From:	Jeffrey Delapena
To:	"Heidi Pozzo"
Cc:	Oliver Orjiako; Jose Alvarez; Rebecca Messinger
Subject:	RE: Comp Plan: Skyview Station traffic study
Date:	Wednesday, September 30, 2026 3:25:00 PM
Attachments:	Skyview Station PLD2018-00034_RPT-Clark_County-Skyview_Station_TIS-180917_REV-1.1-Final_PDF_fo.pdf

Hello Heidi,

Thank you for providing this comment and attachment. Confirming these have been received and will be added to the Comprehensive Plan Index of Record.

Best,

Jeff Delapena
Program Assistant
COMMUNITY PLANNING

564.397.4558

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From: Heidi Pozzo <hcpheidi@yahoo.com>
Sent: Wednesday, September 30, 2026 3:21 PM
To: Jeffrey Delapena <Jeffrey.Delapena@clark.wa.gov>
Cc: Oliver Orjiako <Oliver.Orjiako@clark.wa.gov>; Jose Alvarez <Jose.Alvarez@clark.wa.gov>
Subject: Comp Plan: Skyview Station traffic study

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Dear Jeff,

I've just uploaded the traffic study for Skyview Station to the link you provided me for inclusion in the Comp Plan.

Thank you

Heidi

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10-31-18

TRANSPORTATION IMPACT STUDY

To
Clark County

For
Skyview Station
NE 139th Street &
NE 10th Avenue

Dated
September 17, 2018
Revised October 31, 2018

Project Number
2170410.01

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EXECUTIVE SUMMARY

This Transportation Impact Study (TIS) has been prepared in support of the proposed Skyview Station development located at the northeast corner of the NE 139th Street/NE 10th Avenue intersection in Clark County, Washington.

Project Description

- The proposed Skyview Station development will include approximately 80,150 square feet (SF) of shopping center with eight (8) buildings platted on separate lots. Two site accesses are proposed:
  - A full-movement driveway is proposed on NE 10th Avenue, a designated collector street. This driveway will be located opposite NE 141st Street and will include one inbound and two outbound travel lanes.
  - A second limited access driveway is proposed on NE 139th Street, a designated minor arterial. This driveway will be limited to right-in/right-out (RIRO) movements only and will be aligned nearly opposite the bus-only access serving the Salmon Creek Park & Ride. (A technical road modification (TRM) will be submitted with the development application to add the site driveway on NE 139th Street).
- The site has a covenant of record (AFN 5170404) that requires certain mitigation measures to be in place prior to issuance of a building permit; however, a concurrent process is underway to release all the identified measures based on an updated traffic analysis that demonstrates agency operational standards are met without mitigation.

Existing Conditions

- The site is within the City of Vancouver Urban Growth Area but outside City limits. Clark County zoning is General Commercial (GC).
- The arterial network surrounding the site includes NE 139th Street and NE 10th Avenue. Other major streets include NE Tenney Road, NE 134th Street, and NE 20th Avenue. Freeway access (I-5 and I-205) is available from both NE 139th Street and NE 134th Street.
- All streets providing direct access to the site have sidewalks on both sides of the street with one exception: NE 139th Street does not have sidewalks on the north side of the street between NE 10th Avenue and NE 20th Avenue. WSDOT did not construct sidewalks on the north side of NE 139th Street as it crosses over the freeway and the segment along the site frontage does not currently have sidewalks.
- All streets providing direct access to the site have bike lanes on both sides of the street.
- C-TRAN has three bus routes that serve the project site. Two routes stop at the Salmon Creek Park & Ride station on the south side of NE 139th Street, across from the project site; and one stops on NE 139th Street just west of NE 10th Avenue.
- Turning movement counts for study area intersections were collected in either April or October 2018.Five years of historical crash data did not show significant patterns or unexpected behaviors in the study area intersection.
- All study area intersections currently meet agency standards.

- Traffic simulations indicate 95th percentile queues exceed available storage during the AM and/or PM peak hour at some intersections. None of these queues are expected to affect upstream intersection operations.
- All roadway segments currently meet the County's capacity standard of 0.90 or better.

Pre-Development Conditions

- Two Clark County projects along NE 10th Avenue will fully connect NE 139th Street to NE 179th Street creating a local parallel route to I-5 on the west side of the freeway. Both are fully funded, and construction is expected to be nearly complete by the opening year of Skyview Station; therefore, these projects are included in the pre-development conditions.
- An average 2% annual growth rate was applied to existing 2018 traffic volumes over two (2) years to estimate 2020 background traffic growth. Figure 5 presented the AM and PM peak hour background traffic growth.
- In-process traffic volumes for four (4) projects were provided by Clark County staff.
- Near-term traffic reroutes based on the 2018 existing traffic counts were developed to account for the completion of the NE 10th Avenue connection between NE 139th Street to NE 179th Street.
- All study area intersections currently meet agency standards.
- Traffic simulations indicate 95th percentile queues exceed available storage during the AM and/or PM peak hour at some intersections. None of these queues are expected to affect upstream intersection operations.
- All roadway segments are anticipated to meet the County's capacity standard of 0.90 or better, except for two segments:
    - During the AM peak hour, the segment of NE Salmon Creek Avenue between NE 134th Street and NE 50th Avenue is anticipated to have a v/c ratio of 1.08 in the eastbound direction under pre-development conditions.
    - During the PM peak hour, the segment of N 139th Street between the I-205 NB On-Ramp and NE 20th Avenue is anticipated to have a v/c ratio of 0.91 in the westbound direction under pre-development conditions.

Site Development

- The site comprises two tax lots (property identification numbers 185726000 and 185727000) totaling 8.66 acres. Both lots have existing development, a single-family home, and DeWitt Construction, but neither will remain with the Skyview Station development.
- Trip generation estimates were developed using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition. The pass-by trip rates are based on the ITE *Trip Generation Handbook*, 3rd Edition. The Shopping Center land use was used.
- Net site trip generation is anticipated at 180 AM peak hour, 454 PM peak hour and 5,072 daily trips. Of the total trips, 114 AM peak hour, 296 PM peak hour, and 3,312 daily trips are primary trips.
- Distribution for pass-by trips were estimated from the traffic count data at the intersection of NE 139th Street and NE 10th Avenue.

- Site trip distribution for primary trips is based on the select zone base year (2010) and future year (2035) travel volumes plots for Traffic Analysis Zone (TAZ) 95.
- A site access is proposed on NE 139th Street with turns limited to right-in/right-out movements. A TRM is required to approve this access; therefore, this TIA addresses three access alternatives: 1) No access, 2) Right-in only, and 3) Right-in/right out.

Site Access and Circulation

- Site-generated traffic volumes meet the criterial for allowing an additional driveway on a minor arterial, which supports the proposal for a right-in/right-out access on NE 139th Street.
- Both proposed accesses would meet the County spacing standards.
- NE 10th Avenue is a straight roadway with clear stopping and intersection sight distance in both directions as measured 15 feet from the edge of the vehicle travel lane. Landscaping along the site frontage will maintain the necessary sight triangles.
- NE 139th Street has a slight curvature but the proposed right-out movement from the site will have clear stopping and intersection sight distance looking to the west, as needed.
- Internal drive aisles will be constructed through the site connecting both the main driveway and proposed RIRO with all parcels on the site. All site parking will be accessible via the drive aisles and will have access to both proposed driveways.
- Pedestrians will have two site access connections from NE 139th Street and one connection from NE 10th Avenue.
- If access on NE 139th Street is restricted to right-in movements only, traffic would have two options for entering the site but only one option for exiting the site.
- If no access is provided on NE 139th Street, then all entering and exiting traffic would be concentrated at a single access point.

Post-Development Conditions

- All intersections currently meet agency standards and will continue to meet standards through the year 2020 with one exception. At the site access on NE 10th Avenue, the westbound left-turn movement will exceed capacity under post-development conditions.
- The addition of an access on NE 139th Street measurably improves the site access operations at NE 10th Avenue with either access alternative.
- Two county intersections will have queues that exceed available storage:
    - Simulations show the westbound approach to NE 10th Avenue from the site is expected to fail under post-development conditions generating substantial queues within the site.
    - Simulations show several approaches at the NE 139th Street/NE 10 Avenue intersection would have two approaches that exceed available storage under at least one scenario, but the approach queues are not anticipated to affect upstream intersection operations.
- The westbound approach to NE 10th Avenue from the site is expected to have long queues in the site under post-development conditions. The addition of right-in only on NE 139th Street will shorten the queues but there would still be 13-14 queuing to turn left during the PM peak hour. The PM queues would shorten to 7-8 vehicles by adding the RIRO.

- With the proposed RIRO access on NE 139th Street, the southbound approach shows short queues, which confirms that queuing on NE 139th Street will have minimal effect on the proposed site access.
- All roadway segments are anticipated to meet the County's capacity standard of 0.90 or better except for two segments, but neither segment listed above reflects a project impact that would trigger the need for mitigation:
  - On NE Salmon Creek Avenue between NE 134th Street and NE 50th Avenue, the segment is over capacity under pre-development conditions and the proposed project does not change the v/c ratio of the link.
  - On NE 139th Street between the I-205 NB On-Ramp and NE 20th Avenue, the arterial capacity assumption underestimates the capacity of this free-flow segment and capacity of the adjacent segment is well below the County's v/c ratio threshold.

Recommendations

- To address poor operations and queuing, a traffic signal is recommended at the intersection of NE 141st Street/Site Access/NE 10th Avenue with development of Skyview Station. A preliminary review of peak hour signal warrants shows that the PM peak hour would meet the warrant threshold.
- The proposed RIRO access on NE 139th Street is recommended for the following reasons:
  - Site trip generation meets the County criteria for an additional driveway on a minor arterial.
  - The proposed location of the access on NE 139th Street will meet the driveway spacing criteria for arterials.
  - NE 139th Street is the only practical location for a second site access. A second access on NE 10th Avenue would provide no operational benefits to either the site or the surrounding transportation system.
  - If no additional access is provided on NE 139th Street, then all entering and exiting traffic would be concentrated at a single access point. Should circumstances arise, such as a severe crash on NE 10th Avenue that interferes with the operations of the primary site access, no other access options would be available.
  - The RIRO provides additional access for emergency vehicles entering/exiting the site.
  - Both the right-in and RIRO will reduce site traffic through the adjacent signalized intersection at NE 139th Street and NE 10th Avenue, but the RIRO provides a greater reduction to traffic on NE 10th Avenue.
  - Both the right-in and RIRO improve operations at intersections adjacent to the site, but the RIRO provides an overall greater benefit by more substantially reducing traffic demand on NE 10th Avenue and the full site access opposite NE 141st Street.
  - Both the right-in and RIRO reduce some queues at intersections adjacent to the site, but the RIRO provides an overall greater benefit by reducing traffic demand at the full site access opposite NE 141st Street.

I. INTRODUCTION

This Transportation Impact Study (TIS) has been prepared in support of the proposed Skyview Station development located at the northeast corner of the NE 139th Street/NE 10th Avenue intersection in Clark County, Washington. Figure 1 in Appendix A presents a vicinity map indicating the project location.

Project Description

The proposed Skyview Station development will include approximately 80,150 square feet (SF) of shopping center with eight (8) buildings platted on separate lots. As shown in the site plan in Figure 2, two site accesses are proposed:

- A full-movement driveway is proposed on NE 10th Avenue, a designated collector street. This driveway will be located opposite NE 141st Street and will include one inbound and two outbound travel lanes.
- A second limited access driveway is proposed on NE 139th Street, a designated minor arterial. This driveway will be limited to right-in/right-out (RIRO) movements only and will be aligned nearly opposite the bus-only access serving the Salmon Creek Park & Ride.

A technical road modification (TRM) will be submitted with the development application to add the site driveway on NE 139th Street. Per Clark County Code (CCC) Table 40.350.030-6, an additional driveway may be allowed on a minor arterial for sites generating more than 2,000 daily trips. The access will meet the driveway spacing criteria for arterials as outlined in CCC Table 40.350.030-4. However, because the proposed RIRO has not been approved, traffic operations will be evaluated both with and without it.

The site has a covenant of record (AFN 5170404) that requires certain mitigation measures to be in place prior to issuance of a building permit; however, a concurrent process is underway to release all the identified measures based on an updated traffic analysis that reflects changes in assumptions about the developable area, background growth rates, new network connections, and additional site access consistent with those presented in this TIS. The update demonstrates that the transportation network can meet agency operational standards with site development under current zoning regulations without mitigation.

Scope of Analysis

This TIS has been prepared in accordance with Clark County Code (CCC) Section 40.350.020(D), as well as pre-application notes provided by County staff dated June 7, 2018. The study includes a summary of existing traffic conditions, crash review, proposed trip generation, and an analysis of intersection operations, site accesses, and queuing.

The study parameters and areas of concern have been discussed with County staff as the project has developed. A formal scoping letter was submitted August 13, 2018. (See Appendix B for documentation.)

Study Area

Clark County requires a TIS for proposed developments anticipated to generate more than 10 peak period vehicle trips. Per CCC 40.350.020(D)(5), the study area may include intersections within three (3) miles of the project site since trip generation is estimated greater than 250 new peak hour trips (i.e., primary trips).

Within the 3-mile radius, 30 intersections under Clark County or Washington State Department of Transportation (WSDOT) jurisdiction are proposed for analysis:

- Clark County jurisdiction
  - NE 179th Street/NE Delfel Road South (West Intersection)
  - NE 179th Street/NE Delfel Road North (East Intersection)
  - NE 179th Street/NE 15th Avenue
  - NE 179th Street/NE 29th Avenue
  - NE 10th Avenue/NE 149th Street
  - NE 10th Avenue/NE 141st Street/Site Access
  - NE Tenney Road/NE 139th Street
  - NE 139th Street/NE 10th Avenue
  - NE 139th Street/RIRO (Post-Development)
  - NE 139th Street/NE 20th Avenue
  - NE 139th Street/NE 23rd Avenue
  - NE 139th Street/NE 29th Avenue
  - NE 136th Street/NE 10th Avenue
  - NE Tenney Road/NE 134th Street/NE 10th Avenue
  - NE 134th Street/NE 20th Avenue
  - NE 134th Street/NE 29th Avenue
  - NE 134th Street/NE Salmon Creek Avenue
  - NE Highway 99/NE 20th Avenue/Salmon Creek Plaza
  - NE Highway 99/NE 117th Street
- WSDOT jurisdiction:
  - NE 179th Street/I-5 SB Off-Ramp
  - NE 179th Street/I-5 NB On-Ramp
  - NE 179th Street/NE 10th Avenue/I-5 NB Off-Ramp
  - NE 139th Street/I-5 SB On-Ramp
  - NE 139th Street/I-5 NB Off-Ramp
  - NE 139th Street/I-205 NB On-Ramp
  - NE 134th Street/I-5 SB On-Ramp
  - NE 134th Street/I-5 NB Off-Ramp
  - NE 134th Street/I-205 SB Off-Ramp/NE Highway 99
  - NE 134th Street/I-205 SB On-Ramp
  - NE 134th Street/NE 23rd Avenue/I-205 NB Off-Ramp

In addition to the intersection analysis, the following concurrency corridors were evaluated.

- NE 179th Street between NE Delfel Road S and NE 50th Avenue
- NE 139th Street between NE Tenney Road and NE 29th Avenue
- NE Tenney Road/NE 134th Street/NE Salmon Creek Avenue between NE 10th and NE 50th Avenues
- NE 10th Avenue/NE Delfel Road South (NB/SB) between NE 179th and 134th Streets
- NE 15th Avenue/NE 20th Avenue/NE Highway 99 between NE 179th and NE 99th Streets
- NE 23rd Avenue between NE 139th and NE 134th Streets
- NE 29th Avenue between NE 179th and NE 134th Streets

Analysis Scenarios

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

- 2018 Existing
- 2020 Pre-Development without Skyview Station
- 2020 Post-Development with Skyview Station

II. EXISTING CONDITIONS

The existing conditions analysis is based on a current year 2018 inventory of transportation facilities and 2018 traffic data.

Site Conditions

The site comprises two tax lots (property identification numbers 185726000 and 185727000) totaling 8.66 acres. Both lots have existing development, a single-family home, and DeWitt Construction, but neither will remain with the Skyview Station development.

The site is within the City of Vancouver Urban Growth Area but outside city limits. Clark County zoning is General Commercial (GC).

Transportation System Inventory

The transportation system was reviewed to identify the characteristics of the network serving the site.

Vehicular Transportation Facilities

Table 1 summarizes the characteristics of the study area roadways.

TABLE 1 – ROADWAY CHARACTERISTICS

Roadway		Functional Classification	Posted Speed (mph)	Travel Lanes	Bike Lanes	On-Street Parking	Sidewalks
NE 179th Street	E of I-5 W of I-5	Principal Arterial (4cb) Principal Arterial (4cb)	40 55	2 4	Yes No	No No	South No
NE 149th Street		Collector (2)	35	2	No	No	Partial
NE 141st Street		Local	N/A	2	No	Yes	Yes
NE 139th Street	W of 10th W of 20th E of 20th	Minor Arterial (4cb) Minor Arterial (4cb) Collector (2cb)	35 35 35	4+ 4+ 2-3	Yes Yes Yes	No No No	Yes South Yes
NE Tenney Road		Minor Arterial (4cb)	30-35	4+	Yes	No	Yes
NE 134th Street		Minor Arterial (4cb)	30	4+	Yes	No	Yes
NE Salmon Creek Avenue		Collector (2cb)	35	4+	Yes	No	Yes
NE Delfel Road	N or 179th S of 179th	Collector (2) Collector (2cb)	N/A 35	2 3	Shoulder Yes	No No	No Yes
NE 10th Avenue	N of 179th N of 164th N of 139th S of 139th	Minor Arterial (4cb) Collector (2cb) Collector (2cb) Collector (2cb)	50 35 35 35	2 2 3 2-3	No No Yes Yes	No No No No	No No Yes Yes
NE 15th Avenue		Minor Arterial (2cb)	40	2	Yes	No	Yes
NE 20th Avenue	N of 134th S of 134th	Minor Arterial (4cb) Principal Arterial (4cb)	40 25	4+ 4+	Yes Yes	No No	Yes Yes

TABLE 1 – ROADWAY CHARACTERISTICS							
Roadway		Functional Classification	Posted Speed (mph)	Travel Lanes	Bike Lanes	On-Street Parking	Sidewalks
NE 23rd Avenue		Collector (2cb)	35	3	Yes	No	Yes
NE 29th Avenue		Minor Arterial (2cb)	35	2+	No	No	Partial
NE Highway 99	S of 134th	Collector (2cb)	40	3	Yes	No	Yes
	N of 129th	Principal Arterial (4cb)	40	4+	Yes	No	Yes
	S of 129th	Principal Arterial (4cb)	40	4	No	No	No
	N of 117th	Principal Arterial (4cb)	40	4+	Yes	No	Yes

Figure 3 presents the existing lane configurations and traffic control devices for the study area intersections.

Pedestrian Facilities

All streets providing direct access to the site have sidewalks on both sides of the street with one exception: NE 139th Street does not have sidewalks on the north side of the street between NE 10th Avenue and NE 20th Avenue. WSDOT did not construct sidewalks on the north side of NE 139th Street as it crosses over the freeway and the segment along the site frontage does not currently have sidewalks.

Bicycle Facilities

All streets providing direct access to the site have bike lanes on both sides of the street.

Transit Facilities

C-TRAN has three bus routes that serve the project site. Two routes stop at the Salmon Creek Park & Ride station on the south side of NE 139th Street, across from the project site, and one stops on NE 139th Street just west of NE 10th Avenue. Buses enter and exit the Park & Ride from NE 139th Street, but other vehicles access the parking lot via NE 136th Street just east of the roundabout on NE 10th Avenue.

Route #9 – Felida travels through the Felida neighborhood connecting the Salmon Creek Park & Ride with the 99th Street Transit Center. This route does not actually enter the Park & Ride but stops on the south side on NE 139th Street at NE 10th Avenue just across the intersection from the transit center. The route travels eastbound on NE 139th Street, loops around the Fred Meyer Shopping Center on NE 10th Avenue and NE Tenney Road, then returns westbound on NE 139th Avenue. Weekday service has hourly headways with the first bus departing at 6:27 AM and the last bus departing at 6:27 PM. Saturday service also has hourly headways with the first but departing at 9:22 AM and the last bus departing at 6:22 PM. The route does not run on Sundays.

Route #105 – I-5 Express travels to/from downtown Portland via I-5 with interim stops at the 99th Street Transit Center and downtown Vancouver. Weekday southbound service begins at 6:00 AM and the final bus departs at 6:44 PM. Headways are as short as 20 minutes in the early morning to about 50 minutes midday and about 30 minutes during the evenings. The first northbound bus arrives at 6:37 AM and the last arrives at 8:06 PM. Headways vary from 25 minutes during peak commute periods to 55 minutes midday. There is no weekend service.

Route #134 – Salmon Creek Express also travels to/from downtown Portland on a similar route to Route #105. The route provides southbound service weekday mornings with departures 5:20 AM to 8:07 AM and northbound service weekday afternoons with arrivals from 3:50 PM to 7:70 PM. Headways vary from 20 to 30 minutes. There is no weekend service.

Bus route maps and schedules are presented in Appendix C.

Existing Traffic Counts

Turning movement counts for study area intersections were collected in either April or October 2018. Appendix D contains the raw traffic count data.

Figure 4 presents the 2018 weekday AM and PM peak hour volumes. These volumes include the trips generated by the existing uses on the site. For the purposes of the future analysis, the existing site driveway from DeWitt Construction was assumed to be located opposite NE 141st Street.

Crash Analysis

Historical crash data reported for the study area intersections were evaluated for safety. Crash data for the five-year period of 2013 through 2017 was obtained from WSDOT and used to review crash patterns and estimate crash rates at study area intersections. Due to the extensive study area, the crash review was limited to the following intersections near the site:

- NE134th Street/NE 10th Avenue
- NE 136th Street/NE 10th Avenue
- NE 139th Street/NE Tenney Rd
- NE 139th Street/NE 10th Avenue
- NE 139th Street/I-5 SB On-Ramp
- NE 139th Street/I-5 NB Off-Ramp
- NE 139th Street/I-5 NB On-Ramp
- NE 139th Street/NE 20th Avenue
- NE 141st Street/NE 10th Avenue

The crash evaluation is summarized in Table 2. The raw crash data is provided in Appendix E.

Crash Data Summary

Fifty-four (54) crashes were reported at the study area intersections listed above in the five-year analysis period.

TABLE 2 – INTERSECTION CRASH RATES								
Intersection (Traffic Control Type)	Year					Total Crashes	ADT	Crash Rate
	2013	2014	2015	2016	2017			
NE134th Street/ NE 10th Avenue	2	2	1	0	0	5	21,100	0.13
NE 136th Street/ NE 10th Avenue	1	0	0	0	0	1	7,300	0.08
NE 139th Street/ NE Tenney Rd	0	1	0	0	0	1	22,400	0.02
NE 139th Street/ NE 10th Avenue	0	2	1	1	2	6	26,900	0.12
NE 139th Street/ I-5 SB On-Ramp	0	1	1	1	1	4	24,700	0.13
NE 139th Street/ I-5 NB Off-Ramp	0	2	9	5	5	21	25,500	0.64
NE 139th Street/ I-5 NB On-Ramp	0	1	0	1	1	3	26,300	0.09
NE 139th Street/ NE 20th Avenue	1	3	1	2	5	12	34,900	0.19
NE 141st Street/ NE 10th Avenue	0	0	1	0	0	1	12,500	0.04

The NE 139th Street intersection with the I-5 northbound off-ramp had the greatest number of crashes. Most crashes reported were turning collisions involving a vehicle making from the ramp making a northbound left and a vehicle traveling eastbound or westbound on NE 139th Street. Note, this intersection was not open until midway through 2014.

The NE 139th Street intersection with NE 20th Avenue had the second greatest number of crashes. Most crashes reported were rear end collisions.

No crashes resulted in a fatality, but two crashes were reported as “suspected serious injury.” Both occurred at the NE 139th Street/NE 20th Avenue intersection. One was reported in 2016 and involved a bicyclist that was hit by a vehicle traveling eastbound on NE 139th Street. The other was a fixed-object collision involving a driver traveling northbound on NE 20th Avenue who fell asleep.

Only one (1) pedestrian-related crash was reported at any of the study area intersections. It was reported at the I-5 northbound off-ramp at NE 139th Street. A northbound vehicle turning right from the ramp struck a pedestrian on NE 139th Street. A possible injury was indicated.

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 at each intersection by a peak-to-daily factor, or k-factor. A k-factor of 0.09 was derived using recent average daily traffic (ADT) and PM peak hour volumes for several of the arterials obtained from the Southwest Washington Regional Transportation Council (RTC) traffic database. This factor was applied to all study area intersections to estimate ADT. Only 3.5 years was used in the crash rate calculations for the I-5 ramp intersections because the interchange opened mid-year 2014.

III. PRE-DEVELOPMENT CONDITIONS

The pre-development conditions reflect a build-out year scenario without the proposed development. This scenario includes traffic from 2018 existing conditions, background traffic growth to year 2020, in-process traffic from other approved developments that have not yet been constructed, and traffic reroutes from changes in the transportation network.

Planned Transportation Improvements

The adopted 2018-2023 *Clark County Transportation Improvement Program* (TIP) were reviewed for scheduled transportation projects within the study area that may affect intersection and/or roadway capacity. The following improvements are identified in the study area:

- Project A: NE 10th Avenue – NE 149th Street to NE 154th Street
  - Construct a 2-lane collector with center turn lane, bike lanes, and sidewalks.
  - Project is fully funded with a cost of $11,535,000.
  - Design is underway, and construction is scheduled for 2020-2021.
- Project B: NE 10th Avenue – NE 154th Street to NE 164th Street
  - Construct a bridge over Whipple Creek and 2-lane collector with center turn lane, bike lanes, and sidewalks.
  - Project is fully funded with a cost of $23,213,000.
  - Project is currently under construction and scheduled for completion in 2018-2019.
- Project 3: I-5/NE 179th Street – NE Delfel Road to NE 15th Avenue
  - Improve roadway to a standard arterial (widening lanes and shoulders, installing bike lanes and sidewalks, addressing mitigation). Possibly reconfigure the on-ramps/off-ramps. Realign NE Delfel Road. Roundabouts, signal or intersection improvements will be completed as part of this project.
  - Project cost is estimated at $27,367,000 and is partially funded through 2022-2023.
  - Planning and scoping is underway in partnership with WSDOT.
  - Project may be accelerated if funding permits.
- Project 6: NE 15th Avenue – NE 179th Street to NE 10th Avenue
  - Construct a 3-lane minor arterial including center turn lane/median, sidewalks, and bicycle lanes.
  - Project cost is estimated at $15,000,000 and is partially funded through 2022-2023.
  - Scoping and traffic modeling is underway.
  - Project may be accelerated if funding permits.

Both Project A and Project B are fully funded, and construction is expected to be nearly complete by the opening year of Skyview Station; therefore, these projects are included in the pre-development conditions.

The other two projects at the NE 179th Street interchange are not fully funded, and no improvements are assumed for the future conditions in this TIS.

Background Traffic Growth

Background traffic growth is applied to existing traffic volumes to forecast future traffic demand. An average 2% annual growth rate was applied to existing 2018 traffic volumes over two (2) years to estimate 2020 background traffic growth. Figure 5 presented the AM and PM peak hour background traffic growth.

In-Process Traffic

In-process traffic volumes account for developments that have been approved or that are under construction at the time of a traffic study. These traffic volumes account for traffic that will be added to the external road network before build-out of the proposed development occurs.

Traffic volumes for the following developments, as provided by Clark County staff, were included as in-process:

- Vancouver Clinic at Salmon Creek
- Phase 1: 179th Street Commercial
- Phase 2: 179th Street Commercial
- iTech Preparatory School

Figure 6 presents the in-process traffic volumes for the AM and PM peak hours. Appendix F includes the supporting documentation for all in-process developments.

Traffic Reroutes

The two Clark County TIP projects along NE 10th Avenue will fully connect NE 139th Street to NE 179th Street, creating a local parallel route to I-5 on the west side of the freeway. This improvement is anticipated to change some of the area travel patterns when completed.

A Transportation Impact Discipline Report for the NE 10 Avenue (NE 154th to NE 164th Street) Project #370922 was prepared by Kittelson & Associates, Inc. in June 2014. The report included analysis of No Build and Build conditions for an opening year (2018) and a future year of 2035. Because the traffic data was collected prior to the opening of the NE 139th Street interchange, the opening year analysis needed to estimate changes in travel patterns from the interchange improvements as well as the NE 10th Avenue Project. Furthermore, the study only includes PM peak hour volumes and did not address many of the intersections included the Skyview Station study area; therefore, this TIS estimated the near-term traffic reroutes based on the 2018 existing traffic counts.

The NE 10th Avenue connection has the immediate potential to change three patterns of traffic flow:

- The NE 10th Avenue connection may provide a more direct route for to/from NE 179th Street than NW 11th Avenue. To estimate the rerouted traffic demand, approximately 20% of the traffic traveling east-west on NE 179th Street at NE Delfel Road was assumed to divert from NW 11th Avenue to NE 10th Avenue. This assumption diverts in 55 AM peak hour trips (35 northbound/20 southbound) and 65 PM peak hour trips (30 northbound/35 southbound).
- Some of the traffic from neighborhoods and businesses along NE 10th Avenue and NE 149th Street that currently uses the NE 134th/139th Street interchange to access I-5 to/from the north may use the NE 179th Street interchange instead. To estimate the rerouted traffic demand, approximately 10% of the traffic using the northbound on-ramp on NE 139th Street and 15% of

the traffic using the southbound off-ramp on NE 134th Street was assumed to divert to the NE 179th Avenue interchange ramps. The southbound percentage was assumed to be higher because the travel time saving is greater than northbound. This assumption diverts 40 AM peak hour trips (15 northbound/25 southbound) and 55 PM peak hour trips (25 northbound/30 southbound).

- Some of the traffic from the neighborhoods and businesses along NE 10th Avenue, NE 164th Street, and NE Delfel Road currently uses the NE 179th Street interchange to access I-5 and I-205 to/from the south may use the NE 139th/134th Street interchange instead. To estimate the rerouted traffic demand, approximately 5% of the traffic using the NE 179th Street ramps to/from the south was assumed to divert to the I-5 and I-205 ramps at NE 139th Street or NE 134th Street. This assumption diverts 20 AM peak hour trips (5 northbound/15 southbound) and 30 PM peak hour trips (15 northbound/15 southbound).

Figure 7 presents the NE 10th Avenue traffic reroutes for the AM and PM peak hours. Appendix G includes the supporting documentation.

A comparison of the PM peak hour rerouted traffic volumes using the diversion assumptions outlined above and the difference between the 2018 No Build and Build scenarios from the Kittelson report shows comparable results.

Pre-Development Traffic

The 2020 pre-development scenario combines 2018 existing traffic, background traffic growth of 2% per year for two (2) years, in-process traffic, and pre-development traffic reroutes. Figure 8 presents the 2020 pre-development traffic volumes.

IV. SITE DEVELOPMENT

The trip generation, distribution, and assignment for the proposed Skyview Station development are described below.

Proposed Development

The proposed Skyview Station development will include approximately 80,150 square feet (SF) of shopping center.

As shown in the attached plan, two site accesses are proposed:

- A full-movement driveway is proposed on NE 10th Avenue, a designated collector street. This driveway will be located opposite NE 141st Street and will include one inbound and two outbound travel lanes.
- A second limited access driveway is proposed on NE 139th Street, a designated minor arterial. This driveway will be limited to right-in/right-out (RIRO) movements only and will be aligned opposite the bus-only access serving the Salmon Creek Park & Ride.

As noted previously, a TRM will be submitted with the development application to add the site driveway on NE 139th Street. Because the proposed RIRO has not been approved, traffic operations will be evaluated both with and without it.

Site Trip Generation

Trip generation estimates were developed using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition. The pass-by trip rates are based on the ITE *Trip Generation Handbook*, 3rd Edition.

Table 3 summarizes the trip generation for the proposed development. The mixed retail estimates were prepared assuming the "Shopping Center" (ITE Code 820) because the rates reflect the variety of retail and service uses that are found in most shopping centers. This approach allows for more flexibility as the site develops and produces similar trip generation results for the PM peak hour and daily estimates as an assessment of individual uses.

TABLE 3 – SKYVIEW STATION TRIP GENERATION

Land Use	Trip Type	AM			PM			Daily
		In	Out	Total	In	Out	Total	
Shopping Center 80.150 KSF	Total	119	73	192	221	240	461	5,172
	Pass-by	33	33	66	79	79	158	1,760
	Primary	86	40	126	142	161	303	3,412

Based on the available ITE data, the proposed development is anticipated to generate 192 AM peak hour, 461 PM peak hour, and 5,172 total daily trips. Of these trips, 126 AM peak hour, 303 PM peak hour, and 3,412 daily trips are primary trips; and 66 AM peak hour, 158 PM peak hour, and 1,760 daily trips are pass-by trips.

The trip generation for the existing uses on the site is summarized in Table 4. Volumes for DeWitt are from a traffic study prepared for DeWitt Construction relocation dated November 2017 by Kittelson Associates, Inc. The residential trips are based on ITE rates.

TABLE 4 – EXISTING SITE TRIP GENERATION								
Land Use	Trip Type	AM			PM			Daily
		In	Out	Total	In	Out	Total	
DeWitt	Total	8	3	11	1	5	6	91
Housing (1 Single-Family Home)	Total	0	1	1	1	0	1	9
Total	**Total**	8	4	12	2	5	7	100

To estimate the net site trip generation, the existing trips were subtracted from the trip generated by the proposed Skyview Station development, as summarized in Table 5. The net primary trip generation is reduced to 114 AM peak hour, 296 PM peak hour, and 3,312 daily primary trips with the subtraction of existing trips while the pass-by volumes remain unchanged.

TABLE 5 – NET SITE TRIP GENERATION								
Land Use	Trip Type	AM			PM			Daily
		In	Out	Total	In	Out	Total	
Net Site Trips	Total	111	69	180	219	235	454	5,072
	Pass-by	33	33	66	79	79	158	1,760
	Primary	78	36	114	140	156	296	3,312

Trip Distribution and Assignment

Site trip distribution varies by trip type. The basis for distributing each trip type is calculated below.

Pass-by Trips

Distribution for pass-by trips were estimated from the traffic count data at the intersection of NE 139th Street and NE 10th Avenue. The distributions are different for the AM and PM peak hours to reflect difference in directional split between those two periods.

Pass-by trips trip distribution assumptions for the AM/PM peak hours are:

- 15%/25% from northbound NE10th Avenue
- 35%/25% from southbound NE 10th Avenue
- 25%/25% from eastbound NE 139th Street
- 25%/25% from westbound NE 139th Street

Figure 9 presents the pass-by trip distribution and assignment during the AM and PM peak hour without the RIRO on NE 139th Avenue.

Primary Trips

Site trip distribution for primary trips is based on the select zone base year (2010) and future year (2035) travel volumes plots for Traffic Analysis Zone (TAZ) 95. Primary trip distribution for the AM and PM peak hour is assumed to be:

- 20% to/from the north
  - 12% via I-5 using either NE 134th/NE 139th Street ramps or NE 10th Avenue to NE 179th Street ramps
  - 4% via NE 10th Avenue to NE Delfel Road north of NE 179th Street
  - 4% via NE 179th Street to areas east of the interchange
- 57% to/from the south
  - 24% via I-5 split between the NE 134th and NE 139th Street ramps
  - 24% via I-205
  - 5% via NE Highway 99
  - 4% to/from residential areas south of NE Tenney Road/E 134th Street
- 15% to/from the west
  - 10% via NE 139th Street
  - 5% via NE 149th Street
- 8% to/from the east
  - 2% via NE 20th Avenue
  - 1% via NE 29th Avenue
  - 3% via NE Salmon Creek Avenue
  - 2% to/from residential areas along NE 139th Street and NE 134th Street

Figure 10 presents the primary trip distribution and assignment during the AM and PM peak hour without the RIRO on NE 139th Avenue.

Total Site Trips

The pass-by and primary trips were added together to determine the total number of site trips. The total site trips during the AM and PM peak hours without the RIRO on NE 139th Avenue are presented in Figure 11.

Post-Development Traffic

Post-development traffic volumes are the sum of the project trips and the pre-development traffic volumes. Figure 12 presents the AM and PM peak hour post-development traffic volumes for the study area.

Alternative Access

A site access is proposed on NE 139th Street with turns limited to right-in/right-out movements. A TRM is required to approve this access; therefore, this TIA address three access alternatives:

- No access
- Right-in only
- Right-in/right out

The basis for distributing each trip type to the external roadway network remains the same as described earlier. Only three intersections are affected by the site access alternatives. Figure 13 shows the AM and PM peak hour total project trip assignment for all three access scenarios. Figure 14 shows the AM and PM peak hour 2020 post-development traffic volumes for the three access scenarios.

Traffic Impact Fee Calculation

In accordance with Clark County's Traffic Impact Fee (TIF) Program, the overall TIF for the Skyview Station shopping center at 79.95 KSF is calculated as $1,110,592. We recommend proportionally allocating the total fee using the County's TIF trip generation rates and factors. This approach accounts for the fact that larger shopping centers generate fewer trips/KSF than smaller shopping centers, which is reflected in the County TIF methodology. The details are presented in Appendix I.

Note, the credit for existing site uses, DeWitt Construction, and the single-family residence, is nearly $43,000. This calculation is also included in Appendix I.

V. SITE ACCESS AND CIRCULATION

The evaluation of site access and on-site circulation includes the assessment of access spacing, sight distance, and traffic warrants.

Site Access

As previously stated, the proposed development will provide access to the site via two site accesses:

- A full-movement driveway is proposed on NE 10th Avenue, a designated collector street. This driveway will be located opposite NE 141st Street and will include one inbound and two outbound travel lanes.
- A second limited access driveway is proposed on NE 139th Street, a designated minor arterial. This driveway will be limited to right-in/right-out (RIRO) movements only and will be aligned opposite the bus-only access serving the Salmon Creek Park & Ride.

Number of Accesses

The project is expected to generate 5,072 net daily driveway trips, including 1,760 pass-by trips and 3,312 primary trips. Per CCC 40.350.30(B)(4)(d)(1)(b), "the number of driveways and driveway lanes on arterials shall be based upon an estimate of site traffic generation in accordance with Table 40.350.030-6." This table shows that sites generating more than 2,000 daily trips can have an additional driveway on a minor arterial.

Access Spacing

The proposed access on NE 10th Avenue will be aligned opposite NE 141st Street and the two accesses serving the existing site uses (DeWitt Construction and a single-family residence) will be closed. Per CCC Table 40.350.030-4, minimum separation for driveways on a collector with a 35-mph posted speed is 150 feet. The centerline of the proposed access is approximately 440 feet north of the stop bar at NE 139th Street and approximately 150 south of the driveway for the single-family residence immediately north of the site.

The proposed access on NE 139th Avenue will be aligned opposite the bus-only access serving the Salmon Creek Park & Ride. Per CCC Table 40.350.030-4, minimum separation for driveways on an arterial with a 35-mph posted speed is also 150 feet. The centerline of the proposed access is approximately 390 feet east of the stop bar at NE 10th Avenue and more than 1,000 feet west of the freeway ramps.

Both proposed accesses would meet the County spacing standards.

Sight Distance Evaluation

Sight distance for the proposed site accesses was evaluated based on CCC 40.350.030(B)(8). For a posted speed of 35 mph, the stopping sight distance (SSD) shall be 250 feet and the intersection sight distance (ISD) shall be 350 feet.

NE 10th Avenue is a straight roadway with clear SSD and ISD in both directions as measured 15 feet from the edge of the vehicle travel lane. Landscaping along the site frontage will maintain the necessary sight triangles.

NE 139th Street has a slight curvature but the proposed right-out movement from the site will have clear SSD and ISD looking to the west, as needed.

On-Site Circulation

Internal drive aisles will be constructed through the site connecting both the main driveway and proposed RIRO with all parcels on the site. All site parking will be accessible via the drive aisles and will have access to both proposed driveways.

Pedestrians will have two site access connections from NE 139th Street and one connection from NE 10th Avenue.

Access Alternatives

If access on NE 139th Street is restricted to right-in movements only, traffic would have two options for entering the site but only one option for exiting the site. Limiting the options for exiting vehicles would concentrate all the exiting traffic at one location, which would result in longer on-site queues. Moreover, should circumstances arise, such as a severe crash on NE 10th Avenue which could interfere with the operations of the primary site access, no other access options would be available for exiting vehicles.

If no access is provided on NE 139th Street, then all entering and exiting traffic would be concentrated at a single access point. This alternative would limit accessibility for emergency vehicles entering the site as well as raising concerns for exiting vehicles.

VI. OPERATIONS ANALYSIS

Two aspects of operational analysis were evaluated for the study area intersections: 1) intersection operation 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 Operations Analysis

Intersection operations are generally measured by three 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

Two jurisdictional standards apply in the study area. All intersections are under Clark County jurisdiction except for the I-5 and I-205 interchange ramps.

Clark County

CCC Section 40.350.020(G) defines the mobility standards for County intersections as:

- LOS E at unsignalized intersections where signal warrants are not met
- LOS D at unsignalized intersections where signal warrants are met
- Delay for individual movements at signalized intersections equal to or less than two (2) cycle lengths or 240 seconds in delay (whichever is less)

WSDOT

WSDOT sets LOS standards for state highways based on RCW 47.06.140(2). The LOS standards are set jointly by regional transportation planning organizations (RTPOs) and WSDOT for urban and rural highways. The LOS standard for urban highways developed by the Regional Transportation Council (RTC) and WSDOT in Clark County is LOS E.

Methodology

Intersection operations were analyzed with the use of Synchro 9 software, which utilizes the Transportation Research Board's *Highway Capacity Manual* (HCM) 2000 and 2010 methodologies. All signalized study area intersections were reported using HCM 2000 and all unsignalized study area intersections were reported using HCM 2010, per the City's *Traffic Study Guidelines.* Signal timing information was obtained from City, County, and WSDOT staff, and is presented in Appendix J.

Findings

Due to the size of the study area, the operations results are summarized by jurisdiction. Only the overall intersection operation result for signalized intersections and the critical movement for unsignalized intersections are presented in each jurisdiction table. The operation results summarized for each lane of lane group are presented in summary tables in Appendix K and HCM reports are presented in Appendix L.

Clark County Intersections

Table 6 summarizes the results for the county intersections in the study area for all scenarios during the AM and PM peak hours. The summary table presents either the overall intersection operations at signalized intersections or the worst movement at unsignalized intersections.

TABLE 6 – INTERSECTION OPERATIONS – CLARK COUNTY INTERSECTIONS

Intersection	Peak Hour	Analysis Results (V/C Ratio - LOS - Delay)		
		2018 Existing	2020 Pre-Development	2020 Post-Development
NE 179th Street/ NE Delfel Road (West)	AM	0.12-B-13	0.16-C-24	0.17-C-25
	PM	0.12-B-13	0.16-B-18	0.18-B-20
NE 179th Street/ NE Delfel Road (East)	AM	0.50-C-17 (SBL)	0.56-C-20 (SBL)	0.58-C-21 (SBL)
	PM	0.40-C-18 (SBL)	0.47-C-21 (SBL)	0.50-D-22 (SBL)
NE 179th Street/ NE 15th Avenue	AM	0.33-A-6	0.41-A-7	0.41-A-7
	PM	0.43-A-7	0.73-B-18	0.73-B-18
NE 179th Street/ NE 29th Avenue	AM	0.35-B-11 (WB)	0.41-B-12 (WB)	0.41-B-12 (WB)
	PM	0.49-B-12 (EB)	0.62-C-16 (EB)	0.62-C-17 (EB)
NE 10th Avenue/ NE 149th Street	AM	0.33-B-10 (EBR)	0.37-B-11 (EBR)	0.38-B-11 (EBR)
	PM	0.22-A-10 (EBR)	0.23-B-10 (EBR)	0.24-B-10 (EBR)
NE 10th Avenue/ NE 141st Street/Site Access	AM	0.06-B-13 (EB)	0.07-B-13 (EB)	0.35-E-35 (WBL)
	PM	0.04-B-14 (EB)	0.05-C-15 (EB)	**2.04-F-573 (WBL)**
NE Tenney Road/ NE 139th Street	AM	0.32-D-36	0.33-D-35	0.33-D-36
	PM	0.42-D-37	0.45-D-36	0.45-D-36
NE 139th Street/ NE 10th Avenue	AM	0.54-C-27	0.57-C-27	0.59-C-30
	PM	0.67-C-33	0.70-D-35	0.81-D-43
NE 139th Street/ RIRO	AM	N/A	N/A	N/A
	PM	N/A	N/A	N/A
NE 139th Street/ NE 20th Avenue	AM	0.32-D-38	0.39-D-38	0.39-D-38
	PM	0.62-D-41	0.72-D-42	0.74-D-42
NE 139th Street/ NE 23rd Avenue	AM	0.31-C-33	0.43-C-30	0.44-C-30
	PM	0.48-D-43	0.66-D-41	0.69-D-41
NE 139th Street/ NE 29th Avenue	AM	0.25-D-41	0.37-C-34	0.38-D-35
	PM	0.34-D-42	0.42-D-44	0.43-D-45
NE 136th Street/ NE 10th Avenue	AM	0.17-A-5 (SB)	0.19-A-5 (SB)	0.20-A-5 (SB)
	PM	0.32-A-7 (SB)	0.35-A-7 (SB)	0.40-A-8 (SB)
NE Tenney Road/NE 134th Street/ NE 10th Avenue	AM	0.28-B-10	0.30-B-11	0.30-B-11
	PM	0.46-B-19	0.48-B-19	0.51-C-21

TABLE 6 – INTERSECTION OPERATIONS – CLARK COUNTY INTERSECTIONS				
Intersection	Peak Hour	Analysis Results (V/C Ratio - LOS - Delay)		
		2018 Existing	2020 Pre-Development	2020 Post-Development
NE 134th Street/ NE 20th Avenue	AM	0.50-D-36	0.55-D-37	0.55-D-37
	PM	0.56-D-45	0.59-D-45	.6.4-D-46
NE 134th Street/ NE 29th Avenue	AM	0.39-B-14	0.60-C-21	0.60-C-21
	PM	0.45-B-19	0.56-C-21	0.56-C-21
NE 134th Street/ NE Salmon Creek Avenue	AM	0.47-B-13	0.65-B-16	0.66-B-16
	PM	0.47-B-17	0.56-B-19	0.57-B-19
NE Highway 99/ NE 20th Avenue	AM	0.46-C-25	0.49-C-25	0.49-C-25
	PM	0.62-D-40	0.66-D-40	0.66-D-40
NE Highway 99/ NE 117th Street	AM	0.53-C-31	0.56-C-31	0.56-C-31
	PM	0.62-C-32	0.66-C-33	0.66-C-33

As summarized in Table 6 and detailed in Appendix K, all intersections currently meet the County standards and will continue to meet standards through the year 2020 with one exception. At the site access on NE 10th Avenue, the westbound left-turn movement will exceed capacity under post-development conditions.

WSDOT Intersections

Table 7 summarizes the results for the state intersections in the study area for all scenarios during the AM and PM peak hours. The summary table presents either the overall intersection operations at signalized intersections or the worst movement at unsignalized intersections.

TABLE 7 – INTERSECTION OPERATIONS – WSDOT INTERSECTIONS				
Intersection	Peak Hour	Analysis Results (V/C Ratio - LOS - Delay)		
		2018 Existing	2020 Pre-Development	2020 Post-Development
NE 179th Street/ I-5 SB Off-Ramp	AM	0.30-C-33	0.39-D-36	0.39-D-36
	PM	0.33-C-26	0.59-C-28	0.60-C-28
NE 179th Street/ I-5 NB On-Ramp	AM	0.08-A-9 (EBL)	0.11-B-10 (EBL)	0.11-B-10 (EBL)
	PM	0.09-A-10 (EBL)	0.20-B-14 (EBL)	0.21-B-14 (EBL)
NE 179th Street/NE 10th Avenue/ I-5 NB Off-Ramp	AM	0.25-C-31	0.30-C-30	0.30-C-30
	PM	0.40-C-24	0.67-C-24	0.69-C-24
NE 139th Street/ I-5 SB On-Ramp	AM	0.27-B-11	0.31-B-13	0.32-B-13
	PM	0.37-B-13	0.41-B-14	0.43-B-13

TABLE 7 – INTERSECTION OPERATIONS – WSDOT INTERSECTIONS				
Intersection	Peak Hour	Analysis Results (V/C Ratio - LOS - Delay)		
		2018 Existing	2020 Pre-Development	2020 Post-Development
NE 139th Street/ I-5 NB Off-Ramp	AM	0.34-B-19	0.38-C-21	0.39-C-21
	PM	0.48-C-26	0.53-C-27	0.56-C-27
NE 139th Street/ I-5 NB On-Ramp	AM	0.16-A-10 (EBL)	0.17-B-10 (EBL)	0.18-B-11 (EBL)
	PM	0.38-B-13 (EBL)	0.44-C-15 (EBL)	0.48-C-16 (EBL)
NE 134th Street/ I-5 SB On-Ramp	AM	0.31-A-8	0.34-A-10	0.34-A-10
	PM	0.43-B-11	0.45-B-11	0.48-B-11
NE 134th Street/ I-5 NB Off-Ramp	AM	0.28-B-16	0.29-B-17	0.30-B-17
	PM	0.42-B-18	0.44-B-18	0.45-B-18
NE 134th Street/NE Highway 99/ I-205 SB Off-Ramp	AM	0.28-B-17	0.31-B-17	0.31-B-17
	PM	0.36-B-13	0.38-B-14	0.39-B-14
NE 134th Street/ I-205 SB On-Ramp	AM	0.30-A-10 (WBL)	0.41-B-11 (WBL)	0.41-B-11 (WBL)
	PM	0.51-B-11 (WBL)	0.63-B-14 (WBL)	0.64-B-14 (WBL)
NE 134th Street/NE 23rd Avenue/ I-205 NB Off-Ramp	AM	0.50-D-37	0.57-D-39	0.58-D-39
	PM	0.70-D-49	0.82-C-53	0.83-D-54

As shown in Table 7 and detailed in Appendix K, all intersections currently meet the WSDOT intersection standards and will continue to meet standards through the year 2020.

Access Alternatives

The site plan includes an access proposed on NE 139th Street with turns limited to right-in/right-out movements. County approval of the proposed access is required; therefore, three access alternatives are evaluated:

- No access on NE 139th Street; all traffic entering and exiting the site must use the access on NE 10th Avenue. *(Note: This alternative is assumed in Table 6.)*
- Right-in only, which would allow westbound rights from NE 139th Street into the site while all traffic would exit the site onto NE 10th Avenue.
- Right-in/Right-out, which would allow westbound rights from NE 139th Street into the site and southbound rights onto NE 139th Street out of the site.

Table 8 summarizes the results for the intersections in the study area affected by the access alternatives.

TABLE 8 – INTERSECTION OPERATIONS – ACCESS ALTERNATIVES				
Intersection	Peak Hour	Analysis Results (V/C Ratio - LOS - Delay)		
		Post-Development No Access	Post- Development Right-In Only	Post- Development Right-In/Right-Out
NE 10th Avenue/ NE 141st Street/Site Access	AM	0.35-E-35 (WBL)	0.34-D-33 (WBL)	0.27-D-31 (WBL)
	PM	**2.04-F-573 (WBL)**	**1.91-F-509 (WBL)**	**1.52-F-346 (WBL)**
NE 139th Street/ NE 10th Avenue	AM	0.59-C-30	0.59-C-30	0.59-C-29
	PM	0.81-D-43	0.79-D-41	0.80-D-43
NE 139th Street/ RIRO	AM	N/A	N/A	0.02-B-11 (SBR)
	PM	N/A	N/A	0.09-B-13 (SBR)

As shown in Table 8, the addition of an access on NE 139th Street measurably improves the site access operations at NE 10th Avenue with either access alternative.

