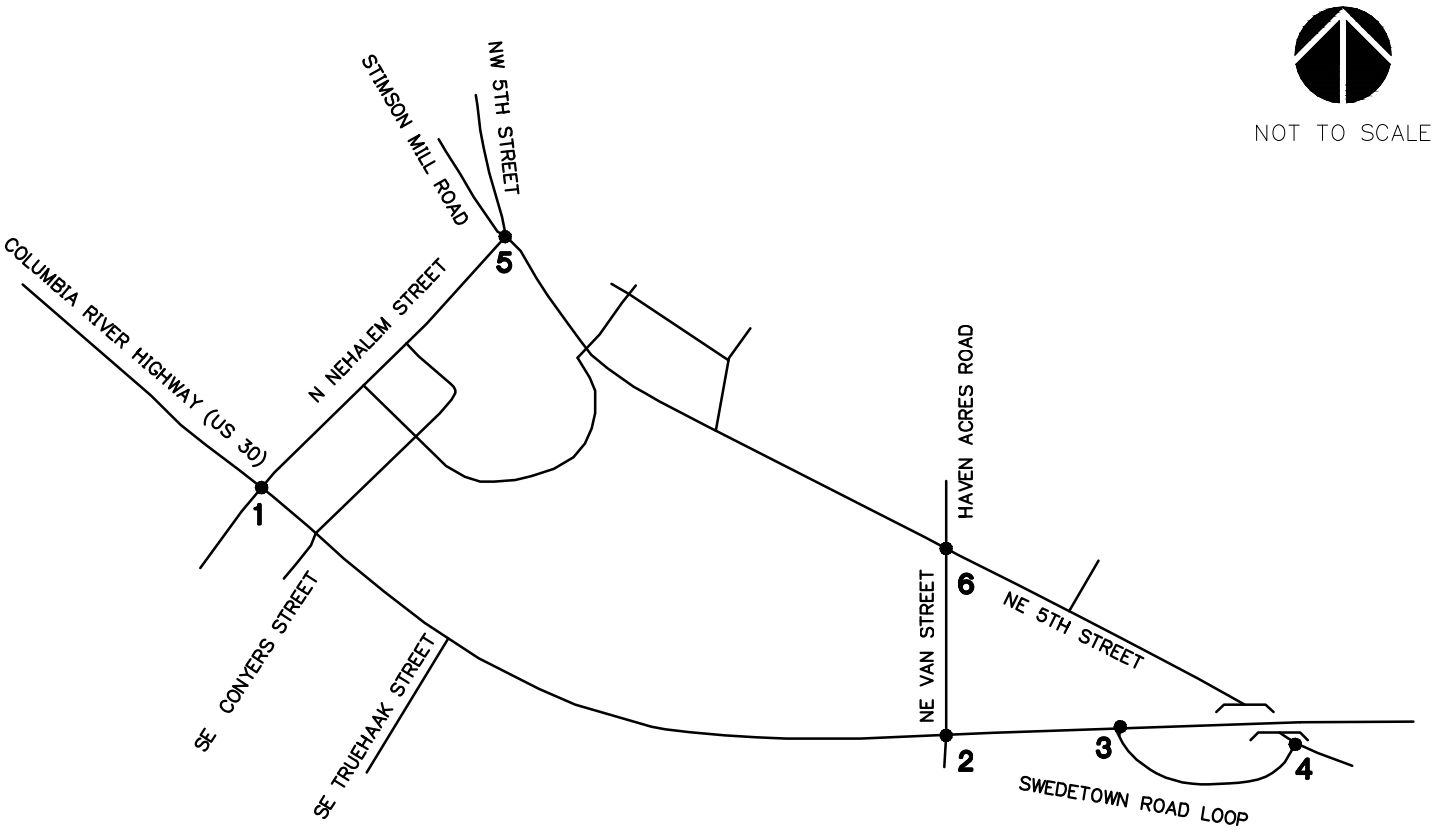
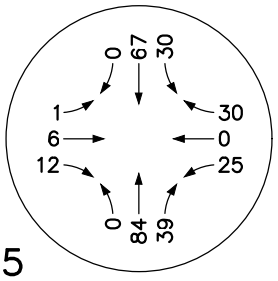
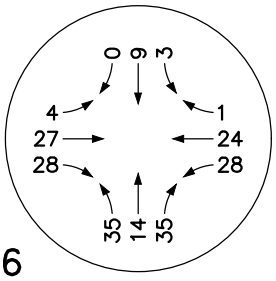
2020 EXISTING TRAFFIC VOLUMES - AM PEAK HOUR

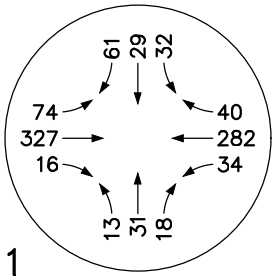
NEXT RENEWABLE FUELS
COLUMBIA COUNTY, OREGON

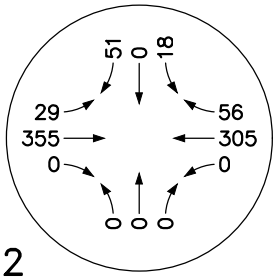
FIGURE
4A

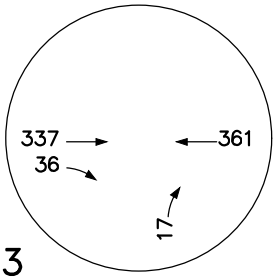


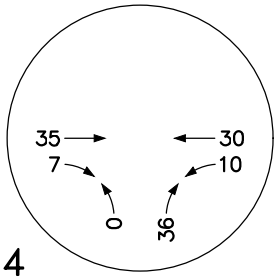












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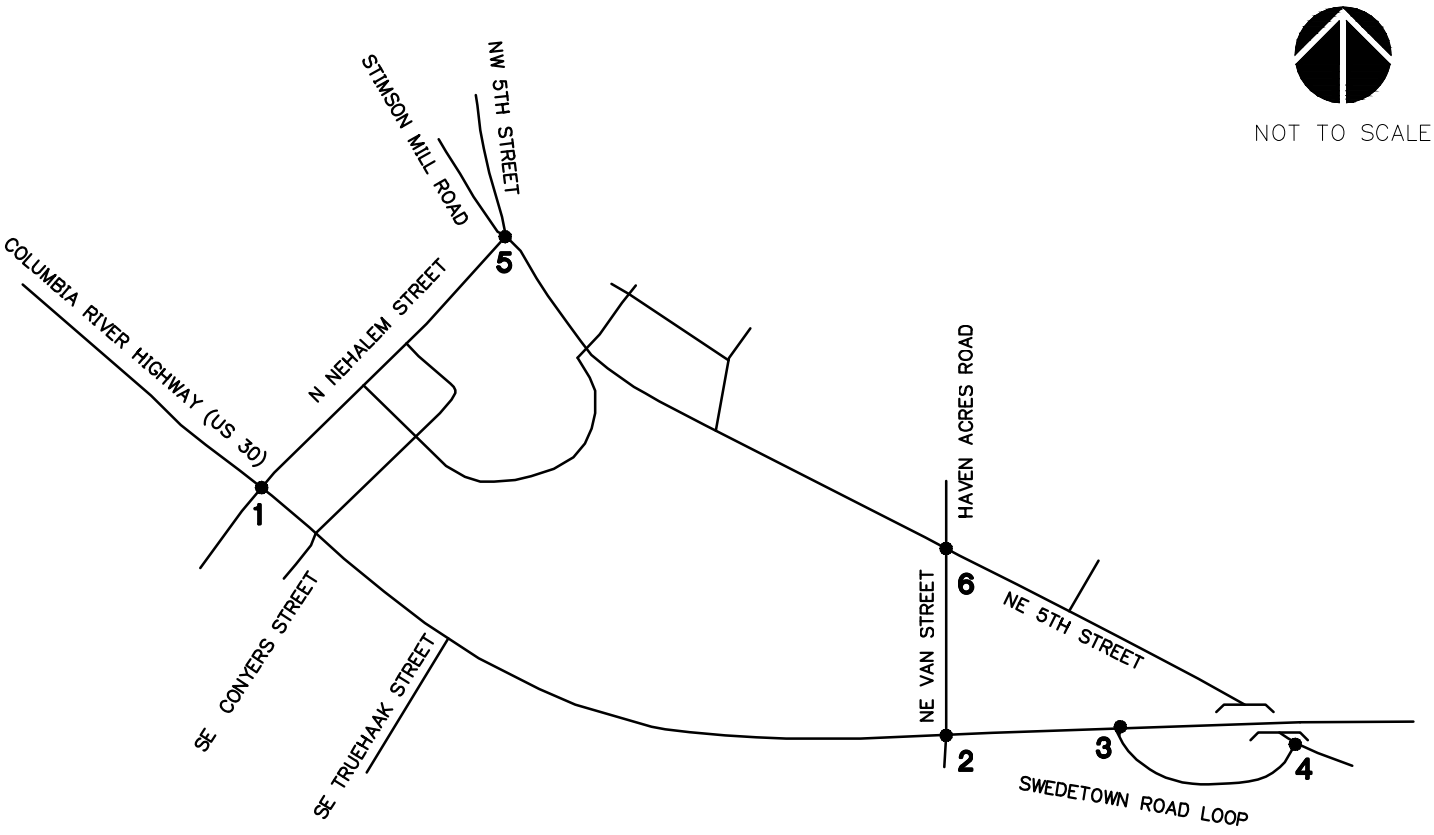
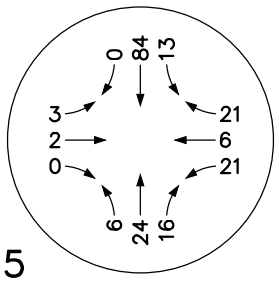
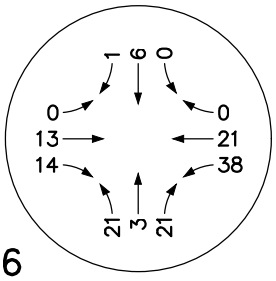
2020 EXISTING TRAFFIC VOLUMES - PM PEAK HOUR

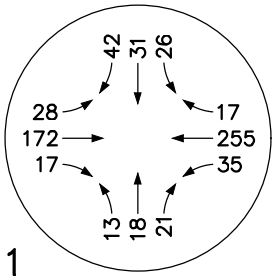
NEXT RENEWABLE FUELS
COLUMBIA COUNTY, OREGON

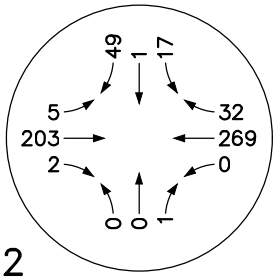
FIGURE
4B

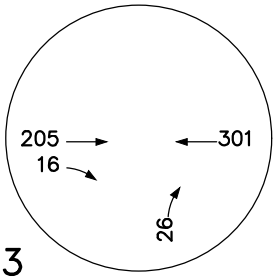


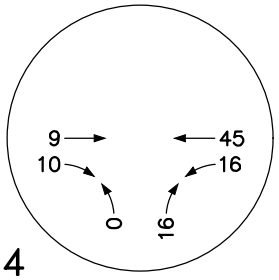












Note: Existing 2020 traffic adjusted by a modification factor of 1.08 based on comparison with 2019 traffic volumes.

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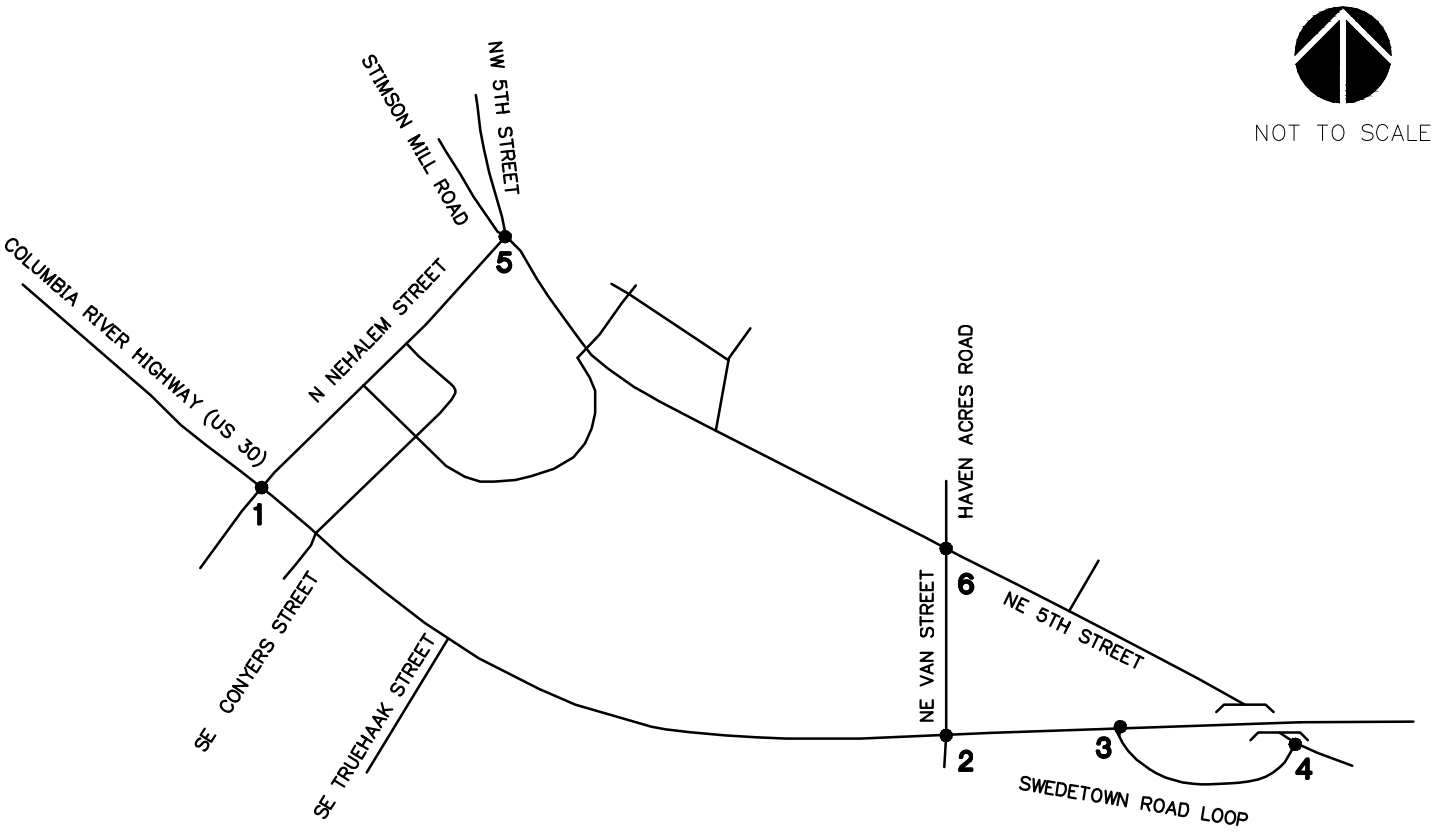
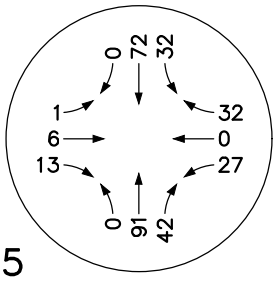
2020 COVID-19 ADJUSTED TRAFFIC VOLUMES - AM PEAK HOUR

NEXT RENEWABLE FUELS
COLUMBIA COUNTY, OREGON

FIGURE 5A





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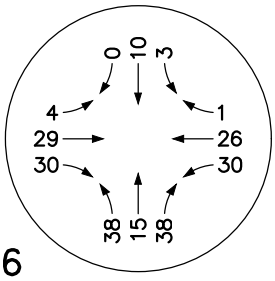

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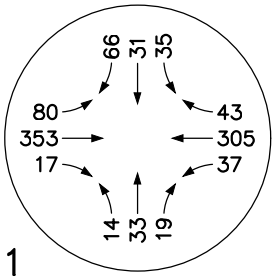

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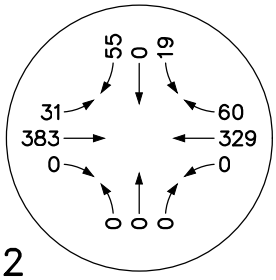

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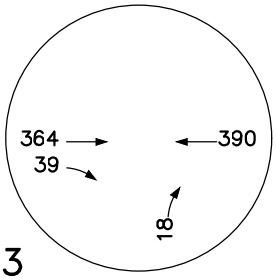

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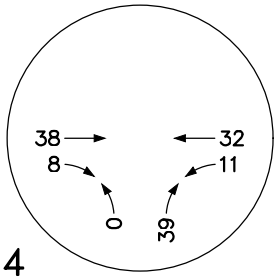

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Note: Existing 2020 traffic adjusted by a modification factor of 1.08 based on comparison with 2019 traffic volumes.

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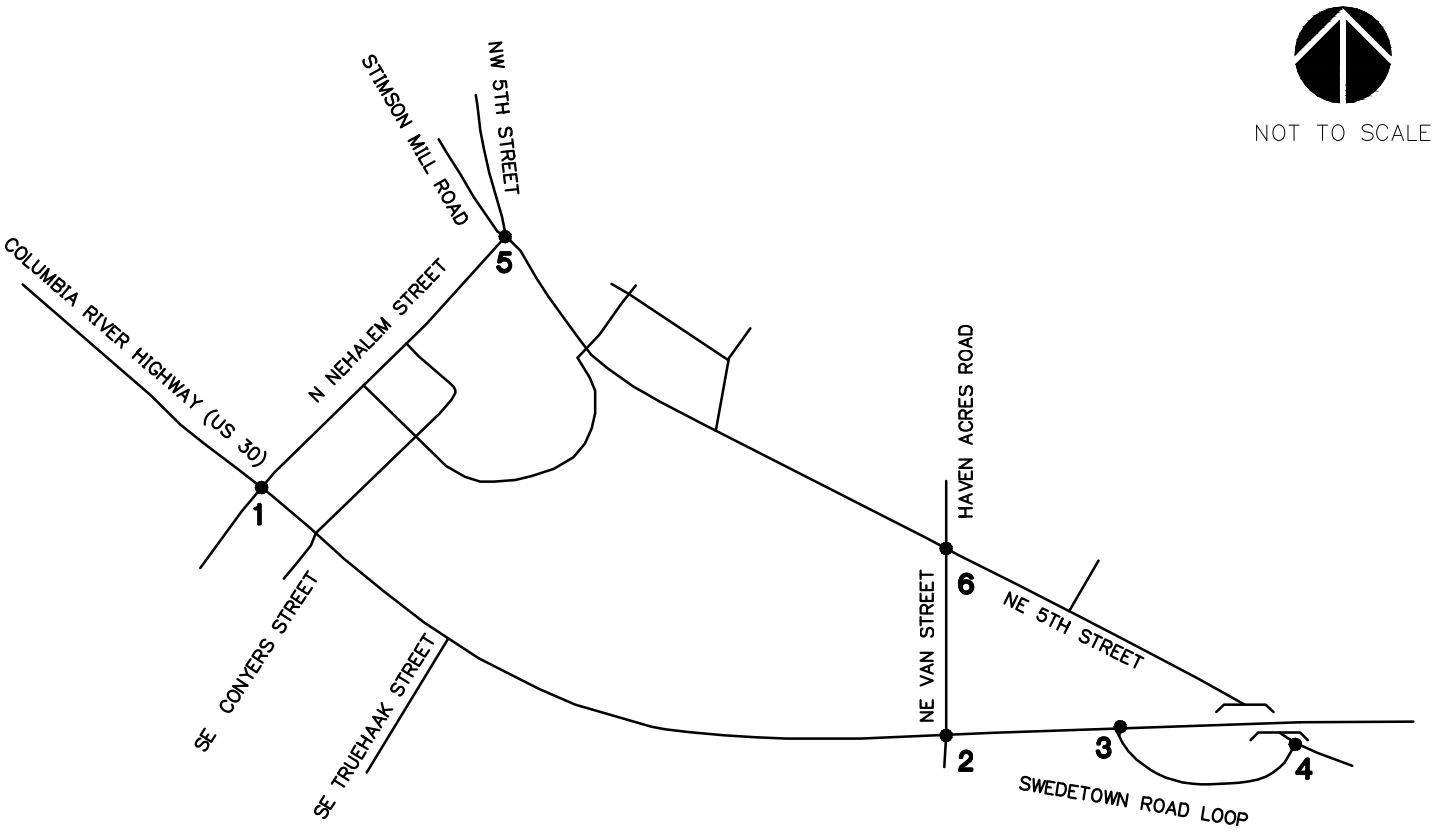
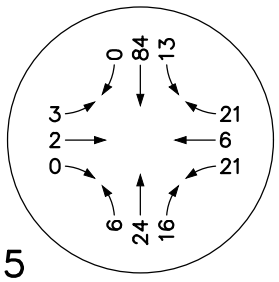
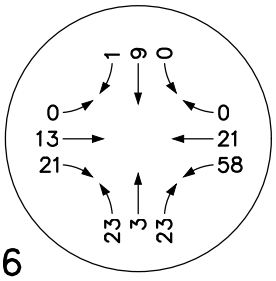
2020 COVID-19 ADJUSTED TRAFFIC VOLUMES - PM PEAK HOUR

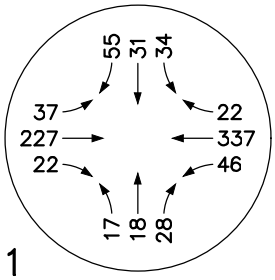
NEXT RENEWABLE FUELS
COLUMBIA COUNTY, OREGON

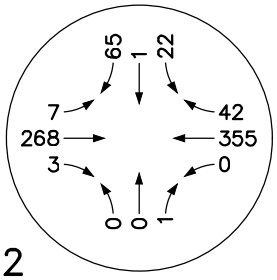
FIGURE
5B

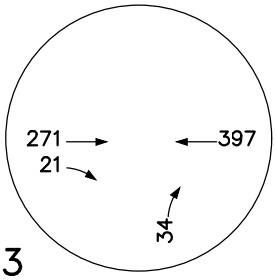


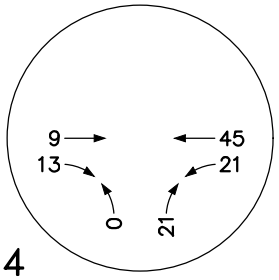












Note: Seasonal adjustment factor of 1.32 based on data for ATR #05–006 applied to 2020 adjusted traffic volumes.

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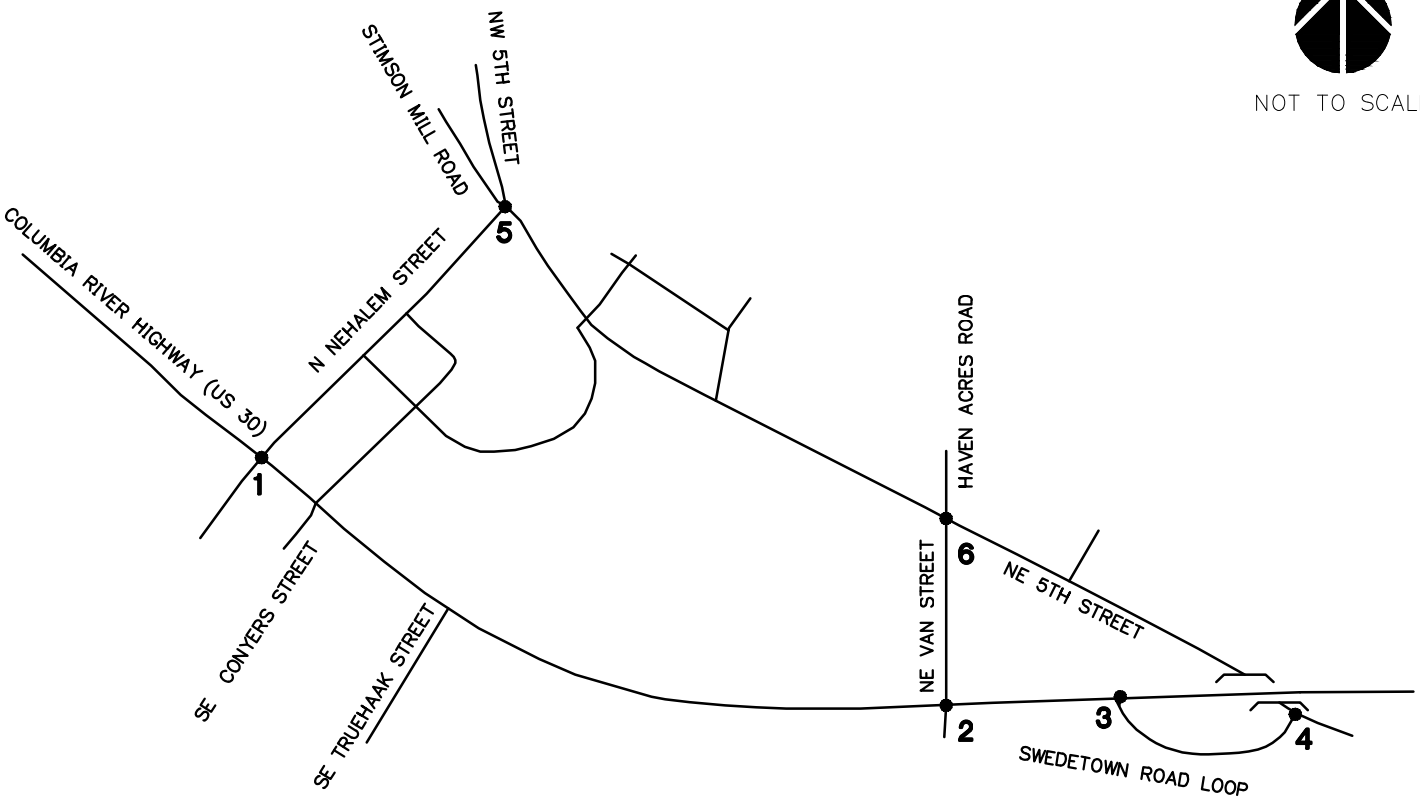
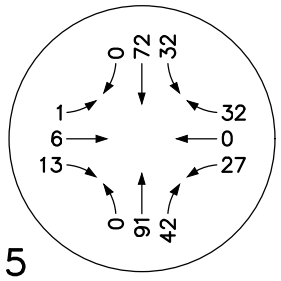
2020 SEASONALLY ADJUSTED TRAFFIC VOLUMES - AM PEAK HOUR

NEXT RENEWABLE FUELS
COLUMBIA COUNTY, OREGON

FIGURE
6A

NOT TO SCALE





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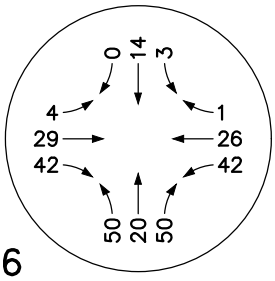

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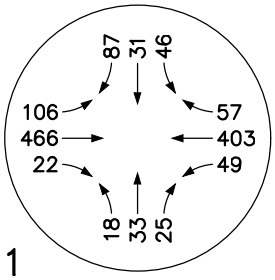

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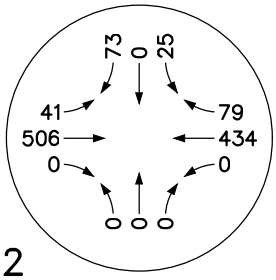

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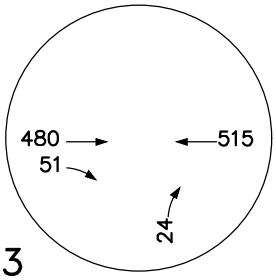

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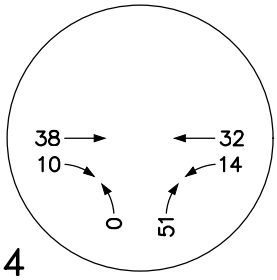

4

Note: Seasonal adjustment factor of 1.32 based on data for ATR #05–006 applied to 2020 adjusted traffic volumes.

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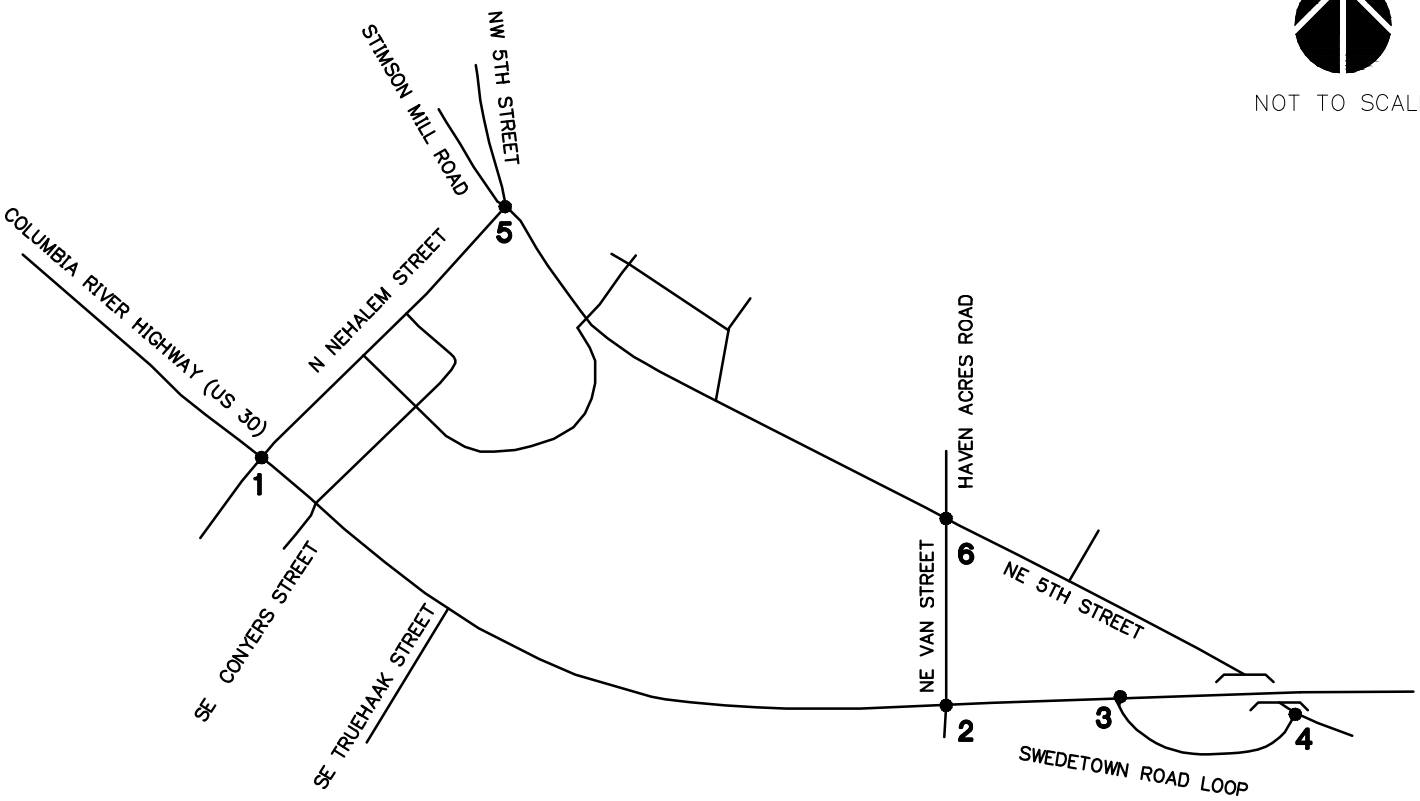
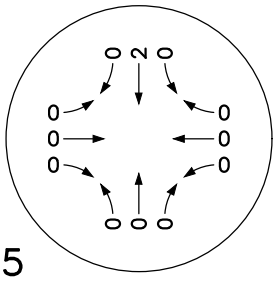
2020 SEASONALLY ADJUSTED TRAFFIC VOLUMES - PM PEAK HOUR

NEXT RENEWABLE FUELS
COLUMBIA COUNTY, OREGON

FIGURE
6B

NOT TO SCALE





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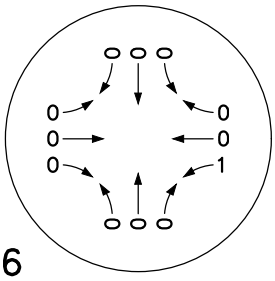

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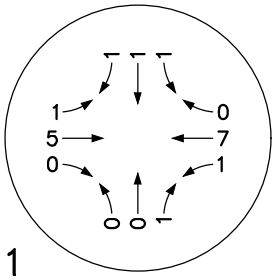

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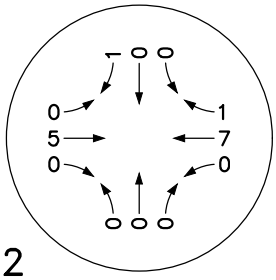

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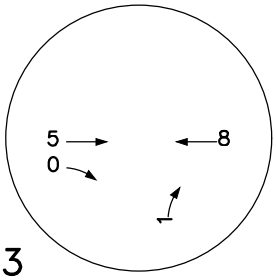

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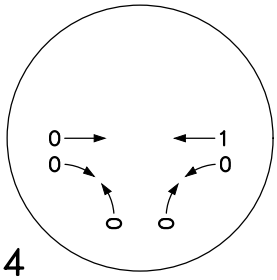

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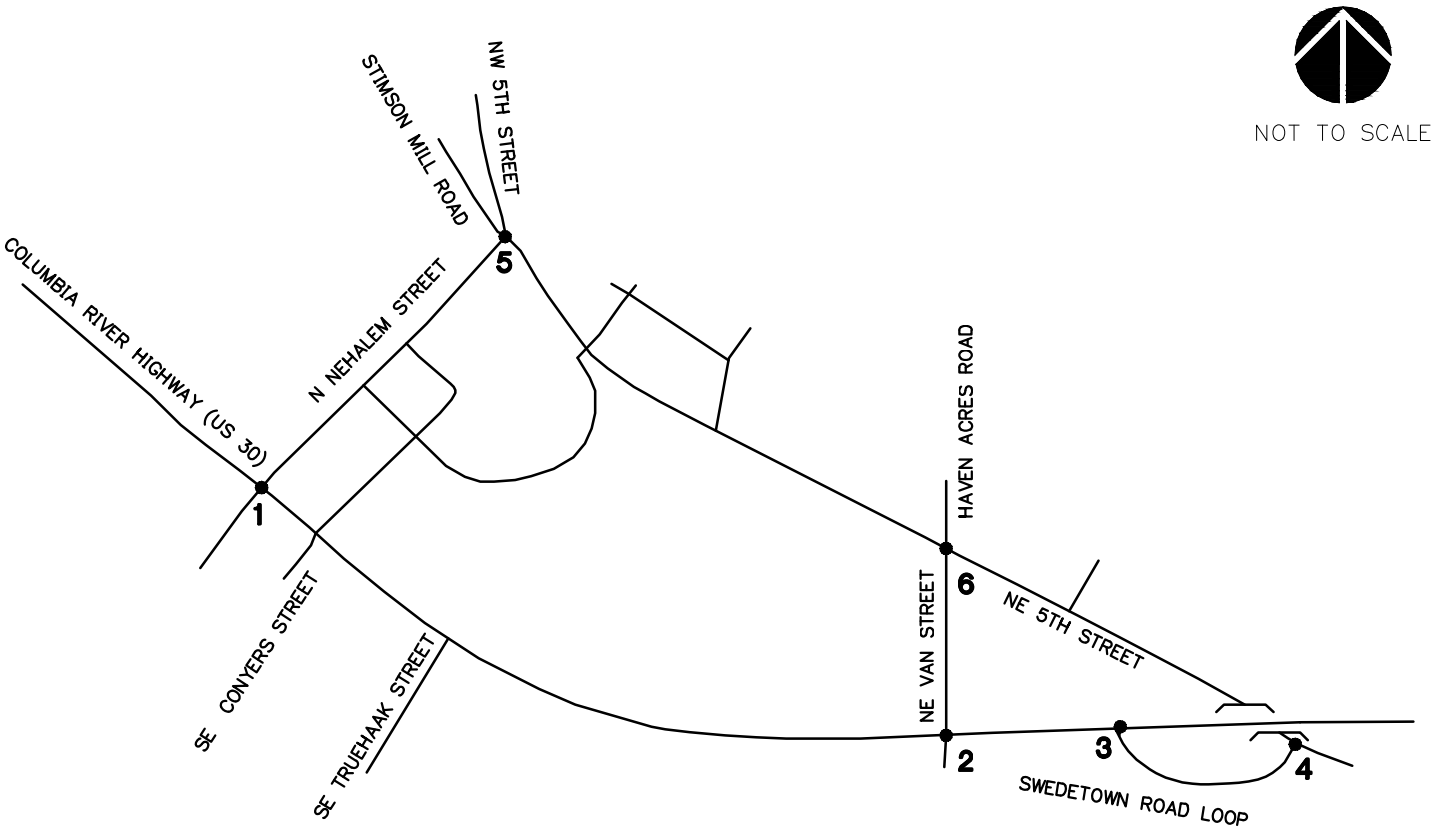
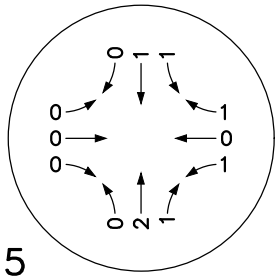
BACKGROUND GROWTH, 4 YEARS AT 0.5% PER YEAR - AM PEAK HOUR

NEXT RENEWABLE FUELS
COLUMBIA COUNTY, OREGON

FIGURE
7A





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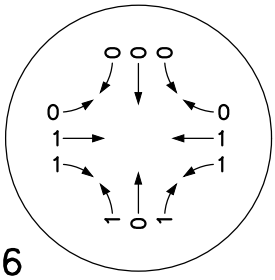

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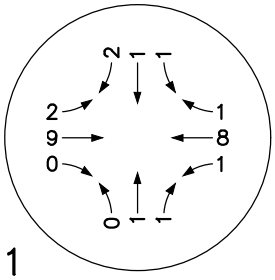

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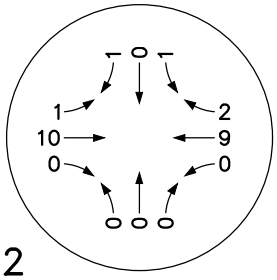

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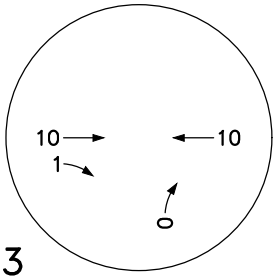

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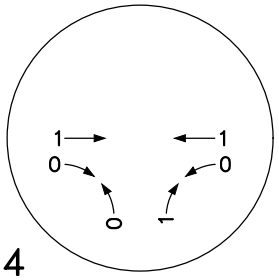

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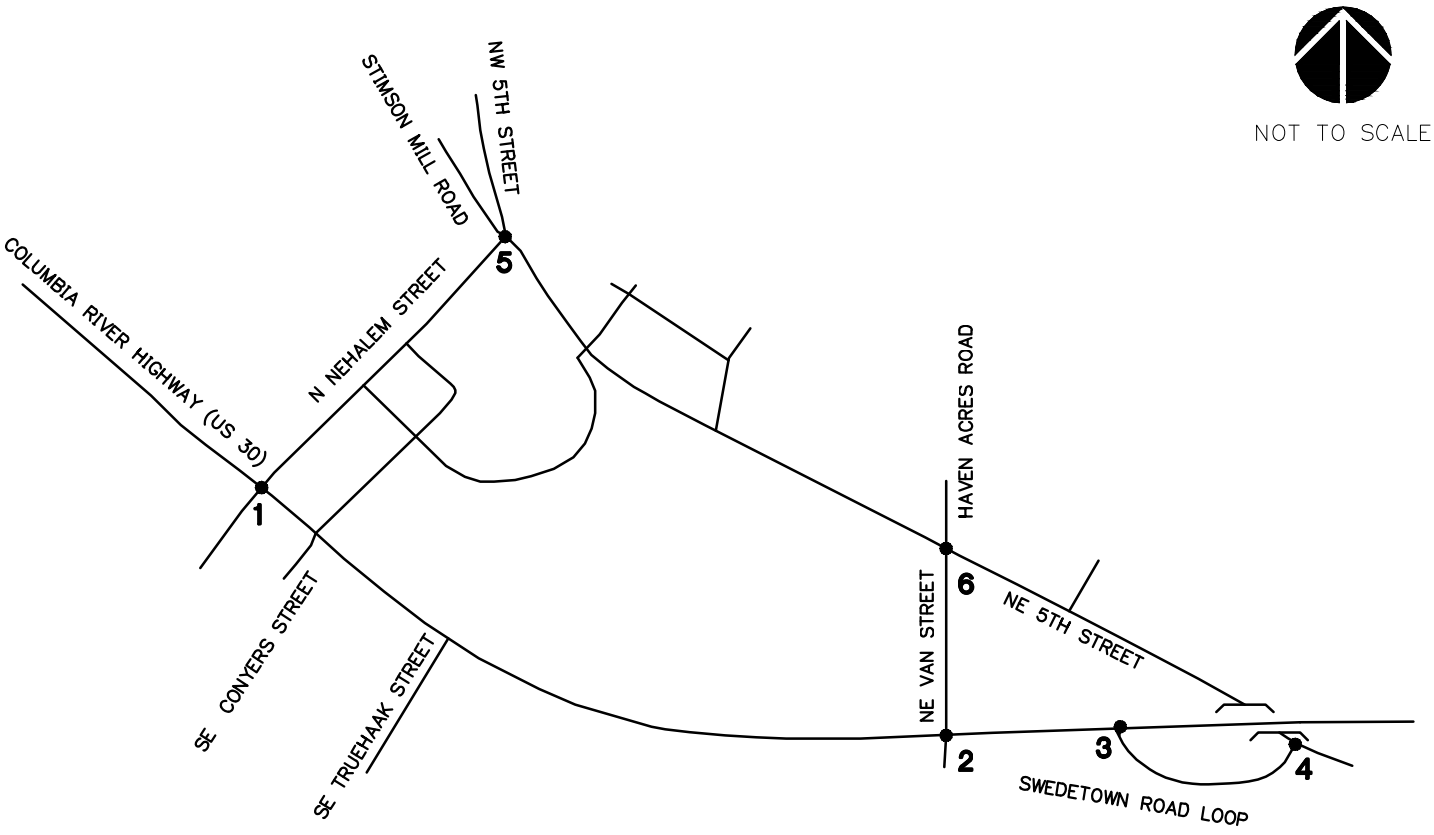
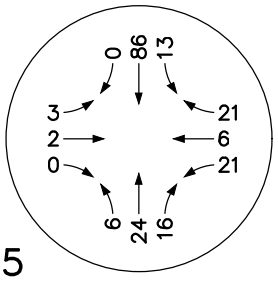
BACKGROUND GROWTH, 4 YEARS AT 0.5% PER YEAR - PM PEAK HOUR

NEXT RENEWABLE FUELS
COLUMBIA COUNTY, OREGON

FIGURE
7B





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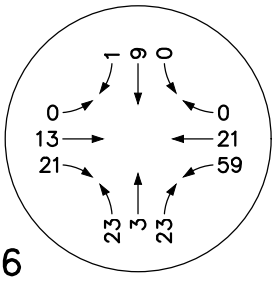

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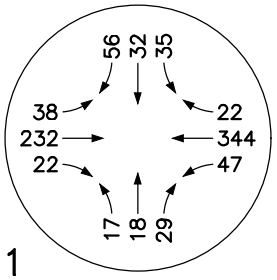

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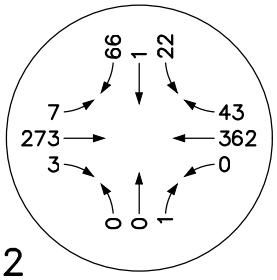

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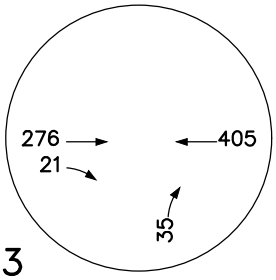

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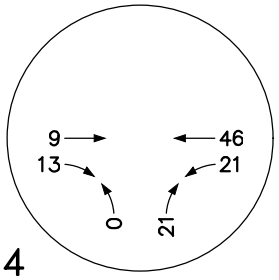

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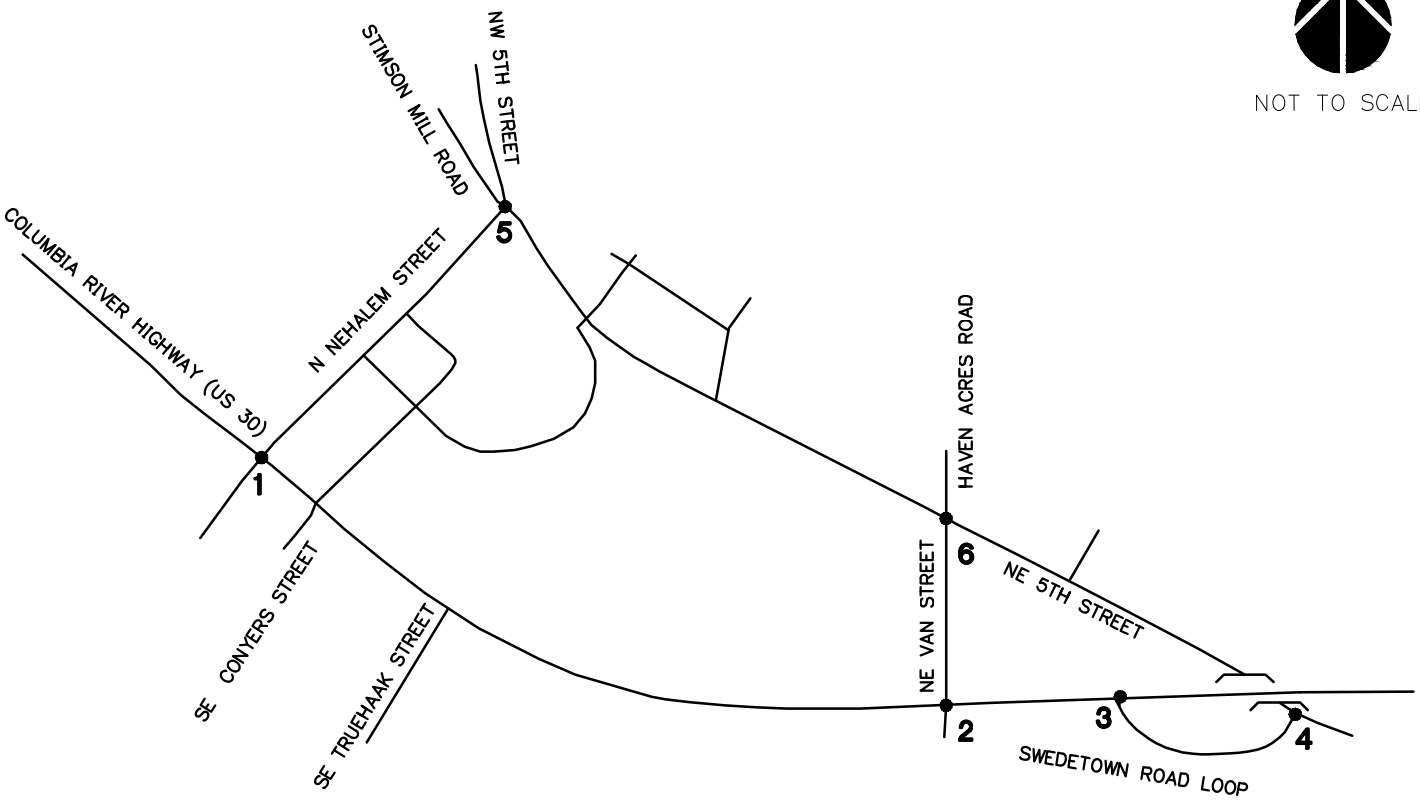
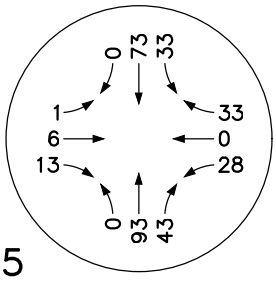
2024 PRE-DEVELOPMENT TRAFFIC VOLUMES - AM PEAK HOUR

NEXT RENEWABLE FUELS
COLUMBIA COUNTY, OREGON

FIGURE
8A

NOT TO SCALE





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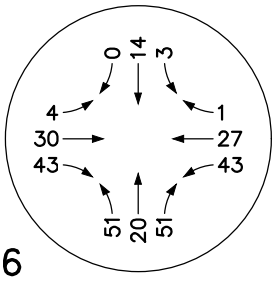

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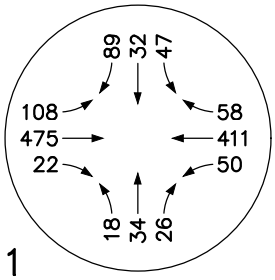

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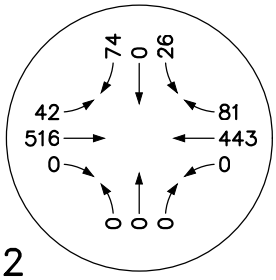

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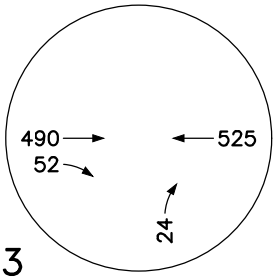

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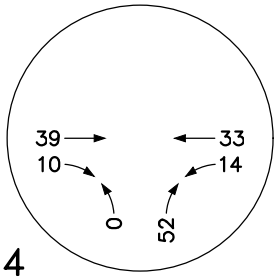