At the intersection of NE 139th Street and NE 10th Avenue, both access alternatives improve overall intersection operations compared with the no access alternative. However, the right-in access alternative performs slightly better that than the RIRO because the shift in traffic volume demand is less favorable for the critical movements that define the overall intersection performance. For example, some of the exiting traffic would shift from the southbound right-turn lane on NE 10th Avenue, which is not a critical movement, to the westbound through lanes on NE 139th Street, which are critical.

In summary, both the right-in and RIRO improve operations at intersections adjacent to the site, but the RIRO provides an overall greater benefit by more substantially reducing traffic demand on NE 10th Avenue and the full site access opposite NE 141st Street.

Intersection Queuing Analysis

An intersection queuing analysis was conducted for the six study area intersections during the AM and PM peak hour to evaluate any potential queue spillbacks:

- NE 10th Avenue/NE 141st Street/Site Access
- NE 139th Street/NE 10th Avenue
- NE 139th Street/RIRO (Post-Development)
- NE 139th Street/I-5 SB On-Ramp
- NE 139th Street/I-5 NB Off-Ramp
- NE 139th Street/I-205 NB On-Ramp

These intersections either abut the site or were identified as a concern by WSDOT.

Methodology

Available queue storage lengths were estimated using Google Earth Pro software and rounded to the nearest 5 feet. For turn lanes, two available storage values are stated: the first represents the striped storage; and 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 values are reported for storage: the first is the distance to an upstream driveway; the second is the distance to an upstream intersection.

The 95th percentile queues were estimated using SimTraffic software. Queue demand results were rounded to the nearest 25 feet to represent average vehicle lengths.

Findings

The AM and PM peak hour 95th percentile queues are summarized by jurisdiction and only locations where queue deficiencies are present or projected are summarized. Bold text indicates that the calculated queue exceeds the storage for the travel lane. The SimTraffic output sheets are provided in Appendix M.

Clark County Intersections

Table 9 presents the 95th percentile queuing results for County intersections and site accesses in the study area where queues exceed or will exceed effective storage.

TABLE 9 – 95TH PERCENTILE QUEUING ANALYSIS – CLARK COUNTY INTERSECTIONS

Intersection	Lane Group	Available Storage (Striped/Effective)	Analysis Results		
			2018 Existing	2020 Pre-Development	2020 Post-Development
NE 10th Avenue/ NE 141st Street/ Site Access	EB	120/120	50/50	50/50	50/50
	WBL	140/170	N/A	N/A	75/**525**
	WBT+R	140/170	N/A	N/A	50/**225**
	NBL	60/130	0/25	0/50	25/25
	SBL	90/240	0/0	0/0	50/50
NE 139th Street/ NE 10th Avenue	EBL	250/330	100/125	100/125	125/175
	EBT	510/905	100/175	150/200	125/225
	EBT+R	510/905	150/200	175/225	175/225
	WBL	250/385	50/100	50/75	50/150
	WBT	>1000	150/275	175/350	175/475
	WBT+R	>1000	200/350	200/450	225/575
	NBL	320/380	50/50	50/50	50/50
	NBT	265/625	75/100	75/125	100/150
	NBR	165/195	0/0	0/0	0/25
	SBL	150/230	225/225	225/**275**	225/**300**
	SBT	125/425	125/125	125/200	125/325
	SBR	120/150	50/50	75/75	50/100
NE 139th Street/ RIRO Access	SBR	100/100	N/A	N/A	N/A

As shown in Table 9, two County intersections will have queues that exceed available storage:

- Simulations show the westbound approach to NE 10th Avenue from the site is expected to fail under post-development conditions generating substantial queues within the site.
- Simulations show the southbound left-turn lane would exceed available storage under at least one scenario. On the southbound approach, through queues are expected to block access to the left-turn lane 10-15% of the PM peak hour but the approach queues are not anticipated to affect the upstream intersection. This condition is present under pre-development conditions.

WSDOT Intersections

Table 10 presents the queuing results for state intersections in the study area where queues exceed or will exceed effective storage.

TABLE 10 – 95TH PERCENTILE QUEUING ANALYSIS – WSDOT INTERSECTIONS

Intersection	Lane Group	Available Storage (Striped/Effective)	Analysis Results		
			2018 Existing	2020 Pre-Development	2020 Post-Development
NE 139th Street/ I-5 SB On-Ramp	EBT	900/+1,000	125/150	125/225	125/175
	EBT	900/+1,000	75/100	75/125	75/100
	EBR	175/215	100/125	125/125	125/125
	WBL	125/390	100/175	125/200	125/200
	WBL	390/390	125/200	125/225	150/250
NE 139th Street/ I-5 NB Off-Ramp	EBT	430/430	100/150	100/175	100/175
	EBT	430/430	100/150	100/175	100/200
	EBT	430/430	10/125	100/150	100/150
	WBT	200/520	75/125	100/150	100/175
	WBT	200/520	100/150	100/200	100/200
	WBT	200/520	100/150	125/175	125/200
	NBL	>1000/>1000	325/750	325/725	375/925
	NBR	405/440	125/475	150/475	200/550
NE 139th Street/ I-5 NB On-Ramp	EBL	215/215	75/175	75/**225**	100/**225**

As shown in Table 10, the WSDOT intersections can accommodate the 95th percentile queues under all scenarios. (Although the eastbound left-turn to I-5 northbound is shown to be 10 feet longer than available storage, this value is rounded up from the simulation values and is not anticipated to affect upstream intersection operations.)

Access Alternatives

Table 11 summarizes the results for the intersections in the study area affected by the three access alternatives.

TABLE 11 – 95TH PERCENTILE QUEUING ANALYSIS – ACCESS ALTERNATIVES					
Intersection	Lane Group	Available Storage (Striped/ Effective)	Analysis Results		
			Post-Development No Access	Post-Development Right-In Only	Post-Development Right-In/Right-Out
NE 10th Avenue/ NE 141st Street/ Site Access	EB	120/120	50/50	50/50	50/50
	WBL	140/170	75/**525**	75/**350**	50/**200**
	WBT+R	140/170	50/**225**	50/50	50/50
	NBL	60/130	25/25	25/50	25/25
	SBL	90/240	50/50	25/50	25/50
NE 139th Street/ NE 10th Avenue	EBL	250/330	125/175	125/200	100/200
	EBT	510/905	125/225	150/225	125/200
	EBT+R	510/905	175/225	175/250	175/225
	WBL	250/385	50/150	50/125	50/125
	WBT	355*/>1000	175/475	150/**425**	175/**400**
	WBT+R	355*/>1000	225/575	225/**500**	200/**475**
	NBL	320/380	50/50	50/50	50/50
	NBT	265/625	100/150	100/150	75/150
	NBR	165/195	0/25	0/0	0/0
	SBL	150/230	225/**300**	225/**300**	225/**300**
	SBT	125/425	125/325	125/275	150/275
	SBR	120/150	50/100	75/100	75/75
NE 139th Street/ RIRO Access	SBR	100/100	N/A	N/A	25/50

* Under the post-development scenario, the westbound approach has 355 feet of storage between NE 10th Avenue and the proposed RIRO access.

The westbound approach to NE 10th Avenue from the site is expected to have long queues in the site under post-development conditions. The addition of right-in only on NE 139th Street will shorten the queues but there would still be 13-14 vehicles queuing to turn left during the PM peak hour. The PM queues would shorten to 7-8 vehicles by adding the RIRO.

Simulations show the NE 139th Street/NE 10 Avenue intersection will have two approaches that have 95th percentile queues that exceed available storage. The addition of the right-in movement will shorten some queues and even greater reductions are anticipated with the RIRO. As noted previously, southbound through queues are expected to block access to the southbound left-turn lane 10-15% of the PM peak hour but the approach queues are not anticipated to affect the upstream intersection. On the westbound approach, the queues will sometimes extend past the proposed site access, but average queues will not affect the access. The southbound RIRO approach shows short queues, which confirms that queuing on NE 139th Street will have minimal effect on the proposed site access.

In summary, both the right-in and RIRO reduce some queues at intersections adjacent to the site, but the RIRO provides an overall greater benefit by reducing traffic demand at the full site access opposite NE 141st Street.

Roadway Segment Analysis

In addition to the intersection analysis, the County requires that roadway segments be analyzed to ensure they do not exceed the County's standard.

Performance Measures

Per the County's Code, the maximum v/c ratio for each roadway segment shall not exceed 0.90 for each direction of travel.

Methodology

Capacity volumes are designated by the County for both urban and rural arterials and collectors and are presented in the CCC Table 40.350.020-1. The County's Arterial Atlas was utilized to determine the County designation for all study area roadway segments. The directional segment volumes were then divided by the respective roadway capacities to determine the v/c ratios.

Findings

Table 12 presents the AM peak hour roadway capacity analysis, and Table 13 presents the PM peak hour roadway capacity analysis.

TABLE 12 – AM PEAK HOUR ROADWAY CAPACITY ANALYSIS

Segment		Arterial Class	Capacity	Existing (2018)		2020 Pre-Development		2020 Post-Development	
From	To			Volume	V/C	Volume	V/C	Volume	V/C
NE 179th Street (EB/WB)									
NE Delfel Road S	NE Delfel Road N	Pr-4cb	1800	240/138	0.13/0.08	260/172	0.14/0.10	263/184	0.15/0.10
NE Delfel Road N	I-5 SB Ramps	Pr-4cb	1800	483/259	0.27/0.14	509/293	0.28/0.16	511/302	0.28/0.17
NE 10th Avenue/ I-5 NB Off-Ramp	NE 15th Avenue	Pr-4cb	1800	260/317	0.14/0.18	348/417	0.19/0.23	349/419	0.19/0.23
NE 15th Avenue	NE 29th Avenue	Pr-4cb	1800	175/334	0.10/0.19	187/367	0.10/0.20	188/369	0.10/0.21
NE 29th Avenue	NE 50th Avenue	Pr-4cb	1800	173/210	0.10/0.12	186/236	0.10/0.13	187/237	0.10/0.13
NE 139th Street (EB/WB)									
NE Tenney Road	NE 10th Avenue	M-4cb	1800	334/475	0.19/0.26	367/500	0.20/0.28	375/504	0.21/0.28
NE 10th Avenue	RIRO Access	M-4cb	1800	585/557	0.33/0.31	624/593	0.35/0.33	641/635	0.36/0.35
RIRO Access	I-5 SB On-Ramp	M-4cb	1800	602/557	0.33/0.31	645/592	0.36/0.33	662/634	0.37/0.35
I-205 NB On-Ramp	NE 20th Avenue	M-4cb	1800	455/787	0.25/0.44	653/917	0.36/0.51	661/943	0.37/0.52
NE 20th Avenue	NE 23rd Avenue	C-2cb/ M-4cb	900/ 1800	259/332	0.29/0.18	521/457	0.58/0.25	521/477	0.58/0.27
NE 23rd Avenue	NE 29th Avenue	C-2cb	900	107/247	0.12/0.27	256/348	0.28/0.39	256/352	0.28/0.39

TABLE 12 – AM PEAK HOUR ROADWAY CAPACITY ANALYSIS									
Segment		Arterial Class	Capacity	Existing (2018)		2020 Pre-Development		2020 Post-Development	
From	To			Volume	V/C	Volume	V/C	Volume	V/C
NE Tenney Road/NE 134th Street/NE Salmon Creek Avenue (EB/WB)									
NE 10th Avenue	I-5 SB On-Ramp	M-4cb	1800	814/542	0.45/0.30	869/539	0.48/0.30	877/551	0.49/0.31
I-5 SB On-Ramp	I-5 NB Off-Ramp	M-4cb	1800	894/548	0.50/0.30	1034/609	0.57/0.34	1038/612	0.58/0.34
NE 20th Avenue	I-205 SB On-Ramp	M-4cb	1800	1352/829	0.75/0.46	1487/903	0.83/0.50	1498/907	0.83/0.50
I-205 NB Off-Ramp/ NE 23rd Avenue	NE 29th Avenue	M-4cb	1800	663/389	0.37/0.22	822/483	0.46/0.27	823/484	0.46/0.27
NE 29th Avenue	NE Salmon Creek Avenue	M-4cb	1800	691/334	0.38/0.19	980/532	0.54/0.30	981/534	0.55/0.30
NE 134th Street	NE 50th Avenue	C-2cb	900	645/265	0.72/0.29	968/468	**1.08**/0.52	968/469	**1.08**/0.52
NE 10th Avenue/NE Delfel Road South (NB/SB)									
NE 179th Street	NE 149th Street	C-2cb	900	17/45	0.02/0.05	58/92	0.06/0.10	61/104	0.07/0.12
NE 149th Street	NE 141st Street	C-2cb	900	113/507	0.13/0.56	130/554	0.14/0.62	135/570	0.15/0.63
NE 141st Street	NE 139th Street	C-2cb	900	297/461	0.33/0.51	310/506	0.34/0.56	388/553	0.43/0.61
NE 139th Street	NE 136th Street	C-2cb	900	123/170	0.14/0.19	118/192	0.13/0.21	130/202	0.14/0.22
NE 136th Street	NE 134th Street	C-2cb	900	145/175	0.16/0.19	136/192	0.15/0.21	148/202	0.16/0.22
NE 15th Avenue/NE 20th Avenue/NE Highway (NB/SB)									
NE 179th Street	NE 144th Street	M-2cb	900	127/189	0.14/0.21	181/294	0.20/0.33	181/294	0.20/0.33
NE 144th Street	NE 139th Street	M-4cb	1800	505/544	0.28/0.30	527/572	0.29/0.32	528/573	0.29/0.32
NE 139th Street	NE 134th Street	M-4cb	1800	643/350	0.36/0.19	718/367	0.40/0.20	723/374	0.40/0.21
NE 134th Street	NE 117th Street	Pr-4cb	1800	797/454	0.44/0.25	853/478	0.47/0.27	857/479	0.48/0.27
NE 117th Street	NE 99th Street	Pr-4cb	1800	415/401	0.23/0.22	441/419	0.25/0.23	442/419	0.25/0.23
NE 23rd Avenue (NB/SB)									
NE 139th Street	NE 134th Street	C-2cb	900	414/223	0.46/0.25	493/320	0.55/0.36	509/320	0.57/0.36
NE 29th Avenue (NB/SB)									
NE 179th Street	NE 159th Street	M-2cb	900	132/124	0.15/0.14	148/141	0.16/0.16	149/141	0.17/0.16
NE 144th Street	NE 139th Street	M-2cb	900	115/284	0.13/0.32	134/327	0.15/0.36	134/328	0.15/0.36
NE 139th Street	NE 134th Street	M-2cb	900	123/157	0.14/0.17	229/321	0.25/0.36	231/321	0.26/0.36

TABLE 13 – PM PEAK HOUR ROADWAY CAPACITY ANALYSIS									
Segment		Arterial Class	Capacity	Existing (2018)		2020 Pre-Development		2020 Post-Development	
From	To			Volume	V/C	Volume	V/C	Volume	V/C
NE 179th Street (EB/WB)									
NE Delfel Road S	NE Delfel Road N	Pr-4cb	1800	287/256	0.16/0.14	322/302	0.18/0.17	340/324	0.19/0.18
NE Delfel Road N	I-5 SB Ramps	Pr-4cb	1800	398/421	0.22/0.23	435/471	0.24/0.26	447/487	0.25/0.27
NE 10th Avenue/ I-5 NB Off-Ramp	NE 15th Avenue	Pr-4cb	1800	410/397	0.23/0.22	640/875	0.36/0.49	644/879	0.36/0.49
NE 15th Avenue	NE 29th Avenue	Pr-4cb	1800	343/295	0.19/0.16	410/357	0.23/0.20	414/361	0.23/0.20
NE 29th Avenue	NE 50th Avenue	Pr-4cb	1800	282/184	0.16/0.10	329/217	0.18/0.12	332/220	0.18/0.12
NE 139th Street (EB/WB)									
NE Tenney Road	NE 10th Avenue	M-4cb	1800	546/490	0.30/0.27	586/528	0.33/0.29	600/544	0.33/0.30
NE 10th Avenue	RIRO Access	M-4cb	1800	831/965	0.46/0.54	868/1036	0.48/0.58	938/1107	0.52/0.62
RIRO Access	I-5 SB On-Ramp	M-4cb	1800	904/965	0.50/0.54	944/1037	0.52/0.58	1014/1108	0.56/0.62
I-205 NB On-Ramp	NE 20th Avenue	M-4cb	1800	647/1396	0.36/0.78	721/1641	0.40/**0.91**	760/1683	0.42/**0.94**
NE 20th Avenue	NE 23rd Avenue	C-2cb/ M-4cb	900/ 1800	313/613	0.35/0.34	426/879	0.47/0.49	432/912	0.48/0.51
NE 23rd Avenue	NE 29th Avenue	C-2cb	900	279/318	0.31/0.35	340/492	0.38/0.55	344/497	0.38/0.55
NE Tenney Road/NE 134th Street/NE Salmon Creek Avenue (EB/WB)									
NE 10th Avenue	I-5 SB On-Ramp	M-4cb	1800	1119/913	0.62/0.51	1184/949	0.66/0.53	1222/975	0.68/0.54
I-5 SB On-Ramp	I-5 NB Off-Ramp	M-4cb	1800	941/885	0.52/0.49	1039/949	0.58/0.53	1051/957	0.58/0.53
NE 20th Avenue	I-205 SB On-Ramp	M-4cb	1800	1291/1145	0.72/0.64	1373/1222	0.76/0.68	1413/1230	0.79/0.68
I-205 NB Off-Ramp/ NE 23rd Avenue	NE 29th Avenue	M-4cb	1800	546/707	0.30/0.39	598/779	0.33/0.43	600/781	0.33/0.43
NE 29th Avenue	NE Salmon Creek Avenue	M-4cb	1800	624/653	0.35/0.36	734/781	0.41/0.43	738/785	0.41/0.44
NE 134th Street	NE 50th Avenue	C-2cb	900	391/553	0.43/0.61	476/682	0.53/0.76	477/683	0.53/0.76
NE 10th Avenue/NE Delfel Road South (NB/SB)									
NE 179th Street	NE 149th Street	C-2cb	900	71/55	0.08/0.06	119/112	0.13/0.12	137/134	0.15/0.15
NE 149th Street	NE 141st Street	C-2cb	900	325/512	0.36/0.57	371/553	0.41/0.61	397/582	0.44/0.65
NE 141st Street	NE 139th Street	C-2cb	900	580/525	0.64/0.58	627/567	0.70/0.63	778/737	0.86/0.82
NE 139th Street	NE 136th Street	C-2cb	900	255/307	0.28/0.34	263/335	0.29/0.37	289/379	0.32/0.42
NE 136th Street	NE 134th Street	C-2cb	900	190/407	0.21/0.45	190/433	0.21/0.48	216/477	0.24/0.53
NE 15th Avenue/NE 20th Avenue/NE Highway (NB/SB)									
NE 179th Street	NE 144th Street	M-2cb	900	71/55	0.08/0.06	119/112	0.13/0.12	137/134	0.15/0.15
NE 144th Street	NE 139th Street	M-4cb	1800	325/512	0.36/0.57	371/553	0.41/0.61	397/582	0.44/0.65
NE 139th Street	NE 134th Street	M-4cb	1800	580/525	0.64/0.58	627/567	0.70/0.63	778/737	0.86/0.82
NE 134th Street	NE 117th Street	Pr-4cb	1800	255/307	0.28/0.34	263/335	0.29/0.37	289/379	0.32/0.42
NE 117th Street	NE 99th Street	Pr-4cb	1800	190/407	0.21/0.45	190/433	0.21/0.48	216/477	0.24/0.53

TABLE 13 – PM PEAK HOUR ROADWAY CAPACITY ANALYSIS									
Segment		Arterial Class	Capacity	Existing (2018)		2020 Pre-Development		2020 Post-Development	
From	To			Volume	V/C	Volume	V/C	Volume	V/C
NE 23rd Avenue (NB/SB)									
NE 139th Street	NE 134th Street	C-2cb	900	416/367	0.46/0.41	512/454	0.57/0.50	540/454	0.60/0.50
NE 29th Avenue (NB/SB)									
NE 179th Street	NE 159th Street	M-2cb	900	155/123	0.17/0.14	193/153	0.21/0.17	194/154	0.22/0.17
NE 144th Street	NE 139th Street	M-2cb	900	331/234	0.37/0.26	374/255	0.42/0.28	376/256	0.42/0.28
NE 139th Street	NE 134th Street	M-2cb	900	246/207	0.27/0.23	340/272	0.38/0.30	343/274	0.38/0.30

All roadways currently meet and are anticipated to continue to meet the County's capacity standard of 0.90 or better under all development scenarios except for two segments:

- During the AM peak hour, the segment of NE Salmon Creek Avenue between NE 134th Street and NE 50th Avenue is anticipated to have a v/c ratio of 1.08 in the eastbound direction under pre-development conditions. The v/c ratio is not anticipated to change under post-development conditions because the proposed Skyview Station will not add any new trips to this link in this direction.
- During the PM peak hour, the segment of N 139th Street between the I-205 NB On-Ramp and NE 20th Avenue is anticipated to have a v/c ratio of 0.91 in the westbound direction under pre-development conditions and 0.94 under post development conditions. However, this segment is not controlled by a traffic signal or STOP sign; thus, the capacity of the segment is underestimated using the concurrency methodology. This segment has a free right-turn movement onto the freeway ramp which more than 35% percent of the traffic uses. Once the traffic turns for the highway, the v/c ratio for the next segment would drop below 0.60 for all conditions.

In summary, neither segment listed above reflects a project impact that would trigger the need for mitigation. On NE Salmon Creek Avenue, the segment is over capacity under pre-development conditions and the proposed project does not change the v/c ratio of the link. On NE 139th Street, the arterial capacity assumption underestimates the capacity of this free-flow segment and capacity of the adjacent segment is well below the County's v/c ratio threshold.

VII. MITIGATION AND RECOMMENDATIONS

Operational concerns were identified at the site access on NE 10th Avenue. Potential mitigation measures are discussed below, followed by recommendations.

Potential Mitigation Measures

To address operational and queuing concerns at the intersection of NE 10th Avenue at NE 141st Street/Site Access, potential mitigation measures were considered.

Even with the traffic reductions at this intersection that could be realized with an access on NE 139th Street, the westbound left-turn movement from the site is anticipated to be over capacity under post-development conditions. Only one potential mitigation measure was considered at this intersection: a traffic signal at the site access on NE 10th Avenue. A preliminary review of peak hour signal warrants shows that the PM peak hour would meet the warrant threshold.

Table 14 summarizes intersection operations with these measures in place for all three access alternatives. The traffic signal was assumed to have permitted phasing in the east-west direction and protected/permitted phasing in the north-south direction. An actuated but uncoordinated cycle length of 90 seconds was assumed during both the AM and PM peak hours.

TABLE 14 – NE 10TH AVENUE/NE 141ST STREET/SITE ACCESS OPERATIONS WITH MITIGATION

Movement	Analysis Results (V/C Ratio - LOS - Delay)					
	Post-Development No Access		Post- Development Right-In Only		Post- Development Right-In/Right-Out	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Without Potential Mitigation						
EB	0.06-B-13	0.06-C-17	0.06-B-13	0.06-C-16	0.06-B-13	0.06-C-16
WBL	0.02-C-21	**2.04-F-573**	0.34-D-33	**1.91-F-509**	0.27-D-31	**1.52-F-346**
WBT+R	0.00-A-0	0.11-B-15	0.03-B-10	0.11-B-14	0.03-B-10	0.11-B-14
NBL	0.01-A-9	0.02-A-9	0.01-A-9	0.02-A-9	0.01-A-9	0.02-A-9
SBL	0.00-A-0	0.06-A-10	0.02-A-8	0.06-A-10	0.02-A-8	0.06-A-9
With Potential Mitigation						
Overall	0.56-A-7	0.74-B-15	0.56-A-7	0.68-B-13	0.54-A-6	0.65-B-12
EB	0.02-B-18	0.01-C-20	0.02-B-18	0.01-B-19	0.02-B-18	0.01-B-19
WBL	0.38-B-20	0.69-C-30	0.38-B-20	0.69-C-28	0.30-B-19	0.60-C-24
WBT+R	0.01-B-18	0.03-C-20	0.01-B-18	0.03-B-19	0.01-B-18	0.03-B-19
NBL	0.02-A-4	0.05-A-6	0.02-A-4	0.05-A-6	0.02-A-4	0.05-A-6
NBT+R	0.41-A-5	0.79-B-15	0.36-A-5	0.72-B-13	0.36-A-5	0.72-B-12
SBL	0.04-A-4	0.21-A-9	0.04-A-4	0.17-A-7	0.04-A-4	0.16-A-6
SBT+R	0.59-A-6	0.53-A-9	0.59-A-6	0.53-A-8	0.59-A-6	0.52-A-7

Installation of a traffic signal at the site access would greatly improve the operations for traffic leaving the site, with relatively short delays for other traffic movements at the intersection.

Recommendations

The following recommendations improve study area operations:

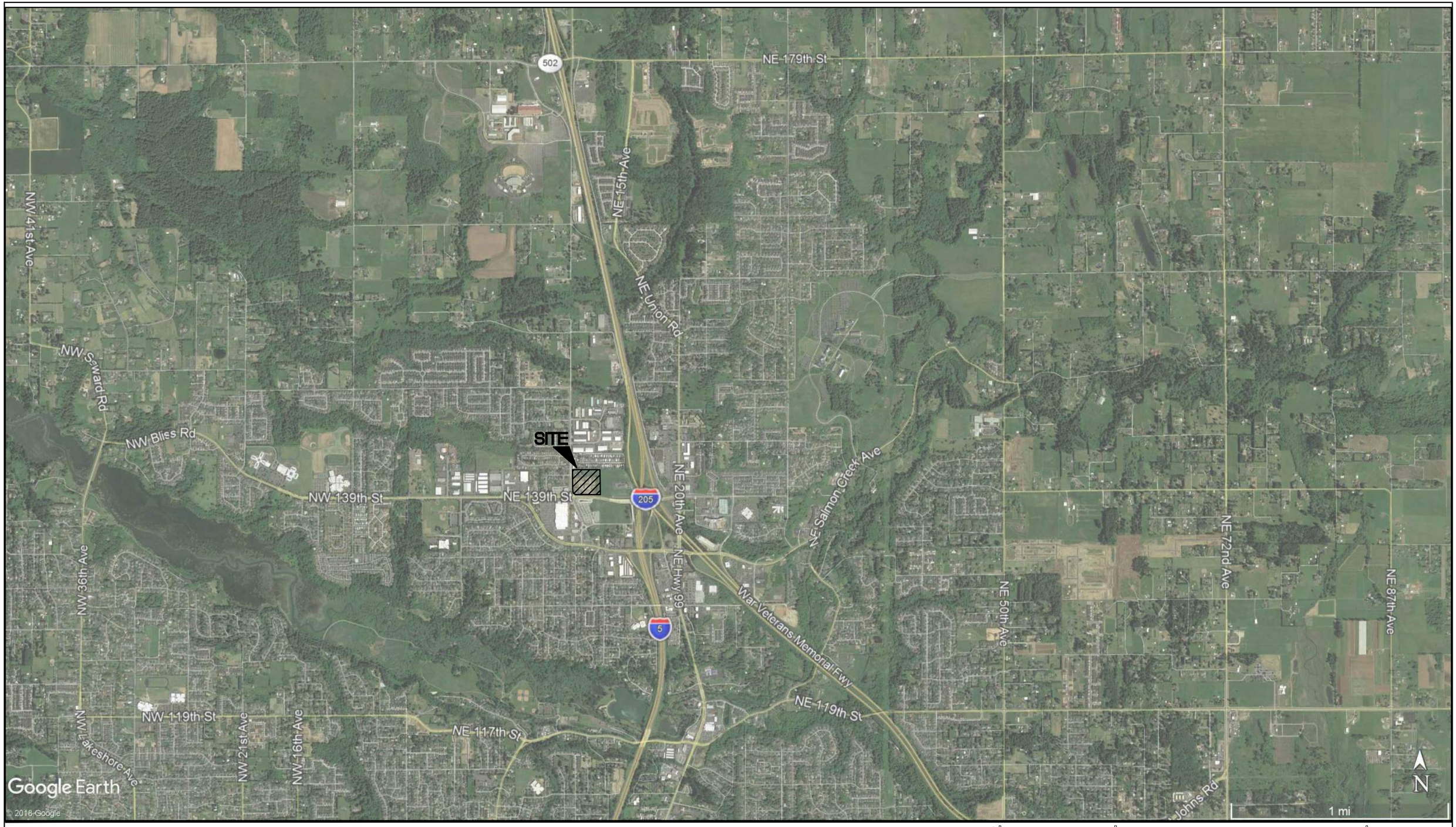
- A traffic signal is recommended at the intersection of NE 141st Street/Site Access/NE 10th Avenue with development of Skyview Station to reduce delays and queuing.
- The proposed RIRO access on NE 139th Street is recommended for the following reasons:
  - Site trip generation meets the County criteria for an additional driveway on a minor arterial.
  - The proposed location of the access on NE 139th Street will meet the driveway spacing criteria for arterials.
  - NE 139th Street is the only practical location for a second site access. A second access on NE 10th Avenue would provide no operational benefits to either the site or the surrounding transportation system.
  - If no additional access is provided on NE 139th Street, then all entering and exiting traffic would be concentrated at a single access point. Should circumstances arise, such as a severe crash on NE 10th Avenue that interferes with the operations of the primary site access, no other access options would be available.
  - The RIRO provides additional access for emergency vehicles entering/exiting the site.
  - Both the right-in and RIRO will reduce site traffic through the adjacent signalized intersection at NE 139th Street and NE 10th Avenue but the RIRO provides a greater reduction to traffic on NE 10th Avenue.
  - Both the right-in and RIRO improve operations at intersections adjacent to the site but the RIRO provides an overall greater benefit by more substantially reducing traffic demand on NE 10th Avenue and the full site access opposite NE 141st Street.
  - Both the right-in and RIRO reduce some queues at intersections adjacent to the site but the RIRO provides an overall greater benefit by reducing traffic demand at the full site access opposite NE 141st Street.

VIII. APPENDIX

Appendix A. Figures
Appendix B. Scoping Materials
Appendix C. Transit Information
Appendix D. Traffic Count Summaries & Balanced Volumes
Appendix E. Crash Data
Appendix F. In-Process Data
Appendix G. 10th Avenue Reroutes
Appendix H. Travel Demand Plots
Appendix I. Traffic Impact Fee Calculations
Appendix J. Signal Timing Information
Appendix K. Operations and Queuing Summary Tables
Appendix L. HCM Intersection Operations Calculations
Appendix M. SimTraffic 95th Percentile Queuing Calculations

APPENDIX A.

FIGURES



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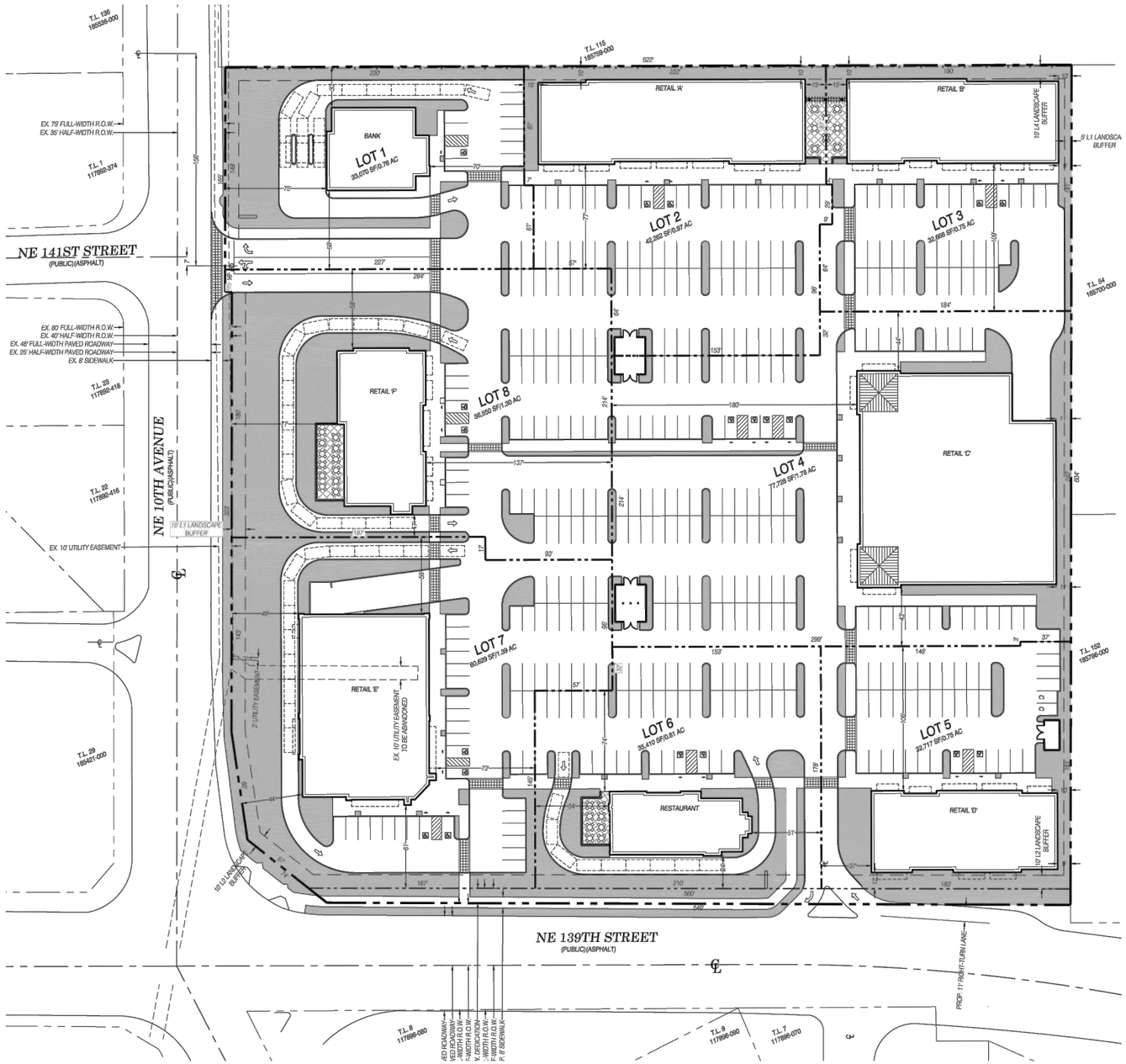
VICINITY MAP

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
1



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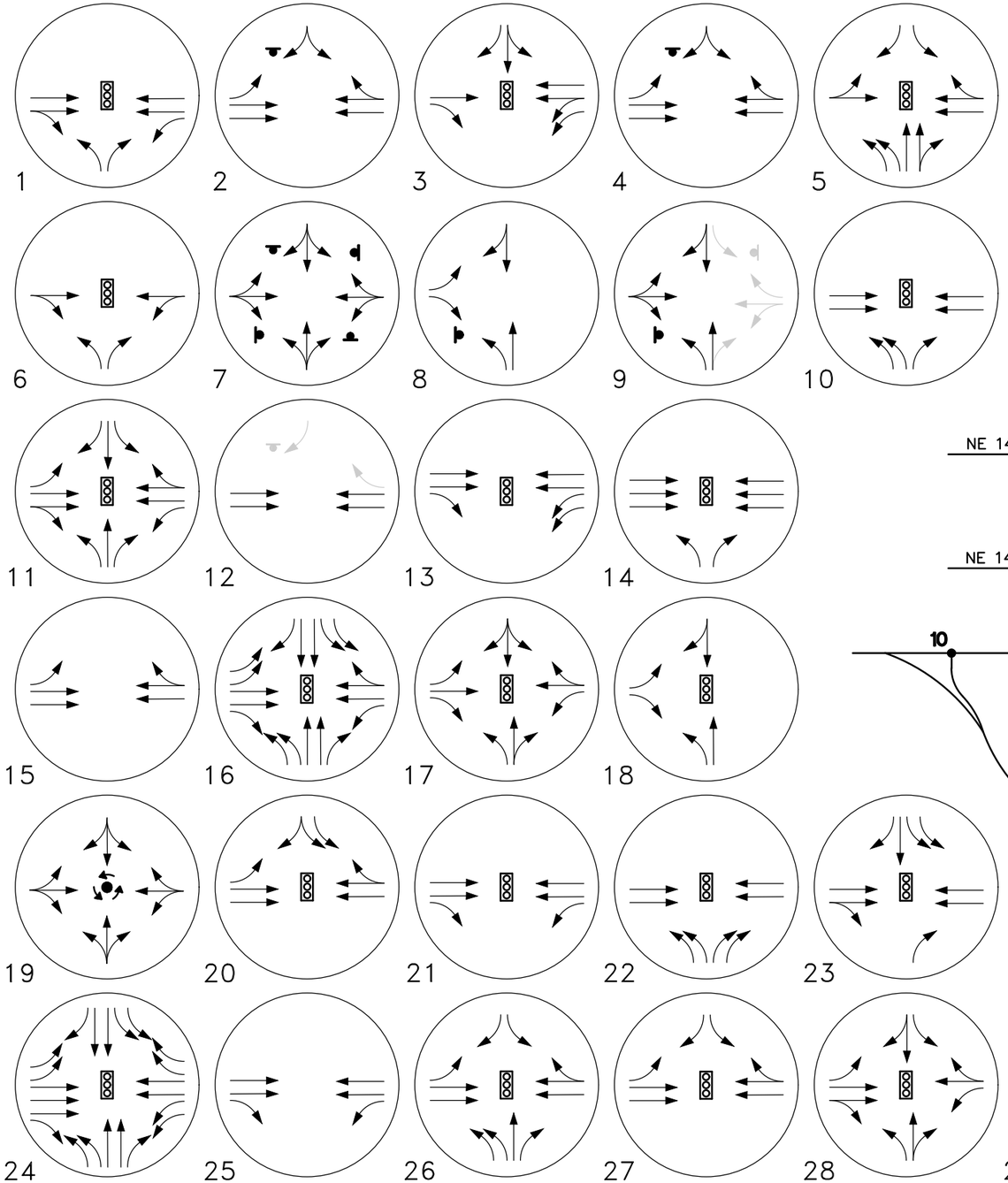
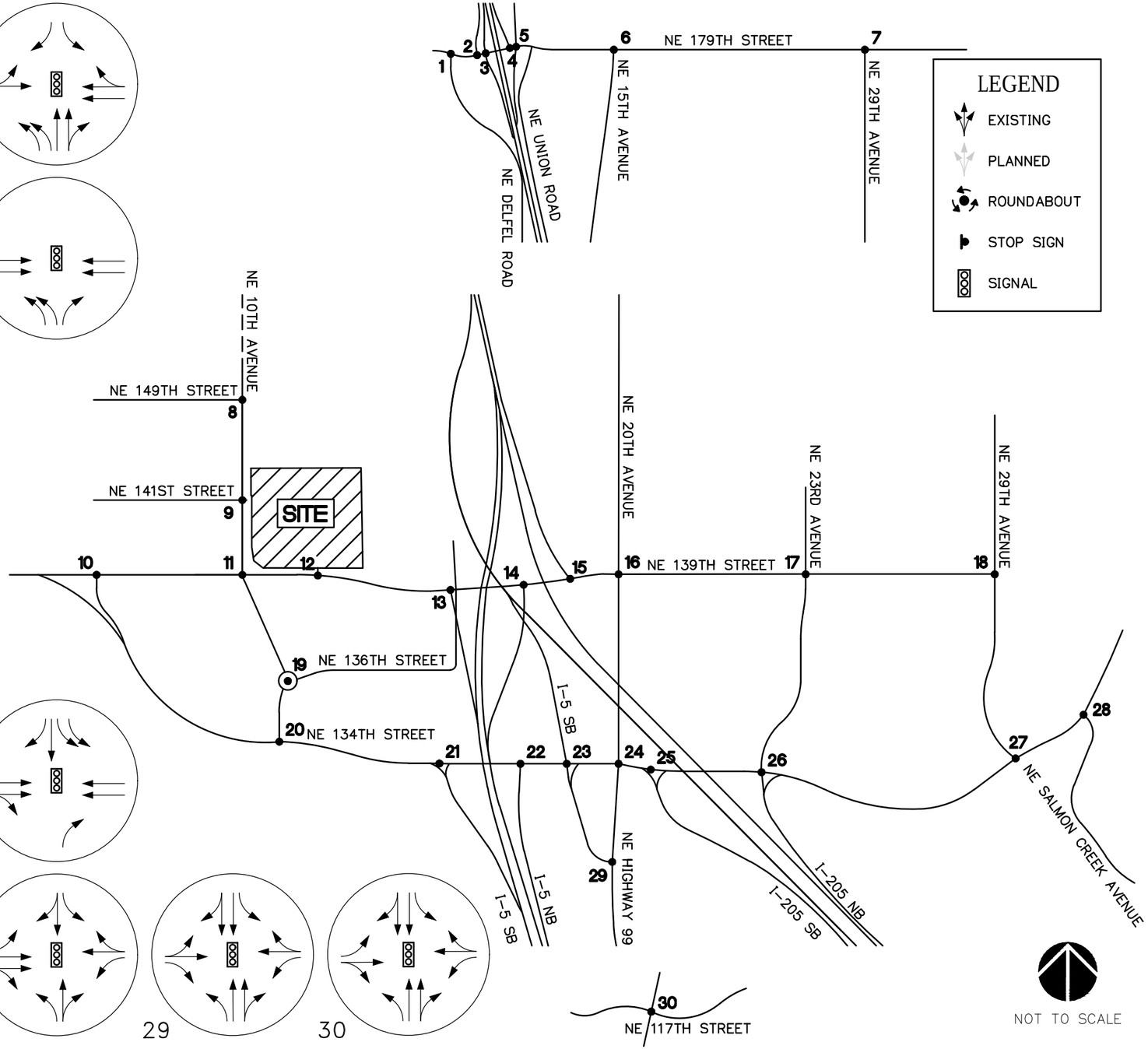
PROPOSED SITE PLAN

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE 2





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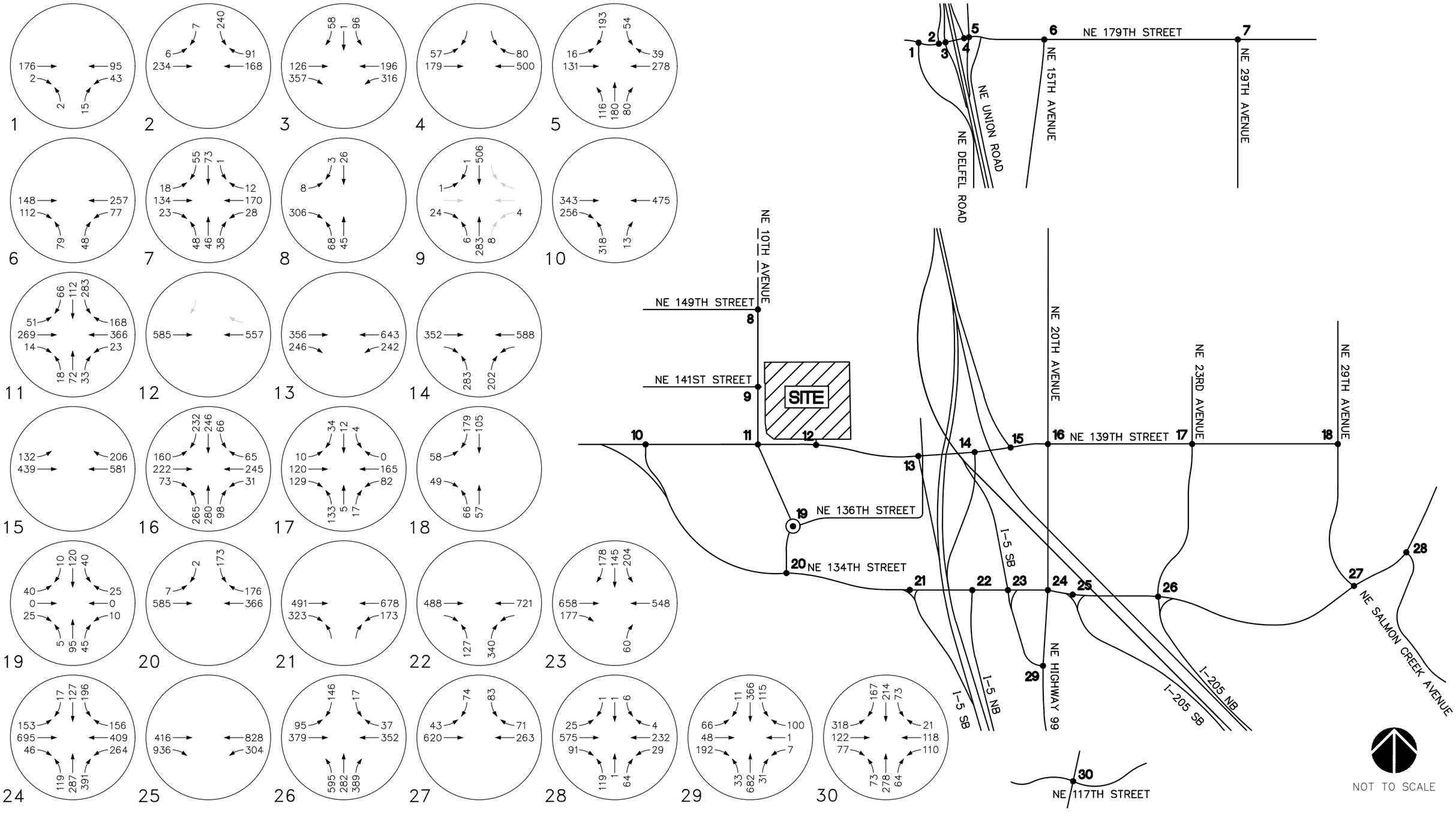
EXISTING + PLANNED TRAFFIC CONTROL DEVICES + LANE CONFIGURATIONS

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE 3



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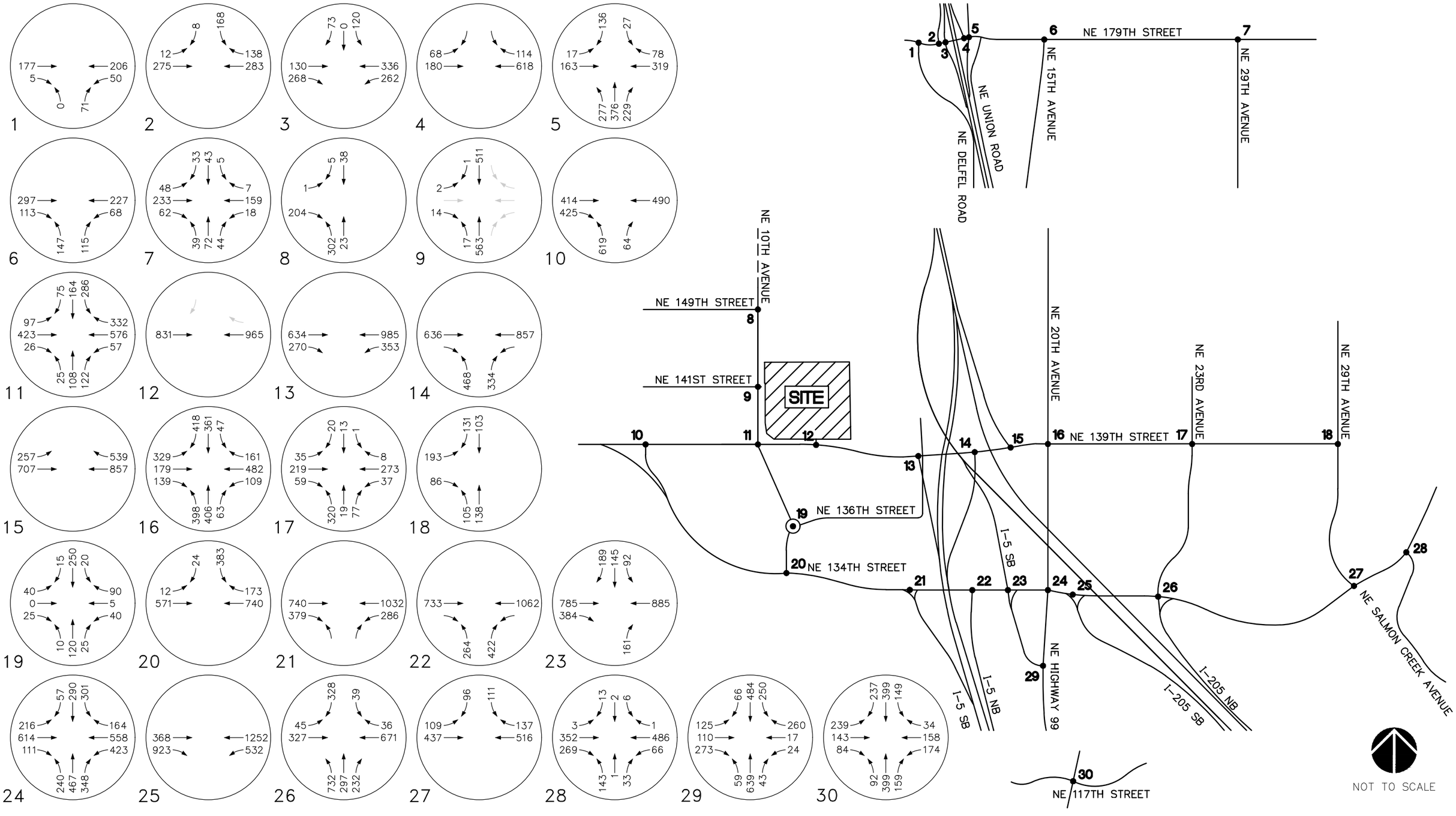
2018 EXISTING TRAFFIC - AM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
4A



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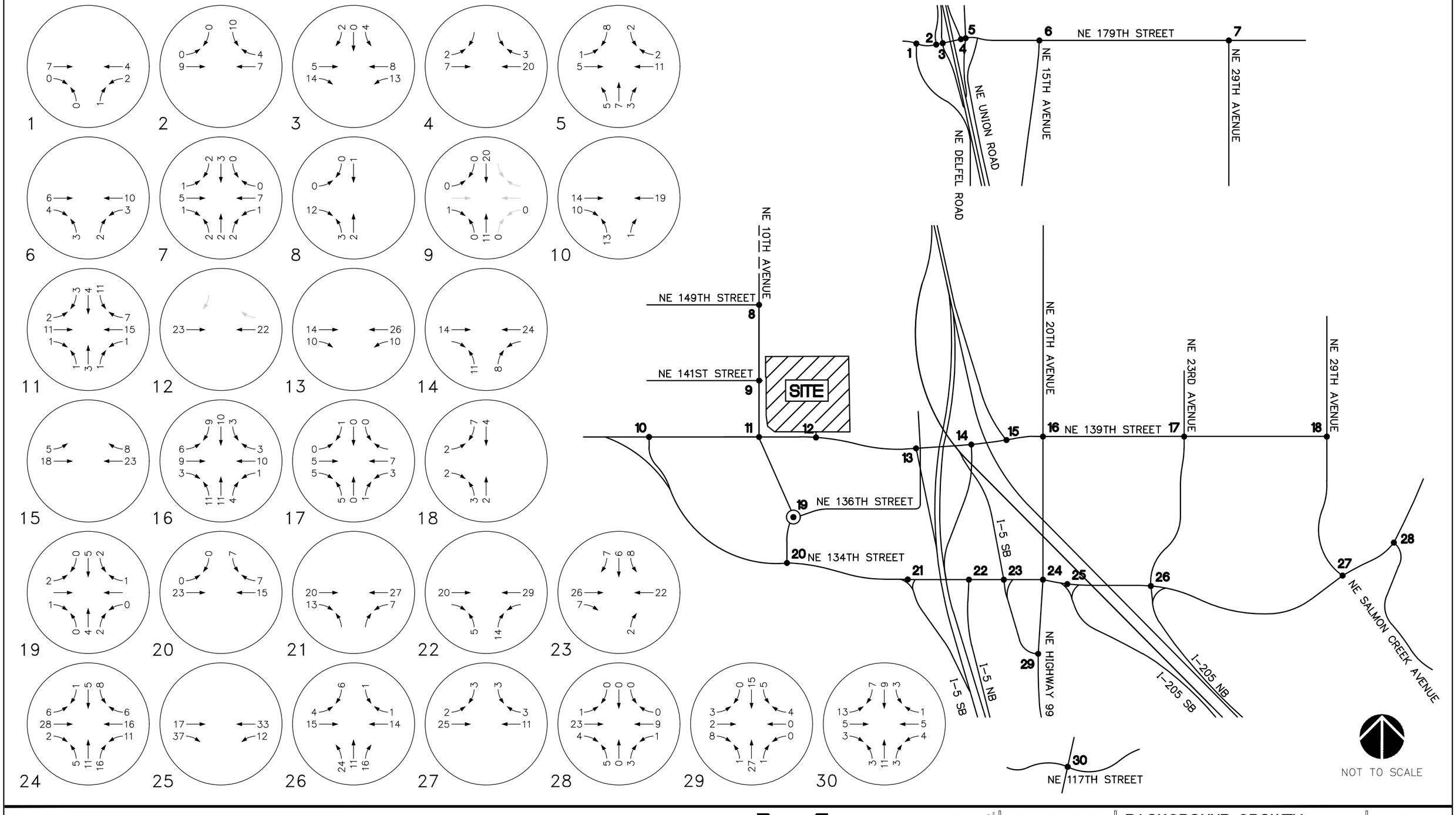
2018 EXISTING TRAFFIC - PM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
4B



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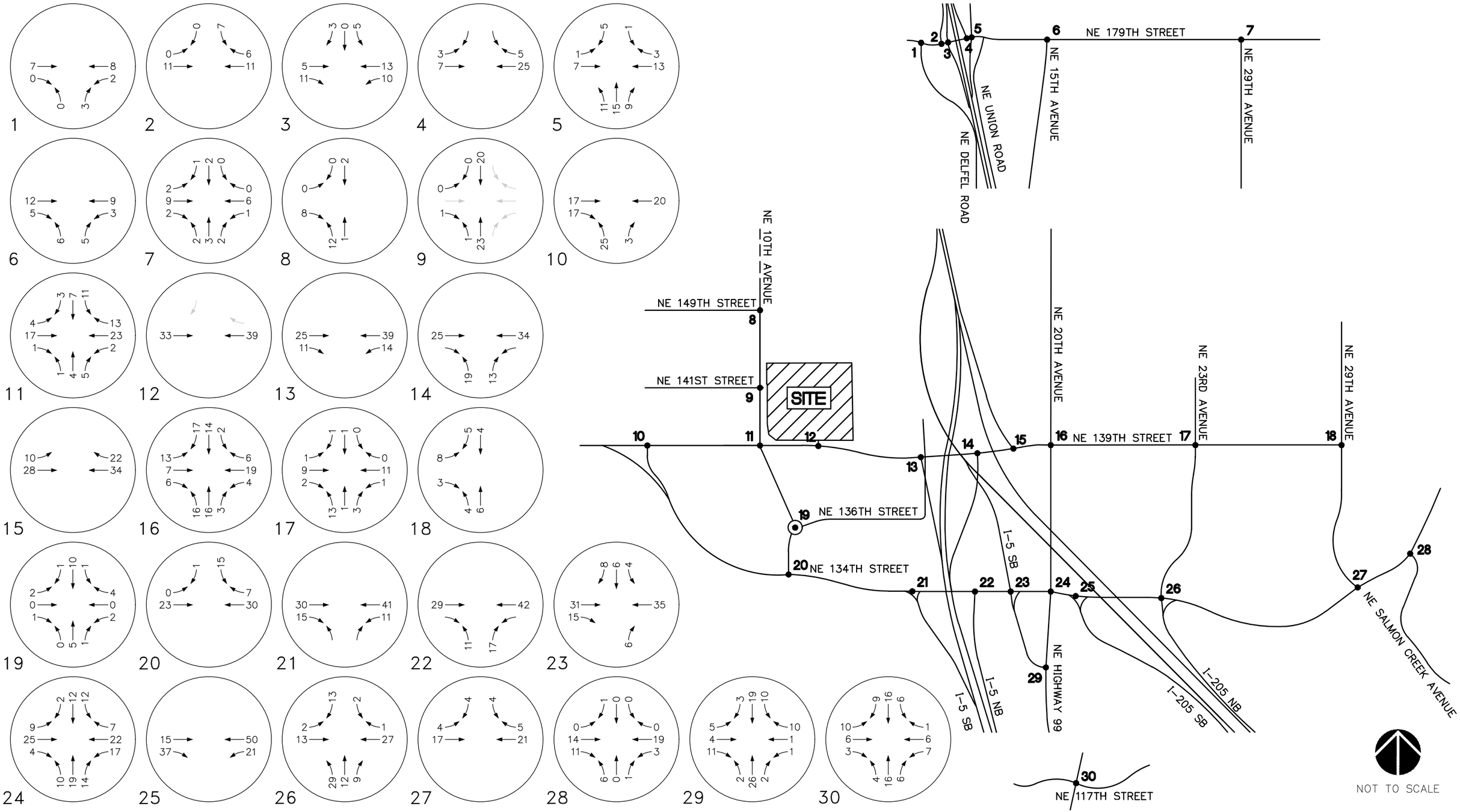
BACKGROUND GROWTH, 2 YEARS AT 2% PER YEAR - AM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
5A



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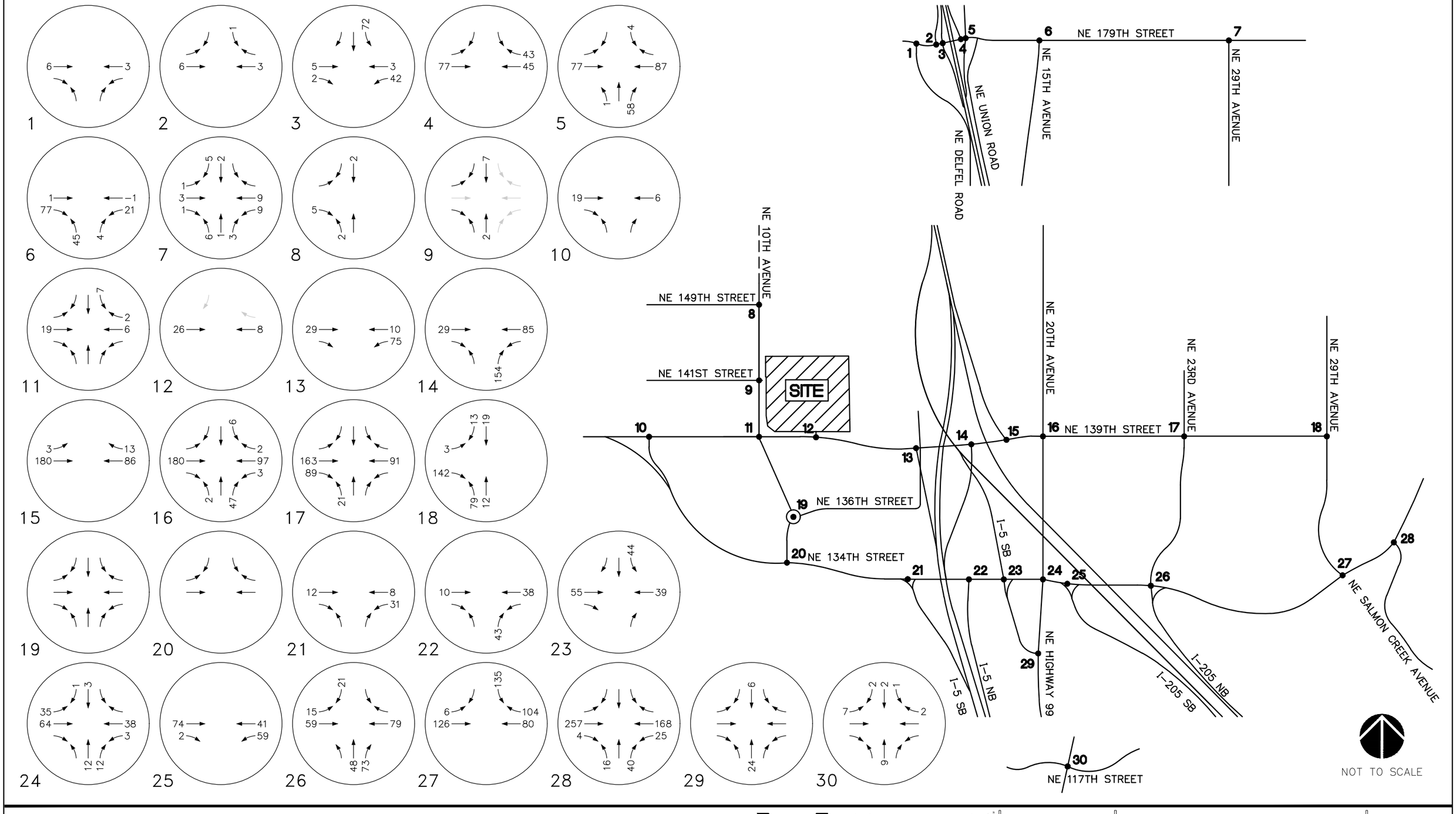
BACKGROUND GROWTH, 2 YEARS AT 2% PER YEAR - PM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE 5B



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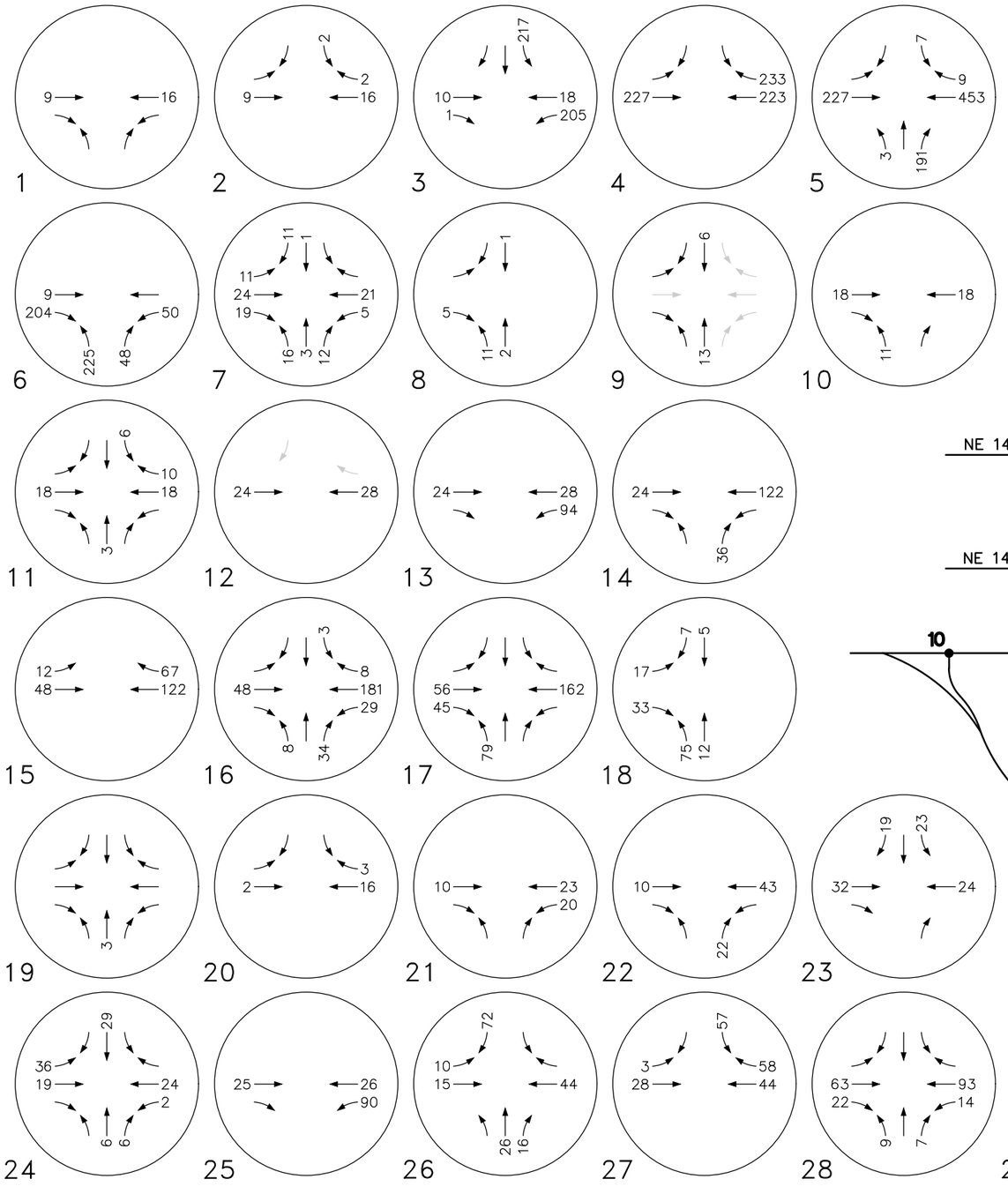
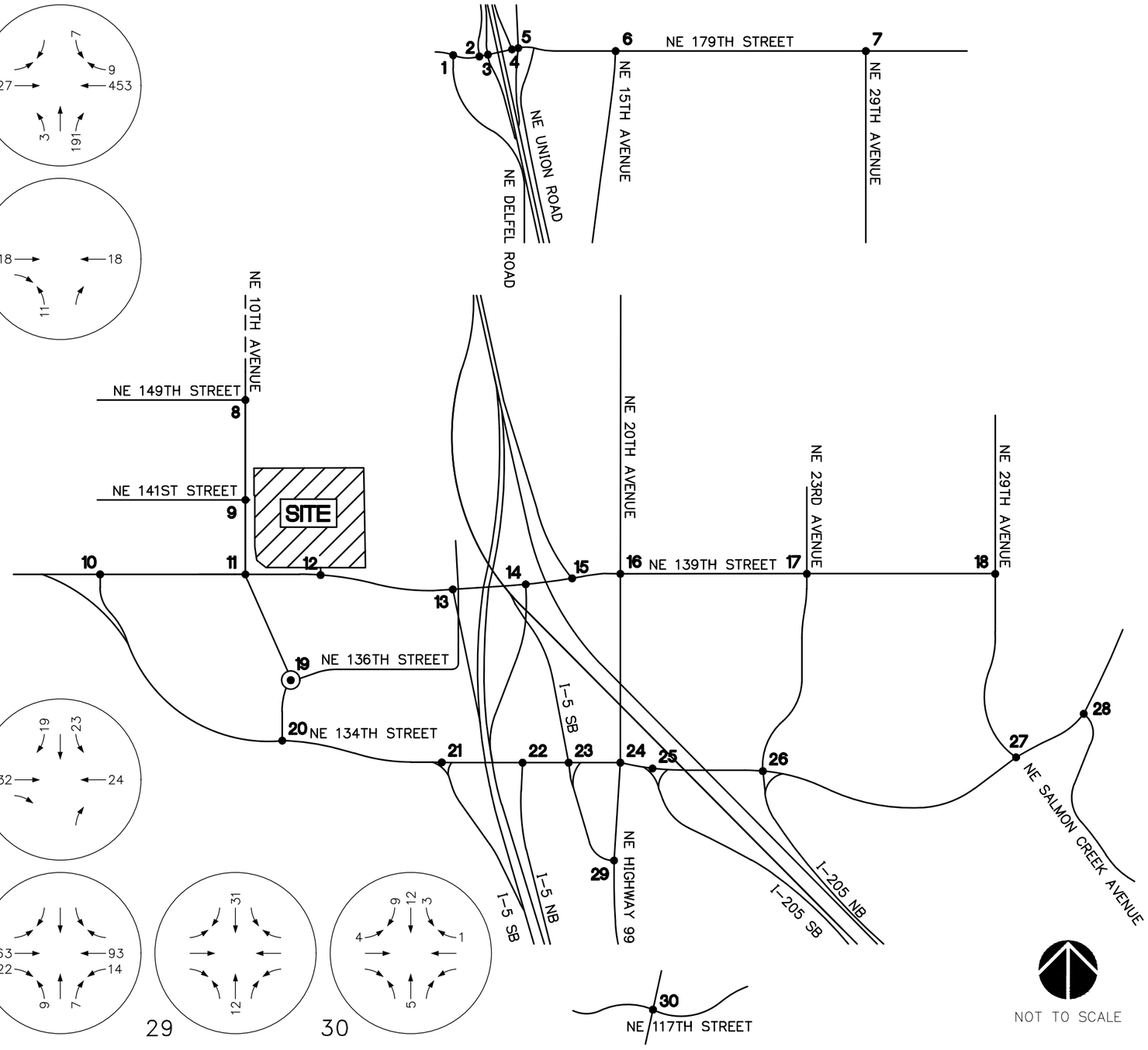
IN-PROCESS TRAFFIC - AM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
6A





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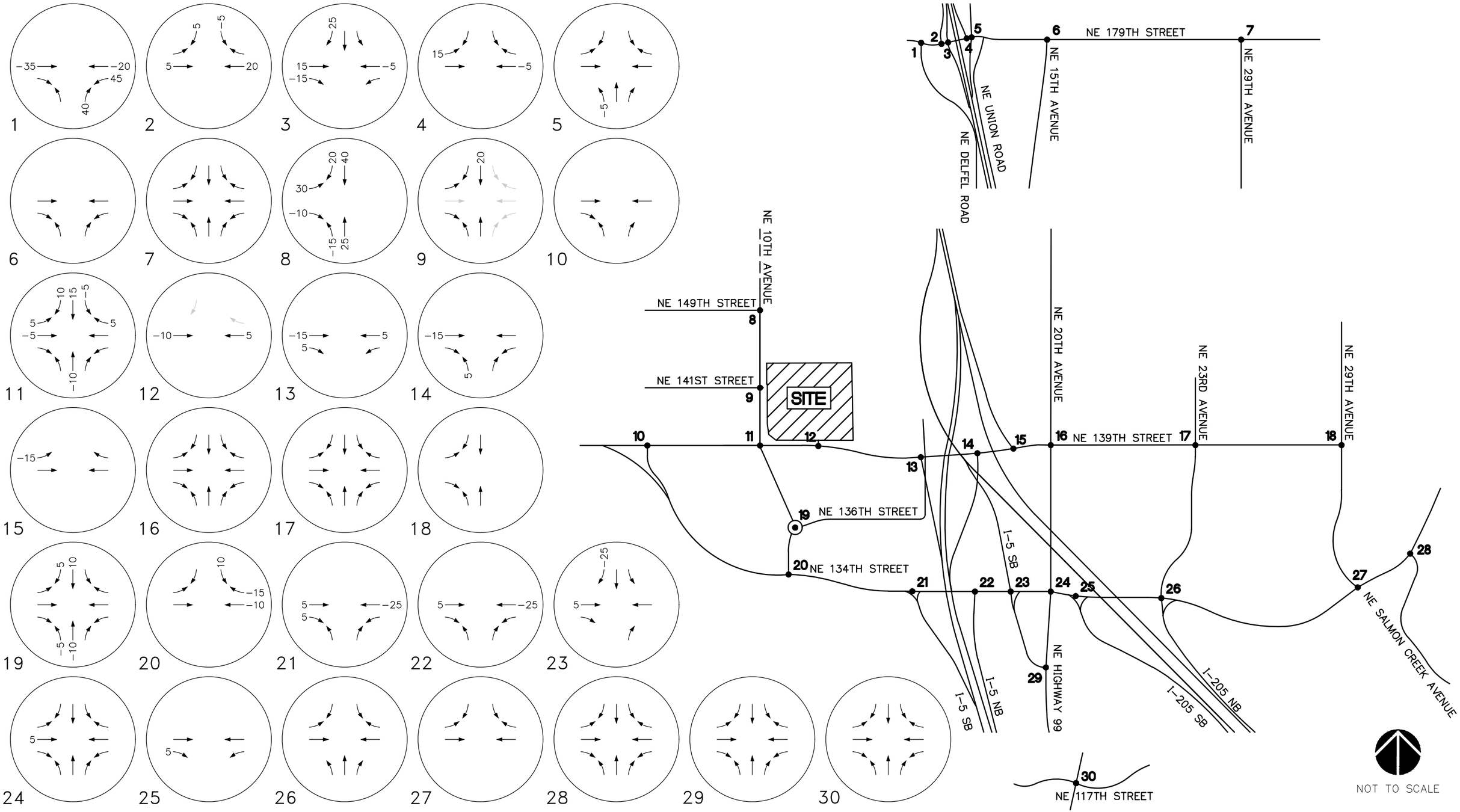
IN-PROCESS TRAFFIC - PM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
6B



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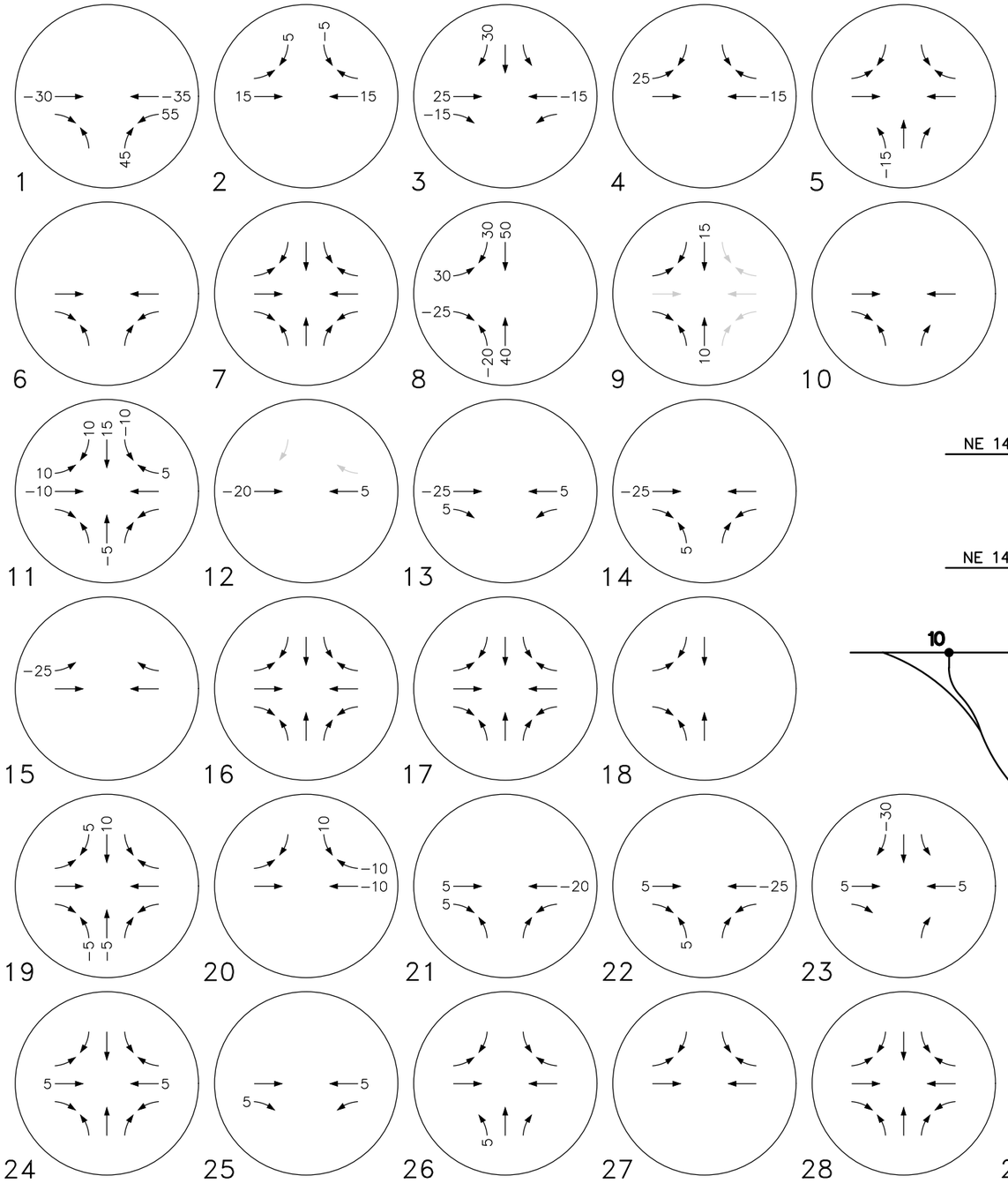
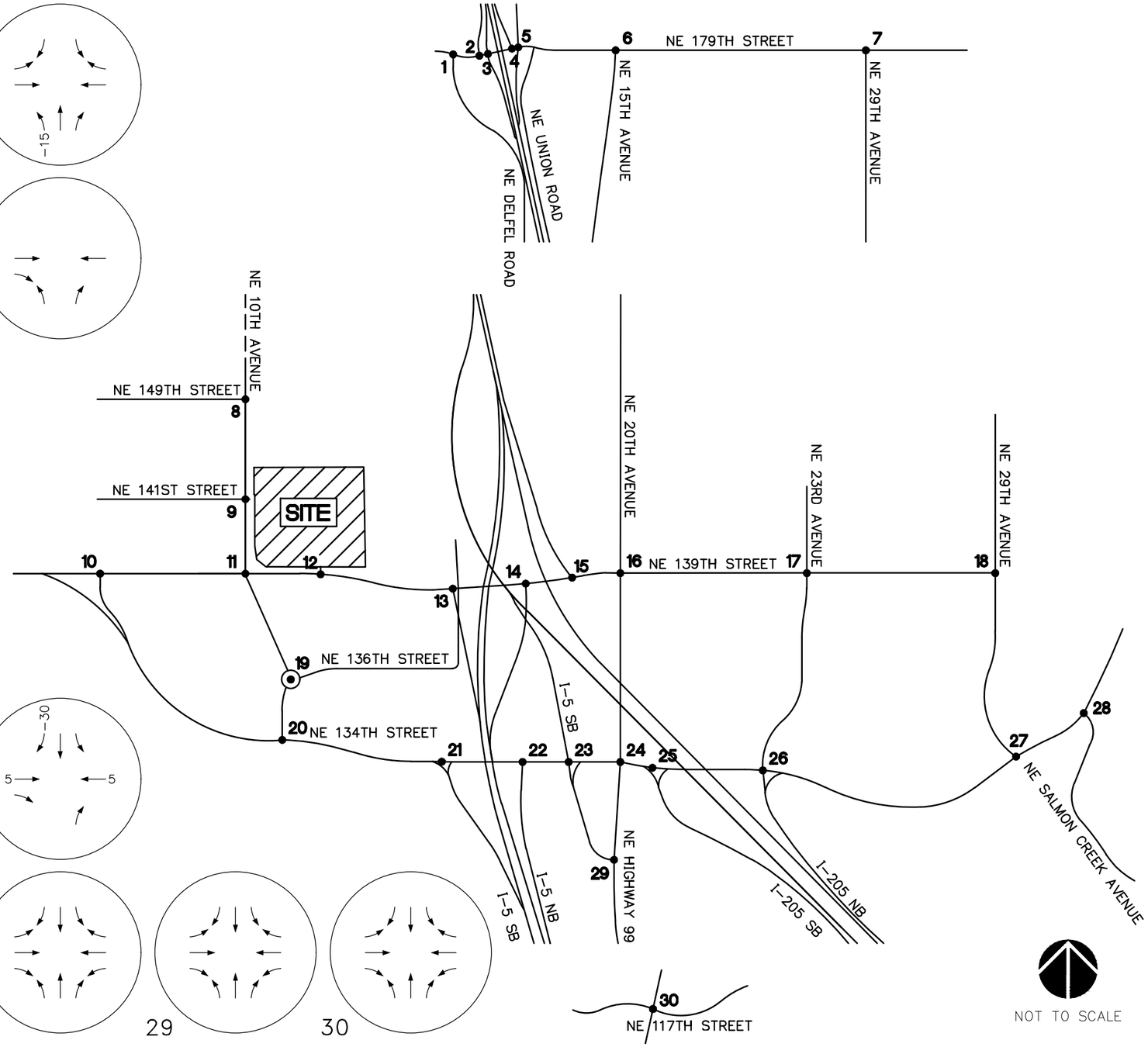
TRAFFIC REROUTES FOR 10TH AVENUE EXTENSION - AM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE 7A





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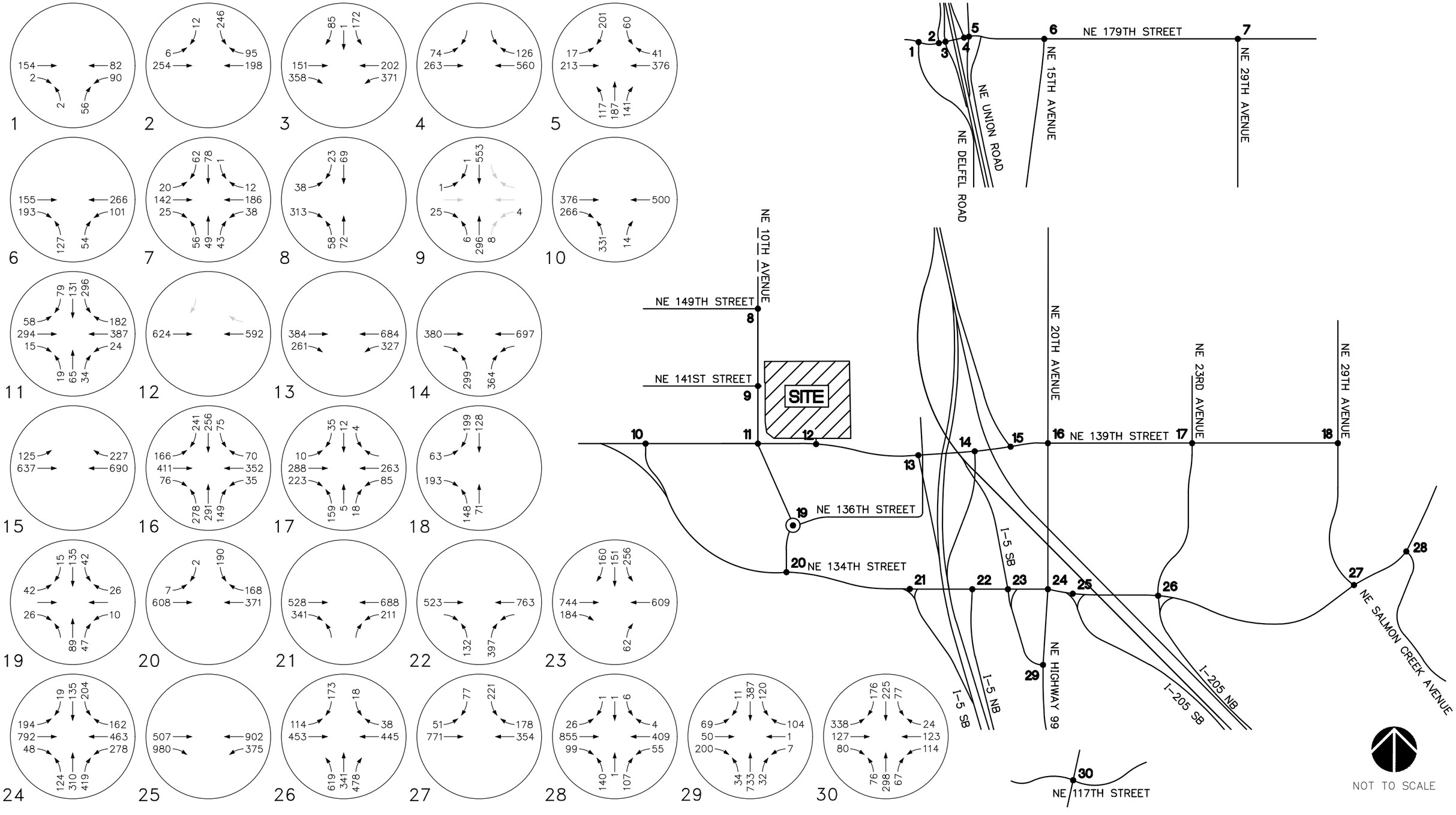
TRAFFIC REROUTES FOR 10TH AVENUE EXTENSION - PM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE 7B



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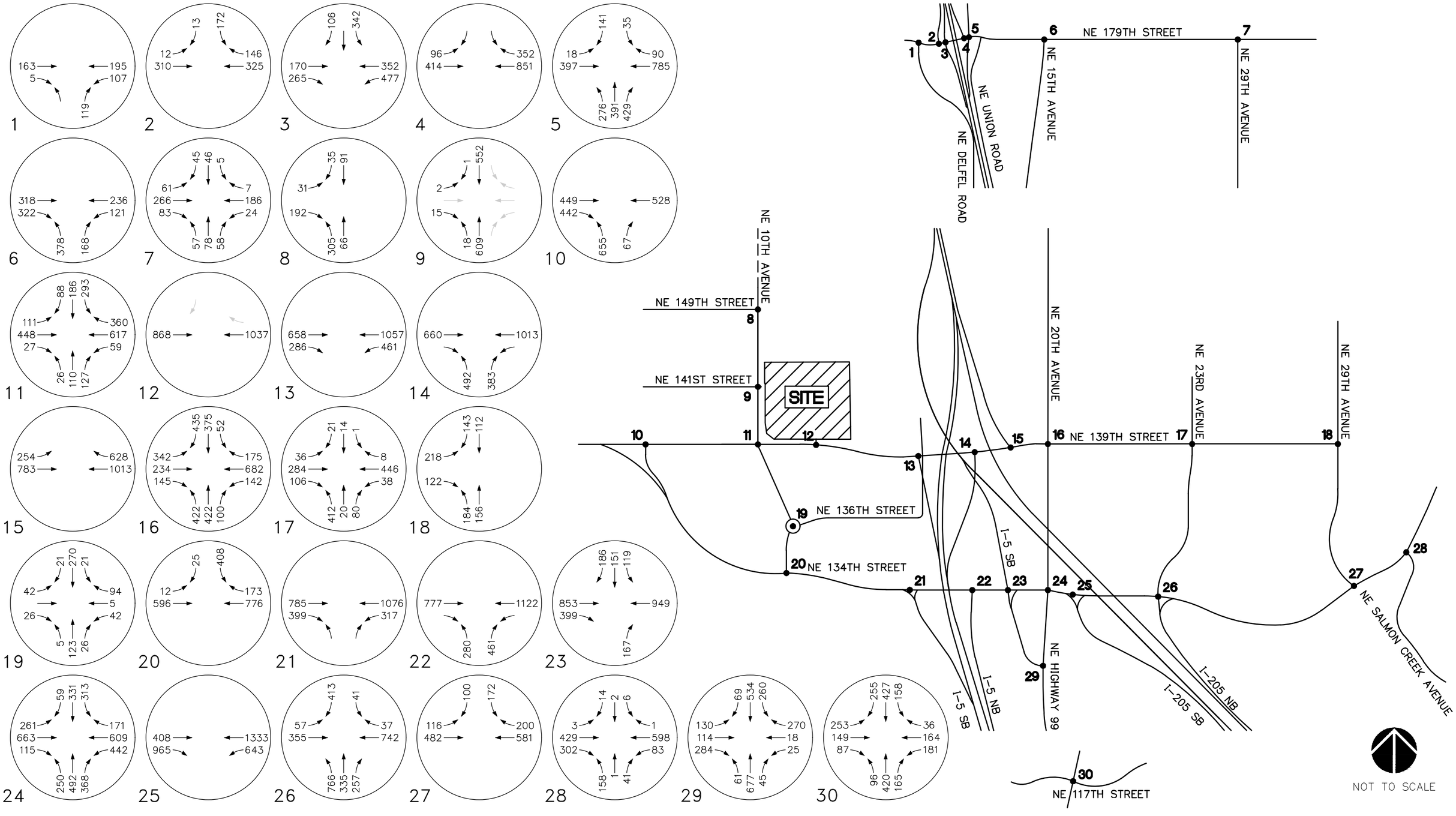
2020 PRE-DEVELOPMENT TRAFFIC VOLUMES - AM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
8A



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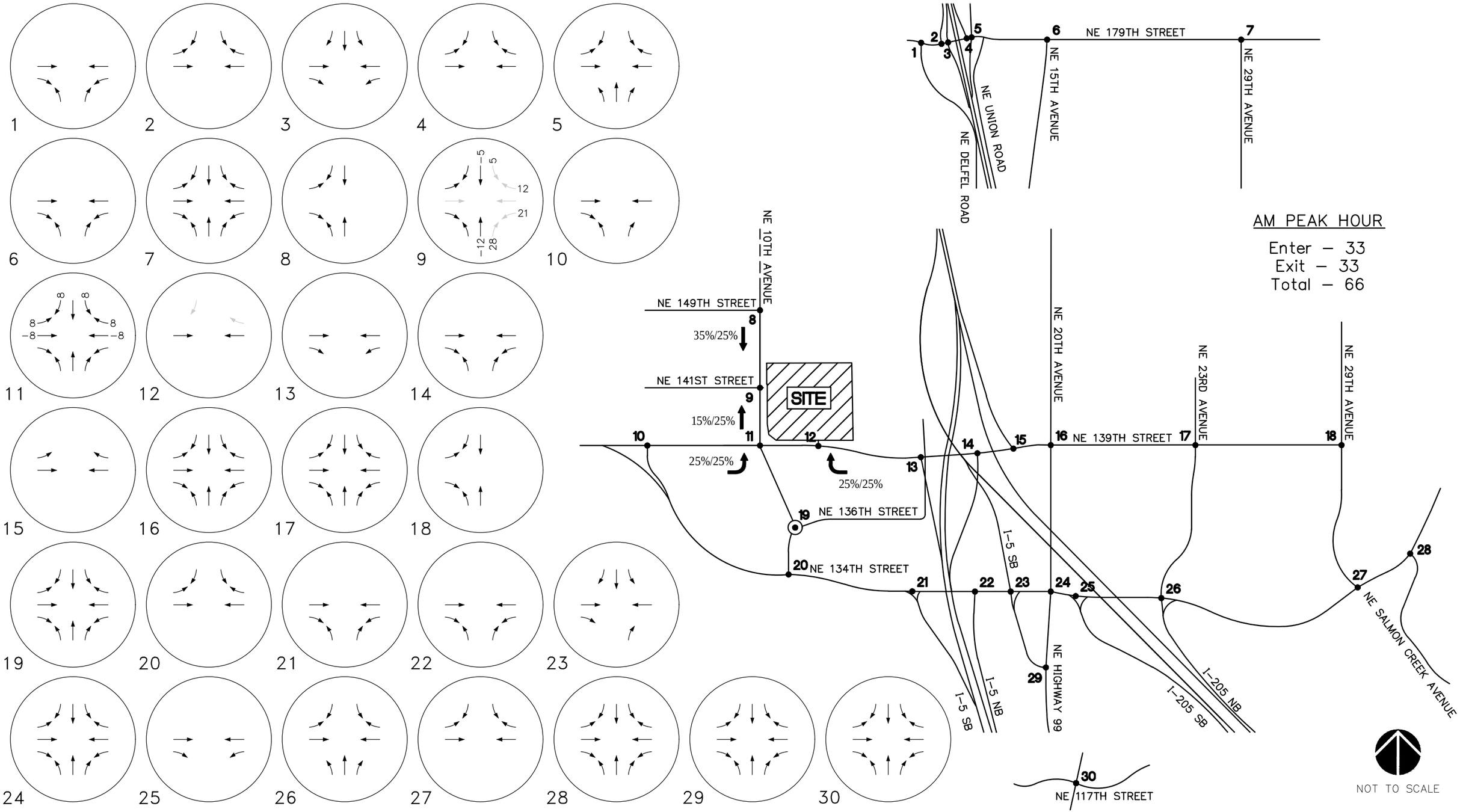
2020 PRE-DEVELOPMENT TRAFFIC VOLUMES - PM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
8B



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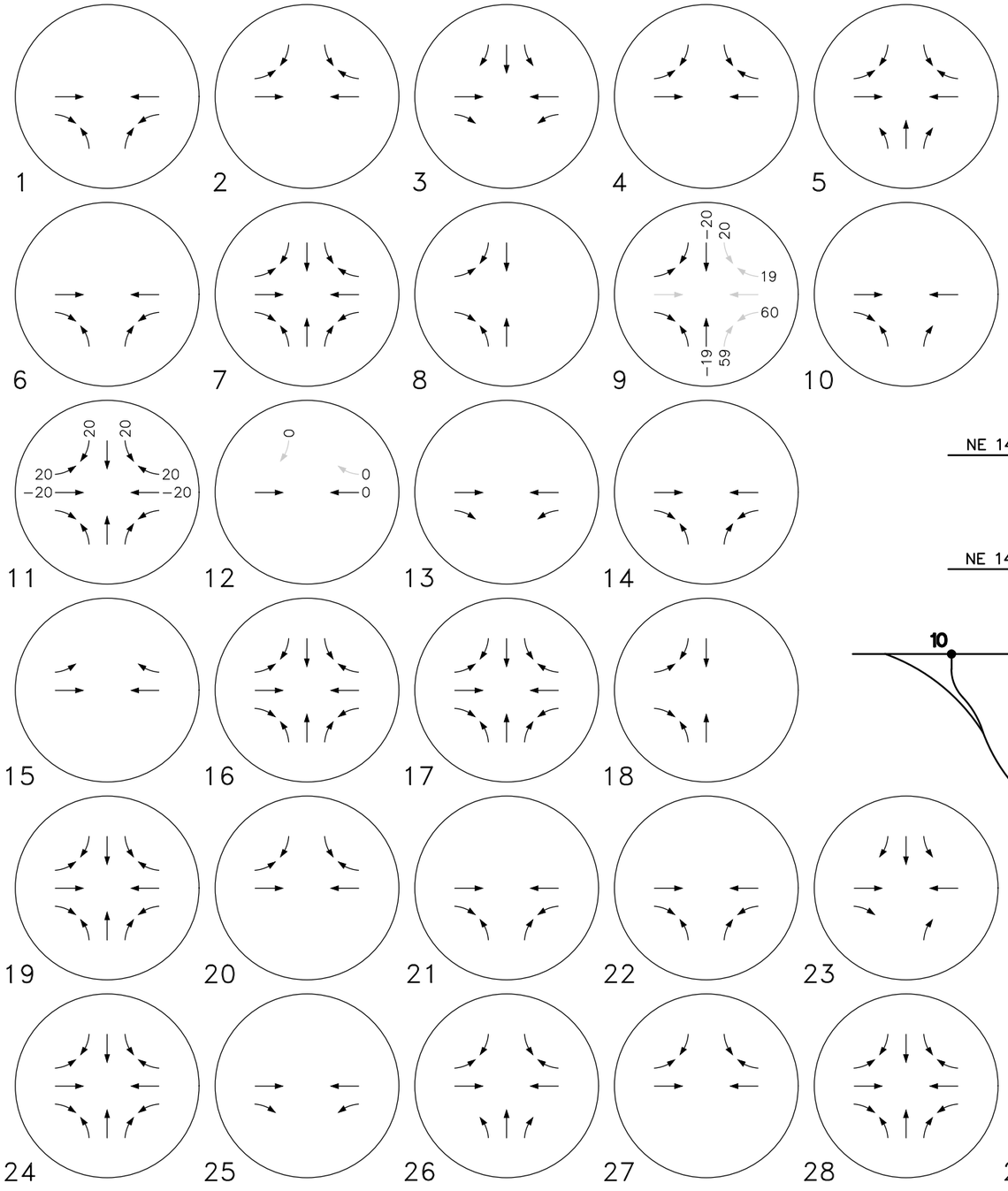
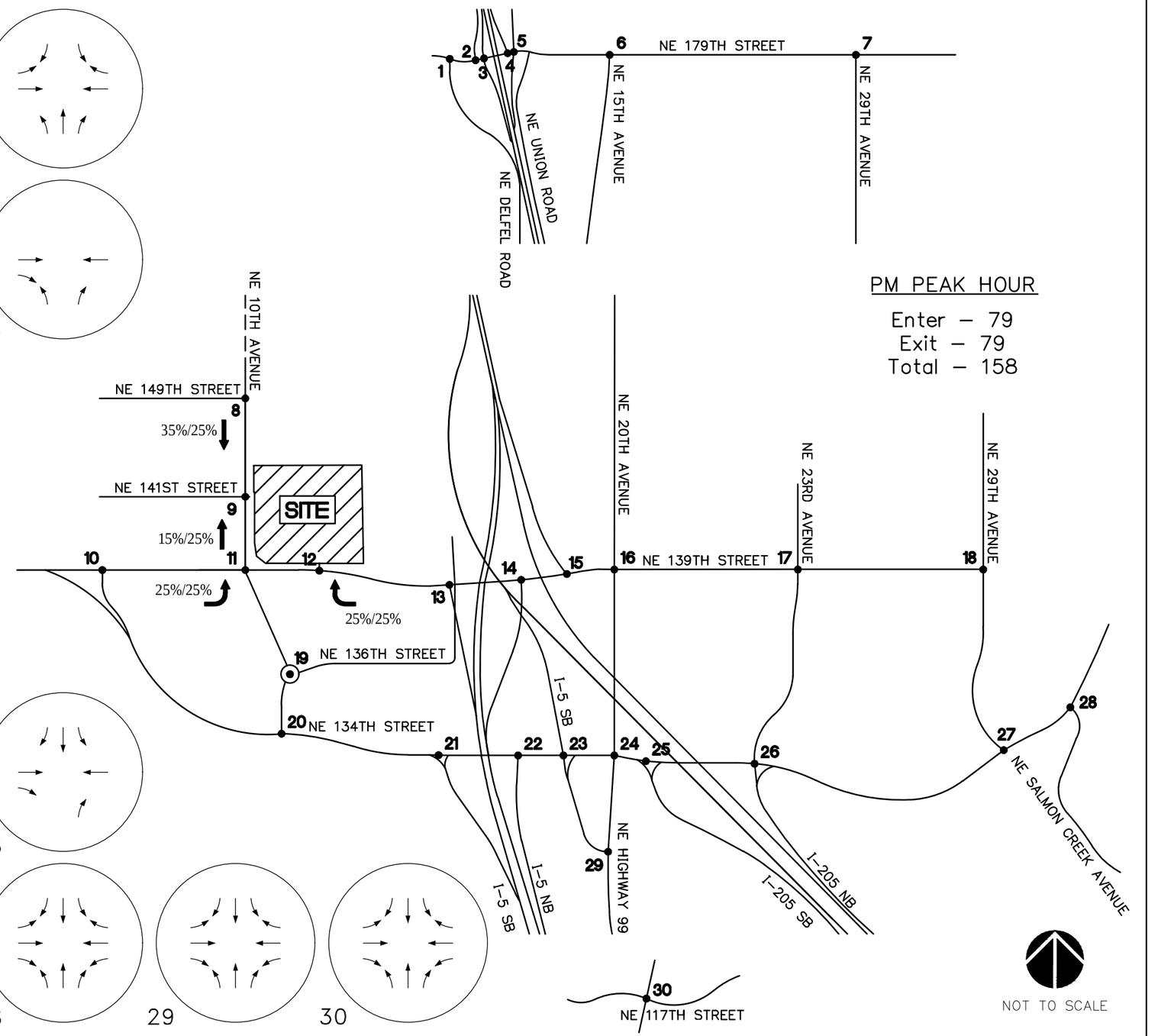
PASS-BY TRIP DISTRIBUTION + TRIP ASSIGNMENT - AM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE 9A





PM PEAK HOUR

Enter – 79
Exit – 79
Total – 158

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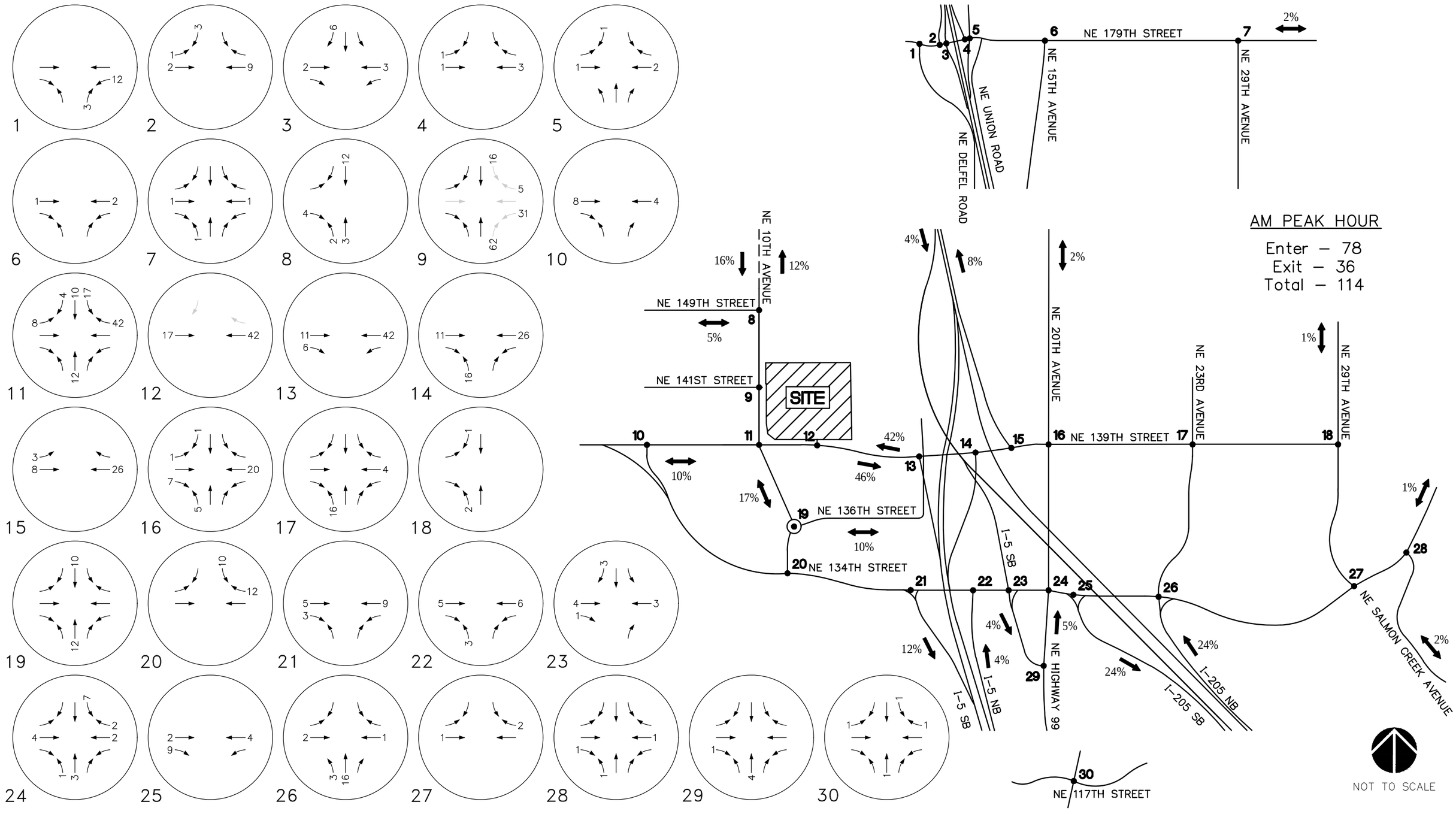
PASS-BY TRIP DISTRIBUTION + TRIP ASSIGNMENT - PM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
9B