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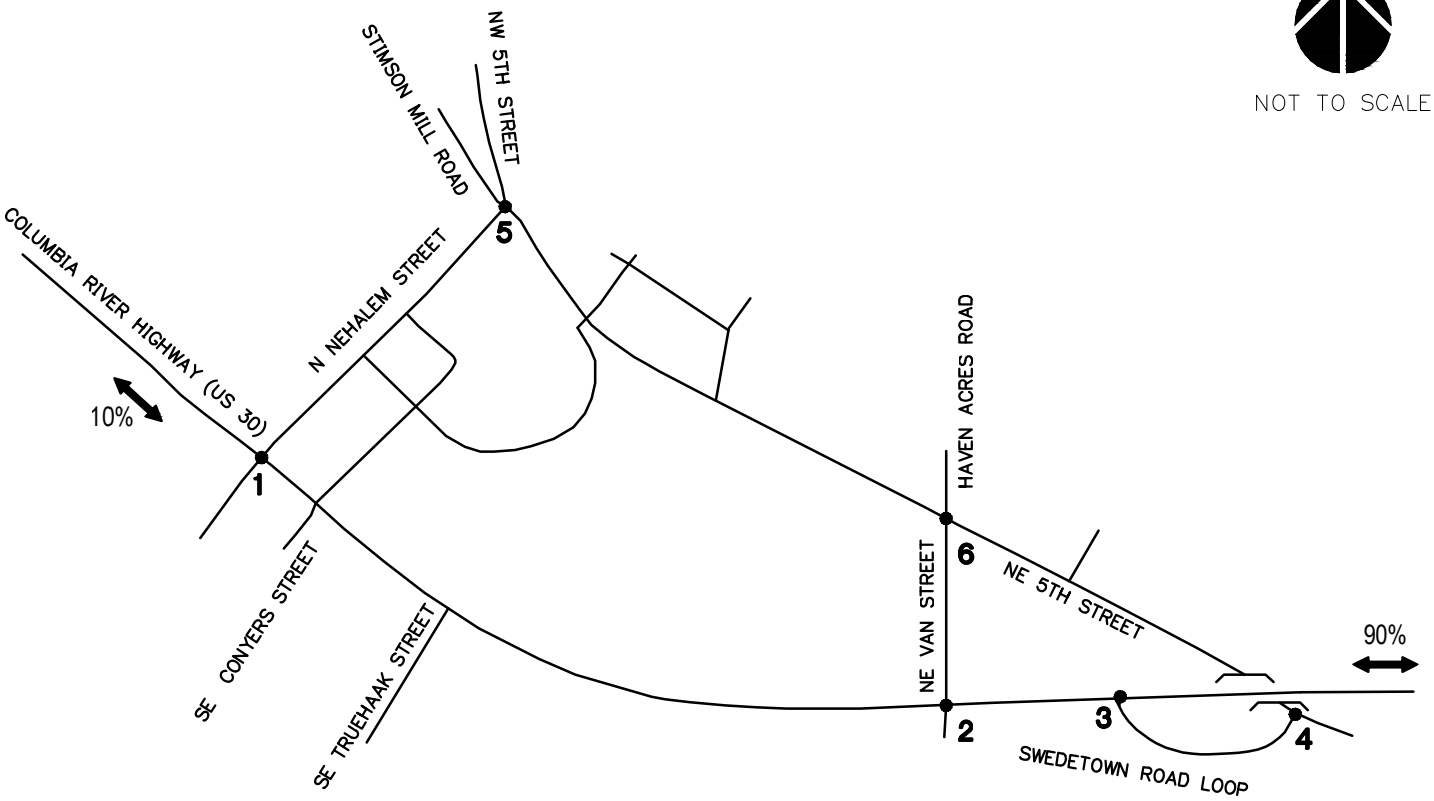
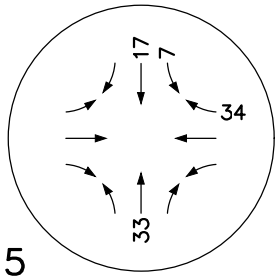
2024 PRE-DEVELOPMENT TRAFFIC VOLUMES - PM PEAK HOUR

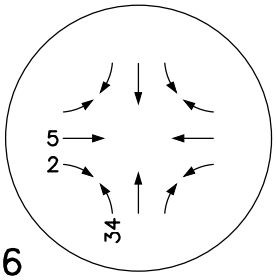
NEXT RENEWABLE FUELS
COLUMBIA COUNTY, OREGON

FIGURE
8B

NOT TO SCALE

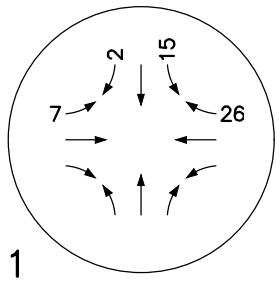


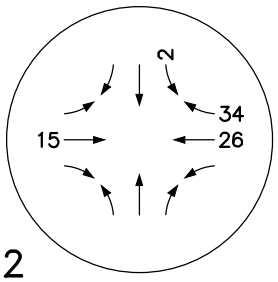


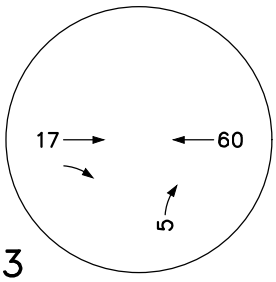


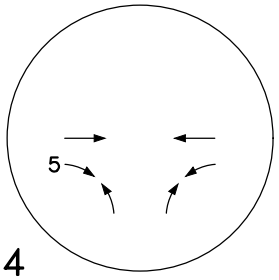
AM PEAK HOUR

Enter – 67
Exit – 24
Total – 91









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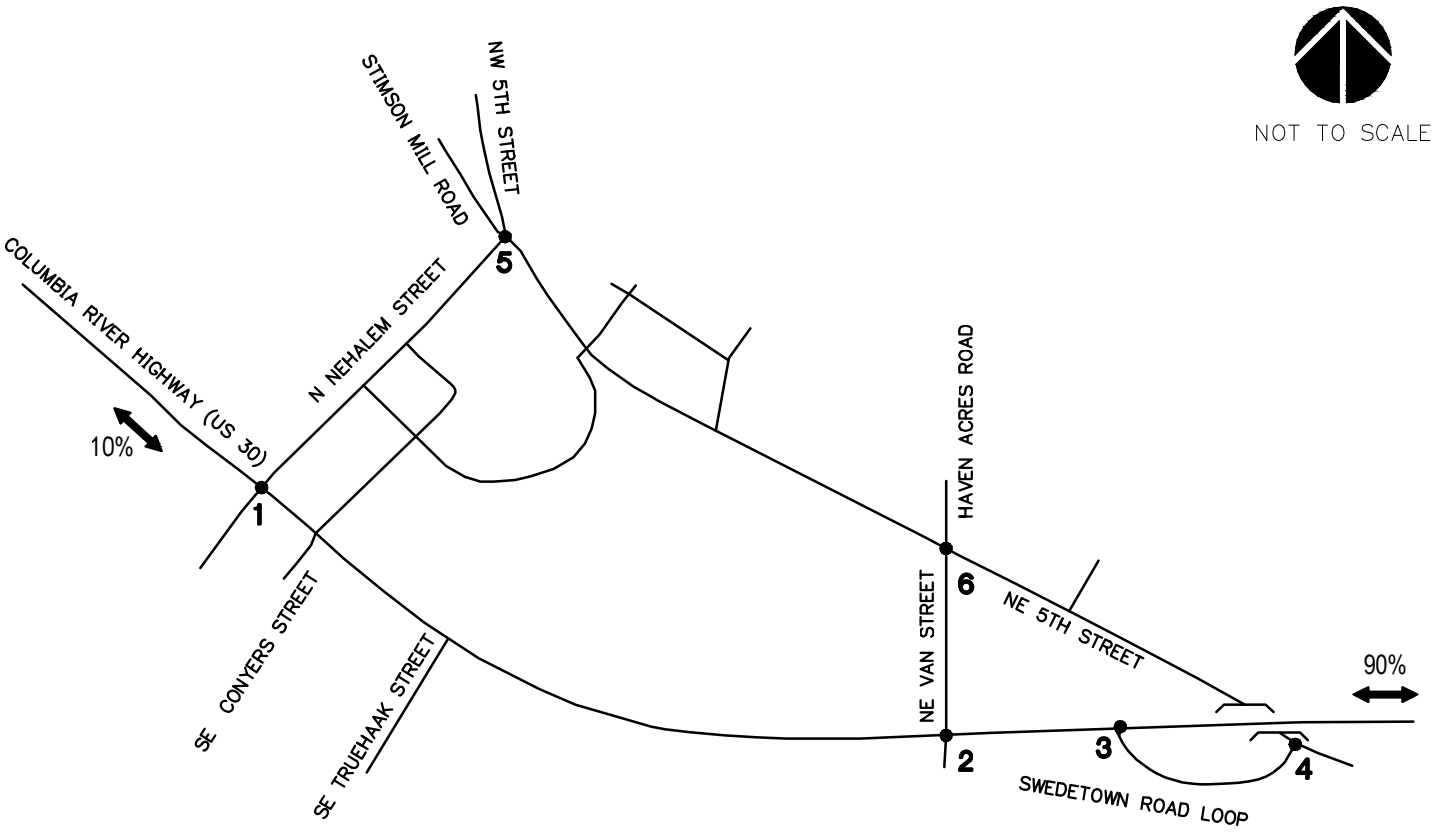
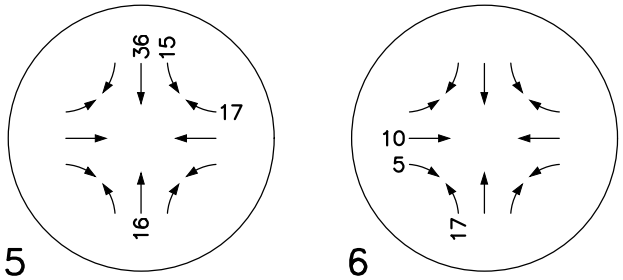
TRIP DISTRIBUTION + TRAFFIC ASSIGNMENT - AM PEAK HOUR

NEXT RENEWABLE FUELS
COLUMBIA COUNTY, OREGON

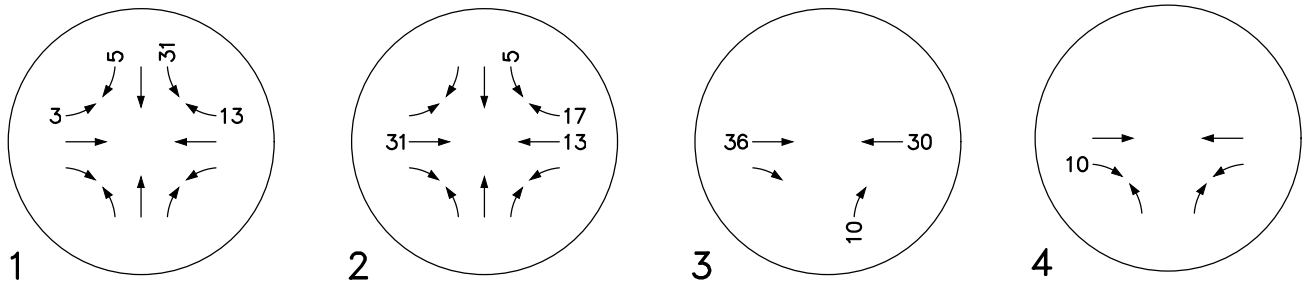
FIGURE
9A





PM PEAK HOUR

Enter – 33
Exit – 51
Total – 84



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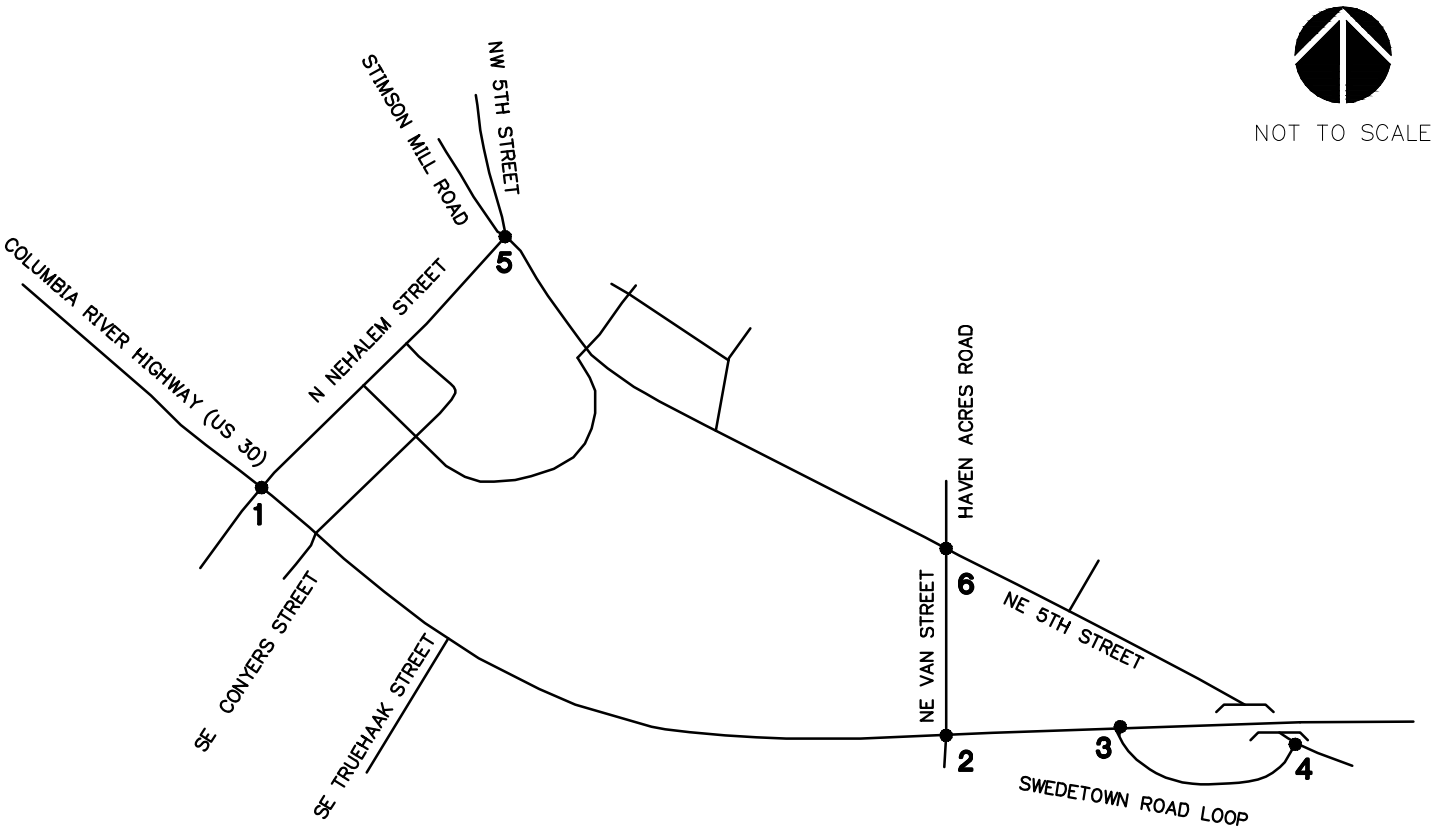
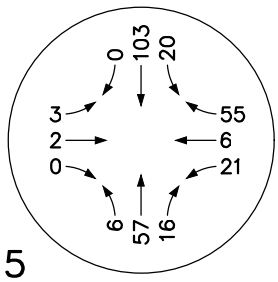
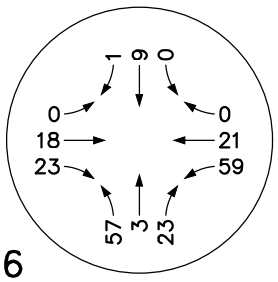
TRIP DISTRIBUTION + TRAFFIC ASSIGNMENT - PM PEAK HOUR

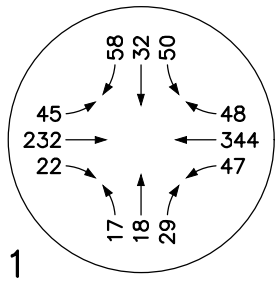
NEXT RENEWABLE FUELS
COLUMBIA COUNTY, OREGON

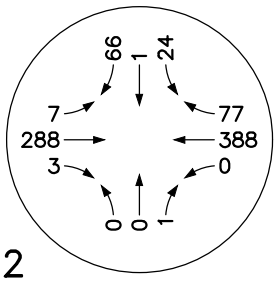
FIGURE
9B

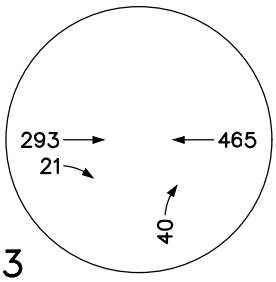


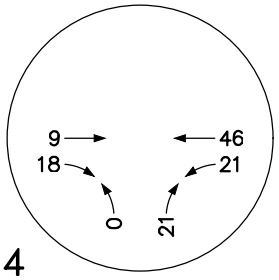












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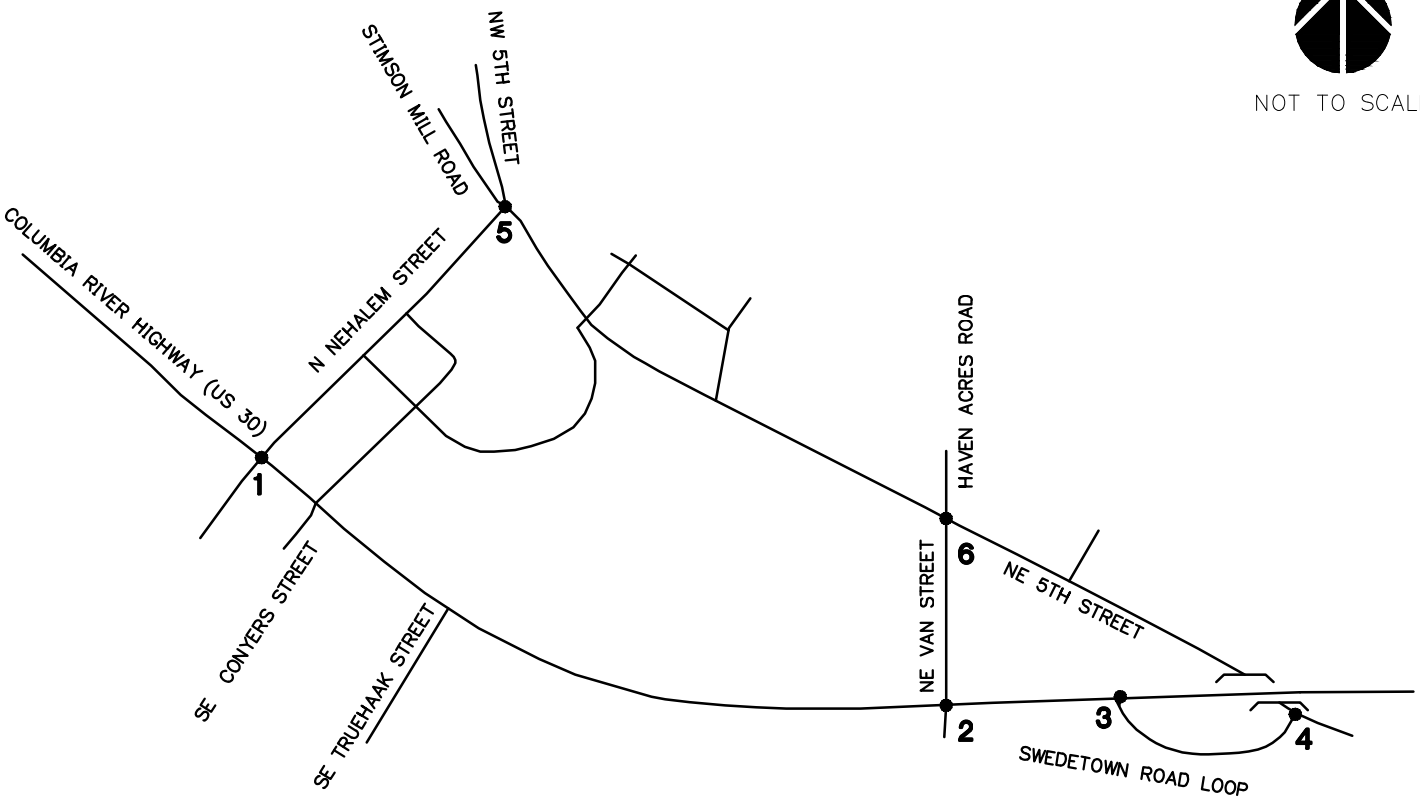
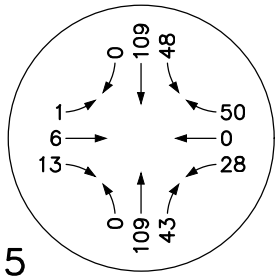
2024 POST-DEVELOPMENT TRAFFIC VOLUMES - AM PEAK HOUR

NEXT RENEWABLE FUELS
COLUMBIA COUNTY, OREGON

FIGURE
10A

NOT TO SCALE





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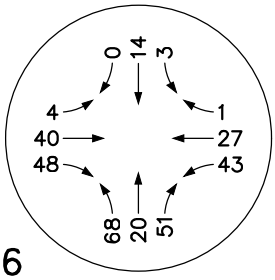

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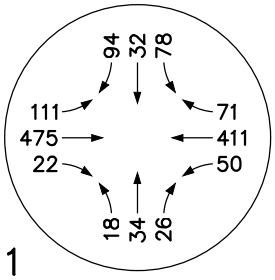

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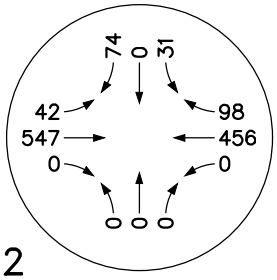

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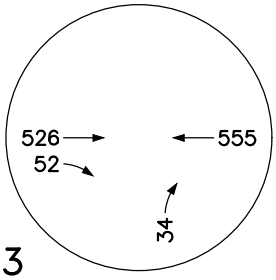

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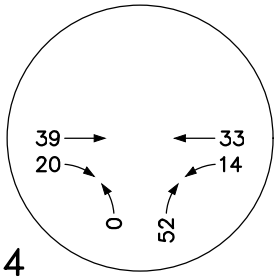

4

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MACKENZIE.

DATE: 1.14.2021
DRAWN BY: JHA
CHECKED BY: JTJ
JOB NO: 220031500

2024 POST-DEVELOPMENT TRAFFIC VOLUMES - PM PEAK HOUR

NEXT RENEWABLE FUELS
COLUMBIA COUNTY, OREGON

FIGURE
10B

APPENDIX B

SCOPING MATERIAL

MACKENZIE. 60 YEARS

DESIGN DRIVEN I CLIENT FOCUSED

November 30, 2020

Columbia County Public Works
Attention: Tristan Wood
1054 Oregon Street
St. Helens, OR 97051

Re: **NEXT Renewable Fuels**
Transportation Impact Analysis Scoping
Project Number 2200315.03

Dear Tristan:

Mackenzie has prepared this letter to present the proposed scope ahead of submitting a formal Transportation Impact Analysis (TIA) for the proposed NEXT Renewable Fuels site at the Port Westward Industrial Park near Clatskanie in Columbia County, Oregon.

INTRODUCTION

NEXT Renewable Fuels is proposing a production facility that converts recycled organic materials into liquid fuels. The site is located south of the PGE Clatskanie and Westward power stations. The site will have access to Hermo Road with secondary access to Kallunki Road. The facility is also proposing to utilize an offsite rail spur.

TRIP GENERATION

NEXT Renewable Fuels provided their projected staff schedule for the proposed facility, as well as projections of truck trips per day. The facility will have 25 management staff, 9 office/clerical staff, 13 operators, and 36 maintenance staff, for a total of 83 staff working between 8 AM and 5 PM. There will be two (2) weekday and weekend shifts of two (2) processing shift managers, two (2) security staff, and 31 operators; the first shift will be between 6 AM and 6 PM, and the second shift will be between 6 PM and 6 AM. The total staff count will be 223.

In reviewing the staffing schedules, the proposed fuel production facility will have trip rates consistent with those presented in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual,* 10th Edition for a "Manufacturing" (ITE LUC 140) facility on a "per employee" basis. Per ITE, the number of employees is "the total number of persons employed at a facility, not just those in attendance at the particular hour or day the data are collected."

Table 1 presents the trip generation estimates for the proposed NEXT Renewable Fuels production facility based on ITE's "Manufacturing" (LUC 140) use per number of employees.

TABLE 1 – TRIP GENERATION ESTIMATES									
Land Use	ITE LUC	Size	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Manufacturing	140	223 employees	80	11	91	11	73	84	551

As presented in Table 1, the proposed fuels production facility is estimated to generate 91 AM peak hour, 84 PM peak hour, and 551 daily trips. Up to 20 trucks will access the site daily. Most of those 20 trucks will be smaller single-unit trucks making deliveries. Five (5) semi-trucks will carry clay to the site per day, and one (1) additional semi-truck will account for an additional delivery per day, for a total of six (6) semi-trucks per day.

Per the 2017 Columbia County Transportation System Plan (TSP), Volume 2, Section P, a TIA will be required for any development generating more than 25 AM or PM peak hour trips, more than 400 daily trips, and for any projected increase of five (5) trips by vehicles exceeding 26,000 pounds. Therefore, a TIA will be required for the proposed NEXT Renewable Fuels production facility.

TRANSPORTATION IMPACT ANALYSIS

The assumptions for the TIA in support of the proposed NEXT Renewable Fuels site in Columbia County are presented below.

Study Area Intersections

The study area will include all intersections impacted by at least 50 peak hour trips. The route for both employees and trucks will include U.S. Highway 30, NE Van Street, NE 5th Street, Beaver Falls Road, Quincy Mayger Road, and Hermo Road. We assume most of the truck traffic as well as employees will route to and from the east on Highway 30. The following intersections are proposed for the study area:

1. Highway 30/NE Van Street
2. Highway 30/Nehalem Street
3. Highway 30/Swedetown Road Loop Ramp
4. NE 5th Street/Stimson Mill Road/N Nehalem Street

Study Area Roadways

An evaluation of roadway conditions with the proposed project trips will also be included in the TIA. Specifically, we will evaluate the segment of Hermo Road between Quincy Mayger Road and the site access to ensure the planned County improvements will adequately serve future trips.

Both Beaver Falls Road between Stimson Street and Quincy Mayger Road, and Quincy Mayger Road are designated County Resource Routes for freight traffic. Highway 30 is designated an ODOT Freight Route and Federal Freight Route.

Analysis Periods

An analysis of the AM and PM peak hours of the street will be conducted for the following analysis periods:

- 2020 Existing
- 2022 Pre-development without NEXT Renewable Fuels
- 2022 Post-development with NEXT Renewable Fuels

Future Volumes

We will apply a 0.5% annual growth rate to estimate background growth from existing to pre-development conditions. This is a conservative background growth estimate as a 0.2% annual growth rate was established using ODOT's 2038 Future Volume Table for Highway 30 between 2016 and 2038. In-process trips for approved developments in the area will be added to the background traffic volumes as needed.

Analysis/Evaluation

Intersection capacity analysis and queuing will be examined for the study intersections using Synchro and SimTraffic software. We will obtain the traffic signal timing plans for the Highway 30/Nehalem Street intersection from ODOT. All analyses will be in conformance with ODOT standards as presented in the ODOT Analysis Procedures Manual (APM), Version 2. This includes seasonally adjusting existing traffic volumes along Highway 30 using data for Automatic Traffic Recorder (ATR) #05-006, located on Highway 30 about one (1) mile west of Rainier Road.

Crash data for the study area will be compiled and evaluated for safety. Intersection sight distance evaluations at study area and key intersections and the site access will be based on AASHTO methodology.

Mitigation options will be reviewed as needed.

INFORMATION REQUEST

Please provide in-process trip projections for approved developments which may impact the identified study area intersections.

Please contact me at 971-346-3781 or bahrend@mcknze.com if you have any questions or comments regarding the information presented in this letter.

Sincerely,

Brent Ahrend, PE
Associate Principal | Traffic Engineer

Enclosures: Site Plan
Staff Schedules

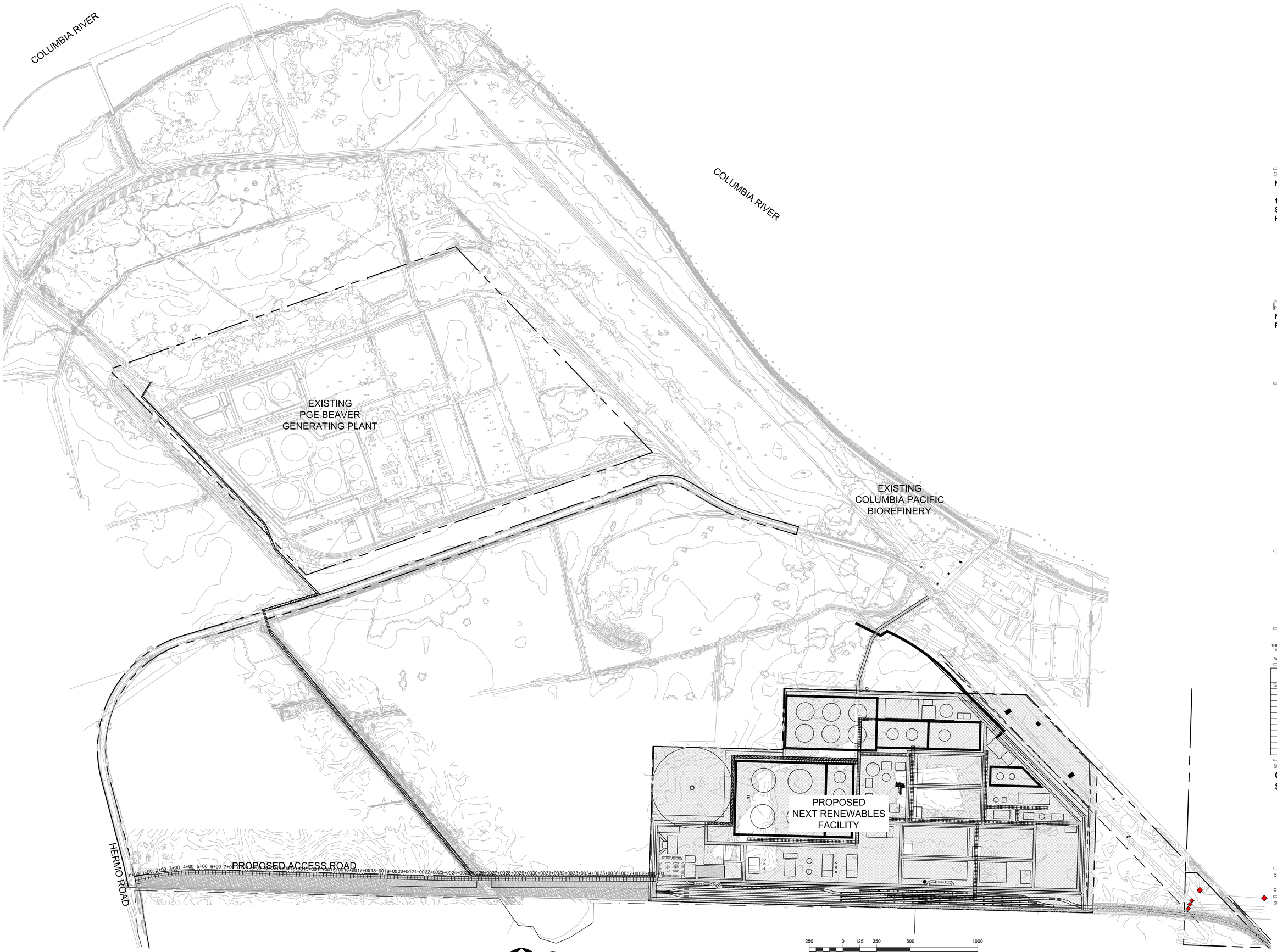
c: Ken Shonkwiler – ODOT Region 2
Louis Soumas – Waterside Energy Development, LLC
Gene Cotten – NEXT Renewable Fuels
Laurie Parry – Stewardship Solutions, Inc.
Brian Varricchione, Brent Nielsen, Janet Jones – Mackenzie

NEXT Renewable Fuels, Oregon
Port Westward
Preliminary Staffing Requirements

		Weekdays			Weekends	
	FTE	Office/Mgt.	Shift 1	Shift 2	Shift 1	Shift 2
Managers, Professionals and Supervisors	**Total**	0800-1700	0600-1800	1800-0600	0600-1800	1800-0600
Plant Manager	1	1				
General/Community Manager	1	1				
Processing Manager Refining and Pretreatment	1	1				
Commodity Manager	1	1				
Controller	1	1				
Feedstock Accounting/Inventory Super	1	1				
Accountant/Contracting Manager	1	1				
Human Resource Manager	1	1				
Tech Support Manager	1	1				
Manager, Planning and Logistics	1	1				
Logistics Coordination Supervisor	1	1				
Feedstock Supply Supervisor	1	1				
Director, Operations and Maintenance	1	1				
Superintendent, Process and Utilities	1	1				
Superintendent Offsites and Loading	1	1				
Pretreatment Manager	1	1				
Processing Shift Manager	8		2	2	2	2
Manager, HESS	1	1				
Environmental Engineer	1	1				
Safety Supervisor	1	1				
Superintendent, Process & Quality	1	1				
Process Engineer	1	1				
Lab Manager	1	1				
Superintendent, Instrument Control & Electrics	1	1				
Tank farm manager	1	1				
Maintenance Manager	1	1				
Total Manager, Professionals and Supervisor	**33**	**25**	**2**	**2**	**2**	**2**
Office, Clerical, and Non-operating direct						
Purchasing Coordinator	1	1				
Billing and Collections Clerk	1	1				
Payables/Payroll Clerk	1	1				
Executive Assistant	1	1				
Admin Support	2	2				
Human Resource Support	1	1				
Refining Senior Planner	1	1				
Blending Controller	1	1				
Security Shift Crew	8		2	2	2	2
Total Office and Other Non-operating	**17**	**9**	**2**	**2**	**2**	**2**

Managers, Professionals and Supervisors	FTE Total	Weekdays Office/Mgt. 0800-1700	Weekdays Shift 1 0600-1800	Weekdays Shift 2 1800-0600	Weekends Shift 1 0600-1800	Weekends Shift 2 1800-0600
	FTE Total	Weekdays Office/Mgt. 0800-1700	Weekdays Shift 1 0600-1800	Weekdays Shift 2 1800-0600	Weekends Shift 1 0600-1800	Weekends Shift 2 1800-0600
Operators						
Process ISBL & Gen. Utilities Operator	1	1				
Tankage Blending and Transfer Operator	1	1				
Processing Team Leaders	16		4	4	4	4
Processing Panel Operators	20		5	5	5	5
Pretreatment Operators	24		6	6	6	6
General Operators	24		6	6	6	6
Other Operators	24		6	6	6	6
Safety Techs	2	2				
Fire Station Day Supervisor	1	1				
Lab Technician-day	1	1				
Lab Technician, Shift	8		2	2	2	2
Instrument Engr. 1	1	1				
Inspection & Reliability Superintendent	1	1				
Computer Engineer	1	1				
Tank farm operators	2	2				
Load/offload Operator*	4		1	1	1	1
Load/offload Helper*	4		1	1	1	1
Warehouse/Shop Supervisor	1	1				
Order/Parts	1	1				
Total Operators	**137**	**13**	**31**	**31**	**31**	**31**
Maintenance*						
Maintenance Technicians	8	8				
Instrument & Electronics Tech	8	8				
Day Supervisor, ISBL	1	1				
Day Supervisor, OSBL	1	1				
Superintendent, Instruments & Electronics	1	1				
Instruments Technicians	1	1				
Superintendent, Piping and Mechanical	1	1				
Millwright	8	8				
Fitter/Welder	4	4				
General Laborer	1	1				
Coordinator Support Services	1	1				
Civils and General Laborer	1	1				
Total Maintenance	**36**	**36**	**0**	**0**	**0**	**0**
Total Staffing at Plant	**223**	**83**	**35**	**35**	**35**	**35**

* Positions may be outsourced or contracted with 3rd Parties and not be direct employees



1 EX1 OVERALL SITE PLAN

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Project
NEXT RENEWABLES
PORT WESTWARD

REVISION SCHEDULE

Delta	Issued As	Issue Date

SHEET TITLE:
OVERALL SITE PLAN

DRAWN BY: CAM

CHECKED BY: BDN

SHEET
EX1

JOB NO. **2200315.01**

PRELIMINARY ONLY

Oregon
Kate Brown, Governor

Department of Transportation
Region 2 Tech Center
455 Airport Road SE, Building A
Salem, Oregon 97301-5397
Telephone (503) 986-2990
Fax (503) 986-2839

DATE: December 1, 2020

TO: Ken Shonkwiler
Senior Region Planner

FROM: Arielle S. Ferber, PE
Traffic Analysis Engineer

SUBJECT: NEXT Renewable Fuels Development (Columbia County) – Outright Use
TIA Scoping Review Comments

ODOT Region 2 Traffic has completed our review of the submitted traffic impact analysis scoping memo (dated November 30, 2020) to address traffic impacts due to development located between Hermo Road and Kallunki Road in Columbia County, with respect to consistency and compliance with ODOT's Analysis Procedures Manual, Version 2 (APM). The APM was most recently updated in October 2020. The current version is published online at: http://www.oregon.gov/ODOT/TD/TP/Pages/APM.aspx. As a result, we submit the following comments for the County's consideration:

Recommended analysis items to be addressed:

1. Traffic volumes and travel patterns have been disrupted due to COVID-19. ODOT recommends developing and applying a COVID adjustment factor to the 2020 traffic counts to determine "pre-COVID" 2020 traffic volumes. ODOT recommends comparing 2019 and 2020 traffic volumes from a nearby/representative ATR (in this case ATR #05-006 would be appropriate) to determine the COVID adjustment factor.
2. Our review identified multiple trip generation errors which should be modified to reflect the appropriate trip generation for LUC 140 (Manufacturing).
    - The AM trip split of 74% in and 26% out gives the 91 AM peak hour trips a split of 67 trips in and 24 trips out. The PM peak hour trip split of 39% in and 61% out gives the 84 PM peak hour trips a split of 33 trips in and 51 trips out.
    - The daily trip generation utilized the weighted average rate method where the fitted curve equation method is instead recommended, per the *Institute of Transportation Engineers* (*ITE*). This change will increase the daily trip generation by 116 trips to a total of 667 trips.

3. ODOT recommends a crash analysis be conducted for the study area intersections by comparing an intersection's crash rate to that of the corresponding 90th percentile crash rate per Section 4.1. and Exhibit 4-1 of ODOT's *APM*.
4. ODOT recommends simulation-based queuing analyses (such as SimTraffic) be conducted and reported for all study area intersections in accordance with Chapter 8 of the *APM*.

Thank you for the opportunity to review this traffic impact analysis scoping memo. So long as the above comments are incorporated, this scope of work can be anticipated to direct a study that will appropriately address traffic impacts of the proposed development in accordance with ODOT analysis procedures and methodologies. If there are any questions regarding these comments, please contact me at (503) 986-2857 or Arielle.Ferber@ODOT.state.or.us

APPENDIX C

TRANSIT INFORMATION

Sunset Empire Transportation District
503-861-7433
Ridethebus.org

Lower Columbia Connector Daily

Astoria - Portland

Eastbound

Astoria Transit Center	7:20 AM	11:50 AM	4:20 PM
Country Market	7:40 AM	12:10 PM	4:40 PM
Knappa Pizza	7:50 AM	12:20 PM	4:50 PM
Westport	8:05 AM	12:35 PM	5:05 PM
SW Tichenor St & Hwy 30 (Clatskanie)	8:15 AM	12:45 PM	5:15 PM
Rainier Transit Center*	8:32 AM	1:02 PM	5:32 PM
St Helens Transit Center	9:05 AM	1:35 PM	6:05 PM
Scappoose (NE 1st & Prairie St)	9:20 AM	1:50 PM	6:20 PM
Portland Union Station	10:00 AM	2:30 PM	7:00 PM

Westbound

Portland Union Station	10:40 AM	3:10 PM	7:40 PM
Scappoose (NE 1st & Prairie St)	11:20 AM	3:50 PM	8:20 PM
St Helens Transit Center	11:43 AM	4:13 PM	8:43 PM
Rainier Transit Center*	12:06 PM	4:36 PM	9:06 PM
N Nehalem St & Hwy 30 (Clatskanie)	12:34 PM	5:04 PM	9:34 PM
Westport	12:44 PM	5:14 PM	9:44 PM
Knappa Pizza	12:59 PM	5:29 PM	9:59 PM
Country Market	1:04 PM	5:34 PM	10:04 PM
Astoria Transit Center	1:23 PM	5:53 PM	10:23 PM

** There will be a 10-minute layover at Rainier.* *Approved 2/1/20*

	Astoria	Knappa Svenson	Westport	Clatskanie	Rainer	St. Helens	Scappoose	Portland
Astoria	NA	$1	$1	$1	$5	$6	$8	$15
Knappa Svenson	$1	NA	$1	$1	$5	$6	$8	$15
Westport	$1	$1	NA	$1	$5	$6	$8	$15
Clatskanie	$1	$1	$1	NA	$5	$6	$8	$15
Rainier	$5	$5	$5	$5	NA	$3	$6	$10
St. Helens	$6	$6	$6	$6	$3	NA	$3	$8
Scappoose	$8	$8	$8	$8	$6	$3	NA	$6
Portland	$15	$15	$15	$15	$10	$8	$6	NA

Please have correct fare. Drivers do not carry change.

NWCONNECTOR VISITOR PASSES

Purchase from Drivers on any NWCONNECTOR Route

3-day passes $25.00 7-day passes $30.00

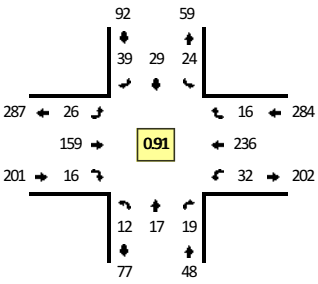
APPENDIX D

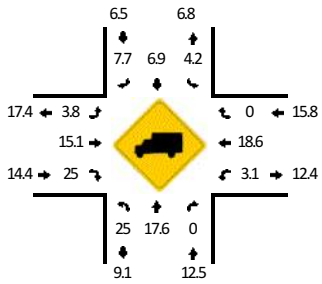
TRAFFIC COUNT SUMMARIES

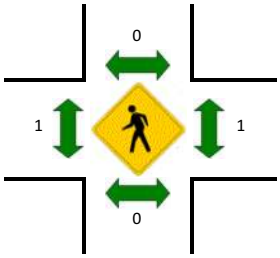
Type of peak hour being reported: System Peak | Method for determining peak hour: Total Entering Volume

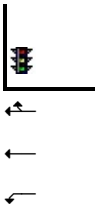
LOCATION: N Nehalem St -- E Columbia River Hwy 30 | **QC JOB #:** 15323009
CITY/STATE: Clatskanie, OR | **DATE:** Tue, Nov 17 2020

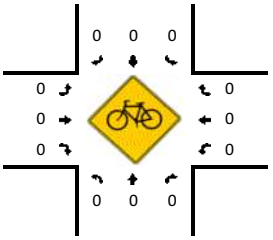
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:40 AM -- 7:55 AM

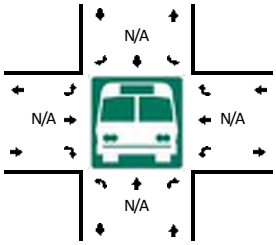


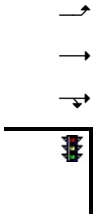


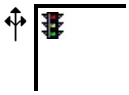


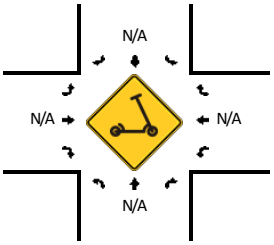












5-Min Count Period Beginning At	N Nehalem St (Northbound)				N Nehalem St (Southbound)				E Columbia River Hwy 30 (Eastbound)				E Columbia River Hwy 30 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	2	0	0	2	3	0	1	4	3	0	2	18	0	0	35	
7:05 AM	1	0	3	0	0	0	3	0	1	7	0	0	1	17	0	0	33	
7:10 AM	2	1	3	0	1	1	3	0	3	15	2	0	5	13	1	0	50	
7:15 AM	0	1	1	0	1	1	2	0	1	24	1	0	2	17	0	0	51	
7:20 AM	1	3	2	0	1	3	2	0	2	12	3	0	3	21	0	0	53	
7:25 AM	5	1	0	0	1	6	0	0	4	12	2	0	3	16	3	0	53	
7:30 AM	0	2	1	0	5	1	2	0	2	14	0	0	5	20	1	0	53	
7:35 AM	1	2	2	0	3	1	3	0	5	13	0	0	3	27	0	0	60	
7:40 AM	0	2	4	0	5	3	4	0	1	8	0	0	2	21	3	0	53	
7:45 AM	0	1	4	0	1	1	6	0	1	12	2	0	3	23	0	0	54	
7:50 AM	1	2	0	0	2	5	4	0	2	17	3	0	1	26	1	0	64	
7:55 AM	1	0	1	0	3	3	6	0	0	11	3	0	3	16	0	0	47	606
8:00 AM	1	0	2	0	1	2	4	0	2	10	1	0	4	20	3	0	50	621
8:05 AM	2	2	2	0	0	1	2	0	3	12	0	0	0	14	3	0	41	629
8:10 AM	0	1	0	0	1	2	4	0	3	14	1	0	3	15	2	0	46	625
8:15 AM	0	1	2	0	4	2	3	0	1	14	0	0	4	16	1	0	48	622
8:20 AM	1	1	1	0	2	0	3	0	2	13	1	0	2	17	2	0	45	614
8:25 AM	1	0	3	0	3	1	3	0	6	19	1	0	0	11	1	0	49	610
8:30 AM	1	0	0	0	3	3	1	0	1	26	2	0	1	8	2	0	48	605
8:35 AM	1	1	1	0	0	0	5	0	4	16	0	0	0	21	0	0	49	594
8:40 AM	0	0	1	0	2	1	2	0	3	21	0	0	0	19	0	0	49	590
8:45 AM	1	0	4	0	1	0	4	0	5	14	0	0	2	15	0	0	46	582
8:50 AM	0	3	4	0	2	2	3	0	3	17	1	0	0	20	1	0	56	574
8:55 AM	0	0	0	0	4	1	3	0	4	13	1	0	6	11	2	0	45	572

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	20	32	0	32	36	56	0	16	148	20	0	24	280	16	0	684
Heavy Trucks	0	0	0		4	8	4		0	24	16		4	64	0		124
Buses																	
Pedestrians		0				0				4				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/2/2020 4:11 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

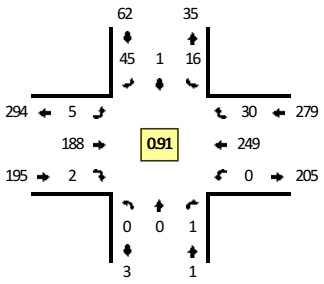
Type of peak hour being reported: System Peak

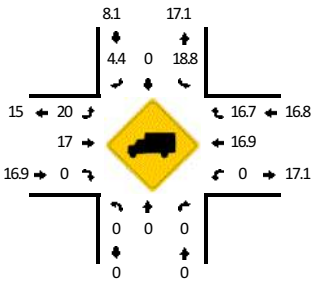
Method for determining peak hour: Total Entering Volume

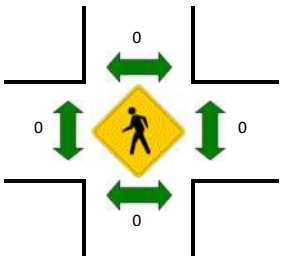
LOCATION: NE Van St -- E Columbia River Hwy 30
CITY/STATE: Clatskanie, OR

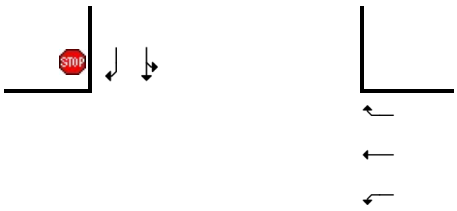
QC JOB #: 15323001
DATE: Tue, Nov 17 2020

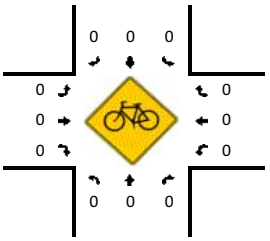
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:15 AM -- 7:30 AM

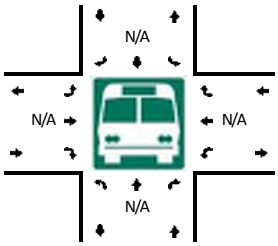


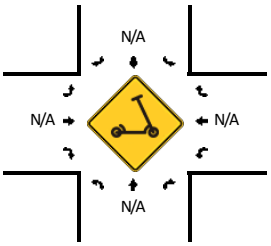












5-Min Count Period Beginning At	NE Van St (Northbound)				NE Van St (Southbound)				E Columbia River Hwy 30 (Eastbound)				E Columbia River Hwy 30 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	1	0	5	0	0	9	0	0	0	20	3	0	38	
7:05 AM	0	0	0	0	0	0	4	0	0	13	0	0	0	20	0	0	37	
7:10 AM	0	0	0	0	0	0	2	0	0	14	0	0	0	13	3	0	32	
7:15 AM	0	0	0	0	2	0	3	0	0	27	0	0	0	18	1	0	51	
7:20 AM	0	0	0	0	2	0	7	0	1	17	0	0	0	20	1	0	48	
7:25 AM	0	0	0	0	0	1	5	0	0	17	1	0	0	22	2	0	48	
7:30 AM	0	0	1	0	1	0	4	0	0	19	0	0	0	13	6	0	44	
7:35 AM	0	0	0	0	0	0	3	0	1	15	0	0	0	26	2	0	47	
7:40 AM	0	0	0	0	1	0	4	0	3	11	0	0	0	21	1	0	41	
7:45 AM	0	0	0	0	0	0	1	0	0	16	1	0	0	28	4	0	50	
7:50 AM	0	0	0	0	3	0	3	0	0	17	0	0	0	23	6	0	52	
7:55 AM	0	0	0	0	1	0	2	0	0	10	0	0	0	21	3	0	37	525
8:00 AM	0	0	0	0	1	0	7	0	0	15	0	0	0	23	0	0	46	533
8:05 AM	0	0	0	0	2	0	4	0	0	18	0	0	0	15	1	0	40	536
8:10 AM	0	0	0	0	3	0	2	0	0	6	0	0	0	19	3	0	33	537
8:15 AM	0	0	0	0	3	0	3	0	1	26	0	0	0	19	2	0	54	540
8:20 AM	0	0	0	0	1	0	1	0	1	15	0	0	0	17	1	0	36	528
8:25 AM	0	0	1	0	2	0	4	0	2	25	0	0	0	11	2	0	47	527
8:30 AM	0	0	0	0	2	0	0	0	3	24	0	0	0	11	5	0	45	528
8:35 AM	0	0	0	0	0	0	5	0	0	12	0	0	0	20	3	0	40	521
8:40 AM	0	0	0	0	1	0	2	0	0	23	0	0	0	13	1	0	40	520
8:45 AM	0	0	0	0	1	0	5	0	1	22	0	0	0	13	2	0	44	514
8:50 AM	0	0	0	0	1	0	7	0	3	14	0	0	0	18	2	0	45	507
8:55 AM	0	1	0	0	0	0	4	0	0	19	1	0	0	13	3	0	41	511

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	16	4	60	0	4	244	4	0	0	240	16	0	588
Heavy Trucks	0	0	0		4	0	4		0	44	0		0	40	4		96
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/2/2020 4:11 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

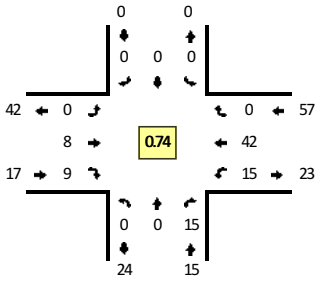
Type of peak hour being reported: System Peak