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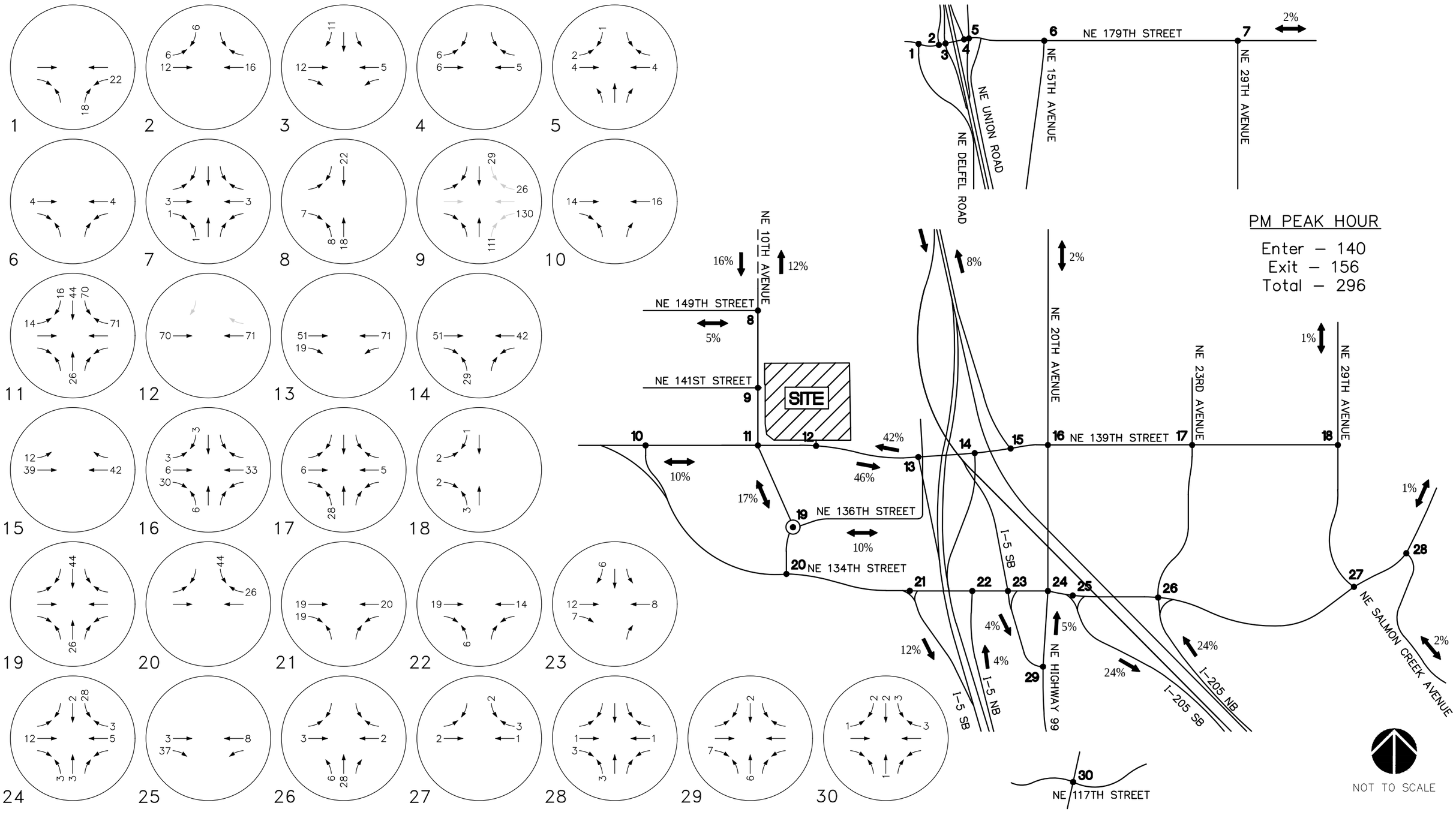
PRIMARY TRIP DISTRIBUTION + TRIP ASSIGNMENT - AM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE 10A

AM PEAK HOUR
Enter – 78
Exit – 36
Total – 114



PM PEAK HOUR

Enter – 140
Exit – 156
Total – 296

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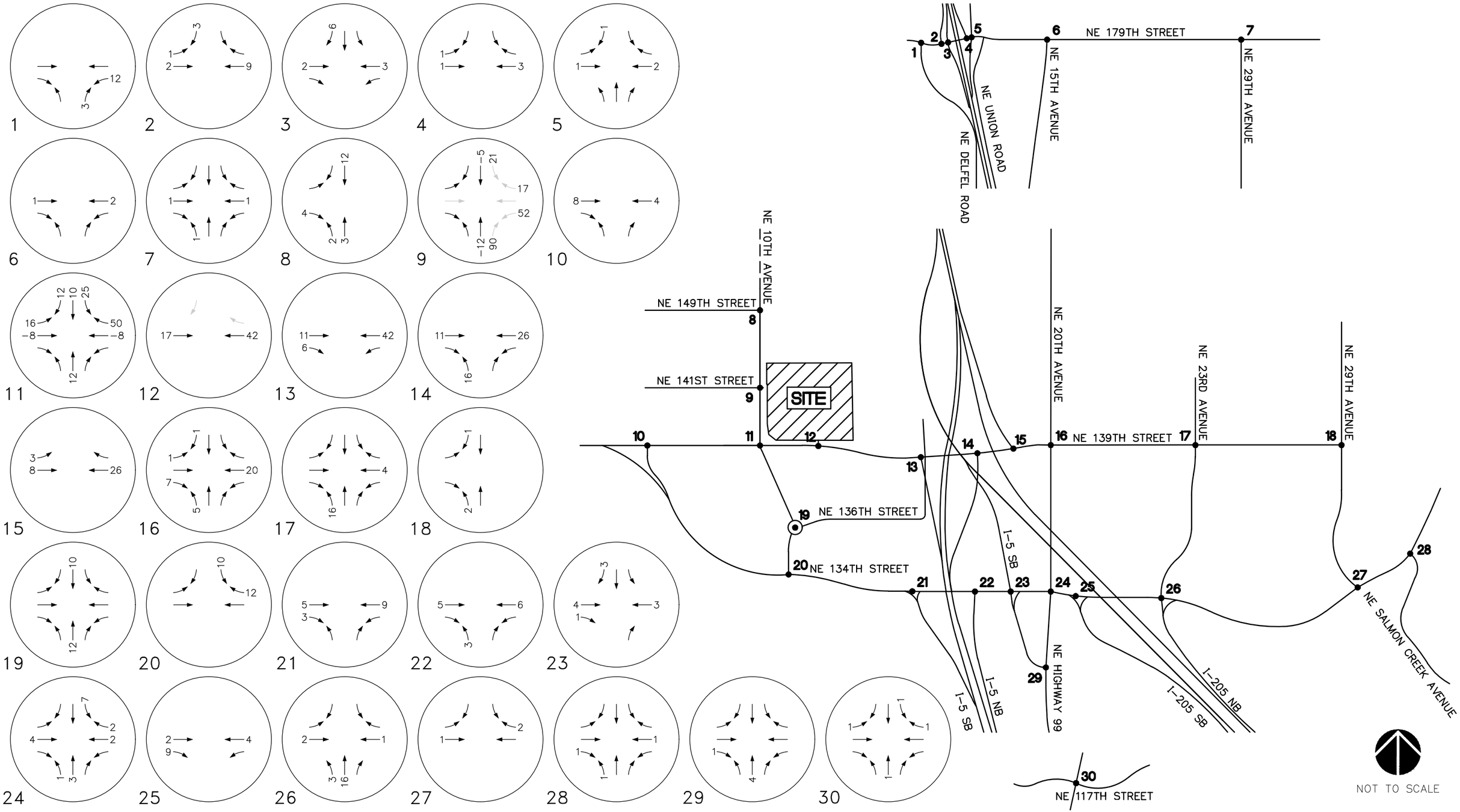
PRIMARY TRIP DISTRIBUTION + TRIP ASSIGNMENT - PM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
10B



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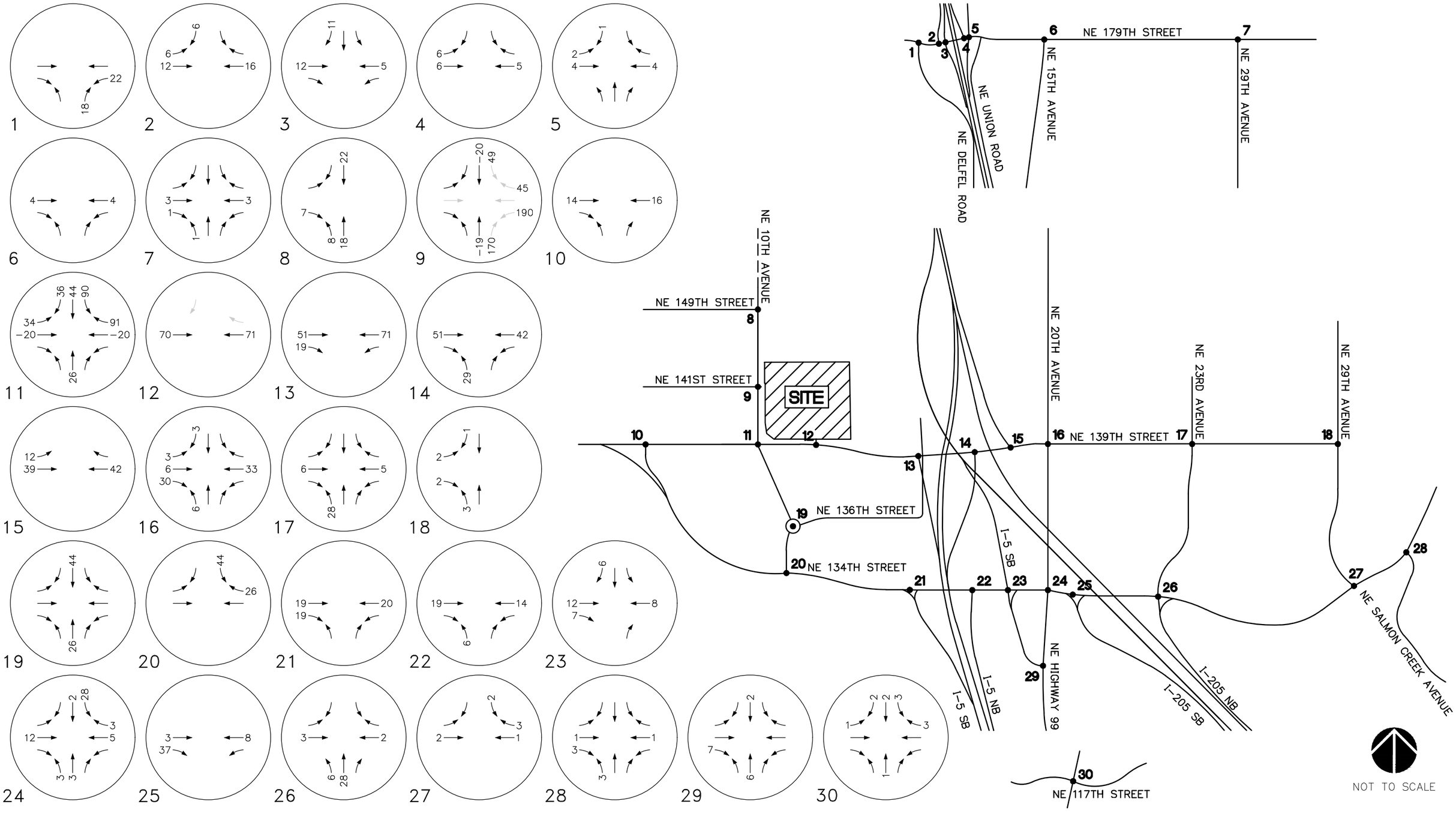
TOTAL TRIP ASSIGNMENT - AM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
11A



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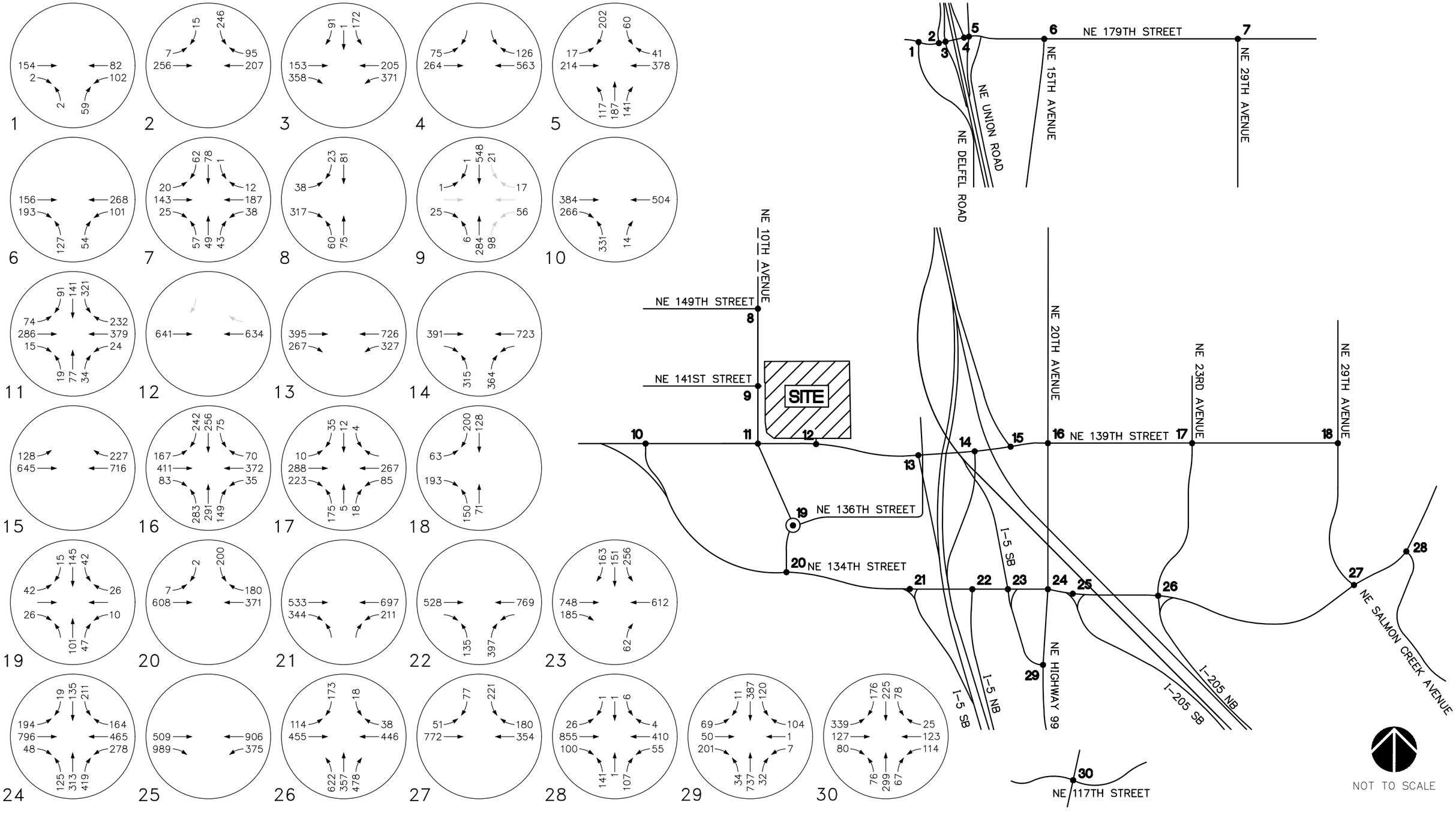
TOTAL TRIP ASSIGNMENT - PM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
11B



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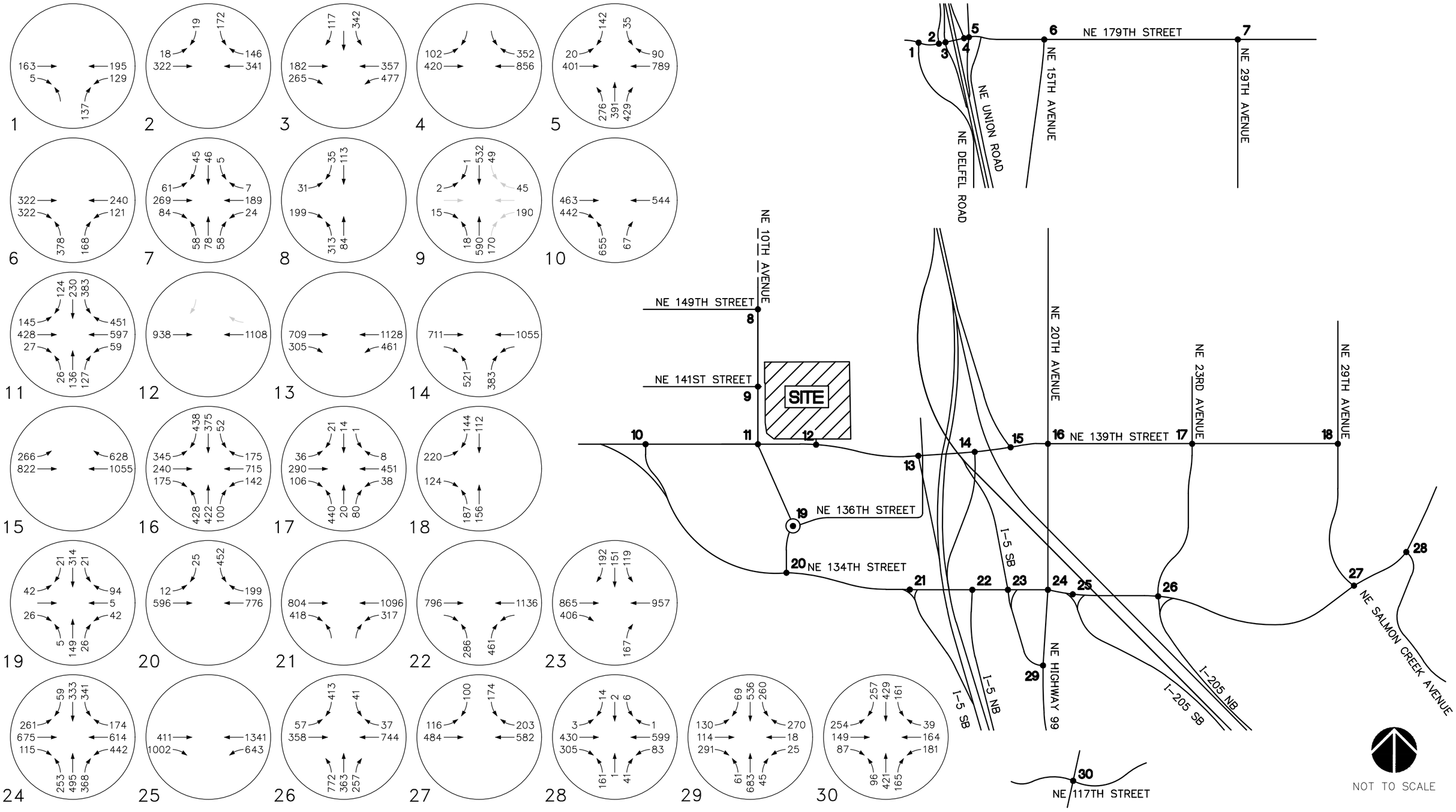
2020 POST-DEVELOPMENT TRAFFIC VOLUMES - AM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
12A



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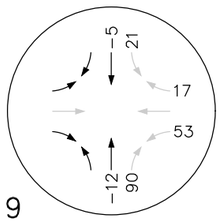
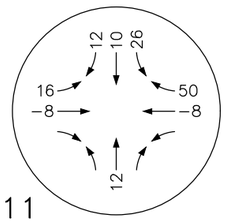
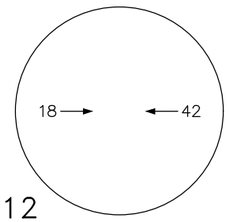
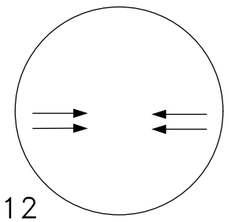
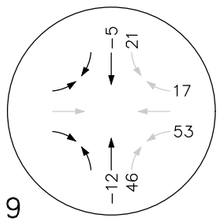
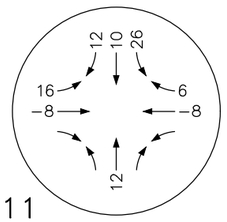
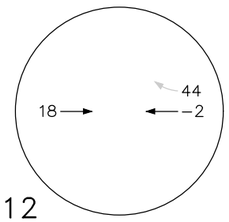
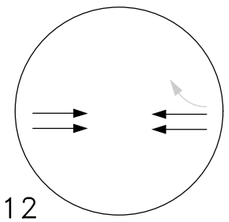
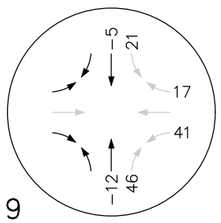
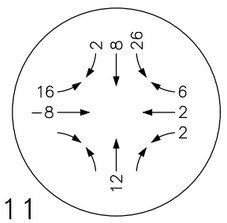
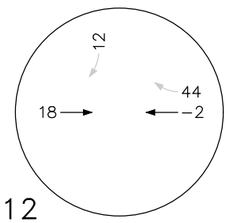
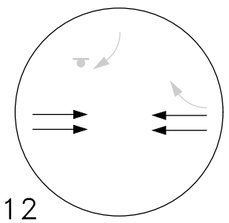
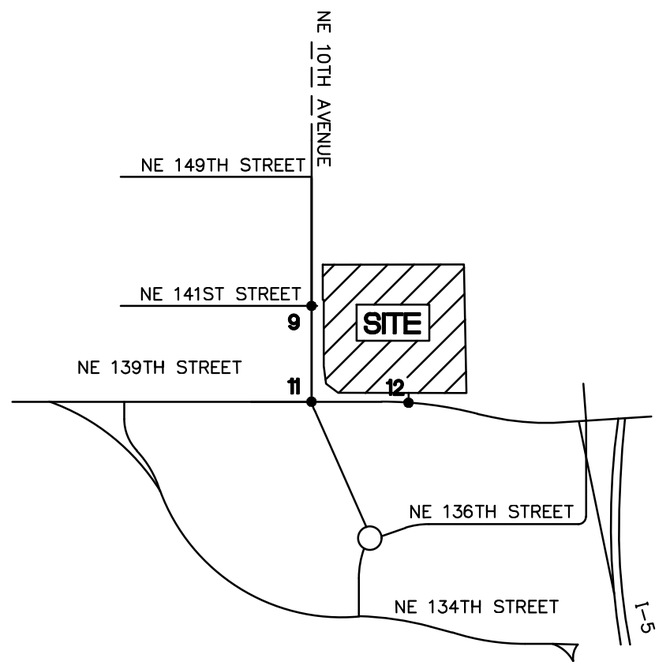
2020 POST-DEVELOPMENT TRAFFIC VOLUMES - PM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
12B

NE 139th Street Site Access Alternative	NE 10th Avenue/ NE 141st Street	NE 10th Avenue/ NE 139st Street	NE 139st Street/ Site Access	Site Access Intersection Configuration
No Access	 9	 11	 12	 12
Right–in Only	 9	 11	 12	 12
Right–in/ Right–out	 9	 11	 12	 12



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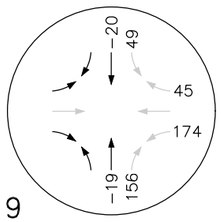
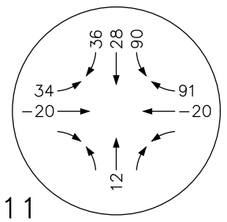
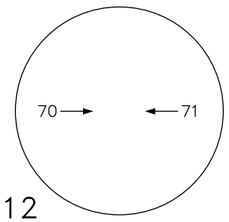
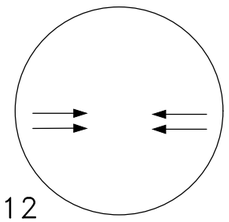
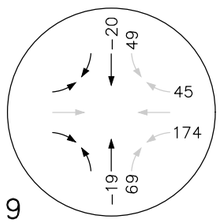
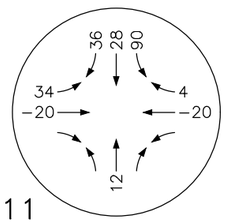
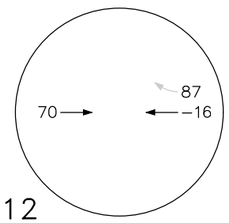
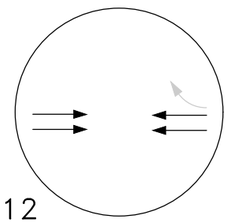
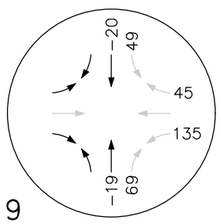
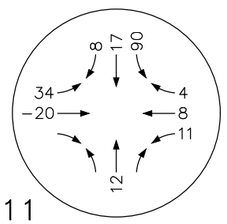
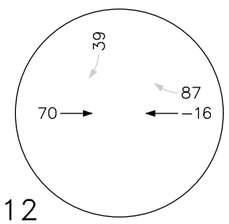
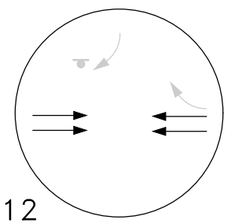
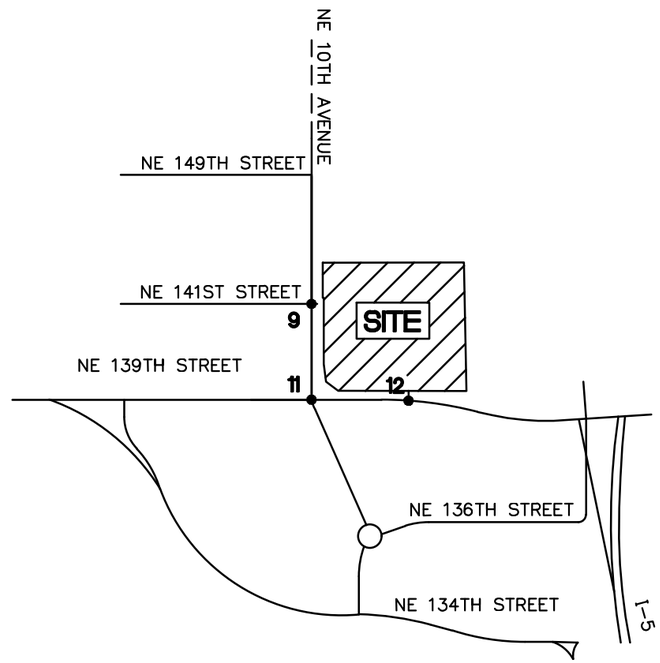
139TH ACCESS COMPARISON TOTAL PROJECT TRIPS - AM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE 13A

NE 139th Street Site Access Alternative	NE 10th Avenue/ NE 141st Street	NE 10th Avenue/ NE 139st Street	NE 139st Street/ Site Access	Site Access Intersection Configuration
No Access	 9	 11	 12	 12
Right–in Only	 9	 11	 12	 12
Right–in/ Right–out	 9	 11	 12	 12



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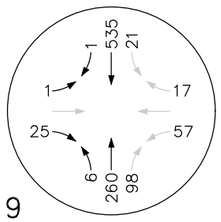
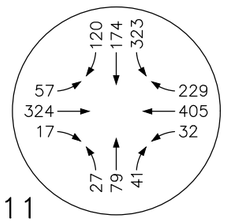
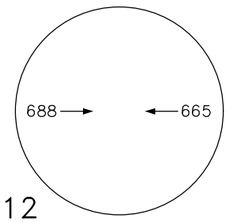
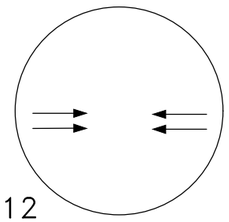
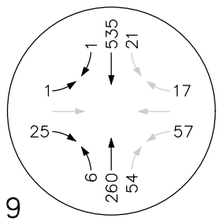
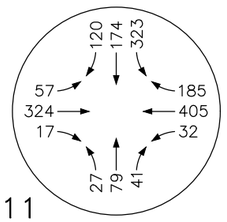
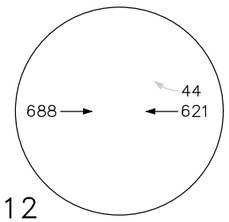
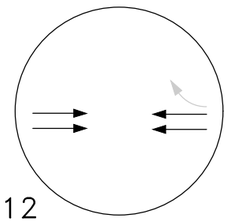
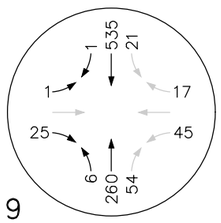
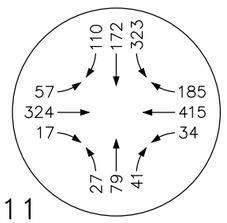
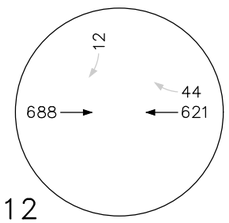
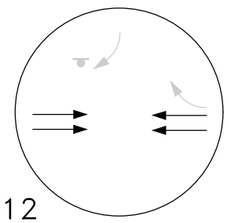
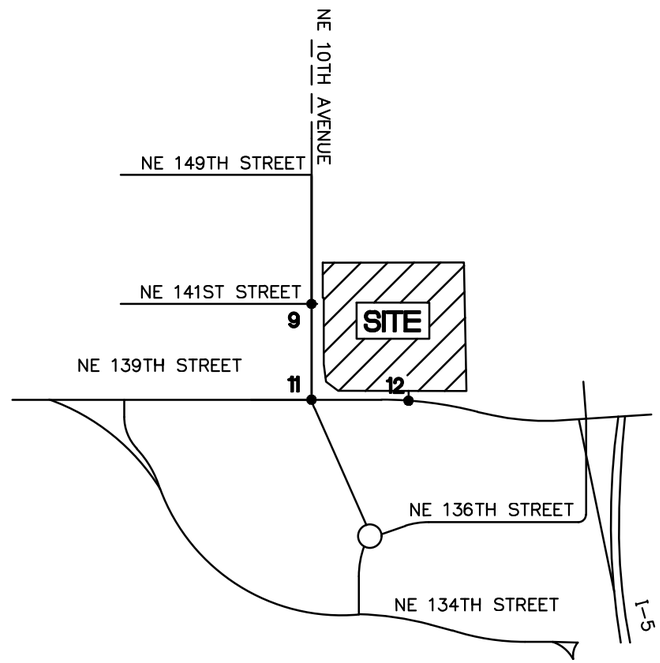
139TH ACCESS COMPARISON TOTAL PROJECT TRIPS - PM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE 13B

NE 139th Street Site Access Alternative	NE 10th Avenue/ NE 141st Street	NE 10th Avenue/ NE 139st Street	NE 139st Street/ Site Access	Site Access Intersection Configuration
No Access	 9	 11	 12	 12
Right–in Only	 9	 11	 12	 12
Right–in/ Right–out	 9	 11	 12	 12



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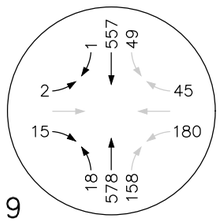
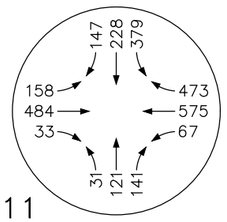
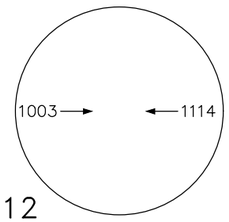
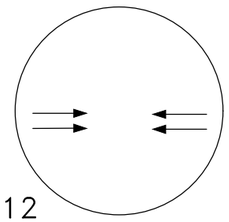
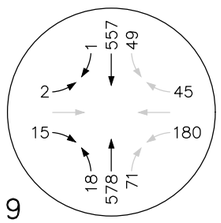
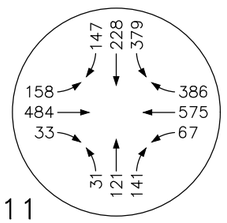
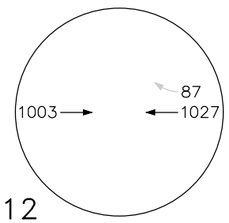
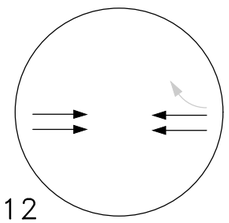
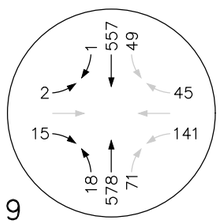
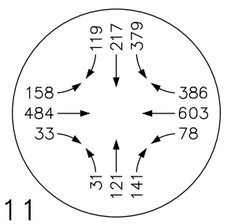
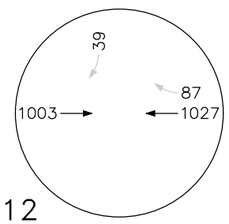
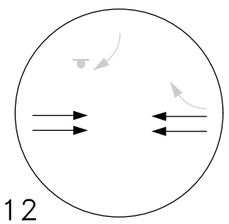
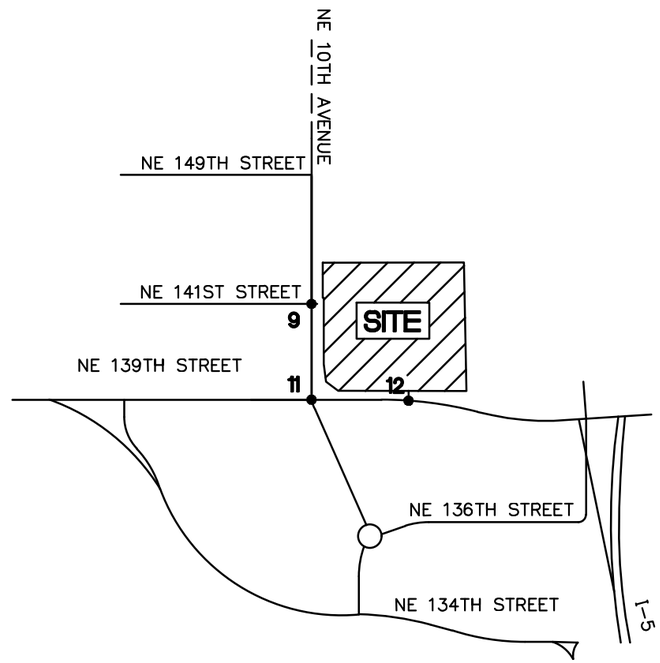
139TH ACCESS COMPARISON 2020 POST-DEVELOPMENT - AM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
14A

NE 139th Street Site Access Alternative	NE 10th Avenue/ NE 141st Street	NE 10th Avenue/ NE 139st Street	NE 139st Street/ Site Access	Site Access Intersection Configuration
No Access	 9	 11	 12	 12
Right–in Only	 9	 11	 12	 12
Right–in/ Right–out	 9	 11	 12	 12



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139TH ACCESS COMPARISON 2020 POST DEVELOPMENT - PM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE 14B

APPENDIX B

SCOPING MATERIALS

MACKENZIE.

DESIGN DRIVEN | CLIENT FOCUSED

August 13, 2018

Clark County Public Works
Attention: David Jardin
1300 Franklin Street
Vancouver, WA 98660

Re: **Skyview Station Phase 1**
Traffic Impact Study Scoping
Project Number 2170410.01

Dear Mr. Jardin:

Mackenzie has prepared this scoping letter in advance of preparing the required Traffic Impact Study (TIS) for Phase 1 of the Skyview Station development. This letter presents trip generation and distribution, analysis periods, and study area recommendations.

SITE CONDITIONS

The site comprises two tax lots (property identification numbers 185726000 and 185727000) totaling 8.66 acres. Both lots have existing development, but none will remain with the Skyview Station development.

The site is within the City of Vancouver Urban Growth Area but outside city limits. Clark County zoning is General Commercial (GC)

PROJECT SUMMARY

Phase 1 of the proposed Skyview Station development will include approximately 80,150 square feet (SF) of shopping center.

As shown in the attached plan, two site accesses are proposed:

- A full-movement driveway is proposed on NE 10th Avenue, a designated collector street. This driveway will be located opposite NE 141st Street and will include one inbound and two outbound travel lanes.
- A second limited access driveway is proposed on NE 139th Street, a designated minor arterial. This driveway will be limited to right-in/right-out (RIRO) movements only and will be aligned opposite the bus-only access serving the Salmon Creek Park & Ride.

A technical road modification will be submitted with the development application to add the site driveway on NE 139th Street. Per Clark County Code (CCC) Table 40.350.030-6, an additional driveway may be allowed on a minor arterial for sites generating more than 2,000 daily trips. The access will meet the driveway spacing criteria for arterials as outlined in CCC Table 40.350.030-4. However, because the proposed RIRO has not been approved, traffic operations will be evaluated both with and without it.

Site Trip Generation

Trip generation estimates were developed using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition. The pass-by trip rates are based on the ITE *Trip Generation Handbook*, 3rd Edition.

Table 1 summarizes the trip generation for the proposed development. The mixed retail estimates were prepared assuming the "Shopping Center" (ITE Code 820) because the rates reflect the variety of retail and service uses that are found in most shopping centers. This approach allows for more flexibility as the site develops and produces similar trip generation results for the PM peak hour and daily estimates as an assessment of individual uses.

TABLE 1 – SKYVIEW STATION PHASE 1 TRIP GENERATION

Land Use	Trip Type	AM			PM			Daily
		In	Out	Total	In	Out	Total	
Shopping Center 129.1 KSF	Total	119	73	192	221	240	461	5,172
	Pass-by	33	33	66	79	79	158	1,760
	Primary	86	40	126	142	161	303	3,412

Based on the available ITE data, the proposed development is anticipated to generate 192 AM peak hour, 461 PM peak hour, and 5,172 total daily trips. Of these trips, 126 AM peak hour, 303 PM peak hour, and 3,412 daily trips are primary trips; and 66 AM peak hour, 158 PM peak hour, and 1,760 daily trips are pass-by trips.

The trip generation for the existing uses on the site is summarized in Table 2. Volumes for DeWitt are from a traffic study prepared for DeWitt Construction relocation dated November 2017 by Kittelson Associates, Inc. The residential trips are based on ITE rates.

TABLE 2 – EXISTING SITE TRIP GENERATION

Land Use	Trip Type	AM			PM			Daily
		In	Out	Total	In	Out	Total	
DeWitt	Total	8	3	11	1	5	6	91
Housing (1 Single-Family Home)	Total	0	1	1	1	0	1	9
Total	**Total**	8	4	12	2	5	7	100

To estimate the net site trip generation, the existing trips were subtracted from the trip generated by the proposed Skyview Station development, as summarized in Table 3. The net primary trip generation is reduced to 114 AM peak hour, 296 PM peak hour, and 3,312 daily primary trips with the subtraction of existing trips while the pass-by volumes remain unchanged.

TABLE 3 – NET SITE TRIP GENERATION								
Land Use	Trip Type	AM			PM			Daily
		In	Out	Total	In	Out	Total	
Net Site Trips	Total	111	69	180	219	235	454	5,072
	Pass-by	33	33	66	79	79	158	1,760
	Primary	78	36	114	140	156	296	3,312

TRIP DISTRIBUTION

Site trip distribution varies by trip type. The basis for distributing each trip type is calculated below.

Primary Trips

Site trip distribution for primary trips is based on the select zone base year (2010) and future year (2035) travel volumes plots for Traffic Analysis Zone (TAZ) 95. Primary trip distribution for the AM and PM peak hour is assumed to be:

- 20% to/from the north
  - 12% via I-5 using either NE 134th/NE 139th Street ramps or NE 10th Avenue to NE 179th Street ramps
  - 4% via NE 10th Avenue to NE Delfel Road north of NE 179th Street
  - 4% via NE 179th Street to areas east of the interchange
- 57% to/from the south
  - 24% via I-5 split between the NE 134th and NE 139th Street ramps
  - 24% via I-205
  - 5% via NE Highway 99
  - 4% to/from residential areas south of NE Tenney Road/E 134th Street
- 15% to/from the west
  - 10% via NE 139th Street
  - 5% via NE 149th Street
- 8% to/from the east
  - 2% via NE 20th Avenue
  - 1% via NE 29th Avenue
  - 3% via NE Salmon Creek Avenue
  - 2% to/from residential areas along NE 139th Street and NE 134th Street

Figure 1 presents the primary trip distribution and assignment of net traffic during the AM and PM peak hour without the RIRO on NE 139th Avenue.

Pass-by Trips

Distribution for pass-by trips were estimated from the historical traffic count data on NE Fourth Plain Boulevard east of NE Ward Road (2015 road tube data and 2013 intersection counts). The distributions are different for the AM and PM peak hours to reflect difference in directional split between those two periods.

Pass-by trips trip distribution assumptions for the AM peak hour are:

- 15% from northbound NE10th Avenue
- 35% from southbound NE 10th Avenue
- 25% from eastbound NE 139th Street
- 25% from westbound NE 139th Street

Pass-by trips trip distribution assumptions for the PM peak hour are:

- 25% from northbound NE10th Avenue
- 25% from southbound NE 10th Avenue
- 25% from eastbound NE 139th Street
- 25% from westbound NE 139th Street

Figure 2 presents the pass-by trip distribution and assignment for retail trips during the AM and PM peak hour without the RIRO on NE 139th Avenue.

Total Site Trips

The pass-by and primary trips were added together to determine the total number of site trips. The total site trips during the AM and PM peak hours are presented in Figure 3.

Comparison of Site Access

Figure 4 compares the trip assignment for the intersections adjacent to the for three access scenarios:

- No access on NE 139th Street
- Right-in access on NE 139th Street
- Right-in/Right-Out access on NE 139th Street

STUDY AREA

Per Clark County Code (CCC) 40.350.020, the study area may include intersections within 3 miles of the project site since trip generation is estimated to be greater than 250 net new weekday PM peak hour trips (i.e., primary trips).

Study Area Intersections

Within the 3-mile radius, the following intersections are proposed for analysis:

- NE 179th Street/NE Delfel Road South
- NE 179th Street/NE Delfel Road North
- NE 179th Street/I-5 SB Ramps
- NE 179th Street/I-5 NB On-Ramp
- NE 179th Street/NE 10th Avenue/I-5 NB Off-Ramp
- NE 179th Street/NE 15th Avenue
- NE 179th Street/NE 29th Avenue
- NE 149th Street/NE 10th Avenue
- NE 10th Avenue/NE 141st Street
- NE 139th Street/NE Tenney Road
- NE 139th Street/NE 10th Avenue
- NE 139th Street/RIRO Access
- NE 139th Street/I-5 SB On-Ramp
- NE 139th Street/I-5 NB Off-Ramp
- NE 139th Street/I-205 NB On-Ramp
- NE 139th Street/NE 20th Avenue
- NE 139th Street/NE 23rd Avenue
- NE 139th Street/NE 29th Avenue
- NE 136th Street/NE 10th Avenue
- NE Tenney Road/NE 10th Avenue
- NE 134th Street/I-5 SB On-Ramp
- NE 134th Street/I-5 NB Off-Ramp
- NE 134th Street/I-205 SB Off-Ramp/Highway 99
- NE 134th Street/NE 20th Avenue
- NE 134th Street/I-205 SB On-Ramp
- NE 134th Street/I-205 NB Off-Ramp/NE 23rd Avenue
- NE 134th Street/NE 29th Avenue
- NE 134th Street/NE Salmon Creek Avenue
- Highway 99/NE 20th Avenue
- Highway 99/NE 117th Street

This list of intersections includes both Clark County and Washington State Department of Transportation (WSDOT) intersections. The latter have been included since they are requested by the state related to the proposed access on NE 139th Avenue.

The Concurrency Comments provided by you on March 22, 2018 listed 8 additional regionally-significant intersections that could be impacted by the proposed development. Our trip assignment indicates that volumes at these intersections will be less than 5 trips for any approach; therefore, they are not proposed as part of the study area.

Study Area Corridors

Within the 3-mile radius, the following corridors are proposed for analysis:

- NE 179th Street (EB/WB) between
  - NE Delfel Road S and NE Delfel Road N
  - NE Delfel Road N and I-5 SB Ramps
  - NE 10th Avenue/ I-5 NB Off-Ramp and NE 15th Avenue
  - NE 15th Avenue and NE 29th Avenue
  - NE 29th Avenue and NE 50th Avenue
- NE 139th Street (EB/WB) between
  - NE Tenney Road and NE 10th Avenue
  - NE 10th Avenue and RIRO Access
  - RIRO Access and I-5 SB On-Ramp
  - I-205 NB On-Ramp and NE 20th Avenue

  - NE 20th Avenue and NE 23rd Avenue
  - NE 23rd Avenue and NE 29th Avenue
- NE Tenney Road/NE 134th Street/NE Salmon Creek Avenue (EB/WB) between
  - NE 10th Avenue and I-5 SB On-Ramp
  - I-5 SB On-Ramp and I-5 NB Off-Ramp
  - NE 20th Avenue and I-205 SB On-Ramp
  - I-205 NB Off-Ramp/ NE 23rd Avenue and NE 29th Avenue
  - NE 29th Avenue and NE Salmon Creek Avenue
  - NE 134th Street and NE 50th Avenue
- NE 10th Avenue/NE Delfel Road South (NB/SB) between
  - NE 179th Street and NE 149th Street
  - NE 149th Street and NE 141st Street
  - NE 141st Street and NE 139th Street
  - NE 139th Street and NE 136th Street
  - NE 136th Street and NE 134th Street
- NE 15th Avenue/NE 20th Avenue/NE Highway (NB/SB) between
  - NE 179th Street and NE 144th Street
  - NE 144th Street and NE 139th Street
  - NE 139th Street and NE 134th Street
  - NE 134th Street and NE 117th Street
  - NE 117th Street and NE 99th Street
- NE 23rd Avenue (NB/SB) between
  - NE 139th Street and NE 134th Street
- NE 29th Avenue (NB/SB) between
  - NE 179th Street and NE 159th Street
  - NE 144th Street and NE 139th Street
  - NE 139th Street and NE 134th Street

ANALYSIS YEARS & PERIODS

The TIS will review the AM and PM peak hour conditions at the study area intersections for the following scenarios:

- 2018 Existing
- 2020 Pre-Development without proposed development
- 2020 Post-Development with proposed development

Pre-Development Assumptions

The pre-development conditions will reflect a build-out year scenario without the proposed development. This scenario includes traffic from 2018 existing conditions, background traffic growth to year 2020, in-process traffic from other approved developments that have not yet been constructed, and traffic reroutes from changes in the transportation network.

Background Traffic Growth

An average 2% annual growth rate will be applied to existing 2018 traffic volumes over two years to estimate 2020 background traffic growth.

In-Process Traffic

The following in-process developments will be included in the pre-development condition based on information provided by you:

- Vancouver Clinic at Salmon Creek
- Phase 1: 179th Street Commercial
- Phase 2: 179th Street Commercial
- iTech Prepatory School

Traffic Reroutes

Two Clark County TIP projects along NE 10th Avenue will fully connect NE 139th Street to NE 179th Street creating a local parallel route to I-5 on the west side of the freeway. This improvement is anticipated to change some of the area travel patterns when completed.

A Transportation Impact Discipline Report for the NE 10 Avenue (NE 154th to NE 164th Street) Project #370922 was prepared by Kittelson & Associates, Inc. in June 2014. The report included analysis of No Build and Build conditions for an opening year (2018) and a future year of 2035. Because the traffic data was collected prior to the opening of the NE 139th Street interchange, the opening year analysis needed to estimate changes in travel patterns from the interchange improvements as well as the NE 10th Avenue Project. Furthermore, the study only includes PM peak hour volumes and did not address many of the intersection included the Skyview Station study area.

For these reasons, we propose to estimate the near-term traffic reroutes based on the 2018 existing traffic counts using the following assumptions of changes traffic flow patterns:

- The NE 10th Avenue connection may provide a more direct route for to/from NE 179th Street than NW 11th Avenue. To estimate the rerouted traffic demand, approximately 20% of the traffic traveling east-west on NE 179th Street at NE Delfel Road was assumed to divert from NW 11th Avenue to NE 10th Avenue.
- Some of the traffic from neighborhoods and businesses along NE 10th Avenue and NE 149th Street that currently uses the NE 134th/139th Street interchange to access I-5 to/from the north may use the NE 179th Street interchange instead. To estimate the rerouted traffic demand, approximately 10% of the traffic using the northbound on-ramp on NE 139th Street and 15% of the traffic using the southbound off-ramp on NE 134th Street was assumed to divert to the NE 179th Avenue interchange ramps. The southbound percentage was assumed to be higher because the travel time saving is greater than northbound.
- Some of the traffic from the neighborhoods and businesses along NE 10th Avenue, NE 164th Street, and NE Delfel Road the currently uses the NE 179th Street interchange to access I-5 and I-205 to/from the south may use the NE 139th/134th Street interchange instead. To estimate the rerouted traffic demand, approximately 5% of the traffic using the NE 179th Street ramps to/from the south was assumed to divert to the I-5 and I-205 ramps at NE 139th Street or NE 134th Street.

Comparison of the resulting PM peak hour traffic reroute volumes using the diversion assumptions outlined above and the difference between the 2018 No Build and Build scenarios from the Kittelson report shows similar results.

CRASH ANALYSIS

We propose to review the five-year collision history at intersections along the following segments:

- NE 10th Avenue between NE 134th Street and NE 149th Street
- NE 139th Street between NE Tenney Road and NE 20th Avenue

INFORMATION REQUEST

Please confirm the following analysis assumptions:

- Site trips will be assigned to the study area using the trip distribution patterns described in this letter.
- The study area will include the intersections and segments listed in this letter.
- A 2.0% annual background growth will be applied to study area intersections.
- The in-process developments listed are still the only projects to be included in the analysis.
- The traffic rerouting assumptions for estimating the effects of the NE 10th Avenue improvements appear reasonable.
- The crash analysis corridors are acceptable.

If you have any questions or comments regarding this proposed scope, please do not hesitate to contact me.

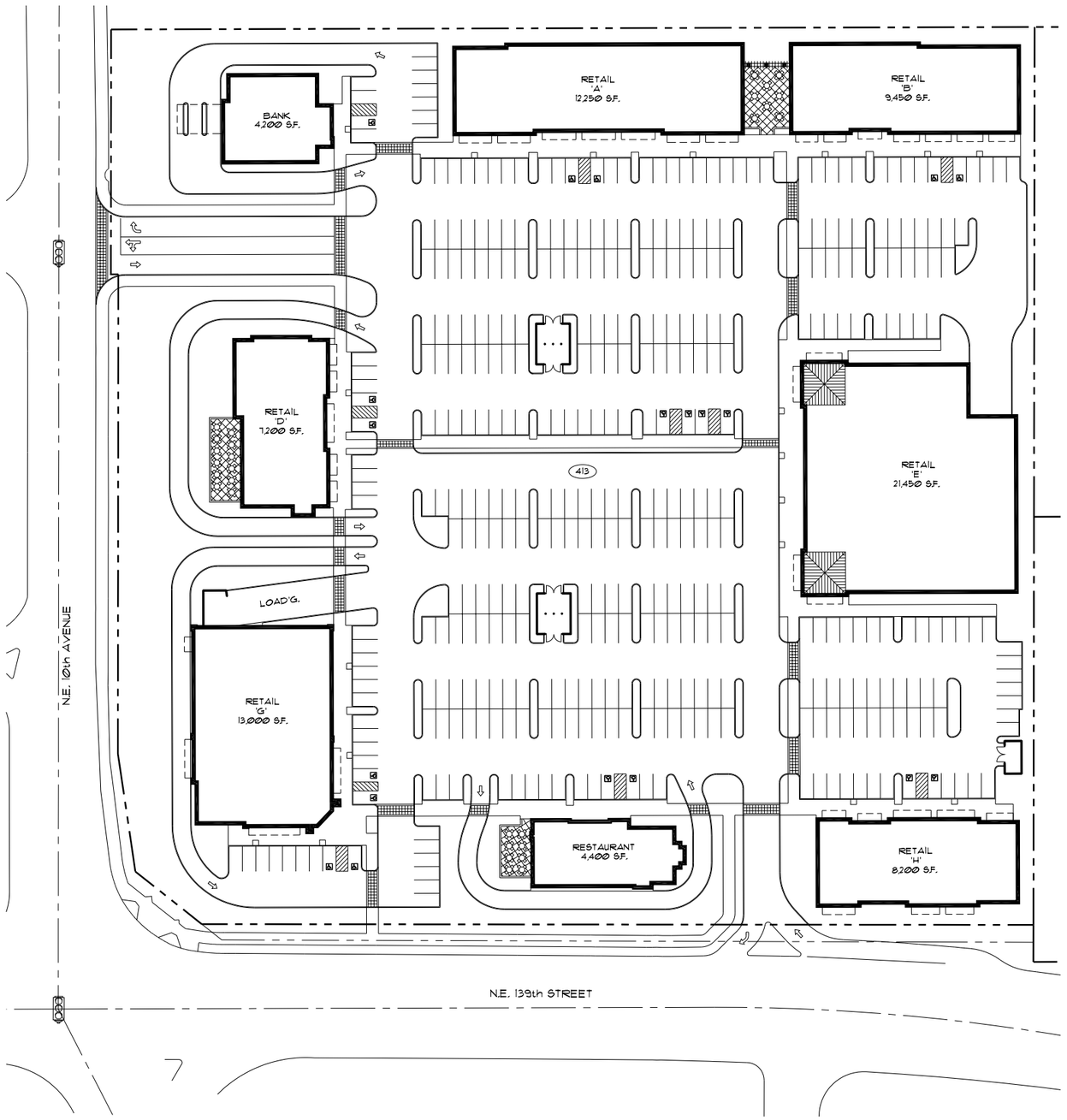
Sincerely,

Brent Ahrend, PE
Senior Associate | Traffic Engineer

Jennifer Danziger, PE
Traffic Engineer

Enclosure(s): Site Plan, Volume Figures

c: Chad Stewart, Ryan Hurley – Hurley Development
Jocelyn Cross – Olsen Engineering



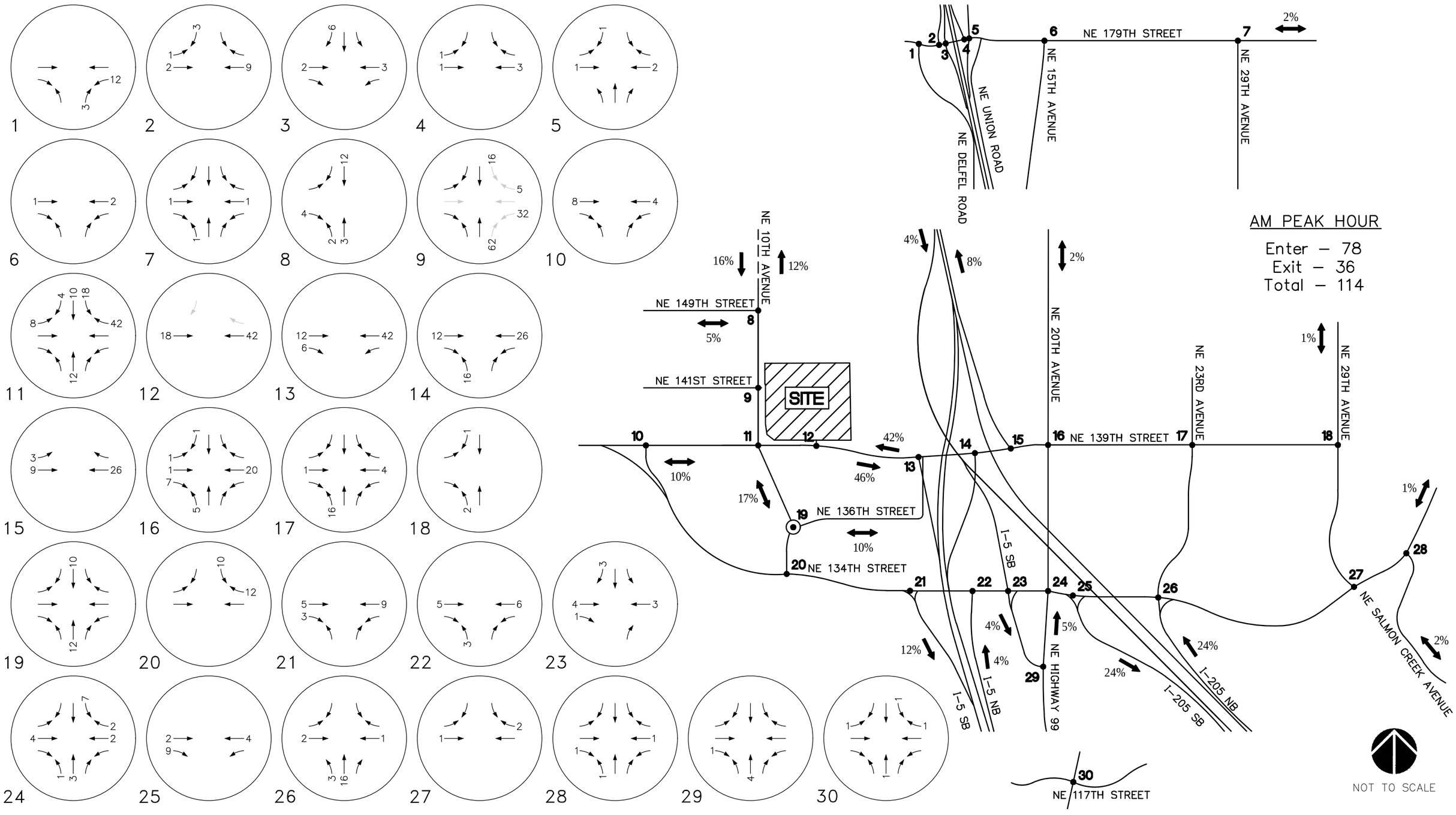
Skyview Station

Tiland/Schmidt Architects, p.c.

NE 139th St. & NE 10th Ave. - Clark County WA 98685

08.01.18

0' 20' 40' 80'



AM PEAK HOUR

Enter – 78
Exit – 36
Total – 114

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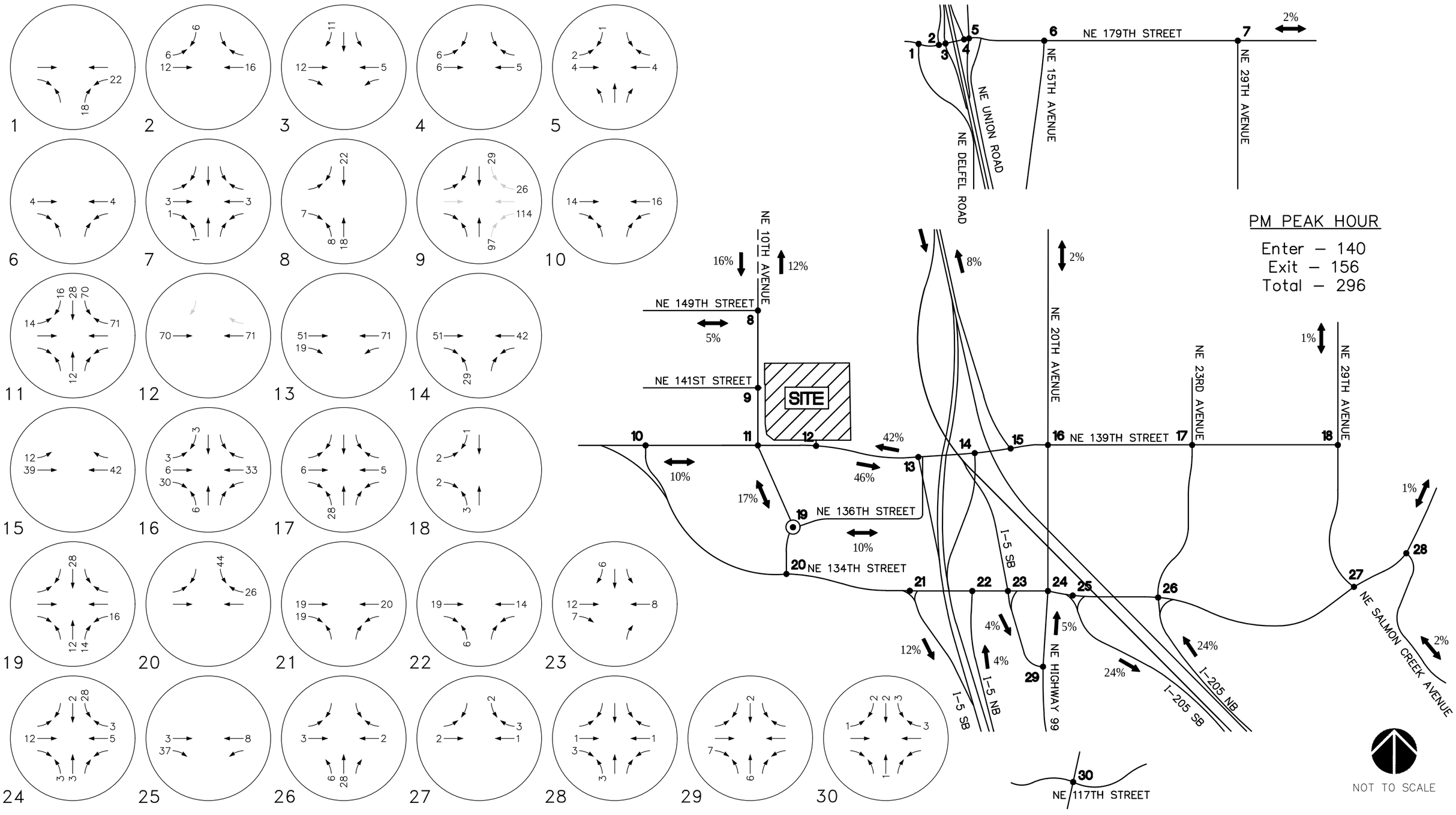
PRIMARY TRIP DISTRIBUTION + TRIP ASSIGNMENT – AM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE 1A



PM PEAK HOUR

Enter – 140
Exit – 156
Total – 296

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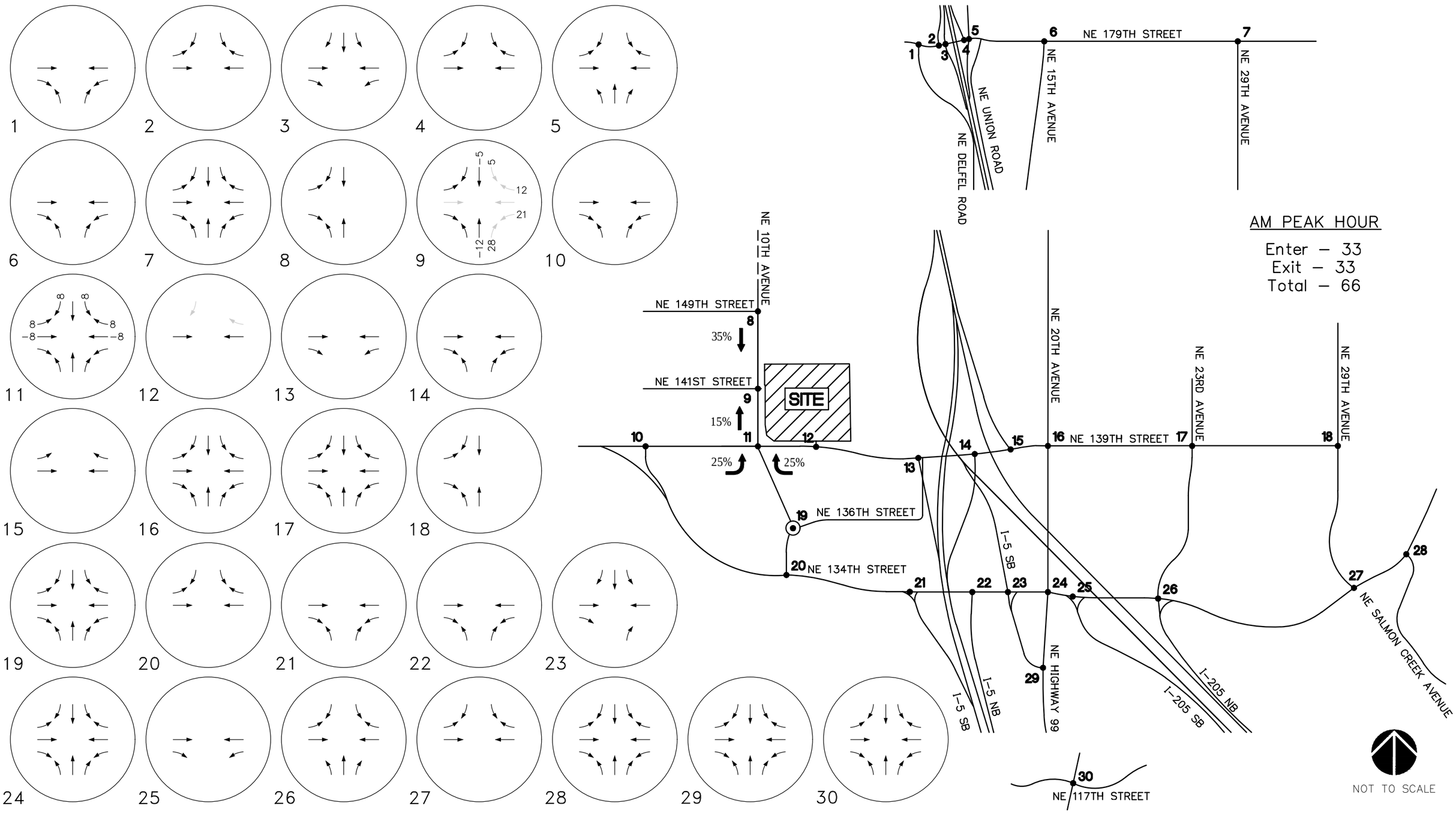
PRIMARY TRIP DISTRIBUTION + TRIP ASSIGNMENT - PM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE 1B



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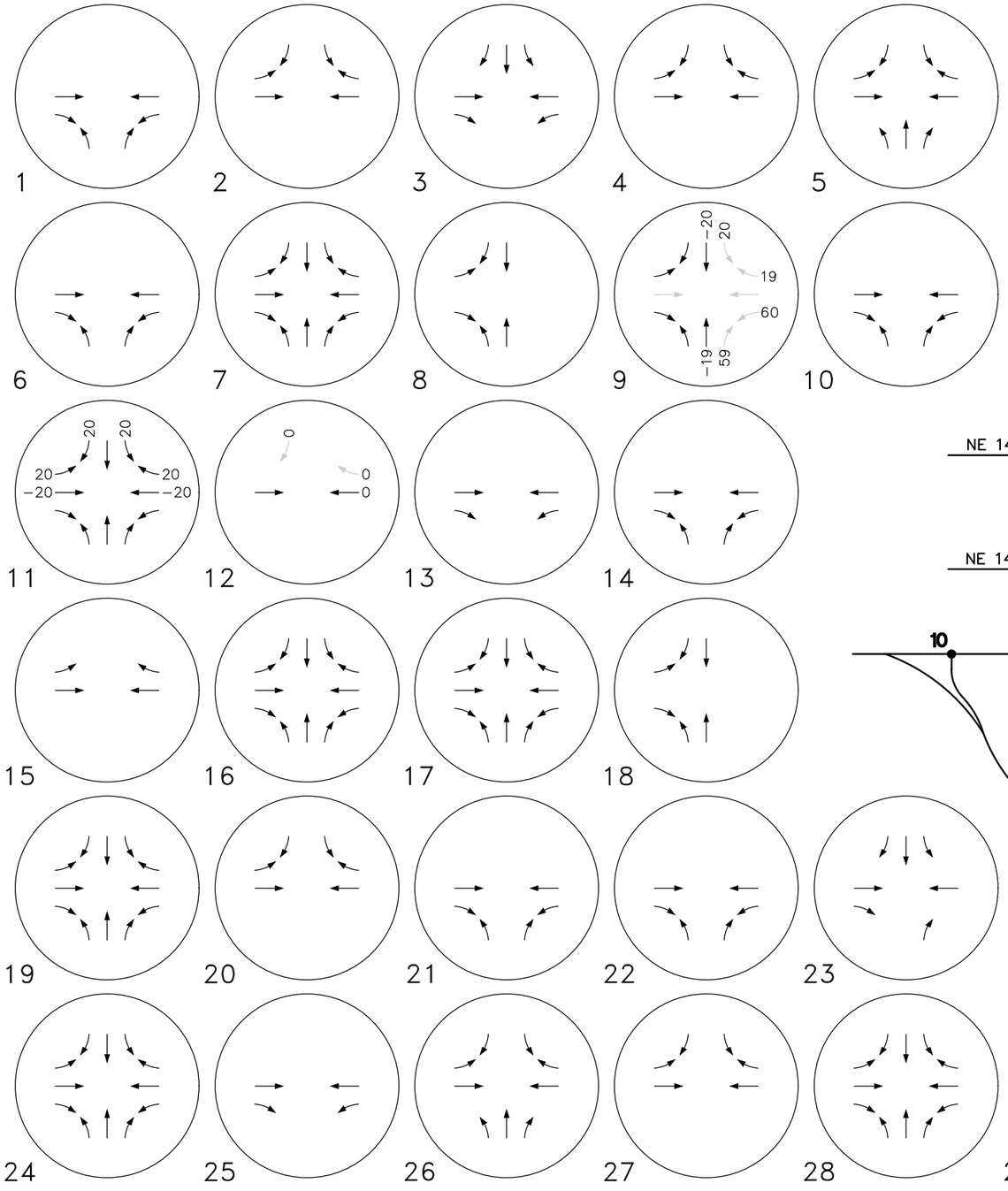
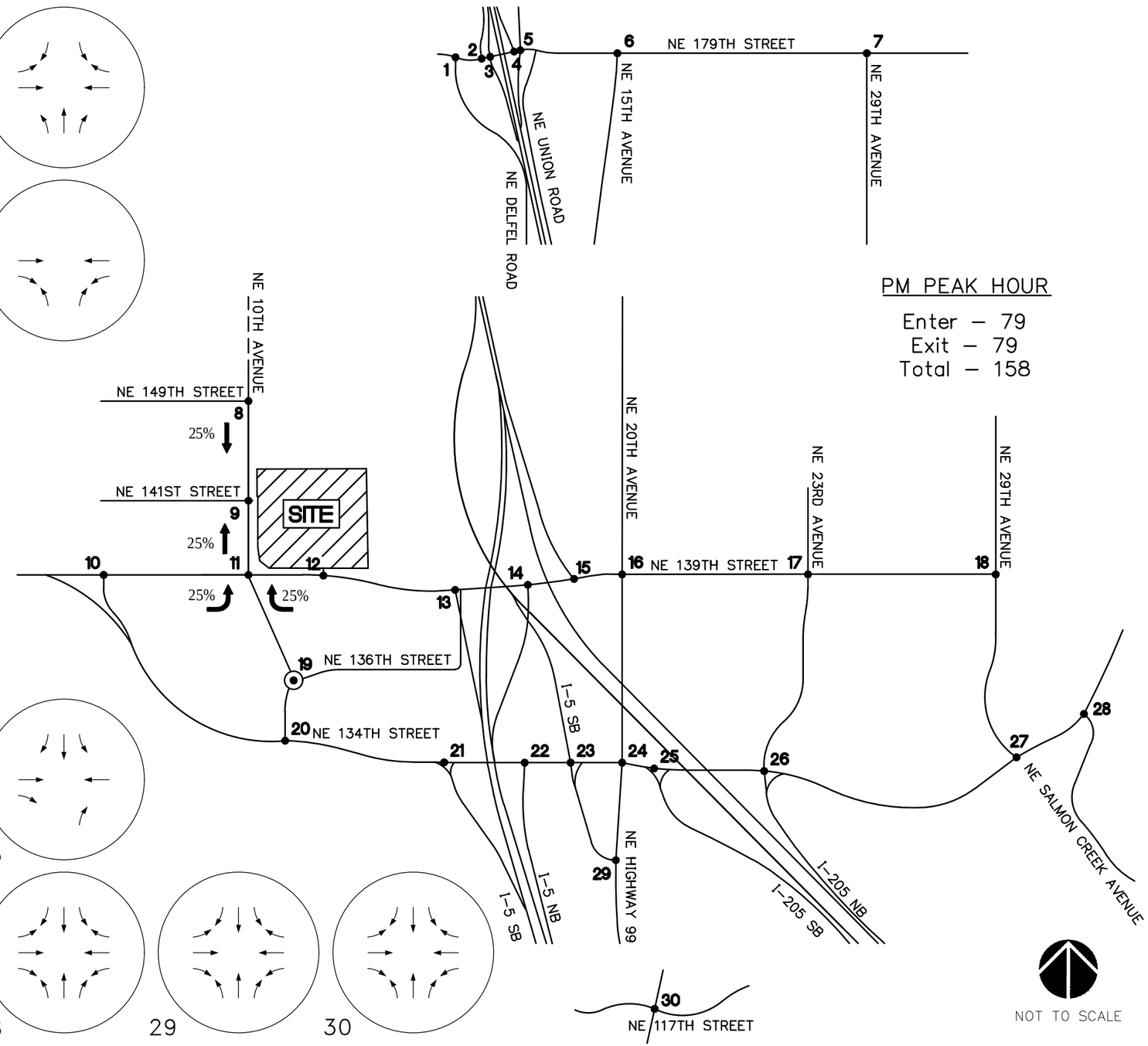
PASS-BY TRIP DISTRIBUTION + TRIP ASSIGNMENT - AM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
2A





PM PEAK HOUR

Enter – 79
Exit – 79
Total – 158

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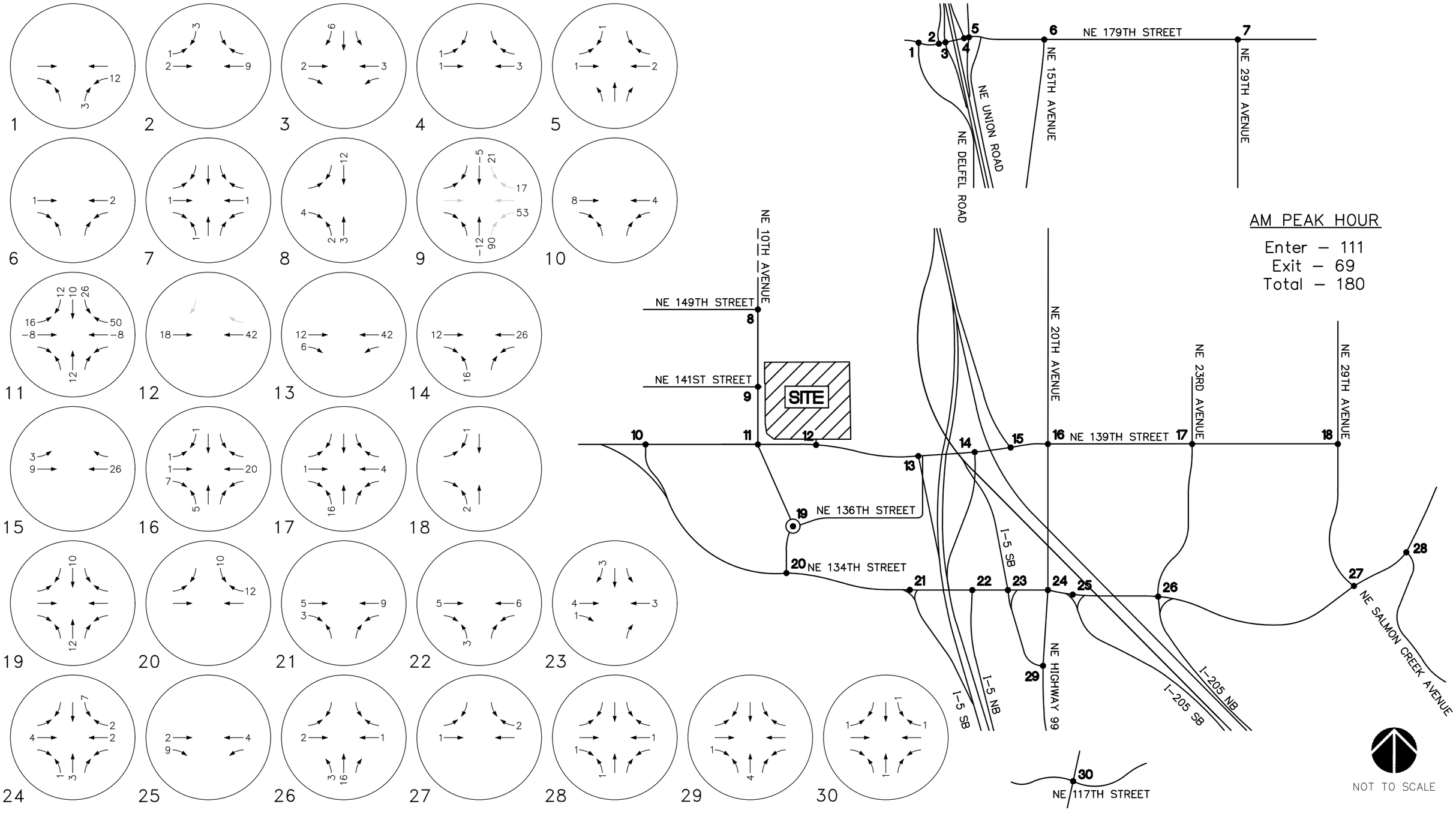
PASS-BY TRIP DISTRIBUTION + TRIP ASSIGNMENT - PM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
2B



AM PEAK HOUR

Enter – 111
Exit – 69
Total – 180

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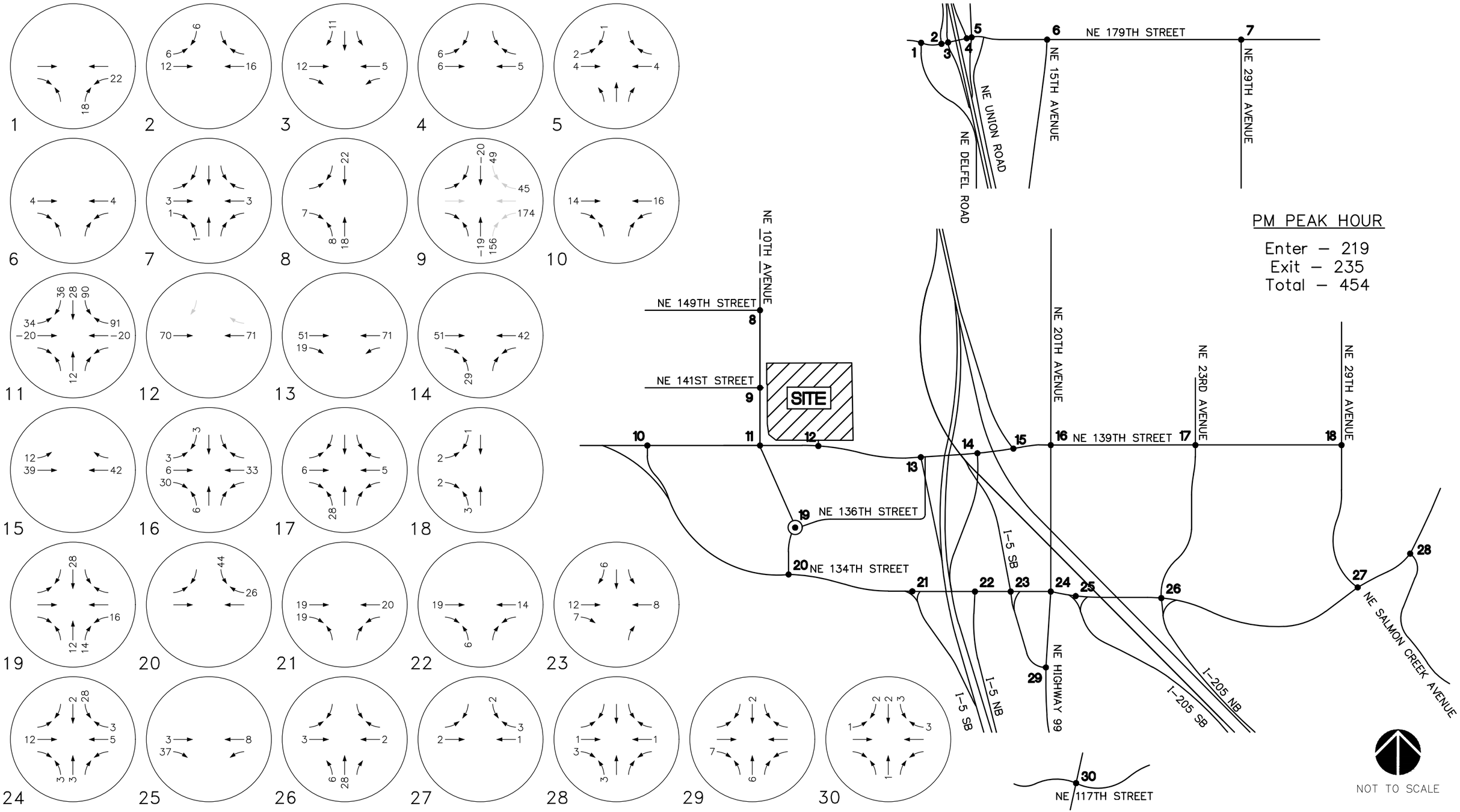
TOTAL TRIP ASSIGNMENT - AM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE 3A



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TOTAL TRIP ASSIGNMENT - PM PEAK HOUR

SKYVIEW STATION
CLARK COUNTY, WASHINGTON

FIGURE
3B

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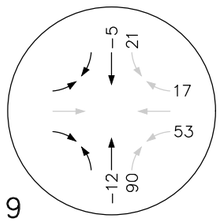
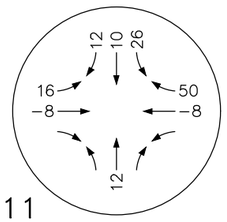
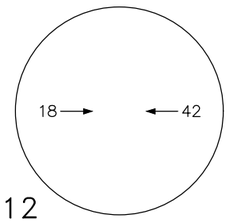
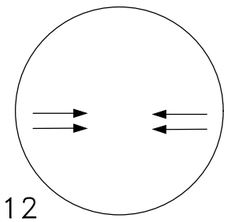
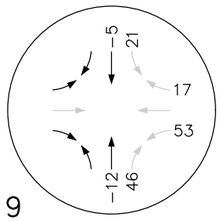
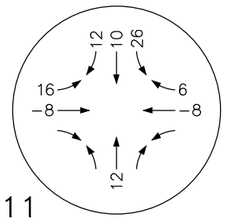
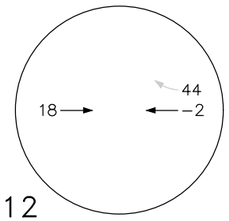
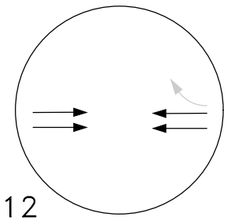
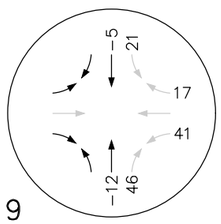
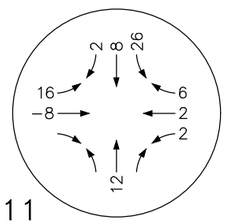
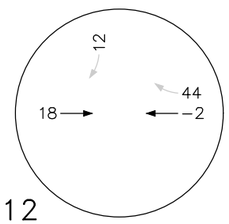
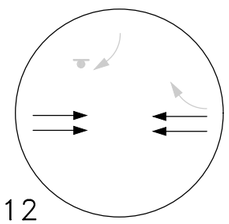
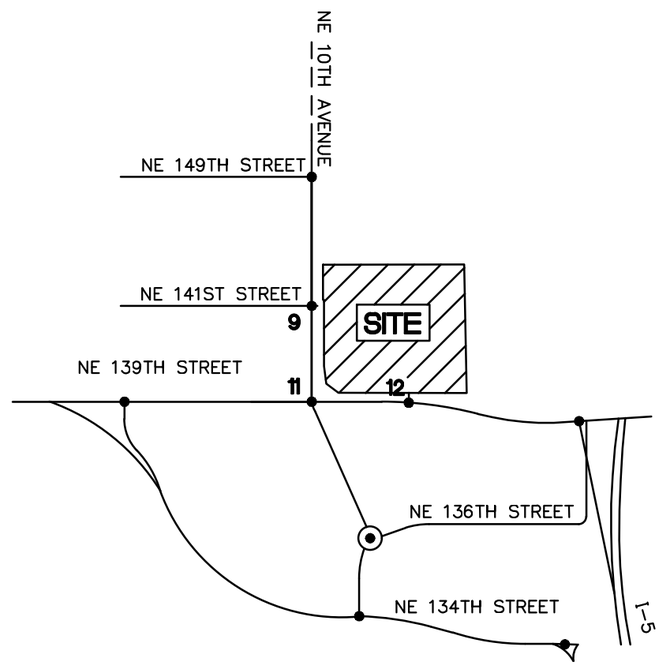
NE 139th Street Site Access Alternative	NE 10th Avenue/ NE 141st Street	NE 10th Avenue/ NE 139st Street	NE 139st Street/ Site Access	Site Access Intersection Configuration
No Access	 9	 11	 12	 12
Right–in Only	 9	 11	 12	 12
Right–in/ Right–out	 9	 11	 12	 12

AM PEAK HOUR

Enter – 111
Exit – 69
Total – 180



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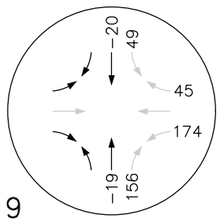
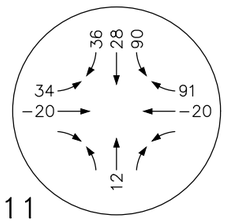
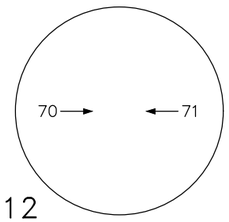
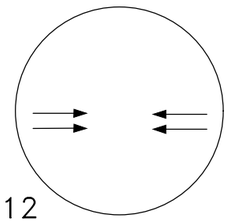
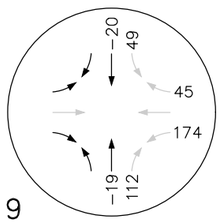
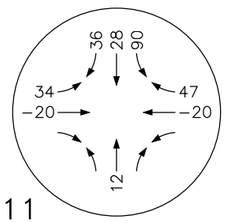
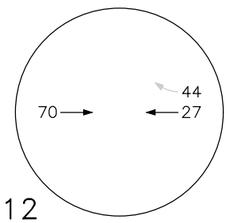
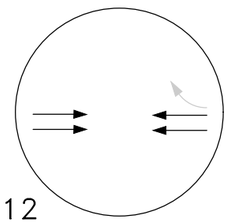
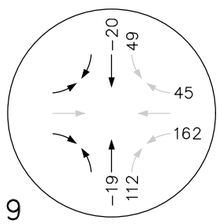
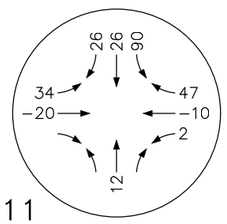
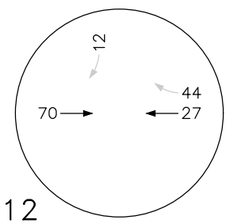
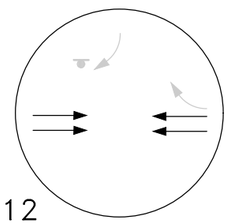
DATE: 8.10.2018
DRAWN BY: PGP
CHECKED BY: JED
JOB NO: 2170609.02

139TH ACCESS COMPARISON TOTAL PROJECT TRIPS - AM PEAK HOUR

5TH PLAIN CREEK STATION
VANCOUVER, WASHINGTON

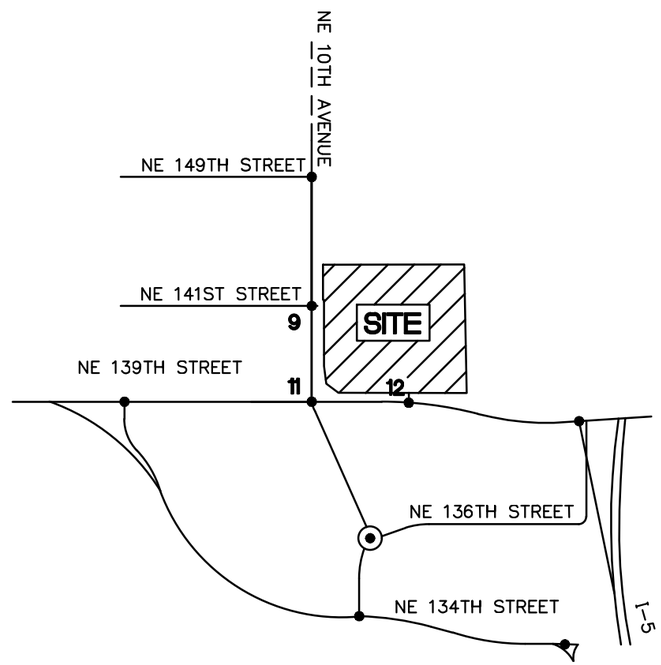
FIGURE
4A

NOT TO SCALE

NE 139th Street Site Access Alternative	NE 10th Avenue/ NE 141st Street	NE 10th Avenue/ NE 139st Street	NE 139st Street/ Site Access	Site Access Intersection Configuration
No Access	 9	 11	 12	 12
Right–in Only	 9	 11	 12	 12
Right–in/ Right–out	 9	 11	 12	 12

PM PEAK HOUR

Enter – 219
Exit – 235
Total – 454



Portland 503.224.9560 Vancouver 360.695.7879 Seattle 206.749.9993
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139TH ACCESS COMPARISON TOTAL PROJECT TRIPS - PM PEAK HOUR

5TH PLAIN CREEK STATION
VANCOUVER, WASHINGTON

FIGURE
4B

APPENDIX C

TRANSIT INFORMATION

9 Felida

Weekdays

North to Salmon Creek

99th Street Transit Center Stop ID 110 ❶	NW 36th Ave & 122nd St Stop ID 2998 ❷	NE 139th St & 10th Ave Stop ID 6014 ❸
—	—	—
7:05AM	7:17	7:27
8:05	8:17	8:27
9:05	9:17	9:27
10:05	10:17	10:27
11:05	11:17	11:27
12:05PM	**12:17**	**12:27**
1:05	**1:17**	**1:27**
2:05	**2:17**	**2:27**
3:05	**3:17**	**3:27**
4:05	**4:17**	**4:27**
5:05	**5:17**	**5:27**
6:05	**6:17**	**6:27**

South to 99th Street

NE 139th St & 10th Ave Stop ID 6014 ❸	NW 36th Ave & 122nd St Stop ID 3037 ❷	99th Street Transit Center Stop ID 110 ❶
6:27AM	6:36	6:49
7:27	7:36	7:49
8:27	8:36	8:49
9:27	9:36	9:49
10:27	10:36	10:49
11:27	11:36	11:49
12:27PM	**12:36**	**12:49**
1:27	**1:36**	**1:49**
2:27	**2:36**	**2:49**
3:29	**3:38**	**3:51**
4:27	**4:36**	**4:49**
5:27	**5:36**	**5:49**
6:27	**6:36**	**6:49**

Saturday

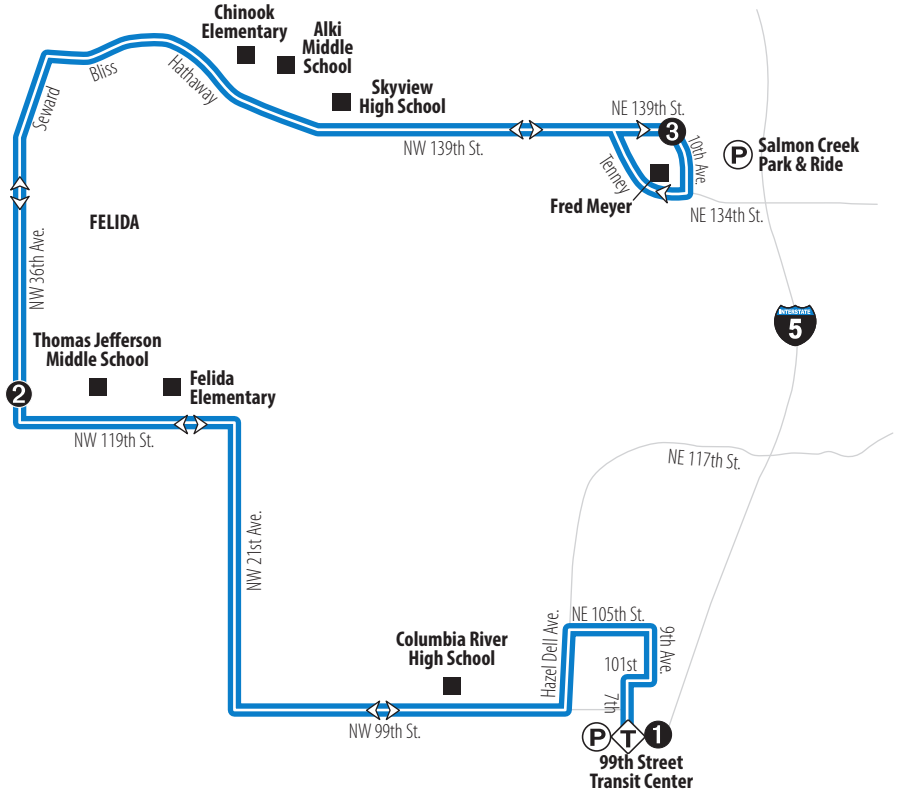
North to Salmon Creek

99th Street Transit Center Stop ID 110 ❶	NW 36th Ave & 122nd St Stop ID 2998 ❷	NE 139th St & 10th Ave Stop ID 6014 ❸
9:00AM	9:12	9:22
10:00	10:12	10:22
11:00	11:12	11:22
12:00PM	**12:12**	**12:22**
1:00	**1:12**	**1:22**
2:00	**2:12**	**2:22**
3:00	**3:12**	**3:22**
4:00	**4:12**	**4:22**
5:00	**5:12**	**5:22**
6:00	**6:12**	**6:22**

South to 99th Street

NE 139th St & 10th Ave Stop ID 6014 ❸	NW 36th Ave & 122nd St Stop ID 3037 ❷	99th Street Transit Center Stop ID 110 ❶
9:22AM	9:31	9:44
10:22	10:31	10:44
11:22	11:31	11:44
12:22PM	**12:31**	**12:44**
1:22	**1:31**	**1:44**
2:22	**2:31**	**2:44**
3:22	**3:31**	**3:44**
4:22	**4:31**	**4:44**
5:22	**5:31**	**5:44**
6:22	**6:31**	**6:44**

- **Bold** times are PM runs
- No Sunday/Holiday Service



I-5 Express Salmon Cr. Exp. 99th Street Exp.

105, 134, 199

Route 105 · I-5 Express

Weekdays Only

South to Portland

Morning trips travel south on 5th Ave.

Salmon Creek Park & Ride *Stop ID 105* ❶	99th Street Transit Center *Stop ID 110* ❷	15th St & Broadway *Stop ID 6046* ❸	SW 5th & Alder *Stop ID 5001* ❹	SW 5th & Hall *Stop ID 5009* ❺
—	—	5:36AM	6:01	6:05
6:00	6:07	6:19	6:46	6:50
6:20	6:27	6:39	7:06	7:11
6:40	6:47	6:59	7:31	7:36
7:00	7:07	7:19	7:51	7:56
7:30	7:37	7:49	8:22	8:27
8:00	8:07	8:19	8:52	8:57
8:30	8:37	8:46	9:14	9:19
9:00	9:07	9:16	9:44	9:49
9:50	9:57	10:06	10:31	10:36
10:40	10:47	10:56	11:19	11:24
11:30	11:37	11:46	**12:09PM**	**12:13**

Afternoon trips travel north on 6th Ave.

Salmon Creek Park & Ride *Stop ID 105* ❶	99th Street Transit Center *Stop ID 110* ❷	15th St & Broadway *Stop ID 6046* ❸	SW 6th & Columbia *Stop ID 6002* ❻	SW 6th & Stark *Stop ID 6006* ❼
12:04PM	**12:11**	**12:20**	**12:45**	**12:48**
12:57	**1:04**	**1:13**	**1:35**	**1:39**
1:53	**2:00**	**2:09**	**2:31**	**2:35**
2:45	**2:52**	**3:00**	**3:22**	**3:26**
3:33	**3:40**	**3:48**	**4:10**	**4:14**
—	—	**4:06**	**4:28**	**4:33**
—	—	**4:21**	**4:43**	**4:48**
4:17	**4:24**	**4:32**	**4:54**	**4:59**
4:52	**4:59**	**5:07**	**5:30**	**5:36**
5:12	**5:19**	**5:27**	**5:50**	**5:56**
5:44	**5:51**	**5:59**	**6:22**	**6:26**
6:14	**6:21**	**6:29**	**6:51**	**6:55**
6:46	**6:53**	**7:01**	**7:23**	**7:27**

Note for #105 I-5 Express ONLY: People who are 65+, disabled or who have medicare cards save 50% on Express fares from 9 AM–3 PM weekdays with a valid Honored ID card issued by C-TRAN or TriMet, Medicare card, or state issued ID showing age 65 or older.

During snow and ice conditions, these routes may drop off passengers at the nearest MAX station to connect with other TriMet routes in downtown Portland to their final destination.

North to Vancouver

Morning trips travel south on 5th Ave.

SW 5th & Alder *Stop ID 5001* ❹	SW 5th & Hall *Stop ID 5009* ❺	Broadway & Evergreen Blvd *Stop ID 632* ❽	99th Street Transit Center *Stop ID 110* ❷	Salmon Creek Park & Ride *Stop ID 105* ❶
6:01AM	6:05	6:18	6:29	6:37
6:46	6:50	7:03	7:15	7:23
7:06	7:11	7:24	7:36	7:44
7:31	7:36	7:49	8:01	8:09
7:51	7:56	8:09	8:21	8:29
8:22	8:27	8:40	8:52	9:00
8:52	8:57	9:10	9:22	9:30
9:14	9:19	9:32	9:44	9:52
9:44	9:49	10:02	10:15	10:23
10:31	10:36	10:49	11:02	11:10
11:19	11:24	11:37	11:50	11:58
12:09PM	**12:13**	**12:26**	**12:39**	**12:47**

Afternoon trips travel north on 6th Ave.

SW 6th & Columbia *Stop ID 6002* ❻	SW 6th & Stark *Stop ID 6006* ❼	Broadway & Evergreen Blvd *Stop ID 632* ❽	99th Street Transit Center *Stop ID 110* ❷	Salmon Creek Park & Ride *Stop ID 105* ❶
12:45PM	**12:48**	**1:06**	**1:19**	**1:27**
1:35	**1:39**	**1:59**	**2:12**	**2:20**
2:31	**2:35**	**2:57**	**3:10**	**3:18**
3:22	**3:26**	**3:48**	**4:01**	**4:09**
3:58	**4:02**	**4:27**	**4:40**	**4:48**
4:10	**4:14**	**4:39**	**4:52**	**5:00**
4:28	**4:33**	**4:58**	**5:11**	**5:21**
4:43	**4:48**	**5:16**	**5:29**	**5:39**
4:54	**4:59**	**5:27**	**5:40**	**5:50**
5:13	**5:19**	**5:47**	**6:00**	**6:10**
5:30	**5:36**	**6:04**	**6:17**	**6:27**
5:50	**5:56**	**6:24**	**6:36**	**6:46**
6:22	**6:26**	**6:49**	**7:01**	**7:11**
6:51	**6:55**	**7:18**	**7:30**	**7:40**
7:23	**7:27**	**7:44**	**7:56**	**8:06**

- **Bold** times are PM runs
- No Saturday or Sunday/Holiday Service
- C-TRAN Express fare required

*Due to traffic and weather conditions, scheduled times may vary; either earlier or later than shown.destination.

134 · Salmon Express

Weekdays Only

South to Portland

Morning trips travel south on 5th Ave.

Salmon Creek Park & Ride *Stop ID 105* ❶	99th Street Transit Center *Stop ID 110* ❷	SW 5th & Alder *Stop ID 5001* ❹	SW 5th & Hall *Stop ID 5009* ❺
5:20AM	—	5:43*	5:47*
5:42	—	6:10*	6:14*
5:57	—	6:29*	6:33*
6:12	—	6:46*	6:50*
6:27	—	7:06*	7:10*
6:42	—	7:22*	7:26*
6:57	—	7:40*	7:44*
7:17	—	8:00*	8:04*
7:37	—	8:20*	8:24*
8:07	8:14	8:53*	8:57*

North to Salmon Creek Park & Ride

Afternoon trips travel north on 6th Ave.

SW 6th & Columbia *Stop ID 6002* ❻	SW 6th & Stark *Stop ID 6006* ❼	99th Street Transit Center *Stop ID 110* ❷	Salmon Creek Park & Ride *Stop ID 105* ❶
3:10PM	**3:14**	—	**3:50***
3:30	**3:34**	—	**4:10***
3:50	**3:54**	—	**4:33***
4:05	**4:10**	—	**4:49***
4:20	**4:25**	—	**5:03***
4:35	**4:40**	—	**5:19***
4:50	**4:55**	—	**5:35***
5:05	**5:11**	—	**5:51***
5:23	**5:29**	—	**6:06***
5:43	**5:49**	**6:21***	**6:28***
6:03	**6:09**	**6:38***	**6:45***
6:28	**6:34**	**7:03***	**7:10***

199 · 99th Street Express

Weekdays Only

South to Portland

Morning trips travel south on 5th Ave.

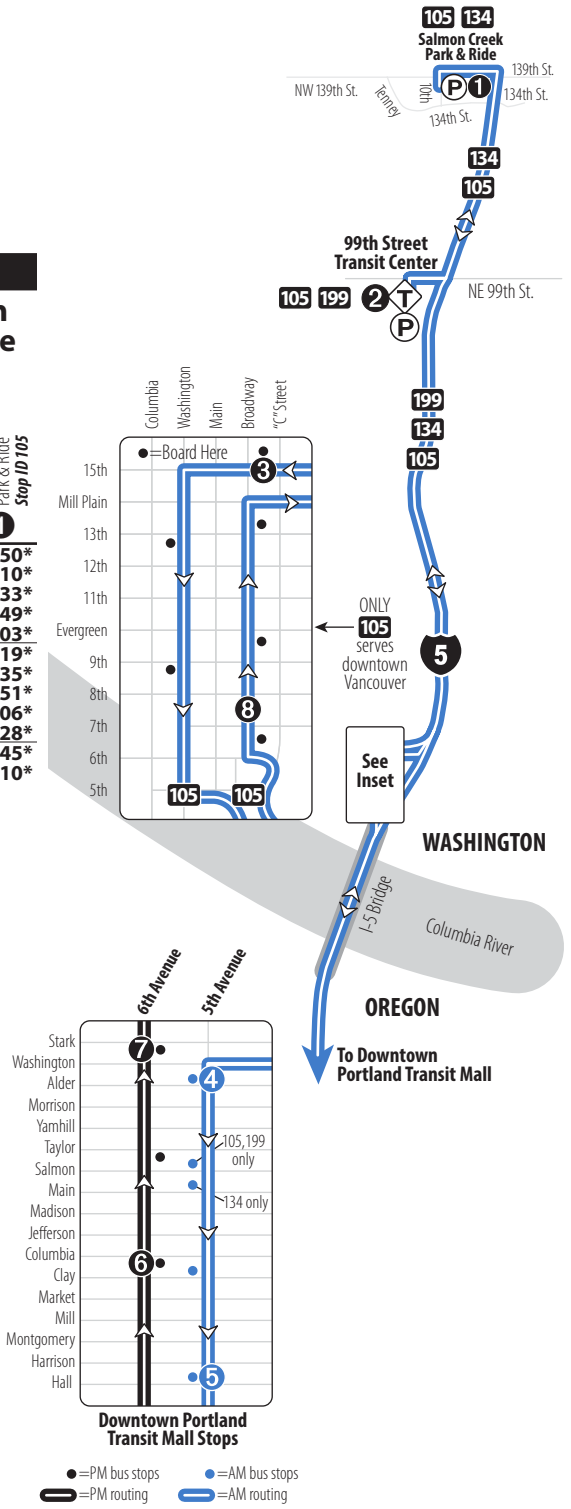
99th Street Transit Center *Stop ID 110* ❷	SW 5th & Alder *Stop ID 5001* ❹	SW 5th & Hall *Stop ID 5009* ❺
5:25AM	5:47*	5:51*
5:50	6:19*	6:23*
6:05	6:38*	6:42*
6:20	6:56*	7:00*
6:35	7:13*	7:17*
6:50	7:31*	7:35*
7:10	7:51*	7:55*
7:30	8:11*	8:15*
7:50	8:31*	8:35*
8:10	8:49*	8:53*
8:14	8:53*	8:57*

North to 99th St. Transit Center

Afternoon trips travel north on 6th Ave.