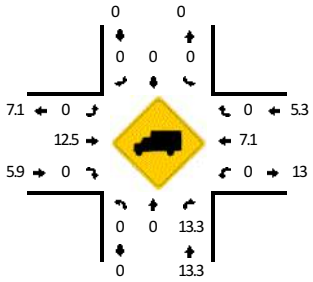
Method for determining peak hour: Total Entering Volume

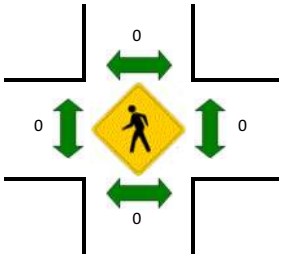
LOCATION: E Columbia River Hwy 30 Ramp Loop -- Swedetown Rd
CITY/STATE: Clatskanie, OR

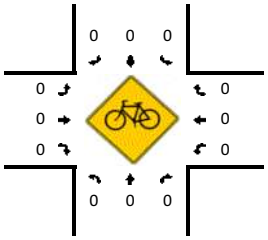
QC JOB #: 15323003
DATE: Tue, Nov 17 2020

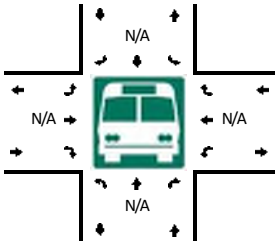
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:50 AM -- 8:05 AM

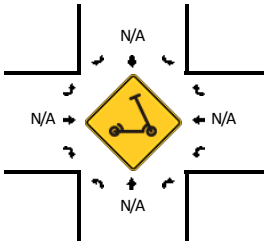












5-Min Count Period Beginning At	E Columbia River Hwy 30 Ramp Loop (Northbound)				E Columbia River Hwy 30 Ramp Loop (Southbound)				Swedetown Rd (Eastbound)				Swedetown Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	5	
7:05 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	3	0	0	5	
7:10 AM	0	0	1	0	0	0	0	0	0	2	1	0	1	3	0	0	8	
7:15 AM	0	0	6	0	0	0	0	0	0	1	1	0	0	1	0	0	9	
7:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	6	
7:25 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	5	
7:30 AM	0	0	1	0	0	0	0	0	0	0	2	0	1	2	0	0	6	
7:35 AM	0	0	1	0	0	0	0	0	0	1	0	0	5	1	0	0	8	
7:40 AM	0	0	2	0	0	0	0	0	0	1	2	0	0	7	0	0	12	
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	3	
7:50 AM	0	0	1	0	0	0	0	0	0	3	2	0	3	3	0	0	12	
7:55 AM	0	0	1	0	0	0	0	0	0	0	1	0	1	3	0	0	6	85
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	10	0	0	12	92
8:05 AM	0	0	0	0	0	0	0	0	0	0	1	0	2	3	0	0	6	93
8:10 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	2	0	0	4	89
8:15 AM	0	0	1	0	0	0	0	0	0	2	0	0	1	4	0	0	8	88
8:20 AM	0	0	0	0	0	0	0	0	0	2	0	0	2	3	0	0	7	89
8:25 AM	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	4	88
8:30 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	3	85
8:35 AM	0	0	2	0	0	0	0	0	0	3	1	0	7	1	0	0	14	91
8:40 AM	0	0	1	0	0	0	0	0	0	2	0	0	0	2	0	0	5	84
8:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	1	4	0	0	7	88
8:50 AM	0	0	0	0	0	0	0	0	0	2	0	0	1	1	0	0	4	80
8:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4	78

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	12	0	0	0	0	0	0	12	12	0	20	64	0	0	120
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	8	0		8
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/2/2020 4:11 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

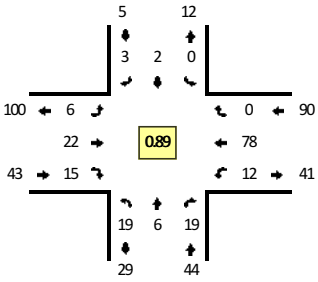
Type of peak hour being reported: Intersection Peak

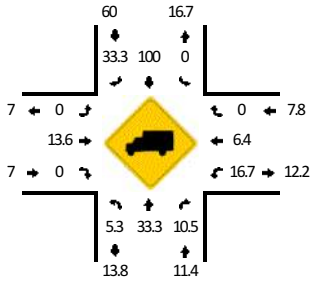
Method for determining peak hour: Total Entering Volume

LOCATION: Stimson Mill Rd -- NW 5th St
CITY/STATE: Clatskanie, OR

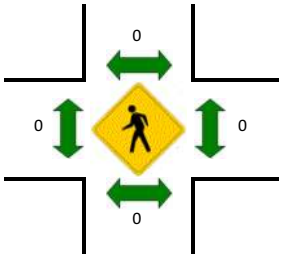
QC JOB #: 15323007
DATE: Tue, Nov 17 2020

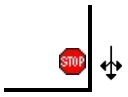
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

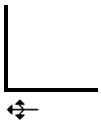


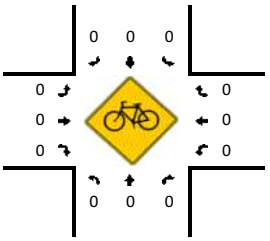


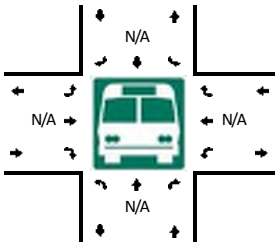
Quality Counts
DATA THAT DRIVES COMMUNITIES

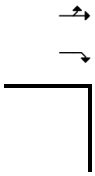


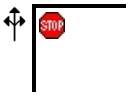


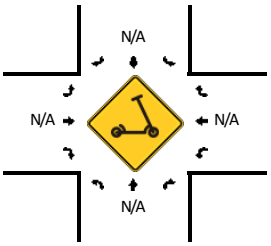












5-Min Count Period Beginning At	Stimson Mill Rd (Northbound)				Stimson Mill Rd (Southbound)				NW 5th St (Eastbound)				NW 5th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	1	0	0	0	0	0	0	0	1	0	0	2	3	0	0	8	
7:05 AM	3	1	1	0	0	0	0	0	0	0	1	0	1	2	0	0	9	
7:10 AM	1	0	0	0	0	0	0	0	0	2	1	0	0	3	0	0	7	
7:15 AM	0	0	3	0	0	0	1	0	0	2	0	0	4	6	0	0	16	
7:20 AM	1	0	0	0	0	1	0	0	0	3	2	0	0	6	0	0	13	
7:25 AM	0	0	0	0	0	1	0	0	1	4	0	0	0	5	0	0	11	
7:30 AM	0	1	4	0	0	0	0	0	0	2	3	0	0	10	0	0	20	
7:35 AM	1	0	3	0	0	0	0	0	1	5	0	0	0	5	0	0	15	
7:40 AM	4	1	2	0	0	0	0	0	0	0	1	0	1	7	0	0	16	
7:45 AM	4	0	3	0	0	0	0	0	0	3	2	0	1	5	0	0	18	
7:50 AM	3	0	1	0	0	0	1	0	0	0	1	0	2	7	0	0	15	
7:55 AM	3	1	1	0	0	0	0	0	0	1	0	0	0	10	0	0	16	164
8:00 AM	1	1	0	0	0	0	1	0	2	0	2	0	1	4	0	0	12	168
8:05 AM	0	1	0	0	0	0	0	0	1	2	3	0	0	3	0	0	10	169
8:10 AM	2	1	2	0	0	0	0	0	1	0	1	0	3	10	0	0	20	182
8:15 AM	2	1	0	0	0	0	0	0	0	1	0	1	0	3	0	0	8	174
8:20 AM	1	0	1	0	0	0	0	0	0	3	3	0	0	4	0	0	12	173
8:25 AM	3	0	1	0	0	0	0	0	0	2	3	0	0	4	0	0	13	175
8:30 AM	4	0	0	0	0	2	0	0	1	3	1	0	0	4	0	0	15	170
8:35 AM	1	2	0	0	0	0	0	0	0	5	2	0	0	3	0	0	13	168
8:40 AM	1	0	0	0	0	0	0	0	0	0	1	0	1	4	0	0	7	159
8:45 AM	1	0	2	0	0	0	1	0	0	4	3	0	1	4	0	0	16	157
8:50 AM	1	0	3	0	0	1	1	0	1	3	3	0	1	3	0	0	17	159
8:55 AM	1	0	2	0	0	1	1	0	0	4	2	0	0	7	0	0	18	161

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	20	8	36	0	0	0	0	0	4	28	16	0	4	88	0	0	204
Heavy Trucks	4	4	0		0	0	0		0	0	0		0	0	0		8
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

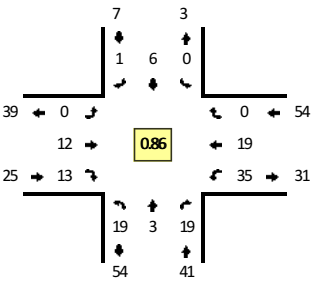
Type of peak hour being reported: Intersection Peak

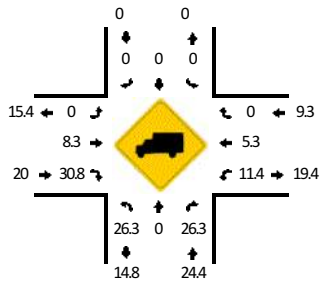
Method for determining peak hour: Total Entering Volume

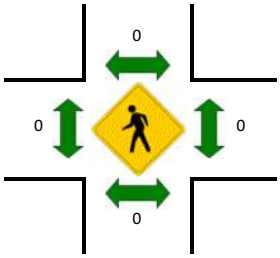
LOCATION: NE Van St -- NE 5th St
CITY/STATE: Clatskanie, OR

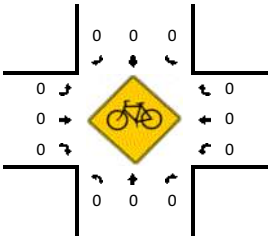
QC JOB #: 15323005
DATE: Tue, Nov 17 2020

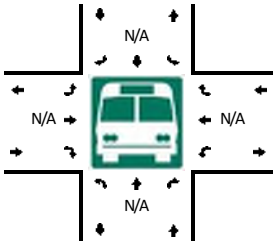
Peak-Hour: 7:40 AM -- 8:40 AM
Peak 15-Min: 8:25 AM -- 8:40 AM

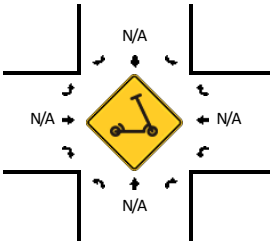












5-Min Count Period Beginning At	NE Van St (Northbound)				NE Van St (Southbound)				NE 5th St (Eastbound)				NE 5th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	0	1	0	0	0	0	0	0	1	1	0	6	0	0	0	11	
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	6	
7:10 AM	2	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	7	
7:15 AM	1	0	0	0	0	2	0	0	0	3	1	0	3	0	0	0	10	
7:20 AM	1	0	1	0	0	2	0	0	0	0	4	0	4	0	0	0	12	
7:25 AM	1	0	1	0	0	0	0	0	0	0	1	0	4	0	0	0	7	
7:30 AM	4	0	2	0	0	0	0	0	0	1	2	0	3	0	0	0	12	
7:35 AM	2	0	1	0	0	0	0	0	0	1	1	0	3	1	0	0	9	
7:40 AM	3	0	1	0	0	1	0	0	0	2	0	0	3	3	0	0	13	
7:45 AM	3	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	7	
7:50 AM	2	0	3	0	0	0	0	0	0	2	3	0	3	1	0	0	14	
7:55 AM	3	0	0	0	0	1	0	0	0	0	1	0	1	2	0	0	8	116
8:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	7	1	0	0	9	114
8:05 AM	1	0	0	0	0	1	0	0	0	0	2	0	4	3	0	0	11	119
8:10 AM	2	0	1	0	0	1	1	0	0	0	2	0	2	0	0	0	9	121
8:15 AM	1	0	3	0	0	0	0	0	0	0	0	0	5	1	0	0	10	121
8:20 AM	0	0	2	0	0	1	0	0	0	2	1	0	1	2	0	0	9	118
8:25 AM	1	0	2	0	0	0	0	0	0	2	2	0	3	2	0	0	12	123
8:30 AM	2	2	5	0	0	0	0	0	0	0	1	0	2	2	0	0	14	125
8:35 AM	1	1	1	0	0	0	0	0	0	3	1	0	3	1	0	0	11	127
8:40 AM	0	0	1	0	0	1	0	0	0	0	2	0	1	1	0	0	6	120
8:45 AM	1	0	1	0	0	1	0	0	0	3	1	0	5	1	0	0	13	126
8:50 AM	3	0	2	0	0	0	1	0	0	0	3	0	2	1	0	0	12	124
8:55 AM	3	1	0	0	0	2	0	0	1	0	2	0	0	1	0	0	10	126

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	16	12	32	0	0	0	0	0	0	20	16	0	32	20	0	0	148
Heavy Trucks	0	0	12		0	0	0		0	4	8		4	0	0		28
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

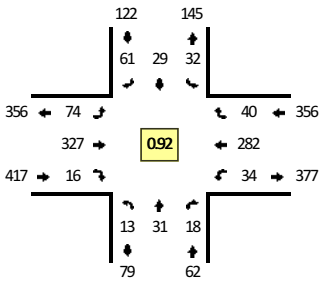
Type of peak hour being reported: System Peak

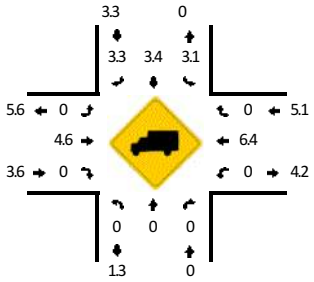
Method for determining peak hour: Total Entering Volume

LOCATION: N Nehalem St -- E Columbia River Hwy 30
CITY/STATE: Clatskanie, OR

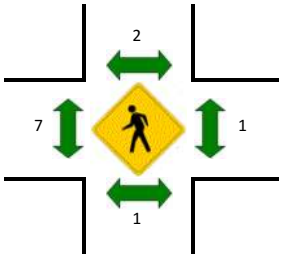
QC JOB #: 15323010
DATE: Tue, Nov 17 2020

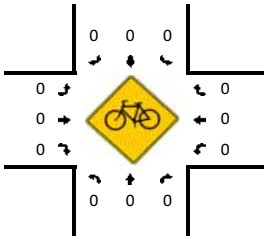
Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

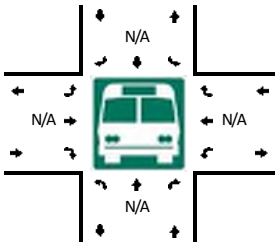


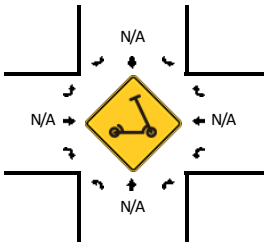


Quality Counts
DATA THAT DRIVES COMMUNITIES









5-Min Count Period Beginning At	N Nehalem St (Northbound)				N Nehalem St (Southbound)				E Columbia River Hwy 30 (Eastbound)				E Columbia River Hwy 30 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	1	1	0	6	2	4	0	6	33	3	0	3	11	2	0	73	
4:05 PM	1	0	2	0	2	1	2	0	6	24	1	0	3	14	1	0	57	
4:10 PM	1	1	2	0	4	1	7	0	5	38	0	0	4	14	3	0	80	
4:15 PM	0	3	2	0	3	4	3	0	2	30	2	0	2	23	3	0	77	
4:20 PM	0	3	1	0	2	2	4	0	3	28	1	0	1	21	3	0	69	
4:25 PM	1	1	1	0	2	3	7	0	7	12	0	0	2	32	3	0	71	
4:30 PM	1	2	3	0	3	1	3	0	13	25	0	0	2	24	6	0	83	
4:35 PM	1	1	0	0	2	2	3	0	2	26	1	0	4	32	3	0	77	
4:40 PM	1	4	0	0	0	2	5	0	5	31	2	0	8	20	3	0	81	
4:45 PM	2	3	0	0	3	3	5	0	8	28	3	0	1	22	2	0	80	
4:50 PM	1	1	2	0	5	3	8	0	5	30	1	0	2	16	3	0	77	
4:55 PM	2	1	1	0	1	3	5	0	11	26	2	0	1	24	4	0	81	906
5:00 PM	1	5	5	0	5	3	7	0	6	38	1	0	0	14	3	0	88	921
5:05 PM	3	6	2	0	6	1	2	0	7	26	3	0	6	26	1	0	89	953
5:10 PM	0	1	1	0	0	2	9	0	5	27	0	0	5	28	6	0	84	957
5:15 PM	1	1	3	0	6	2	2	0	6	27	0	0	3	19	2	0	72	952
5:20 PM	3	2	2	0	1	2	6	0	6	36	0	0	1	20	0	0	79	962
5:25 PM	8	0	1	0	5	4	7	0	11	32	3	0	1	15	1	0	88	979
5:30 PM	2	4	2	0	1	1	3	0	1	23	0	0	5	21	1	0	64	960
5:35 PM	1	7	2	0	3	1	3	0	10	19	0	0	3	17	2	0	68	951
5:40 PM	1	2	2	0	0	3	6	0	4	19	5	0	1	21	4	0	68	938
5:45 PM	1	1	2	0	1	1	4	0	1	46	1	0	4	20	3	0	85	943
5:50 PM	3	2	5	0	2	0	4	0	2	13	0	0	3	17	2	0	53	919
5:55 PM	2	2	2	0	0	1	4	0	1	23	0	0	6	19	1	0	61	899

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	16	48	32	0	44	24	72	0	72	364	16	0	44	272	40	0	1044
Heavy Trucks	0	0	0		0	0	0		0	8	0		0	20	0		28
Buses																	
Pedestrians		0				8				4				0			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

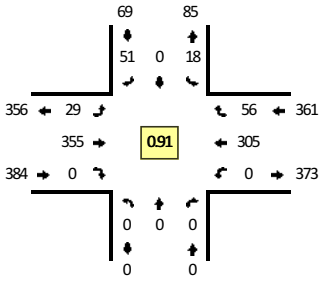
Report generated on 12/2/2020 11:24 AM

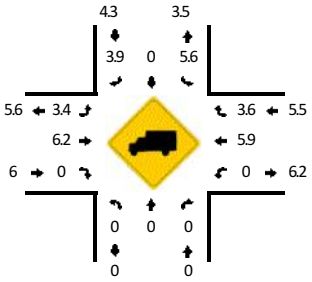
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: System Peak | Method for determining peak hour: Total Entering Volume

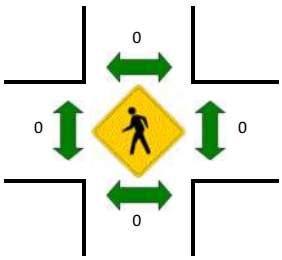
LOCATION: NE Van St -- E Columbia River Hwy 30 | **QC JOB #:** 15323002
CITY/STATE: Clatskanie, OR | **DATE:** Tue, Nov 17 2020

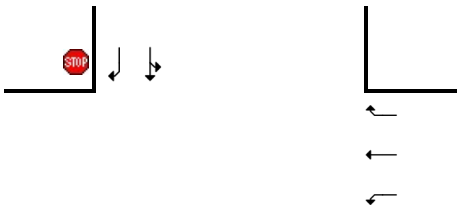
Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:15 PM -- 4:30 PM

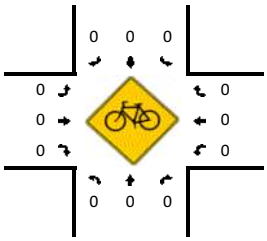


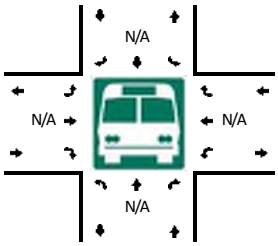


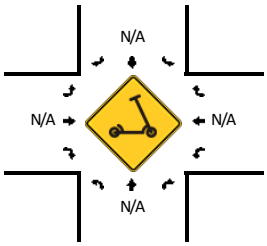
Quality Counts
DATA THAT DRIVES COMMUNITIES











5-Min Count Period Beginning At	NE Van St (Northbound)				NE Van St (Southbound)				E Columbia River Hwy 30 (Eastbound)				E Columbia River Hwy 30 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	1	0	4	0	1	39	0	0	0	5	6	0	56	
4:05 PM	0	0	0	0	1	0	3	0	0	28	0	0	0	24	8	0	64	
4:10 PM	1	0	0	0	4	0	1	0	2	27	0	0	0	13	5	0	53	
4:15 PM	0	0	0	0	0	0	6	0	1	35	0	0	0	29	2	0	73	
4:20 PM	0	0	0	0	5	0	5	0	2	37	0	0	0	21	7	0	77	
4:25 PM	0	0	0	0	1	0	8	0	4	23	0	0	0	33	4	0	73	
4:30 PM	0	0	0	0	1	0	3	0	3	24	0	0	0	28	1	0	60	
4:35 PM	0	0	0	0	0	0	3	0	1	24	0	0	0	28	3	0	59	
4:40 PM	0	0	0	0	2	0	6	0	1	31	0	0	0	31	2	0	73	
4:45 PM	0	0	0	0	1	0	3	0	3	21	0	0	0	24	9	0	61	
4:50 PM	0	0	0	0	3	0	2	0	3	41	0	0	0	21	4	0	74	
4:55 PM	0	0	0	0	1	0	5	0	1	25	0	0	0	20	1	0	53	776
5:00 PM	0	0	0	0	0	0	4	0	1	33	0	0	0	23	8	0	69	789
5:05 PM	0	0	0	0	3	0	3	0	5	34	0	0	0	18	4	0	67	792
5:10 PM	0	0	0	0	1	0	3	0	4	27	0	0	0	29	11	0	75	814
5:15 PM	0	0	0	0	0	0	3	0	0	33	0	0	0	16	4	0	56	797
5:20 PM	0	0	0	0	2	0	4	0	3	29	0	0	0	17	4	0	59	779
5:25 PM	0	0	0	0	1	0	5	0	1	28	0	0	0	16	1	0	52	758
5:30 PM	0	0	0	0	1	2	4	0	4	41	0	1	0	22	7	0	82	780
5:35 PM	0	0	0	0	4	0	3	0	3	28	0	0	0	20	4	0	62	783
5:40 PM	2	0	0	0	3	0	6	0	0	25	0	0	0	21	1	0	58	768
5:45 PM	0	0	0	0	2	0	1	0	3	39	0	0	0	24	1	0	70	777
5:50 PM	0	0	0	0	1	0	5	0	0	18	0	0	0	20	6	0	50	753
5:55 PM	0	0	0	0	0	0	2	0	0	27	0	0	0	22	1	0	52	752

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	24	0	76	0	28	380	0	0	0	332	52	0	892
Heavy Trucks	0	0	0		0	0	4		0	36	0		0	28	0		68
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

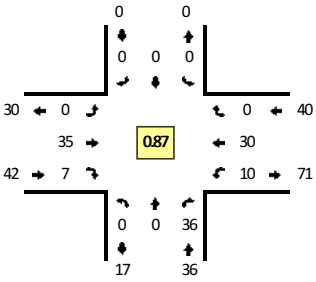
Comments:

Report generated on 12/2/2020 11:24 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

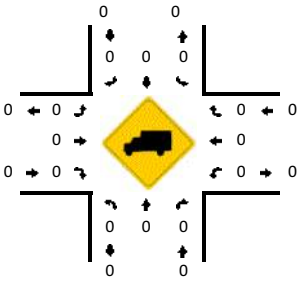
LOCATION: E Columbia River Hwy 30 Ramp Loop -- Swedetown Rd
CITY/STATE: Clatskanie, OR

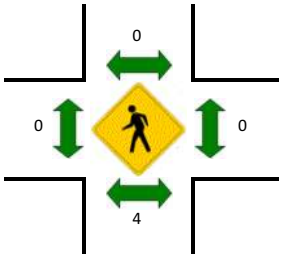
QC JOB #: 15323004
DATE: Tue, Nov 17 2020

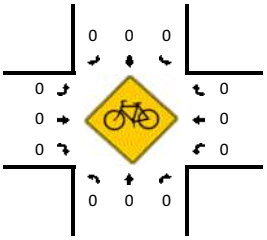
Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:50 PM -- 5:05 PM

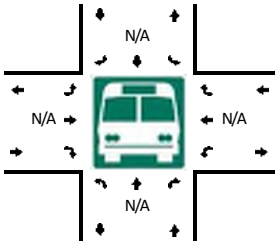


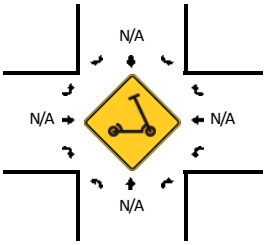
Quality Counts
DATA THAT DRIVES COMMUNITIES











5-Min Count Period Beginning At	E Columbia River Hwy 30 Ramp Loop (Northbound)				E Columbia River Hwy 30 Ramp Loop (Southbound)				Swedetown Rd (Eastbound)				Swedetown Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	3	0	0	0	0	0	0	4	1	0	0	3	0	0	11	
4:05 PM	0	0	2	0	0	0	0	0	0	4	0	0	0	1	0	0	7	
4:10 PM	0	0	1	0	0	0	0	0	0	3	1	0	2	0	0	0	7	
4:15 PM	0	0	2	0	0	0	0	0	0	4	0	0	3	3	0	0	12	
4:20 PM	0	0	1	0	0	0	0	0	0	0	1	0	2	2	0	0	6	
4:25 PM	0	0	6	0	0	0	0	0	0	3	0	0	1	4	0	0	14	
4:30 PM	0	0	2	0	0	0	0	0	0	3	0	0	0	3	0	0	8	
4:35 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	7	
4:40 PM	0	0	5	0	0	0	0	0	0	1	0	0	1	5	0	0	12	
4:45 PM	0	0	3	0	0	0	0	0	0	1	2	0	0	0	0	0	6	
4:50 PM	0	0	4	0	0	0	0	0	0	6	1	0	2	0	0	0	13	
4:55 PM	0	0	5	0	0	0	0	0	0	0	1	0	0	2	0	0	8	111
5:00 PM	0	0	4	0	0	0	0	0	0	3	2	0	1	3	0	0	13	113
5:05 PM	0	0	2	0	0	0	0	0	0	1	0	0	0	2	0	0	5	111
5:10 PM	0	0	2	0	0	0	0	0	0	10	0	0	0	2	0	0	14	118
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4	110
5:20 PM	1	0	2	0	0	0	0	0	0	3	0	0	0	1	0	0	7	111
5:25 PM	0	0	3	0	0	0	0	0	0	4	1	0	0	6	0	0	14	111
5:30 PM	0	0	3	0	0	0	0	0	0	4	0	0	2	6	0	0	15	118
5:35 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	3	0	0	5	116
5:40 PM	0	0	2	0	0	0	0	0	0	0	1	0	2	4	0	0	9	113
5:45 PM	0	0	6	0	0	0	0	0	0	1	0	0	0	3	0	0	10	117
5:50 PM	0	0	3	0	0	0	0	0	0	2	1	0	2	2	0	0	10	114
5:55 PM	0	0	5	0	0	0	0	0	0	2	0	0	0	4	0	0	11	117

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	52	0	0	0	0	0	0	36	16	0	12	20	0	0	136
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Buses																	
Pedestrians		8				0				0				0			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

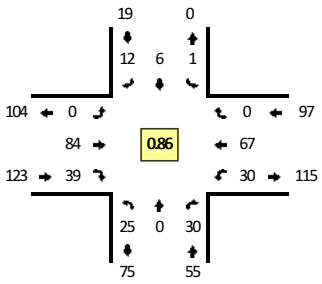
Type of peak hour being reported: Intersection Peak

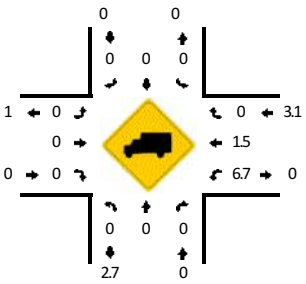
Method for determining peak hour: Total Entering Volume

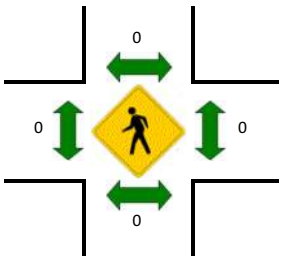
LOCATION: Stimson Mill Rd -- NW 5th St
CITY/STATE: Clatskanie, OR

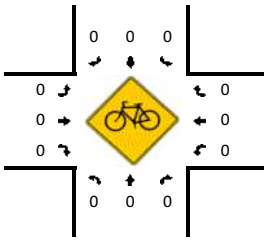
QC JOB #: 15323008
DATE: Tue, Nov 17 2020

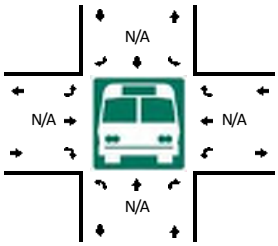
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

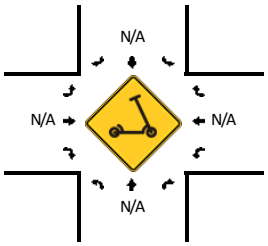












5-Min Count Period Beginning At	Stimson Mill Rd (Northbound)				Stimson Mill Rd (Southbound)				NW 5th St (Eastbound)				NW 5th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	0	2	0	0	0	2	0	0	10	1	0	2	7	0	0	27	
4:05 PM	4	0	1	0	0	0	0	0	0	4	3	0	2	1	0	0	15	
4:10 PM	1	0	3	0	0	0	2	0	0	3	2	0	1	5	0	0	17	
4:15 PM	1	0	1	0	0	0	0	0	0	3	6	0	0	7	0	0	18	
4:20 PM	3	0	2	0	1	0	0	0	0	9	2	0	1	7	0	0	25	
4:25 PM	2	0	4	0	0	0	0	0	0	7	2	0	2	7	0	0	24	
4:30 PM	1	0	1	0	0	0	0	0	1	12	2	0	1	3	0	0	21	
4:35 PM	3	1	2	0	0	1	0	0	0	7	3	0	0	7	0	0	24	
4:40 PM	1	0	1	0	0	0	0	0	0	5	1	0	3	6	0	0	17	
4:45 PM	4	0	5	0	0	0	0	0	0	2	4	0	2	8	0	0	25	
4:50 PM	1	0	0	0	0	2	4	0	0	10	3	0	3	7	0	0	30	
4:55 PM	0	0	0	0	0	1	1	0	0	7	4	0	2	2	0	0	17	260
5:00 PM	3	0	5	0	0	0	3	0	0	6	2	0	3	10	0	0	32	265
5:05 PM	2	0	1	0	0	0	0	0	0	12	5	0	3	4	0	0	27	277
5:10 PM	0	0	3	0	1	1	2	0	0	6	4	0	2	7	0	0	26	286
5:15 PM	2	0	2	0	0	0	0	0	0	8	2	0	3	2	0	0	19	287
5:20 PM	3	0	3	0	0	1	0	0	0	3	1	0	5	4	0	0	20	282
5:25 PM	2	0	4	0	0	1	1	0	0	7	5	0	2	12	0	0	34	292
5:30 PM	5	0	3	0	0	0	0	0	0	6	3	0	1	2	0	0	20	291
5:35 PM	2	0	4	0	0	0	1	0	0	10	2	0	0	5	0	0	24	291
5:40 PM	1	0	0	0	0	0	0	0	0	7	4	0	4	4	0	0	20	294
5:45 PM	2	0	4	0	0	0	0	0	0	0	2	0	2	5	0	0	15	284
5:50 PM	2	0	1	0	0	0	0	0	1	4	0	0	2	2	0	0	12	266
5:55 PM	3	0	2	0	0	0	0	0	0	2	3	1	1	2	0	0	14	263

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	20	0	36	0	4	4	20	0	0	96	44	0	32	84	0	0	340
Heavy Trucks	0	0	0		0	0	0		0	0	0		4	0	0		4
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

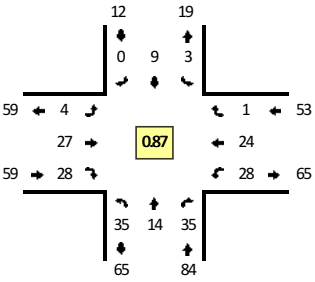
Type of peak hour being reported: Intersection Peak

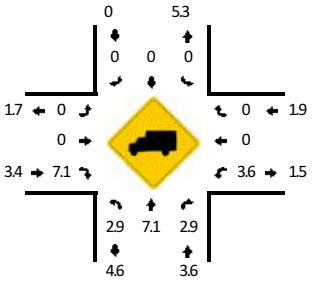
Method for determining peak hour: Total Entering Volume

LOCATION: NE Van St -- NE 5th St
CITY/STATE: Clatskanie, OR

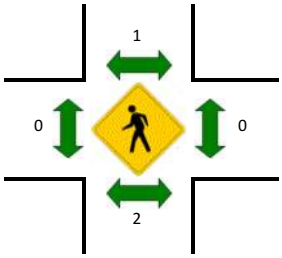
QC JOB #: 15323006
DATE: Tue, Nov 17 2020

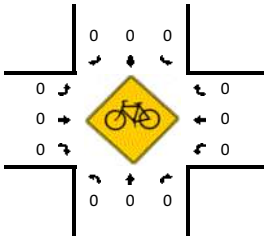
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:20 PM -- 5:35 PM

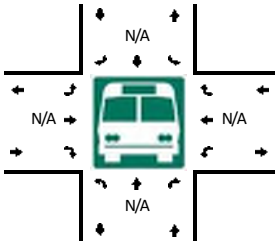


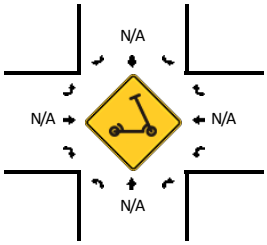


Quality Counts
DATA THAT DRIVES COMMUNITIES









5-Min Count Period Beginning At	NE Van St (Northbound)				NE Van St (Southbound)				NE 5th St (Eastbound)				NE 5th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	1	4	0	0	1	0	0	0	1	1	0	3	2	0	0	16	
4:05 PM	4	1	3	0	0	2	0	0	0	1	2	0	0	2	0	0	15	
4:10 PM	3	1	3	0	0	2	0	0	1	1	3	0	0	0	0	0	14	
4:15 PM	0	0	3	0	0	0	0	0	0	2	3	0	3	0	0	0	11	
4:20 PM	4	0	5	0	0	1	0	0	1	1	7	0	2	1	0	0	22	
4:25 PM	3	2	2	0	0	0	0	0	0	0	5	0	4	0	0	0	16	
4:30 PM	1	1	2	0	0	0	0	0	1	1	1	0	3	1	1	0	12	
4:35 PM	2	0	3	0	0	1	1	0	1	1	1	0	1	3	0	0	14	
4:40 PM	1	0	1	0	1	0	0	0	0	1	3	0	5	1	0	0	13	
4:45 PM	6	1	4	0	0	1	0	0	0	2	1	0	0	2	0	0	17	
4:50 PM	0	3	5	0	0	1	0	0	2	5	2	0	0	1	0	0	19	
4:55 PM	0	0	1	0	1	1	0	0	0	2	3	0	4	0	0	0	12	181
5:00 PM	7	0	1	0	0	1	0	0	0	3	2	0	2	3	0	0	19	184
5:05 PM	2	2	2	0	0	0	0	0	0	2	5	0	0	1	1	0	15	184
5:10 PM	5	2	9	0	1	0	0	0	0	2	1	0	3	1	0	0	24	194
5:15 PM	3	0	2	0	0	1	0	0	0	1	2	0	1	1	0	0	11	194
5:20 PM	6	0	2	0	0	1	0	0	0	4	3	0	1	3	0	0	20	192
5:25 PM	0	0	2	0	1	1	0	0	0	2	1	0	4	3	0	0	14	190
5:30 PM	3	4	4	0	0	0	0	0	1	1	1	0	6	6	0	0	26	204
5:35 PM	3	1	3	0	0	2	0	0	0	1	2	0	3	2	0	0	17	207
5:40 PM	0	1	0	0	0	0	0	0	1	2	5	0	4	1	0	0	14	208
5:45 PM	1	1	2	0	0	2	0	0	0	1	0	0	1	2	0	0	10	201
5:50 PM	2	1	2	0	0	1	0	0	0	0	2	0	3	3	0	0	14	196
5:55 PM	1	0	1	0	0	1	0	0	0	1	0	0	1	2	1	0	8	192

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	36	16	32	0	4	8	0	0	4	28	20	0	44	48	0	0	240
Heavy Trucks	4	0	0		0	0	0		0	0	0		0	0	0		4
Buses																	
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of report: Tube Count - Volume Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011

SPECIFIC LOCATION: **DIRECTION:** NB

CITY/STATE: Clatskanie, OR **DATE:** Nov 17 2020 - Nov 19 2020

Start Time	Mon	Tue 17 Nov 20	Wed 18 Nov 20	Thu 19 Nov 20	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		2	5	1		3			3	
01:00 AM		0	1	1		1			1	
02:00 AM		1	1	1		1			1	
03:00 AM		0	2	0		1			1	
04:00 AM		3	4	2		3			3	
05:00 AM		8	14	12		11			11	
06:00 AM		18	17	13		16			16	
07:00 AM		16	10	10		12			12	
08:00 AM		10	15	12		12			12	
09:00 AM		16	15	17		16			16	
10:00 AM		**23**	20	12		18			18	
11:00 AM		17	**23**	**25**		**22**			**22**	
12:00 PM		13	27	23		21			21	
01:00 PM		26	27	28		27			27	
02:00 PM		23	28	37		29			29	
03:00 PM		42	**38**	40		40			40	
04:00 PM		31	38	30		33			33	
05:00 PM		**44**	33	**47**		**41**			**41**	
06:00 PM		18	28	32		26			26	
07:00 PM		18	25	12		18			18	
08:00 PM		9	6	7		7			7	
09:00 PM		8	12	4		8			8	
10:00 PM		3	6	5		5			5	
11:00 PM		3	6	2		4			4	
Day Total		352	401	373		375			375	
% Weekday Average		93.9%	106.9%	99.5%						
% Week Average		93.9%	106.9%	99.5%		100%				
AM Peak Volume		10:00 AM 23	11:00 AM 23	11:00 AM 25		11:00 AM 22			11:00 AM 22	
PM Peak Volume		5:00 PM 44	3:00 PM 38	5:00 PM 47		5:00 PM 41			5:00 PM 41	

Comments:

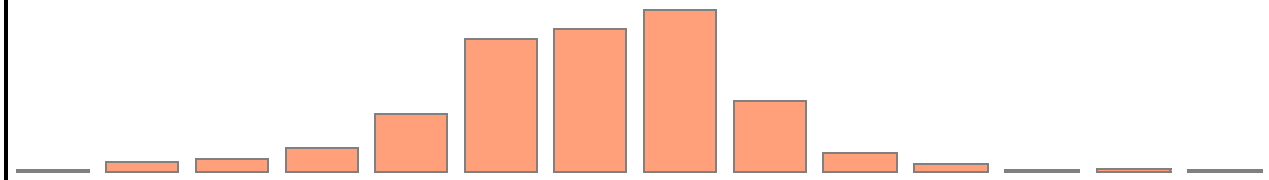
Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Speed Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** NB
CITY/STATE: Clatskanie, OR **DATE:** Nov 17 2020

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	31-40	2
01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0
02:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	41-50	1
03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0
04:00 AM	0	0	0	0	0	0	1	1	1	0	0	0	0	0	3	41-50	2
05:00 AM	0	0	0	1	0	0	0	3	4	0	0	0	0	0	8	46-55	7
06:00 AM	0	0	0	0	0	0	2	**9**	**6**	**1**	0	0	0	0	18	46-55	15
07:00 AM	0	0	0	**2**	2	2	**5**	2	2	1	0	0	0	0	16	40-49	7
08:00 AM	0	1	**1**	0	1	6	1	0	0	0	0	0	0	0	10	31-40	7
09:00 AM	0	1	0	2	2	2	4	3	1	1	0	0	0	0	16	41-50	7
10:00 AM	0	0	1	1	2	**8**	3	6	1	1	0	0	0	0	**23**	36-45	11
11:00 AM	0	**2**	1	1	**3**	5	4	1	0	0	0	0	0	0	17	36-45	9
12:00 PM	0	0	0	0	1	0	3	6	2	**1**	0	0	0	0	13	41-50	9
01:00 PM	0	0	**1**	1	4	5	7	7	0	1	0	0	0	0	26	41-50	14
02:00 PM	0	0	1	0	3	8	5	4	2	0	0	0	0	0	23	36-45	13
03:00 PM	0	**1**	1	0	2	10	**13**	9	**5**	1	0	0	0	0	42	36-45	23
04:00 PM	0	0	1	1	2	8	2	**13**	3	1	0	0	0	0	31	46-55	16
05:00 PM	0	0	0	**2**	**7**	**11**	8	12	4	0	0	0	0	0	**44**	41-50	20
06:00 PM	0	0	0	0	1	2	5	4	4	1	1	0	0	0	18	41-50	9
07:00 PM	0	0	0	2	1	0	8	5	1	0	0	0	**1**	0	18	41-50	13
08:00 PM	0	0	0	0	0	1	5	1	1	0	1	0	0	0	9	39-48	6
09:00 PM	0	0	0	0	1	2	1	0	1	1	**2**	0	0	0	8	36-45	3
10:00 PM	0	0	0	0	0	1	1	1	0	0	0	0	0	0	3	36-45	2
11:00 PM	0	0	0	0	0	0	1	1	1	0	0	0	0	0	3	41-50	2
Day Total	0	5	7	13	32	73	79	89	39	10	4	0	1	0	352	41-50	168
Percent	0%	1.4%	2%	3.7%	9.1%	20.7%	22.4%	25.3%	11.1%	2.8%	1.1%	0%	0.3%	0%			



AM Peak	12:00 AM	11:00 AM	8:00 AM	7:00 AM	11:00 AM	10:00 AM	7:00 AM	6:00 AM	6:00 AM	6:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	10:00 AM		
Volume	0	2	1	2	3	8	5	9	6	1	0	0	0	0	23		
PM Peak	12:00 PM	3:00 PM	1:00 PM	5:00 PM	5:00 PM	5:00 PM	3:00 PM	4:00 PM	3:00 PM	12:00 PM	9:00 PM	12:00 PM	7:00 PM	12:00 PM	5:00 PM		
Volume	0	1	1	2	7	11	13	13	5	1	2	0	1	0	44		

Comments:

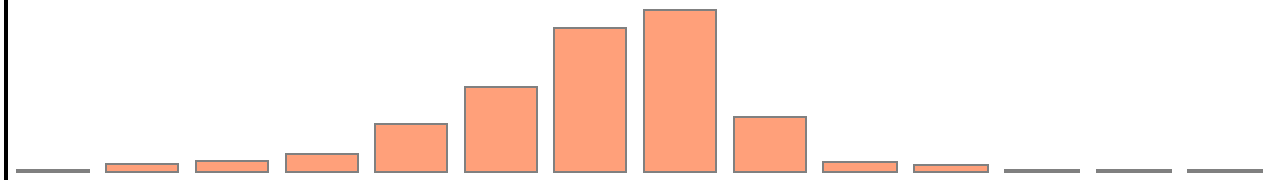
Report generated on 11/23/2020 4:33 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Speed Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** NB
CITY/STATE: Clatskanie, OR **DATE:** Nov 18 2020

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	0	0	0	1	0	2	1	1	0	0	0	0	5	46-55	3
01:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	26-35	1
02:00 AM	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0	1	21-30	1
03:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	41-50	2
04:00 AM	0	0	0	0	1	0	0	2	1	0	0	0	0	0	4	46-55	3
05:00 AM	0	0	0	1	0	0	5	5	**3**	0	0	0	0	0	14	41-50	10
06:00 AM	0	**1**	0	0	1	2	1	**7**	3	**2**	0	0	0	0	17	46-55	10
07:00 AM	0	0	0	0	1	2	3	2	1	0	**1**	0	0	0	10	38-47	5
08:00 AM	0	0	0	0	3	2	6	3	1	0	0	0	0	0	15	41-50	9
09:00 AM	0	0	0	1	1	2	3	7	1	0	0	0	0	0	15	41-50	10
10:00 AM	0	0	**1**	0	1	**4**	7	6	1	0	0	0	0	0	20	41-50	13
11:00 AM	0	0	0	1	**4**	2	**10**	5	1	0	0	0	0	0	**23**	41-50	15
12:00 PM	0	**2**	0	1	**4**	5	6	5	4	0	0	0	0	0	27	37-46	11
01:00 PM	**1**	0	0	0	1	4	8	11	2	0	0	0	0	0	27	41-50	19
02:00 PM	0	0	0	1	1	8	7	7	3	0	0	**1**	0	0	28	36-45	15
03:00 PM	0	0	0	0	2	**11**	5	**13**	**6**	**1**	0	0	0	0	**38**	46-55	19
04:00 PM	0	0	1	0	3	8	**12**	10	2	1	1	0	0	0	38	41-50	22
05:00 PM	0	0	1	**3**	2	5	12	7	3	0	0	0	0	0	33	41-50	19
06:00 PM	0	1	1	0	2	2	9	8	3	0	**2**	0	0	0	28	41-50	17
07:00 PM	0	0	**4**	2	2	4	5	7	0	1	0	0	0	0	25	41-50	12
08:00 PM	0	1	0	0	2	0	2	1	0	0	0	0	0	0	6	41-50	3
09:00 PM	0	0	0	0	3	1	1	4	2	1	0	0	0	0	12	46-55	6
10:00 PM	0	0	0	1	0	0	3	0	2	0	0	0	0	0	6	36-45	3
11:00 PM	0	0	0	0	0	0	1	5	0	0	0	0	0	0	6	41-50	6
Day Total	1	5	8	12	35	63	106	119	40	7	4	1	0	0	401	41-50	225
Percent	0.2%	1.2%	2%	3%	8.7%	15.7%	26.4%	29.7%	10%	1.7%	1%	0.2%	0%	0%			



AM Peak	12:00 AM	6:00 AM	10:00 AM	2:00 AM	11:00 AM	10:00 AM	11:00 AM	6:00 AM	5:00 AM	6:00 AM	7:00 AM	12:00 AM	12:00 AM	12:00 AM	11:00 AM		
Volume	0	1	1	1	4	4	10	7	3	2	1	0	0	0	23		
PM Peak	1:00 PM	12:00 PM	7:00 PM	5:00 PM	12:00 PM	3:00 PM	4:00 PM	3:00 PM	3:00 PM	3:00 PM	6:00 PM	2:00 PM	12:00 PM	12:00 PM	3:00 PM		
Volume	1	2	4	3	4	11	12	13	6	1	2	1	0	0	38		

Comments:

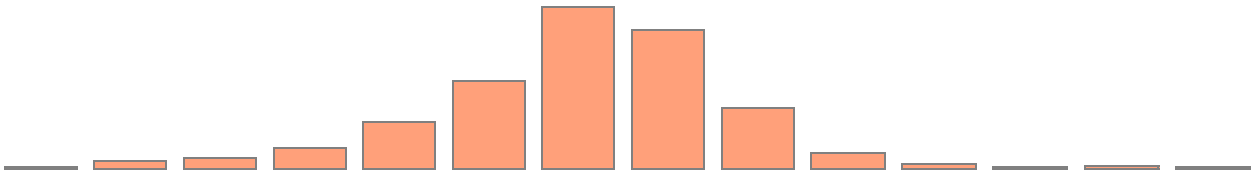
Report generated on 11/23/2020 4:33 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Speed Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** NB
CITY/STATE: Clatskanie, OR **DATE:** Nov 19 2020

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	31-40	1
01:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	46-55	1
02:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	41-50	1
03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0
04:00 AM	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2	26-35	1
05:00 AM	0	0	0	0	0	0	4	**4**	**4**	0	0	0	0	0	12	41-50	8
06:00 AM	0	0	0	1	0	3	3	3	3	0	0	0	0	0	13	36-45	6
07:00 AM	0	0	0	**2**	2	1	2	1	1	**1**	0	0	0	0	10	26-35	4
08:00 AM	0	0	**1**	0	1	0	5	3	2	0	0	0	0	0	12	41-50	8
09:00 AM	0	1	0	0	0	0	**10**	4	1	1	0	0	0	0	17	41-50	14
10:00 AM	0	0	0	0	3	0	5	4	0	0	0	0	0	0	12	41-50	9
11:00 AM	0	**2**	1	1	**6**	**5**	7	3	0	0	0	0	0	0	**25**	36-45	12
12:00 PM	0	0	2	2	1	5	4	5	3	1	0	0	0	0	23	36-45	9
01:00 PM	0	0	0	0	4	3	13	6	1	0	**1**	0	0	0	28	41-50	19
02:00 PM	0	0	**3**	1	3	8	10	8	3	1	0	0	0	0	37	38-47	18
03:00 PM	0	0	0	**3**	1	**12**	5	**14**	**5**	0	0	0	0	0	40	41-50	19
04:00 PM	**1**	**1**	0	0	**5**	3	7	7	5	0	1	0	0	0	30	41-50	14
05:00 PM	0	0	0	2	1	9	**15**	13	4	**2**	0	0	**1**	0	**47**	41-50	28
06:00 PM	0	0	0	1	2	5	8	9	5	2	0	0	0	0	32	41-50	17
07:00 PM	0	0	0	0	0	2	4	2	1	2	1	0	0	0	12	41-50	6
08:00 PM	0	0	0	1	1	0	3	2	0	0	0	0	0	0	7	41-50	5
09:00 PM	0	1	0	0	0	0	1	1	0	0	0	0	1	0	4	41-50	2
10:00 PM	0	0	0	0	0	1	1	3	0	0	0	0	0	0	5	41-50	4
11:00 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	36-45	2
Day Total	1	5	7	14	31	59	108	93	40	10	3	0	2	0	373	41-50	201
Percent	0.3%	1.3%	1.9%	3.8%	8.3%	15.8%	29%	24.9%	10.7%	2.7%	0.8%	0%	0.5%	0%			
AM Peak	12:00 AM	11:00 AM	8:00 AM	7:00 AM	11:00 AM	11:00 AM	9:00 AM	5:00 AM	5:00 AM	7:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	11:00 AM		
Volume	0	2	1	2	6	5	10	4	4	1	0	0	0	0	25		
PM Peak	4:00 PM	4:00 PM	2:00 PM	3:00 PM	4:00 PM	3:00 PM	5:00 PM	3:00 PM	3:00 PM	5:00 PM	1:00 PM	12:00 PM	5:00 PM	12:00 PM	5:00 PM		
Volume	1	1	3	3	5	12	15	14	5	2	1	0	1	0	47		



Comments:

Report generated on 11/23/2020 4:33 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

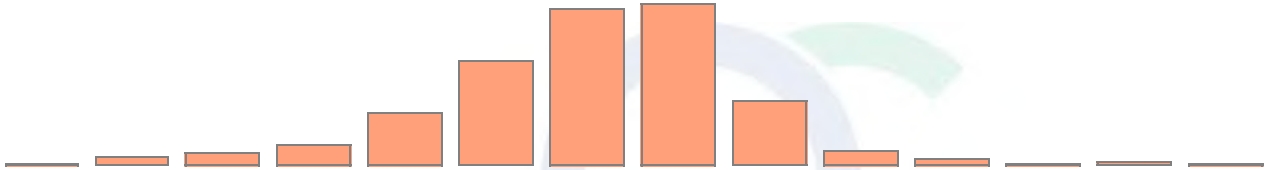
Type of report: Tube Count - Speed Data

SUMMARY - Tube Count - Speed Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd)
QC JOB #: 15323011
SPECIFIC LOCATION:
DIRECTION: NB
CITY/STATE: Clatskanie, OR
DATE: Nov 17 2020 - Nov 19 2020

Speed Range	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total **Percent**	2 0.2%	15 1.3%	22 2%	39 3.5%	98 8.7%	195 17.3%	293 26%	301 26.7%	119 10.6%	27 2.4%	11 1%	1 0.1%	3 0.3%	0 0%	1126	41-50	594
Cumulative Percent	0.2%	1.5%	3.5%	6.9%	15.6%	32.9%	59%	85.7%	96.3%	98.7%	99.6%	99.7%	100%	100%			

ADT
375



85th Percentile: 49 MPH
Mean Speed(Average): 43 MPH
Median: 43 MPH
Mode: 48 MPH

Comments:

Report generated on 11/23/2020 4:33 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Vehicle Classification Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** NB
CITY/STATE: Clatskanie, OR **DATE:** Nov 17 2020

Start Time	Motorcycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0		2
01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		0
02:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0		1
03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		0
04:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0		3
05:00 AM	0	3	0	0	5	0	0	0	0	0	0	0	0		8
06:00 AM	0	11	3	0	4	0	0	0	0	0	0	0	0		18
07:00 AM	0	8	**4**	**2**	2	0	0	0	0	0	0	0	0		16
08:00 AM	0	2	3	0	4	0	0	0	**1**	0	0	0	0		10
09:00 AM	0	8	4	0	4	0	0	0	0	0	0	0	0		16
10:00 AM	0	**15**	4	1	2	0	0	**1**	0	0	0	0	0		**23**
11:00 AM	0	8	2	0	**7**	0	0	0	0	0	0	0	0		17
12:00 PM	0	7	3	0	1	0	0	**2**	0	0	0	0	0		13
01:00 PM	0	12	**8**	**1**	5	0	0	0	0	0	0	0	0		26
02:00 PM	0	13	7	0	2	0	0	1	0	0	0	0	0		23
03:00 PM	**1**	24	8	1	7	0	0	1	0	0	0	0	0		42
04:00 PM	0	21	3	1	6	0	0	0	0	0	0	0	0		31
05:00 PM	0	**28**	7	0	**8**	0	0	1	0	0	0	0	0		**44**
06:00 PM	0	13	4	0	0	0	0	1	0	0	0	0	0		18
07:00 PM	0	12	4	0	2	0	0	0	0	0	0	0	0		18
08:00 PM	0	6	3	0	0	0	0	0	0	0	0	0	0		9
09:00 PM	0	5	2	0	1	0	0	0	0	0	0	0	0		8
10:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0		3
11:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0		3
Day Total	1	206	70	6	61	0	0	7	1	0	0	0	0		352
Percent	0.3%	58.5%	19.9%	1.7%	17.3%	0%	0%	2%	0.3%	0%	0%	0%	0%		
AM Peak	12:00 AM	10:00 AM	7:00 AM	7:00 AM	11:00 AM	12:00 AM	12:00 AM	10:00 AM	8:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM		10:00 AM
Volume	0	15	4	2	7	0	0	1	1	0	0	0	0		23
PM Peak	3:00 PM	5:00 PM	1:00 PM	1:00 PM	5:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM		5:00 PM
Volume	1	28	8	1	8	0	0	2	0	0	0	0	0		44

ADT
352

Comments:

Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Vehicle Classification Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** NB
CITY/STATE: Clatskanie, OR **DATE:** Nov 18 2020

Start Time	Motorcycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	1	3	0	1	0	0	0	0	0	0	0	0		5
01:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0		1
02:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0		1
03:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0		2
04:00 AM	0	3	0	0	1	0	0	0	0	0	0	0	0		4
05:00 AM	0	6	4	0	4	0	0	0	0	0	0	0	0		14
06:00 AM	0	7	4	0	**6**	0	0	0	0	0	0	0	0		17
07:00 AM	0	4	3	**2**	1	0	0	0	0	0	0	0	0		10
08:00 AM	0	6	5	0	4	0	0	0	0	0	0	0	0		15
09:00 AM	0	5	4	1	4	0	0	0	**1**	0	0	0	0		15
10:00 AM	0	6	**8**	2	3	0	0	**1**	0	0	0	0	0		20
11:00 AM	0	**13**	4	1	5	0	0	0	0	0	0	0	0		**23**
12:00 PM	0	15	9	0	2	**1**	0	0	0	0	0	0	0		27
01:00 PM	0	13	10	**1**	3	0	0	0	0	0	0	0	0		27
02:00 PM	0	17	7	0	3	0	0	**1**	0	0	0	0	0		28
03:00 PM	0	19	**15**	1	3	0	0	0	0	0	0	0	0		**38**
04:00 PM	0	**21**	7	1	**8**	0	0	1	0	0	0	0	0		38
05:00 PM	0	21	5	0	6	0	0	1	0	0	0	0	0		33
06:00 PM	0	19	6	0	3	0	0	0	0	0	0	0	0		28
07:00 PM	0	16	4	0	5	0	0	0	0	0	0	0	0		25
08:00 PM	0	4	0	0	2	0	0	0	0	0	0	0	0		6
09:00 PM	0	9	2	0	1	0	0	0	0	0	0	0	0		12
10:00 PM	0	5	1	0	0	0	0	0	0	0	0	0	0		6
11:00 PM	0	5	1	0	0	0	0	0	0	0	0	0	0		6
Day Total	0	218	102	9	66	1	0	4	1	0	0	0	0		401
Percent	0%	54.4%	25.4%	2.2%	16.5%	0.2%	0%	1%	0.2%	0%	0%	0%	0%		
AM Peak	12:00 AM	11:00 AM	10:00 AM	7:00 AM	6:00 AM	12:00 AM	12:00 AM	10:00 AM	9:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM		11:00 AM
Volume	0	13	8	2	6	0	0	1	1	0	0	0	0		23
PM Peak	12:00 PM	4:00 PM	3:00 PM	1:00 PM	4:00 PM	12:00 PM	12:00 PM	2:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM		3:00 PM
Volume	0	21	15	1	8	1	0	1	0	0	0	0	0		38

ADT 401

Comments:

Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Vehicle Classification Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** NB
CITY/STATE: Clatskanie, OR **DATE:** Nov 19 2020

Start Time	Motorcycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0		1
01:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0		1
02:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0		1
03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		0
04:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0		2
05:00 AM	0	6	1	0	**5**	0	0	0	0	0	0	0	0		12
06:00 AM	0	3	5	0	5	0	0	0	0	0	0	0	0		13
07:00 AM	0	4	1	**2**	2	0	0	**1**	0	0	0	0	0		10
08:00 AM	0	3	7	0	2	0	0	0	0	0	0	0	0		12
09:00 AM	0	8	4	0	5	0	0	0	0	0	0	0	0		17
10:00 AM	0	7	2	1	2	0	0	0	0	0	0	0	0		12
11:00 AM	0	**10**	**9**	0	5	0	0	1	0	0	0	0	0		**25**
12:00 PM	0	11	5	0	7	0	0	0	0	0	0	0	0		23
01:00 PM	0	20	4	**1**	2	**1**	0	0	0	0	0	0	0		28
02:00 PM	0	25	6	0	5	0	0	**1**	0	0	0	0	0		37
03:00 PM	**1**	21	**11**	1	6	0	0	0	0	0	0	0	0		40
04:00 PM	0	18	5	0	7	0	0	0	0	0	0	0	0		30
05:00 PM	0	**28**	11	0	**8**	0	0	0	0	0	0	0	0		**47**
06:00 PM	0	23	4	0	5	0	0	0	0	0	0	0	0		32
07:00 PM	0	6	4	0	2	0	0	0	0	0	0	0	0		12
08:00 PM	0	4	2	0	1	0	0	0	0	0	0	0	0		7
09:00 PM	0	2	1	0	1	0	0	0	0	0	0	0	0		4
10:00 PM	0	3	1	0	1	0	0	0	0	0	0	0	0		5
11:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0		2
Day Total	1	207	85	5	71	1	0	3	0	0	0	0	0		373
Percent	0.3%	55.5%	22.8%	1.3%	19%	0.3%	0%	0.8%	0%	0%	0%	0%	0%		
AM Peak	12:00 AM	11:00 AM	11:00 AM	7:00 AM	5:00 AM	12:00 AM	12:00 AM	7:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM		11:00 AM
Volume	0	10	9	2	5	0	0	1	0	0	0	0	0		25
PM Peak	3:00 PM	5:00 PM	3:00 PM	1:00 PM	5:00 PM	1:00 PM	12:00 PM	2:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM		5:00 PM
Volume	1	28	11	1	8	1	0	1	0	0	0	0	0		47

ADT 373

Comments:

Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Vehicle Classification Data

SUMMARY - Tube Count - Vehicle Classification Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** NB
CITY/STATE: Clatskanie, OR **DATE:** Nov 17 2020

	Motorcycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	2	631	257	20	198	2	0	14	2	0	0	0	0		1126
Percent	0.2%	56%	22.8%	1.8%	17.6%	0.2%	0%	1.2%	0.2%	0%	0%	0%	0%		
ADT 375															

Comments:

Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011

SPECIFIC LOCATION: **DIRECTION:** SB

CITY/STATE: Clatskanie, OR **DATE:** Nov 17 2020 - Nov 19 2020

Start Time	Mon	Tue 17 Nov 20	Wed 18 Nov 20	Thu 19 Nov 20	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		1	2	2		2			2	
01:00 AM		1	2	1		1			1	
02:00 AM		2	2	2		2			2	
03:00 AM		6	7	3		5			5	
04:00 AM		7	6	5		6			6	
05:00 AM		16	16	17		16			16	
06:00 AM		22	14	17		18			18	
07:00 AM		**29**	28	32		30			30	
08:00 AM		22	17	17		19			19	
09:00 AM		24	25	20		23			23	
10:00 AM		21	24	25		23			23	
11:00 AM		24	**32**	**38**		**31**			**31**	
12:00 PM		20	28	**31**		26			26	
01:00 PM		26	24	27		26			26	
02:00 PM		29	**33**	30		**31**			**31**	
03:00 PM		20	22	24		22			22	
04:00 PM		**34**	28	22		28			28	
05:00 PM		26	28	27		27			27	
06:00 PM		14	13	13		13			13	
07:00 PM		16	15	13		15			15	
08:00 PM		8	11	2		7			7	
09:00 PM		8	8	5		7			7	
10:00 PM		3	8	3		5			5	
11:00 PM		1	2	1		1			1	
Day Total		380	395	377		384			384	
% Weekday Average		99%	102.9%	98.2%						
% Week Average		99%	102.9%	98.2%		100%				
AM Peak Volume		7:00 AM 29	11:00 AM 32	11:00 AM 38		11:00 AM 31			11:00 AM 31	
PM Peak Volume		4:00 PM 34	2:00 PM 33	12:00 PM 31		2:00 PM 31			2:00 PM 31	

Comments:

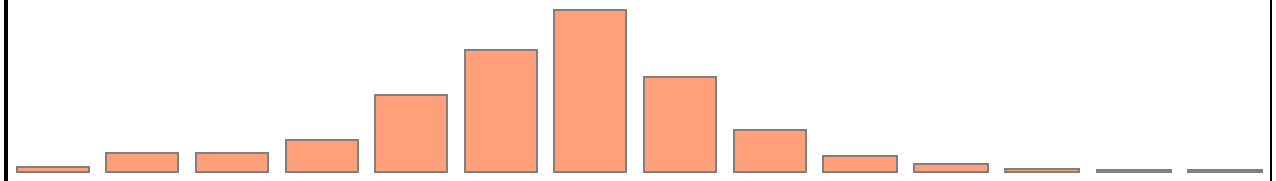
Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Speed Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** SB
CITY/STATE: Clatskanie, OR **DATE:** Nov 17 2020

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	46-55	1
01:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	51-60	1
02:00 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	21-30	1
03:00 AM	0	1	0	1	0	2	0	1	1	0	0	0	0	0	6	31-40	2
04:00 AM	0	0	0	1	0	1	2	1	0	0	**1**	**1**	0	0	7	41-50	3
05:00 AM	0	0	0	0	2	2	**8**	1	1	**2**	0	0	0	0	16	36-45	10
06:00 AM	0	0	0	0	1	6	5	**8**	1	0	1	0	0	0	22	41-50	13
07:00 AM	**1**	0	**3**	0	2	4	6	6	**5**	2	0	0	0	0	**29**	41-50	12
08:00 AM	0	1	0	**2**	3	4	8	4	0	0	0	0	0	0	22	41-50	12
09:00 AM	0	0	0	1	4	**7**	5	4	2	0	1	0	0	0	24	36-45	12
10:00 AM	0	**3**	1	0	3	4	4	5	0	1	0	0	0	0	21	41-50	9
11:00 AM	1	1	1	2	**6**	6	5	2	0	0	0	0	0	0	24	31-40	12
12:00 PM	**1**	2	0	**2**	**6**	2	5	2	0	0	0	0	0	0	20	28-37	8
01:00 PM	0	1	0	2	2	5	9	**7**	0	0	0	0	0	0	26	41-50	16
02:00 PM	0	**3**	0	1	1	**7**	7	6	**3**	**1**	0	0	0	0	29	36-45	14
03:00 PM	0	0	1	1	2	4	7	1	3	1	0	0	0	0	20	36-45	11
04:00 PM	0	0	**2**	1	4	7	**11**	5	3	0	**1**	0	0	0	**34**	36-45	18
05:00 PM	0	0	2	0	4	3	9	4	2	1	1	0	0	0	26	41-50	13
06:00 PM	0	0	2	1	1	4	5	0	1	0	0	0	0	0	14	36-45	9
07:00 PM	0	0	0	2	1	5	6	1	1	0	0	0	0	0	16	36-45	11
08:00 PM	0	0	0	1	4	2	0	1	0	0	0	0	0	0	8	31-40	6
09:00 PM	0	0	0	0	2	2	0	1	1	1	0	**1**	0	0	8	31-40	4
10:00 PM	0	0	0	1	1	0	0	0	1	0	0	0	0	0	3	26-35	2
11:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	31-40	1
Day Total	3	12	12	20	49	78	103	60	26	10	5	2	0	0	380	36-45	181
Percent	0.8%	3.2%	3.2%	5.3%	12.9%	20.5%	27.1%	15.8%	6.8%	2.6%	1.3%	0.5%	0%	0%			



AM Peak Volume	7:00 AM 1	10:00 AM 3	7:00 AM 3	8:00 AM 2	11:00 AM 6	9:00 AM 7	5:00 AM 8	6:00 AM 8	7:00 AM 5	5:00 AM 2	4:00 AM 1	4:00 AM 1	12:00 AM 0	12:00 AM 0	7:00 AM 29		
PM Peak Volume	12:00 PM 1	2:00 PM 3	4:00 PM 2	12:00 PM 2	12:00 PM 6	2:00 PM 7	4:00 PM 11	1:00 PM 7	2:00 PM 3	2:00 PM 1	4:00 PM 1	9:00 PM 1	12:00 PM 0	12:00 PM 0	4:00 PM 34		

Comments:

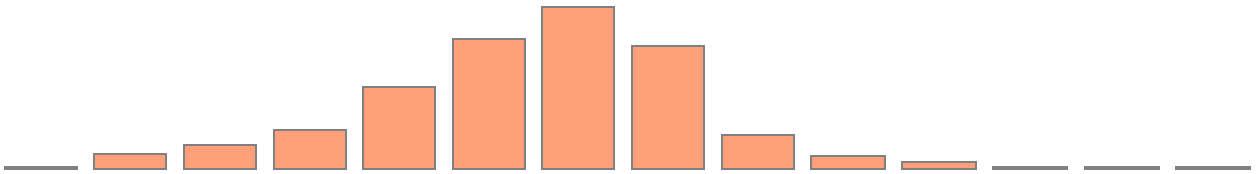
Report generated on 11/23/2020 4:33 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Speed Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** SB
CITY/STATE: Clatskanie, OR **DATE:** Nov 18 2020

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	26-35	1
01:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2	31-40	1
02:00 AM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	26-35	1
03:00 AM	0	1	0	2	0	0	1	3	0	0	0	0	0	0	7	41-50	4
04:00 AM	0	0	0	0	0	1	0	2	1	**1**	0	**1**	0	0	6	46-55	3
05:00 AM	0	0	0	1	3	2	7	1	1	0	**1**	0	0	0	16	36-45	9
06:00 AM	0	1	0	0	3	1	4	3	2	0	0	0	0	0	14	41-50	7
07:00 AM	0	0	1	1	0	6	7	6	**6**	1	0	0	0	0	28	36-45	13
08:00 AM	0	0	1	0	1	5	6	2	1	1	0	0	0	0	17	36-45	11
09:00 AM	0	0	**4**	0	2	6	**9**	2	0	1	1	0	0	0	25	36-45	15
10:00 AM	0	**2**	0	1	1	3	9	**7**	0	1	0	0	0	0	24	41-50	16
11:00 AM	0	0	0	**4**	**7**	**8**	7	6	0	0	0	0	0	0	**32**	36-45	15
12:00 PM	0	**1**	1	1	**7**	7	8	1	1	1	0	0	0	0	28	36-45	15
01:00 PM	0	0	1	1	2	3	**10**	5	1	0	**1**	0	0	0	24	41-50	15
02:00 PM	0	1	0	2	4	**10**	6	7	**3**	0	0	0	0	0	**33**	36-45	16
03:00 PM	0	0	0	**3**	2	3	5	7	2	0	0	0	0	0	22	41-50	12
04:00 PM	0	0	1	2	4	9	3	**8**	1	0	0	0	0	0	28	31-40	13
05:00 PM	0	0	1	1	4	4	10	7	1	0	0	0	0	0	28	41-50	17
06:00 PM	0	1	**2**	0	4	2	2	1	0	0	1	0	0	0	13	31-40	6
07:00 PM	0	1	0	1	0	6	2	3	0	**2**	0	0	0	0	15	36-45	8
08:00 PM	0	0	1	2	3	1	1	3	0	0	0	0	0	0	11	26-35	5
09:00 PM	0	0	1	1	2	2	1	0	1	0	0	0	0	0	8	31-40	4
10:00 PM	0	1	1	1	0	1	2	2	0	0	0	0	0	0	8	41-50	4
11:00 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	36-45	2
Day Total	0	9	15	24	51	82	102	78	21	8	4	1	0	0	395	36-45	184
Percent	0%	2.3%	3.8%	6.1%	12.9%	20.8%	25.8%	19.7%	5.3%	2%	1%	0.3%	0%	0%			
AM Peak	12:00 AM	10:00 AM	9:00 AM	11:00 AM	11:00 AM	11:00 AM	9:00 AM	10:00 AM	7:00 AM	4:00 AM	5:00 AM	4:00 AM	12:00 AM	12:00 AM	11:00 AM		
Volume	0	2	4	4	7	8	9	7	6	1	1	1	0	0	32		
PM Peak	12:00 PM	12:00 PM	6:00 PM	3:00 PM	12:00 PM	2:00 PM	1:00 PM	4:00 PM	2:00 PM	7:00 PM	1:00 PM	12:00 PM	12:00 PM	12:00 PM	2:00 PM		
Volume	0	1	2	3	7	10	10	8	3	2	1	0	0	0	33		



Comments:

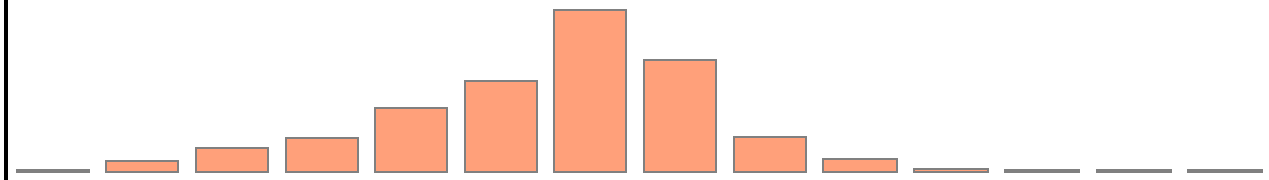
Report generated on 11/23/2020 4:33 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Speed Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** SB
CITY/STATE: Clatskanie, OR **DATE:** Nov 19 2020

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	46-55	2
01:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	41-50	1
02:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	16-25	1
03:00 AM	0	0	1	0	0	1	0	1	0	0	0	0	0	0	3	16-25	1
04:00 AM	0	0	0	0	0	2	1	0	0	0	**1**	**1**	0	0	5	36-45	3
05:00 AM	0	0	0	1	2	3	5	2	3	**1**	0	0	0	0	17	36-45	8
06:00 AM	0	0	0	1	2	2	6	4	1	1	0	0	0	0	17	41-50	10
07:00 AM	0	0	**3**	1	2	5	10	6	**4**	1	0	0	0	0	32	41-50	16
08:00 AM	0	0	0	0	1	2	7	5	1	1	0	0	0	0	17	41-50	12
09:00 AM	0	0	1	1	1	5	4	**7**	1	0	0	0	0	0	20	41-50	11
10:00 AM	0	**1**	2	1	**5**	2	**12**	2	0	0	0	0	0	0	25	36-45	14
11:00 AM	0	1	2	**4**	5	**7**	12	6	0	1	0	0	0	0	**38**	36-45	19
12:00 PM	0	0	1	**3**	3	5	**12**	6	1	0	0	0	0	0	**31**	41-50	18
01:00 PM	0	1	1	0	1	**6**	10	4	**4**	0	0	0	0	0	27	36-45	16
02:00 PM	0	0	**2**	1	5	6	6	7	1	**1**	**1**	0	0	0	30	41-50	13
03:00 PM	0	1	0	2	**7**	2	4	6	2	0	0	0	0	0	24	41-50	10
04:00 PM	0	1	1	1	2	4	7	5	0	1	0	0	0	0	22	41-50	12
05:00 PM	0	0	1	1	3	4	6	**9**	3	0	0	0	0	0	27	41-50	15
06:00 PM	0	0	0	3	2	2	3	2	1	0	0	0	0	0	13	26-35	5
07:00 PM	0	0	0	2	2	2	4	2	0	1	0	0	0	0	13	41-50	6
08:00 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	36-45	2
09:00 PM	**1**	**2**	0	0	0	1	0	1	0	0	0	0	0	0	5	11-20	2
10:00 PM	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	26-35	2
11:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	46-55	1
Day Total	1	7	16	23	44	63	111	77	24	8	2	1	0	0	377	41-50	188
Percent	0.3%	1.9%	4.2%	6.1%	11.7%	16.7%	29.4%	20.4%	6.4%	2.1%	0.5%	0.3%	0%	0%			



AM Peak	12:00 AM	10:00 AM	7:00 AM	11:00 AM	10:00 AM	11:00 AM	10:00 AM	9:00 AM	7:00 AM	5:00 AM	4:00 AM	4:00 AM	12:00 AM	12:00 AM	11:00 AM		
Volume	0	1	3	4	5	7	12	7	4	1	1	1	0	0	38		
PM Peak	9:00 PM	9:00 PM	2:00 PM	12:00 PM	3:00 PM	1:00 PM	12:00 PM	5:00 PM	1:00 PM	2:00 PM	2:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM		
Volume	1	2	2	3	7	6	12	9	4	1	1	0	0	0	31		

Comments:

Report generated on 11/23/2020 4:33 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Speed Data

SUMMARY - Tube Count - Speed Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** SB
CITY/STATE: Clatskanie, OR **DATE:** Nov 17 2020 - Nov 19 2020

Speed Range	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	4	28	43	67	144	223	316	215	71	26	11	4	0	0	1152	36-45	539
Percent	0.3%	2.4%	3.7%	5.8%	12.5%	19.4%	27.4%	18.7%	6.2%	2.3%	1%	0.3%	0%	0%			
Cumulative Percent	0.3%	2.8%	6.5%	12.3%	24.8%	44.2%	71.6%	90.3%	96.4%	98.7%	99.7%	100%	100%	100%			

ADT
384

85th Percentile: 48 MPH
Mean Speed(Average): 41 MPH
Median: 41 MPH
Mode: 43 MPH

Comments:

Report generated on 11/23/2020 4:33 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Vehicle Classification Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** SB
CITY/STATE: Clatskanie, OR **DATE:** Nov 17 2020

Start Time	Motorcycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0		1
01:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0		1
02:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0		2
03:00 AM	0	2	3	0	1	0	0	0	0	0	0	0	0		6
04:00 AM	0	2	1	2	2	0	0	0	0	0	0	0	0		7
05:00 AM	0	8	3	0	5	0	0	0	0	0	0	0	0		16
06:00 AM	0	15	4	0	3	0	0	0	0	0	0	0	0		22
07:00 AM	0	16	9	1	3	0	0	0	0	0	0	0	0		29
08:00 AM	0	14	4	2	2	0	0	0	0	0	0	0	0		22
09:00 AM	0	16	3	0	3	0	0	1	1	0	0	0	0		24
10:00 AM	0	10	6	1	4	0	0	0	0	0	0	0	0		21
11:00 AM	0	7	8	1	7	0	0	1	0	0	0	0	0		24
12:00 PM	0	12	3	1	3	0	0	1	0	0	0	0	0		20
01:00 PM	0	15	6	1	4	0	0	0	0	0	0	0	0		26
02:00 PM	0	17	8	1	2	0	0	1	0	0	0	0	0		29
03:00 PM	0	13	3	0	3	0	0	1	0	0	0	0	0		20
04:00 PM	0	21	5	0	7	0	0	1	0	0	0	0	0		34
05:00 PM	0	17	6	0	3	0	0	0	0	0	0	0	0		26
06:00 PM	0	9	4	0	1	0	0	0	0	0	0	0	0		14
07:00 PM	0	12	4	0	0	0	0	0	0	0	0	0	0		16
08:00 PM	0	7	0	0	1	0	0	0	0	0	0	0	0		8
09:00 PM	0	7	1	0	0	0	0	0	0	0	0	0	0		8
10:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0		3
11:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0		1
Day Total	0	225	83	10	55	0	0	6	1	0	0	0	0		380
Percent	0%	59.2%	21.8%	2.6%	14.5%	0%	0%	1.6%	0.3%	0%	0%	0%	0%		
ADT 380															
AM Peak	12:00 AM	7:00 AM	7:00 AM	4:00 AM	11:00 AM	12:00 AM	12:00 AM	9:00 AM	9:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM		7:00 AM
Volume	0	16	9	2	7	0	0	1	1	0	0	0	0		29
PM Peak	12:00 PM	4:00 PM	2:00 PM	12:00 PM	4:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM		4:00 PM
Volume	0	21	8	1	7	0	0	1	0	0	0	0	0		34

Comments:

Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Vehicle Classification Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** SB
CITY/STATE: Clatskanie, OR **DATE:** Nov 18 2020

Start Time	Motorcycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0		2
01:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0		2
02:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0		2
03:00 AM	0	2	3	1	1	0	0	0	0	0	0	0	0		7
04:00 AM	0	2	3	0	1	0	0	0	0	0	0	0	0		6
05:00 AM	0	11	1	1	3	0	0	0	0	0	0	0	0		16
06:00 AM	0	7	2	1	4	0	0	0	0	0	0	0	0		14
07:00 AM	0	14	**10**	**2**	2	0	0	0	0	0	0	0	0		28
08:00 AM	0	9	5	0	2	0	0	**1**	0	0	0	0	0		17
09:00 AM	0	**18**	3	0	4	0	0	0	0	0	0	0	0		25
10:00 AM	0	13	6	2	2	0	0	1	0	0	0	0	0		24
11:00 AM	0	17	5	2	**7**	0	0	0	**1**	0	0	0	0		**32**
12:00 PM	0	14	**11**	**1**	2	0	0	0	0	0	0	0	0		28
01:00 PM	0	13	9	1	0	0	0	1	0	0	0	0	0		24
02:00 PM	0	**25**	5	0	3	0	0	0	0	0	0	0	0		**33**
03:00 PM	0	11	7	0	**4**	0	0	0	0	0	0	0	0		22
04:00 PM	**1**	13	10	1	3	0	0	0	0	0	0	0	0		28
05:00 PM	0	17	5	0	4	0	0	**2**	0	0	0	0	0		28
06:00 PM	0	9	2	0	2	0	0	0	0	0	0	0	0		13
07:00 PM	0	12	3	0	0	0	0	0	0	0	0	0	0		15
08:00 PM	0	8	2	0	1	0	0	0	0	0	0	0	0		11
09:00 PM	0	6	1	0	1	0	0	0	0	0	0	0	0		8
10:00 PM	0	6	1	0	1	0	0	0	0	0	0	0	0		8
11:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0		2
Day Total	1	233	96	12	47	0	0	5	1	0	0	0	0		395
Percent	0.3%	59%	24.3%	3%	11.9%	0%	0%	1.3%	0.3%	0%	0%	0%	0%		
AM Peak	12:00 AM	9:00 AM	7:00 AM	7:00 AM	11:00 AM	12:00 AM	12:00 AM	8:00 AM	11:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM		11:00 AM
Volume	0	18	10	2	7	0	0	1	1	0	0	0	0		32
PM Peak	4:00 PM	2:00 PM	12:00 PM	12:00 PM	3:00 PM	12:00 PM	12:00 PM	5:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM		2:00 PM
Volume	1	25	11	1	4	0	0	2	0	0	0	0	0		33

ADT
395

Comments:

Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Vehicle Classification Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** SB
CITY/STATE: Clatskanie, OR **DATE:** Nov 19 2020

Start Time	Motorcycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0		2
01:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0		1
02:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0		2
03:00 AM	0	1	0	0	0	**2**	0	0	0	0	0	0	0		3
04:00 AM	0	2	1	1	1	0	0	0	0	0	0	0	0		5
05:00 AM	0	12	2	0	3	0	0	0	0	0	0	0	0		17
06:00 AM	0	7	6	0	4	0	0	0	0	0	0	0	0		17
07:00 AM	0	18	8	**2**	4	0	0	0	0	0	0	0	0		32
08:00 AM	0	12	4	0	1	0	0	0	0	0	0	0	0		17
09:00 AM	0	13	3	0	3	0	0	**1**	0	0	0	0	0		20
10:00 AM	0	12	8	1	3	0	0	1	0	0	0	0	0		25
11:00 AM	0	**19**	**13**	0	**5**	1	0	0	0	0	0	0	0		**38**
12:00 PM	0	14	**12**	0	5	0	0	0	0	0	0	0	0		**31**
01:00 PM	0	14	6	**1**	**6**	0	0	0	0	0	0	0	0		27
02:00 PM	**1**	17	7	0	5	0	0	0	0	0	0	0	0		30
03:00 PM	0	12	10	0	1	0	0	1	0	0	0	0	0		24
04:00 PM	0	12	3	0	5	0	0	**2**	0	0	0	0	0		22
05:00 PM	0	**18**	6	0	3	0	0	0	0	0	0	0	0		27
06:00 PM	0	5	5	0	3	0	0	0	0	0	0	0	0		13
07:00 PM	0	11	2	0	0	0	0	0	0	0	0	0	0		13
08:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0		2
09:00 PM	0	2	1	0	2	0	0	0	0	0	0	0	0		5
10:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0		3
11:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0		1
Day Total	1	207	101	5	55	3	0	5	0	0	0	0	0		377
Percent	0.3%	54.9%	26.8%	1.3%	14.6%	0.8%	0%	1.3%	0%	0%	0%	0%	0%		
ADT 377															
AM Peak	12:00 AM	11:00 AM	11:00 AM	7:00 AM	11:00 AM	3:00 AM	12:00 AM	9:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM		11:00 AM
Volume	0	19	13	2	5	2	0	1	0	0	0	0	0		38
PM Peak	2:00 PM	5:00 PM	12:00 PM	1:00 PM	1:00 PM	12:00 PM	12:00 PM	4:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM		12:00 PM
Volume	1	18	12	1	6	0	0	2	0	0	0	0	0		31

Comments:

Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Vehicle Classification Data

SUMMARY - Tube Count - Vehicle Classification Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** SB
CITY/STATE: Clatskanie, OR **DATE:** Nov 17 2020

	Motorcycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	2	665	280	27	157	3	0	16	2	0	0	0	0		1152
Percent	0.2%	57.7%	24.3%	2.3%	13.6%	0.3%	0%	1.4%	0.2%	0%	0%	0%	0%		
ADT 384															

Comments:

Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Volume Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011

SPECIFIC LOCATION: **DIRECTION:** NB, SB

CITY/STATE: Clatskanie, OR **DATE:** Nov 17 2020 - Nov 19 2020

Start Time	Mon	Tue 17 Nov 20	Wed 18 Nov 20	Thu 19 Nov 20	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		3	7	3		4			4	
01:00 AM		1	3	2		2			2	
02:00 AM		3	3	3		3			3	
03:00 AM		6	9	3		6			6	
04:00 AM		10	10	7		9			9	
05:00 AM		24	30	29		28			28	
06:00 AM		40	31	30		34			34	
07:00 AM		**45**	38	42		42			42	
08:00 AM		32	32	29		31			31	
09:00 AM		40	40	37		39			39	
10:00 AM		44	44	37		42			42	
11:00 AM		41	**55**	**63**		**53**			**53**	
12:00 PM		33	55	54		47			47	
01:00 PM		52	51	55		53			53	
02:00 PM		52	61	67		60			60	
03:00 PM		62	60	64		62			62	
04:00 PM		65	**66**	52		61			61	
05:00 PM		**70**	61	**74**		**68**			**68**	
06:00 PM		32	41	45		39			39	
07:00 PM		34	40	25		33			33	
08:00 PM		17	17	9		14			14	
09:00 PM		16	20	9		15			15	
10:00 PM		6	14	8		9			9	
11:00 PM		4	8	3		5			5	
Day Total		732	796	750		759			759	
% Weekday Average		96.4%	104.9%	98.8%						
% Week Average		96.4%	104.9%	98.8%		100%				
AM Peak Volume		7:00 AM 45	11:00 AM 55	11:00 AM 63		11:00 AM 53			11:00 AM 53	
PM Peak Volume		5:00 PM 70	4:00 PM 66	5:00 PM 74		5:00 PM 68			5:00 PM 68	

Comments:

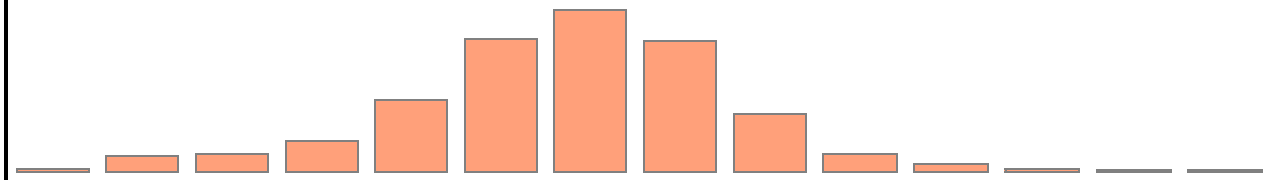
Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Speed Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** NB, SB
CITY/STATE: Clatskanie, OR **DATE:** Nov 17 2020

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	0	0	0	2	0	0	1	0	0	0	0	0	3	31-40	2
01:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	51-60	1
02:00 AM	0	0	0	1	0	0	1	1	0	0	0	0	0	0	3	41-50	2
03:00 AM	0	1	0	1	0	2	0	1	1	0	0	0	0	0	6	31-40	2
04:00 AM	0	0	0	1	0	1	3	2	1	0	**1**	**1**	0	0	10	41-50	5
05:00 AM	0	0	0	1	2	2	8	4	5	2	0	0	0	0	24	41-50	12
06:00 AM	0	0	0	0	1	6	7	**17**	**7**	1	1	0	0	0	40	41-50	24
07:00 AM	**1**	0	**3**	2	4	6	**11**	8	7	**3**	0	0	0	0	**45**	41-50	19
08:00 AM	0	2	1	2	4	10	9	4	0	0	0	0	0	0	32	36-45	19
09:00 AM	0	1	0	**3**	6	9	9	7	3	1	1	0	0	0	40	36-45	18
10:00 AM	0	**3**	2	1	5	**12**	7	11	1	2	0	0	0	0	44	36-45	19
11:00 AM	1	3	2	3	**9**	11	9	3	0	0	0	0	0	0	41	35-44	20
12:00 PM	**1**	2	0	2	7	2	8	8	2	1	0	0	0	0	33	41-50	16
01:00 PM	0	1	1	3	6	10	16	14	0	1	0	0	0	0	52	41-50	30
02:00 PM	0	**3**	1	1	4	**15**	12	10	5	1	0	0	0	0	52	36-45	27
03:00 PM	0	1	2	1	4	14	**20**	10	**8**	**2**	0	0	0	0	62	36-45	34
04:00 PM	0	0	**3**	2	6	15	13	**18**	6	1	1	0	0	0	65	41-50	31
05:00 PM	0	0	2	2	**11**	14	17	16	6	1	1	0	0	0	**70**	41-50	33
06:00 PM	0	0	2	1	2	6	10	4	5	1	1	0	0	0	32	36-45	16
07:00 PM	0	0	0	**4**	2	5	14	6	2	0	0	0	**1**	0	34	41-50	20
08:00 PM	0	0	0	1	4	3	5	2	1	0	1	0	0	0	17	36-45	8
09:00 PM	0	0	0	0	3	4	1	1	2	2	**2**	**1**	0	0	16	31-40	7
10:00 PM	0	0	0	1	1	1	1	1	1	0	0	0	0	0	6	26-35	2
11:00 PM	0	0	0	0	0	1	1	1	1	0	0	0	0	0	4	36-45	2
Day Total	3	17	19	33	81	151	182	149	65	20	9	2	1	0	732	36-45	333
Percent	0.4%	2.3%	2.6%	4.5%	11.1%	20.6%	24.9%	20.4%	8.9%	2.7%	1.2%	0.3%	0.1%	0%			



AM Peak	7:00 AM	10:00 AM	7:00 AM	9:00 AM	11:00 AM	10:00 AM	7:00 AM	6:00 AM	6:00 AM	7:00 AM	4:00 AM	4:00 AM	12:00 AM	12:00 AM	7:00 AM		
Volume	1	3	3	3	9	12	11	17	7	3	1	1	0	0	45		
PM Peak	12:00 PM	2:00 PM	4:00 PM	7:00 PM	5:00 PM	2:00 PM	3:00 PM	4:00 PM	3:00 PM	3:00 PM	9:00 PM	9:00 PM	7:00 PM	12:00 PM	5:00 PM		
Volume	1	3	3	4	11	15	20	18	8	2	2	1	1	0	70		

Comments:

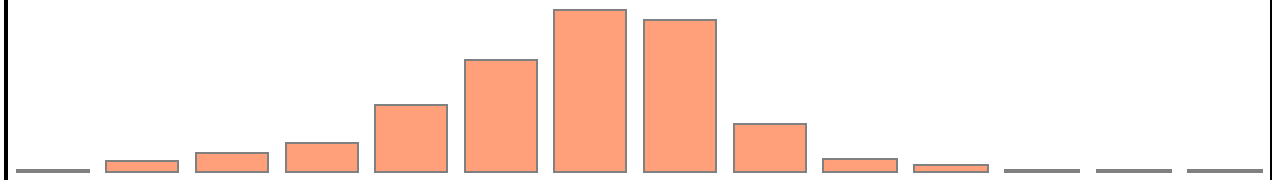
Report generated on 11/23/2020 4:33 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Speed Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** NB, SB
CITY/STATE: Clatskanie, OR **DATE:** Nov 18 2020

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	0	0	1	1	0	3	1	1	0	0	0	0	7	46-55	4
01:00 AM	0	0	0	0	1	1	0	1	0	0	0	0	0	0	3	31-40	2
02:00 AM	0	0	0	1	1	0	1	0	0	0	0	0	0	0	3	26-35	2
03:00 AM	0	1	0	2	0	0	1	5	0	0	0	0	0	0	9	41-50	6
04:00 AM	0	0	0	0	1	1	0	4	2	1	0	**1**	0	0	10	46-55	6
05:00 AM	0	0	0	2	3	2	12	6	4	0	**1**	0	0	0	30	41-50	18
06:00 AM	0	**2**	0	0	4	3	5	10	5	**2**	0	0	0	0	31	41-50	15
07:00 AM	0	0	1	1	1	8	10	8	**7**	1	1	0	0	0	38	38-47	18
08:00 AM	0	0	1	0	4	7	12	5	2	1	0	0	0	0	32	36-45	19
09:00 AM	0	0	**4**	1	3	8	12	9	1	1	1	0	0	0	40	41-50	21
10:00 AM	0	2	1	1	2	7	16	**13**	1	1	0	0	0	0	44	41-50	29
11:00 AM	0	0	0	**5**	**11**	**10**	**17**	11	1	0	0	0	0	0	**55**	41-50	28
12:00 PM	0	**3**	1	2	**11**	12	14	6	5	1	0	0	0	0	55	36-45	26
01:00 PM	**1**	0	1	1	3	7	18	16	3	0	1	0	0	0	51	41-50	34
02:00 PM	0	1	0	3	5	**18**	13	14	6	0	0	**1**	0	0	61	36-45	31
03:00 PM	0	0	0	3	4	14	10	**20**	**8**	1	0	0	0	0	60	41-50	30
04:00 PM	0	0	2	2	7	17	15	18	3	1	1	0	0	0	**66**	41-50	33
05:00 PM	0	0	2	**4**	6	9	**22**	14	4	0	0	0	0	0	61	41-50	36
06:00 PM	0	2	3	0	6	4	11	9	3	0	**3**	0	0	0	41	41-50	20
07:00 PM	0	1	**4**	3	2	10	7	10	0	**3**	0	0	0	0	40	36-45	17
08:00 PM	0	1	1	2	5	1	3	4	0	0	0	0	0	0	17	26-35	7
09:00 PM	0	0	1	1	5	3	2	4	3	1	0	0	0	0	20	31-40	8
10:00 PM	0	1	1	2	0	1	5	2	2	0	0	0	0	0	14	41-50	7
11:00 PM	0	0	0	0	0	1	2	5	0	0	0	0	0	0	8	41-50	7
Day Total	1	14	23	36	86	145	208	197	61	15	8	2	0	0	796	41-50	405
Percent	0.1%	1.8%	2.9%	4.5%	10.8%	18.2%	26.1%	24.7%	7.7%	1.9%	1%	0.3%	0%	0%			



AM Peak	12:00 AM	6:00 AM	9:00 AM	11:00 AM	11:00 AM	11:00 AM	11:00 AM	10:00 AM	7:00 AM	6:00 AM	5:00 AM	4:00 AM	12:00 AM	12:00 AM	11:00 AM		
Volume	0	2	4	5	11	10	17	13	7	2	1	1	0	0	55		
PM Peak	1:00 PM	12:00 PM	7:00 PM	5:00 PM	12:00 PM	2:00 PM	5:00 PM	3:00 PM	3:00 PM	7:00 PM	6:00 PM	2:00 PM	12:00 PM	12:00 PM	4:00 PM		
Volume	1	3	4	4	11	18	22	20	8	3	3	1	0	0	66		

Comments:

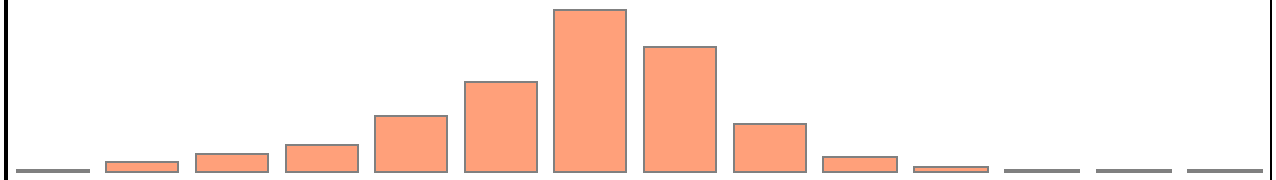
Report generated on 11/23/2020 4:33 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Speed Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** NB, SB
CITY/STATE: Clatskanie, OR **DATE:** Nov 19 2020

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	0	0	0	1	0	1	1	0	0	0	0	0	3	46-55	2
01:00 AM	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	46-55	2
02:00 AM	0	0	1	0	0	0	1	1	0	0	0	0	0	0	3	41-50	2
03:00 AM	0	0	1	0	0	1	0	1	0	0	0	0	0	0	3	16-25	1
04:00 AM	0	0	0	0	1	2	1	0	1	0	**1**	**1**	0	0	7	36-45	3
05:00 AM	0	0	0	1	2	3	9	6	**7**	1	0	0	0	0	29	41-50	15
06:00 AM	0	0	0	2	2	5	9	7	4	1	0	0	0	0	30	41-50	16
07:00 AM	0	0	**3**	3	4	6	12	7	5	**2**	0	0	0	0	42	41-50	19
08:00 AM	0	0	1	0	2	2	12	8	3	1	0	0	0	0	29	41-50	20
09:00 AM	0	1	1	1	1	5	14	**11**	2	1	0	0	0	0	37	41-50	25
10:00 AM	0	1	2	1	8	2	17	6	0	0	0	0	0	0	37	41-50	23
11:00 AM	0	**3**	3	**5**	**11**	**12**	**19**	9	0	1	0	0	0	0	**63**	36-45	31
12:00 PM	0	0	3	**5**	4	10	16	11	4	1	0	0	0	0	54	41-50	27
01:00 PM	0	1	1	0	5	9	**23**	10	5	0	**1**	0	0	0	55	41-50	33
02:00 PM	0	0	**5**	2	**8**	**14**	16	15	4	2	1	0	0	0	67	41-50	31
03:00 PM	0	1	0	5	8	14	9	20	**7**	0	0	0	0	0	64	41-50	29
04:00 PM	**1**	2	1	1	7	7	14	12	5	1	1	0	0	0	52	41-50	26
05:00 PM	0	0	1	3	4	13	21	**22**	7	2	0	0	**1**	0	**74**	41-50	43
06:00 PM	0	0	0	4	4	7	11	11	6	2	0	0	0	0	45	41-50	22
07:00 PM	0	0	0	2	2	4	8	4	1	**3**	1	0	0	0	25	41-50	12
08:00 PM	0	0	0	1	1	1	4	2	0	0	0	0	0	0	9	41-50	6
09:00 PM	1	**3**	0	0	0	1	1	2	0	0	0	0	1	0	9	11-20	3
10:00 PM	0	0	0	1	1	2	1	3	0	0	0	0	0	0	8	41-50	4
11:00 PM	0	0	0	0	0	1	1	0	1	0	0	0	0	0	3	36-45	2
Day Total	2	12	23	37	75	122	219	170	64	18	5	1	2	0	750	41-50	389
Percent	0.3%	1.6%	3.1%	4.9%	10%	16.3%	29.2%	22.7%	8.5%	2.4%	0.7%	0.1%	0.3%	0%			
AM Peak	12:00 AM	11:00 AM	7:00 AM	11:00 AM	11:00 AM	11:00 AM	11:00 AM	9:00 AM	5:00 AM	7:00 AM	4:00 AM	4:00 AM	12:00 AM	12:00 AM	11:00 AM		
Volume	0	3	3	5	11	12	19	11	7	2	1	1	0	0	63		
PM Peak	4:00 PM	9:00 PM	2:00 PM	12:00 PM	2:00 PM	2:00 PM	1:00 PM	5:00 PM	3:00 PM	7:00 PM	1:00 PM	12:00 PM	5:00 PM	12:00 PM	5:00 PM		
Volume	1	3	5	5	8	14	23	22	7	3	1	0	1	0	74		



Comments:

Report generated on 11/23/2020 4:33 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

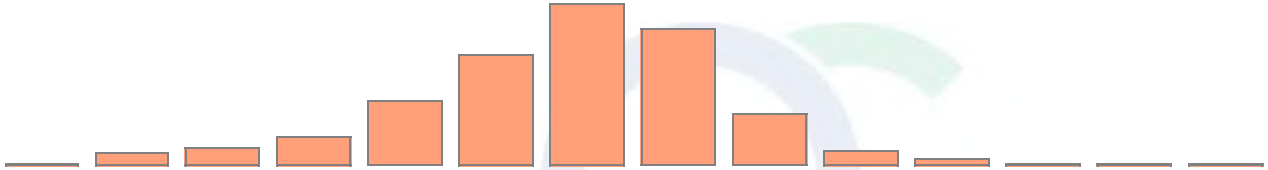
Type of report: Tube Count - Speed Data

SUMMARY - Tube Count - Speed Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd)
QC JOB #: 15323011
SPECIFIC LOCATION:
DIRECTION: NB, SB
CITY/STATE: Clatskanie, OR
DATE: Nov 17 2020 - Nov 19 2020

Speed Range	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	6	43	65	106	242	418	609	516	190	53	22	5	3	0	2278	41-50	1125
Percent	0.3%	1.9%	2.9%	4.7%	10.6%	18.3%	26.7%	22.7%	8.3%	2.3%	1%	0.2%	0.1%	0%			
Cumulative Percent	0.3%	2.2%	5%	9.7%	20.3%	38.6%	65.4%	88%	96.4%	98.7%	99.6%	99.9%	100%	100%			

ADT
759



85th Percentile: 49 MPH
Mean Speed(Average): 42 MPH
Median: 42 MPH
Mode: 43 MPH

Comments:

Report generated on 11/23/2020 4:33 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Vehicle Classification Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** NB, SB
CITY/STATE: Clatskanie, OR **DATE:** Nov 17 2020

Start Time	Motorcycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
01:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
03:00 AM	0	2	3	0	1	0	0	0	0	0	0	0	0	0	6
04:00 AM	0	5	1	2	2	0	0	0	0	0	0	0	0	0	10
05:00 AM	0	11	3	0	10	0	0	0	0	0	0	0	0	0	24
06:00 AM	0	**26**	7	0	7	0	0	0	0	0	0	0	0	0	40
07:00 AM	0	24	**13**	**3**	5	0	0	0	0	0	0	0	0	0	**45**
08:00 AM	0	16	7	2	6	0	0	0	**1**	0	0	0	0	0	32
09:00 AM	0	24	7	0	7	0	0	**1**	1	0	0	0	0	0	40
10:00 AM	0	25	10	2	6	0	0	1	0	0	0	0	0	0	44
11:00 AM	0	15	10	1	**14**	0	0	1	0	0	0	0	0	0	41
12:00 PM	0	19	6	1	4	0	0	**3**	0	0	0	0	0	0	33
01:00 PM	0	27	14	**2**	9	0	0	0	0	0	0	0	0	0	52
02:00 PM	0	30	**15**	1	4	0	0	2	0	0	0	0	0	0	52
03:00 PM	**1**	37	11	1	10	0	0	2	0	0	0	0	0	0	62
04:00 PM	0	42	8	1	**13**	0	0	1	0	0	0	0	0	0	65
05:00 PM	0	**45**	13	0	11	0	0	1	0	0	0	0	0	0	**70**
06:00 PM	0	22	8	0	1	0	0	1	0	0	0	0	0	0	32
07:00 PM	0	24	8	0	2	0	0	0	0	0	0	0	0	0	34
08:00 PM	0	13	3	0	1	0	0	0	0	0	0	0	0	0	17
09:00 PM	0	12	3	0	1	0	0	0	0	0	0	0	0	0	16
10:00 PM	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
11:00 PM	0	3	0	0	1	0	0	0	0	0	0	0	0	0	4
Day Total	1	431	153	16	116	0	0	13	2	0	0	0	0	0	732
Percent	0.1%	58.9%	20.9%	2.2%	15.8%	0%	0%	1.8%	0.3%	0%	0%	0%	0%	0%	
ADT 732															
AM Peak	12:00 AM	6:00 AM	7:00 AM	7:00 AM	11:00 AM	12:00 AM	12:00 AM	9:00 AM	8:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	7:00 AM
Volume	0	26	13	3	14	0	0	1	1	0	0	0	0	0	45
PM Peak	3:00 PM	5:00 PM	2:00 PM	1:00 PM	4:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	5:00 PM
Volume	1	45	15	2	13	0	0	3	0	0	0	0	0	0	70