SW 6th & Columbia *Stop ID 6002* ❻	SW 6th & Stark *Stop ID 6006* ❼	99th Street Transit Center *Stop ID 110* ❷
3:10PM	**3:14**	**3:47***
3:25	**3:29**	**4:02***
3:45	**3:49**	**4:24***
4:00	**4:04**	**4:42***
4:15	**4:19**	**4:57***
4:30	**4:34**	**5:11***
4:45	**4:49**	**5:27***
5:00	**5:04**	**5:42***
5:23	**5:27**	**6:01***
5:43	**5:49**	**6:21***
6:03	**6:09**	**6:38***
6:28	**6:34**	**7:03***

*Due to traffic and weather conditions, scheduled times may vary; either earlier or later than shown.destination.



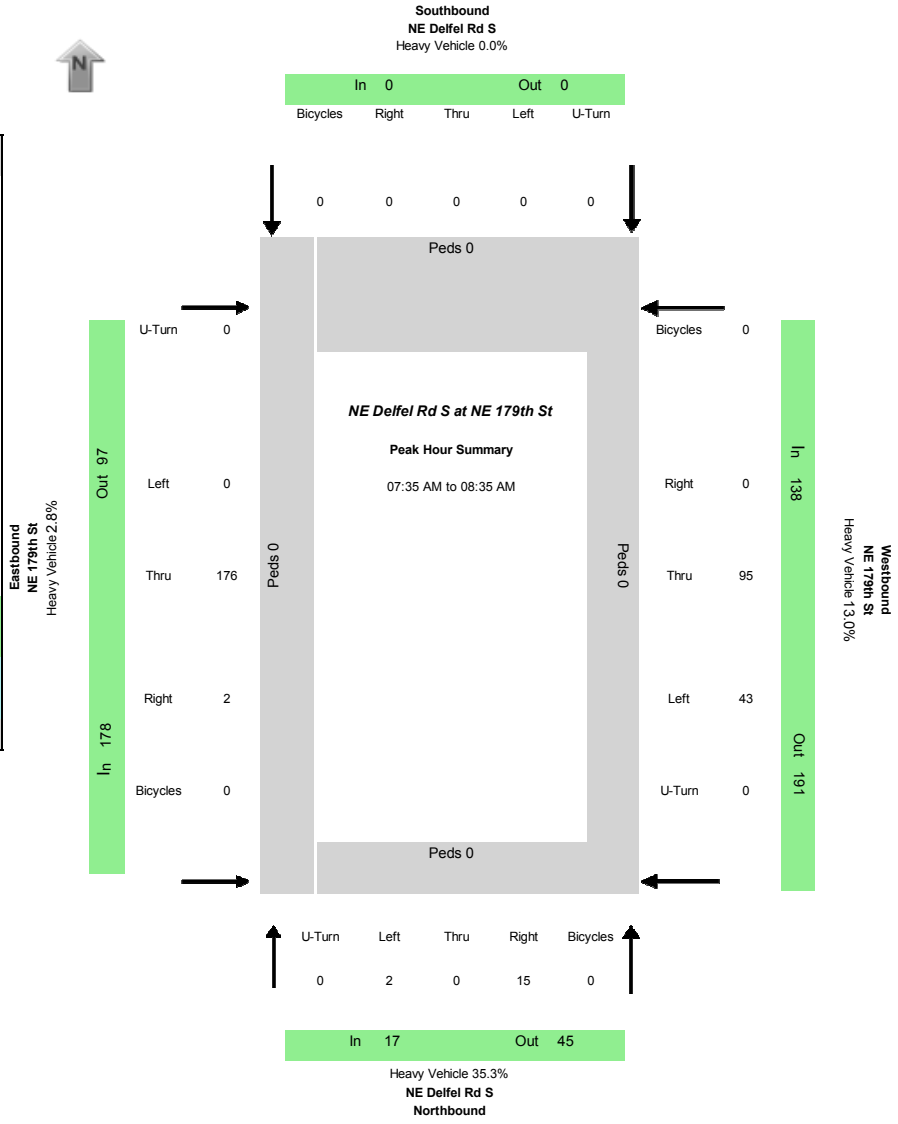
Effective 09/10/2017

APPENDIX D

TRAFFIC COUNT SUMMARIES & BALANCED VOLUMES

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE Delfel Rd S*
E/W street	*NE 179th St*
City, State	Ridgefield WA
Site Notes	
Location	45.750407 - -122.665666
Start Date	Thursday, October 18, 2018
Start Time	07:00:00 AM
Weather	
Study ID #	
Peak Hour Start	07:35:00 AM
Peak 15 Min Start	07:45:00 AM
PHF (15-Min Int)	0.77



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
2	0	15	0	0	0	0	0	0	176	2	0	43	95	0	0	17	0	178	138	45	0	97	191
Percent Heavy Vehicles																							
0.0%	0.0%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	50.0%	0.0%	20.9%	9.5%	0.0%	0.0%	35.3%	0.0%	2.8%	13.0%	22.2%	0.0%	9.3%	5.2%

PHV- Bicycles

Northbound				Southbound				Eastbound				Westbound				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	**Sum**
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PHV - Pedestrians in Crosswalk

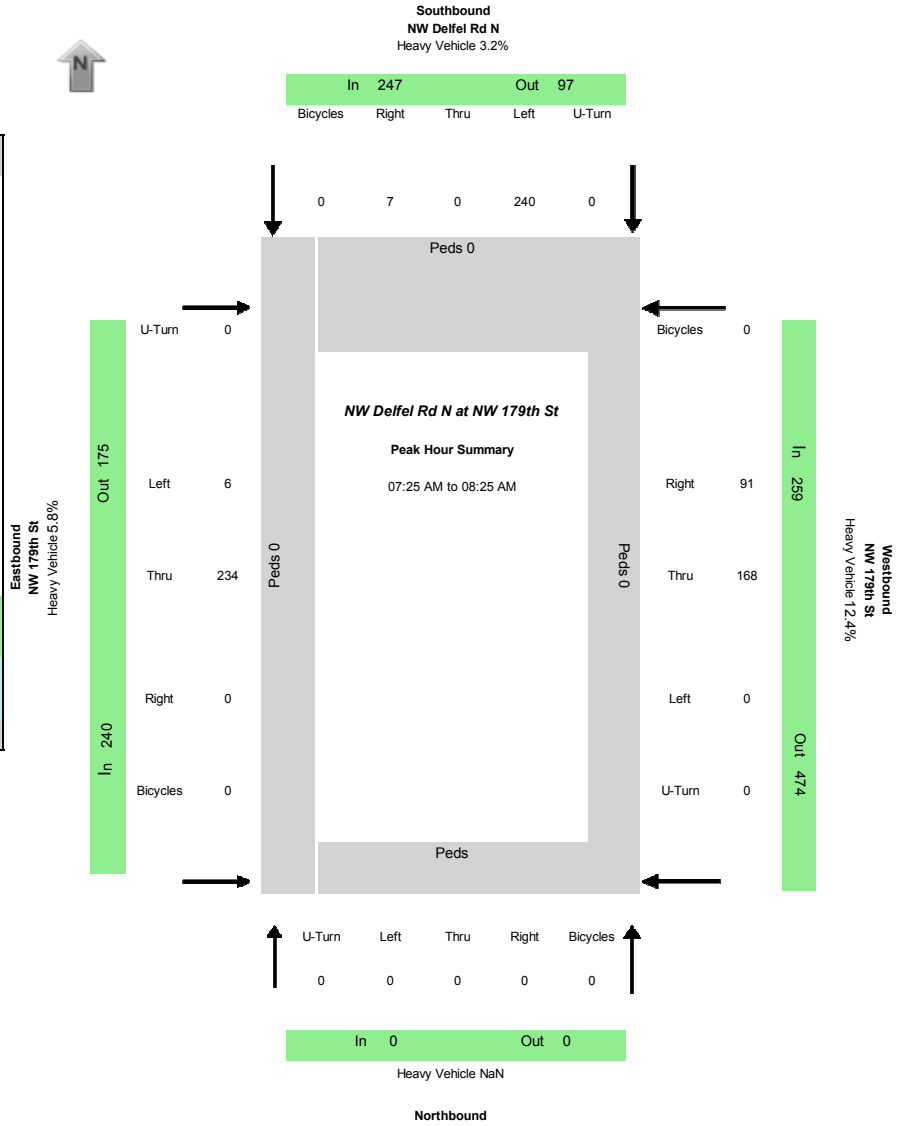
NB	SB	EB	WB	**Sum**
0	0	0	0	0

All Vehicle Volumes

	Northbound NE Delfel Rd S				Southbound NE Delfel Rd S				Eastbound NE 179th St				Westbound NE 179th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
07:00:00 AM	1	0	2	0	0	0	0	0	0	5	0	0	2	10	0	0		
07:05:00 AM	0	0	1	0	0	0	0	0	0	11	1	0	5	5	0	0		
07:10:00 AM	0	0	2	0	0	0	0	0	0	14	0	0	2	7	0	0	68	
07:15:00 AM	0	0	2	0	0	0	0	0	0	14	0	0	5	8	0	0	77	
07:20:00 AM	0	0	2	0	0	0	0	0	0	15	0	0	3	13	0	0	87	
07:25:00 AM	0	0	3	0	0	0	0	0	0	4	0	0	5	2	0	0	76	
07:30:00 AM	0	0	1	0	0	0	0	0	0	13	0	0	1	2	0	0	64	
07:35:00 AM	0	0	2	0	0	0	0	0	0	12	0	0	4	7	0	0	56	
07:40:00 AM	1	0	0	0	0	0	0	0	0	15	1	0	3	5	0	0	67	
07:45:00 AM	0	0	2	0	0	0	0	0	0	20	0	0	8	11	0	0	91	
07:50:00 AM	0	0	1	0	0	0	0	0	0	16	0	0	4	12	0	0	99	
07:55:00 AM	0	0	0	0	0	0	0	0	0	17	0	0	5	12	0	0	108	319
08:00:00 AM	1	0	2	0	0	0	0	0	0	12	0	0	3	3	0	0	88	320
08:05:00 AM	0	0	3	0	0	0	0	0	0	14	0	0	5	5	0	0	82	324
08:10:00 AM	0	0	1	0	0	0	0	0	0	13	0	0	0	6	0	0	68	319
08:15:00 AM	0	0	2	0	0	0	0	0	0	4	0	0	2	12	0	0	67	310
08:20:00 AM	0	0	1	0	0	0	0	0	0	17	0	0	1	11	0	0	70	307
08:25:00 AM	0	0	1	0	0	0	0	0	0	15	0	0	6	7	0	0	79	322
08:30:00 AM	0	0	0	0	0	0	0	0	0	21	1	0	2	4	0	0	87	333
08:35:00 AM	1	0	2	0	0	0	0	0	0	11	0	0	2	5	0	0	78	329
08:40:00 AM	0	0	1	0	0	0	0	0	0	14	0	0	4	5	0	0	73	328
08:45:00 AM	0	0	1	0	0	0	0	0	0	10	0	0	2	16	0	0	74	316
08:50:00 AM	0	0	1	0	0	0	0	0	0	12	0	0	7	18	0	0	91	321
08:55:00 AM	0	0	2	0	0	0	0	0	0	14	1	0	5	10	0	0	99	319

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NW Delfel Rd N*
E/W street	*NW 179th St*
City, State	Ridgefield WA
Site Notes	
Location	45.750464 - -122.664199
Start Date	Thursday, October 18, 2018
Start Time	07:00:00 AM
Weather	
Study ID #	
Peak Hour Start	07:25:00 AM
Peak 15 Min Start	07:45:00 AM
PHF (15-Min Int)	0.85



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
0	0	0	0	240	0	7	0	6	234	0	0	0	168	91	0	0	247	240	259	0	97	175	474
Percent Heavy Vehicles																							
0.0%	0.0%	0.0%	0.0%	2.5%	0.0%	28.6%	0.0%	16.7%	5.6%	0.0%	0.0%	0.0%	12.5%	12.1%	0.0%	#DIV/0!	3.2%	5.8%	12.4%	#DIV/0!	12.4%	13.1%	4.0%

PHV- Bicycles

Northbound				Southbound				Eastbound				Westbound				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum
				0		0	0	0	0		0		0	0	0	0

PHV - Pedestrians in Crosswalk

NB	SB	EB	WB	Sum
	0	0	0	0

All Vehicle Volumes

	Northbound				Southbound NW Delfel Rd N				Eastbound NW 179th St				Westbound NW 179th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
07:00:00 AM					13		0	0	0	18		0		10	6	0		
07:05:00 AM					17		0	0	0	8		0		18	7	0		
07:10:00 AM					18		0	0	1	17		0		10	7	0	150	
07:15:00 AM					9		0	0	0	17		0		13	5	0	147	
07:20:00 AM					14		1	0	3	18		0		12	7	0	152	
07:25:00 AM					10		0	0	0	22		0		20	4	0	155	
07:30:00 AM					23		0	0	0	20		0		4	10	0	168	
07:35:00 AM					18		2	0	1	16		0		14	9	0	173	
07:40:00 AM					20		1	0	0	22		0		12	11	0	183	
07:45:00 AM					19		1	0	1	27		0		15	11	0	200	
07:50:00 AM					31		1	0	0	18		0		20	9	0	219	
07:55:00 AM					22		0	0	0	22		0		19	4	0	220	708
08:00:00 AM					17		0	0	1	12		0		11	7	0	194	709
08:05:00 AM					21		0	0	1	23		0		11	5	0	176	720
08:10:00 AM					16		0	0	0	17		0		9	2	0	153	711
08:15:00 AM					19		1	0	1	13		0		18	7	0	164	726
08:20:00 AM					24		1	0	1	22		0		15	12	0	178	746
08:25:00 AM					9		1	0	0	19		0		15	6	0	184	740
08:30:00 AM					12		0	0	1	19		0		8	4	0	169	727
08:35:00 AM					17		1	0	0	20		0		10	2	0	144	717
08:40:00 AM					14		1	0	0	18		0		9	9	0	145	702
08:45:00 AM					23		1	0	1	16		0		19	6	0	167	694
08:50:00 AM					17		3	0	2	13		0		20	5	0	177	675
08:55:00 AM					18		1	0	1	14		0		15	5	0	180	662

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

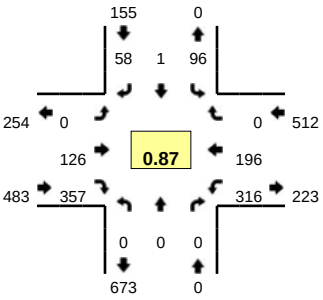
LOCATION: I-5 SB Ramps -- NE 179th St

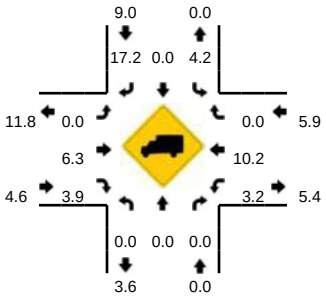
QC JOB #: 14497717

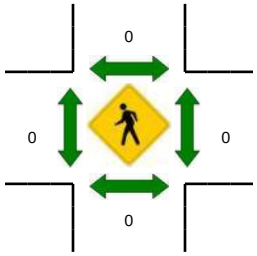
CITY/STATE: Ridgefield, WA

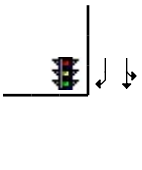
DATE: Wed, Sep 06 2017

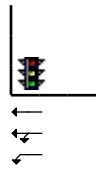
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

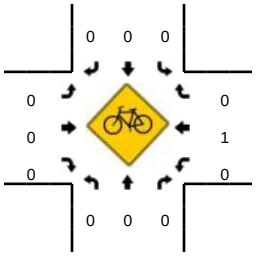


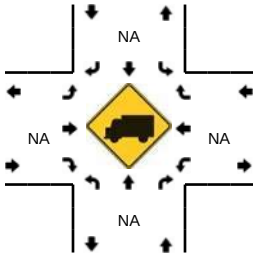


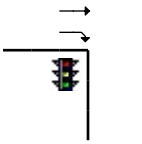


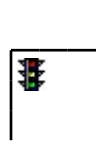


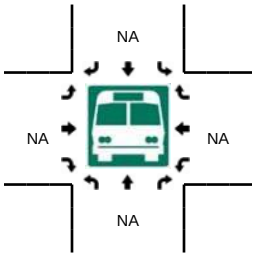












5-Min Count Period Beginning At	I-5 SB Ramps (Northbound)				I-5 SB Ramps (Southbound)				NE 179th St (Eastbound)				NE 179th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	5	0	5	0	0	14	32	0	25	14	0	0	95	
7:05 AM	0	0	0	0	7	0	2	0	0	14	34	0	21	9	0	0	87	
7:10 AM	0	0	0	0	9	0	3	0	0	7	29	0	22	14	0	0	84	
7:15 AM	0	0	0	0	9	0	4	0	0	5	21	0	25	22	0	1	87	
7:20 AM	0	0	0	0	5	0	1	0	0	8	13	0	29	15	0	0	71	
7:25 AM	0	0	0	0	7	1	8	0	0	12	29	0	19	13	0	0	89	
7:30 AM	0	0	0	0	8	0	7	0	0	15	23	0	34	26	0	0	113	
7:35 AM	0	0	0	0	8	0	6	0	0	7	48	0	21	16	0	0	106	
7:40 AM	0	0	0	0	8	0	6	0	0	12	40	0	30	14	0	0	110	
7:45 AM	0	0	0	0	6	0	5	0	0	12	31	0	29	19	0	0	102	
7:50 AM	0	0	0	0	13	0	8	0	0	12	35	0	34	15	0	0	117	
7:55 AM	0	0	0	0	11	0	3	0	0	8	22	0	26	19	0	0	89	1150
8:00 AM	0	0	0	0	8	0	3	0	0	3	21	0	28	16	0	0	79	1134
8:05 AM	0	0	0	0	3	0	3	0	0	7	29	0	28	17	0	0	87	1134
8:10 AM	0	0	0	0	13	0	2	0	0	15	23	0	30	15	0	0	98	1148
8:15 AM	0	0	0	0	4	0	2	0	0	12	13	0	28	11	0	0	70	1131
8:20 AM	0	0	0	0	5	0	3	0	0	10	23	0	20	17	0	0	78	1138
8:25 AM	0	0	0	0	11	0	4	0	0	10	19	0	22	16	0	0	82	1131
8:30 AM	0	0	0	0	4	0	1	0	0	8	40	0	21	29	0	0	103	1121
8:35 AM	0	0	0	0	6	0	5	0	0	5	21	0	29	11	0	0	77	1092
8:40 AM	0	0	0	0	7	0	6	0	0	11	29	0	25	18	0	0	96	1078
8:45 AM	0	0	0	0	11	0	4	0	0	13	21	0	33	14	0	0	96	1072
8:50 AM	0	0	0	0	7	1	4	0	0	11	31	0	27	14	0	0	95	1050
8:55 AM	0	0	0	0	7	0	1	0	0	9	25	0	16	17	0	0	75	1036

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	96	0	76	0	0	136	444	0	340	224	0	0	1316
Heavy Trucks	0	0	0		0	0	8		0	12	8		4	24	0		56
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:12 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: I-5 NB On Ramp -- NE 179th St

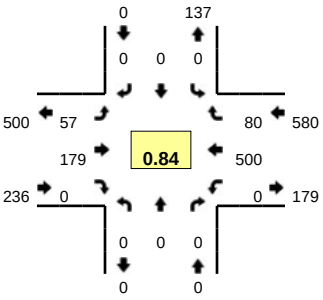
CITY/STATE: Ridgefield, WA

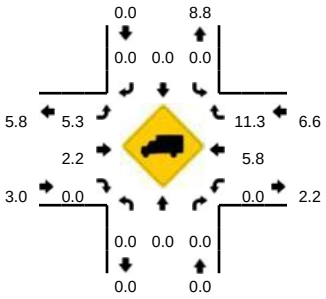
QC JOB #: 14675501

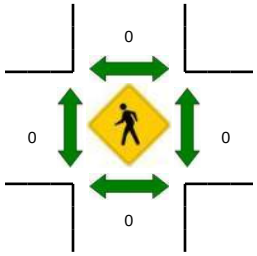
DATE: Thu, Apr 12 2018

Peak-Hour: 7:20 AM -- 8:20 AM

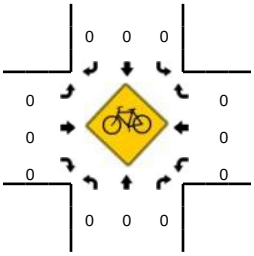
Peak 15-Min: 7:40 AM -- 7:55 AM

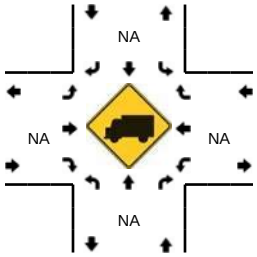




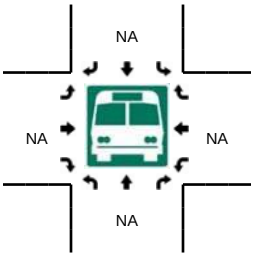












5-Min Count Period Beginning At	I-5 NB On Ramp (Northbound)				I-5 NB On Ramp (Southbound)				NE 179th St (Eastbound)				NE 179th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	0	0	4	10	0	0	0	36	4	0	54	
7:05 AM	0	0	0	0	0	0	0	0	4	3	0	0	0	33	5	0	45	
7:10 AM	0	0	0	0	0	0	0	0	8	7	0	0	0	37	11	0	63	
7:15 AM	0	0	0	0	0	0	0	0	6	7	0	0	0	39	5	0	57	
7:20 AM	0	0	0	0	0	0	0	0	7	13	0	0	0	41	6	0	67	
7:25 AM	0	0	0	0	0	0	0	0	3	14	0	0	0	41	6	0	64	
7:30 AM	0	0	0	0	0	0	0	0	6	18	0	0	0	42	10	0	76	
7:35 AM	0	0	0	0	0	0	0	0	5	15	0	0	0	51	10	0	81	
7:40 AM	0	0	0	0	0	0	0	0	5	17	0	0	0	48	9	0	79	
7:45 AM	0	0	0	0	0	0	0	0	2	20	0	0	0	48	6	0	76	
7:50 AM	0	0	0	0	0	0	0	0	7	25	0	0	0	50	7	0	89	
7:55 AM	0	0	0	0	0	0	0	0	5	12	0	0	0	34	3	0	54	805
8:00 AM	0	0	0	0	0	0	0	0	6	12	0	0	0	30	5	0	53	804
8:05 AM	0	0	0	0	0	0	0	0	4	14	0	0	0	30	6	0	54	813
8:10 AM	0	0	0	0	0	0	0	0	6	5	0	0	0	47	4	0	62	812
8:15 AM	0	0	0	0	0	0	0	0	1	14	0	0	0	38	8	0	61	816
8:20 AM	0	0	0	0	0	0	0	0	4	10	0	0	0	47	5	0	66	815
8:25 AM	0	0	0	0	0	0	0	0	2	10	0	0	0	44	6	0	62	813
8:30 AM	0	0	0	0	0	0	0	0	10	6	0	0	0	55	5	0	76	813
8:35 AM	0	0	0	0	0	0	0	0	4	14	0	0	0	53	7	0	78	810
8:40 AM	0	0	0	0	0	0	0	0	2	16	0	0	0	40	6	0	64	795
8:45 AM	0	0	0	0	0	0	0	0	2	9	0	0	0	53	4	0	68	787
8:50 AM	0	0	0	0	0	0	0	0	4	12	0	0	0	46	1	0	63	761
8:55 AM	0	0	0	0	0	0	0	0	1	11	0	0	0	33	1	0	46	753

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	0	0	0	0	56	248	0	0	0	584	88	0	976
Heavy Trucks	0	0	0		0	0	0		0	12	0		0	32	4		48
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 PM

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

Type of peak hour being reported: Intersection Peak

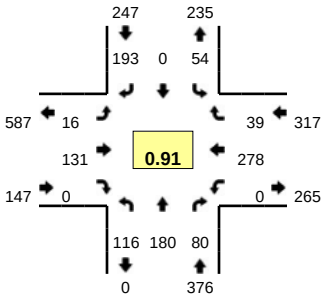
Method for determining peak hour: Total Entering Volume

LOCATION: NE 10th Ave/I-5 NB Off Ramp -- NE 179th St

QC JOB #: 14675503

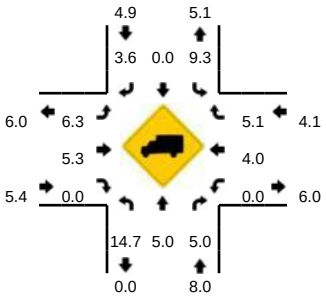
CITY/STATE: Ridgefield, WA

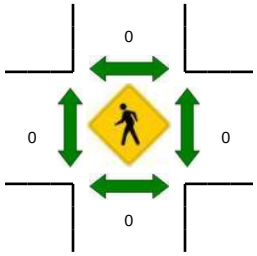
DATE: Thu, Apr 12 2018



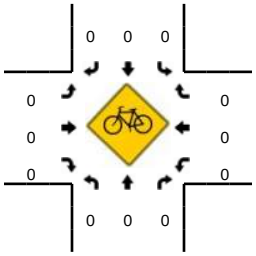
Peak-Hour: 7:50 AM -- 8:50 AM

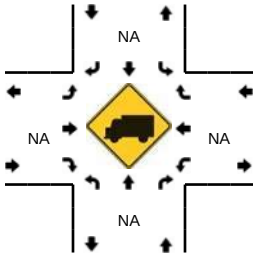
Peak 15-Min: 8:35 AM -- 8:50 AM

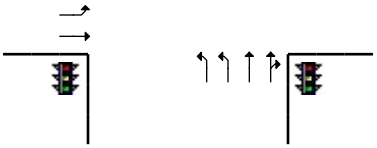


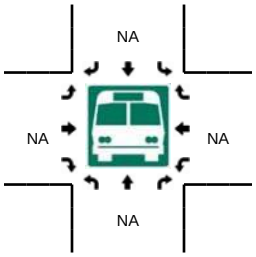












5-Min Count Period Beginning At	NE 10th Ave/I-5 NB Off Ramp (Northbound)				NE 10th Ave/I-5 NB Off Ramp (Southbound)				NE 179th St (Eastbound)				NE 179th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	12	7	6	0	3	0	10	0	1	9	0	0	0	18	0	0	66	
7:05 AM	11	17	6	0	3	0	10	0	1	2	0	0	0	17	1	0	68	
7:10 AM	10	11	3	0	0	0	14	0	1	6	0	0	0	24	1	0	70	
7:15 AM	3	14	7	0	1	0	22	0	2	5	0	0	0	19	1	0	74	
7:20 AM	12	12	7	0	1	0	15	0	1	12	0	0	0	20	1	0	81	
7:25 AM	6	15	3	0	2	0	16	0	0	14	0	0	0	25	3	0	84	
7:30 AM	13	14	6	0	2	0	12	0	1	17	0	0	0	27	1	0	93	
7:35 AM	12	7	6	0	2	0	24	0	1	14	0	0	0	25	1	0	92	
7:40 AM	5	8	3	0	6	0	19	0	2	15	0	0	0	33	1	0	92	
7:45 AM	11	9	8	0	3	0	13	0	2	18	0	0	0	30	2	0	96	
7:50 AM	9	8	5	0	9	0	24	0	0	25	0	0	0	24	1	0	105	
7:55 AM	12	15	8	0	4	0	9	0	2	10	0	0	0	16	1	0	77	998
8:00 AM	6	20	6	0	5	0	11	0	2	10	0	0	0	18	2	0	80	1012
8:05 AM	6	16	4	0	6	0	9	0	1	13	0	0	0	21	2	0	78	1022
8:10 AM	11	13	4	0	5	0	15	0	3	2	0	0	0	25	2	0	80	1032
8:15 AM	6	28	8	0	5	0	27	0	2	12	0	0	0	13	2	0	103	1061
8:20 AM	11	18	8	0	2	0	19	0	1	9	0	0	0	22	2	0	92	1072
8:25 AM	8	10	9	0	2	0	18	0	0	10	0	0	0	24	3	0	84	1072
8:30 AM	9	9	9	0	3	0	18	0	1	5	0	0	0	33	2	0	89	1068
8:35 AM	15	13	8	0	3	0	15	0	2	12	0	0	0	30	4	0	102	1078
8:40 AM	10	14	6	0	3	0	9	0	2	14	0	0	0	27	6	0	91	1077
8:45 AM	13	16	5	0	7	0	19	0	0	9	0	0	0	25	12	0	106	1087
8:50 AM	13	15	1	0	5	0	15	0	0	12	0	0	0	19	6	0	86	1068
8:55 AM	8	14	7	0	5	0	17	0	0	11	0	0	0	9	3	0	74	1065

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	152	172	76	0	52	0	172	0	16	140	0	0	0	328	88	0	1196
Heavy Trucks	28	24	4		0	0	0		4	12	0		0	20	4		96
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

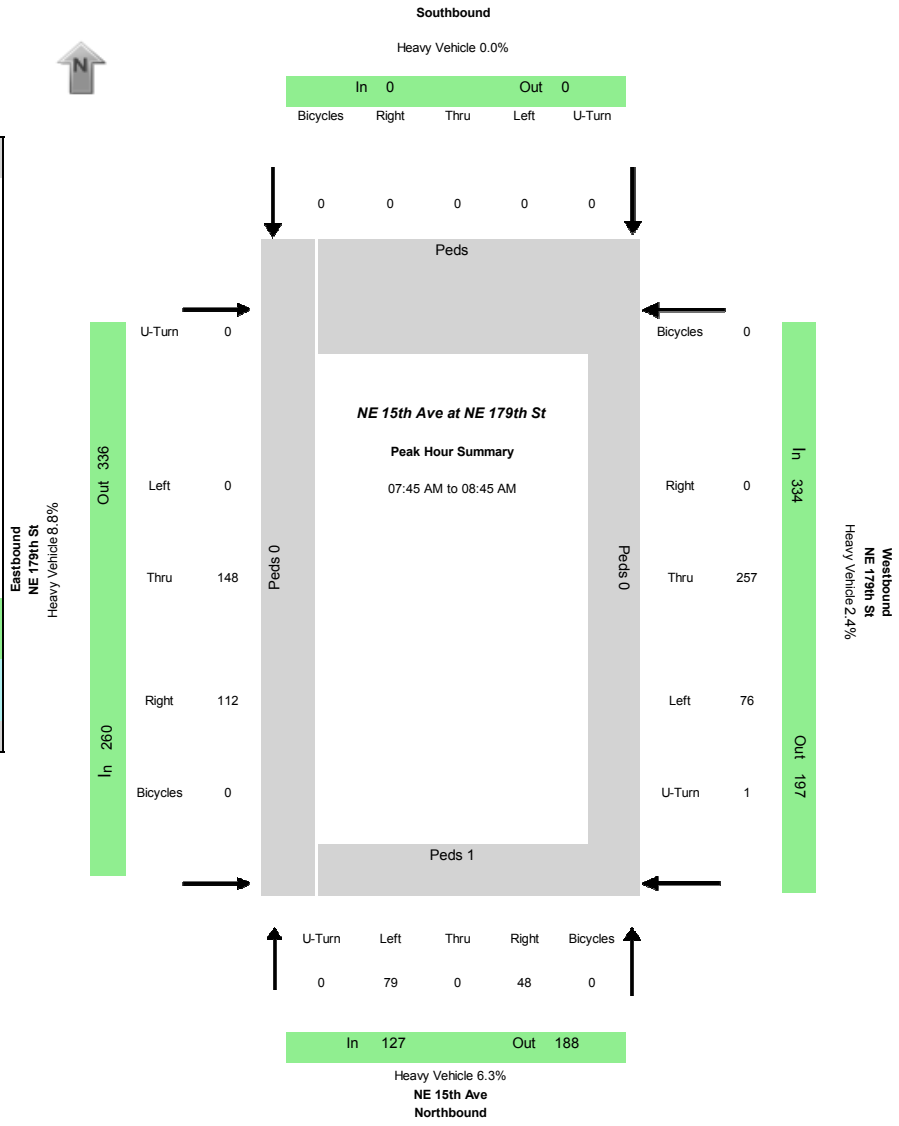
Comments:

Report generated on 4/24/2018 4:03 PM

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

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	***NE 15th Ave***
E/W street	***NE 179th St***
City, State	Ridgefield WA
Site Notes	
Location	45.750681 - -122.655723
Start Date	Thursday, October 18, 2018
Start Time	07:00:00 AM
Weather	
Study ID #	
Peak Hour Start	07:45:00 AM
Peak 15 Min Start	08:15:00 AM
PHF (15-Min Int)	0.96



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
79	0	48	0	0	0	0	0	0	148	112	0	76	257	0	1	127	0	260	334	188	0	336	197
Percent Heavy Vehicles																							
7.6%	0.0%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.8%	8.9%	0.0%	2.6%	2.3%	0.0%	0.0%	6.3%	0.0%	8.8%	2.4%	6.4%	0.0%	3.6%	7.6%

PHV- Bicycles

Northbound				Southbound				Eastbound				Westbound				Sum
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	
0		0	0						0	0	0	0	0		0	0

PHV - Pedestrians in Crosswalk

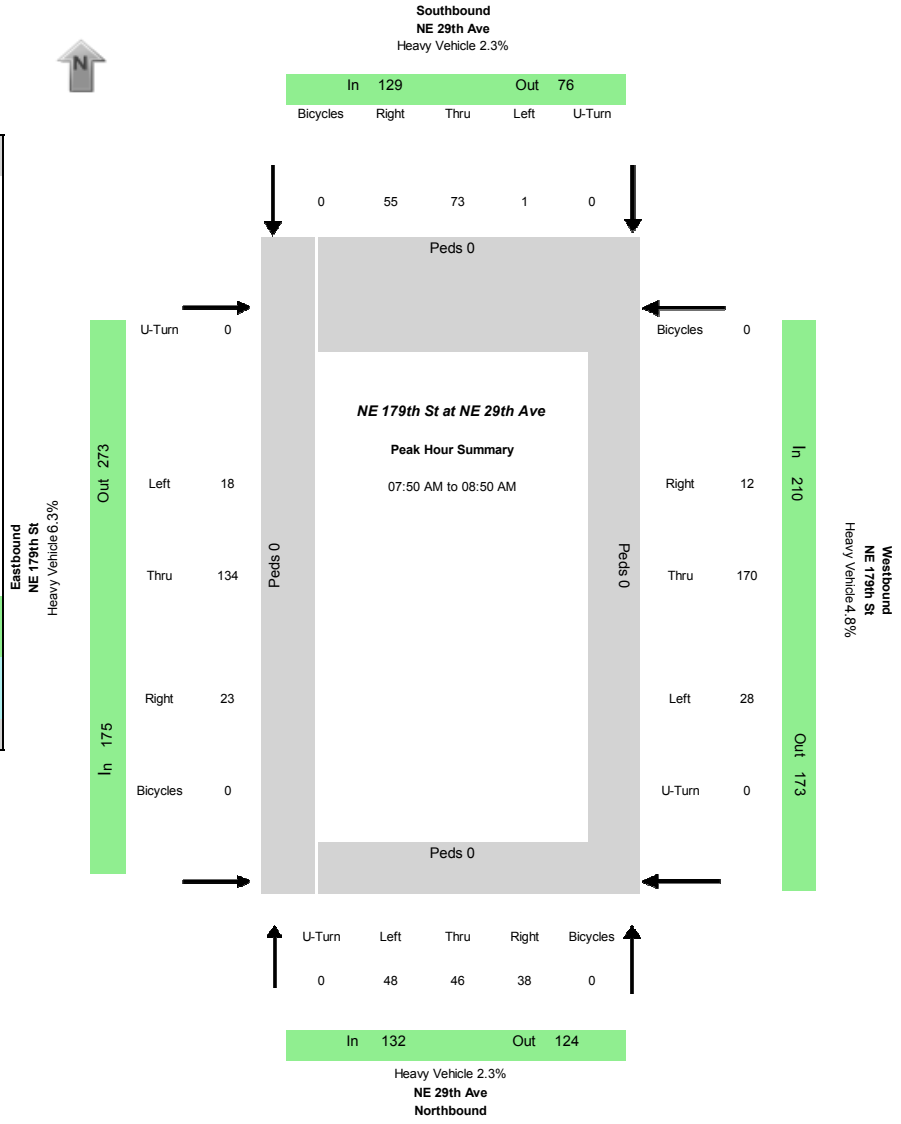
NB	SB	EB	WB	Sum
1		0	0	1

All Vehicle Volumes

	Northbound NE 15th Ave				Southbound				Eastbound NE 179th St				Westbound NE 179th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
07:00:00 AM	5		2	0					4	9	0	5	15		0			
07:05:00 AM	5		0	0					4	5	0	5	13		0			
07:10:00 AM	3		2	0					9	10	0	8	13		0		117	
07:15:00 AM	1		2	0					12	4	0	7	30		0		133	
07:20:00 AM	11		2	0					7	6	0	2	20		0		149	
07:25:00 AM	7		4	0					15	5	0	6	17		0		158	
07:30:00 AM	3		1	0					17	12	0	7	25		0		167	
07:35:00 AM	7		4	0					9	11	0	4	19		0		173	
07:40:00 AM	4		4	0					8	9	0	2	15		0		161	
07:45:00 AM	9		7	0					15	12	0	5	25		0		169	
07:50:00 AM	8		3	0					15	7	0	9	13		0		170	
07:55:00 AM	6		4	0					7	16	0	5	15		0		181	617
08:00:00 AM	8		2	0					15	9	0	3	17		1		163	632
08:05:00 AM	3		5	0					12	10	0	1	24		0		163	655
08:10:00 AM	6		6	0					16	9	0	6	18		0		171	671
08:15:00 AM	6		4	0					11	9	0	10	21		0		177	676
08:20:00 AM	6		2	0					12	5	0	7	33		0		187	693
08:25:00 AM	7		3	0					10	11	0	9	22		0		188	701
08:30:00 AM	6		3	0					10	6	0	8	26		0		186	695
08:35:00 AM	3		4	0					13	7	0	8	22		0		178	698
08:40:00 AM	11		5	0					12	11	0	5	21		0		181	721
08:45:00 AM	4		4	0					9	10	0	8	30		0		187	713
08:50:00 AM	3		4	0					19	11	0	2	11		0		180	708
08:55:00 AM	4		2	0					16	8	0	3	21		0		169	709

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE 29th Ave*
E/W street	*NE 179th St*
City, State	Ridgefield WA
Site Notes	
Location	45.750756 - -122.640992
Start Date	Thursday, October 18, 2018
Start Time	07:00:00 AM
Weather	
Study ID #	
Peak Hour Start	07:50:00 AM
Peak 15 Min Start	08:10:00 AM
PHF (15-Min Int)	0.85



Peak-Hour Volumes (PHV)																								
Northbound				Southbound				Eastbound				Westbound				Entering				Leaving				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB	
48	46	38	0	1	73	55	0	18	134	23	0	28	170	12	0	132	129	175	210	124	76	273	173	
Percent Heavy Vehicles																								
2.1%	0.0%	5.3%	0.0%	0.0%	0.0%	5.5%	0.0%	11.1%	5.2%	8.7%	0.0%	7.1%	4.1%	8.3%	0.0%	2.3%	2.3%	6.3%	4.8%	3.2%	3.9%	4.0%	5.2%	

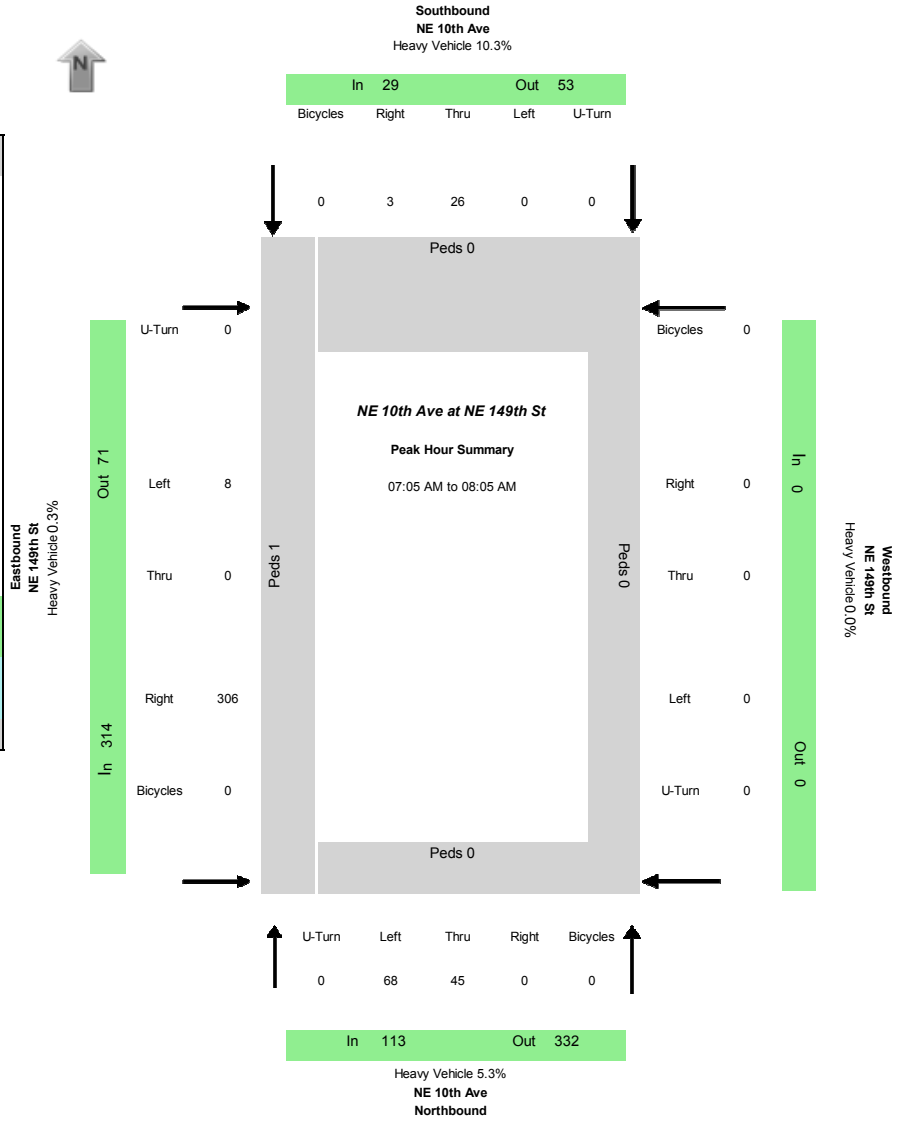
PHV- Bicycles																	PHV - Pedestrians				
Northbound				Southbound				Eastbound				Westbound					in Crosswalk				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	NB	SB	EB	WB	Sum
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

All Vehicle Volumes

	Northbound NE 29th Ave				Southbound NE 29th Ave				Eastbound NE 179th St				Westbound NE 179th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
07:00:00 AM	1	0	0	0	1	2	1	0	0	4	0	0	2	10	0	0		
07:05:00 AM	2	1	3	0	0	4	3	0	1	2	2	0	1	6	0	0		
07:10:00 AM	0	4	2	0	0	2	5	0	3	3	2	0	2	19	0	0	88	
07:15:00 AM	1	2	1	0	0	4	4	0	3	7	0	0	2	12	0	0	103	
07:20:00 AM	7	7	3	0	2	2	2	0	3	7	1	0	1	11	0	0	124	
07:25:00 AM	6	5	2	0	2	4	5	0	2	9	2	0	1	8	1	0	129	
07:30:00 AM	2	8	3	0	0	3	5	0	2	10	1	0	1	13	1	0	142	
07:35:00 AM	6	4	1	0	1	3	3	0	1	10	2	0	0	10	0	0	137	
07:40:00 AM	2	6	2	0	0	7	2	0	1	7	0	0	3	13	0	0	133	
07:45:00 AM	2	4	0	0	0	4	2	0	0	17	0	0	0	14	0	0	127	
07:50:00 AM	3	3	4	0	0	5	5	0	2	15	3	0	3	9	1	0	139	
07:55:00 AM	2	2	3	0	0	4	2	0	0	5	1	0	3	13	1	0	132	482
08:00:00 AM	7	4	4	0	0	5	3	0	1	10	1	0	2	7	1	0	134	506
08:05:00 AM	6	5	1	0	0	6	2	0	4	11	2	0	1	11	2	0	132	532
08:10:00 AM	4	5	2	0	0	5	5	0	2	12	4	0	2	14	1	0	152	546
08:15:00 AM	1	6	6	0	0	10	8	0	1	13	2	0	1	15	1	0	171	574
08:20:00 AM	6	5	3	0	0	7	10	0	3	12	1	0	2	18	2	0	189	597
08:25:00 AM	2	1	2	0	1	4	5	0	1	10	2	0	3	13	2	0	179	596
08:30:00 AM	2	5	1	0	0	4	4	0	0	10	2	0	5	20	1	0	169	601
08:35:00 AM	2	2	5	0	0	5	5	0	3	11	5	0	1	21	0	0	160	620
08:40:00 AM	4	4	3	0	0	10	3	0	0	14	0	0	2	12	0	0	166	629
08:45:00 AM	9	4	4	0	0	8	3	0	1	11	0	0	3	17	0	0	172	646
08:50:00 AM	3	3	3	0	0	2	1	0	2	13	3	0	3	9	0	0	154	635
08:55:00 AM	5	3	4	0	2	7	1	0	1	11	3	0	2	4	0	0	145	642

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE 10th Ave*
E/W street	*NE 149th St*
City, State	Salmon Creek WA
Site Notes	
Location	45.729012 - -122.661714
Start Date	Thursday, October 18, 2018
Start Time	07:00:00 AM
Weather	
Study ID #	
Peak Hour Start	07:05:00 AM
Peak 15 Min Start	07:10:00 AM
PHF (15-Min Int)	0.88



Peak-Hour Volumes (PHV)																								
Northbound				**Southbound**				**Eastbound**				**Westbound**				**Entering**				**Leaving**			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
68	45	0	0	0	26	3	0	8	0	306	0	0	0	0	0	113	29	314	0	332	53	71	0
Percent Heavy Vehicles																							
4.4%	6.7%	0.0%	0.0%	0.0%	11.5%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	10.3%	0.3%	0.0%	1.2%	5.7%	4.2%	0.0%

PHV- Bicycles																	PHV - Pedestrians				
Northbound				**Southbound**				**Eastbound**				**Westbound**					in Crosswalk				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	**Sum**	NB	SB	EB	WB	**Sum**
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1

All Vehicle Volumes

	Northbound NE 10th Ave				**Southbound** NE 10th Ave				**Eastbound** NE 149th St				**Westbound** NE 149th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
07:00:00 AM	1	3	0	0	0	1	0	0	0	0	14	0	0	0	0	0		
07:05:00 AM	4	5	0	0	0	1	0	0	0	0	27	0	0	0	0	0		
07:10:00 AM	6	4	0	0	0	4	0	0	1	0	30	0	0	0	0	0	101	
07:15:00 AM	7	6	0	0	0	3	1	0	1	0	27	0	0	0	0	0	127	
07:20:00 AM	7	3	0	0	0	3	0	0	0	0	27	0	0	0	0	0	130	
07:25:00 AM	4	2	0	0	0	0	0	0	0	0	24	0	0	0	0	0	115	
07:30:00 AM	9	1	0	0	0	4	0	0	1	0	27	0	0	0	0	0	112	
07:35:00 AM	3	1	0	0	0	2	0	0	0	0	32	0	0	0	0	0	110	
07:40:00 AM	6	2	0	0	0	2	0	0	0	0	24	0	0	0	0	0	114	
07:45:00 AM	6	3	0	0	0	2	1	0	0	0	27	0	0	0	0	0	111	
07:50:00 AM	7	7	0	0	0	2	1	0	0	0	22	0	0	0	0	0	112	
07:55:00 AM	3	5	0	0	0	1	0	0	2	0	23	0	0	0	0	0	112	442
08:00:00 AM	6	6	0	0	0	2	0	0	3	0	16	0	0	0	0	0	106	456
08:05:00 AM	6	1	0	0	0	1	1	0	0	0	28	0	0	0	0	0	104	456
08:10:00 AM	6	0	0	0	0	1	1	0	0	0	19	0	0	0	0	0	97	438
08:15:00 AM	6	0	0	0	0	3	0	0	0	0	24	0	0	0	0	0	97	426
08:20:00 AM	2	5	0	0	0	0	0	0	1	0	17	0	0	0	0	0	85	411
08:25:00 AM	7	3	0	0	0	1	0	0	1	0	15	1	0	0	0	0	86	409
08:30:00 AM	7	1	0	0	0	2	0	0	2	0	16	0	0	0	0	0	81	395
08:35:00 AM	12	0	0	0	0	4	0	0	0	0	23	0	0	0	0	0	95	396
08:40:00 AM	11	2	0	0	0	1	0	0	0	0	26	0	0	0	0	0	107	402
08:45:00 AM	7	1	0	0	0	0	0	0	0	0	16	0	0	0	0	0	103	387
08:50:00 AM	9	3	0	0	0	1	0	0	0	0	23	0	0	0	0	0	100	384
08:55:00 AM	5	4	0	1	0	1	0	0	1	0	14	0	0	0	0	0	86	376