Comments:

Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Vehicle Classification Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** NB, SB
CITY/STATE: Clatskanie, OR **DATE:** Nov 18 2020

Start Time	Motorcycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	2	4	0	1	0	0	0	0	0	0	0	0	0	7
01:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
02:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
03:00 AM	0	3	3	1	2	0	0	0	0	0	0	0	0	0	9
04:00 AM	0	5	3	0	2	0	0	0	0	0	0	0	0	0	10
05:00 AM	0	17	5	1	7	0	0	0	0	0	0	0	0	0	30
06:00 AM	0	14	6	1	10	0	0	0	0	0	0	0	0	0	31
07:00 AM	0	18	13	**4**	3	0	0	0	0	0	0	0	0	0	38
08:00 AM	0	15	10	0	6	0	0	1	0	0	0	0	0	0	32
09:00 AM	0	23	7	1	8	0	0	0	**1**	0	0	0	0	0	40
10:00 AM	0	19	**14**	4	5	0	0	**2**	0	0	0	0	0	0	44
11:00 AM	0	**30**	9	3	**12**	0	0	0	1	0	0	0	0	0	**55**
12:00 PM	0	29	20	1	4	**1**	0	0	0	0	0	0	0	0	55
01:00 PM	0	26	19	**2**	3	0	0	1	0	0	0	0	0	0	51
02:00 PM	0	**42**	12	0	6	0	0	1	0	0	0	0	0	0	61
03:00 PM	0	30	**22**	1	7	0	0	0	0	0	0	0	0	0	60
04:00 PM	**1**	34	17	2	**11**	0	0	1	0	0	0	0	0	0	**66**
05:00 PM	0	38	10	0	10	0	0	**3**	0	0	0	0	0	0	61
06:00 PM	0	28	8	0	5	0	0	0	0	0	0	0	0	0	41
07:00 PM	0	28	7	0	5	0	0	0	0	0	0	0	0	0	40
08:00 PM	0	12	2	0	3	0	0	0	0	0	0	0	0	0	17
09:00 PM	0	15	3	0	2	0	0	0	0	0	0	0	0	0	20
10:00 PM	0	11	2	0	1	0	0	0	0	0	0	0	0	0	14
11:00 PM	0	7	1	0	0	0	0	0	0	0	0	0	0	0	8
Day Total	1	451	198	21	113	1	0	9	2	0	0	0	0	0	796
Percent	0.1%	56.7%	24.9%	2.6%	14.2%	0.1%	0%	1.1%	0.3%	0%	0%	0%	0%	0%	
ADT 796															
AM Peak	12:00 AM	11:00 AM	10:00 AM	7:00 AM	11:00 AM	12:00 AM	12:00 AM	10:00 AM	9:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	11:00 AM
Volume	0	30	14	4	12	0	0	2	1	0	0	0	0	0	55
PM Peak	4:00 PM	2:00 PM	3:00 PM	1:00 PM	4:00 PM	12:00 PM	12:00 PM	5:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	4:00 PM
Volume	1	42	22	2	11	1	0	3	0	0	0	0	0	0	66

Comments:

Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Vehicle Classification Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd) **QC JOB #:** 15323011
SPECIFIC LOCATION: **DIRECTION:** NB, SB
CITY/STATE: Clatskanie, OR **DATE:** Nov 19 2020

Start Time	Motorcycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
01:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
02:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
03:00 AM	0	1	0	0	0	**2**	0	0	0	0	0	0	0	0	3
04:00 AM	0	3	2	1	1	0	0	0	0	0	0	0	0	0	7
05:00 AM	0	18	3	0	8	0	0	0	0	0	0	0	0	0	29
06:00 AM	0	10	11	0	9	0	0	0	0	0	0	0	0	0	30
07:00 AM	0	22	9	**4**	6	0	0	**1**	0	0	0	0	0	0	42
08:00 AM	0	15	11	0	3	0	0	0	0	0	0	0	0	0	29
09:00 AM	0	21	7	0	8	0	0	1	0	0	0	0	0	0	37
10:00 AM	0	19	10	2	5	0	0	1	0	0	0	0	0	0	37
11:00 AM	0	**29**	**22**	0	**10**	1	0	1	0	0	0	0	0	0	**63**
12:00 PM	0	25	17	0	**12**	0	0	0	0	0	0	0	0	0	54
01:00 PM	0	34	10	**2**	8	**1**	0	0	0	0	0	0	0	0	55
02:00 PM	**1**	42	13	0	10	0	0	1	0	0	0	0	0	0	67
03:00 PM	1	33	**21**	1	7	0	0	1	0	0	0	0	0	0	64
04:00 PM	0	30	8	0	12	0	0	**2**	0	0	0	0	0	0	52
05:00 PM	0	**46**	17	0	11	0	0	0	0	0	0	0	0	0	**74**
06:00 PM	0	28	9	0	8	0	0	0	0	0	0	0	0	0	45
07:00 PM	0	17	6	0	2	0	0	0	0	0	0	0	0	0	25
08:00 PM	0	5	2	0	2	0	0	0	0	0	0	0	0	0	9
09:00 PM	0	4	2	0	3	0	0	0	0	0	0	0	0	0	9
10:00 PM	0	5	2	0	1	0	0	0	0	0	0	0	0	0	8
11:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
Day Total	2	414	186	10	126	4	0	8	0	0	0	0	0	0	750
Percent	0.3%	55.2%	24.8%	1.3%	16.8%	0.5%	0%	1.1%	0%	0%	0%	0%	0%	0%	
ADT 750															
AM Peak	12:00 AM	11:00 AM	11:00 AM	7:00 AM	11:00 AM	3:00 AM	12:00 AM	7:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	11:00 AM
Volume	0	29	22	4	10	2	0	1	0	0	0	0	0	0	63
PM Peak	2:00 PM	5:00 PM	3:00 PM	1:00 PM	12:00 PM	1:00 PM	12:00 PM	4:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	5:00 PM
Volume	1	46	21	2	12	1	0	2	0	0	0	0	0	0	74

Comments:

Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of report: Tube Count - Vehicle Classification Data

SUMMARY - Tube Count - Vehicle Classification Data

LOCATION: Quincy Mayger Rd (South of Hermo Rd)
SPECIFIC LOCATION:
CITY/STATE: Clatskanie, OR

QC JOB #: 15323011
DIRECTION: NB, SB
DATE: Nov 17 2020

	Motorcycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	4	1296	537	47	355	5	0	30	4	0	0	0	0	0	2278
Percent	0.2%	56.9%	23.6%	2.1%	15.6%	0.2%	0%	1.3%	0.2%	0%	0%	0%	0%	0%	

ADT
759

Comments:

Report generated on 11/23/2020 4:32 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

APPENDIX E

SEASONAL ADJUSTMENT CALCULATIONS

NEXT Renewable Fuels
Seasonal Adjustment for Highway 30

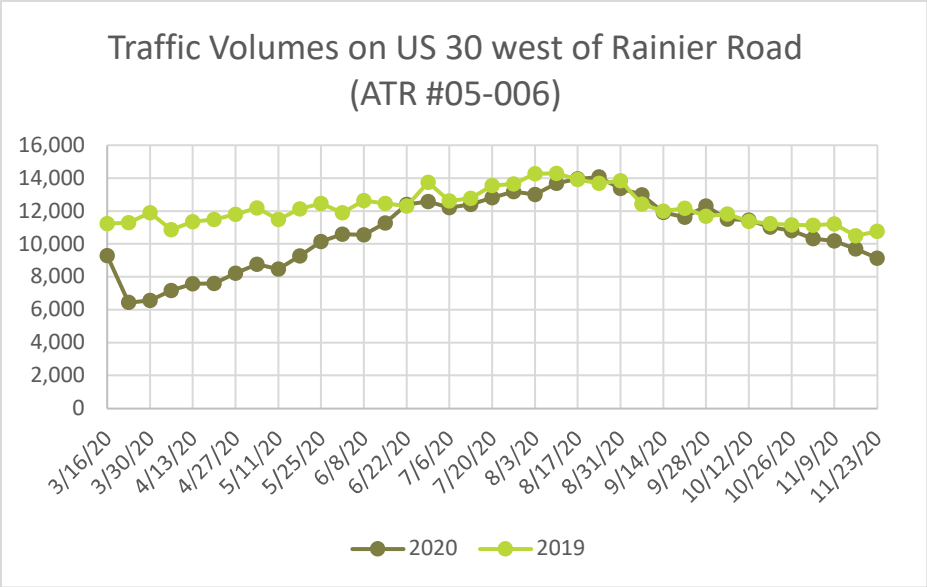
Seasonal Adjustment Using ATR #05-006*							
	2019	**2018**	**2017**	**2016**	**2015**	**Average**	**Adjustment**
Peak Month (August)	119%	119%	127%	117%	120%	119%	1.32
Count Month (November)	93%	90%	90%	91%	90%	90%	

* US30, LOWER COLUMBIA RIVER HIGHWAY, 1.03 MILES WEST OF RAINIER ROAD

US Highway 30 - Weekday Traffic

Week of	2020	2019	% Difference	Note
3/16/20	9,289	11,234	-17%	First week of school closures
3/23/20	6,441	11,286	-43%	First week of Stay Home Executive Order
3/30/20	6,563	11,897	-45%	
4/6/20	7,155	10,858	-34%	
4/13/20	7,579	11,344	-33%	
4/20/20	7,595	11,487	-34%	
4/27/20	8,215	11,796	-30%	
5/4/20	8,752	12,186	-28%	
5/11/20	8,470	11,491	-26%	
5/18/20	9,263	12,123	-24%	
5/25/20	10,150	12,465	-19%	
6/1/20	10,584	11,896	-11%	
6/8/20	10,544	12,629	-17%	
6/15/20	11,269	12,460	-10%	
6/22/20	12,405	12,311	1%	
6/29/20	12,567	13,743	-9%	
7/6/20	12,209	12,617	-3%	
7/13/20	12,401	12,775	-3%	
7/20/20	12,800	13,546	-6%	
7/27/20	13,173	13,638	-3%	
8/3/20	13,003	14,273	-9%	
8/10/20	13,679	14,292	-4%	
8/17/20	13,956	13,923	0%	
8/24/20	14,070	13,675	3%	
8/31/20	13,367	13,840	-3%	
9/7/20	12,981	12,427	4%	
9/14/20	11,911	11,985	-1%	
9/21/20	11,617	12,172	-5%	
9/28/20	12,293	11,679	5%	
10/5/20	11,505	11,812	-3%	
10/12/20	11,454	11,373	1%	
10/19/20	11,017	11,229	-2%	
10/26/20	10,801	11,158	-3%	
11/2/20	10,320	11,140	-7%	
11/9/20	10,173	11,215	-9%	
11/16/20	9,696	10,502	-8%	*Adjustment for count date of 11/17/2020
11/23/20	9,132	10,759	-15%	

Notes: Data obtained from ODOT's "Observed Statewide Traffic Volume Patterns: Related to COVID-19 Monitoring"
Data for US30 based on data from ATR #05-006


Traffic Volumes on US 30 west of Rainier Road
(ATR #05-006)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
3/16/20
3/30/20
4/13/20
4/27/20
5/11/20
5/25/20
6/8/20
6/22/20
7/6/20
7/20/20
8/3/20
8/17/20
8/31/20
9/14/20
9/28/20
10/12/20
10/26/20
11/9/20
11/23/20
2020
2019

APPENDIX F

CRASH DATA

CONTINUOUS SYSTEM CRASH LISTING

092: LOWER COLUMBIA RIVER

Highway 092 ALL ROAD TYPES, MP 60.9 to 61.5 01/01/2014 to 12/31/2018, Both Add and Non-Add mileage

1 - 4 of 19 Crash records shown.

SER# INVEST RD DPT UNLOC?	S P E E D	A L C	D R U G S	M J I N V	S C H L	W O R K	DATE DAY TIME LAT	COUNTY CITY URBAN AREA LONG	RD# FC COMPNT MLG TYP MILEPNT	CONN# FIRST STREET SECOND STREET LRS	RD CHAR DIRECT LOCTN	INT-TYPE (MEDIAN) LEGS (#LANES)	INT-REL TRAF-CONTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH COLL SVRTY	V#	SPCL USE TRLR QTY OWNER TYPE	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
00045	Y	N	N	N			02/06/2014	COLUMBIA	1 02		INTER	3-LEG	N	N	SNOW	ANGL-STP	01	NONE 0	TURN-R										124	01
CITY							TH	CLATSKANIE	MN 0	LOWER COL RIVER HY	N		STOP SIGN	N	SNO	TURN		PRVTE	E -N									000	124	00
N							3P		61.00	VAN ST	06	0		N	DAY	INJ		TRUCK		01	DRVR	NONE	62	M	OR-Y		047,080	017		01
N							46 6 6.95142	-123 11 42.7865279		009200100S00															OR<25					
																	02	NONE 0	STOP											
																		PRVTE	N -S									012		00
																		PSNGR CAR		01	DRVR	INJB	45	M	OTH-Y		000	000		00
																									N-RES					

Y — *Too Fast for Coditions*

SER# INVEST RD DPT UNLOC?	S P E E D	A L C	D R U G S	M J I N V	S C H L	W O R K	DATE DAY TIME LAT	COUNTY CITY URBAN AREA LONG	RD# FC COMPNT MLG TYP MILEPNT	CONN# FIRST STREET SECOND STREET LRS	RD CHAR DIRECT LOCTN	INT-TYPE (MEDIAN) LEGS (#LANES)	INT-REL TRAF-CONTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH COLL SVRTY	V#	SPCL USE TRLR QTY OWNER TYPE	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
00230	N	N	N	N			07/07/2014	COLUMBIA	1 02		INTER	3-LEG	N	N	UNK	S-1STOP	01	NONE 0	STRGHT										004,013	29
NO RPT							MO	CLATSKANIE	MN 0	LOWER COL RIVER HY	NW		STOP SIGN	N	UNK	REAR		PRVTE	NW-SE									022		00
N							1P		61.00	VAN ST	06	0		N	DAY	PDO		MOTRHOME		01	DRVR	NONE	00	Unk	UNK		026	000		29
N							46 6 6.95142	-123 11 42.7865279		009200100S00															UNK					
																	02	NONE 0	STOP											
																		PRVTE	NW-SE									022	013	00
																		PSNGR CAR		01	DRVR	NONE	65	F	OR-Y		000	000		00
																									OR<25					
																	03	NONE 0	STOP											
																		PRVTE	NW-SE									011	004	00
																		PSNGR CAR		01	DRVR	NONE	65	F	OR-Y		000	000		00
																									OR>25					

Y — *Disregarded traffic signal* — *Improper Lane Change* — *Failed to avoid vehicle ahead*

SER# INVEST RD DPT UNLOC?	S P E E D	A L C	D R U G S	M J I N V	S C H L	W O R K	DATE DAY TIME LAT	COUNTY CITY URBAN AREA LONG	RD# FC COMPNT MLG TYP MILEPNT	CONN# FIRST STREET SECOND STREET LRS	RD CHAR DIRECT LOCTN	INT-TYPE (MEDIAN) LEGS (#LANES)	INT-REL TRAF-CONTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH COLL SVRTY	V#	SPCL USE TRLR QTY OWNER TYPE	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
00367	N	N	N	N			10/24/2014	COLUMBIA	1 02		INTER	3-LEG	N	N	CLD	ANGL-OTH	01	NONE 0	TURN-L										082	02
CITY							FR	CLATSKANIE	MN 0	LOWER COL RIVER HY	CN		STOP SIGN	N	DRY	TURN		PRVTE	N -E									015		00
N							12P		61.00	VAN ST	01	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	49	F	OR-Y		028	000	082	02
N							46 6 6.95	-123 11 42.79		009200100S00															OR<25					
																	02	NONE 0	STRGHT											
																		PRVTE	E -W									000		00
																		PSNGR CAR		01	DRVR	NONE	67	M	OTH-Y		000	000		00
																									N-RES					

Y — *Failed to Yield ROW*

SER# INVEST RD DPT UNLOC?	S P E E D	A L C	D R U G S	M J I N V	S C H L	W O R K	DATE DAY TIME LAT	COUNTY CITY URBAN AREA LONG	RD# FC COMPNT MLG TYP MILEPNT	CONN# FIRST STREET SECOND STREET LRS	RD CHAR DIRECT LOCTN	INT-TYPE (MEDIAN) LEGS (#LANES)	INT-REL TRAF-CONTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH COLL SVRTY	V#	SPCL USE TRLR QTY OWNER TYPE	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
00086	N	N	N	N			03/11/2015	COLUMBIA	1 02		INTER	3-LEG	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											02
NO RPT							WE	CLATSKANIE	MN 0	LOWER COL RIVER HY	CN		STOP SIGN	N	DRY	TURN		PRVTE	E -W									000		00
N							5A		61.00	VAN ST	01	0		N	DARK	PDO		PSNGR CAR		01	DRVR	NONE	50	M	OR-Y		000	000		00
N							46 6 6.95	-123 11 42.79		009200100S00															OR<25					
																	02	NONE 0	TURN-L											
																		PRVTE	N -E									015		00
																		PSNGR CAR		01	DRVR	NONE	65	M	OR-Y		028	000		02
																									OR>25					

Y — *Failed to Yield ROW*

SER# INVEST RD DPT UNLOC?	S P E E D	A L C	D R U G S	M J I N V	S C H L	W O R K	DATE DAY TIME LAT	COUNTY CITY URBAN AREA LONG	RD# FC COMPNT MLG TYP MILEPNT	CONN# FIRST STREET SECOND STREET LRS	RD CHAR DIRECT LOCTN	INT-TYPE (MEDIAN) LEGS (#LANES)	INT-REL TRAF-CONTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH COLL SVRTY	V#	SPCL USE TRLR QTY OWNER TYPE	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
00204	N	N	N	N	N	N	06/08/2018	COLUMBIA	1 02		INTER	3-LEG	N	N	CLD	ANGL-OTH	01	NONE 0	STRGHT											02
STATE							FR	CLATSKANIE	MN 0	LOWER COL RIVER HY	CN		STOP SIGN	N	DRY	TURN		PRVTE	E -W									000		00
N							7A		61.00	VAN ST	01	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	51	F	OTH-Y		000	000		00
N							46 6 6.95	-123 11 42.8		009200100S00															N-RES					

Y — *Failed to Yield ROW*

Highway 092 ALL ROAD TYPES, MP 60.9 to 61.5 01/01/2014 to 12/31/2018, Both Add and Non-Add mileage

5 - 9 of 19 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D / D M R J S W / E A U I C O / E L G N H R / D C S V L K	DATE / DAY / TIME / LAT	COUNTY / CITY / URBAN AREA / LONG	RD# FC / COMPNT / MLG TYP / MILEPNT	CONN# / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE / (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
												02	NONE 0	TURN-L											
													PRVTE	N -E									015		00
													PSNGR CAR		01	DRVR	INJC	18	F	OR-Y		028	000		02
																				OR<25					
00386	N N N N	11/04/2014	COLUMBIA	1 02		INTER	3-LEG	N	N	RAIN	ANGL-STP	01	NONE 0	TURN-L											08
NONE		TU	CLATSKANIE	MN 0	LOWER COL RIVER HY	CN		STOP SIGN	N	WET	TURN		PRVTE	S -W									018		00
N	Y	6A		61.00	VAN ST	03	0		Y	DARK	INJ		PSNGR CAR		01	DRVR	NONE	66	F	OTH-Y		002,080	000		08
N		46 6 6.95	-123 11 42.79		009200100S00															N-RES		Made improper Turn			
												02	NONE 0	STOP											
													PRVTE	W -E									012		00
													PSNGR CAR		01	DRVR	INJC	55	M	OR-Y		000	000		00
																				OR<25					
00232	N N N N N N	06/03/2016	COLUMBIA	1 02		INTER	3-LEG	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											02
CITY		FR	CLATSKANIE	MN 0	LOWER COL RIVER HY	CN		STOP SIGN	N	DRY	TURN		PRVTE	SW-NE									000		00
N	Y	2P		61.00	VAN ST	03	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	28	M	OTH-Y		000	000		00
N		46 6 6.95	-123 11 42.79		009200100S00															N-RES		Failed to Yield ROW			
												02	NONE 0	TURN-L											
													PRVTE	NW-NE									015		00
													PSNGR CAR		01	DRVR	INJC	72	M	OR-Y		028	000		02
																				OR<25					
00198	N N N N	05/08/2017	COLUMBIA	1 02		INTER	3-LEG	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT										082	02
NO RPT		MO	CLATSKANIE	MN 0	LOWER COL RIVER HY	CN		STOP SIGN	N	DRY	TURN		PRVTE	W -E									000		00
N		2P		61.00	VAN ST	03	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	74	M	OR-Y		000	000		00
N		46 6 6.95	-123 11 42.79		009200100S00															OR<25		Failed to Yield ROW			
												02	NONE 0	TURN-L											
													PRVTE	N -E									015		00
	Y												PSNGR CAR		01	DRVR	INJC	72	M	OR-Y		028	000	082	02
																				OR<25					
												02	NONE 0	TURN-L											
													PRVTE	N -E									015		00
													PSNGR CAR		02	PSNG	INJB	39	F			000	000		00
00345	N N N N	08/15/2016	COLUMBIA	1 02		STRGHT		N	N	CLR	O-STRGHT	01	NONE 9	STRGHT											05
NO RPT		MO	CLATSKANIE	MN 0	LOWER COL RIVER HY	NW	(NONE)	UNKNOWN	N	DRY	SS-M		N/A	NW-SE									000		00
Y		7A		61.04	VAN ST	03			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N	N	46 6 6.88	-123 11 45.76		009200100S00		(02)													UNK		Drove Left of Center			
												02	NONE 9	STRGHT											
													N/A	SE-NW									000		00
													BOBTAIL		01	DRVR	NONE	00	Unk	UNK		000	000		00
																				UNK					

092: LOWER COLUMBIA RIVER

Highway 092 ALL ROAD TYPES, MP 60.9 to 61.5 01/01/2014 to 12/31/2018, Both Add and Non-Add mileage

10 - 13 of 19 Crash records shown.

Improper Overtaking

SER# / INVEST / RD DPT / UNLOC?	S D M / P R J S W / E A U I C O / E L G N H R / D C S V L K	DATE / DAY / TIME / LAT	COUNTY / CITY / URBAN AREA / LONG	RD# FC / COMPNT / MLG TYP / MILEPNT	CONN# / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE / (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	SPCL USE / TRLR QTY / OWNER / V# TYPE	MOVE / FROM / TO	PRTC / P# TYPE	INJ / SVRTY	A / G / E	S / E / X	LICNS / RES	PED / LOC	ERROR	ACT	EVENT	CAUSE
00262	N N N N	06/25/2017	COLUMBIA	1 02		TRANS		N	N	CLR	S-STRGHT	01 NONE 9	STRGHT										06,02
NO RPT		SU	CLATSKANIE	MN 0	LOWER COL RIVER HY	SE	(NONE)	UNKNOWN	N	DRY	SS-O	N/A	NW-SE								031		00
N	N	UNK		61.26	VAN ST	04			N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000		00
N		46 6 8.68	-123 12 1.72		009200100S00		(02)											UNK					
												02 NONE 9	STRGHT							Failed to Yield ROW			
			Over 600 ft from intersection									N/A	NW-SE								000		00
			at a driveway									PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000 Improper Overtaking	000		00
																		UNK					
00289	N N N N	08/17/2014	COLUMBIA	1 02		TRANS		N	N	CLR	S-STRGHT	01 NONE 0	STRGHT										02,06
CITY		SU	CLATSKANIE	MN 0	LOWER COL RIVER HY	SE	(NONE)	ACCEL LANE	N	DRY	SS-O	PRVTE	NW-SE								031		00
N		12P		61.27	E TRUE HAAK ST	05			N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	66	F	OR-Y		028,036	000		02,06
N	N	46 6 8.914212	-123 12 2.3810039		009200100S00		(03)											OR>25					
												02 NONE 1	STRGHT										
												PRVTE	NW-SE								000		00
												PSNGR CAR		01 DRVR	NONE	44	M	OTH-Y		000	000		00
																		N-RES					
00481	N N N N N N	11/15/2017	COLUMBIA	1 02		INTER	CROSS	N	N	RAIN	S-OTHER	01 NONE 9	TURN-R										08
COUNTY		WE	CLATSKANIE	MN 0	LOWER COL RIVER HY	NE		R-GRN-SIG	N	WET	TURN	N/A	NE-NW								088		00
N		1P		61.47	NEHALEM ST	06	0		N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000		00
N	Y	46 6 14.84	-123 12 14.06		009200100S00													UNK		Made improper Turn			
												02 NONE 9	TURN-R										
												N/A	NE-NW								000		00
												PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000		00
																		UNK					
00188	N N N N N N	04/13/2016	COLUMBIA	1 02		INTER	CROSS	N	N	CLR	S-1STOP	01 NONE 0	STRGHT									013	32,16
CITY		WE	CLATSKANIE	MN 0	LOWER COL RIVER HY	SE		L-GRN-SIG	N	DRY	REAR	PRVTE	SE-NW								022		00
N	Y	5P		61.47	NEHALEM ST	06	0		N	DAY	INJ	PSNGR CAR		01 DRVR	INJC	51	M	OTH-Y		052,016,080	025		32,16
N		46 6 14.84	-123 12 14.06		009200100S00													N-RES		Careless Driving Driver drowsy			
												01 NONE 0	STRGHT										
												PRVTE	SE-NW								022		00
												PSNGR CAR		02 PSNG	INJC	24	M			000	000		00
												02 NONE 0	STOP										
												PRVTE	SE-NW								022	013	00
												PSNGR CAR		01 DRVR	NONE	32	F	OR-Y		000	000		00
																		OR<25					
												03 NONE 0	STOP										
												PRVTE	SE-NW								012		00
												TRUCK		01 DRVR	NONE	62	M	OTH-Y		000	000		00
																		N-RES					

SER# / INVEST / RD DPT / UNLOC?	S P E D	D R A C	M J U S	S I G V	W C N L	O R H K	DATE / DAY / TIME / LAT	COUNTY / CITY / URBAN AREA / LONG	RD# / COMPNT / MLG / MILEPNT	FC	CONN# / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE / (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
00181	N	N	N	N			05/19/2018	COLUMBIA	1	02		INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT										29
NO RPT							SA	CLATSKANIE	MN 0		LOWER COL RIVER HY	SE		TRF SIGNAL	N	DRY	REAR		PRVTE	SE-NW								000		00
N							3P		61.47		NEHALEM ST	06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	51	M	OR-Y		026	000		29
N		Y					46 6 14.84	-123 12 14.08			009200100S00															OR>25					
																		02	NONE 0	STOP										
																			PRVTE	SE-NW								011		00
																			PSNGR CAR		01	DRVR	INJC	20	F	OR-Y		000	000		00
																										OR<25					
																		02	NONE 0	STOP										
																			PRVTE	SE-NW								011		00
																			PSNGR CAR		02	PSNG	INJC	21	M			000	000		00
00005	N	N	N	N			01/04/2018	COLUMBIA	1	02		INTER	CROSS	N	N	CLR	O-OTHER	01	NONE 0	TURN-R										27
NONE							TH	CLATSKANIE	MN 0		LOWER COL RIVER HY	NW		TRF SIGNAL	N	DRY	TURN		PRVTE	NE-NW								000		00
N		Y					2P		61.47		NEHALEM ST	05	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	82	F	OR-Y		016,007	026		27
N							46 6 14.85	-123 12 14.07			009200100S00															OR<25					
																		02	NONE 0	TURN-L										
																			PRVTE	SW-NW								000		00
																			PSNGR CAR		01	DRVR	INJC	34	F	OR-Y		000	000		00
																										OR<25					
																		02	NONE 0	TURN-L										
																			PRVTE	SW-NW								000		00
																			PSNGR CAR		02	PSNG	INJC	11	F			000	000		00
00120	N	N	N	N			04/09/2014	COLUMBIA	1	02		INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT										29
CITY							WE	CLATSKANIE	MN 0		LOWER COL RIVER HY	NW		L-GRN-SIG	N	DRY	REAR		PRVTE	SE-NW								000		00
N		Y					4P		61.47		NEHALEM ST	06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	20	F	OR-Y		026	088		29
N							46 6 14.838768	-123 12 14.0630399			009200100S00															OR<25					
																		02	NONE 0	STOP										
																			PRVTE	SE-NW								012		00
																			PSNGR CAR		01	DRVR	NONE	17	F	OR-Y		000	000		00
																										OR<25					
00299	N	N	N	N			07/23/2017	COLUMBIA	1	02		INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT										04
NONE							SU	CLATSKANIE	MN 0		LOWER COL RIVER HY	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	SE-NW								000		00
N		Y					1P		61.47		NEHALEM ST	01	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	00	M	OTH-Y		026	000		04
N							46 6 14.84	-123 12 14.06			009200100S00															N-RES					
																		02	NONE 0	STRGHT										
																			PRVTE	NE-SW								000		00
																			PSNGR CAR		01	DRVR	INJC	77	M	OR-Y		000	000		00
																										OR<25					

Failed to avoid vehicle ahead

Inattention

Failed to avoid vehicle ahead

Disregarded traffic signal

SER# / INVEST / RD DPT / UNLOC?	S P E D	D R A L	M J U G	S I N H	W C O K	DATE / DAY / TIME / LAT	COUNTY / CITY / URBAN AREA / LONG	RD# / COMPNT / MLG TYP / MILEPNT	FC	CONN# / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE / (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
00337	N	N	N	N		09/17/2018	COLUMBIA	1	02		INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT										02
NONE						MO	CLATSKANIE	MN 0		LOWER COL RIVER HY	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	NE-SW									000	00
N		Y				5A		61.47		NEHALEM ST	01	0		N	DAWN	INJ		PSNGR CAR		01	DRVR	INJC	48	M	OR-Y		000	000		00
N						46 6 14.85	-123 12 14.05			009200100S00															OR<25					
																	02	NONE 0	TURN-L										
																		PRVTE	SW-NW								000		00
																		PSNGR CAR		01	DRVR	NONE	19	M	OTH-Y		028	000		02
																									N-RES					
00223	N	N	N	N		06/30/2014	COLUMBIA	1	02		INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT										04
NO RPT						MO	CLATSKANIE	MN 0		LOWER COL RIVER HY	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	NW-SE								000		00
N		Y				6P		61.47		NEHALEM ST	02	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	64	F	OR-Y		020	000		04
N						46 6 14.838768	-123 12 14.0630399			009200100S00															OR<25					
																	02	NONE 0	STRGHT										
																		PRVTE	NE-SW								000		00
																		PSNGR CAR		01	DRVR	NONE	20	M	OR-Y		000	000		00
																									OR<25					

Failed to Yield ROW

Disregarded traffic signal

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING

CITY OF CLATSKANIE, COLUMBIA COUNTY

VAN ST and LOWER COL RIVER HY, City of Clatskanie, Columbia County, 01/01/2014 to 12/31/2018

1 - 4 of 11 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E E D / A L C / D R U G S / M J I N V / S C H L / W O R K	DATE / DAY / TIME / LAT	CLASS / DIST FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) LEGS (#LANES)	INT-REL / TRAF-CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
00045	Y N N	02/06/2014	02	LOWER COL RIVER HY	INTER	3-LEG	N	N	SNOW	ANGL-STP	01	NONE 0	TURN-R										124	01
CITY		TH		VAN ST	N		STOP SIGN	N	SNO	TURN		PRVTE	E -N									000	124	00 Speed too fast for conditions
N	Duplicate	3P			06	0		N	DAY	INJ		TRUCK		01	DRVR	NONE	62	M	OR-Y		047,080	017		01
N		46 6 6.95142	-123 11 42.7865279	009200100S00															OR<25					
											02	NONE 0	STOP											
												PRVTE	N -S									012		00
												PSNGR CAR		01	DRVR	INJB	45	M	OTH-Y		000	000		00
																			N-RES					
00230	N N N	07/07/2014	02	LOWER COL RIVER HY	INTER	3-LEG	N	N	UNK	S-1STOP	01	NONE 0	STRGHT										004,013	29
NO RPT		MO		VAN ST	NW		STOP SIGN	N	UNK	REAR		PRVTE	NW-SE									022		00
N		1P			06	0		N	DAY	PDO		MOTRHOME		01	DRVR	NONE	00	Unk	UNK		026	000		29
N		46 6 6.95142	-123 11 42.7865279	009200100S00															UNK		Failed to avoid vehicle ahead			
											02	NONE 0	STOP											
	Duplicate											PRVTE	NW-SE									022	013	00
												PSNGR CAR		01	DRVR	NONE	65	F	OR-Y		000	000		00
																			OR<25					
											03	NONE 0	STOP											
												PRVTE	NW-SE									011	004	00
												PSNGR CAR		01	DRVR	NONE	65	F	OR-Y		000	000		00
																			OR>25					
00367	N N N	10/24/2014	02	LOWER COL RIVER HY	INTER	3-LEG	N	N	CLD	ANGL-OTH	01	NONE 0	TURN-L										082	02
CITY	Duplicate	FR		VAN ST	CN		STOP SIGN	N	DRY	TURN		PRVTE	N -E									015		00
N		12P			01	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	49	F	OR-Y		028	000	082	02
N		46 6 6.95	-123 11 42.79	009200100S00															OR<25		Failed to Yield ROW			
											02	NONE 0	STRGHT											
												PRVTE	E -W									000		00
												PSNGR CAR		01	DRVR	NONE	67	M	OTH-Y		000	000		00
																			N-RES					
00386	N N N	11/04/2014	02	LOWER COL RIVER HY	INTER	3-LEG	N	N	RAIN	ANGL-STP	01	NONE 0	TURN-L											08
NONE		TU		VAN ST	CN		STOP SIGN	N	WET	TURN		PRVTE	S -W									018		00
N	Duplicate	6A			03	0		Y	DARK	INJ		PSNGR CAR		01	DRVR	NONE	66	F	OTH-Y		002,080	000		08
N		46 6 6.95	-123 11 42.79	009200100S00															N-RES		Made improper Turn			
											02	NONE 0	STOP											
												PRVTE	W -E									012		00
												PSNGR CAR		01	DRVR	INJC	55	M	OR-Y		000	000		00
																			OR<25					
00086	N N N	03/11/2015	02	LOWER COL RIVER HY	INTER	3-LEG	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											02
	Duplicate																				Failed to Yield ROW			
NO RPT		WE		VAN ST	CN		STOP SIGN	N	DRY	TURN		PRVTE	E -W									000		00
N		5A			01	0		N	DARK	PDO		PSNGR CAR		01	DRVR	NONE	50	M	OR-Y		000	000		00
N		46 6 6.95	-123 11 42.79	009200100S00															OR<25					

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N V	S H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
																02	NONE 0 PRVTE PSNGR CAR	TURN-L N -E	01	DRVR	NONE	65	M	OR-Y OR>25		028	015 000		00 02
00232	N	N	N	N	N		06/03/2016 FR 2P 46 6 6.95	02 -123 11 42.79	LOWER COL RIVER HY VAN ST 009200100S00	INTER CN 03	3-LEG 0	N STOP SIGN	N N	CLR DRY DAY	ANGL-OTH TURN INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT SW-NE	01	DRVR	NONE	28	M	OTH-Y N-RES		000	000		02 00 00
																02	NONE 0 PRVTE PSNGR CAR	TURN-L NW-NE	01	DRVR	INJC	72	M	OR-Y OR<25		028	015 000		00 02
00198	N	N	N				05/08/2017 MO 2P 46 6 6.95	02 -123 11 42.79	LOWER COL RIVER HY VAN ST 009200100S00	INTER CN 03	3-LEG 0	N STOP SIGN	N N	CLR DRY DAY	ANGL-OTH TURN INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT W -E	01	DRVR	NONE	74	M	OR-Y OR<25		000	000	082	02 00 00
																02	NONE 0 PRVTE PSNGR CAR	TURN-L N -E	01	DRVR	INJC	72	M	OR-Y OR<25		028	015 000	082	00 02
																02	NONE 0 PRVTE PSNGR CAR	TURN-L N -E	02	PSNG	INJB	39	F			000	015 000		00 00
00204	N	N	N	N	N		06/08/2018 STATE 7A 46 6 6.95	02 -123 11 42.8	LOWER COL RIVER HY VAN ST 009200100S00	INTER CN 01	3-LEG 0	N STOP SIGN	N N	CLD DRY DAY	ANGL-OTH TURN INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E -W	01	DRVR	NONE	51	F	OTH-Y N-RES		000	000		02 00 00
																02	NONE 0 PRVTE PSNGR CAR	TURN-L N -E	01	DRVR	INJC	18	F	OR-Y OR<25		028	015 000		00 02
00382	N	N	N				09/10/2016 SA 11A 46 6 6.95	07 0 -123 11 42.79	LOWER COL RIVER HY VAN ST 009200100S00	INTER CN 09	3-LEG 2	N YIELD	N N	CLR DRY DAY	S-OTHER TURN PDO	01	NONE 9 N/A PSNGR CAR	TURN-R N -W	01	DRVR	NONE	00	Unk	UNK UNK		000	000		29 00 00
																02	NONE 9 N/A PSNGR CAR	TURN-R N -W	01	DRVR	NONE	00	Unk	UNK UNK		000	013 000		00 00

Duplicate

Failed to Yield ROW

Duplicate

Failed to Yield ROW

Y

Failed to avoid vehicle ahead

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R J S W U I C O G N H R K V L	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED LOC	ERROR	ACT	EVENT	CAUSE
00345	N	N	N	08/15/2016	02	LOWER COL RIVER HY	STRGHT		N	N	CLR	O-STRGHT	01	NONE 9	STRGHT											05
NO RPT				MO		VAN ST	NW	(NONE)	UNKNOWN	N	DRY	SS-M		N/A	NW-SE									000		00
Y				7A			03			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N				46 6 6.88	-123 11 45.76	009200100S00		(02)													UNK					
Duplicate																								Drove Left of center		
													02	NONE 9	STRGHT											
														N/A	SE-NW									000		00
														BOBTAIL		01	DRVR	NONE	00	Unk	UNK		000	000		00
																					UNK					
00262	N	N	N	06/25/2017	02	LOWER COL RIVER HY	TRANS		N	N	CLR	S-STRGHT	01	NONE 9	STRGHT											06,02
NO RPT				SU		VAN ST	SE	(NONE)	UNKNOWN	N	DRY	SS-O		N/A	NW-SE									031		00
N				UNK			04			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N				46 6 8.68	-123 12 1.72	009200100S00		(02)													UNK					
													02	NONE 9	STRGHT											
														N/A	NW-SE									000		00
														PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																					UNK					

Duplicate

CITY OF CLATSKANIE, COLUMBIA COUNTY

NEHALEM ST and LOWER COL RIVER HY, City of Clatskanie, Columbia County, 01/01/2014 to 12/31/2018

1 - 4 of 11 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J S V	I C N L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CONTL	OFFRD RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR / OWNER / TYPE	QTY	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
00481	N	N	N		N	N	11/15/2017	02	LOWER COL RIVER HY	INTER	CROSS	N	N	RAIN	S-OTHER	01	NONE	9	TURN-R												08
COUNTY							WE		NEHALEM ST	NE		R-GRN-SIG	N	WET	TURN		N/A		NE-NW									088		00
N							1P			06	0		N	DAY	PDO		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000	000		00
N							46 6 14.84	-123 12 14.06	009200100S00																	UNK					
																02	NONE	9	TURN-R											
																	N/A		NE-NW									000		00
																	PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000	000		00
																										UNK				
00464	N	N	N				06/30/2014	07	LOWER COL RIVER HY	INTER	CROSS	N	N	CLR	OVERTURN	01	NONE	0	STRGHT										092	26
NO RPT							MO	0	NEHALEM ST	NE		TRF SIGNAL	N	DRY	NCOL		PRVTE		SW-NE									097	092	26
N							5P			05	0		Y	DAY	INJ		MTRCYCLE			01	DRVR	INJB	22	M	OR-Y		000	000		00
N							46 6 14.88	-123 12 14.14																		OR<25					
00188	N	N	N		N	N	04/13/2016	02	LOWER COL RIVER HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE	0	STRGHT										013	32,16
CITY							WE		NEHALEM ST	SE		L-GRN-SIG	N	DRY	REAR		PRVTE		SE-NW									022		00
N							5P			06	0		N	DAY	INJ		PSNGR CAR			01	DRVR	INJC	51	M	OTH-Y		052,016,080	025		32,16
N							46 6 14.84	-123 12 14.06	009200100S00																	N-RES					
																01	NONE	0	STRGHT											
																	PRVTE		SE-NW									022		00
																	PSNGR CAR			02	PSNG	INJC	24	M			000	000		00
																02	NONE	0	STOP											
																	PRVTE		SE-NW									022	013	00
																	PSNGR CAR			01	DRVR	NONE	32	F	OR-Y		000	000		00
																										OR<25				
																03	NONE	0	STOP											
																	PRVTE		SE-NW									012		00
																	TRUCK			01	DRVR	NONE	62	M	OTH-Y		000	000		00
																										N-RES				
00181	N	N	N				05/19/2018	02	LOWER COL RIVER HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE	0	STRGHT											29
NO RPT							SA		NEHALEM ST	SE		TRF SIGNAL	N	DRY	REAR		PRVTE		SE-NW									000		00
N							3P			06	0		N	DAY	INJ		PSNGR CAR			01	DRVR	NONE	51	M	OR-Y		026	000		29
N							46 6 14.84	-123 12 14.08	009200100S00																	OR>25					
																02	NONE	0	STOP											
																	PRVTE		SE-NW									011		00
																	PSNGR CAR			01	DRVR	INJC	20	F	OR-Y		000	000		00
																										OR<25				
																02	NONE	0	STOP											
																	PRVTE		SE-NW									011		00
																	PSNGR CAR			02	PSNG	INJC	21	M			000	000		00

Duplicate

Y

Phantom / non-contact vehicle

Duplicate

Duplicate

CITY OF CLATSKANIE, COLUMBIA COUNTY

NEHALEM ST and LOWER COL RIVER HY, City of Clatskanie, Columbia County, 01/01/2014 to 12/31/2018

5 - 8 of 11 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G	J N S	S H V	W O R L	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED LOC	ERROR	ACT	EVENT	CAUSE
00120	N	N	N				04/09/2014	02	LOWER COL RIVER HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
CITY							WE		NEHALEM ST	NW		L-GRN-SIG	N	DRY	REAR		PRVTE	SE-NW									000		00
N							4P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	20	F	OR-Y		026	088		29
N							46 6 14.838768	-123 12 14.0630399	009200100S00															OR<25					
																02	NONE 0	STOP											
																	PRVTE	SE-NW									012		00
																	PSNGR CAR		01	DRVR	NONE	17	F	OR-Y		000	000		00
																								OR<25					
00005	N	N	N				01/04/2018	02	LOWER COL RIVER HY	INTER	CROSS	N	N	CLR	O-OTHER	01	NONE 0	TURN-R											27
NONE							TH		NEHALEM ST	NW		TRF SIGNAL	N	DRY	TURN		PRVTE	NE-NW									000		00
N							2P			05	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	82	F	OR-Y		016,007	026		27
N							46 6 14.85	-123 12 14.07	009200100S00															OR<25					
																02	NONE 0	TURN-L											
																	PRVTE	SW-NW									000		00
																	PSNGR CAR		01	DRVR	INJC	34	F	OR-Y		000	000		00
																								OR<25					
																02	NONE 0	TURN-L											
																	PRVTE	SW-NW									000		00
																	PSNGR CAR		02	PSNG	INJC	11	F			000	000		00
00223	N	N	N				06/30/2014	02	LOWER COL RIVER HY	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											04
NO RPT							MO		NEHALEM ST	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	NW-SE									000		00
N							6P			02	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	64	F	OR-Y		020	000		04
N							46 6 14.838768	-123 12 14.0630399	009200100S00															OR<25					
																02	NONE 0	STRGHT											
																	PRVTE	NE-SW									000		00
																	PSNGR CAR		01	DRVR	NONE	20	M	OR-Y		000	000		00
																								OR<25					
00299	N	N	N				07/23/2017	02	LOWER COL RIVER HY	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											04
NONE							SU		NEHALEM ST	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	SE-NW									000		00
N							1P			01	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	00	M	OTH-Y		020	000		04
N							46 6 14.84	-123 12 14.06	009200100S00															N-RES					
																02	NONE 0	STRGHT											
																	PRVTE	NE-SW									000		00
																	PSNGR CAR		01	DRVR	INJC	77	M	OR-Y		000	000		00
																								OR<25					
00337	N	N	N				09/17/2018	02	LOWER COL RIVER HY	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT											02
NONE							MO		NEHALEM ST	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	NE-SW									000		00
N							5A			01	0		N	DAWN	INJ		PSNGR CAR		01	DRVR	INJC	48	M	OR-Y		000	000		00
N							46 6 14.85	-123 12 14.05	009200100S00															OR<25					

Duplicate
Duplicate
Duplicate
Duplicate
Duplicate

CITY OF CLATSKANIE, COLUMBIA COUNTY

NEHALEM ST and LOWER COL RIVER HY, City of Clatskanie, Columbia County, 01/01/2014 to 12/31/2018

9 - 11 of 11 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N V	S H L	W R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED LOC	ERROR	ACT	EVENT	CAUSE
																02	NONE 0 PRVTE PSNGR CAR	TURN-L SW-NW						OTH-Y N-RES		028	000 000		00 02
00387	N	N	N				09/22/2017 FR 11A 46 6 14.21	08 50 -123 12 14.76	NEHALEM ST LOWER COL RIVER HY	STRGHT SW 06	(NONE)	N UNKNOWN	N	CLR DRY DAY	O-1STOP BACK INJ	01	NONE 0 PRVTE PSNGR CAR	BACK NE-SW	01	DRVR	NONE	62	M	OTH-Y N-RES		011	088 000	092	10 00
NONE N N		N									(02)																	
																02	NONE 0 PRVTE PSNGR CAR	STOP SW-NE	01	DRVR	INJC	58	F	OR-Y OR<25		000	011 000		00 00
00500	N	N	N				11/28/2017 TU 3P 46 6 13.55	08 100 -123 12 15.29	NEHALEM ST LOWER COL RIVER HY	GRADE SW 07	(NONE)	N UNKNOWN	Y N	CLR DRY DAY	PRKD MV BACK PDO	01	NONE 9 N/A PSNGR CAR	PARKNG SW-NE	01	DRVR	NONE	00	Unk	UNK UNK		000	008 000		10 00 00
NO RPT Y N		N									(02)					02	NONE 9 N/A PSNGR CAR	PRKD-P NE-SW									008		00

Other Improper Driving

Other Improper Driving

CITY OF CLATSKANIE, COLUMBIA COUNTY

VAN ST and 5TH ST, City of Clatskanie, Columbia County, 01/01/2014 to 12/31/2018

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D R U G S	M J I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE

CITY OF CLATSKANIE, COLUMBIA COUNTY

SWEDETOWN RD and SWEDETOWN CUTOFF, City of Clatskanie, Columbia County, 01/01/2014 to 12/31/2018

	S D M																							
SER#	P R J S W	DATE	CLASS	CITY STREET		INT-TYPE						SPCL USE												
INVEST	E A U I C O	DAY	DIST	FIRST STREET	RD CHAR	(MEDIAN)	INT-REL	OFFRD	WTHR	CRASH		TRLR QTY	MOVE				A	S						
RD DPT	E L G N H R	TIME	FROM	SECOND STREET	DIRECT	LEGS	TRAF-	RNDBT	SURF	COLL		OWNER	FROM		PRTC	INJ	G	E	LICNS	PED				
UNLOC?	D C S V L K	LAT	LONG	LRS	LOCTN	(#LANES)	CONTL	DRVWY	LIGHT	SVRTY	V#	TYPE	TO	P#	TYPE	SVRTY	E	X	RES	LOC	ERROR	ACT	EVENT	CAUSE

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submittal of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirement, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.