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

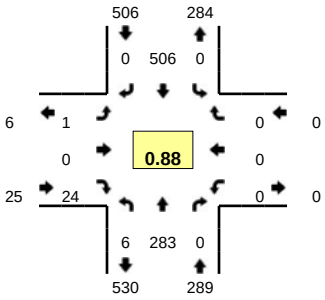
LOCATION: NE 10th Ave -- NE 141st St

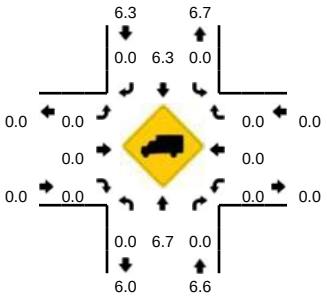
CITY/STATE: Vancouver, WA

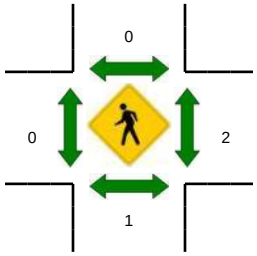
QC JOB #: 14675505

DATE: Thu, Apr 12 2018

Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:40 AM -- 7:55 AM

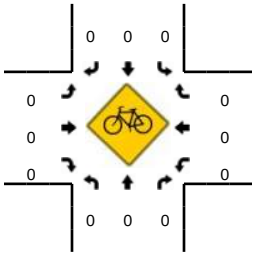


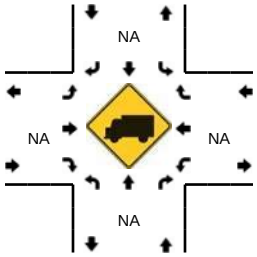


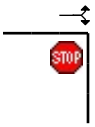


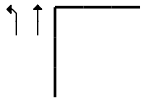


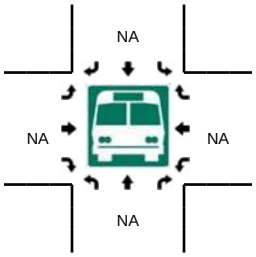












5-Min Count Period Beginning At	NE 10th Ave (Northbound)				NE 10th Ave (Southbound)				NE 141st St (Eastbound)				NE 141st St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	19	0	0	0	34	0	0	0	0	2	0	0	0	0	0	55	
7:05 AM	0	20	0	0	0	47	0	0	0	0	0	0	0	0	0	0	67	
7:10 AM	1	21	0	0	0	40	0	0	0	0	1	0	0	0	0	0	63	
7:15 AM	0	21	0	0	0	36	0	0	0	0	0	0	0	0	0	0	57	
7:20 AM	0	28	0	0	0	43	0	0	0	0	3	0	0	0	0	0	74	
7:25 AM	1	31	0	0	0	30	0	0	0	0	5	0	0	0	0	0	67	
7:30 AM	0	22	0	0	0	43	0	0	0	0	1	0	0	0	0	0	66	
7:35 AM	0	19	0	0	0	35	0	0	0	0	2	0	0	0	0	0	56	
7:40 AM	1	23	0	0	0	56	0	0	0	0	1	0	0	0	0	0	81	
7:45 AM	1	28	0	0	0	48	0	0	0	0	3	0	0	0	0	0	80	
7:50 AM	0	26	0	0	0	47	0	0	0	0	0	0	0	0	0	0	73	
7:55 AM	1	26	0	0	0	36	0	0	0	0	2	0	0	0	0	0	65	804
8:00 AM	0	26	0	0	0	42	0	0	0	0	1	0	0	0	0	0	69	818
8:05 AM	1	21	0	0	0	39	0	0	0	0	2	0	0	0	0	0	63	814
8:10 AM	1	16	0	0	0	42	0	0	1	0	1	0	0	0	0	0	61	812
8:15 AM	0	17	0	0	0	45	0	0	0	0	3	0	0	0	0	0	65	820
8:20 AM	0	18	0	0	0	36	0	0	0	0	4	0	0	0	0	0	58	804
8:25 AM	0	23	0	1	0	32	0	0	0	0	1	0	0	0	0	0	57	794
8:30 AM	0	17	0	0	0	28	0	0	0	0	1	0	0	0	0	0	46	774
8:35 AM	4	21	0	0	0	39	1	0	1	0	1	0	0	0	0	0	67	785
8:40 AM	0	13	0	0	0	35	0	0	0	0	1	0	0	0	0	0	49	753
8:45 AM	0	27	0	0	0	25	0	0	0	0	0	0	0	0	0	0	52	725
8:50 AM	0	11	0	0	0	31	0	0	0	0	1	0	0	0	0	0	43	695
8:55 AM	0	17	0	0	0	28	0	0	0	0	0	0	0	0	0	0	45	675

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	8	308	0	0	0	604	0	0	0	0	16	0	0	0	0	0	936
Heavy Trucks	0	16	0		0	20	0		0	0	0		0	0	0		36
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 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

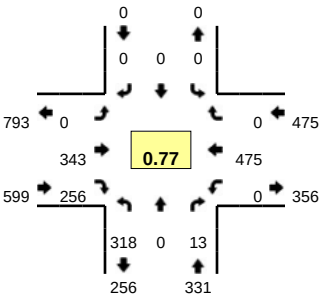
LOCATION: NE Tenney Rd -- NE 139th St

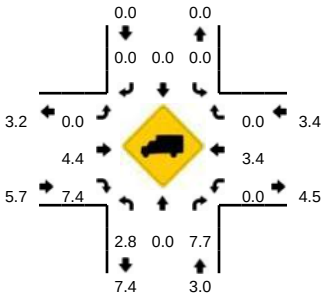
CITY/STATE: Vancouver, WA

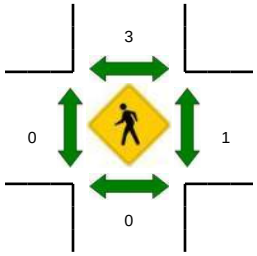
QC JOB #: 14675507

DATE: Thu, Apr 12 2018

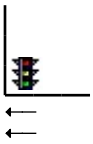
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:05 AM -- 7:20 AM

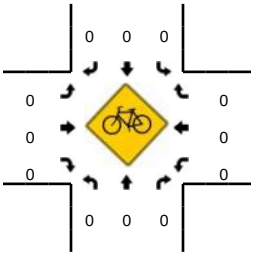


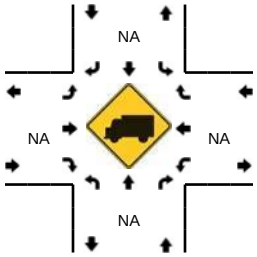


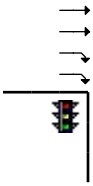


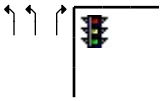


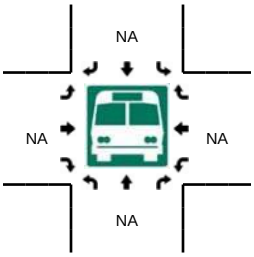












5-Min Count Period Beginning At	NE Tenney Rd (Northbound)				NE Tenney Rd (Southbound)				NE 139th St (Eastbound)				NE 139th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	21	0	1	0	0	0	0	0	0	20	22	0	0	54	0	0	118	
7:05 AM	32	0	1	0	0	0	0	0	0	21	30	0	0	58	0	0	142	
7:10 AM	39	0	0	0	0	0	0	0	0	34	28	0	0	60	0	0	161	
7:15 AM	37	0	3	0	0	0	0	0	0	34	22	0	0	58	0	0	154	
7:20 AM	33	0	0	0	0	0	0	0	0	30	31	0	0	47	0	0	141	
7:25 AM	20	0	1	0	0	0	0	0	0	41	20	0	0	29	0	0	111	
7:30 AM	24	0	0	0	0	0	0	0	0	39	28	0	0	22	0	0	113	
7:35 AM	19	0	0	0	0	0	0	0	0	37	20	0	0	22	0	0	98	
7:40 AM	23	0	4	0	0	0	0	0	0	18	12	0	0	25	0	0	82	
7:45 AM	18	0	1	0	0	0	0	0	0	28	18	0	0	31	0	0	96	
7:50 AM	28	0	1	0	0	0	0	0	0	18	13	0	0	34	0	0	94	
7:55 AM	24	0	1	0	0	0	0	0	0	23	12	0	0	35	0	0	95	1405
8:00 AM	11	0	2	0	0	0	0	0	0	22	15	0	0	29	0	0	79	1366
8:05 AM	26	0	2	0	0	0	0	0	0	23	15	0	0	29	0	0	95	1319
8:10 AM	27	0	2	0	0	0	0	0	0	20	21	0	0	23	0	0	93	1251
8:15 AM	24	0	1	0	0	0	0	0	0	22	25	0	0	26	0	0	98	1195
8:20 AM	25	0	4	0	0	0	0	0	0	38	25	0	0	35	0	0	127	1181
8:25 AM	20	0	1	0	0	0	0	0	0	31	21	0	0	25	0	0	98	1168
8:30 AM	20	0	2	0	0	0	0	0	0	27	23	0	0	7	0	0	79	1134
8:35 AM	18	0	4	0	0	0	0	0	0	35	28	0	0	29	0	0	114	1150
8:40 AM	23	0	2	0	0	0	0	0	0	47	26	0	0	22	0	0	120	1188
8:45 AM	24	0	1	0	0	0	0	0	0	32	27	0	0	25	0	0	109	1201
8:50 AM	24	0	2	0	0	0	0	0	0	38	19	0	0	24	0	0	107	1214
8:55 AM	32	0	3	0	0	0	0	0	0	37	16	0	0	29	0	0	117	1236

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	432	0	16	0	0	0	0	0	0	356	320	0	0	704	0	0	1828
Heavy Trucks	8	0	0		0	0	0		0	16	32		0	16	0		72
Pedestrians		0				4				0				4			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

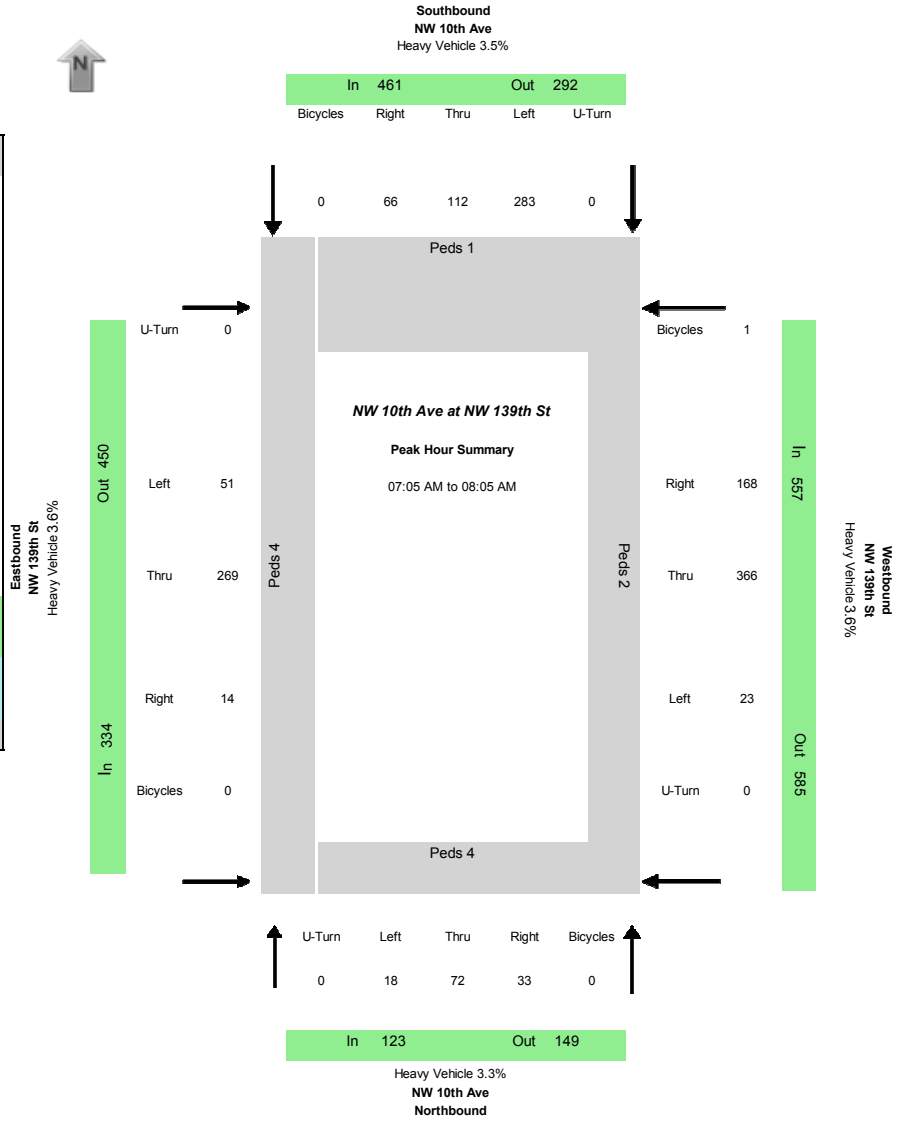
Comments:

Report generated on 4/24/2018 4:03 PM

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

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NW 10th Ave*
E/W street	*NW 139th St*
City, State	Ridgefield WA
Site Notes	
Location	45.721851 - -122.661624
Start Date	Thursday, October 18, 2018
Start Time	07:00:00 AM
Weather	
Study ID #	
Peak Hour Start	07:05:00 AM
Peak 15 Min Start	07:05:00 AM
PHF (15-Min Int)	0.90



Peak-Hour Volumes (PHV)																								
Northbound				**Southbound**				**Eastbound**				**Westbound**				**Entering**				**Leaving**			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
18	72	33	0	283	112	66	0	51	269	14	0	23	366	168	0	123	461	334	557	149	291	450	585
Percent Heavy Vehicles																							
0.0%	2.8%	6.1%	0.0%	2.5%	6.3%	3.0%	0.0%	3.9%	3.3%	7.1%	0.0%	4.3%	3.6%	3.6%	0.0%	3.3%	3.5%	3.6%	3.6%	6.0%	3.4%	3.3%	3.1%

PHV- Bicycles																	PHV - Pedestrians				
Northbound				**Southbound**				**Eastbound**				**Westbound**					in Crosswalk				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	**Sum**	NB	SB	EB	WB	**Sum**
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4	1	4	2	11

All Vehicle Volumes

	Northbound NW 10th Ave				**Southbound** NW 10th Ave				**Eastbound** NW 139th St				**Westbound** NW 139th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
07:00:00 AM	2	9	1	0	15	5	11	0	1	12	2	0	1	35	9	0		
07:05:00 AM	4	7	3	0	14	10	10	0	1	20	2	0	2	53	14	0		
07:10:00 AM	0	4	2	0	19	7	11	0	4	17	0	0	2	54	16	0	379	
07:15:00 AM	1	5	2	0	24	11	10	0	10	18	0	0	2	40	10	0	409	
07:20:00 AM	1	3	1	0	16	11	5	0	2	33	0	0	1	39	11	0	392	
07:25:00 AM	1	4	2	0	25	4	4	0	8	35	2	0	4	38	15	0	398	
07:30:00 AM	0	8	1	0	27	9	4	0	5	35	0	0	1	23	9	0	387	
07:35:00 AM	4	4	2	0	36	13	5	0	2	13	1	0	2	14	12	0	372	
07:40:00 AM	4	7	4	0	25	18	3	0	2	21	1	0	2	24	8	0	349	
07:45:00 AM	2	9	4	0	25	3	3	0	3	29	2	0	1	19	12	0	339	
07:50:00 AM	0	4	3	0	32	7	1	0	8	19	0	0	2	21	24	0	352	
07:55:00 AM	1	6	7	0	25	7	7	0	5	15	2	0	1	21	18	0	348	1474
08:00:00 AM	0	11	2	0	15	12	3	0	1	14	4	0	3	20	19	0	340	1475
08:05:00 AM	0	6	4	0	18	6	4	0	5	22	1	0	0	24	17	0	326	1442
08:10:00 AM	0	6	4	0	26	11	8	0	4	28	0	0	1	14	16	0	329	1424
08:15:00 AM	1	3	2	0	19	17	8	0	5	24	1	0	0	16	12	0	333	1399
08:20:00 AM	1	3	2	0	20	10	2	0	3	14	0	0	3	27	7	0	318	1368
08:25:00 AM	1	7	2	0	18	6	2	0	5	24	2	0	3	27	11	0	308	1334
08:30:00 AM	0	8	1	0	18	7	3	0	5	14	2	0	0	12	11	0	281	1293
08:35:00 AM	2	7	2	0	23	9	4	0	3	23	2	0	1	22	14	0	301	1297
08:40:00 AM	1	4	0	0	19	15	4	0	3	16	0	0	0	21	16	0	292	1277
08:45:00 AM	1	1	2	0	25	11	7	0	3	26	3	0	2	39	9	0	340	1294
08:50:00 AM	1	7	3	0	17	13	5	0	3	25	2	0	3	12	15	0	334	1279
08:55:00 AM	4	8	1	0	17	8	3	0	5	26	2	0	3	22	11	0	345	1274

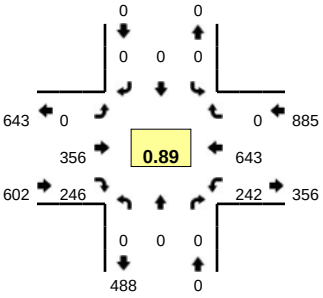
Type of peak hour being reported: Intersection Peak

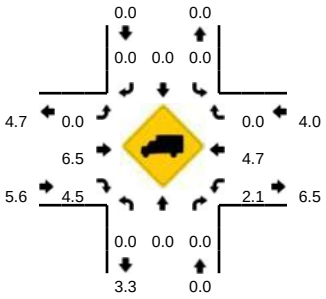
Method for determining peak hour: Total Entering Volume

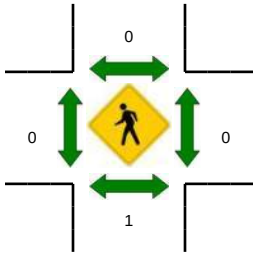
LOCATION: I-5 SB On Ramp -- NE 139th St
CITY/STATE: Vancouver, WA

QC JOB #: 14675509
DATE: Thu, Apr 12 2018

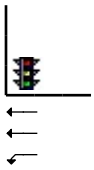
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:10 AM -- 7:25 AM

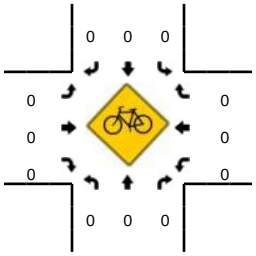


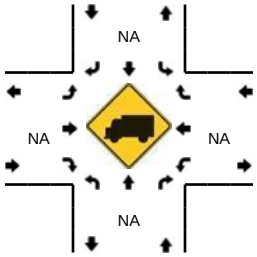


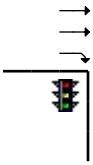




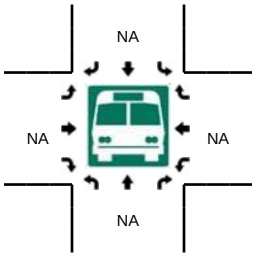












5-Min Count Period Beginning At	I-5 SB On Ramp (Northbound)				I-5 SB On Ramp (Southbound)				NE 139th St (Eastbound)				NE 139th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	0	0	0	19	10	0	16	61	0	0	106	
7:05 AM	0	0	0	0	0	0	0	0	0	25	19	0	10	59	0	0	113	
7:10 AM	0	0	0	0	0	0	0	0	0	19	19	0	13	78	0	0	129	
7:15 AM	0	0	0	0	0	0	0	0	0	35	29	0	26	69	0	0	159	
7:20 AM	0	0	0	0	0	0	0	0	0	32	18	0	20	60	0	0	130	
7:25 AM	0	0	0	0	0	0	0	0	0	32	14	0	24	43	0	0	113	
7:30 AM	0	0	0	0	0	0	0	0	0	43	28	0	16	42	0	0	129	
7:35 AM	0	0	0	0	0	0	0	0	0	34	27	0	21	33	0	0	115	
7:40 AM	0	0	0	0	0	0	0	0	0	36	21	0	22	44	0	0	123	
7:45 AM	0	0	0	0	0	0	0	0	0	25	23	0	23	53	0	0	124	
7:50 AM	0	0	0	0	0	0	0	0	0	29	20	0	27	49	0	0	125	
7:55 AM	0	0	0	0	0	0	0	0	0	27	18	0	24	52	0	0	121	1487
8:00 AM	0	0	0	0	0	0	0	0	0	23	25	0	20	34	0	0	102	1483
8:05 AM	0	0	0	0	0	0	0	0	0	18	22	0	24	41	0	0	105	1475
8:10 AM	0	0	0	0	0	0	0	0	0	19	32	0	17	32	0	0	100	1446
8:15 AM	0	0	0	0	0	0	0	0	0	21	18	0	22	38	0	0	99	1386
8:20 AM	0	0	0	0	0	0	0	0	0	38	20	0	16	36	0	0	110	1366
8:25 AM	0	0	0	0	0	0	0	0	0	34	24	0	22	41	0	0	121	1374
8:30 AM	0	0	0	0	0	0	0	0	0	23	18	0	12	28	0	0	81	1326
8:35 AM	0	0	0	0	0	0	0	0	0	32	26	0	21	36	0	1	116	1327
8:40 AM	0	0	0	0	0	0	0	0	0	47	28	0	30	32	0	0	137	1341
8:45 AM	0	0	0	0	0	0	0	0	0	38	15	0	19	44	0	0	116	1333
8:50 AM	0	0	0	0	0	0	0	0	0	23	20	0	28	27	0	0	98	1306
8:55 AM	0	0	0	0	0	0	0	0	0	33	21	0	12	43	0	0	109	1294

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	0	0	0	0	0	344	264	0	236	828	0	0	1672
Heavy Trucks	0	0	0		0	0	0		0	20	12		4	32	0		68
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 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: I-5 NB Off Ramp -- NE 139th St

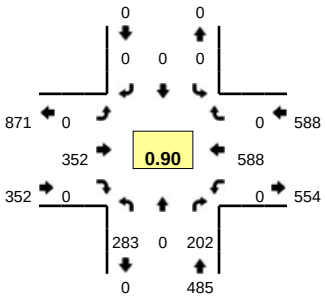
CITY/STATE: Vancouver, WA

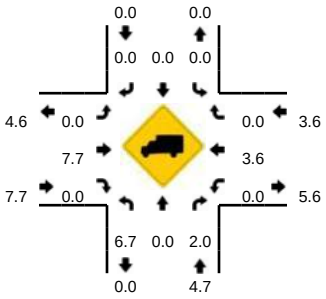
QC JOB #: 14675511

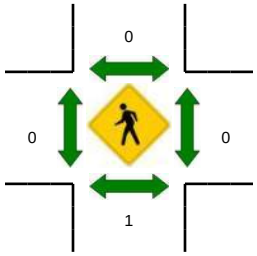
DATE: Thu, Apr 12 2018

Peak-Hour: 7:00 AM -- 8:00 AM

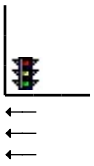
Peak 15-Min: 7:10 AM -- 7:25 AM

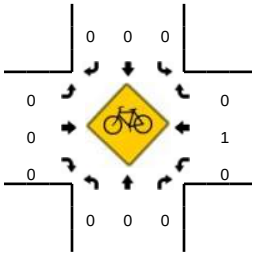


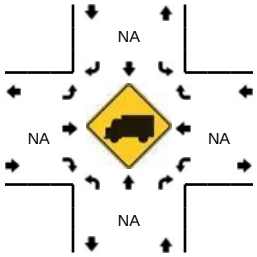


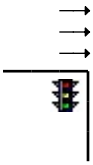




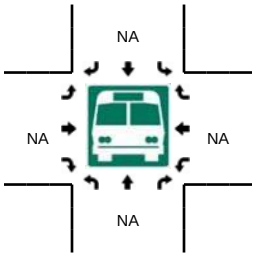












5-Min Count Period Beginning At	I-5 NB Off Ramp (Northbound)				I-5 NB Off Ramp (Southbound)				NE 139th St (Eastbound)				NE 139th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	31	0	13	0	0	0	0	0	0	18	0	0	0	43	0	0	105	
7:05 AM	24	0	9	0	0	0	0	0	0	27	0	0	0	48	0	0	108	
7:10 AM	41	0	9	0	0	0	0	0	0	17	0	0	0	49	0	0	116	
7:15 AM	33	0	24	0	0	0	0	0	0	33	0	0	0	59	0	0	149	
7:20 AM	25	0	18	0	0	0	0	0	0	34	0	0	0	52	0	0	129	
7:25 AM	14	0	13	0	0	0	0	0	0	33	0	0	0	52	0	0	112	
7:30 AM	22	0	16	0	0	0	0	0	0	38	0	0	0	35	0	0	111	
7:35 AM	13	0	19	0	0	0	0	0	0	34	0	0	0	46	0	0	112	
7:40 AM	22	0	15	0	0	0	0	0	0	35	0	0	0	38	0	0	110	
7:45 AM	26	0	26	0	0	0	0	0	0	29	0	0	0	54	0	0	135	
7:50 AM	14	0	19	0	0	0	0	0	0	29	0	0	0	58	0	0	120	
7:55 AM	18	0	21	0	0	0	0	0	0	25	0	0	0	54	0	0	118	1425
8:00 AM	18	0	22	0	0	0	0	0	0	24	0	0	0	33	0	0	97	1417
8:05 AM	23	0	15	0	0	0	0	0	0	18	0	0	0	44	0	0	100	1409
8:10 AM	18	0	24	0	0	0	0	0	0	18	0	0	0	27	0	0	87	1380
8:15 AM	17	0	7	0	0	0	0	0	0	18	0	0	0	45	0	0	87	1318
8:20 AM	18	0	19	0	0	0	0	0	0	39	0	0	0	34	0	0	110	1299
8:25 AM	20	0	20	0	0	0	0	0	0	37	0	0	0	42	0	0	119	1306
8:30 AM	14	0	20	0	0	0	0	0	0	22	0	0	0	25	0	0	81	1276
8:35 AM	15	0	14	0	0	0	0	0	0	33	0	0	0	43	0	0	105	1269
8:40 AM	14	0	17	0	0	0	0	0	0	43	0	0	0	46	0	0	120	1279
8:45 AM	24	0	21	0	0	0	0	0	0	37	0	0	0	40	0	0	122	1266
8:50 AM	13	0	24	0	0	0	0	0	0	26	0	0	0	37	0	0	100	1246
8:55 AM	17	0	22	0	0	0	0	0	0	33	0	0	0	44	0	0	116	1244

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	396	0	204	0	0	0	0	0	0	336	0	0	0	640	0	0	1576
Heavy Trucks	40	0	4		0	0	0		0	16	0		0	4	0		64
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 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: I-205 NB On Ramp -- NE 139th St

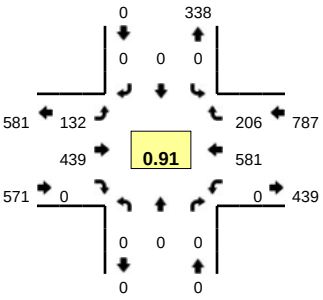
CITY/STATE: Vancouver, WA

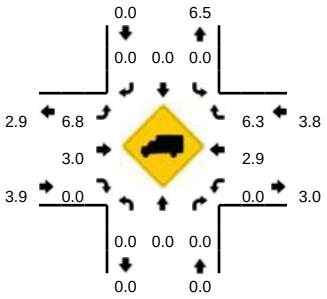
QC JOB #: 14675513

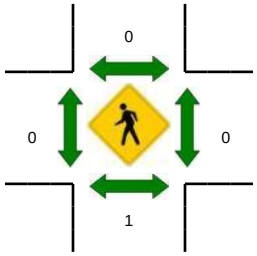
DATE: Thu, Apr 12 2018

Peak-Hour: 7:05 AM -- 8:05 AM

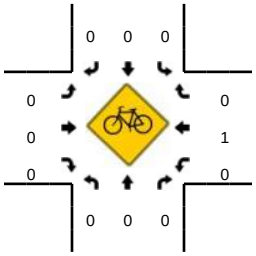
Peak 15-Min: 7:45 AM -- 8:00 AM

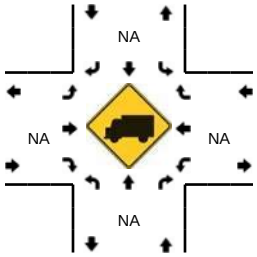




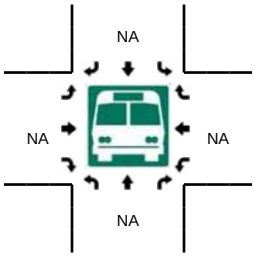












5-Min Count Period Beginning At	I-205 NB On Ramp (Northbound)				I-205 NB On Ramp (Southbound)				NE 139th St (Eastbound)				NE 139th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	0	0	9	23	0	0	0	41	7	0	80	
7:05 AM	0	0	0	0	0	0	0	0	7	26	0	0	0	46	19	0	98	
7:10 AM	0	0	0	0	0	0	0	0	9	15	0	0	0	52	20	0	96	
7:15 AM	0	0	0	0	0	0	0	0	17	47	0	0	0	55	19	0	138	
7:20 AM	0	0	0	0	0	0	0	0	11	38	0	0	0	52	17	0	118	
7:25 AM	0	0	0	0	0	0	0	0	14	33	0	0	0	51	15	0	113	
7:30 AM	0	0	0	0	0	0	0	0	8	38	0	0	0	34	16	0	96	
7:35 AM	0	0	0	0	0	0	0	0	14	43	0	0	0	47	23	0	127	
7:40 AM	0	0	0	0	0	0	0	0	17	34	0	0	0	39	12	0	102	
7:45 AM	0	0	0	0	0	0	0	0	10	46	0	0	0	57	21	0	134	
7:50 AM	0	0	0	0	0	0	0	0	8	40	0	0	0	57	11	0	116	
7:55 AM	0	0	0	0	0	0	0	0	7	38	0	0	0	60	17	0	122	1340
8:00 AM	0	0	0	0	0	0	0	0	10	41	0	0	0	31	16	0	98	1358
8:05 AM	0	0	0	0	0	0	0	0	6	26	0	0	0	45	20	0	97	1357
8:10 AM	0	0	0	0	0	0	0	0	7	36	0	0	0	25	17	0	85	1346
8:15 AM	0	0	0	0	0	0	0	0	7	17	0	0	0	44	25	0	93	1301
8:20 AM	0	0	0	0	0	0	0	0	10	45	0	0	0	36	15	0	106	1289
8:25 AM	0	0	0	0	0	0	0	0	12	45	0	0	0	42	22	0	121	1297
8:30 AM	0	0	0	0	0	0	0	0	6	39	0	0	0	26	14	0	85	1286
8:35 AM	0	0	0	0	0	0	0	0	6	36	0	0	0	49	23	0	114	1273
8:40 AM	0	0	0	0	0	0	0	0	14	52	0	0	0	41	13	0	120	1291
8:45 AM	0	0	0	0	0	0	0	0	10	49	0	0	0	42	22	0	123	1280
8:50 AM	0	0	0	0	0	0	0	0	6	43	0	0	0	37	11	0	97	1261
8:55 AM	0	0	0	0	0	0	0	0	9	44	0	0	0	45	21	0	119	1258

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	0	0	0	0	100	496	0	0	0	696	196	0	1488
Heavy Trucks	0	0	0		0	0	0		4	8	0		0	28	8		48
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

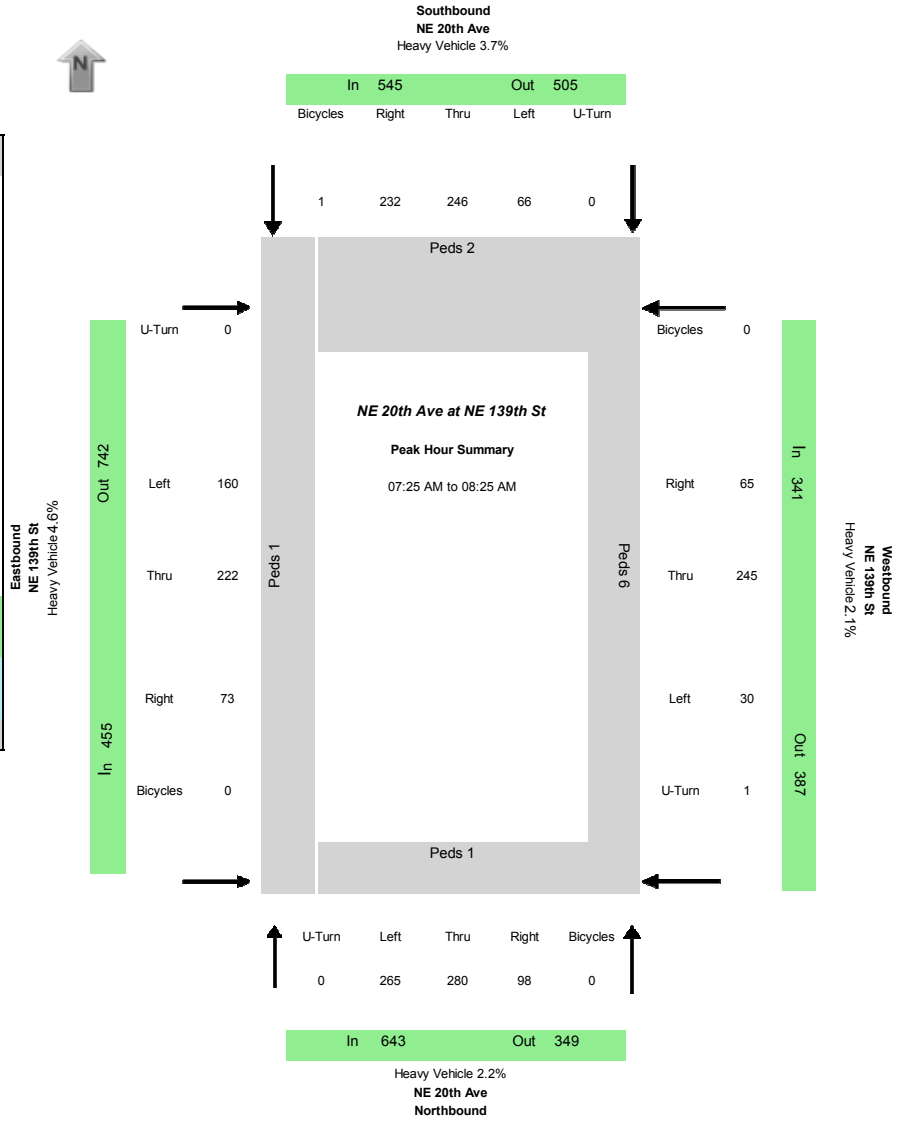
Comments:

Report generated on 4/24/2018 4:03 PM

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

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE 20th Ave*
E/W street	*NE 139th St*
City, State	Salmon Creek WA
Site Notes	
Location	45.721866 - -122.651367
Start Date	Tuesday, October 23, 2018
Start Time	07:00:00 AM
Weather	
Study ID #	
Peak Hour Start	07:25:00 AM
Peak 15 Min Start	07:45:00 AM
PHF (15-Min Int)	0.94



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
265	280	98	0	66	246	232	0	160	222	73	0	30	245	65	1	643	544	455	341	349	505	742	387
Percent Heavy Vehicles																							
3.0%	1.8%	1.0%	0.0%	0.0%	6.1%	2.2%	0.0%	6.3%	1.8%	9.6%	0.0%	6.7%	1.2%	3.1%	0.0%	2.2%	3.7%	4.6%	2.1%	6.9%	3.4%	2.2%	1.3%

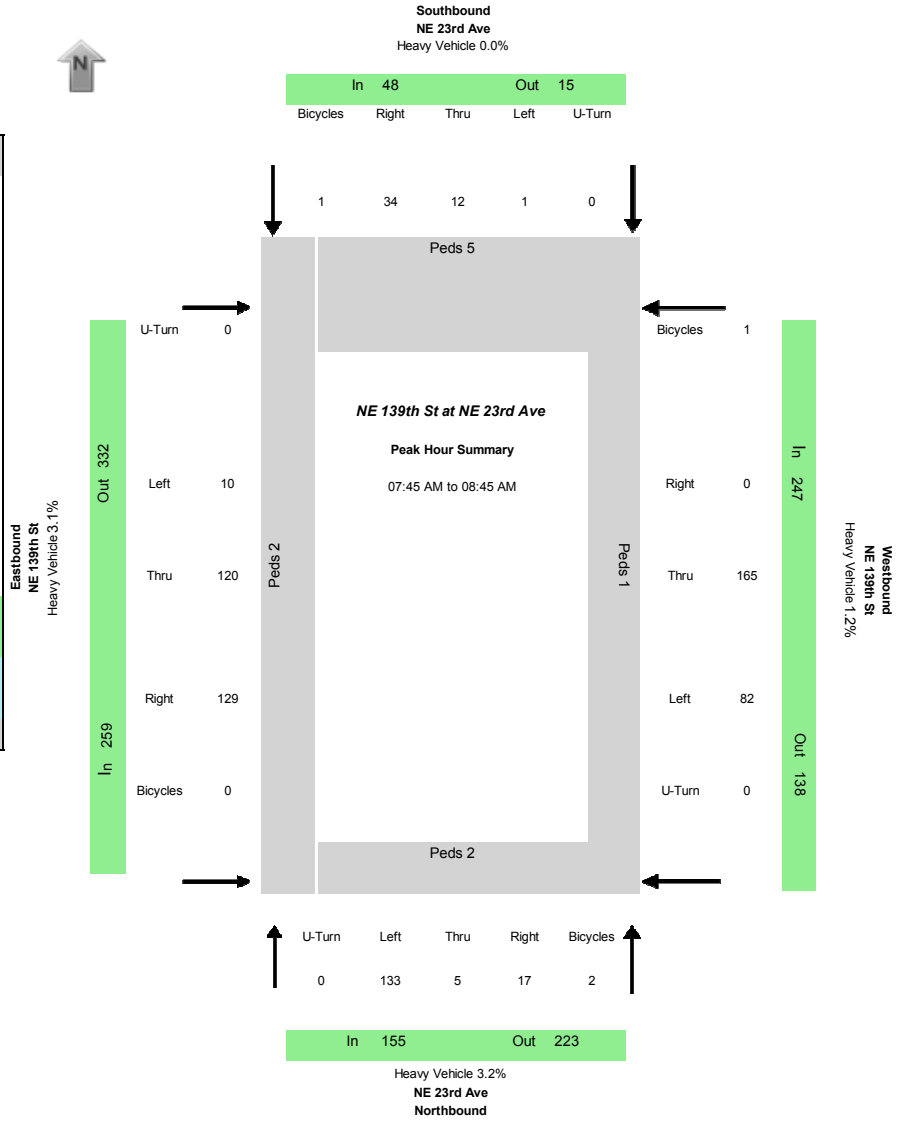
PHV- Bicycles																	PHV - Pedestrians				
Northbound				Southbound				Eastbound				Westbound					in Crosswalk				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	NB	SB	EB	WB	Sum
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2	1	6	10

All Vehicle Volumes

	Northbound NE 20th Ave				Southbound NE 20th Ave				Eastbound NE 139th St				Westbound NE 139th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
07:00:00 AM	15	10	1	0	5	15	15	0	6	12	3	0	0	26	3	0		
07:05:00 AM	22	19	4	0	0	11	27	0	5	9	9	0	0	26	2	0		
07:10:00 AM	30	14	7	0	3	19	31	0	9	9	4	0	2	29	2	0	404	
07:15:00 AM	12	17	5	0	3	9	19	0	17	13	6	0	3	20	4	0	421	
07:20:00 AM	16	13	5	0	6	20	21	0	3	23	8	0	2	18	4	0	426	
07:25:00 AM	35	28	14	0	3	15	21	0	10	25	6	0	1	22	7	0	454	
07:30:00 AM	22	22	6	0	3	25	21	0	23	17	9	0	2	11	6	0	493	
07:35:00 AM	15	18	3	0	3	16	21	0	16	24	8	0	1	25	3	0	507	
07:40:00 AM	18	33	5	0	6	24	15	0	11	9	3	0	0	15	4	0	463	
07:45:00 AM	28	22	12	0	6	15	23	0	12	16	7	0	2	21	5	0	465	
07:50:00 AM	20	22	11	0	11	23	21	0	23	17	4	0	2	29	9	0	504	
07:55:00 AM	21	23	11	0	8	18	15	0	16	18	4	0	4	26	4	0	529	1850
08:00:00 AM	21	24	8	0	5	19	20	0	8	25	6	0	2	20	4	0	522	1901
08:05:00 AM	20	24	7	0	4	27	9	0	9	15	7	0	4	21	3	1	481	1918
08:10:00 AM	22	18	7	0	5	27	17	0	11	11	6	0	7	14	8	0	466	1912
08:15:00 AM	16	18	10	0	8	26	20	0	15	27	6	0	4	19	8	0	481	1961
08:20:00 AM	27	28	4	0	4	11	29	0	6	18	7	0	1	22	4	0	491	1983
08:25:00 AM	10	35	14	0	8	19	7	0	11	13	6	0	2	12	4	0	479	1937
08:30:00 AM	18	24	11	0	2	16	22	0	14	14	9	0	2	12	6	0	452	1920
08:35:00 AM	11	20	13	0	2	20	16	0	21	15	8	0	11	24	2	0	454	1930
08:40:00 AM	20	18	10	0	6	16	28	0	3	25	11	0	6	26	4	0	486	1960
08:45:00 AM	13	28	12	0	4	25	19	0	13	18	11	0	5	16	8	0	508	1963
08:50:00 AM	18	20	9	0	5	22	9	0	20	18	11	0	2	25	10	0	514	1940
08:55:00 AM	5	6	2	0	0	0	2	0	0	3	2	0	3	7	2	0	373	1804

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	***NE 23rd Ave***
E/W street	***NE 139th St***
City, State	Salmon Creek WA
Site Notes	
Location	45.721874 - -122.646228
Start Date	Thursday, October 18, 2018
Start Time	07:00:00 AM
Weather	
Study ID #	
Peak Hour Start	07:45:00 AM
Peak 15 Min Start	07:45:00 AM
PHF (15-Min Int)	0.89



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
133	5	17	0	1	12	34	0	10	120	129	0	82	165	0	0	155	47	259	247	223	15	332	138
Percent Heavy Vehicles																							
3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%	4.2%	1.6%	0.0%	0.0%	1.8%	0.0%	0.0%	3.2%	0.0%	3.1%	1.2%	0.9%	6.7%	2.4%	3.6%

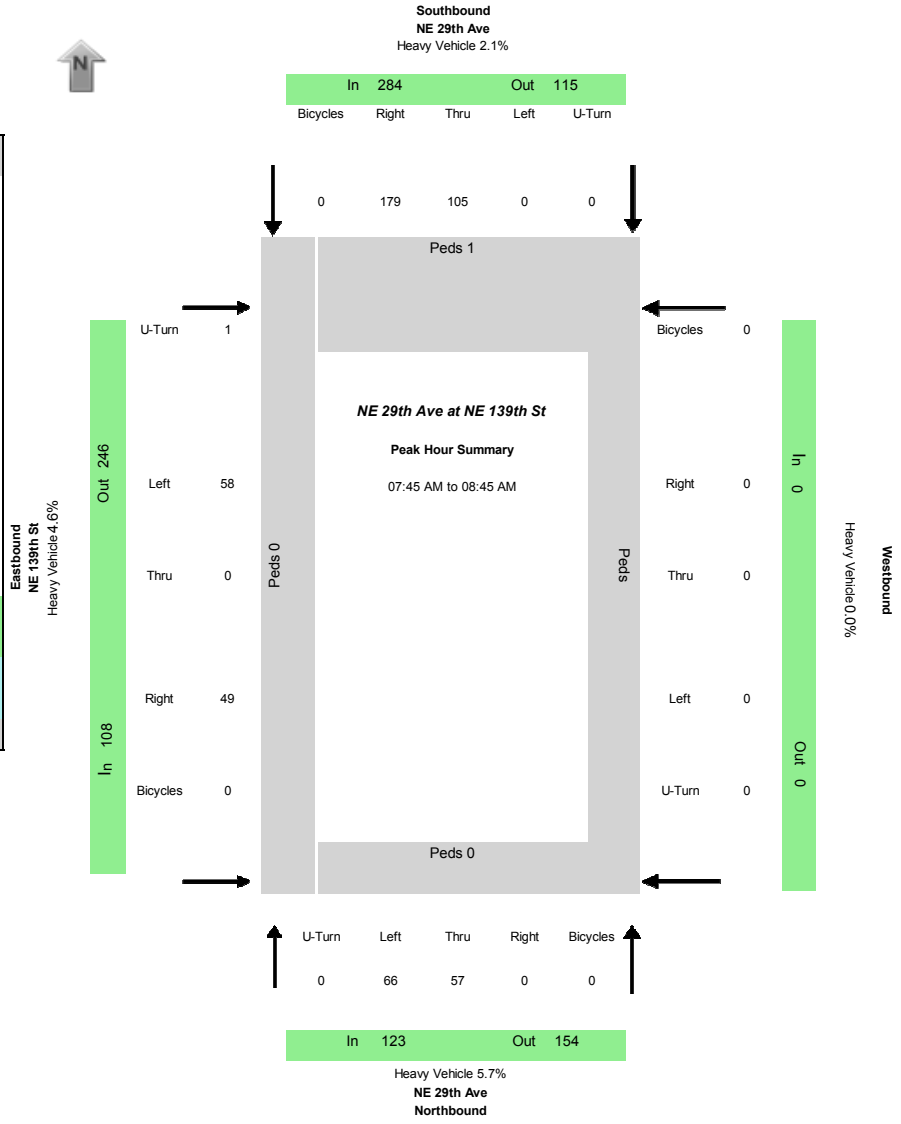
PHV- Bicycles																	PHV - Pedestrians				
Northbound				Southbound				Eastbound				Westbound					in Crosswalk				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	NB	SB	EB	WB	Sum
2	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	4	2	5	2	1	10

All Vehicle Volumes

	Northbound NE 23rd Ave				Southbound NE 23rd Ave				Eastbound NE 139th St				Westbound NE 139th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
07:00:00 AM	5	1	0	0	0	3	4	0	0	8	3	0	5	11	0	0		
07:05:00 AM	8	0	3	0	0	2	6	0	0	3	7	0	6	18	0	0		
07:10:00 AM	10	0	3	0	0	1	4	0	1	5	4	0	10	15	0	0	146	
07:15:00 AM	9	0	0	0	0	2	2	0	2	8	6	0	6	20	0	0	161	
07:20:00 AM	10	0	2	0	1	2	3	0	1	11	12	0	8	9	0	0	167	
07:25:00 AM	16	0	2	0	0	0	4	0	0	6	3	0	5	13	0	0	163	
07:30:00 AM	13	1	2	0	0	3	6	0	0	8	9	0	1	8	0	0	159	
07:35:00 AM	10	0	2	0	1	4	3	0	0	7	9	0	10	12	0	0	158	
07:40:00 AM	11	0	1	0	0	0	1	0	1	8	5	0	6	11	0	0	153	
07:45:00 AM	15	0	2	0	0	0	4	0	1	15	14	0	12	12	0	0	177	
07:50:00 AM	11	1	2	0	0	2	0	0	1	17	12	0	4	16	0	0	185	
07:55:00 AM	9	1	2	0	0	0	2	0	2	9	13	0	8	12	0	0	199	661
08:00:00 AM	12	1	1	0	1	1	3	0	1	13	4	0	3	14	0	0	178	675
08:05:00 AM	10	0	0	0	0	2	6	0	0	9	15	0	10	8	0	0	172	682
08:10:00 AM	11	0	2	0	0	1	2	0	0	4	4	0	7	15	0	0	160	675
08:15:00 AM	7	0	0	0	0	1	0	0	3	8	14	0	7	14	0	0	160	674
08:20:00 AM	15	0	1	0	0	2	5	0	2	12	13	0	4	14	0	0	168	683
08:25:00 AM	10	1	1	0	0	1	2	0	0	8	10	0	4	11	0	0	170	682
08:30:00 AM	9	0	3	0	0	0	2	0	0	8	4	0	7	14	0	0	163	678
08:35:00 AM	13	0	3	0	0	2	3	0	0	6	17	0	7	15	0	0	161	686
08:40:00 AM	11	1	0	0	0	0	5	0	0	11	9	0	9	20	0	0	179	708
08:45:00 AM	9	0	4	0	0	0	3	0	1	8	6	0	5	17	0	0	185	686
08:50:00 AM	8	1	2	0	2	2	1	0	2	10	8	0	7	18	0	0	180	681
08:55:00 AM	9	2	1	0	1	0	3	0	3	12	10	0	3	12	0	0	170	679

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE 29th Ave*
E/W street	*NE 139th St*
City, State	Ridgefield WA
Site Notes	
Location	45.721866 - -122.641089
Start Date	Thursday, October 18, 2018
Start Time	07:00:00 AM
Weather	
Study ID #	
Peak Hour Start	07:45:00 AM
Peak 15 Min Start	07:45:00 AM
PHF (15-Min Int)	0.88



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
66	57	0	0	0	105	179	0	58	0	49	1	0	0	0	0	123	284	108	0	154	115	246	0

Percent Heavy Vehicles

1.5%	10.5%	0.0%	0.0%	0.0%	5.7%	0.0%	0.0%	6.9%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.7%	2.1%	4.6%	0.0%	4.5%	8.7%	0.4%	0.0%

PHV- Bicycles

Northbound				Southbound				Eastbound				Westbound				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum
0	0		0		0	0	0	0		0	0					0

PHV - Pedestrians

in Crosswalk				
NB	SB	EB	WB	Sum
0	1	0		1

All Vehicle Volumes

	Northbound NE 29th Ave				Southbound NE 29th Ave				Eastbound NE 139th St				Westbound				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
07:00:00 AM	7	1		0		5	10	0	3		1	0						
07:05:00 AM	6	3		0		8	17	0	5		0	0						
07:10:00 AM	6	5		0		12	15	0	2		2	0					108	
07:15:00 AM	3	5		0		5	16	0	1		2	0					113	
07:20:00 AM	5	5		0		8	18	0	3		8	0					121	
07:25:00 AM	5	1		0		12	7	0	0		1	0					105	
07:30:00 AM	3	4		0		13	6	0	4		3	0					106	
07:35:00 AM	4	3		0		9	15	0	6		0	0					96	
07:40:00 AM	6	3		0		7	14	0	3		3	0					106	
07:45:00 AM	7	5		0		8	17	0	6		7	0					123	
07:50:00 AM	8	8		0		19	14	0	5		3	0					143	
07:55:00 AM	8	2		0		10	16	0	2		1	0					146	465
08:00:00 AM	7	4		0		5	7	0	4		8	0					131	473
08:05:00 AM	5	6		0		14	11	0	5		3	0					118	478
08:10:00 AM	2	4		0		4	19	0	3		0	0					111	468
08:15:00 AM	2	4		0		15	19	0	6		4	0					126	486
08:20:00 AM	5	2		0		5	20	0	4		5	0					123	480
08:25:00 AM	5	5		0		9	7	0	5		5	0					127	490
08:30:00 AM	4	3		0		5	17	0	9		3	0					118	498
08:35:00 AM	6	7		0		6	15	0	4		1	1					117	501
08:40:00 AM	7	7		0		5	17	0	5		9	0					131	515
08:45:00 AM	5	3		0		14	19	0	1		5	0					137	512
08:50:00 AM	4	2		0		12	16	0	3		2	0					136	494
08:55:00 AM	6	10		0		9	8	0	5		9	0					133	502

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

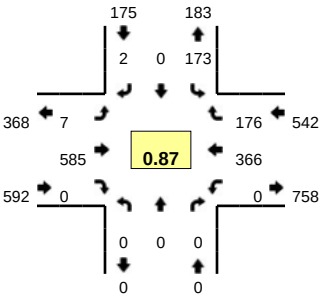
LOCATION: NE 10th Ave -- NE Tenney Rd

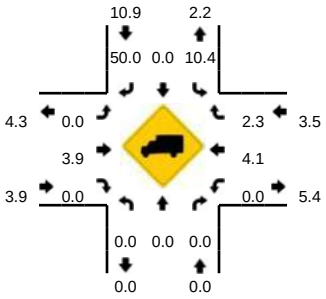
CITY/STATE: Vancouver, WA

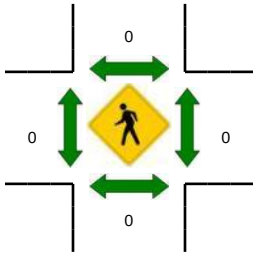
QC JOB #: 14675515

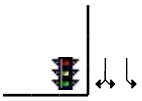
DATE: Thu, Apr 12 2018

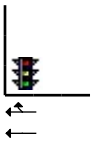
Peak-Hour: 7:05 AM -- 8:05 AM
Peak 15-Min: 7:10 AM -- 7:25 AM