URBAN NON-SYSTEM CRASH LISTING

CITY OF CLATSKANIE, COLUMBIA COUNTY

SWEDETOWN RD and LOWER COL RIVER HY, City of Clatskanie, Columbia County, 01/01/2014 to 12/31/2018

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D R U G S	M J I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE / (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	SPCL USE / TRLR QTY / OWNER / V# TYPE	MOVE / FROM / TO	PRTC / P# TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED / LOC	ERROR	ACT EVENT	CAUSE

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING

CITY OF CLATSKANIE, COLUMBIA COUNTY

NEHALEM ST and 5TH ST, City of Clatskanie, Columbia County, 01/01/2014 to 12/31/2018

1 - 2 of 2 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	M R G S	J U N V	S I H L	C O R K	W DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED / LOC	ERROR	ACT	EVENT	CAUSE
00005	Y	N	N				01/03/2016	07	S NEHALEM ST	INTER	3-LEG	N	N	SLT	ANGL-OTH	01	NONE 0	TURN-R										124	30,08
CITY							SU	0	N 5TH ST	SW		STOP SIGN	N	ICE	TURN		PRVTE	NW-SW									000	124	00
N							11A			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	61	F	EXP		050,080	017		30,08
N		Y					46 6 23.57	-123 12 3.11																	N-RES					
																02	NONE 0	STRGHT											
																	PRVTE	SW-NE									006		00
																	PSNGR CAR		01	DRVR	NONE	28	M	OR-Y		000	000		00
																								OR<25					
																02	NONE 0	STRGHT											
																	PRVTE	SW-NE									006		00
																	PSNGR CAR		02	PSNG	NO<5	03	M			000	000		00
00100	N	N	N		N	N	03/15/2018	07	N 5TH ST	CURVE		N	N	CLR	O-STRGHT	01	NONE	STRGHT											05,27
COUNTY							TH	2323	S NEHALEM ST	NW	(NONE)	UNKNOWN	N	DRY	SS-M		PRVTE	S -N									088		00
Y							5P			08			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	39	M	OTH-Y		016,037	038		05,27
N		N					46 6 52.05	-123 12 13.9			(02)														N-RES					
																02	NONE	STRGHT											
																	PRVTE	N -S									000		00
																	PSNGR CAR		01	DRVR	NONE	40	M	OR-Y		000	000		00
																								OR<25					
																02	NONE	STRGHT											
																	PRVTE	N -S									000		00
																	PSNGR CAR		02	PSNG	INJB	42	F			000	000		00

Driving in excess of posted speed limit

Made improper Turn

Too Far from intersection

Drove Left of center

Inattention

CITY OF CLATSKANIE, COLUMBIA COUNTY

VAN ST and 5TH ST, City of Clatskanie, Columbia County, 01/01/2014 to 12/31/2018

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D R U G S	M J I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE TRLR QTY OWNER TYPE	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE

APPENDIX G

SIGNAL INFORMATION

Monday, April 01, 2019 11:29

Intersection Name	*20 - US30 at Nehalem*	**Local ID**	*20*
Intersection Telephone Number			
System Name	*53 - US30-OR47_Scaps-Clatskanie*	**System ID**	*53*
Controller Type	*Voyage - C1-C11*		
Controller Serial Number		**Installation Date**	
Programmed by		**Programmed Date**	

Graphic Map Background	**Phase Rotation Diagram**

Control Data (next/2/2)

Controller Function and Timing (next/2/1, next/2/2)

Security, Sequence, Initialization

Security Code	******	0 = disabled, or 1000-9999
Sequence	*7*	0 = sequential, 1 = quad left turn, 2-6 = special A-E, 7 = lead lag

Lead Lag (next/2/2/3)

Phases 1 - 2	**Phases 3 - 4**	**Phases 5 - 6**	**Phases 7 - 8**
2	*2*	*2*	*2*

0 = no reversal, 1 = reversal, 2 = by coord plan or clock

Initialization and Flash (next/2/2/5)

	Initialization	**Flash Entry**	**Flash Exit**	
Ring 1 Phase	*1*	*0*	*1*	phase 1-8
Ring 2 Phase	*5*	*0*	*5*	phase 1-8
Interval	*0*	*0*	*0*	0 = red, 1 = yellow, 2 = green

Power up Flash	*0.0*	0.0 - 25.5 seconds		**First All Red**	*6.0*	0.0 - 25.5 seconds

Soft Flash (next/2/2/5)

Phase	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	0 = dark, 1=flash yel WIG, 2 = flash yel WAG, 3 = flash red WIG, 4 = flash red WAG				
	3	*4*	*3*	*4*	*3*	*4*	*3*	*4*					
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	
	3	*4*	*3*	*4*	*3*	*4*	*3*	*4*	*3*	*4*	*3*	*4*	same as phase
Internal Logic Output	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	
	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 = normal, 1 = dark, 2 = flash WIG

Per Phase Functions (next/2/2/3, next/2/2/1)

	1	2	3	4	5	6	7	8	
Phases Used	X	X		X	X	X		X	X = on
Restricted Phases									X = on (Sequence 2, 6, 7 only)
Exclusive Phases									X = on (Sequence 7 only)
Yellow Lock									
Min Recall		X				X			
Max Recall									
Ped Recall									
Red Lock									
Max Out Recall Inhibit	X	X	X	X	X	X	X	X	X = on
Soft Recall									
Free Walk Rest									
Conditional Ped									
Disable Inhibit Max Termination									
Call to Non Act 1									
Call to Non Act 2									

Dual Entry (next/2/2/9/3)

Mode 1 — 0 = off, 1 = on, 2 = Not Used, 3 = by coord plan, 4 = by time clock circuit 61

Dual Entry Phase -->	1	2	3	4	5	6	7	8	
Phase	0	0	0	8	0	0	0	4	0 = none, 1-8 = phase 1-8

Conditional Service, Five Section Head

Conditional Service (next/2/2/9/3)

	Mode	CS Max Time
Phase 1	0	0
Phase 3	0	0
Phase 5	0	0
Phase 7	0	0

0 = off, 1 = C.S.On. 2 = C.S. on by TOD circuit 57, 3 = N/A, 4 = C.S. and C.R. On, 5 = C.R. on by TOD circuit 57.

5 Section Head Logic (next/2/2/9/4)

X Omits Y		**Anti-Trap**		**Yellow Blanking LT**	
		Trap Protected Phase	**Next Phase**	**Phase**	
X : Y					
6 : 1	0	**1**	**< (5)**	**1**	
8 : 3	0	**3**	**< (7)**	**3**	
2 : 5	0	**5**	**< (1)**	**5**	
4 : 7	0	**7**	**< (3)**	**7**	
0=off, 1=side call, 2=no side call		X = On			

Phase Times (next/2/2/2, next/2/2/9/5)									
	1	2	3	4	5	6	7	8	
Movement									
Minimum Green	*4*	*10*	*0*	*6*	*4*	*10*	*0*	*6*	0 - 255 sec
Passage	*2.3*	*5.5*	*0.0*	*2.5*	*2.3*	*6.1*	*0.0*	*3.0*	0.0 - 25.5 sec
Yellow	*3.5*	*4.0*	*0.0*	*3.5*	*3.5*	*4.0*	*0.0*	*3.5*	0.0 - 25.5 sec
Red Clearance	*0.5*	*0.5*	*0.0*	*0.5*	*0.5*	*0.5*	*0.0*	*0.5*	0.0 - 25.5 sec or 0 - 255 sec
Max 1	*15*	*35*	*0*	*19*	*19*	*35*	*0*	*19*	0 - 255 sec
Max 2	*15*	*35*	*0*	*19*	*19*	*35*	*0*	*19*	0 - 255 sec
Walk	*0*	*7*	*0*	*9*	*0*	*9*	*0*	*7*	0 - 255 sec
Ped Clear	*0*	*15*	*0*	*24*	*0*	*20*	*0*	*23*	0 - 255 sec
Seconds Per Actuation	*0.0*	*2.4*	*0.0*	*0.0*	*0.0*	*2.4*	*0.0*	*0.0*	0.0 - 25.5 sec
Time Before Reduction	*8*	*10*	*0*	*5*	*8*	*10*	*0*	*5*	0 - 255 sec
Time to Reduce	*3*	*20*	*0*	*5*	*3*	*20*	*0*	*5*	0 - 255 sec
Minimum Gap	*0.5*	*4.1*	*0.0*	*2.0*	*0.5*	*4.1*	*0.0*	*3.0*	0.0 - 25.5 sec
Max Variable Initial	*4*	*19*	*0*	*6*	*4*	*19*	*0*	*6*	0 - 255 sec
Auto Max Adjust	*0.0*	*5.0*	*0.0*	*0.0*	*0.0*	*5.0*	*0.0*	*0.0*	0.0 - 25.5 sec
Auto Max Limit	*0*	*60*	*0*	*0*	*0*	*60*	*0*	*0*	0 - 255 sec
Inhibit Min Yellow									X = On
Red Decimal Off									X = On
Advance Walk	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec

Other Controller Functions (next/2/2/9)									
Phase -->	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
Inhibit Simultaneous Gap Out	*X*		*X*	*X*	*X*		*X*	*X*	X = On
Last Car Passage	*2*	0 = recall phase, 1 = last car passage, 2 = NOT recall - Not last car passage							
Red Revert (+2 seconds)	*0.0*	0 - 25.5 sec							
Auto Ped Clear	*X*	X = On							
Flashing Don't Walk Into Yellow		X = On							
Soft Recall / Red Rest Delay	*0.0*	0 - 25.5 sec							
Ped Pushbutton	*0*	0 - 5 sec, 0 = disable							
Advance Flash Rate	*0*	0 = disable, 1 = 120 FPM							
Change Sequence		X = On (After a download with a power on - off cycle)							
Phase -->	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
Red Clear Extension Detector	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 = none 1 - 32 = detector 1 - 32
Red Clear Extension Red Time	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0 - 25.5 sec.

Local Detectors (next/2/2/4)

Detector Data

	Yellow Lock	Detector Inhibit	Call Phase	Extend Phase	Switch Phase	Delay Time	Stretch / Disconnect Time	Delay or Disconnect Mode
Detector 1 - System -			*1*	*1*	*0*	*0*	*2.0*	*0*
Detector 2 -			*1*	*1*	*0*	*0*	*0.0*	*0*
Detector 3 -			*3*	*3*	*0*	*0*	*0.0*	*0*
Detector 4 -			*3*	*3*	*0*	*0*	*0.0*	*0*
Detector 5 - System -			*5*	*5*	*0*	*0*	*2.0*	*0*
Detector 6 -			*5*	*5*	*0*	*0*	*0.0*	*0*
Detector 7 -			*5*	*5*	*0*	*0*	*0.0*	*0*
Detector 8 -			*5*	*5*	*0*	*0*	*0.0*	*0*
Detector 9 - System -			*2*	*2*	*0*	*0*	*0.0*	*0*
Detector 10 - System -			*2*	*2*	*0*	*0*	*0.0*	*0*
Detector 11 -			*2*	*2*	*0*	*0*	*0.0*	*0*
Detector 12 -			*2*	*2*	*0*	*0*	*0.0*	*0*
Detector 13 -			*2*	*2*	*0*	*0*	*0.0*	*0*
Detector 14 -			*4*	*4*	*0*	*10*	*1.5*	*0*
Detector 15 - System -			*4*	*4*	*0*	*0*	*2.0*	*0*
Detector 16 -			*4*	*4*	*0*	*0*	*1.5*	*0*
Detector 17 -			*4*	*4*	*0*	*0*	*0.0*	*0*
Detector 18 -			*4*	*4*	*0*	*0*	*0.0*	*0*
Detector 19 - System -			*6*	*6*	*0*	*0*	*0.0*	*0*
Detector 20 - System -			*6*	*6*	*0*	*0*	*0.0*	*0*
Detector 21 -			*6*	*6*	*0*	*0*	*0.0*	*0*
Detector 22 -			*6*	*6*	*0*	*0*	*0.0*	*0*
Detector 23 -			*6*	*6*	*0*	*0*	*0.0*	*0*
Detector 24 - System -			*8*	*8*	*0*	*5*	*2.0*	*0*
Detector 25 -			*8*	*8*	*0*	*0*	*0.0*	*0*
Detector 26 -			*8*	*8*	*0*	*0*	*0.0*	*0*
Detector 27 -			*8*	*8*	*0*	*0*	*0.0*	*0*
Detector 28 -			*8*	*8*	*0*	*0*	*0.0*	*0*
Detector 29 -			*0*	*0*	*0*	*0*	*0.0*	*0*
Detector 30 -			*0*	*0*	*0*	*0*	*0.0*	*0*
Detector 31 -			*0*	*0*	*0*	*0*	*0.0*	*0*
Detector 32 -			*0*	*0*	*0*	*0*	*0.0*	*0*

yellow lock, detector inhibit, - X = On; call, extend, phase - 0 = none 1 - 8 = phase 1 - 8 ; delay time - 0 - 255 sec
stretch / disconnect time - 0.0 - 25.5 sec.; delay or disconnect Mode - 0 -13

Detector Plans (next/2/2/4/5)

	Loop Number									
	Plan Detectors	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 32, 0 = none, 1 -3 2 = detectors 1 - 32
Detector Plan 1	**Call Phase**	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 8, 0 = none, 1 - 8 = phase 1 - 8
	Extend Phase	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Switch Phase	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Delay Time	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec
	Stretch/Disconnect Time	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 sec
	Delay/ Disconnect Mode	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 13
Detector Plan 2	**Call Phase**	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 8, 0 = none, 1 - 8 = phase 1 - 8
	Extend Phase	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Switch Phase	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Delay Time	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec
	Stretch/Disconnect Time	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 sec
	Delay/ Disconnect Mode	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 13
Detector Plan 3	**Call Phase**	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 8, 0 = none, 1 - 8 = phase 1 - 8
	Extend Phase	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Switch Phase	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Delay Time	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec
	Stretch/Disconnect Time	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 sec
	Delay/ Disconnect Mode	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 13

Detector Fail Monitor (next/2/2/4/3)					Detectors 33-64 (next/2/2/4/6)		
	Fail Monitor Enable	Recall Phase	Min Counts	Max Counts		Call Phase	Extend Phase
Detector 1 - System -		*0*	*0*	*0*	Detector 33 -	0	0
Detector 2 -		*0*	*0*	*0*	Detector 34 -	0	0
Detector 3 -		*0*	*0*	*0*	Detector 35 -	0	0
Detector 4 -		*0*	*0*	*0*	Detector 36 -	0	0
Detector 5 - System -		*0*	*0*	*0*	Detector 37 -	0	0
Detector 6 -		*0*	*0*	*0*	Detector 38 -	0	0
Detector 7 -		*0*	*0*	*0*	Detector 39 -	0	0
Detector 8 -		*0*	*0*	*0*	Detector 40 -	0	0
Detector 9 - System -		*0*	*0*	*0*	Detector 41 -	0	0
Detector 10 - System -		*0*	*0*	*0*	Detector 42 -	0	0
Detector 11 -		*0*	*0*	*0*	Detector 43 -	0	0
Detector 12 -		*0*	*0*	*0*	Detector 44 -	0	0
Detector 13 -		*0*	*0*	*0*	Detector 45 -	0	0
Detector 14 -		*0*	*0*	*0*	Detector 46 -	0	0
Detector 15 - System -		*0*	*0*	*0*	Detector 47 -	0	0
Detector 16 -		*0*	*0*	*0*	Detector 48 -	0	0
Detector 17 -		*0*	*0*	*0*	Detector 49 -	0	0
Detector 18 -		*0*	*0*	*0*	Detector 50 -	0	0
Detector 19 - System -		*0*	*0*	*0*	Detector 51 -	0	0
Detector 20 - System -		*0*	*0*	*0*	Detector 52 -	0	0
Detector 21 -		*0*	*0*	*0*	Detector 53 -	0	0
Detector 22 -		*0*	*0*	*0*	Detector 54 -	0	0
Detector 23 -		*0*	*0*	*0*	Detector 55 -	0	0
Detector 24 - System -		*0*	*0*	*0*	Detector 56 -	0	0
Detector 25 -		*0*	*0*	*0*	Detector 57 -	0	0
Detector 26 -		*0*	*0*	*0*	Detector 58 -	0	0
Detector 27 -		*0*	*0*	*0*	Detector 59 -	0	0
Detector 28 -		*0*	*0*	*0*	Detector 60 -	0	0
Detector 29 -		*0*	*0*	*0*	Detector 61 -	0	0
Detector 30 -		*0*	*0*	*0*	Detector 62 -	0	0
Detector 31 -		*0*	*0*	*0*	Detector 63 -	0	0
Detector 32 -		*0*	*0*	*0*	Detector 64 -	0	0
fail monitor enable - X = On, recall phase - 0 = none 1 - 8 = phase 1 - 8, min, max					call / extend phase - 0 = none 1 - 8 = phase 1 - 8		

Detector Fail Sample Period (all detectors)	*0*	0 - 255 minutes

Video Fail Inputs (next/2/2/4/3) -->	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
Phase Recalled	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 = none, 1 - 8 = phase 1 - 8

System Detectors (next/2/2/4/4)

System Detectors -->	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
Local Detector	*1*	*5*	*9*	*10*	*15*	*19*	*20*	*24*	0 = none, 1 - 32 = phase 1 - 32

Overlaps / FYLTA (next/2/2/8)

Vehicle Overlaps		Phase or Movement	Phases 1	2	3	4	5	6	7	8	Extension Green	Clearance Yellow	Red
Overlaps	A		0	0	0	0	0	0	0	0	0.0	0.0	0.0
	B		0	0	0	0	0	0	0	0	0.0	0.0	0.0
	C		0	0	0	0	0	0	0	0	0.0	0.0	0.0
	D		0	0	0	0	0	0	0	0	0.0	0.0	0.0
	E		0	0	0	0	0	0	0	0	0.0	0.0	0.0
	F		0	0	0	0	0	0	0	0	0.0	0.0	0.0
	G		0	0	0	0	0	0	0	0	0.0	0.0	0.0
	H		0	0	0	0	0	0	0	0	0.0	0.0	0.0
	I		0	0	0	0	0	0	0	0	0.0	0.0	0.0
	J		0	0	0	0	0	0	0	0	0.0	0.0	0.0
	K		0	0	0	0	0	0	0	0	0.0	0.0	0.0
	L		0	0	0	0	0	0	0	0	0.0	0.0	0.0

A - D
0 = none
1 = overlap
2 = 60 FPM
3 = Not ped
4=Comp. Ph.
5=Prevent. Ext.
6=Not Veh.
7=Adv. FF

E - L
0 = no Overlap
1 = Overlap

Green,Yellow Red

Not Ped - Ped Overlaps (next/2/2/8/5)

Ped Overlaps ->		A	B	C	D	E	F	G	H
Overlaps	A								
	B								
	C								
	D								

X = Nor Ped Ped Overlap

Advance Warning (next/2/2/8/3)

	E	F	G	H	I	J	K	L	
Enable	0	0	0	0	0	0	0	0	0 = disabled, 1 = enabled
1st Conditional Overlap	0	0	0	0	0	0	0	0	0 = none, 1 - overlap E, 2 = overlap F, etc.
2nd Conditional Overlap	0	0	0	0	0	0	0	0	
Advance Deactivation Delay	0	0	0	0	0	0	0	0	0 - 99 seconds

Ped Overlaps (next/2/2/8/5)

Phase -->		1	2	3	4	5	6	7	8	Walk	Ped Clear	Ped Recall
Ped Overlap	A									0	0	
	B									0	0	
	C									0	0	
	D									0	0	
	E									0	0	
	F									0	0	
	G									0	0	
	H									0	0	

Phase, Ped Recall: X = on

Walk, Ped Clear: 0 - 255 seconds

Flashing Yellow Left Turn Arrow (FYLTA) (next/2/2/8/6)

Phase Pairs -->	1 - 2	3 - 4	5 - 6	7 - 8	
Enable	0	0	0	0	0 = off, 3 = 3 outputs, 4 = 4 outputs, 5 = 5 outputs
Even Omits Odd	0	0	0	0	0 = off, 1 = on, 2 = on, place call across barrier
Detector Switch Odd / Even					X = on, odd phase must be omitted
Red Transition	0.0	0.0	0.0	0.0	0.0 or 2.0 - 25.5 sec
Red Extension	0.0	0.0	0.0	0.0	0.0 - 25.5 sec
Return to GLTA	0	0	0	0	0 = off, 1 = max out, 2 = yellow lock

Flashing Yellow Left Turn Arrow (FYLTA) - Continued on last page

Service Plans (next/2/2/6)

		1	2	3	4	5	6	7	8	
	Phase -->	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
Service Plan 1	**Call Mode**	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	0 = actuated, 1 = omit, 2 = CNA, 3 = min recall, 4 = max recall, 5 = soft recall, 6 = ped recall, 7 = omit ped, 8 = red rest									
	Minimum Green	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.
	Passage	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 sec.
	Yellow	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 or 3.0 - 25.5
	Red	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 sec.
	Walk	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.
	Pedestrian Clearance	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.

		1	2	3	4	5	6	7	8	
	Phase -->	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
Service Plan 2	**Call Mode**	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	0 = actuated, 1 = omit, 2 = CNA, 3 = min recall, 4 = max recall, 5 = soft recall, 6 = ped recall, 7 = omit ped, 8 = red rest									
	Minimum Green	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.
	Passage	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 sec.
	Yellow	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 or 3.0 - 25.5
	Red	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 sec.
	Walk	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.
	Pedestrian Clearance	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.

		1	2	3	4	5	6	7	8	
	Phase -->	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
Service Plan 3	**Call Mode**	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	0 = actuated, 1 = omit, 2 = CNA, 3 = min recall, 4 = max recall, 5 = soft recall, 6 = ped recall, 7 = omit ped, 8 = red rest									
	Minimum Green	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.
	Passage	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 sec.
	Yellow	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 or 3.0 - 25.5
	Red	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 sec.
	Walk	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.
	Pedestrian Clearance	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.

		1	2	3	4	5	6	7	8	
	Phase -->	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
Service Plan 4	**Call Mode**	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	0 = actuated, 1 = omit, 2 = CNA, 3 = min recall, 4 = max recall, 5 = soft recall, 6 = ped recall, 7 = omit ped, 8 = red rest									
	Minimum Green	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.
	Passage	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 sec.
	Yellow	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 or 3.0 - 25.5
	Red	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 sec.
	Walk	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.
	Pedestrian Clearance	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.

		1	2	3	4	5	6	7	8	
	Phase -->	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
Service Plan 5	**Call Mode**	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	0 = actuated, 1 = omit, 2 = CNA, 3 = min recall, 4 = max recall, 5 = soft recall, 6 = ped recall, 7 = omit ped, 8 = red rest									
	Minimum Green	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.
	Passage	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 sec.
	Yellow	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 or 3.0 - 25.5
	Red	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 sec.
	Walk	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.
	Pedestrian Clearance	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.

		1	2	3	4	5	6	7	8	
	Phase -->	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
Service Plan 6	**Call Mode**	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	0 = actuated, 1 = omit, 2 = CNA, 3 = min recall, 4 = max recall, 5 = soft recall, 6 = ped recall, 7 = omit ped, 8 = red rest									
	Minimum Green	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.
	Passage	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 sec.
	Yellow	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 or 3.0 - 25.5
	Red	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 sec.
	Walk	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.
	Pedestrian Clearance	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.

Service Plans Cont.

	Phase -->	1	2	3	4	5	6	7	8	
Service Plan 7	Call Mode	0	0	0	0	0	0	0	0	
	0 = actuated, 1 = omit, 2 = CNA, 3 = min recall, 4 = max recall, 5 = soft recall, 6 = ped recall, 7 = omit ped, 8 = red rest									
	Minimum Green	0	0	0	0	0	0	0	0	0 - 255 sec.
	Passage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 - 25.5 sec.
	Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 - 25.5 or 3.0 - 25.5
	Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 - 25.5 sec.
	Walk	0	0	0	0	0	0	0	0	0 - 255 sec.
	Pedestrian Clearance	0	0	0	0	0	0	0	0	0 - 255 sec.

	Phase -->	1	2	3	4	5	6	7	8	
Service Plan 8	Call Mode	0	0	0	0	0	0	0	0	
	0 = actuated, 1 = omit, 2 = CNA, 3 = min recall, 4 = max recall, 5 = soft recall, 6 = ped recall, 7 = omit ped, 8 = red rest									
	Minimum Green	0	0	0	0	0	0	0	0	0 - 255 sec.
	Passage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 - 25.5 sec.
	Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 - 25.5 or 3.0 - 25.5
	Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 - 25.5 sec.
	Walk	0	0	0	0	0	0	0	0	0 - 255 sec.
	Pedestrian Clearance	0	0	0	0	0	0	0	0	0 - 255 sec.

Max Plans (next/2/2/7)

	Phase -->	1	2	3	4	5	6	7	8	
Max Plan 1	Normal Max	0	0	0	0	0	0	0	0	0 - 255 sec
	Fail Max	0	0	0	0	0	0	0	0	
	Auto Max Adjust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 - 25.5 sec
	Auto Max Limit	0	0	0	0	0	0	0	0	0 - 255 sec
Max Plan 2	Normal Max	0	0	0	0	0	0	0	0	0 - 255 sec
	Fail Max	0	0	0	0	0	0	0	0	
	Auto Max Adjust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 - 25.5 sec
	Auto Max Limit	0	0	0	0	0	0	0	0	0 - 255 sec
Max Plan 3	Normal Max	0	0	0	0	0	0	0	0	0 - 255 sec
	Fail Max	0	0	0	0	0	0	0	0	
	Auto Max Adjust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 - 25.5 sec
	Auto Max Limit	0	0	0	0	0	0	0	0	0 - 255 sec
Max Plan 4	Normal Max	0	0	0	0	0	0	0	0	0 - 255 sec
	Fail Max	0	0	0	0	0	0	0	0	
	Auto Max Adjust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 - 25.5 sec
	Auto Max Limit	0	0	0	0	0	0	0	0	0 - 255 sec
Max Plan 5	Normal Max	0	0	0	0	0	0	0	0	0 - 255 sec
	Fail Max	0	0	0	0	0	0	0	0	
	Auto Max Adjust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 - 25.5 sec
	Auto Max Limit	0	0	0	0	0	0	0	0	0 - 255 sec
Max Plan 6	Normal Max	0	0	0	0	0	0	0	0	0 - 255 sec
	Fail Max	0	0	0	0	0	0	0	0	
	Auto Max Adjust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 - 25.5 sec
	Auto Max Limit	0	0	0	0	0	0	0	0	0 - 255 sec
Max Plan 7	Normal Max	0	0	0	0	0	0	0	0	0 - 255 sec
	Fail Max	0	0	0	0	0	0	0	0	
	Auto Max Adjust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 - 25.5 sec
	Auto Max Limit	0	0	0	0	0	0	0	0	0 - 255 sec
Max Plan 8	Normal Max	0	0	0	0	0	0	0	0	0 - 255 sec
	Fail Max	0	0	0	0	0	0	0	0	
	Auto Max Adjust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 - 25.5 sec
	Auto Max Limit	0	0	0	0	0	0	0	0	0 - 255 sec

Coordination Data (next/2/3)

Coordination Modes (next/2/3/1, next/2/3/4/1, next/2/3/4/3)

Flash Mode	*33*	0=off, 1=on, 33=time clock, 34=comm, 35=hardwire, 36=NWS Set only, 37=AB3418 / NTCIP S
Coordination Plan Mode	*34*	0=free, 1-32 = coord plan 1-32, 33=time clock, 34=comm, 35=hardwire, 36=NWS Set only, 37=
Offset Seeking Mode	*2*	0=add only, 1=dwell, 2=fastway
Late Ped	*0*	0 = off, 1 = on
Coord Walk Rest	*0*	0 = off, 1 = on, 2 = by TOD circuit 160, 3 = end of walk, 4 = coord ped during perms
Repeated Phase Service	*0*	0=off, 1=on (no coord ped), 2=on (beginning green coord ped), 3=on (coord ped always)
Zero Mode (TS2 only)	*0*	0=start of main street, 1=end of main street, 2=by TOD circuit 144

Phase -->	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	0 = service allowed 1 = service prevented
Omit Phase During Repeated Phase Service	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Auto Permissive Min Green	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 seconds

Coordination Plans (next/2/3/2)

Coord Plan	**Coordination Phases**		**Cycle Length**	**Offset Time**	**Min Cycle Length Dwell Time**	**Permissive**	**Service Plan**	**Max Plan**
	Ring 1	**Ring 2**						
1 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
3 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
4 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
5 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
6 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
7 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
8 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
9 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
10 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
11 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
12 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
13 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
14 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
15 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
16 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
17 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
18 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
19 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
20 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
21 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
22 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
23 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
24 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
25 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
26 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
27 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
28 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
29 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
30 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
31 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
32 -	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	0 - 8		0 - 255 sec.				0 - 8	

Coordination Plans cont.

Coord Plan	* = Force Offs / Split Times (TS2)								* = Yield Points / Actuated Times (TS2)	
	1	2	3	4	5	6	7	8	Ring 1	Ring 2
1 -	0	0	0	0	0	0	0	0	0	0
2 -	0	0	0	0	0	0	0	0	0	0
3 -	0	0	0	0	0	0	0	0	0	0
4 -	0	0	0	0	0	0	0	0	0	0
5 -	0	0	0	0	0	0	0	0	0	0
6 -	0	0	0	0	0	0	0	0	0	0
7 -	0	0	0	0	0	0	0	0	0	0
8 -	0	0	0	0	0	0	0	0	0	0
9 -	0	0	0	0	0	0	0	0	0	0
10 -	0	0	0	0	0	0	0	0	0	0
11 -	0	0	0	0	0	0	0	0	0	0
12 -	0	0	0	0	0	0	0	0	0	0
13 -	0	0	0	0	0	0	0	0	0	0
14 -	0	0	0	0	0	0	0	0	0	0
15 -	0	0	0	0	0	0	0	0	0	0
16 -	0	0	0	0	0	0	0	0	0	0
17 -	0	0	0	0	0	0	0	0	0	0
18 -	0	0	0	0	0	0	0	0	0	0
19 -	0	0	0	0	0	0	0	0	0	0
20 -	0	0	0	0	0	0	0	0	0	0
21 -	0	0	0	0	0	0	0	0	0	0
22 -	0	0	0	0	0	0	0	0	0	0
23 -	0	0	0	0	0	0	0	0	0	0
24 -	0	0	0	0	0	0	0	0	0	0
25 -	0	0	0	0	0	0	0	0	0	0
26 -	0	0	0	0	0	0	0	0	0	0
27 -	0	0	0	0	0	0	0	0	0	0
28 -	0	0	0	0	0	0	0	0	0	0
29 -	0	0	0	0	0	0	0	0	0	0
30 -	0	0	0	0	0	0	0	0	0	0
31 -	0	0	0	0	0	0	0	0	0	0
32 -	0	0	0	0	0	0	0	0	0	0
	0 - 255 sec * = force offs and yield points									

Circuit Mapping (next/2/3/3)

Circuit Map	Coord Plan	Time Clock Circuit		Time Clock Circuit		Time Clock Circuit		Time Clock Circuit		Time Clock Circuit		Time Clock Circuit		Time Clock Circuit		Time Clock Circuit	
1	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
2	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
3	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
4	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
5	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
6	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
7	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
8	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
9	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
10	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
11	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
12	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
13	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
14	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
15	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
16	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
17	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
18	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
19	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U
20	*34*	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*0*	N/U	*99*	LG5

coord plan - 0 = free, 1 - 32 = coord plan 1 - 32, 33 = any, 34 none selected
time clock circuits - 0 = not used, or circuits 6 - 196

Dynamic Phase Length (next/2/3/4/4)

Phase -->		1	2	3	4	5	6	7	8	
Back Detector		*1*	*29*	*0*	*15*	*5*	*30*	*0*	*24*	0 = none, 1-32 = detector 1-32
Lane Factor		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 = none, 1.0 - 5.0
Check Out Detector		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 = none, 1-32 = detector 1-32
Coord Delta Force Off	Set A	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec
	Set B	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Set C	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Set D	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Free Delta Max	Set A	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Set B	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Set C	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Set D	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	

Platoon Progression (next/2/3/4/5)

Entry Local Only			Master Local Only		
Platoon Max	*0*	0 - 255 sec	Smoothing Factor	*0.0*	0.0 - 1.0
Min Platoon Green	*0*	0 - 255 sec			
Entry Detector Gap	*0.0*	0.0 - 25.5			
Min Platoon Cycle	*0*	0 - 255 sec			

Inbound			Outbound		
Only for Entry Inbound Local or Master Local			Only for Entry Outbound Local or Master Local		
Entry IB Local also Last OB Local	*0*	0 - 50	Entry OB Local also Last IB Local	*0*	0 - 50
Speed	*0*	0 - 55 mph	Speed	*0*	0 - 55 mph
Distance from Entry Local	*0*	0 - 65000 feet	Distance from Entry Local	*0*	0 - 65000 feet
Entry Local Only			**Entry Local Only**		
Distance from Entry Local Detector	*0*	0 - 999 feet	Distance from Entry Local Detector	*0*	0 - 999 feet
Entry Local Detector	*0*	*0* 0 - 32	Entry Local Detector	*0*	*0* 0 - 32
Master Local			**Master Local**		
Master Mid - System Critical Detectors	*0*	*0* 0 - 16	Master Mid - System Critical Detectors	*0*	*0* 0 - 16

Force Off Percents

Inbound	1	3	4	5	7	8	Outbound	1	3	4	5	7	8
Split 1	*0*	*0*	*0*	*0*	*0*	*0*	Split 1	*0*	*0*	*0*	*0*	*0*	*0*
Split 2	*0*	*0*	*0*	*0*	*0*	*0*	Split 2	*0*	*0*	*0*	*0*	*0*	*0*
	0 - 100 %							0 - 100 %					

Time of Day Data (next/2/4)

Day Program (next/2/4/1)

	Day Prog.	Time	Coord Plan	Coord Plan or Circuit		State On / Off		Day Prog.	Time	Coord Plan	Coord Plan or Circuit		State On/Off
1							51						
2							52						
3							53						
4							54						
5							55						
6							56						
7							57						
8							58						
9							59						
10							60						
11							61						
12							62						
13							63						
14							64						
15							65						
16							66						
17							67						
18							68						
19							69						
20							70						
21							71						
22							72						
23							73						
24							74						
25							75						
26							76						
27							77						
28							78						
29							79						
30							80						
31							81						
32							82						
33							83						
34							84						
35							85						
36							86						
37							87						
38							88						
39							89						
40							90						
41							91						
42							92						
43							93						
44							94						
45							95						
46							96						
47							97						
48							98						
49							99						
50							100						
	1 - 15	hh : mm	X = on	coord plan 0 - 32 or circuit 1-196		X = on		1 - 15	hh : mm	X = on	coord plan 0 - 32 or circuit 1-196		X = on

Day Program cont.														
	Day Prog.	Time	Coord Plan	Coord Plan or Circuit		State On / Off		Day Prog.	Time	Coord Plan	Coord Plan or Circuit		State On / Off
101							151						
102							152						
103							153						
104							154						
105							155						
106							156						
107							157						
108							158						
109							159						
110							160						
111							161						
112							162						
113							163						
114							164						
115							165						
116							166						
117							167						
118							168						
119							169						
120							170						
121							171						
122							172						
123							173						
124							174						
125							175						
126							176						
127							177						
128							178						
129							179						
130							180						
131							181						
132							182						
133							183						
134							184						
135							185						
136							186						
137							187						
138							188						
139							189						
140							190						
141							191						
142							192						
143							193						
144							194						
145							195						
146							196						
147							197						
148							198						
149							199						
150							200						
	1 - 15	hh : mm	X = on	coord plan 0 - 32 or circuit 1-196		X = on		1 - 15	hh : mm	X = on	coord plan 0 - 32 or circuit 1-196		X = on

Week Program (next/2/4/2)

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	1	1	1	1	1	2
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1

0 = none, 1 - 15 = day plan

Exception Days (next/2/4/6)

	DOW	WOM	DOM	MOY	Day Prog.
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
	0-10	0 - 5	0-31	0-12	0 - 15

Year Program (next/2/4/3)

From Date	To Date	Week Program
01/01/2019	12/31/2019	1

New Years Day - Date - January 1st

Martin Luther King Day - DOW WOM - 3rd Monday of January

President's Day - DOW WOM - 3rd Monday February

Memorial Day - DOW WOM - Last Monday May

Fourth of July - Date - July 4th

Labor Day - DOW WOM - 1st Monday September

Columbus Day - DOW WOM - 2nd Monday October

Veteran's Day - Date - November 11th

Thanksgiving - DOW WOM - 4th Thursday November

Christmas - Date - December 25th

Time Clock References (next/2/4/5)

Synch reference Mode	0	0 = timed, 1 = by event
Synch Reference Time	00:00	00:00 - 23:59
Daylight Savings Enable	X	X = on
Reset Time	00:00	00:00 - 23:59

Exception day headings - DOW = Day of Week, WOM = Week of Month, DOM = Day of Month, MOY = Month of Year

Circuit Overrides (next/2/4/4)							
1 - Coord Line 1	CL1	*TOD*		51 - Ped Omit 3	PO3	*TOD*	
2 - Coord Line 2	CL2	*TOD*		52 - Ped Omit 4	PO4	*TOD*	
3 - Coord Line 4	CL4	*TOD*		53 - Ped Omit 5	PO5	*TOD*	
4 - Coord Line 8	CL8	*TOD*		54 - Ped Omit 6	PO6	*TOD*	
5 - Coord Line 16	C16	*TOD*		55 - Ped Omit 7	PO7	*TOD*	
6 - Coord Operation	CRD	*TOD*		56 - Ped Omit 8	PO8	*TOD*	
7 - Soft Flash	SFL	*TOD*		57 - Conditional Service	CVS	*TOD*	
8 - Enable System Relays	ESR	*TOD*		58 - Inhibit Simultaneous Gap Out	ISG	*On*	
9 - Call to Non Act 1	CN1	*TOD*		59 - Inhibit Hardwire	HWI	*TOD*	
10 - Call to Non Act 2	CN2	*TOD*		60 - Ped Override Mode	POM	*On*	
11 - Walk Rest Modifier	WRM	*TOD*		61 - Dual Entry	DLE	*On*	
12 - Min Recall	MIN	*TOD*		62 - Exclusive Ped	EPD	*TOD*	
13 - Max 2 Both Rings	MX2	*TOD*		63 - Call to Time Clock Mode	CTC	*TOD*	
14 - Coord Inhibit Max Ring 1, 2	IMT	*TOD*		64 - Dual Enhanced Ped	DEP	*TOD*	
15 - Enable Service Log	ESL	*TOD*		65 - Service Plan 1	SP1	*TOD*	
16 - Call to Free	CTF	*TOD*		66 - Service Plan 2	SP2	*TOD*	
17 - TOD Output 1	TO1	*TOD*		67 - Service Plan 3	SP3	*TOD*	
18 - TOD Output 2	TO2	*TOD*		68 - Service Plan 4	SP4	*TOD*	
19 - TOD Output 3	TO3	*TOD*		69 - Service Plan 5	SP5	*TOD*	
20 - TOD Output 4	TO4	*TOD*		70 - Service Plan 6	SP6	*TOD*	
21 - TOD Output 5	TO5	*TOD*		71 - Service Plan 7	SP7	*TOD*	
22 - TOD Output 6	TO6	*TOD*		72 - Service Plan 8	SP8	*TOD*	
23 - TOD Output 7	TO7	*TOD*		73 - Max Plan 1	MP1	*TOD*	
24 - TOD Output 8	TO8	*TOD*		74 - Max Plan 2	MP2	*TOD*	
25 - Vehicle Call Phase 1	VC1	*TOD*	On / Off / TOD	75 - Max Plan 3	MP3	*TOD*	On / Off / TOD
26 - Vehicle Call Phase 2	VC2	*TOD*		76 - Max Plan 4	MP4	*TOD*	
27 - Vehicle Call Phase 3	VC3	*TOD*		77 - Max Plan 5	MP5	*TOD*	
28 - Vehicle Call Phase 4	VC4	*TOD*		78 - Max Plan 6	MP6	*TOD*	
29 - Vehicle Call Phase 5	VC5	*TOD*		79 - Max Plan 7	MP7	*TOD*	
30 - Vehicle Call Phase 6	VC6	*TOD*		80 - Max Plan 8	MP8	*TOD*	
31 - Vehicle Call Phase 7	VC7	*TOD*		81 - Transit Priority Max Group 1	TG1	*TOD*	
32 - Vehicle Call Phase 8	VC8	*TOD*		82 - Transit Priority Max Group 2	TG2	*TOD*	
33 - Ped Call Phase 1	PC1	*TOD*		83 - Transit Priority Max Group 3	TG3	*TOD*	
34 - Ped Call Phase 2	PC2	*TOD*		84 - Transit Priority Max Group 4	TG4	*TOD*	
35 - Ped Call Phase 3	PC3	*TOD*		85 - Transit Priority Max Group 5	TG5	*TOD*	
36 - Ped Call Phase 4	PC4	*TOD*		86 - Transit Priority Max Group 6	TG6	*TOD*	
37 - Ped Call Phase 5	PC5	*TOD*		87 - Transit Priority Max Group 7	TG7	*TOD*	
38 - Ped Call Phase 6	PC6	*TOD*		88 - Transit Priority Max Group 8	TG8	*TOD*	
39 - Ped Call Phase 7	PC7	*TOD*		89 - Inhibit Volume Density 1	IV1	*TOD*	
40 - Ped Call Phase 8	PC8	*TOD*		90 - Inhibit Volume Density 2	IV2	*TOD*	
41 - Vehicle Omit 1	VO1	*TOD*		91 - Inhibit Volume Density 3	Iv3	*TOD*	
42 - Vehicle Omit 2	VO2	*TOD*		92 - Inhibit Volume Density 4	IV4	*TOD*	
43 - Vehicle Omit 3	VO3	*TOD*		93 - Inhibit Volume Density 5	IV5	*TOD*	
44 - Vehicle Omit 4	VO4	*TOD*		94 - Inhibit Volume Density 6	IV6	*TOD*	
45 - Vehicle Omit 5	VO5	*TOD*		95 - Inhibit Volume Density 7	IV7	*TOD*	
46 - Vehicle Omit 6	VO6	*TOD*		96 - Inhibit Volume Density 8	IV8	*TOD*	
47 - Vehicle Omit 7	VO7	*TOD*		97 - Lag 1	LG1	*TOD*	
48 - Vehicle Omit 8	VO8	*TOD*		98 - Lag 3	LG3	*TOD*	
49 - Ped Omit 1	PO1	*TOD*		99 - Lag 5	LG5	*TOD*	
50 - Ped Omit 2	PO2	*TOD*		100 - Lag 7	LG7	*TOD*	

Circuit Overrides cont.							
101 - Inhibit Overlap A	**OLA**	*TOD*		**151 - Coord Hold 7**	**HD7**	*TOD*	
102 - Inhibit Overlap B	**OLB**	*TOD*		**152 - Coord Hold 8**	**HD8**	*TOD*	
103 - Inhibit Overlap C	**OLC**	*TOD*		**153 - PE Priority Return B**	**PRB**	*TOD*	
104 - Inhibit Overlap D	**OLD**	*TOD*		**154 - PE Priority Return C**	**PRC**	*TOD*	
105 - Enable Schedule A Phone 1	**AT1**	*TOD*		**155 - PE Priority Return D**	**PRD**	*TOD*	
106 - Enable Schedule A Phone 2	**AT2**	*TOD*		**156 - PE Priority Return E**	**PRE**	*TOD*	
107 - Enable Schedule B Phone 1	**BT1**	*TOD*		**157 - Platoon Inbound**	**PPI**	*TOD*	
108 - Enable Schedule B Phone 2	**BT2**	*TOD*		**158 - Platoon Outbound**	**PPO**	*TOD*	
109 - Enable Schedule C Phone 1	**CT1**	*TOD*		**159 - Platoon Spl 2**	**PS2**	*TOD*	
110 - Enable Schedule C Phone 2	**CT2**	*TOD*		**160 - Coord Walk Rest**	**CWR**	*TOD*	
111 - Enable Volume to Call Phone 1	**VT1**	*TOD*		**161 - Dynamic Phase Length Short Inhibit 1**	**SI1**	*TOD*	
112 - Enable Volume to Call Phone 2	**VT2**	*TOD*		**162 - Dynamic Phase Length Short Inhibit 2**	**SI2**	*TOD*	
113 - Enable Volume Logging	**EVL**	*On*		**163 - Dynamic Phase Length Short Inhibit 3**	**SI3**	*TOD*	
114 - Enable MOE Logging	**EML**	*On*		**164 - Dynamic Phase Length Short Inhibit 4**	**SI4**	*TOD*	
115 - Detector Low Threshold Inhibit	**DLI**	*TOD*		**165 - Dynamic Phase Length Short Inhibit 5**	**SI5**	*TOD*	
116 - Detector Continue Presence Inhibit	**DPI**	*TOD*		**166 - Dynamic Phase Length Short Inhibit 6**	**SI6**	*TOD*	
117 - Inhibit Detector Based on Programming	**IND**	*TOD*		**167 - Dynamic Phase Length Short Inhibit 7**	**SI7**	*TOD*	
118 - Inhibit Detector Delay	**IDD**	*TOD*		**168 - Dynamic Phase Length Short Inhibit 8**	**SI8**	*TOD*	
119 - Inhibit Conditional Ped	**ICP**	*TOD*		**169 - Coord Late Left Turn 1**	**CT1**	*TOD*	
120 - Inhibit Transit Priority	**ITP**	*TOD*		**170 - Coord Late Left Turn 3**	**CT3**	*TOD*	
121 - Red Rest Ring 1,2	**RRM**	*TOD*		**171 - Coord Late Left Turn 5**	**CT5**	*TOD*	
122 - Enable Transcend	**TRA**	*TOD*		**172 - Coord Late Left Turn 7**	**CT7**	*TOD*	
123 - Omit Red Clear Ring 1,2	**ORC**	*TOD*		**173 - Dynamic Phase Length Enable A**	**DPA**	*TOD*	
124 - Not Used	**N/U**	*TOD*		**174 - Dynamic Phase Length Enable B**	**DPB**	*TOD*	
125 - Ped Recycle Ring 1,2	**PCY**	*TOD*	On / Off / TOD	**175 - Dynamic Phase Length Enable C**	**DPC**	*TOD*	On / Off / TOD
126 - Not Used	**N/U**	*TOD*		**176 - Dynamic Phase Length Enable D**	**DPD**	*TOD*	
127 - Enable MOE Log to Call Phone 1	**MT1**	*TOD*		**177 - Proactive Plan Select Average**	**PSA**	*TOD*	
128 - Enable MOE Log to Call Phone 2	**MT2**	*TOD*		**178 - Proactive Plan Select Inbound**	**PSI**	*TOD*	
129 - Transit Inhibit Short Time 1	**IS1**	*TOD*		**179 - Proactive Plan Select Outbound**	**PSO**	*TOD*	
130 - Transit Inhibit Short Time 2	**IS2**	*TOD*		**180 - Split Variant Inbound**	**SVI**	*TOD*	
131 - Transit Inhibit Short Time 3	**IS3**	*TOD*		**181 - Split Variant Outbound**	**SVO**	*TOD*	
132 - Transit Inhibit Short Time 4	**IS4**	*TOD*		**182 - Disable Coord Walk Rest Ring 1**	**DW1**	*TOD*	
133 - Transit Inhibit Short Time 5	**IS5**	*TOD*		**183 - Disable Coord Walk Rest Ring 2**	**DW2**	*TOD*	
134 - Transit Inhibit Short Time 6	**IS6**	*TOD*		**184 - Proactive Plan Select New Look**	**NLK**	*TOD*	
135 - Transit Inhibit Short Time 7	**IS7**	*TOD*		**185 - Disable Red Clearance Extension**	**DRX**	*TOD*	
136 - Transit Inhibit Short Time 8	**IS8**	*TOD*		**186 - Detector Plan Line 1**	**DL1**	*TOD*	
137 - Enable Transit Priority Logging	**ETL**	*TOD*		**187 - Detector Plan Line 2**	**DL2**	*TOD*	
138 - Disable Flashing Yellow Arrow 1	**DF1**	*TOD*		**188 - Disable LRT 1 Vertical Flashing Bar**	**DV1**	*TOD*	
139 - Disable Flashing Yellow Arrow 3	**DF3**	*TOD*		**189 - Disable LRT 2 Vertical Flashing Bar**	**DV2**	*TOD*	
140 - Disable Flashing Yellow Arrow 5	**DF5**	*TOD*		**190 - Disable LRT 3 Vertical Flashing Bar**	**DV3**	*TOD*	
141 - Disable Flashing Yellow Arrow 7	**DF7**	*TOD*		**191 - Disable LRT 4 Vertical Flashing Bar**	**DV4**	*TOD*	
142 - Disable Auto Max	**DAM**	*TOD*		**192 - Datakey Enable**	**DKE**	*On*	
143 - Disable Repeat Phase Service	**DRS**	*TOD*		**193 - Dynamic Phase Reversal Enable 1**	**DR1**	*TOD*	
144 - Coord End of Main Street	**EMS**	*TOD*		**194 - Dynamic Phase Reversal Enable 3**	**DR3**	*TOD*	
145 - Coord Hold 1	**HD1**	*TOD*		**195 - Dynamic Phase Reversal Enable 5**	**DR5**	*TOD*	
146 - Coord Hold 2	**HD2**	*TOD*		**196 - Dynamic Phase Reversal Enable 7**	**DR7**	*TOD*	
147 - Coord Hold 3	**HD3**	*TOD*		**197 - Enable Coord Logging**	**ECL**	*On*	
148 - Coord Hold 4	**HD4**	*TOD*		**198 - Disable Gap FYLTA 1,3,5,7**	**DGF**	*TOD*	
149 - Coord Hold 5	**HD5**	*TOD*		**199 - Coordination Auto Walk**	**CAW**	*TOD*	
150 - Coord Hold 6	**HD6**	*TOD*		**200 - Enable Coordinated Auto Max**	**ECM**	*TOD*	

Preemption Data (next/2/5)

Sequence (next/2/5/1 - 8)

Sequences / Intervals		Instruction	Phases Serviced	Interval Time	Hold On Input	Outputs On	Output Mode
1	1	*197*	*25*	*0*	*1*		*0*
	2	*98*		*0*	*0*		*0*
	3	*0*		*0*	*0*		*0*
	4	*0*		*0*	*0*		*0*
	5	*0*		*0*	*0*		*0*
	6	*0*		*0*	*0*		*0*
	7	*0*		*0*	*0*		*0*
	8	*0*		*0*	*0*		*0*
	9	*0*		*0*	*0*		*0*
	10	*0*		*0*	*0*		*0*
2	1	*197*	*4*	*0*	*1*		*0*
	2	*98*		*0*	*0*		*0*
	3	*0*		*0*	*0*		*0*
	4	*0*		*0*	*0*		*0*
	5	*0*		*0*	*0*		*0*
	6	*0*		*0*	*0*		*0*
	7	*0*		*0*	*0*		*0*
	8	*0*		*0*	*0*		*0*
	9	*0*		*0*	*0*		*0*
	10	*0*		*0*	*0*		*0*
3	1	*197*	*16*	*0*	*1*		*0*
	2	*98*		*0*	*0*		*0*
	3	*0*		*0*	*0*		*0*
	4	*0*		*0*	*0*		*0*
	5	*0*		*0*	*0*		*0*
	6	*0*		*0*	*0*		*0*
	7	*0*		*0*	*0*		*0*
	8	*0*		*0*	*0*		*0*
	9	*0*		*0*	*0*		*0*
	10	*0*		*0*	*0*		*0*
4	1	*197*	*8*	*0*	*1*		*0*
	2	*98*		*0*	*0*		*0*
	3	*0*		*0*	*0*		*0*
	4	*0*		*0*	*0*		*0*
	5	*0*		*0*	*0*		*0*
	6	*0*		*0*	*0*		*0*
	7	*0*		*0*	*0*		*0*
	8	*0*		*0*	*0*		*0*
	9	*0*		*0*	*0*		*0*
	10	*0*		*0*	*0*		*0*
5	1	*0*		*0*	*0*		*0*
	2	*0*		*0*	*0*		*0*
	3	*0*		*0*	*0*		*0*
	4	*0*		*0*	*0*		*0*
	5	*0*		*0*	*0*		*0*
	6	*0*		*0*	*0*		*0*
	7	*0*		*0*	*0*		*0*
	8	*0*		*0*	*0*		*0*
	9	*0*		*0*	*0*		*0*
	10	*0*		*0*	*0*		*0*

Instructions
0 - Service Phases
1-9 = Special Interval 1-9
10 - Preempt Sequence Allows FYLTA
11 - Preempt Interval Disables FYLTA
15 - Alternate Trap Protection
90 - Go to all Red
91 - Soft Flash On
92 - Soft Flash Off
93 - Enable Ped
94 - Disable Peds
95 - Priority Return
96 - Enable Coordination with peds
97 - Enable Coordination without peds
98 - Return with NO Calls
99 - Return with Vehicle Calls
100 - jump to step in Interval Time
101 - Use Interval Time as Resetable Gap Timer
196 - Coord Re-synch with Peds
197 - Coord Re-synch without Peds
200 - Light Rail Train phase without Peds
201 - Light Rail Train phase with Peds
202 - Return to highest queue/delay phase (this uses the Dynamic Phase Length Back Detectors)
216 - Light Rail Train Coord Re-synch with Peds
217 - Light Rail Train Coord Re-synch without Peds

Phases Serviced - phases 1 - 8

Interval Time - 0 - 255 sec or interval 1 - 10

Hold on Input:
0 = Do not hold
1 = Hold
2 = Ped Service to Rest in Walk

Outputs On - output 1 - 8

Output Modes -
0 = all steady on
1 = all flash together
2 = odd flashes WIG, even flashes WAG
3 = 1 - 4 steady on, 5 - 8 all flash together

Sequence cont.							
Sequences / Intervals		Instruction	Phases Serviced	Interval Time	Hold On Input	Outputs On	Output Mode
6	1	0		0	0		0
	2	0		0	0		0
	3	0		0	0		0
	4	0		0	0		0
	5	0		0	0		0
	6	0		0	0		0
	7	0		0	0		0
	8	0		0	0		0
	9	0		0	0		0
	10	0		0	0		0
7	1	0		0	0		0
	2	0		0	0		0
	3	0		0	0		0
	4	0		0	0		0
	5	0		0	0		0
	6	0		0	0		0
	7	0		0	0		0
	8	0		0	0		0
	9	0		0	0		0
	10	0		0	0		0
8	1	0		0	0		0
	2	0		0	0		0
	3	0		0	0		0
	4	0		0	0		0
	5	0		0	0		0
	6	0		0	0		0
	7	0		0	0		0
	8	0		0	0		0
	9	0		0	0		0
	10	0		0	0		0

Sequence Timing (next/2/5/0)										
	Sequence -- >	1	2	3	4	5	6	7	8	
	Input Memory									X = on
	Input Priority	6	6	6	6	0	0	0	0	0 = lowest, - 8 = highest
Entry (Transition) Parameters	Min Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 - 25.5 sec
	Walk	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0 would time the normal function time
	Ped Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Overlap Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 - 25.5 sec
	Overlap Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Delay to Preempt	0	0	0	0	0	0	0	0	0 - 255 sec
	Delay Ped Omit	0	0	0	0	0	0	0	0	
	Delay Phase Omit	0	0	0	0	0	0	0	0	
	Min Reservice	0	0	0	0	0	0	0	0	0 - 255 min
Overlap Inhibits	A									X = inhibit
	B									
	C									
	D									
Exit Parameters	Exit to Coord Plan Offset by X	0	0	0	0	0	0	0	0	0 - 20
	Exit Coord Plan Time	0	0	0	0	0	0	0	0	0 - 60 min
	Exit to Max Plan	0	0	0	0	0	0	0	0	0 - 8
	Exit Free Time	0	0	0	0	0	0	0	0	0 - 60 min
	Override Time	0	0	0	0	0	0	0	0	
	Fail Time	0	0	0	0	0	0	0	0	
	Exit Mode Time	0	0	0	0	0	0	0	0	

Priority Return and Special Intervals (next/2/5/0/6, next/2/5/9)														
Phase / Overlap -->		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**A**	**B**	**C**	**D**	
Priority Return	**Enable**	*0*	0 = disabled, 1 = enabled, 2 = enabled, skip preemption phases on exit											
	A (max)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 100% of currently used max				
	B (max)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*					
	C (max)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*					
	D (max)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*					
	E (max)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*					
	Ped Clear	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 100% of currently used ped clearance				
Queue Delay Recovery		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 - 255 sec.				
Special Intervals	**1**	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0 = Dark 1 = green don't walk 2 = green walk 3 = green flashing don't walk 4 = yellow 5 = red 6 = flashing yellow WIG 7 = flashing yellow WAG 8 = flashing red WIG 9 = flashing red WAG 10 = walk only 11=flashing don't walk only
	2	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	3	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	4	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	5	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	6	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	7	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	8	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	9	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	

Light Rail Train (next/2/5/0/7)						
Light Rail Train -->	**1**	**2**	**3**	**4**	
Associated Preempt	*0*	*0*	*0*	*0*	0 = none, preempt 1 - 8
Time to Green	*0*	*0*	*0*	*0*	0 - 255 sec
Horizontal Bar Flash Time	*0.0*	*0.0*	*0.0*	*0.0*	0.0 - 25.5 sec
Vertical Bar Flash Time	*0.0*	*0.0*	*0.0*	*0.0*	
Min Duration	*0*	*0*	*0*	*0*	0 - 255 sec

Communications Data (next/2/6)

System ID	*53*	**Local ID**	*20*
1st Central Phone Number		**2nd Central Phone Number**	
Modem Setup String		**Intersection Name**	*US30 @ Nehalem*
Subnet Mask 1	*0.0.0.0*	**Subnet Mask 2**	*0.0.0.0*
IP (Ethernet) Port 1		**IP (Ethernet) Port 2**	*0*
Central Port	*6*		
System Mode	*0*		
System Port	*0*	**Alternate System Port**	*0*

IP Address 1		**IP Address 2**		**AB3418e Physical Address**	*1*
Gateway Address 1		**Gateway Address 2**		**AB3418e Group Address**	*0*

Baud Rates		**Flow Control**	**Port Use**
Port 1 (Slot A2 Upper)	*0*	*1*	*Suggested Use - FSK*
Port 2 (Slot A2 Lower)	*0*	*1*	*Suggested Use - Not Used*
Port 3 (Slot A1 Upper)	*0*	*0*	*Suggested Use - Modem to Central*
Port 4 (Slot A1 Lower or C50S)	*2*	*NIU*	*Suggested Use - RS232 to Laptop*
0 = 1200, 1 = 2400, 2 = 9600, 3 = 19200 baud		0 = off, 1 = on	

Reports

Volume Log Period	*15*	minutes	**Volume/Occ Log Period**	*0*	second	**MOE Log Period**	*15*	minute

0 = disabled, 1,2,3,4,5,6,10,12,15,20,30,60 minutes

Function Schedule Mapping (next/2/6/7)

Alarm 1	*0*		**Soft Flash**	*1*	
Alarm 2	*0*		**Manual Control Enable (MCE)**	*4*	
Alarm 3	*0*		**Emergency or Railroad Preempt**	*1*	
Alarm 4	*0*		**Not Used**	*0*	
Alarm 5	*0*	0 = none	**Cycle Failure**	*2*	0 = none
Not Used	*0*	1 = schedule A	**Coordination Failure**	*2*	1 = schedule A
Not Used	*0*	2 = schedule B	**Keyboard use / Data Changed**	*3*	2 = schedule B
Not Used	*0*	3 = schedule C	**Coord Running / Free**	*2*	3 = schedule C
Power On / Off	*1*	4 = schedule R	**Cabinet Door**	*3*	4 = schedule R
Checksum Failure	*4*		**Extended Ped Pushbutton**	*0*	
Video / Detector Failure	*4*		**Monitor Status**	*4*	
Master to Local Comm Lost	*0*		**Red Extension**	*0*	

Miscellaneous Data

Transit Priority (next/2/7)

	1	2	3	4	5	6	7	8	
Phases									Phases 1 - 8 (max of 2 compatible phases)
PE Enable (6.25Hz TP call on PE)	X	X	X	X	X	X	X	X	X = 6.25 Hz signal will activate TP
Priority	0	0	0	0	0	0	0	0	0 - 8, 8 = highest
Memory									X = on
Delay Time	0	0	0	0	0	0	0	0	0 - 255 sec
Minimum Reservice Time (per input)	0	0	0	0	0	0	0	0	0 - 255 min
Override Time	0	0	0	0	0	0	0	0	0 - 255 sec
Bus Extend	0	0	0	0	0	0	0	0	0 - 255 sec
Minimum Reservice Time (all inputs)	0	0 - 255 min							
Free Operation Mode	0	0 = use shortest of max 1 or 2, 1 - 8 = use max time of group 1 - 8, 9 = use time of day							

Transit Priority Alternate Force Off Plans

Current Coord Plan	1	2	3	4	5	6	7	8
Alternate TP Force Off Plan	0	0	0	0	0	0	0	0
Current Coord Plan	9	10	11	12	13	14	15	16
Alternate TP Force Off Plan	0	0	0	0	0	0	0	0

0 = none
17 - 32 = coord plan 17 - 32

Group Timing

	Phase -->	1	2	3	4	5	6	7	8
Group 1	**Max Times**	0	0	0	0	0	0	0	0
	Walk Times	0	0	0	0	0	0	0	0
Group 2	**Max Times**	0	0	0	0	0	0	0	0
	Walk Times	0	0	0	0	0	0	0	0
Group 3	**Max Times**	0	0	0	0	0	0	0	0
	Walk Times	0	0	0	0	0	0	0	0
Group 4	**Max Times**	0	0	0	0	0	0	0	0
	Walk Times	0	0	0	0	0	0	0	0
Group 5	**Max Times**	0	0	0	0	0	0	0	0
	Walk Times	0	0	0	0	0	0	0	0
Group 6	**Max Times**	0	0	0	0	0	0	0	0
	Walk Times	0	0	0	0	0	0	0	0
Group 7	**Max Times**	0	0	0	0	0	0	0	0
	Walk Times	0	0	0	0	0	0	0	0
Group 8	**Max Times**	0	0	0	0	0	0	0	0
	Walk Times	0	0	0	0	0	0	0	0

0 - 255 sec
0 would time the normal function time

Truck Priority (next/2/7/9)

	1	2	3	4	
Truck Priority-->	1	2	3	4	
Associated Transit Priority	0	0	0	0	0 = none 1 - 8 = transit priority 1 - 8
Leading Detector	0	0	0	0	0 = none, 1 - 32 = detector 1 - 32
Trailing Detector	0	0	0	0	
Stop Bar Distance	0	0	0	0	0 - 999 feet
Trap Distance	0	0	0	0	0.0 - 99.9 feet
Minimum Speed	0	0	0	0	0 - 100 mph
Minimum Length	0	0	0	0	0 - 255 feet
Downhill Grade	0	0	0	0	0 - 20 %
Uphill Grade	0	0	0	0	
Undersized Vehicle					X = Enabled

Change I/O		X = On (After a download with a power on - off cycle)

Inputs (Non Default I/O is offset to the right) (next/2/8/1)											
C1-39	*101*	*VD9*	**C1-55**	*15*	*VD5*	**C1-67**	*22*	*PED2*	**C11-15**	*254*	*N/U*
C1-40	*113*	*VD19*	**C1-56**	*11*	*VD1*	**C1-68**	*26*	*PED6*	**C11-16**	*254*	*N/U*
C1-41	*106*	*VD14*	**C1-57**	*17*	*VD7*	**C1-69**	*24*	*PED4*	**C11-17**	*254*	*N/U*
C1-42	*118*	*VD24*	**C1-58**	*13*	*VD3*	**C1-70**	*28*	*PED8*	**C11-18**	*254*	*N/U*
C1-43	*102*	*VD10*	**C1-59**	*16*	*VD6*	**C1-71**	*151*	*PE1*	**C11-19**	*254*	*N/U*
C1-44	*114*	*VD20*	**C1-60**	*12*	*VD2*	**C1-72**	*152*	*PE2*	**C11-20**	*254*	*N/U*
C1-45	*107*	*VD15*	**C1-61**	*18*	*VD8*	**C1-73**	*153*	*PE3*	**C11-21**	*254*	*N/U*
C1-46	*161*	*VD25*	**C1-62**	*14*	*VD4*	**C1-74**	*154*	*PE4*	**C11-22**	*254*	*N/U*
C1-47	*105*	*VD13*	**C11-10**	*254*	*N/U*	**C1-75**	*254*	*N/U*	**C11-23**	*254*	*N/U*
C1-48	*117*	*VD23*	**C11-11**	*254*	*N/U*	**C1-76**	*104*	*VD12*	**C11-24**	*254*	*N/U*
C1-49	*112*	*VD18*	**C11-12**	*254*	*N/U*	**C1-77**	*116*	*VD22*	**C11-25**	*254*	*N/U*
C1-50	*164*	*VD28*	**C11-13**	*254*	*N/U*	**C1-78**	*111*	*VD17*	**C11-26**	*254*	*N/U*
C1-51	*199*	*PEDI*	**C1-63**	*103*	*VD11*	**C1-79**	*163*	*VD27*	**C11-27**	*254*	*N/U*
C1-52	*155*	*PE5*	**C1-64**	*115*	*VD21*	**C1-80**	*82*	*IADV*	**C11-28**	*254*	*N/U*
C1-53	*85*	*MCE*	**C1-65**	*108*	*VD16*	**C1-81**	*137*	*MONS*	**C11-29**	*254*	*N/U*
C1-54	*254*	*N/U*	**C1-66**	*162*	*VD26*	**C1-82**	*62*	*ST1*	**C11-30**	*254*	*N/U*

Outputs (Non Default I/O is offset to the right) (next/2/8/2)											
C1-2	*44*	*4DWK*	**C1-19**	*48*	*8DWK*	**C1-35**	*131*	*TO1*	**C1-91**	*41*	*1DWK*
C1-3	*64*	*4WLK*	**C1-20**	*68*	*8WLK*	**C1-36**	*132*	*TO2*	**C1-93**	*61*	*1WLK*
C1-4	*14*	*4RED*	**C1-21**	*18*	*8RED*	**C1-37**	*133*	*TO3*	**C1-94**	*106*	*OLBR*
C1-5	*24*	*4YEL*	**C1-22**	*28*	*8YEL*	**C1-38**	*134*	*TO4*	**C1-95**	*105*	*OLBY*
C1-6	*34*	*4GRN*	**C1-23**	*38*	*8GRN*	**C1-100**	*53*	*3PCL*	**C1-96**	*104*	*OLBG*
C1-7	*13*	*3RED*	**C1-24**	*17*	*7RED*	**C1-101**	*51*	*1PCL*	**C1-97**	*103*	*OLAR*
C1-8	*23*	*3YEL*	**C1-25**	*27*	*7YEL*	**C1-102**	*187*	*SFL*	**C1-98**	*102*	*OLAY*
C1-9	*33*	*3GRN*	**C1-26**	*37*	*7GRN*	**C1-103**	*147*	*WDOG*	**C1-99**	*101*	*OLAG*
C1-10	*42*	*2DWK*	**C1-27**	*46*	*6DWK*	**C1-83**	*43*	*3DWK*	**C11-1**	*254*	*N/U*
C1-11	*62*	*2WLK*	**C1-28**	*66*	*6WLK*	**C1-84**	*63*	*3WLK*	**C11-2**	*254*	*N/U*
C1-12	*12*	*2RED*	**C1-29**	*16*	*6RED*	**C1-85**	*116*	*OLDR*	**C11-3**	*254*	*N/U*
C1-13	*22*	*2YEL*	**C1-30**	*26*	*6YEL*	**C1-86**	*115*	*OLDY*	**C11-4**	*254*	*N/U*
C1-15	*32*	*2GRN*	**C1-31**	*36*	*6GRN*	**C1-87**	*114*	*OLDG*	**C11-5**	*254*	*N/U*
C1-16	*11*	*1RED*	**C1-32**	*15*	*5RED*	**C1-88**	*113*	*OLCR*	**C11-6**	*254*	*N/U*
C1-17	*21*	*1YEL*	**C1-33**	*25*	*5YEL*	**C1-89**	*112*	*OLCY*	**C11-7**	*254*	*N/U*
C1-18	*31*	*1GRN*	**C1-34**	*35*	*5GRN*	**C1-90**	*111*	*OLCG*	**C11-8**	*254*	*N/U*

Internal Logic (next/2/9)			
Step	**Inst.**	**Description**	**Comment**
1	*201*	Jumper Two Inputs	
2	*101*	Vehicle Detector 9	
3	*165*	Vehicle Detector 29	
4	*201*	Jumper Two Inputs	
5	*102*	Vehicle Detector 10	
6	*165*	Vehicle Detector 29	
7	*201*	Jumper Two Inputs	
8	*113*	Vehicle Detector 19	
9	*166*	Vehicle Detector 30	
10	*201*	Jumper Two Inputs	
11	*114*	Vehicle Detector 20	
12	*166*	Vehicle Detector 30	
13			
14			
15			
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Internal Logic cont.			
Step	**Inst.**	**Description**	**Comment**
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Internal Logic cont.			
Step	**Inst.**	**Description**	**Comment**
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Internal Logic cont.			
Step	**Inst.**	**Description**	**Comment**
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Internal Logic cont.			
Step	**Inst.**	**Description**	**Comment**
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FYLTA - Continued (next/2/2/8/6)						
	Phase Pairs -->	**1 - 2**	**3 - 4**	**5 - 6**	**7 - 8**	
Gap-Dependent FYLTA (next/2/2/8/6-A)	**Detector Input**	*0*	*0*	*0*	*0*	0 = disable, 1 - 64 detectors
	Min Delay	*0*	*0*	*0*	*0*	0 - 255 sec
	Detector Gap	*0.0*	*0.0*	*0.0*	*0.0*	0 - 25.5 sec
	Max Delay	*0*	*0*	*0*	*0*	0 - 255 sec
	Not Ped	*0*	*0*	*0*	*0*	0 - 255 sec

FYLTA Gap-Dependent Plans (next/2/2/8/6)						
	Phase Pairs -->	**1 - 2**	**3 - 4**	**5 - 6**	**7 - 8**	
FYLTA Gap-Dependent Plan A	**Detector Input**	*0*	*0*	*0*	*0*	0 = disable, 1 - 64 detectors
	Min Delay	*0*	*0*	*0*	*0*	0 - 255 sec
	Detector Gap	*0.0*	*0.0*	*0.0*	*0.0*	0 - 25.5 sec
	Max Delay	*0*	*0*	*0*	*0*	0 - 255 sec
	Not Ped	*0*	*0*	*0*	*0*	0 - 255 sec
FYLTA Gap-Dependent Plan B	**Detector Input**	*0*	*0*	*0*	*0*	0 = disable, 1 - 64 detectors
	Min Delay	*0*	*0*	*0*	*0*	0 - 255 sec
	Detector Gap	*0.0*	*0.0*	*0.0*	*0.0*	0 - 25.5 sec
	Max Delay	*0*	*0*	*0*	*0*	0 - 255 sec
	Not Ped	*0*	*0*	*0*	*0*	0 - 255 sec
FYLTA Gap-Dependent Plan C	**Detector Input**	*0*	*0*	*0*	*0*	0 = disable, 1 - 64 detectors
	Min Delay	*0*	*0*	*0*	*0*	0 - 255 sec
	Detector Gap	*0.0*	*0.0*	*0.0*	*0.0*	0 - 25.5 sec
	Max Delay	*0*	*0*	*0*	*0*	0 - 255 sec

	Not Ped	0	0	0	0	0 - 255 sec
FYLTA Gap-Dependent Plan D	Detector Input	0	0	0	0	0 = disable, 1 - 64 detectors
	Min Delay	0	0	0	0	0 - 255 sec
	Detector Gap	0.0	0.0	0.0	0.0	0 - 25.5 sec
	Max Delay	0	0	0	0	0 - 255 sec
	Not Ped	0	0	0	0	0 - 255 sec

Preemption - Continued

Railroad Communications (IEEE 1570) (next/2/5/0/8)

	ATC	Wayside	
Railroad Number	0	0	0 - 999, represents railroad
Railroad Line Number	0	0	0 - 999, represents railroad line
Group Number	0	0	0 - 999, represents physical group of equipment
Subnode Number	0	0	0 - 99, subnode within physical group of equipment
Device Number	0	0	0 - 99, device within physical group of equipment
Associated Preempt	0		0 - 8
Communication Port	0		0 - 4

Reports - Continued

Reports - Service Delay Modes (next/2/6/0)

Phase -->	1	2	3	4	5	6	7	8	
Mode	0	0	0	0	0	0	0	0	0 = disable, 1 = enable, 2 = Ped, 3 = Veh/P

Ped Overlap -->	A	B	C	D	E	F	G	H	
Mode	0	0	0	0	0	0	0	0	0 = disable, 1 = enable

Detector -->	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Detector -->	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Enable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Detector -->	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Enable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Detector -->	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Enable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

15877 C14305 Contract Plans

LEGEND
LOWER COLUMBIA RIVER HWY. AT NEHALEM ST
US 30 AND M.P. 61.47
(CLATSKANIE)

LEGEND

CONTROLLERS

- EX/C — Retain and protect existing Model 170 controller and Model 332 cabinet
- RX/C — Remove existing controller model 170
- C/2070 — Install model 2070 controller in existing model 332 cabinet
- C — Controller (See Signal Plan)

POLES

- EX/SP — Retain and protect existing strain pole
- WH — Install weather head for aerial power drop
- EX/I — Retain and protect existing power pole (Power source)
- RX/FB — Remove and save existing flashing beacon signal pedestal

SIGNALS

- EX/VPh — Retain and protect existing phase (Ph=phase) vehicle signal
- EX/PPh — Retain and protect existing phase (Ph=phase) programmed vehicle signal
- RX/P/B — Remove existing pedestrian signal, pushbutton and instructions
- C/B/Ph — Install phase (Ph=phase) countdown pedestrian signal with clamshell mount and pushbutton with 'H' mount

SIGNS

- RX/AL — Remove existing aluminum sign and mount
- AL/10 — Install aluminum (30"x36", type "W7") "LEFT TURN YIELD TO ONCOMING TRAFFIC" sign (OR17-1)
- AL/5R — Install aluminum (30"x36", type "W7") right arrow "ONLY" sign (R3-5R)

CABINETS

- EX/TC — Retain and protect existing terminal cabinet
- RX/SC — Retain and protect existing service cabinet
- BMCL — Install base mounted service cabinet, 120/240 volt metered, for signal and signal pole mounted illumination systems
- RX/MS — Remove existing meter base

JUNCTION BOXES

- EX/J1 — Retain and protect existing 17"x10"x12" precast concrete junction box
- EX/J3 — Retain and protect existing 30"x17"x12" precast concrete junction box
- SP/S — Install 6" max. sand pocket block-out with (S=size) inch conduit to junction box
- EX/SPB — Retain and protect existing sand pocket block-out with (01") conduit to junction box

LEGEND CONTINUED

WIRES

- EX/CC — Retain and protect existing control cables
- EX/M — Retain and protect existing messenger cable
- EX/4O — Retain and protect existing tether cable
- EX/W — Retain and protect existing wiring
- RX N/G — Remove existing (N=number) No. (G=AWG wire size) type THHN wiring
- EX N/G — Retain and protect existing (N=number) No. (G=AWG wire size) type THHN wiring
- X-N/G — Install (X=number of cables) control cables with (N=number) AWG No. (G=AWG wire size) conductors
- N/G — Install (N=number) No. (G=AWG wire size) type THWN wires
- PL — Install poly pull line

CONDUITS

- S EX/DC — Retain and protect existing (size) detector conduit
- S EX/EC — Retain and protect existing (size) electrical conduit
- EX/EC — Retain and protect existing conduit stub
- S — Install (S=size) inch electrical conduit
- HDD — Install conduit by horizontal directional drilling, open trench not allowed
- W — Install conduit and wire as required by power company

LUMINAIRES

- RX/PE — Remove existing photocell
- EX/HPS — Maintain and protect existing high pressure sodium luminaire
- EX/LA — Maintain and protect existing luminaire arm
- PE/I — Install photocontrol electronic relay on pole, as per T.M.S. Dwg. No. TM465

LOOPS

- LD/Ph — Install phase (Ph=phase) 6' round or 4' diamond vehicle detector loop
- N/LW — Install (N=number) pair of loop wires
- LF/X-Ph — Install (X=number of cables) phase (Ph=phase) loop feeder cables
- RX/FPh — Remove existing phase (Ph=phase) loop feeder cable
- EX/FPh — Retain and protect existing phase (Ph=phase) loop feeder cable

REVISED AS CONSTRUCTED
6/1/12
CONTRACT 14305
Paul Christiansen Project Manager
DATE: 6-1-12

NOTE:
See T.R.S. Dwg. 15878 Thru 15880 for Signal and Detector Plans

for Traffic Section Approval

REGISTERED PROFESSIONAL ENGINEER
48,097
Jordan R. Orser
OREGON
JULY 21, 1998
JORDON R. ORSER
Expires Dec. 31, 2010

OREGON DEPARTMENT OF TRANSPORTATION
TRAFFIC - ROADWAY SECTION

Region 1 - Traffic Unit

US30: SWEDETOWN ROAD - JCT OR-47
LOWER COLUMBIA RIVER HIGHWAY
COLUMBIA COUNTY

DESIGNED BY: Jeffrey Hayes
REVIEWED BY: Scott Cromer
DRAWN BY: Jeffrey Hayes
FC: 092 MP: 61.47

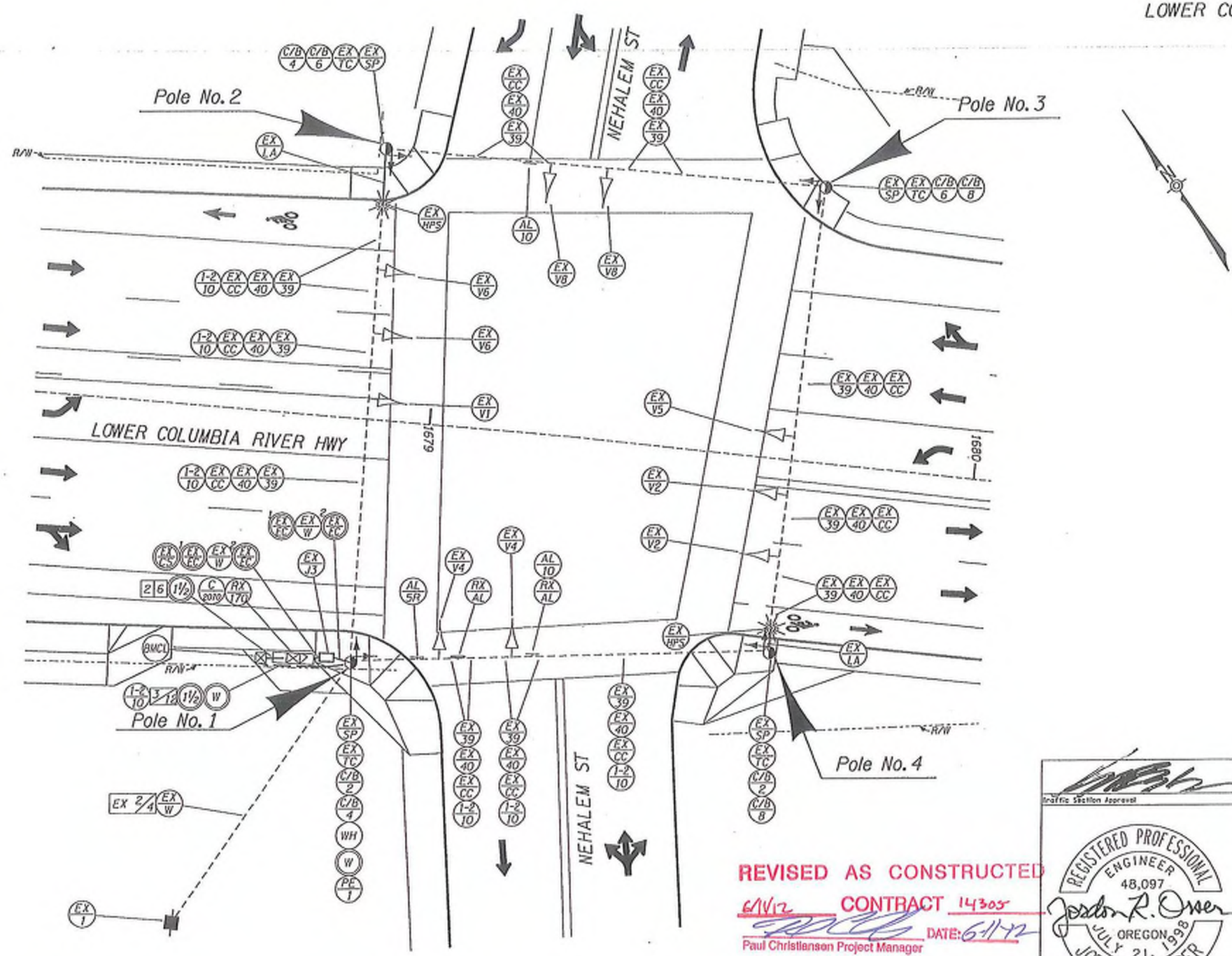
ACCOMPANIED BY DWGS. TM460, TM465, TM467, TM475, TM480, TM485
and T.R.S. Dwgs 15878 - 15882

LEGEND

1S30 NO. 2A155 T.R.S. DRG. NO. 15877

15878 C14305 Contract Plans

SIGNAL PLAN
LOWER COLUMBIA RIVER HWY. AT NEHALEM ST
US 30 AND M.P. 61.47
(CLATSKANIE)



REVISED AS CONSTRUCTED
6/14/12 CONTRACT 14305
Paul Christiansen Project Manager DATE: 6/14/12

NOTE:
See T.R.S. Dwg. 15877 for Legend

Traffic Section Approval

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TRAFFIC - ROADWAY SECTION

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REVIEWED BY: Scott Cromer
DRAWN BY: Jeffrey Hayes
FC: 092 MP: 61.47

SIGNAL PLAN

ISSU NO. 2A155 T.R.S. DWG. NO. 15878

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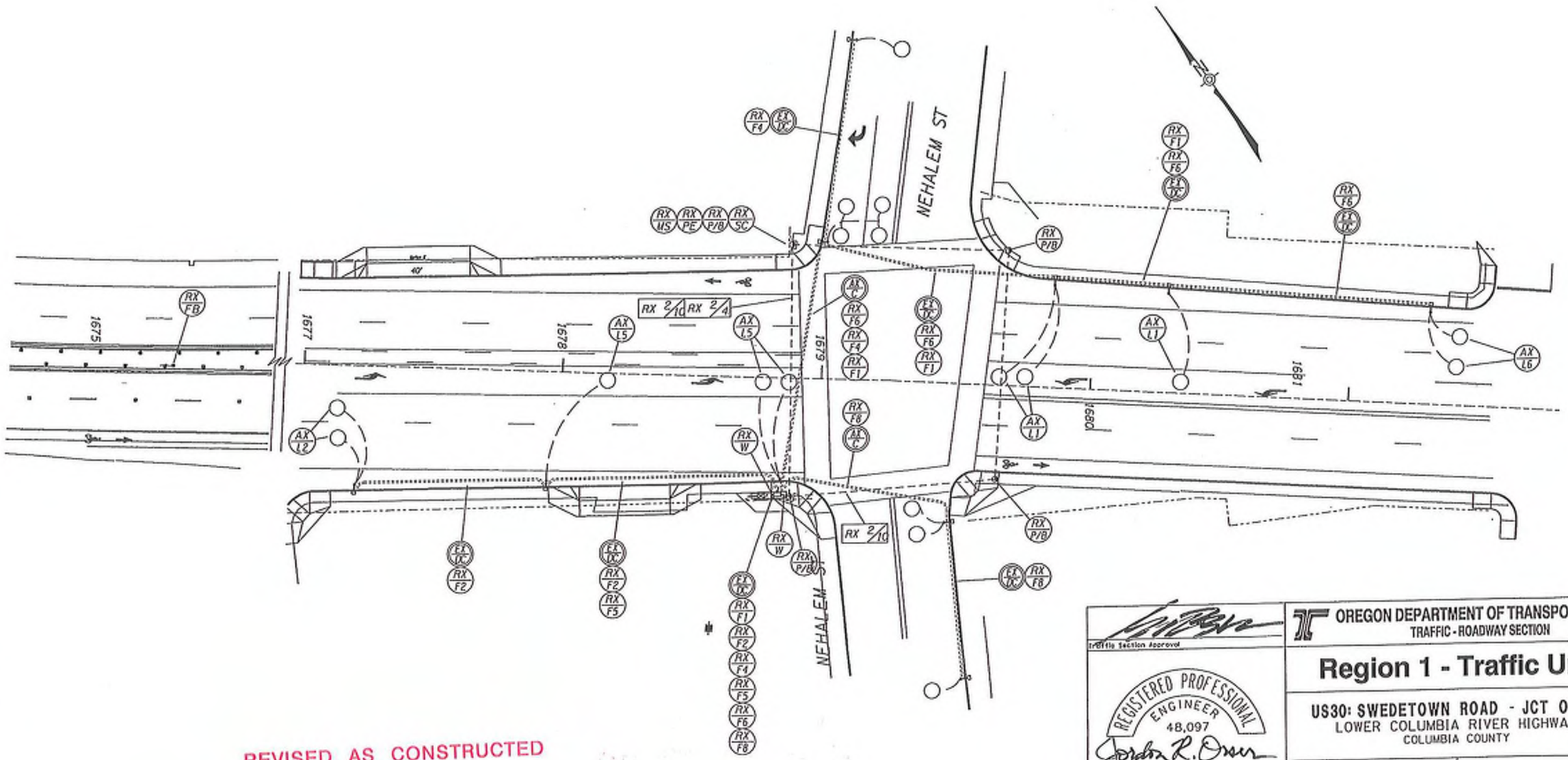
97/185

15819 C14305 Contract Plans

REMOVAL PLAN
LOWER COLUMBIA RIVER HWY. AT NEHALEM ST
US 30 AND M.P. 61.47
(CLATSKANIE)



REVISED AS CONSTRUCTED
6/4/12 CONTRACT 14305
DATE: 6/4/12
Paul Christiansen Project Manager

NOTE:
See T.R.S. Dwg. 15877 for Legend

Traffic Section Approval

REGISTERED PROFESSIONAL ENGINEER
48,097
Jordon R. Orser
JULY 21, 1998
OREGON
JORDON R. ORSER
Expires Dec. 31, 2010

OREGON DEPARTMENT OF TRANSPORTATION
TRAFFIC - ROADWAY SECTION

Region 1 - Traffic Unit

US30: SWEDETOWN ROAD - JCT OR-47
LOWER COLUMBIA RIVER HIGHWAY
COLUMBIA COUNTY

DESIGNED BY: Jeffrey Hayes
REVIEWED BY: Scott Cramer
DRAWN BY: Jeffrey Hayes
FC: 092 MP: 61.47

REMOVAL PLAN

ISSU NO. 2A155 T.R.S. DWG. NO. 15879

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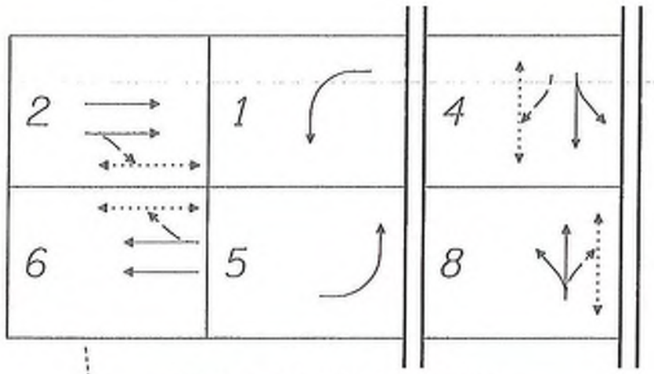
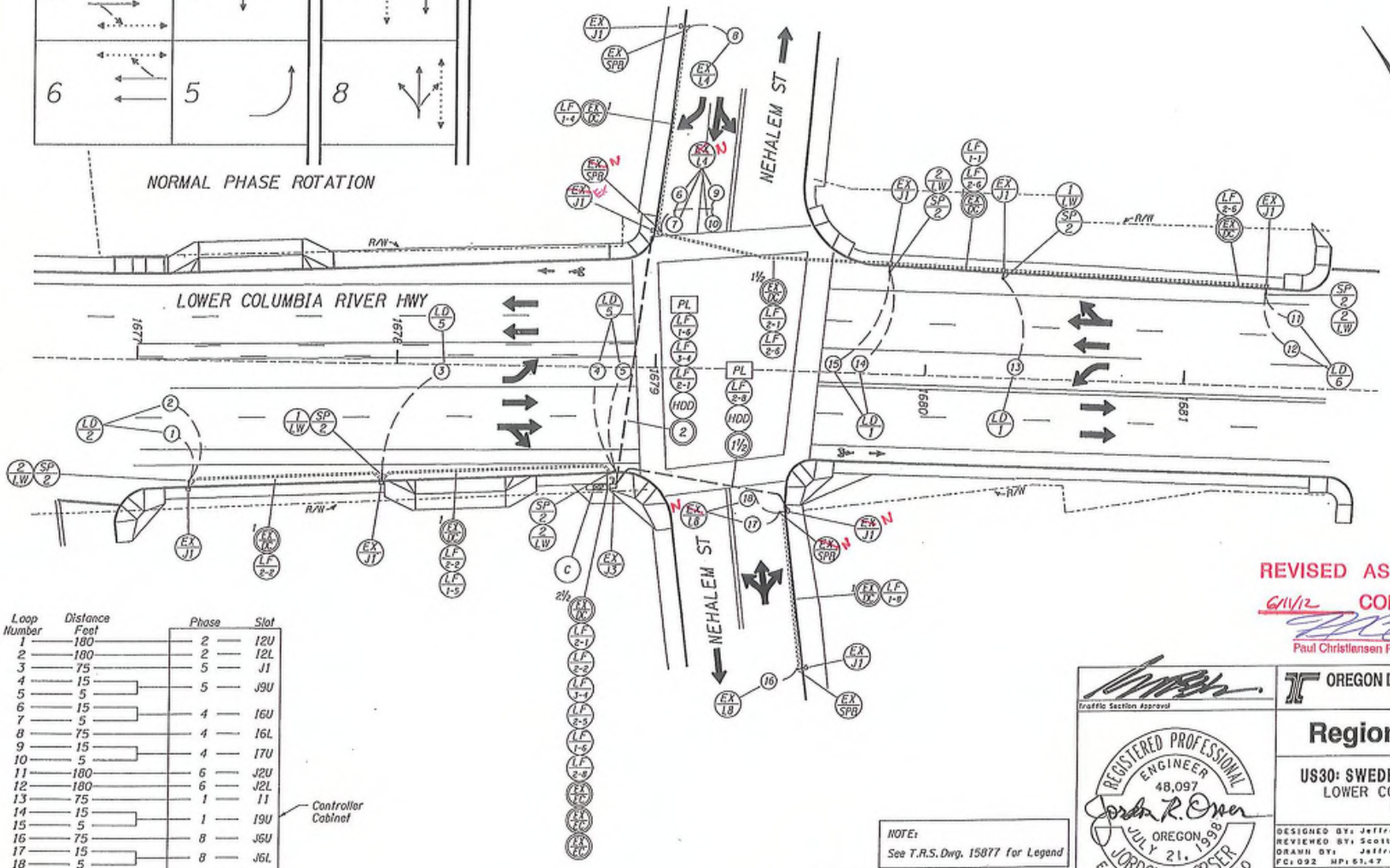
DETECTOR PLAN
LOWER COLUMBIA RIVER HWY. AT NEHALEM ST
US 30 AND M.P. 61.47
(CLATSKANIE)



NORMAL PHASE ROTATION



Loop Number	Distance Feet	Phase	Slot
1	180	2	I2U
2	180	2	I2L
3	75	5	J1
4	15	5	J9U
5	5		
6	15	4	I6U
7	5		
8	75	4	I6L
9	15	4	I7U
10	5		
11	180	6	J2U
12	180	6	J2L
13	75	1	I1
14	15	1	I9U
15	5		
16	75	8	J6U
17	15	8	J6L
18	5		

Controller Cabinet

LOOP DETECTOR WIRING DIAGRAM
"Distance" is from Stop Line to center of loop in feet

NOTE:
See T.R.S. Dwg. 15877 for Legend

NOTE:
Field Verify Measurements Before Construction

REVISED AS CONSTRUCTED
6/11/12 CONTRACT 14305
DATE: 6/11/12
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TRAFFIC - ROADWAY SECTION

Region 1 - Traffic Unit

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REVIEWED BY: Scott Cromer
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FC: 092 MP: 61.47

DETECTOR PLAN

ISSUE NO. 2A155 T.R.S. DWG. NO. 15880

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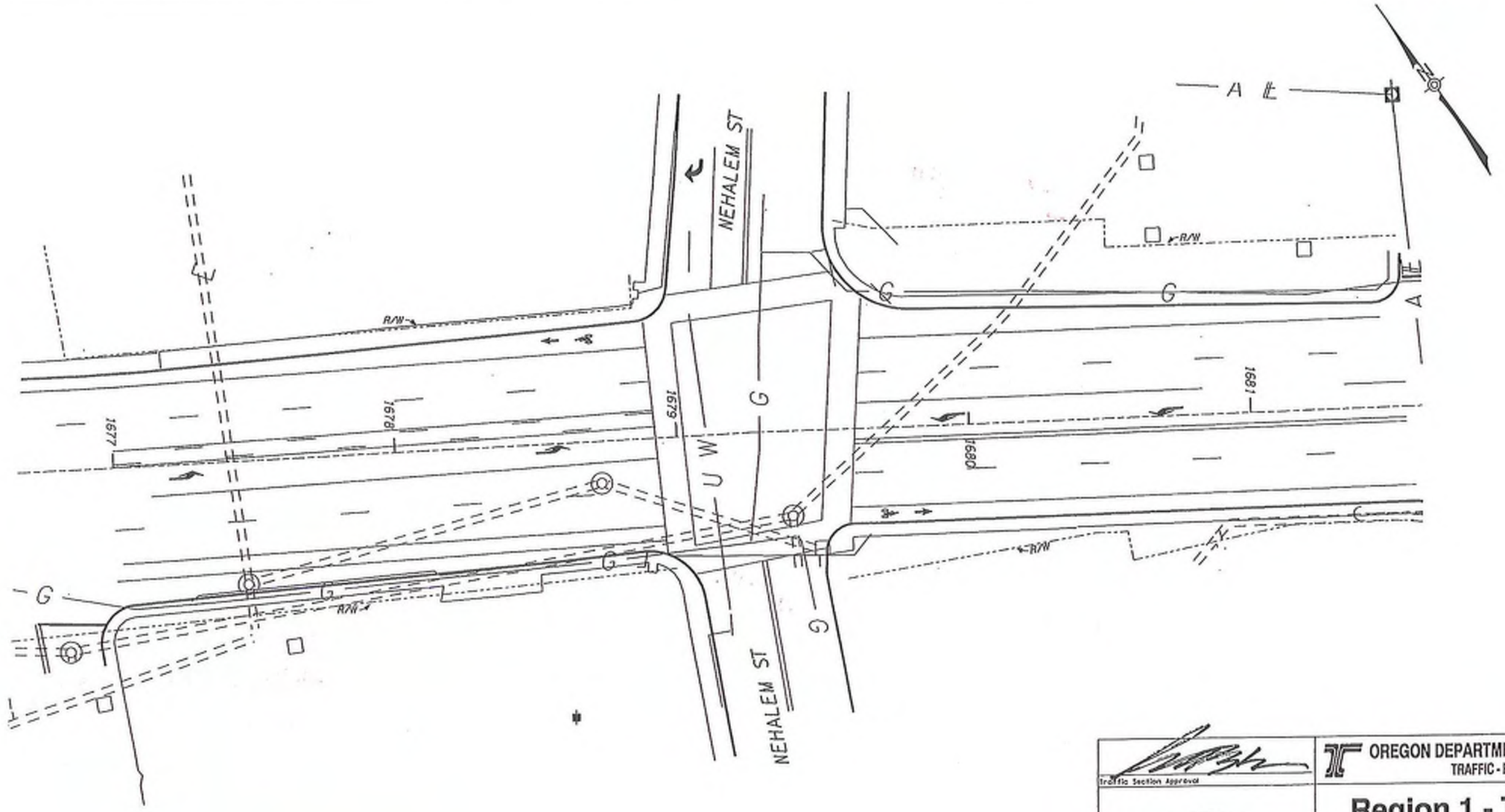
15881 C14305 Contract Plans

UTILITY PLAN
LOWER COLUMBIA RIVER HWY. AT NEHALEM ST
US 30 AND M.P. 61.47
(CLATSKANIE)



REVISED AS CONSTRUCTED
CONTRACT 14305
DATE: 6/1/12
Paul Christiansen Project Manager

Traffic Section Approval

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OREGON DEPARTMENT OF TRANSPORTATION
TRAFFIC - ROADWAY SECTION

Region 1 - Traffic Unit

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LOWER COLUMBIA RIVER HIGHWAY
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DESIGNED BY: Jeffrey Hayes
REVIEWED BY: Scott Cramer
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FC: 092 MP: 61.47

UTILITY PLAN

ISSD NO. 2A155 T.R.S. DRG. NO. 15881

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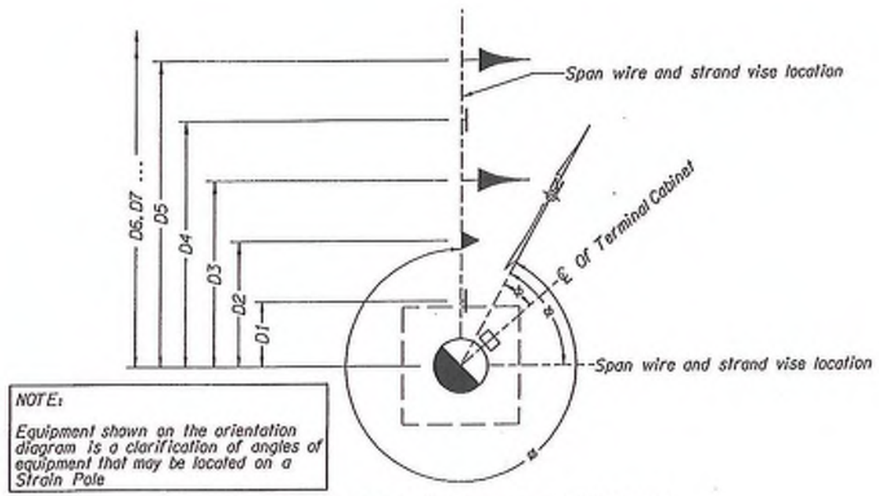
SIGNAL PLAN DETAILS
LOWER COLUMBIA RIVER HWY. AT NEHALEM ST
US 30 AND M.P. 61.47
(CLATSKANIE)

POLE ENTRANCE CHART

		See TM650 thru TM653	EQUIPMENT ON POLE					EQUIPMENT ON MAST ARM (Length in Feet and Equipment Type)							
POLE NO.	DWG. NO.	TYPE	PED. SIGNAL DEG.	TERM. CABINET DEG.	SIGN DEG.	TRAFFIC SIGNAL DEG.	PHOTO ELECTRIC CELL	D1	D2	D3	D4	D5	D6	D7	D8
1	15878	STP	45 & 135	Extg	Extg			60 / V3L	62 / V2	74 / V2	96 / Pole 2	—	—	—	—
2	15878	STP	135 & 225	Extg	Extg			27 / SA	31 / V2	42 / V2	65 / Pole 3	—	—	—	—
3	15878	STP	45 & 315	Extg	Extg			47 / V3L	58 / V2	69 / V2	88 / Pole 4	—	—	—	—
4	15878	STP	45 & 315	Extg	Extg			44 / SA	48 / V2	62 / V2	66 / SA	81 / Pole 1	—	—	—

BRACKET MOUNT

V3L = Traffic Signal Type 3L, Adjustable Bracket Mount Tenon Not Required (See Std. Dwg. TM460)
V2 = Traffic Signal Type 2, Adjustable Bracket Mount Tenon Not Required (See Std. Dwg. TM460)
SA = Sign, 30" x 36" Aluminum w/Adjustable Bracket Mount Tenon Not Required (See Std Dwg TM465)
Extg = Retain and Protect, existing traffic signal equipment



STRAIN POLE ORIENTATION DIAGRAM

REVISED AS CONSTRUCTED
6/11/12 CONTRACT 14305
Paul Christiansen Project Manager DATE 6/11/12

Traffic Section Approval

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OREGON DEPARTMENT OF TRANSPORTATION
TRAFFIC - ROADWAY SECTION

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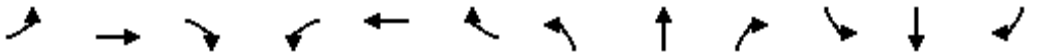
SIGNAL PLAN DETAILS

ISSU NO. 2A155 T.R.S. DOC. NO. 15882

APPENDIX H

OPERATIONS CALCULATIONS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	227	22	46	337	22	17	18	28	34	31	55
Future Volume (vph)	37	227	22	46	337	22	17	18	28	34	31	55
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Frt	1.00	0.99		1.00	0.99			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	1.00
Satd. Flow (prot)	1599	2832		1614	2796			1442			1617	1360
Flt Permitted	0.95	1.00		0.95	1.00			0.90			0.80	1.00
Satd. Flow (perm)	1599	2832		1614	2796			1314			1331	1360
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	41	249	24	51	370	24	19	20	31	37	34	60
RTOR Reduction (vph)	0	8	0	0	5	0	0	26	0	0	0	50
Lane Group Flow (vph)	41	265	0	51	389	0	0	44	0	0	71	10
Confl. Peds. (#/hr)							1		1	1		1
Heavy Vehicles (%)	4%	15%	25%	3%	19%	0%	25%	18%	0%	4%	7%	8%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Actuated Green, G (s)	2.2	19.7		3.0	20.5			6.8			6.8	6.8
Effective Green, g (s)	2.2	20.2		3.0	21.0			6.8			6.8	6.8
Actuated g/C Ratio	0.05	0.48		0.07	0.50			0.16			0.16	0.16
Clearance Time (s)	4.0	4.5		4.0	4.5			4.0			4.0	4.0
Vehicle Extension (s)	2.3	5.5		2.3	6.1			3.0			2.5	2.5
Lane Grp Cap (vph)	83	1362		115	1398			212			215	220
v/s Ratio Prot	0.03	0.09		c0.03	c0.14							
v/s Ratio Perm								0.03			c0.05	0.01
v/c Ratio	0.49	0.19		0.44	0.28			0.21			0.33	0.04
Uniform Delay, d1	19.4	6.2		18.7	6.1			15.3			15.6	14.9
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	2.7	0.2		1.6	0.3			0.5			0.7	0.1
Delay (s)	22.0	6.4		20.3	6.4			15.8			16.2	14.9
Level of Service	C	A		C	A			B			B	B
Approach Delay (s)		8.5			8.0			15.8			15.6	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	42.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	35.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	268	3	0	355	42	0	0	1	22	1	65
Future Vol, veh/h	7	268	3	0	355	42	0	0	1	22	1	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Free	-	-	None	-	-	Yield
Storage Length	200	-	-	-	-	660	-	-	-	-	-	260
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	20	17	0	0	17	17	0	0	0	19	0	4
Mvmt Flow	8	295	3	0	390	46	0	0	1	24	1	71

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	390	0	0	-	-	0	704	703	297	703	704	390
Stage 1	-	-	-	-	-	-	313	313	-	390	390	-
Stage 2	-	-	-	-	-	-	391	390	-	313	314	-
Critical Hdwy	4.3	-	-	-	-	-	7.1	6.5	6.2	7.29	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.29	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.29	5.5	-
Follow-up Hdwy	2.38	-	-	-	-	-	3.5	4	3.3	3.671	4	3.336
Pot Cap-1 Maneuver	1077	-	-	0	-	0	354	364	747	331	364	654
Stage 1	-	-	-	0	-	0	702	661	-	601	611	-
Stage 2	-	-	-	0	-	0	637	611	-	663	660	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	1077	-	-	-	-	-	313	361	747	329	361	654
Mov Cap-2 Maneuver	-	-	-	-	-	-	313	361	-	329	361	-
Stage 1	-	-	-	-	-	-	697	656	-	597	611	-
Stage 2	-	-	-	-	-	-	566	611	-	657	655	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	9.8	12.7
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	SBLn1	SBLn2
Capacity (veh/h)	747	1077	-	-	-	330	654
HCM Lane V/C Ratio	0.001	0.007	-	-	-	0.077	0.109
HCM Control Delay (s)	9.8	8.4	-	-	-	16.8	11.2
HCM Lane LOS	A	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0	0	-	-	-	0.2	0.4

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	271	21	0	397	0	34
Future Vol, veh/h	271	21	0	397	0	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Stop
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	13	0	17	0	0
Mvmt Flow	298	23	0	436	0	37

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	-	298
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	0	0	-	0	746
Stage 1	-	0	0	-	0	-
Stage 2	-	0	0	-	0	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	-	746
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	746	-	-
HCM Lane V/C Ratio	0.05	-	-
HCM Control Delay (s)	10.1	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-

Intersection	
Int Delay, s/veh	3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	9	13	21	45	0	21
Future Vol, veh/h	9	13	21	45	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	13	0	0	7	0	13
Mvmt Flow	10	14	23	49	0	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	24	0	112	17
Stage 1	-	-	-	-	17	-
Stage 2	-	-	-	-	95	-
Critical Hdwy	-	-	4.1	-	6.4	6.33
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.417
Pot Cap-1 Maneuver	-	-	1604	-	890	1031
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	934	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1604	-	877	1031
Mov Cap-2 Maneuver	-	-	-	-	877	-
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	920	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.3	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1031	-	-	1604	-
HCM Lane V/C Ratio	0.022	-	-	0.014	-
HCM Control Delay (s)	8.6	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	2	0	21	6	21	6	24	16	13	84	0
Future Vol, veh/h	3	2	0	21	6	21	6	24	16	13	84	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	14	0	17	6	0	5	33	11	0	100	33
Mvmt Flow	3	2	0	24	7	24	7	27	18	15	94	0
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	7.5	7.7	7.7	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	20%	0%	60%	44%	13%
Vol Thru, %	80%	0%	40%	12%	87%
Vol Right, %	0%	100%	0%	44%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	16	5	48	97
LT Vol	6	0	3	21	13
Through Vol	24	0	2	6	84
RT Vol	0	16	0	21	0
Lane Flow Rate	34	18	6	54	109
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.045	0.023	0.007	0.064	0.126
Departure Headway (Hd)	4.846	4.521	4.448	4.292	4.17
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	736	787	809	821	853
Service Time	2.599	2.275	2.448	2.389	2.224
HCM Lane V/C Ratio	0.046	0.023	0.007	0.066	0.128
HCM Control Delay	7.8	7.4	7.5	7.7	7.8
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0	0.2	0.4

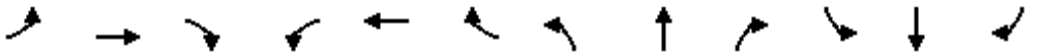
Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	13	14	38	21	0	21	3	21	0	6	1
Future Vol, veh/h	0	13	14	38	21	0	21	3	21	0	6	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	8	31	11	5	0	26	0	26	0	0	0
Mvmt Flow	0	15	16	44	24	0	24	3	24	0	7	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	24	0	0	31	0	0	139	135	23	149	143	24
Stage 1	-	-	-	-	-	-	23	23	-	112	112	-
Stage 2	-	-	-	-	-	-	116	112	-	37	31	-
Critical Hdwy	4.1	-	-	4.21	-	-	7.36	6.5	6.46	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.36	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.36	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.299	-	-	3.734	4	3.534	3.5	4	3.3
Pot Cap-1 Maneuver	1604	-	-	1525	-	-	779	760	989	824	752	1058
Stage 1	-	-	-	-	-	-	937	880	-	898	807	-
Stage 2	-	-	-	-	-	-	834	807	-	984	873	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1604	-	-	1525	-	-	756	738	989	783	730	1058
Mov Cap-2 Maneuver	-	-	-	-	-	-	756	738	-	783	730	-
Stage 1	-	-	-	-	-	-	937	880	-	898	784	-
Stage 2	-	-	-	-	-	-	802	784	-	956	873	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4.8	9.5	9.8
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	848	1604	-	-	1525	-	-	764
HCM Lane V/C Ratio	0.062	-	-	-	0.029	-	-	0.011
HCM Control Delay (s)	9.5	0	-	-	7.4	0	-	9.8
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	466	22	49	403	57	18	33	25	46	31	87
Future Volume (vph)	106	466	22	49	403	57	18	33	25	46	31	87
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Frt	1.00	0.99		1.00	0.98			0.96			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	1.00
Satd. Flow (prot)	1662	3152		1662	3100			1646			1649	1426
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.78	1.00
Satd. Flow (perm)	1662	3152		1662	3100			1528			1327	1426
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	116	512	24	54	443	63	20	36	27	51	34	96
RTOR Reduction (vph)	0	3	0	0	15	0	0	22	0	0	0	79
Lane Group Flow (vph)	116	533	0	54	491	0	0	61	0	0	85	17
Confl. Peds. (#/hr)							1		1	1		1
Heavy Vehicles (%)	0%	5%	0%	0%	6%	0%	0%	0%	0%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Actuated Green, G (s)	9.2	24.9		3.8	19.5			9.0			9.0	9.0
Effective Green, g (s)	9.2	25.4		3.8	20.0			9.0			9.0	9.0
Actuated g/C Ratio	0.18	0.51		0.08	0.40			0.18			0.18	0.18
Clearance Time (s)	4.0	4.5		4.0	4.5			4.0			4.0	4.0
Vehicle Extension (s)	2.3	5.5		2.3	6.1			3.0			2.5	2.5
Lane Grp Cap (vph)	304	1594		125	1235			273			237	255
v/s Ratio Prot	c0.07	c0.17		0.03	c0.16							
v/s Ratio Perm								0.04			c0.06	0.01
v/c Ratio	0.38	0.33		0.43	0.40			0.22			0.36	0.07
Uniform Delay, d1	18.0	7.4		22.2	10.8			17.6			18.1	17.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.5	0.3		1.4	0.6			0.4			0.7	0.1
Delay (s)	18.5	7.7		23.6	11.4			18.0			18.7	17.2
Level of Service	B	A		C	B			B			B	B
Approach Delay (s)		9.6			12.6			18.0			17.9	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	12.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	50.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	42.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	506	0	0	434	79	0	0	0	25	0	73
Future Vol, veh/h	41	506	0	0	434	79	0	0	0	25	0	73
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Free	-	-	None	-	-	Yield
Storage Length	200	-	-	-	-	660	-	-	-	-	-	260
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	6	0	0	6	4	0	0	0	6	0	4
Mvmt Flow	45	556	0	0	477	87	0	0	0	27	0	80

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	477	0	-	-	-	0	1123	1123	556	1123	1123	477
Stage 1	-	-	-	-	-	-	646	646	-	477	477	-
Stage 2	-	-	-	-	-	-	477	477	-	646	646	-
Critical Hdwy	4.13	-	-	-	-	-	7.1	6.5	6.2	7.16	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.16	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.16	5.5	-
Follow-up Hdwy	2.227	-	-	-	-	-	3.5	4	3.3	3.554	4	3.336
Pot Cap-1 Maneuver	1080	-	0	0	-	0	185	207	534	180	207	584
Stage 1	-	-	0	0	-	0	464	470	-	562	559	-
Stage 2	-	-	0	0	-	0	573	559	-	454	470	-
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	1080	-	-	-	-	-	154	198	534	174	198	584
Mov Cap-2 Maneuver	-	-	-	-	-	-	154	198	-	174	198	-
Stage 1	-	-	-	-	-	-	445	450	-	538	559	-
Stage 2	-	-	-	-	-	-	494	559	-	435	450	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0	0	16.5
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	1080	-	-	174	584
HCM Lane V/C Ratio	-	0.042	-	-	0.158	0.137
HCM Control Delay (s)	0	8.5	-	-	29.5	12.1
HCM Lane LOS	A	A	-	-	D	B
HCM 95th %tile Q(veh)	-	0.1	-	-	0.5	0.5

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	480	51	0	515	0	24
Future Vol, veh/h	480	51	0	515	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Stop
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	6	0	0	6	0	0
Mvmt Flow	527	56	0	566	0	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	-	527
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	0	0	-	0	555
Stage 1	-	0	0	-	0	-
Stage 2	-	0	0	-	0	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	-	555
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	555	-	-
HCM Lane V/C Ratio	0.048	-	-
HCM Control Delay (s)	11.8	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	38	10	14	32	0	51
Future Vol, veh/h	38	10	14	32	0	51
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	44	11	16	37	0	59

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	55	0	119	50
Stage 1	-	-	-	-	50	-
Stage 2	-	-	-	-	69	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1563	-	882	1024
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	959	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1563	-	873	1024
Mov Cap-2 Maneuver	-	-	-	-	873	-
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	949	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1024	-	-	1563	-
HCM Lane V/C Ratio	0.057	-	-	0.01	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	6	13	27	0	32	0	91	42	32	72	0
Future Vol, veh/h	1	6	13	27	0	32	0	91	42	32	72	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	7	2	0	0	0	0	0	0	0
Mvmt Flow	1	7	15	31	0	37	0	106	49	37	84	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	7.8	7.9	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	5%	46%	31%
Vol Thru, %	68%	30%	0%	69%
Vol Right, %	32%	65%	54%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	133	20	59	104
LT Vol	0	1	27	32
Through Vol	91	6	0	72
RT Vol	42	13	32	0
Lane Flow Rate	155	23	69	121
Geometry Grp	1	1	1	1
Degree of Util (X)	0.17	0.027	0.084	0.142
Departure Headway (Hd)	3.963	4.193	4.405	4.241
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	891	858	818	833
Service Time	2.051	2.196	2.406	2.328
HCM Lane V/C Ratio	0.174	0.027	0.084	0.145
HCM Control Delay	7.9	7.3	7.8	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	0.1	0.3	0.5

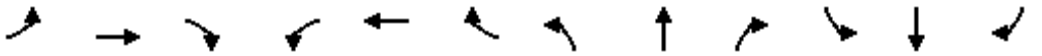
Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	4	29	30	30	26	1	38	15	38	3	10	0
Future Vol, veh/h	4	29	30	30	26	1	38	15	38	3	10	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	7	4	0	0	3	7	3	0	0	0
Mvmt Flow	5	33	34	34	30	1	44	17	44	3	11	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	31	0	0	67	0	0	164	159	50	190	176	31
Stage 1	-	-	-	-	-	-	60	60	-	99	99	-
Stage 2	-	-	-	-	-	-	104	99	-	91	77	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.13	6.57	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.57	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.57	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.236	-	-	3.527	4.063	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	1595	-	-	1522	-	-	798	724	1015	774	721	1049
Stage 1	-	-	-	-	-	-	949	835	-	912	817	-
Stage 2	-	-	-	-	-	-	899	803	-	921	835	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1595	-	-	1522	-	-	772	705	1015	713	702	1049
Mov Cap-2 Maneuver	-	-	-	-	-	-	772	705	-	713	702	-
Stage 1	-	-	-	-	-	-	946	832	-	909	798	-
Stage 2	-	-	-	-	-	-	866	785	-	861	832	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	3.9	9.9	10.2
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	843	1595	-	-	1522	-	-	705
HCM Lane V/C Ratio	0.124	0.003	-	-	0.023	-	-	0.021
HCM Control Delay (s)	9.9	7.3	0	-	7.4	0	-	10.2
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	232	22	47	344	22	17	18	29	35	32	56
Future Volume (vph)	38	232	22	47	344	22	17	18	29	35	32	56
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Frt	1.00	0.99		1.00	0.99			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	1.00
Satd. Flow (prot)	1599	2833		1614	2796			1443			1617	1360
Flt Permitted	0.95	1.00		0.95	1.00			0.90			0.80	1.00
Satd. Flow (perm)	1599	2833		1614	2796			1315			1329	1360
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	42	255	24	52	378	24	19	20	32	38	35	62
RTOR Reduction (vph)	0	8	0	0	5	0	0	27	0	0	0	52
Lane Group Flow (vph)	42	271	0	52	397	0	0	44	0	0	73	10
Confl. Peds. (#/hr)							1		1	1		1
Heavy Vehicles (%)	4%	15%	25%	3%	19%	0%	25%	18%	0%	4%	7%	8%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Actuated Green, G (s)	2.2	19.6		3.1	20.5			6.8			6.8	6.8
Effective Green, g (s)	2.2	20.1		3.1	21.0			6.8			6.8	6.8
Actuated g/C Ratio	0.05	0.48		0.07	0.50			0.16			0.16	0.16
Clearance Time (s)	4.0	4.5		4.0	4.5			4.0			4.0	4.0
Vehicle Extension (s)	2.3	5.5		2.3	6.1			3.0			2.5	2.5
Lane Grp Cap (vph)	83	1355		119	1398			212			215	220
v/s Ratio Prot	0.03	0.10		c0.03	c0.14							
v/s Ratio Perm								0.03			c0.05	0.01
v/c Ratio	0.51	0.20		0.44	0.28			0.21			0.34	0.05
Uniform Delay, d1	19.4	6.3		18.6	6.1			15.3			15.6	14.9
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	2.8	0.2		1.5	0.3			0.5			0.7	0.1
Delay (s)	22.2	6.5		20.1	6.4			15.8			16.3	14.9
Level of Service	C	A		C	A			B			B	B
Approach Delay (s)		8.5			8.0			15.8			15.7	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	42.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	35.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	273	3	0	362	43	0	0	1	22	1	66
Future Vol, veh/h	7	273	3	0	362	43	0	0	1	22	1	66
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Free	-	-	None	-	-	Yield
Storage Length	200	-	-	-	-	660	-	-	-	-	-	260
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	20	17	0	0	17	17	0	0	0	19	0	4
Mvmt Flow	8	300	3	0	398	47	0	0	1	24	1	73

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	398	0	0	-	-	0	717	716	302	716	717	398
Stage 1	-	-	-	-	-	-	318	318	-	398	398	-
Stage 2	-	-	-	-	-	-	399	398	-	318	319	-
Critical Hdwy	4.3	-	-	-	-	-	7.1	6.5	6.2	7.29	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.29	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.29	5.5	-
Follow-up Hdwy	2.38	-	-	-	-	-	3.5	4	3.3	3.671	4	3.336
Pot Cap-1 Maneuver	1069	-	-	0	-	0	347	358	742	324	358	647
Stage 1	-	-	-	0	-	0	698	657	-	595	606	-
Stage 2	-	-	-	0	-	0	631	606	-	659	657	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	1069	-	-	-	-	-	306	355	742	322	355	647
Mov Cap-2 Maneuver	-	-	-	-	-	-	306	355	-	322	355	-
Stage 1	-	-	-	-	-	-	693	652	-	591	606	-
Stage 2	-	-	-	-	-	-	559	606	-	653	652	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	9.9	12.8
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	SBLn1	SBLn2
Capacity (veh/h)	742	1069	-	-	-	323	647
HCM Lane V/C Ratio	0.001	0.007	-	-	-	0.078	0.112
HCM Control Delay (s)	9.9	8.4	-	-	-	17.1	11.3
HCM Lane LOS	A	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0	0	-	-	-	0.3	0.4

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	276	21	0	405	0	35
Future Vol, veh/h	276	21	0	405	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Stop
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	13	0	17	0	0
Mvmt Flow	303	23	0	445	0	38

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	-	303
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	0	0	-	0	741
Stage 1	-	0	0	-	0	-
Stage 2	-	0	0	-	0	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	-	741
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	741	-	-
HCM Lane V/C Ratio	0.052	-	-
HCM Control Delay (s)	10.1	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-

Intersection	
Int Delay, s/veh	3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	9	13	21	46	0	21
Future Vol, veh/h	9	13	21	46	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	13	0	0	7	0	13
Mvmt Flow	10	14	23	51	0	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	24	0	114	17
Stage 1	-	-	-	-	17	-
Stage 2	-	-	-	-	97	-
Critical Hdwy	-	-	4.1	-	6.4	6.33
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.417
Pot Cap-1 Maneuver	-	-	1604	-	887	1031
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	932	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1604	-	874	1031
Mov Cap-2 Maneuver	-	-	-	-	874	-
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	918	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.3	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1031	-	-	1604	-
HCM Lane V/C Ratio	0.022	-	-	0.014	-
HCM Control Delay (s)	8.6	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	2	0	21	6	21	6	24	16	13	86	0
Future Vol, veh/h	3	2	0	21	6	21	6	24	16	13	86	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	14	0	17	6	0	5	33	11	0	100	33
Mvmt Flow	3	2	0	24	7	24	7	27	18	15	97	0
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	7.5	7.7	7.7	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	20%	0%	60%	44%	13%
Vol Thru, %	80%	0%	40%	12%	87%
Vol Right, %	0%	100%	0%	44%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	16	5	48	99
LT Vol	6	0	3	21	13
Through Vol	24	0	2	6	86
RT Vol	0	16	0	21	0
Lane Flow Rate	34	18	6	54	111
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.045	0.023	0.007	0.064	0.129
Departure Headway (Hd)	4.847	4.522	4.454	4.295	4.169
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	735	787	808	820	854
Service Time	2.601	2.276	2.454	2.394	2.223
HCM Lane V/C Ratio	0.046	0.023	0.007	0.066	0.13
HCM Control Delay	7.8	7.4	7.5	7.7	7.8
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0	0.2	0.4

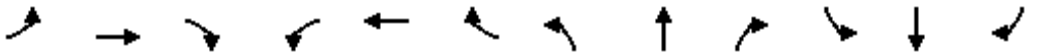
Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	13	21	59	21	0	23	3	23	0	9	1
Future Vol, veh/h	0	13	21	59	21	0	23	3	23	0	9	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	8	31	11	5	0	26	0	26	0	0	0
Mvmt Flow	0	15	24	69	24	0	27	3	27	0	10	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	24	0	0	39	0	0	195	189	27	204	201	24
Stage 1	-	-	-	-	-	-	27	27	-	162	162	-
Stage 2	-	-	-	-	-	-	168	162	-	42	39	-
Critical Hdwy	4.1	-	-	4.21	-	-	7.36	6.5	6.46	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.36	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.36	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.299	-	-	3.734	4	3.534	3.5	4	3.3
Pot Cap-1 Maneuver	1604	-	-	1515	-	-	715	709	983	758	699	1058
Stage 1	-	-	-	-	-	-	932	877	-	845	768	-
Stage 2	-	-	-	-	-	-	781	768	-	978	866	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1604	-	-	1515	-	-	681	676	983	709	667	1058
Mov Cap-2 Maneuver	-	-	-	-	-	-	681	676	-	709	667	-
Stage 1	-	-	-	-	-	-	932	877	-	845	733	-
Stage 2	-	-	-	-	-	-	734	733	-	948	866	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	5.5	9.9	10.3
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	795	1604	-	-	1515	-	-	693
HCM Lane V/C Ratio	0.072	-	-	-	0.045	-	-	0.017
HCM Control Delay (s)	9.9	0	-	-	7.5	0	-	10.3
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	108	475	22	50	411	58	18	34	26	47	32	89
Future Volume (vph)	108	475	22	50	411	58	18	34	26	47	32	89
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Frt	1.00	0.99		1.00	0.98			0.95			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	1.00
Satd. Flow (prot)	1662	3152		1662	3100			1644			1649	1426
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.81	1.00
Satd. Flow (perm)	1662	3152		1662	3100			1528			1371	1426
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	119	522	24	55	452	64	20	37	29	52	35	98
RTOR Reduction (vph)	0	3	0	0	15	0	0	24	0	0	0	81
Lane Group Flow (vph)	119	543	0	55	501	0	0	62	0	0	87	17
Confl. Peds. (#/hr)							1		1	1		1
Heavy Vehicles (%)	0%	5%	0%	0%	6%	0%	0%	0%	0%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Actuated Green, G (s)	9.3	25.2		3.8	19.7			9.0			9.0	9.0
Effective Green, g (s)	9.3	25.7		3.8	20.2			9.0			9.0	9.0
Actuated g/C Ratio	0.18	0.51		0.08	0.40			0.18			0.18	0.18
Clearance Time (s)	4.0	4.5		4.0	4.5			4.0			4.0	4.0
Vehicle Extension (s)	2.3	5.5		2.3	6.1			3.0			2.5	2.5
Lane Grp Cap (vph)	306	1604		125	1240			272			244	254
v/s Ratio Prot	c0.07	c0.17		0.03	c0.16							
v/s Ratio Perm								0.04			c0.06	0.01
v/c Ratio	0.39	0.34		0.44	0.40			0.23			0.36	0.07
Uniform Delay, d1	18.1	7.4		22.3	10.8			17.8			18.2	17.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.5	0.3		1.4	0.6			0.4			0.7	0.1
Delay (s)	18.6	7.7		23.8	11.5			18.2			18.9	17.3
Level of Service	B	A		C	B			B			B	B
Approach Delay (s)		9.6			12.7			18.2			18.1	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	50.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	516	0	0	443	81	0	0	0	26	0	74
Future Vol, veh/h	42	516	0	0	443	81	0	0	0	26	0	74
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Free	-	-	None	-	-	Yield
Storage Length	200	-	-	-	-	660	-	-	-	-	-	260
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	6	0	0	6	4	0	0	0	6	0	4
Mvmt Flow	46	567	0	0	487	89	0	0	0	29	0	81

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	487	0	-	-	-	0	1146	1146	567	1146	1146	487
Stage 1	-	-	-	-	-	-	659	659	-	487	487	-
Stage 2	-	-	-	-	-	-	487	487	-	659	659	-
Critical Hdwy	4.13	-	-	-	-	-	7.1	6.5	6.2	7.16	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.16	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.16	5.5	-
Follow-up Hdwy	2.227	-	-	-	-	-	3.5	4	3.3	3.554	4	3.336
Pot Cap-1 Maneuver	1071	-	0	0	-	0	178	201	527	173	201	576
Stage 1	-	-	0	0	-	0	456	464	-	555	554	-
Stage 2	-	-	0	0	-	0	566	554	-	446	464	-
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	1071	-	-	-	-	-	148	192	527	167	192	576
Mov Cap-2 Maneuver	-	-	-	-	-	-	148	192	-	167	192	-
Stage 1	-	-	-	-	-	-	436	444	-	531	554	-
Stage 2	-	-	-	-	-	-	486	554	-	427	444	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0	0	17.2
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	1071	-	-	167	576
HCM Lane V/C Ratio	-	0.043	-	-	0.171	0.141
HCM Control Delay (s)	0	8.5	-	-	31	12.3
HCM Lane LOS	A	A	-	-	D	B
HCM 95th %tile Q(veh)	-	0.1	-	-	0.6	0.5

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	490	52	0	525	0	24
Future Vol, veh/h	490	52	0	525	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Stop
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	6	0	0	6	0	0
Mvmt Flow	538	57	0	577	0	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	-	538
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	0	0	-	0	547
Stage 1	-	0	0	-	0	-
Stage 2	-	0	0	-	0	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	-	547
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	547	-	-
HCM Lane V/C Ratio	0.048	-	-
HCM Control Delay (s)	11.9	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	39	10	14	33	0	52
Future Vol, veh/h	39	10	14	33	0	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	45	11	16	38	0	60

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	56	0	121	51
Stage 1	-	-	-	-	51	-
Stage 2	-	-	-	-	70	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1562	-	879	1023
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	958	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1562	-	870	1023
Mov Cap-2 Maneuver	-	-	-	-	870	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	948	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1023	-	-	1562	-
HCM Lane V/C Ratio	0.058	-	-	0.01	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	6	13	28	0	33	0	93	43	33	73	0
Future Vol, veh/h	1	6	13	28	0	33	0	93	43	33	73	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	7	2	0	0	0	0	0	0	0
Mvmt Flow	1	7	15	33	0	38	0	108	50	38	85	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	7.8	7.9	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	5%	46%	31%
Vol Thru, %	68%	30%	0%	69%
Vol Right, %	32%	65%	54%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	136	20	61	106
LT Vol	0	1	28	33
Through Vol	93	6	0	73
RT Vol	43	13	33	0
Lane Flow Rate	158	23	71	123
Geometry Grp	1	1	1	1
Degree of Util (X)	0.174	0.027	0.087	0.145
Departure Headway (Hd)	3.969	4.209	4.419	4.249
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	889	855	816	832
Service Time	2.06	2.212	2.42	2.338
HCM Lane V/C Ratio	0.178	0.027	0.087	0.148
HCM Control Delay	7.9	7.3	7.8	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	0.1	0.3	0.5

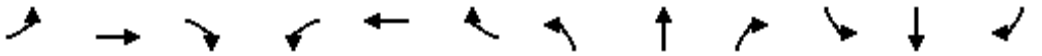
Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	4	30	43	43	27	1	51	20	51	3	14	0
Future Vol, veh/h	4	30	43	43	27	1	51	20	51	3	14	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	7	4	0	0	3	7	3	0	0	0
Mvmt Flow	5	34	49	49	31	1	59	23	59	3	16	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	32	0	0	83	0	0	207	199	59	240	223	32
Stage 1	-	-	-	-	-	-	69	69	-	130	130	-
Stage 2	-	-	-	-	-	-	138	130	-	110	93	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.13	6.57	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.57	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.57	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.236	-	-	3.527	4.063	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	1593	-	-	1501	-	-	748	688	1004	718	679	1048
Stage 1	-	-	-	-	-	-	939	828	-	878	792	-
Stage 2	-	-	-	-	-	-	863	779	-	900	822	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1593	-	-	1501	-	-	714	663	1004	640	655	1048
Mov Cap-2 Maneuver	-	-	-	-	-	-	714	663	-	640	655	-
Stage 1	-	-	-	-	-	-	936	826	-	875	766	-
Stage 2	-	-	-	-	-	-	817	753	-	821	820	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	4.5	10.4	10.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	801	1593	-	-	1501	-	-	652
HCM Lane V/C Ratio	0.175	0.003	-	-	0.033	-	-	0.03
HCM Control Delay (s)	10.4	7.3	0	-	7.5	0	-	10.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	232	22	47	344	48	17	18	29	50	32	58
Future Volume (vph)	45	232	22	47	344	48	17	18	29	50	32	58
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Frt	1.00	0.99		1.00	0.98			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	1.00
Satd. Flow (prot)	1599	2833		1614	2798			1443			1614	1360
Flt Permitted	0.95	1.00		0.95	1.00			0.90			0.77	1.00
Satd. Flow (perm)	1599	2833		1614	2798			1311			1284	1360
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	49	255	24	52	378	53	19	20	32	55	35	64
RTOR Reduction (vph)	0	8	0	0	12	0	0	27	0	0	0	53
Lane Group Flow (vph)	49	271	0	52	419	0	0	44	0	0	90	11
Confl. Peds. (#/hr)							1		1	1		1
Heavy Vehicles (%)	4%	15%	25%	3%	19%	0%	25%	18%	0%	4%	7%	8%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Actuated Green, G (s)	2.3	19.6		3.3	20.6			7.0			7.0	7.0
Effective Green, g (s)	2.3	20.1		3.3	21.1			7.0			7.0	7.0
Actuated g/C Ratio	0.05	0.47		0.08	0.50			0.17			0.17	0.17
Clearance Time (s)	4.0	4.5		4.0	4.5			4.0			4.0	4.0
Vehicle Extension (s)	2.3	5.5		2.3	6.1			3.0			2.5	2.5
Lane Grp Cap (vph)	86	1343		125	1392			216			211	224
v/s Ratio Prot	0.03	0.10		c0.03	c0.15							
v/s Ratio Perm								0.03			c0.07	0.01
v/c Ratio	0.57	0.20		0.42	0.30			0.21			0.43	0.05
Uniform Delay, d1	19.6	6.5		18.6	6.3			15.3			15.9	14.9
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	6.1	0.2		1.3	0.4			0.5			1.0	0.1
Delay (s)	25.7	6.7		19.9	6.6			15.8			16.9	15.0
Level of Service	C	A		B	A			B			B	B
Approach Delay (s)		9.5			8.1			15.8			16.1	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	10.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	42.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	36.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	288	3	0	388	77	0	0	1	24	1	66
Future Vol, veh/h	7	288	3	0	388	77	0	0	1	24	1	66
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Free	-	-	None	-	-	Yield
Storage Length	200	-	-	-	-	660	-	-	-	-	-	260
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	20	17	0	0	17	17	0	0	0	19	0	4
Mvmt Flow	8	316	3	0	426	85	0	0	1	26	1	73

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	426	0	0	-	-	0	761	760	318	760	761	426
Stage 1	-	-	-	-	-	-	334	334	-	426	426	-
Stage 2	-	-	-	-	-	-	427	426	-	334	335	-
Critical Hdwy	4.3	-	-	-	-	-	7.1	6.5	6.2	7.29	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.29	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.29	5.5	-
Follow-up Hdwy	2.38	-	-	-	-	-	3.5	4	3.3	3.671	4	3.336
Pot Cap-1 Maneuver	1043	-	-	0	-	0	325	338	727	302	337	624
Stage 1	-	-	-	0	-	0	684	647	-	574	589	-
Stage 2	-	-	-	0	-	0	610	589	-	646	646	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	1043	-	-	-	-	-	285	335	727	300	334	624
Mov Cap-2 Maneuver	-	-	-	-	-	-	285	335	-	300	334	-
Stage 1	-	-	-	-	-	-	679	642	-	569	589	-
Stage 2	-	-	-	-	-	-	538	589	-	640	641	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	10	13.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	SBLn1	SBLn2
Capacity (veh/h)	727	1043	-	-	-	301	624
HCM Lane V/C Ratio	0.002	0.007	-	-	-	0.091	0.116
HCM Control Delay (s)	10	8.5	-	-	-	18.2	11.5
HCM Lane LOS	B	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0	0	-	-	-	0.3	0.4

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	293	21	0	465	0	40
Future Vol, veh/h	293	21	0	465	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Stop
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	13	0	17	0	0
Mvmt Flow	322	23	0	511	0	44

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	-	322
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	0	0	-	0	724
Stage 1	-	0	0	-	0	-
Stage 2	-	0	0	-	0	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	-	724
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	724	-	-
HCM Lane V/C Ratio	0.061	-	-
HCM Control Delay (s)	10.3	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	9	18	21	46	0	21
Future Vol, veh/h	9	18	21	46	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	13	0	0	7	0	13
Mvmt Flow	10	20	23	51	0	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	30	0	117	20
Stage 1	-	-	-	-	20	-
Stage 2	-	-	-	-	97	-
Critical Hdwy	-	-	4.1	-	6.4	6.33
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.417
Pot Cap-1 Maneuver	-	-	1596	-	884	1027
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	932	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1596	-	871	1027
Mov Cap-2 Maneuver	-	-	-	-	871	-
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	918	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.3	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1027	-	-	1596	-
HCM Lane V/C Ratio	0.022	-	-	0.014	-
HCM Control Delay (s)	8.6	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	2	0	21	6	55	6	57	16	20	103	0
Future Vol, veh/h	3	2	0	21	6	55	6	57	16	20	103	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	14	0	17	6	0	5	33	11	0	100	33
Mvmt Flow	3	2	0	24	7	62	7	64	18	22	116	0
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	7.7	7.9	8.1	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	0%	60%	26%	16%
Vol Thru, %	90%	0%	40%	7%	84%
Vol Right, %	0%	100%	0%	67%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	63	16	5	82	123
LT Vol	6	0	3	21	20
Through Vol	57	0	2	6	103
RT Vol	0	16	0	55	0
Lane Flow Rate	71	18	6	92	138
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.096	0.023	0.007	0.112	0.164
Departure Headway (Hd)	4.878	4.606	4.657	4.375	4.271
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	726	767	772	825	826
Service Time	2.67	2.397	2.661	2.375	2.369
HCM Lane V/C Ratio	0.098	0.023	0.008	0.112	0.167
HCM Control Delay	8.2	7.5	7.7	7.9	8.2
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.3	0.1	0	0.4	0.6

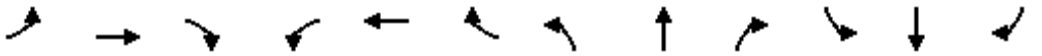
Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	18	23	59	21	0	57	3	23	0	9	1
Future Vol, veh/h	0	18	23	59	21	0	57	3	23	0	9	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	8	31	11	5	0	26	0	26	0	0	0
Mvmt Flow	0	21	27	69	24	0	66	3	27	0	10	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	24	0	0	48	0	0	203	197	35	212	210	24
Stage 1	-	-	-	-	-	-	35	35	-	162	162	-
Stage 2	-	-	-	-	-	-	168	162	-	50	48	-
Critical Hdwy	4.1	-	-	4.21	-	-	7.36	6.5	6.46	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.36	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.36	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.299	-	-	3.734	4	3.534	3.5	4	3.3
Pot Cap-1 Maneuver	1604	-	-	1503	-	-	706	702	973	749	691	1058
Stage 1	-	-	-	-	-	-	923	870	-	845	768	-
Stage 2	-	-	-	-	-	-	781	768	-	968	859	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1604	-	-	1503	-	-	671	669	973	700	659	1058
Mov Cap-2 Maneuver	-	-	-	-	-	-	671	669	-	700	659	-
Stage 1	-	-	-	-	-	-	923	870	-	845	732	-
Stage 2	-	-	-	-	-	-	733	732	-	938	859	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	5.5	10.6	10.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	734	1604	-	-	1503	-	-	685
HCM Lane V/C Ratio	0.131	-	-	-	0.046	-	-	0.017
HCM Control Delay (s)	10.6	0	-	-	7.5	0	-	10.3
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0.1	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	475	22	50	411	71	18	34	26	78	32	94
Future Volume (vph)	111	475	22	50	411	71	18	34	26	78	32	94
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Frt	1.00	0.99		1.00	0.98			0.95			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	1.00
Satd. Flow (prot)	1662	3152		1662	3093			1644			1640	1426
Flt Permitted	0.95	1.00		0.95	1.00			0.91			0.81	1.00
Satd. Flow (perm)	1662	3152		1662	3093			1522			1374	1426
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	122	522	24	55	452	78	20	37	29	86	35	103
RTOR Reduction (vph)	0	4	0	0	19	0	0	24	0	0	0	84
Lane Group Flow (vph)	122	543	0	55	511	0	0	62	0	0	121	19
Confl. Peds. (#/hr)							1		1	1		1
Heavy Vehicles (%)	0%	5%	0%	0%	6%	0%	0%	0%	0%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Actuated Green, G (s)	9.4	25.4		4.1	20.1			9.8			9.8	9.8
Effective Green, g (s)	9.4	25.9		4.1	20.6			9.8			9.8	9.8
Actuated g/C Ratio	0.18	0.50		0.08	0.40			0.19			0.19	0.19
Clearance Time (s)	4.0	4.5		4.0	4.5			4.0			4.0	4.0
Vehicle Extension (s)	2.3	5.5		2.3	6.1			3.0			2.5	2.5
Lane Grp Cap (vph)	301	1576		131	1230			287			259	269
v/s Ratio Prot	c0.07	c0.17		0.03	c0.17							
v/s Ratio Perm								0.04			c0.09	0.01
v/c Ratio	0.41	0.34		0.42	0.42			0.22			0.47	0.07
Uniform Delay, d1	18.7	7.8		22.7	11.3			17.8			18.7	17.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.5	0.3		1.3	0.7			0.4			1.0	0.1
Delay (s)	19.3	8.1		24.0	11.9			18.1			19.6	17.3
Level of Service	B	A		C	B			B			B	B
Approach Delay (s)		10.2			13.1			18.1			18.6	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	12.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	51.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	547	0	0	456	98	0	0	0	31	0	74
Future Vol, veh/h	42	547	0	0	456	98	0	0	0	31	0	74
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Free	-	-	None	-	-	Yield
Storage Length	200	-	-	-	-	660	-	-	-	-	-	260
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	6	0	0	6	4	0	0	0	6	0	4
Mvmt Flow	46	601	0	0	501	108	0	0	0	34	0	81

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	501	0	-	-	-	0	1194	1194	601	1194	1194	501
Stage 1	-	-	-	-	-	-	693	693	-	501	501	-
Stage 2	-	-	-	-	-	-	501	501	-	693	693	-
Critical Hdwy	4.13	-	-	-	-	-	7.1	6.5	6.2	7.16	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.16	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.16	5.5	-
Follow-up Hdwy	2.227	-	-	-	-	-	3.5	4	3.3	3.554	4	3.336
Pot Cap-1 Maneuver	1058	-	0	0	-	0	165	188	504	160	188	566
Stage 1	-	-	0	0	-	0	437	448	-	545	546	-
Stage 2	-	-	0	0	-	0	556	546	-	427	448	-
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	1058	-	-	-	-	-	137	180	504	155	180	566
Mov Cap-2 Maneuver	-	-	-	-	-	-	137	180	-	155	180	-
Stage 1	-	-	-	-	-	-	418	429	-	522	546	-
Stage 2	-	-	-	-	-	-	476	546	-	408	429	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0	0	19
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	1058	-	-	155	566
HCM Lane V/C Ratio	-	0.044	-	-	0.22	0.144
HCM Control Delay (s)	0	8.6	-	-	34.7	12.4
HCM Lane LOS	A	A	-	-	D	B
HCM 95th %tile Q(veh)	-	0.1	-	-	0.8	0.5

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	526	52	0	555	0	34
Future Vol, veh/h	526	52	0	555	0	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Stop
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	6	0	0	6	0	0
Mvmt Flow	578	57	0	610	0	37

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	-	578
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	0	0	-	0	519
Stage 1	-	0	0	-	0	-
Stage 2	-	0	0	-	0	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	-	519
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	519	-	-
HCM Lane V/C Ratio	0.072	-	-
HCM Control Delay (s)	12.5	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	39	20	14	33	0	52
Future Vol, veh/h	39	20	14	33	0	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	45	23	16	38	0	60

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	68	0	127	57
Stage 1	-	-	-	-	57	-
Stage 2	-	-	-	-	70	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1546	-	872	1015
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	958	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1546	-	862	1015
Mov Cap-2 Maneuver	-	-	-	-	862	-
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	947	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1015	-	-	1546	-
HCM Lane V/C Ratio	0.059	-	-	0.01	-
HCM Control Delay (s)	8.8	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	6	13	28	0	50	0	109	43	48	109	0
Future Vol, veh/h	1	6	13	28	0	50	0	109	43	48	109	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	7	2	0	0	0	0	0	0	0
Mvmt Flow	1	7	15	33	0	58	0	127	50	56	127	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.6	8.1	8.3	8.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	5%	36%	31%
Vol Thru, %	72%	30%	0%	69%
Vol Right, %	28%	65%	64%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	152	20	78	157
LT Vol	0	1	28	48
Through Vol	109	6	0	109
RT Vol	43	13	50	0
Lane Flow Rate	177	23	91	183
Geometry Grp	1	1	1	1
Degree of Util (X)	0.206	0.029	0.114	0.223
Departure Headway (Hd)	4.189	4.421	4.522	4.405
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	859	810	794	816
Service Time	2.208	2.447	2.545	2.424
HCM Lane V/C Ratio	0.206	0.028	0.115	0.224
HCM Control Delay	8.3	7.6	8.1	8.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.1	0.4	0.9

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	4	40	48	43	27	1	68	20	51	3	14	0
Future Vol, veh/h	4	40	48	43	27	1	68	20	51	3	14	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	7	4	0	0	3	7	3	0	0	0
Mvmt Flow	5	46	55	49	31	1	78	23	59	3	16	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	32	0	0	101	0	0	222	214	74	255	241	32
Stage 1	-	-	-	-	-	-	84	84	-	130	130	-
Stage 2	-	-	-	-	-	-	138	130	-	125	111	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.13	6.57	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.57	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.57	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.236	-	-	3.527	4.063	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	1593	-	-	1479	-	-	732	675	985	702	664	1048
Stage 1	-	-	-	-	-	-	922	816	-	878	792	-
Stage 2	-	-	-	-	-	-	863	779	-	884	807	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1593	-	-	1479	-	-	698	650	985	624	639	1048
Mov Cap-2 Maneuver	-	-	-	-	-	-	698	650	-	624	639	-
Stage 1	-	-	-	-	-	-	919	814	-	875	765	-
Stage 2	-	-	-	-	-	-	816	753	-	805	805	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	4.6	10.9	10.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	772	1593	-	-	1479	-	-	636
HCM Lane V/C Ratio	0.207	0.003	-	-	0.033	-	-	0.031
HCM Control Delay (s)	10.9	7.3	0	-	7.5	0	-	10.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0.1	-	-	0.1

APPENDIX I

QUEUING ANALYSIS

Intersection: 1: S Nehalem Street/N Nehalem St & Columbia River Highway (HWY 30)

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LT	R
Maximum Queue (ft)	94	125	90	73	174	141	90	89	76
Average Queue (ft)	27	46	16	29	73	35	33	37	29
95th Queue (ft)	63	96	55	62	140	97	72	77	60
Link Distance (ft)		464	464		740	740	309	414	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	190			190					100
Storage Blk Time (%)					0			0	0
Queuing Penalty (veh)					0			0	0

Intersection: 2: Driveway/NE Van St & Columbia River Highway (HWY 30)

Movement	EB	NB	SB
Directions Served	L	LTR	LT
Maximum Queue (ft)	31	18	69
Average Queue (ft)	3	1	18
95th Queue (ft)	19	11	52
Link Distance (ft)		317	512
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: HWY 30 / Swedetown Loop & Columbia River Highway (HWY 30)/Columbia River Highwa

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: HWY 30 / Swedetown Loop & NE 5th Street/Swedetown Road

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	7	53
Average Queue (ft)	0	15
95th Queue (ft)	5	40
Link Distance (ft)	934	642
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: N Nehalem Street/NW 5th Street & Stimson Mill Road/NE 5th Street

Movement	WB	NB	NB	SB
Directions Served	LTR	LT	R	LTR
Maximum Queue (ft)	75	81	72	133
Average Queue (ft)	31	21	16	71
95th Queue (ft)	62	57	49	119
Link Distance (ft)	458	450		1276
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			20	
Storage Blk Time (%)		2	1	
Queuing Penalty (veh)		0	0	

Intersection: 6: NE Van St/Haven Acres Road & NE 5th Street

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	20	81	31
Average Queue (ft)	1	32	6
95th Queue (ft)	10	71	25
Link Distance (ft)	1172	512	288
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 1

Intersection: 1: S Nehalem Street/N Nehalem St & Columbia River Highway (HWY 30)

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LT	R
Maximum Queue (ft)	168	215	173	103	206	157	96	107	80
Average Queue (ft)	57	85	43	40	91	55	37	41	34
95th Queue (ft)	117	169	114	80	165	118	72	82	61
Link Distance (ft)		464	464		740	740	309	414	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	190			190					100
Storage Blk Time (%)		0			0			0	0
Queuing Penalty (veh)		1			0			0	0

Intersection: 2: Driveway/NE Van St & Columbia River Highway (HWY 30)/Columbia River Highway (US 3

Movement	EB	SB
Directions Served	L	LT
Maximum Queue (ft)	41	57
Average Queue (ft)	14	17
95th Queue (ft)	41	47
Link Distance (ft)		513
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	200	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: HWY 30 / Swedetown Loop & Columbia River Highway (US 30)

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: HWY 30 / Swedetown Loop & NE 5th Street/Swedetown Road

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	21	44
Average Queue (ft)	1	19
95th Queue (ft)	13	37
Link Distance (ft)	936	618
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: N Nehalem Street/SW 5th Street & Stimson Mill Road/NE 5th Street

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	70	74	64
Average Queue (ft)	35	40	37
95th Queue (ft)	56	64	60
Link Distance (ft)	470	453	1276
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: NE Van St/Haven Acres Road & NE 5th Street

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	19	70	31
Average Queue (ft)	1	34	10
95th Queue (ft)	8	57	32
Link Distance (ft)	1168	513	288
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 1

Intersection: 1: S Nehalem Street/N Nehalem St & Columbia River Highway (HWY 30)

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LT	R
Maximum Queue (ft)	92	161	96	88	171	148	98	98	73
Average Queue (ft)	29	51	16	37	69	35	32	37	27
95th Queue (ft)	65	110	47	74	136	91	74	74	58
Link Distance (ft)		464	464		740	740	309	414	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	190			190					100
Storage Blk Time (%)		0			0			0	0
Queuing Penalty (veh)		0			0			0	0

Intersection: 2: Driveway/NE Van St & Columbia River Highway (HWY 30)

Movement	EB	NB	SB
Directions Served	L	LTR	LT
Maximum Queue (ft)	36	18	59
Average Queue (ft)	4	0	14
95th Queue (ft)	21	6	44
Link Distance (ft)		317	512
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: HWY 30 / Swedetown Loop & Columbia River Highway (HWY 30)/Columbia River Highwa

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: HWY 30 / Swedetown Loop & NE 5th Street/Swedetown Road

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	14	59
Average Queue (ft)	1	13
95th Queue (ft)	9	41
Link Distance (ft)	934	642
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: N Nehalem Street/NW 5th Street & Stimson Mill Road/NE 5th Street

Movement	WB	NB	NB	SB
Directions Served	LTR	LT	R	LTR
Maximum Queue (ft)	62	72	55	135
Average Queue (ft)	30	22	17	72
95th Queue (ft)	57	51	48	121
Link Distance (ft)	458	450		1276
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			20	
Storage Blk Time (%)		2	1	
Queuing Penalty (veh)		0	0	

Intersection: 6: NE Van St/Haven Acres Road & NE 5th Street

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	18	79	31
Average Queue (ft)	1	31	9
95th Queue (ft)	11	66	32
Link Distance (ft)	1172	512	288
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 1

Intersection: 1: S Nehalem Street/N Nehalem St & Columbia River Highway (HWY 30)

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LT	R
Maximum Queue (ft)	123	171	138	84	193	146	95	99	80
Average Queue (ft)	54	85	46	34	90	56	38	46	34
95th Queue (ft)	105	157	112	69	162	120	77	87	65
Link Distance (ft)		464	464		740	740	309	414	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	190			190					100
Storage Blk Time (%)		0			0			0	0
Queuing Penalty (veh)		0			0			0	0

Intersection: 2: Driveway/NE Van St & Columbia River Highway (HWY 30)/Columbia River Highway (US 3

Movement	EB	SB
Directions Served	L	LT
Maximum Queue (ft)	45	64
Average Queue (ft)	16	21
95th Queue (ft)	42	53
Link Distance (ft)		513
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	200	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: HWY 30 / Swedetown Loop & Columbia River Highway (US 30)

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: HWY 30 / Swedetown Loop & NE 5th Street/Swedetown Road

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	26	33
Average Queue (ft)	1	18
95th Queue (ft)	10	34
Link Distance (ft)	936	618
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: N Nehalem Street/SW 5th Street & Stimson Mill Road/NE 5th Street

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	2	65	87	63
Average Queue (ft)	0	31	40	38
95th Queue (ft)	2	58	68	57
Link Distance (ft)	557	470	453	1276
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: NE Van St/Haven Acres Road & NE 5th Street

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	8	30	100	31
Average Queue (ft)	0	3	41	13
95th Queue (ft)	4	14	70	37
Link Distance (ft)	284	1168	513	288
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 1

Intersection: 1: S Nehalem Street/N Nehalem St & Columbia River Highway (HWY 30)

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LT	R
Maximum Queue (ft)	85	125	88	95	164	128	91	117	76
Average Queue (ft)	32	53	21	33	81	39	33	47	28
95th Queue (ft)	67	105	59	69	144	89	73	90	63
Link Distance (ft)		464	464		740	740	309	414	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	190			190					100
Storage Blk Time (%)					0			1	0
Queuing Penalty (veh)					0			0	0

Intersection: 2: Driveway/NE Van St & Columbia River Highway (HWY 30)

Movement	EB	NB	SB
Directions Served	L	LTR	LT
Maximum Queue (ft)	32	6	92
Average Queue (ft)	2	0	22
95th Queue (ft)	16	5	60
Link Distance (ft)		317	512
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: HWY 30 / Swedetown Loop & Columbia River Highway (HWY 30)/Columbia River Highwa

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: HWY 30 / Swedetown Loop & NE 5th Street/Swedetown Road

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	14	57
Average Queue (ft)	1	13
95th Queue (ft)	10	43
Link Distance (ft)	934	642
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: N Nehalem Street/NW 5th Street & Stimson Mill Road/NE 5th Street

Movement	WB	NB	NB	SB
Directions Served	LTR	LT	R	LTR
Maximum Queue (ft)	73	89	68	139
Average Queue (ft)	38	37	16	76
95th Queue (ft)	60	73	50	123
Link Distance (ft)	458	450		1276
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			20	
Storage Blk Time (%)		5	1	
Queuing Penalty (veh)		1	1	

Intersection: 6: NE Van St/Haven Acres Road & NE 5th Street

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	23	94	31
Average Queue (ft)	2	44	7
95th Queue (ft)	11	79	27
Link Distance (ft)	1172	512	288
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 2

Intersection: 1: S Nehalem Street/N Nehalem St & Columbia River Highway (HWY 30)

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LT	R
Maximum Queue (ft)	135	202	173	122	193	172	97	109	70
Average Queue (ft)	60	84	48	38	100	64	36	54	35
95th Queue (ft)	113	158	122	81	170	133	76	96	63
Link Distance (ft)		464	464		740	740	309	414	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	190			190					100
Storage Blk Time (%)		0			0			1	0
Queuing Penalty (veh)		0			0			1	0

Intersection: 2: Driveway/NE Van St & Columbia River Highway (HWY 30)/Columbia River Highway (US 3

Movement	EB	SB
Directions Served	L	LT
Maximum Queue (ft)	42	68
Average Queue (ft)	15	25
95th Queue (ft)	41	57
Link Distance (ft)		513
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	200	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: HWY 30 / Swedetown Loop & Columbia River Highway (US 30)

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: HWY 30 / Swedetown Loop & NE 5th Street/Swedetown Road

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	21	39
Average Queue (ft)	1	18
95th Queue (ft)	9	35
Link Distance (ft)	936	618
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: N Nehalem Street/SW 5th Street & Stimson Mill Road/NE 5th Street

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	3	66	75	70
Average Queue (ft)	0	36	42	45
95th Queue (ft)	2	55	68	67
Link Distance (ft)	557	470	453	1276
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: NE Van St/Haven Acres Road & NE 5th Street

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	25	82	31
Average Queue (ft)	4	39	12
95th Queue (ft)	18	66	36
Link Distance (ft)	1168	513	288
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 1