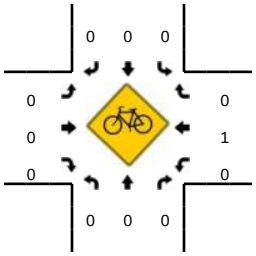


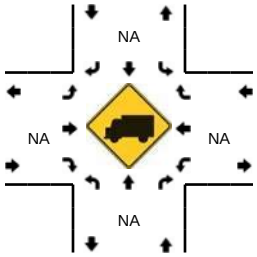


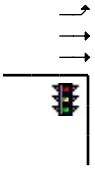




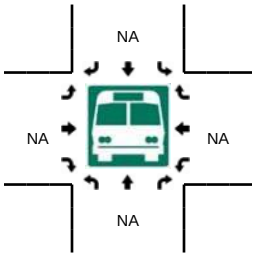












5-Min Count Period Beginning At	NE 10th Ave (Northbound)				NE 10th Ave (Southbound)				NE Tenney Rd (Eastbound)				NE Tenney Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	9	0	0	0	1	41	0	0	0	31	12	0	94	
7:05 AM	0	0	0	0	15	0	0	0	0	52	0	0	0	30	14	0	111	
7:10 AM	0	0	0	0	8	0	0	0	0	52	0	0	0	42	12	0	114	
7:15 AM	0	0	0	0	17	0	0	0	2	41	0	0	0	48	16	0	124	
7:20 AM	0	0	0	0	15	0	0	0	0	66	0	0	0	34	23	0	138	
7:25 AM	0	0	0	0	9	0	1	0	1	57	0	0	0	24	12	0	104	
7:30 AM	0	0	0	0	15	0	1	0	0	55	0	0	0	26	16	0	113	
7:35 AM	0	0	0	0	15	0	0	0	0	59	0	0	0	20	12	0	106	
7:40 AM	0	0	0	0	20	0	0	0	3	42	0	0	0	32	13	0	110	
7:45 AM	0	0	0	0	13	0	0	0	0	42	0	0	0	24	11	0	90	
7:50 AM	0	0	0	0	23	0	0	0	0	40	0	0	0	33	15	0	111	
7:55 AM	0	0	0	0	13	0	0	0	1	32	0	0	0	29	18	0	93	1308
8:00 AM	0	0	0	0	10	0	0	0	0	47	0	0	0	24	14	0	95	1309
8:05 AM	0	0	0	0	19	0	1	0	1	29	0	0	0	25	5	0	80	1278
8:10 AM	0	0	0	0	13	0	2	0	0	42	0	0	0	32	9	0	98	1262
8:15 AM	0	0	0	0	9	0	0	0	1	50	0	0	0	46	12	0	118	1256
8:20 AM	0	0	0	0	17	0	0	0	0	40	0	0	0	26	8	0	91	1209
8:25 AM	0	0	0	0	10	0	1	0	2	54	0	0	0	30	12	0	109	1214
8:30 AM	0	0	0	0	15	0	0	0	0	41	0	0	0	39	7	0	102	1203
8:35 AM	0	0	0	0	10	0	0	0	0	59	0	0	0	22	10	0	101	1198
8:40 AM	0	0	0	0	14	0	0	0	2	47	0	0	0	37	8	0	108	1196
8:45 AM	0	0	0	0	13	0	0	0	0	50	0	0	0	38	8	0	109	1215
8:50 AM	0	0	0	0	12	0	2	0	0	57	0	0	0	36	9	0	116	1220
8:55 AM	0	0	0	0	11	0	1	0	1	55	0	0	0	52	11	0	131	1258

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	160	0	0	0	8	636	0	0	0	496	204	0	1504
Heavy Trucks	0	0	0		28	0	0		0	24	0		0	8	8		68
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 PM

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

Type of peak hour being reported: User-Defined

Method for determining peak hour: Total Entering Volume

LOCATION: I-5 SB On Ramp -- NE 134th St

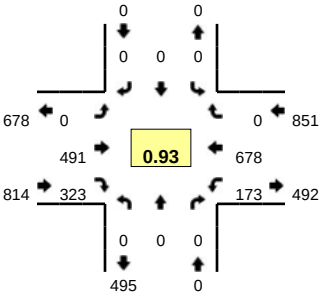
CITY/STATE: Vancouver, WA

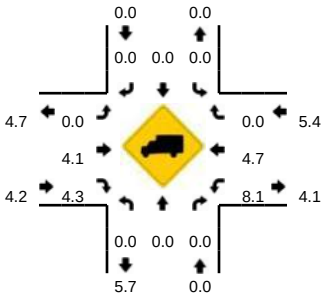
QC JOB #: 14675517

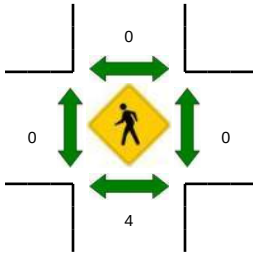
DATE: Thu, Apr 12 2018

Peak-Hour: 8:00 AM -- 9:00 AM

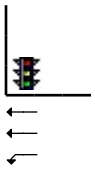
Peak 15-Min: 8:45 AM -- 9:00 AM

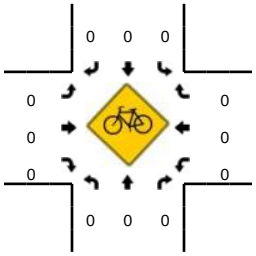


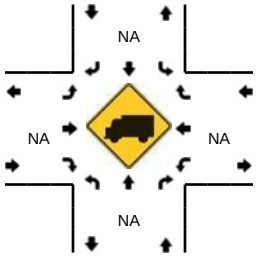


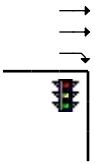




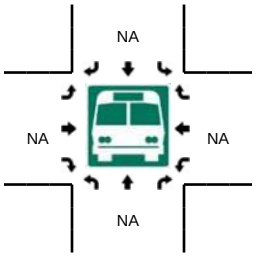












5-Min Count Period Beginning At	I-5 SB On Ramp (Northbound)				I-5 SB On Ramp (Southbound)				NE 134th St (Eastbound)				NE 134th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	0	0	0	33	25	0	14	56	0	0	128	
7:05 AM	0	0	0	0	0	0	0	0	0	47	33	0	5	46	0	0	131	
7:10 AM	0	0	0	0	0	0	0	0	0	41	25	0	10	67	0	0	143	
7:15 AM	0	0	0	0	0	0	0	0	0	38	34	0	10	66	0	0	148	
7:20 AM	0	0	0	0	0	0	0	0	0	58	35	0	11	58	0	0	162	
7:25 AM	0	0	0	0	0	0	0	0	0	48	25	0	14	45	0	0	132	
7:30 AM	0	0	0	0	0	0	0	0	0	61	25	0	14	52	0	0	152	
7:35 AM	0	0	0	0	0	0	0	0	0	46	41	0	13	41	0	0	141	
7:40 AM	0	0	0	0	0	0	0	0	0	48	29	0	13	49	0	0	139	
7:45 AM	0	0	0	0	0	0	0	0	0	51	27	0	10	44	0	0	132	
7:50 AM	0	0	0	0	0	0	0	0	0	44	19	0	18	58	0	0	139	
7:55 AM	0	0	0	0	0	0	0	0	0	37	19	0	14	61	0	0	131	1678
8:00 AM	0	0	0	0	0	0	0	0	0	33	26	0	8	50	0	0	117	1667
8:05 AM	0	0	0	0	0	0	0	0	0	36	22	0	14	46	0	1	119	1655
8:10 AM	0	0	0	0	0	0	0	0	0	42	28	0	10	60	0	0	140	1652
8:15 AM	0	0	0	0	0	0	0	0	0	41	21	0	13	69	0	0	144	1648
8:20 AM	0	0	0	0	0	0	0	0	0	32	30	0	21	53	0	0	136	1622
8:25 AM	0	0	0	0	0	0	0	0	0	43	26	0	15	42	0	0	126	1616
8:30 AM	0	0	0	0	0	0	0	0	0	42	26	0	11	61	0	0	140	1604
8:35 AM	0	0	0	0	0	0	0	0	0	49	31	0	12	43	0	0	135	1598
8:40 AM	0	0	0	0	0	0	0	0	0	47	23	0	21	69	0	0	160	1619
8:45 AM	0	0	0	0	0	0	0	0	0	40	36	0	14	45	0	0	135	1622
8:50 AM	0	0	0	0	0	0	0	0	0	41	29	0	14	59	0	0	143	1626
8:55 AM	0	0	0	0	0	0	0	0	0	45	25	0	19	81	0	0	170	1665

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	0	0	0	0	0	504	360	0	188	740	0	0	1792
Heavy Trucks	0	0	0		0	0	0		0	16	28		12	24	0		80
Pedestrians		8				0				0				0			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/19/2018 5:23 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: I-5 NB Off Ramp -- NE 134th St

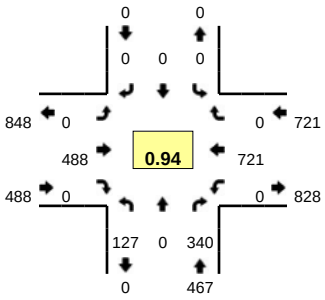
CITY/STATE: Vancouver, WA

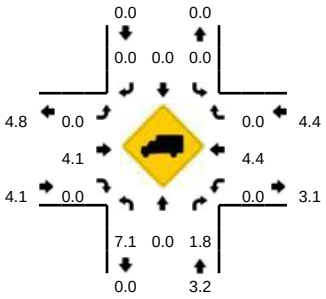
QC JOB #: 14675519

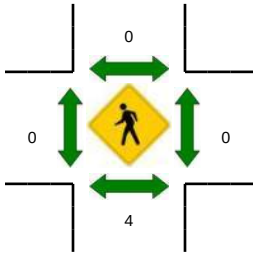
DATE: Thu, Apr 12 2018

Peak-Hour: 8:00 AM -- 9:00 AM

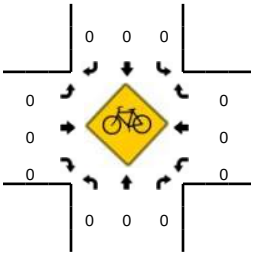
Peak 15-Min: 8:45 AM -- 9:00 AM

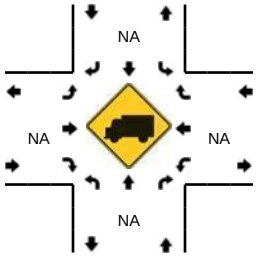


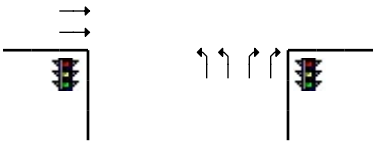


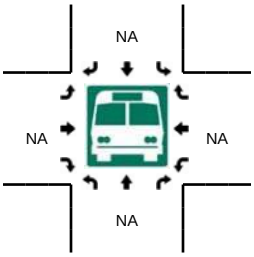












5-Min Count Period Beginning At	I-5 NB Off Ramp (Northbound)				I-5 NB Off Ramp (Southbound)				NE 134th St (Eastbound)				NE 134th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	7	0	10	0	0	0	0	0	0	33	0	0	0	61	0	0	111	
7:05 AM	5	0	22	0	0	0	0	0	0	40	0	0	0	45	0	0	112	
7:10 AM	10	0	14	0	0	0	0	0	0	50	0	0	0	69	0	0	143	
7:15 AM	4	0	14	0	0	0	0	0	0	36	0	0	0	68	0	0	122	
7:20 AM	12	0	21	0	0	0	0	0	0	53	0	0	0	55	0	0	141	
7:25 AM	8	0	30	0	0	0	0	0	0	54	0	0	0	52	0	0	144	
7:30 AM	7	0	25	0	0	0	0	0	0	56	0	0	0	61	0	0	149	
7:35 AM	2	0	24	0	0	0	0	0	0	39	0	0	0	48	0	0	113	
7:40 AM	14	0	20	0	0	0	0	0	0	57	0	0	0	52	0	0	143	
7:45 AM	5	0	22	0	0	0	0	0	0	53	0	0	0	49	0	0	129	
7:50 AM	7	0	20	0	0	0	0	0	0	43	0	0	0	68	0	0	138	
7:55 AM	17	0	31	0	0	0	0	0	0	39	0	0	0	57	0	0	144	1589
8:00 AM	9	0	36	0	0	0	0	0	0	30	0	0	0	51	0	0	126	1604
8:05 AM	8	0	22	0	0	0	0	0	0	38	0	0	0	57	0	0	125	1617
8:10 AM	12	0	26	0	0	0	0	0	0	41	0	0	0	55	0	0	134	1608
8:15 AM	13	0	24	0	0	0	0	0	0	38	0	0	0	65	0	0	140	1626
8:20 AM	5	0	27	0	0	0	0	0	0	37	0	0	0	67	0	0	136	1621
8:25 AM	14	0	19	0	0	0	0	0	0	42	0	0	0	49	0	0	124	1601
8:30 AM	13	0	33	0	0	0	0	0	0	37	0	0	0	51	0	0	134	1586
8:35 AM	12	0	31	0	0	0	0	0	0	48	0	0	0	48	0	0	139	1612
8:40 AM	8	0	29	0	0	0	0	0	0	54	0	0	0	81	0	0	172	1641
8:45 AM	10	0	27	0	0	0	0	0	0	42	0	0	0	51	0	0	130	1642
8:50 AM	14	0	30	0	0	0	0	0	0	38	0	0	0	58	0	0	140	1644
8:55 AM	9	0	36	0	0	0	0	0	0	43	0	0	0	88	0	0	176	1676

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	132	0	372	0	0	0	0	0	0	492	0	0	0	788	0	0	1784
Heavy Trucks	8	0	4		0	0	0		0	16	0		0	20	0		48
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 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: I-205 SB Off Ramp/NE Hwy 99 -- NE 134th St

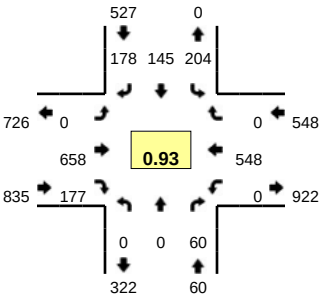
QC JOB #: 14675521

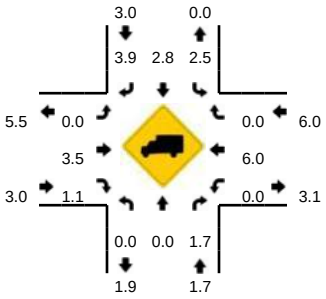
CITY/STATE: Vancouver, WA

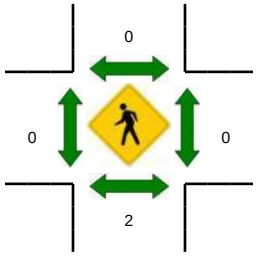
DATE: Thu, Apr 12 2018

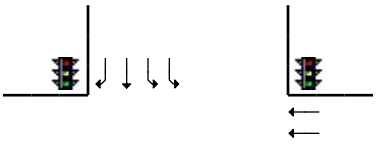
Peak-Hour: 8:00 AM -- 9:00 AM

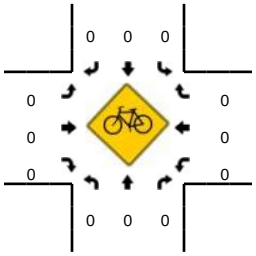
Peak 15-Min: 8:45 AM -- 9:00 AM

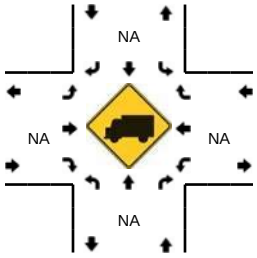




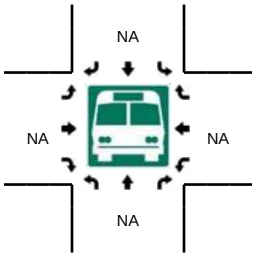












5-Min Count Period Beginning At	I-205 SB Off Ramp/NE Hwy 99 (Northbound)				I-205 SB Off Ramp/NE Hwy 99 (Southbound)				NE 134th St (Eastbound)				NE 134th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	4	0	11	10	24	0	0	36	6	0	0	37	0	0	128	
7:05 AM	0	0	4	0	10	11	18	0	0	50	13	0	0	28	0	0	134	
7:10 AM	0	0	3	0	8	8	19	0	0	51	15	0	0	61	0	0	165	
7:15 AM	0	0	4	0	10	14	22	0	0	41	11	0	0	39	0	0	141	
7:20 AM	0	0	6	0	11	19	19	0	0	55	17	0	0	34	0	0	161	
7:25 AM	0	0	5	0	13	12	18	0	0	57	22	0	0	36	0	0	163	
7:30 AM	0	0	4	0	18	8	22	0	0	64	11	0	0	42	0	0	169	
7:35 AM	0	0	8	0	12	7	20	0	0	54	13	0	0	29	0	0	143	
7:40 AM	0	0	5	0	19	10	10	0	0	63	22	0	0	41	0	0	170	
7:45 AM	0	0	6	0	12	9	15	0	0	61	14	0	0	34	0	0	151	
7:50 AM	0	0	3	0	23	9	17	0	0	45	12	0	0	55	0	0	164	
7:55 AM	0	0	7	0	16	10	16	0	0	61	14	0	0	37	0	0	161	1850
8:00 AM	0	0	8	0	18	9	18	0	0	47	21	0	0	33	0	0	154	1876
8:05 AM	0	0	2	0	20	19	11	0	0	47	16	0	0	48	0	0	163	1905
8:10 AM	0	0	2	0	12	11	20	0	0	52	14	0	0	36	0	0	147	1887
8:15 AM	0	0	5	0	20	10	15	0	0	43	11	0	0	51	0	0	155	1901
8:20 AM	0	0	5	0	11	14	12	0	0	52	20	0	0	55	0	0	169	1909
8:25 AM	0	0	4	0	15	17	10	0	0	47	15	0	0	45	0	0	153	1899
8:30 AM	0	0	8	0	16	8	19	0	0	49	14	0	0	33	0	0	147	1877
8:35 AM	0	0	4	0	11	13	13	0	0	64	22	0	0	30	0	0	157	1891
8:40 AM	0	0	3	0	17	11	7	0	0	68	15	0	0	73	0	0	194	1915
8:45 AM	0	0	7	0	22	11	8	0	0	62	6	0	0	47	0	0	163	1927
8:50 AM	0	0	8	0	25	12	19	0	0	57	8	0	0	33	0	0	162	1925
8:55 AM	0	0	4	0	17	10	26	0	0	70	15	0	0	64	0	0	206	1970

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	76	0	256	132	212	0	0	756	116	0	0	576	0	0	2124
Heavy Trucks	0	0	0		8	12	4		0	20	4		0	24	0		72
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

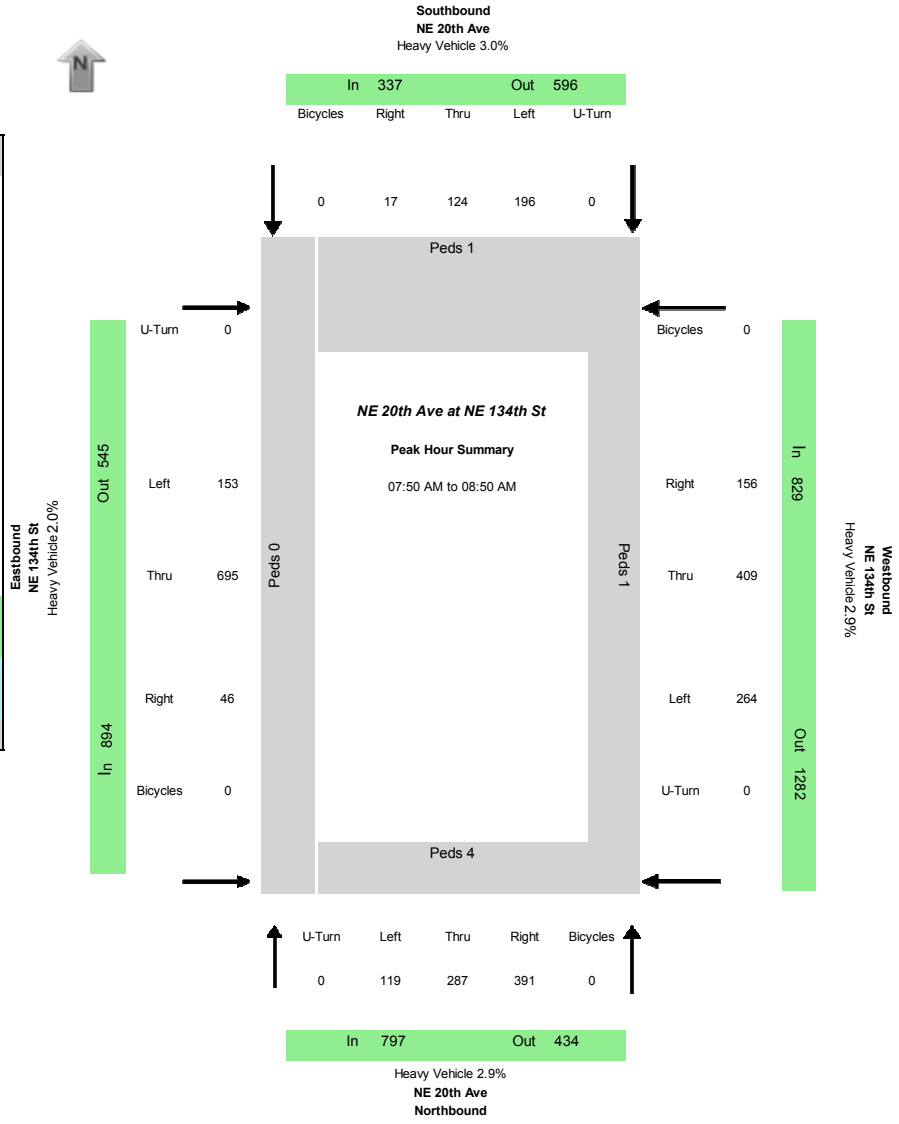
Comments:

Report generated on 4/24/2018 4:03 PM

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

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE 20th Ave*
E/W street	*NE 134th St*
City, State	Ridgefield WA
Site Notes	
Location	45.7182 - -122.651335
Start Date	Thursday, October 18, 2018
Start Time	07:00:00 AM
Weather	
Study ID #	
Peak Hour Start	07:50:00 AM
Peak 15 Min Start	08:35:00 AM
PHF (15-Min Int)	0.91



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
119	287	391	0	196	124	17	0	153	695	46	0	264	409	156	0	797	337	894	829	434	596	545	1282
Percent Heavy Vehicles																							
5.0%	3.1%	2.0%	0.0%	1.0%	4.8%	11.8%	0.0%	1.3%	2.0%	4.3%	0.0%	1.9%	4.4%	0.6%	0.0%	2.9%	3.0%	2.0%	2.9%	3.0%	2.0%	4.8%	1.9%

PHV- Bicycles

Northbound				Southbound				Eastbound				Westbound				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PHV - Pedestrians in Crosswalk

NB	SB	EB	WB	Sum
4	1	0	1	6

All Vehicle Volumes

	Northbound NE 20th Ave				Southbound NE 20th Ave				Eastbound NE 134th St				Westbound NE 134th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
07:00:00 AM	6	13	25	0	14	8	2	0	7	35	2	0	12	30	14	0		
07:05:00 AM	15	15	31	0	17	8	0	0	1	43	4	0	16	32	15	0		
07:10:00 AM	13	21	40	0	10	2	0	0	7	56	6	0	11	34	13	0	578	
07:15:00 AM	11	19	47	0	20	6	1	0	11	54	1	0	24	20	11	0	635	
07:20:00 AM	9	23	30	0	20	7	0	0	5	49	3	0	12	23	16	0	635	
07:25:00 AM	10	10	36	0	20	7	0	0	10	60	2	0	22	24	14	0	637	
07:30:00 AM	12	19	35	0	11	5	2	0	16	67	2	0	24	27	19	0	651	
07:35:00 AM	7	29	41	0	27	8	0	0	12	49	2	0	26	20	12	0	687	
07:40:00 AM	9	21	37	0	17	13	3	0	10	67	3	0	21	43	17	0	733	
07:45:00 AM	8	21	35	0	13	1	1	0	17	53	7	0	21	26	22	0	719	
07:50:00 AM	9	31	40	0	25	9	2	0	17	65	3	0	19	34	15	0	755	
07:55:00 AM	10	26	38	0	12	10	0	0	12	50	5	0	23	31	15	0	726	2674
08:00:00 AM	8	24	24	0	12	10	2	0	12	67	4	0	25	40	17	0	746	2751
08:05:00 AM	11	20	31	0	5	5	3	0	16	61	4	0	20	31	11	0	695	2772
08:10:00 AM	12	22	35	0	22	14	1	0	11	47	5	0	24	25	14	0	695	2791
08:15:00 AM	6	20	32	0	16	10	3	0	4	42	4	0	15	32	12	0	646	2762
08:20:00 AM	12	22	31	0	19	11	0	0	21	59	0	0	21	29	11	0	664	2801
08:25:00 AM	6	28	29	0	13	15	2	0	12	57	2	0	34	36	8	0	674	2828
08:30:00 AM	13	16	32	0	16	13	3	0	7	40	5	0	21	25	9	0	678	2789
08:35:00 AM	10	15	31	0	14	12	0	0	11	61	4	0	25	43	16	0	684	2798
08:40:00 AM	6	30	41	0	20	7	1	0	20	73	8	0	18	44	8	0	718	2813
08:45:00 AM	16	33	27	0	22	8	0	0	10	73	2	0	19	39	20	0	787	2857
08:50:00 AM	8	20	33	0	20	15	0	0	9	71	2	0	27	29	9	0	788	2831
08:55:00 AM	18	22	26	0	17	9	3	0	23	67	0	0	29	31	10	0	767	2854

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: I-205 SB On Ramp -- NE 134th St

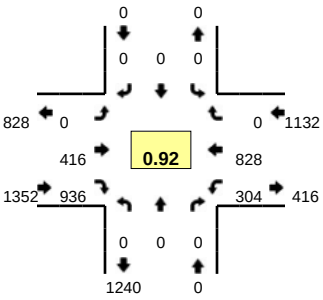
CITY/STATE: Vancouver, WA

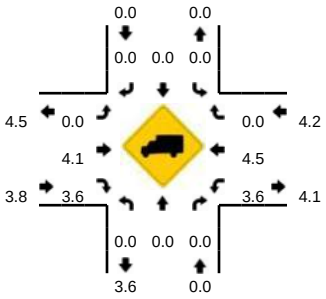
QC JOB #: 14675523

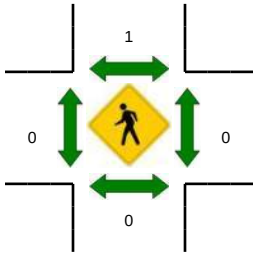
DATE: Thu, Apr 12 2018

Peak-Hour: 7:10 AM -- 8:10 AM

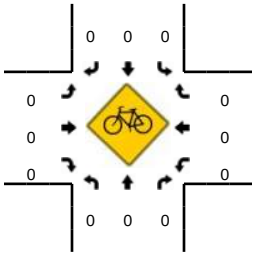
Peak 15-Min: 7:40 AM -- 7:55 AM

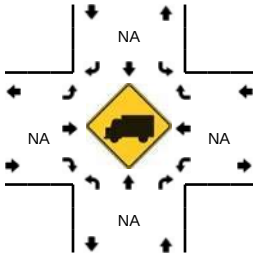




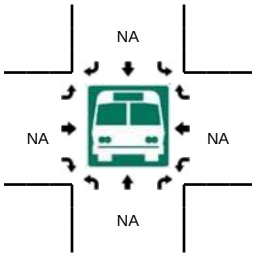












5-Min Count Period Beginning At	I-205 SB On Ramp (Northbound)				I-205 SB On Ramp (Southbound)				NE 134th St (Eastbound)				NE 134th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	0	0	0	20	58	0	13	49	0	0	140	
7:05 AM	0	0	0	0	0	0	0	0	0	19	68	0	29	45	0	0	161	
7:10 AM	0	0	0	0	0	0	0	0	0	26	77	0	16	69	0	0	188	
7:15 AM	0	0	0	0	0	0	0	0	0	28	80	0	28	78	0	0	214	
7:20 AM	0	0	0	0	0	0	0	0	0	25	67	0	32	57	0	0	181	
7:25 AM	0	0	0	0	0	0	0	0	0	38	80	0	24	69	0	0	211	
7:30 AM	0	0	0	0	0	0	0	0	0	40	80	0	21	71	0	0	212	
7:35 AM	0	0	0	0	0	0	0	0	0	35	88	0	30	65	0	0	218	
7:40 AM	0	0	0	0	0	0	0	0	0	34	101	0	27	70	0	0	232	
7:45 AM	0	0	0	0	0	0	0	0	0	41	77	0	35	61	0	0	214	
7:50 AM	0	0	0	0	0	0	0	0	0	37	76	0	24	91	0	0	228	
7:55 AM	0	0	0	0	0	0	0	0	0	39	76	0	26	71	0	0	212	2411
8:00 AM	0	0	0	0	0	0	0	0	0	37	63	0	19	60	0	0	179	2450
8:05 AM	0	0	0	0	0	0	0	0	0	36	71	0	22	66	0	0	195	2484
8:10 AM	0	0	0	0	0	0	0	0	0	36	63	0	14	68	0	0	181	2477
8:15 AM	0	0	0	0	0	0	0	0	0	33	78	0	23	72	0	0	206	2469
8:20 AM	0	0	0	0	0	0	0	0	0	38	61	0	11	72	0	0	182	2470
8:25 AM	0	0	0	0	0	0	0	0	0	30	65	0	20	67	0	0	182	2441
8:30 AM	0	0	0	0	0	0	0	0	0	33	81	0	20	49	0	0	183	2412
8:35 AM	0	0	0	0	0	0	0	0	0	49	62	0	16	60	0	0	187	2381
8:40 AM	0	0	0	0	0	0	0	0	0	54	71	0	28	76	0	0	229	2378
8:45 AM	0	0	0	0	0	0	0	0	0	47	70	0	25	63	0	0	205	2369
8:50 AM	0	0	0	0	0	0	0	0	0	55	56	0	27	54	0	0	192	2333
8:55 AM	0	0	0	0	0	0	0	0	0	69	50	0	23	81	0	0	223	2344

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	0	0	0	0	0	448	1016	0	344	888	0	0	2696
Heavy Trucks	0	0	0		0	0	0		0	8	44		8	36	0		96
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

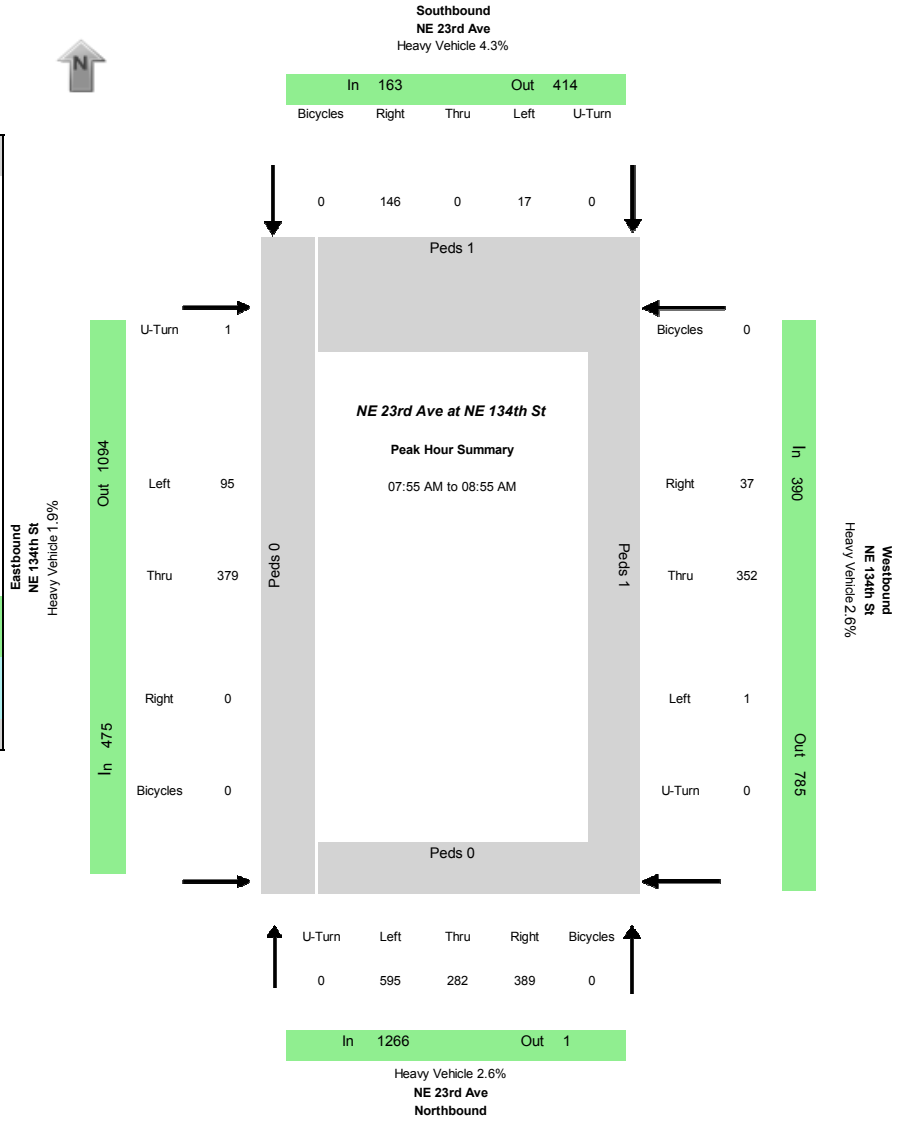
Comments:

Report generated on 4/24/2018 4:03 PM

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

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE 23rd Ave*
E/W street	*NE 134th St*
City, State	Salmon Creek WA
Site Notes	
Location	45.718053 - -122.647451
Start Date	Thursday, October 18, 2018
Start Time	07:00:00 AM
Weather	
Study ID #	
Peak Hour Start	07:55:00 AM
Peak 15 Min Start	08:40:00 AM
PHF (15-Min Int)	0.80



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
595	282	389	0	17	0	146	0	95	379	0	1	1	352	37	0	1266	163	475	390	1	414	1094	785
Percent Heavy Vehicles																							
3.9%	2.1%	1.0%	0.0%	11.8%	0.0%	3.4%	0.0%	2.1%	1.8%	0.0%	0.0%	0.0%	2.3%	5.4%	0.0%	2.6%	4.3%	1.9%	2.6%	0.0%	2.4%	3.3%	1.7%

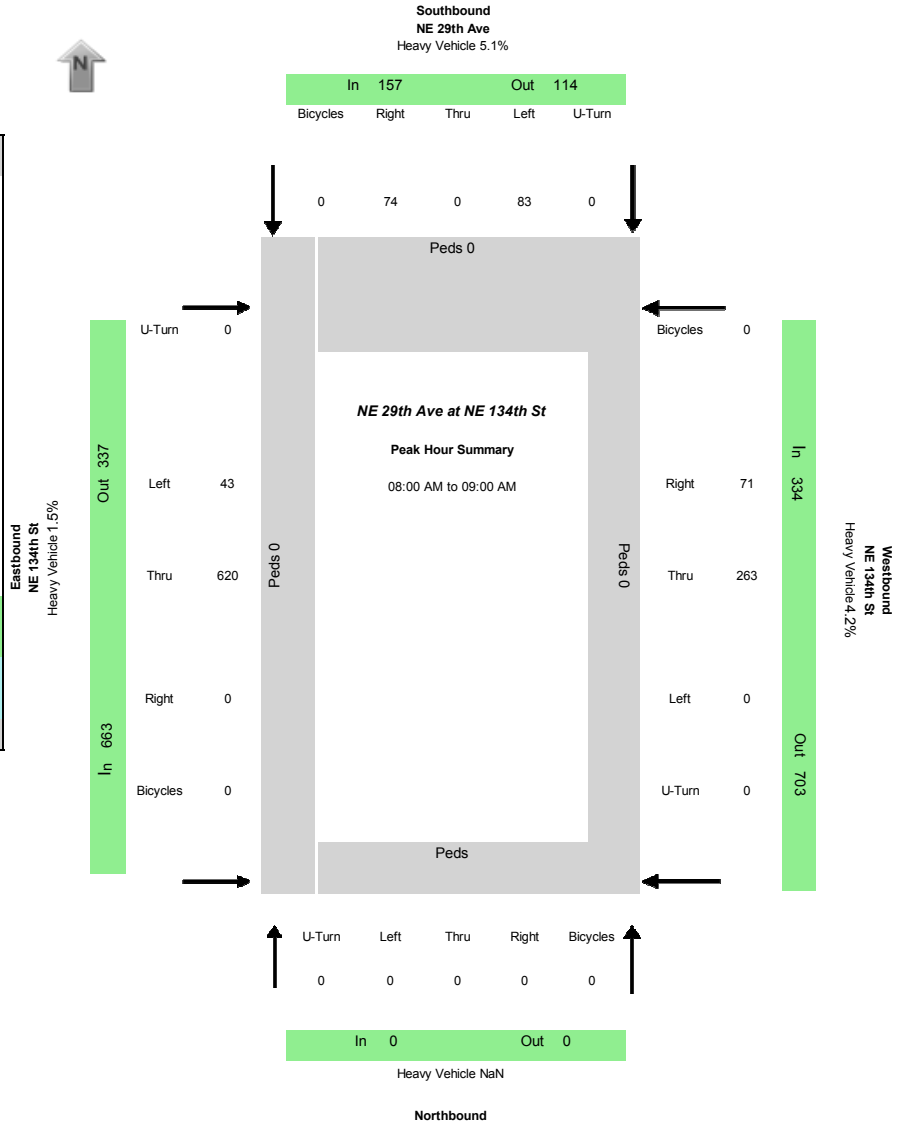
PHV- Bicycles																	PHV - Pedestrians				
Northbound				Southbound				Eastbound				Westbound					in Crosswalk				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	NB	SB	EB	WB	Sum
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2

All Vehicle Volumes

	Northbound NE 23rd Ave				Southbound NE 23rd Ave				Eastbound NE 134th St				Westbound NE 134th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
07:00:00 AM	44	22	9	0	2	0	8	0	5	11	0	0	0	22	1	0		
07:05:00 AM	34	8	5	0	0	0	13	0	3	14	0	0	0	33	2	0		
07:10:00 AM	46	20	9	0	0	0	14	0	7	10	0	0	0	25	1	0	368	
07:15:00 AM	47	22	10	0	2	0	8	0	9	22	0	0	0	17	5	0	386	
07:20:00 AM	43	22	19	0	1	0	13	0	6	15	0	0	0	25	2	0	420	
07:25:00 AM	44	30	11	0	1	0	10	0	10	29	0	0	0	24	3	0	450	
07:30:00 AM	48	25	20	0	0	0	10	0	3	21	0	0	0	32	2	0	469	
07:35:00 AM	54	29	20	0	1	0	22	0	6	21	0	0	0	37	3	0	516	
07:40:00 AM	56	31	22	0	0	0	16	0	7	33	0	0	0	29	3	0	551	
07:45:00 AM	47	40	18	0	0	0	13	0	8	18	0	0	0	30	9	0	573	
07:50:00 AM	44	33	27	0	3	0	16	0	14	37	0	0	0	27	7	0	588	
07:55:00 AM	79	39	30	0	1	0	14	0	9	35	0	0	0	26	2	0	626	1995
08:00:00 AM	36	23	18	0	1	0	8	0	8	31	0	0	0	30	5	0	603	2031
08:05:00 AM	43	20	23	0	3	0	12	0	6	30	0	0	0	32	1	0	565	2089
08:10:00 AM	61	21	18	0	0	0	12	0	10	23	0	0	1	18	2	0	496	2123
08:15:00 AM	43	20	19	0	3	0	9	0	6	18	0	1	0	32	2	0	489	2134
08:20:00 AM	38	23	26	0	1	0	14	0	4	22	0	0	0	35	5	0	487	2156
08:25:00 AM	55	30	30	0	1	0	12	0	7	23	0	0	0	33	6	0	518	2191
08:30:00 AM	53	29	22	0	0	0	12	0	9	20	0	0	0	23	0	0	533	2198
08:35:00 AM	36	14	32	0	0	0	17	0	7	24	0	0	0	29	1	0	525	2165
08:40:00 AM	50	23	41	0	0	0	14	0	13	45	0	0	0	28	3	0	545	2185
08:45:00 AM	60	25	59	0	2	0	15	0	6	44	0	0	0	40	5	0	633	2258
08:50:00 AM	41	15	71	0	5	0	7	0	10	64	0	0	0	26	5	0	717	2294
08:55:00 AM	62	19	58	0	0	0	13	0	9	36	0	0	0	22	3	0	722	2281

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE 29th Ave*
E/W street	*NE 134th St*
City, State	Ridgefield WA
Site Notes	
Location	45.718346 - -122.640445
Start Date	Thursday, October 18, 2018
Start Time	07:00:00 AM
Weather	
Study ID #	
Peak Hour Start	08:00:00 AM
Peak 15 Min Start	08:45:00 AM
PHF (15-Min Int)	0.68



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
0	0	0	0	83	0	74	0	43	620	0	0	0	263	71	0	0	157	663	334	0	114	337	703
Percent Heavy Vehicles																							
0.0%	0.0%	0.0%	0.0%	7.2%	0.0%	2.7%	0.0%	7.0%	1.1%	0.0%	0.0%	0.0%	3.4%	7.0%	0.0%	#DIV/0!	5.1%	1.5%	4.2%	#DIV/0!	7.0%	3.3%	1.8%

PHV- Bicycles																PHV - Pedestrians				
Northbound				Southbound				Eastbound				Westbound					in Crosswalk			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	NB	SB	EB	WB	Sum
					0		0	0	0		0		0	0	0	0		0	0	0	0

All Vehicle Volumes

	Northbound				Southbound NE 29th Ave				Eastbound NE 134th St				Westbound NE 134th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
07:00:00 AM					2		5	0	1	11		0		19	7	0		
07:05:00 AM					1		6	0	3	12		0		24	5	0		
07:10:00 AM					5		9	0	3	11		0		15	8	0	147	
07:15:00 AM					4		9	0	4	22		0		9	4	0	154	
07:20:00 AM					7		7	0	4	26		0		21	4	0	172	
07:25:00 AM					7		7	0	3	20		0		16	3	0	177	
07:30:00 AM					6		10	0	2	25		0		17	8	0	193	
07:35:00 AM					2		11	0	3	26		0		27	3	0	196	
07:40:00 AM					4		3	0	8	44		0		25	4	0	228	
07:45:00 AM					5		10	0	4	25		0		28	9	0	241	
07:50:00 AM					12		8	0	5	44		1		27	9	0	275	
07:55:00 AM					4		6	0	9	43		0		14	6	0	269	821
08:00:00 AM					8		5	0	3	31		0		21	7	0	263	851
08:05:00 AM					7		13	0	6	36		0		15	7	0	241	884
08:10:00 AM					1		2	0	3	42		0		17	1	0	225	899
08:15:00 AM					3		11	0	2	27		0		16	7	0	216	913
08:20:00 AM					8		5	0	1	24		0		28	6	0	204	916
08:25:00 AM					8		7	0	6	44		0		26	4	0	233	955
08:30:00 AM					5		3	0	2	33		0		21	6	0	237	957
08:35:00 AM					2		4	0	7	45		0		22	9	0	254	974
08:40:00 AM					9		4	0	2	66		0		25	7	0	272	999
08:45:00 AM					11		8	0	1	74		0		30	8	0	334	1050
08:50:00 AM					9		5	0	2	110		0		24	4	0	399	1098
08:55:00 AM					12		7	0	8	88		0		18	5	0	424	1154

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

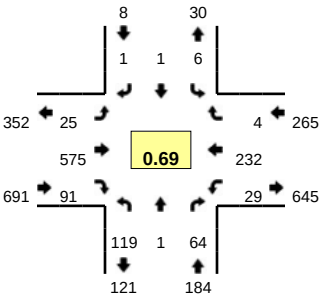
LOCATION: NE Salmon Creek Ave -- NE 134th St

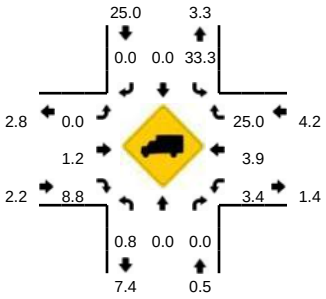
QC JOB #: 14675525

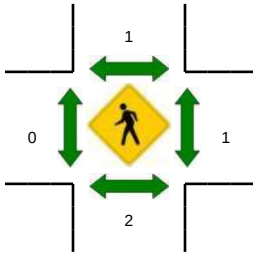
CITY/STATE: Vancouver, WA

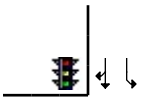
DATE: Thu, Apr 12 2018

Peak-Hour: 8:00 AM -- 9:00 AM
Peak 15-Min: 8:45 AM -- 9:00 AM

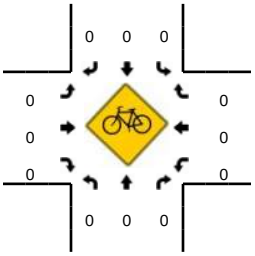


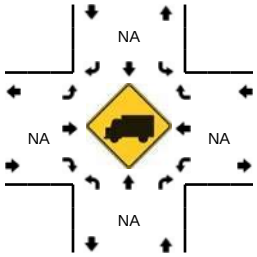


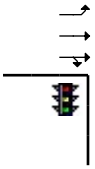


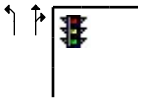


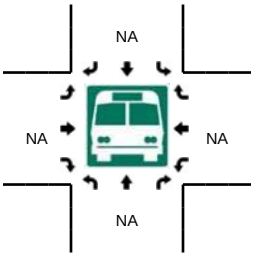












5-Min Count Period Beginning At	NE Salmon Creek Ave (Northbound)				NE Salmon Creek Ave (Southbound)				NE 134th St (Eastbound)				NE 134th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	6	0	0	0	0	0	0	0	0	12	2	0	1	9	0	0	30	
7:05 AM	12	0	3	0	0	0	1	0	0	4	2	0	0	9	0	0	31	
7:10 AM	14	0	1	0	1	0	0	0	0	6	8	0	1	9	0	0	40	
7:15 AM	13	0	1	0	0	0	0	0	0	13	5	0	2	15	0	0	49	
7:20 AM	9	0	5	0	0	0	0	0	1	17	7	0	2	14	0	0	55	
7:25 AM	12	0	4	0	0	0	0	0	0	21	4	0	1	9	1	0	52	
7:30 AM	10	0	6	0	0	0	0	0	1	43	8	0	2	14	2	0	86	
7:35 AM	12	0	5	0	0	0	0	0	1	39	6	0	4	13	1	0	81	
7:40 AM	17	1	6	0	0	0	0	0	2	43	4	0	1	17	2	0	93	
7:45 AM	15	0	8	0	0	0	0	0	1	47	9	0	4	24	1	0	109	
7:50 AM	13	0	7	0	0	1	0	0	4	38	4	0	2	12	1	0	82	
7:55 AM	10	0	2	0	1	0	0	0	0	32	6	0	3	23	0	0	77	785
8:00 AM	9	1	6	0	1	0	0	0	4	32	7	0	2	19	0	0	81	836
8:05 AM	9	0	4	0	0	0	0	0	3	26	4	0	3	24	2	0	75	880
8:10 AM	9	0	5	0	0	0	0	0	3	41	7	0	2	16	0	0	83	923
8:15 AM	12	0	4	0	0	1	0	0	5	23	12	0	0	13	0	0	70	944
8:20 AM	10	0	7	0	0	0	0	0	2	37	8	0	1	16	1	0	82	971
8:25 AM	7	0	6	0	1	0	0	0	2	26	7	0	2	16	1	0	68	987
8:30 AM	14	0	2	0	1	0	1	0	1	25	7	0	5	16	0	0	72	973
8:35 AM	15	0	4	0	0	0	0	0	2	53	5	0	4	26	0	0	109	1001
8:40 AM	5	0	3	0	0	0	0	0	0	56	4	0	3	21	0	0	92	1000
8:45 AM	6	0	8	0	1	0	0	0	0	74	18	0	3	21	0	0	131	1022
8:50 AM	11	0	8	0	2	0	0	0	1	86	7	0	2	27	0	0	144	1084
8:55 AM	12	0	7	0	0	0	0	0	2	96	5	0	2	17	0	0	141	1148

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	116	0	92	0	12	0	0	0	12	1024	120	0	28	260	0	0	1664
Heavy Trucks	0	0	0		4	0	0		0	8	12		4	4	0		32
Pedestrians		0				0				0				4			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 PM

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

Type of peak hour being reported: Intersection Peak

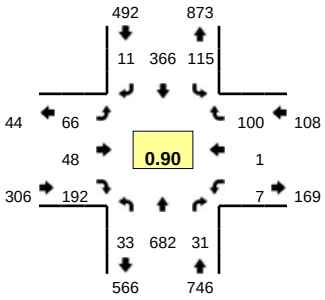
Method for determining peak hour: Total Entering Volume

LOCATION: NE 20th Ave/NE Hwy 99 -- NE Hwy 99

QC JOB #: 14675527

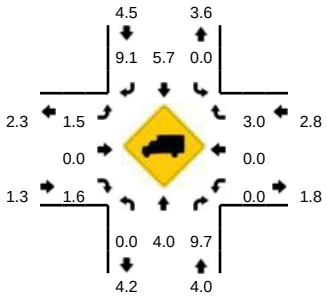
CITY/STATE: Vancouver, WA

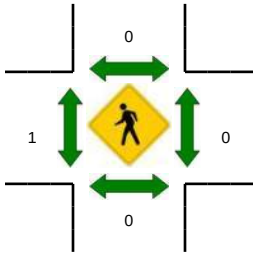
DATE: Thu, Apr 12 2018

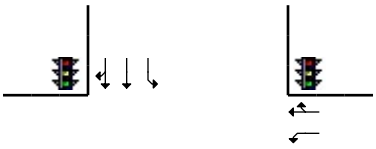


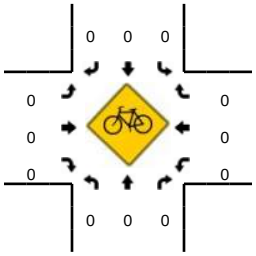
Peak-Hour: 7:50 AM -- 8:50 AM

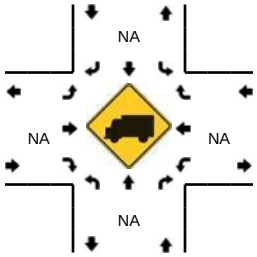
Peak 15-Min: 8:05 AM -- 8:20 AM

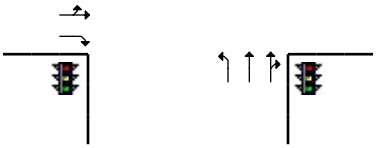


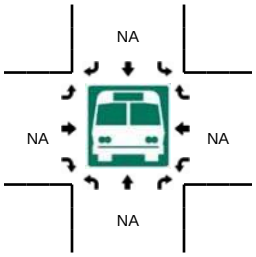












5-Min Count Period Beginning At	NE 20th Ave/NE Hwy 99 (Northbound)				NE 20th Ave/NE Hwy 99 (Southbound)				NE Hwy 99 (Eastbound)				NE Hwy 99 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	45	1	0	7	14	0	1	9	2	9	0	1	0	6	0	96	
7:05 AM	1	39	0	0	1	14	0	2	5	3	12	0	0	0	5	0	82	
7:10 AM	2	48	1	0	7	14	0	2	2	3	14	0	0	0	9	0	102	
7:15 AM	3	51	0	0	12	19	4	1	2	3	15	0	1	0	6	0	117	
7:20 AM	0	38	0	0	7	20	1	4	8	3	17	0	1	0	2	0	101	
7:25 AM	0	46	2	0	4	15	2	2	7	3	25	0	0	0	8	0	114	
7:30 AM	3	53	3	0	7	21	4	3	5	2	10	0	0	0	11	0	122	
7:35 AM	0	51	4	0	2	26	1	0	4	2	12	0	0	0	10	0	112	
7:40 AM	2	37	1	0	3	17	1	3	13	4	14	0	0	1	9	0	105	
7:45 AM	3	54	2	0	6	20	1	1	8	4	18	0	0	0	10	0	127	
7:50 AM	2	46	2	0	7	25	1	2	7	4	14	0	1	0	8	0	119	
7:55 AM	3	47	2	0	8	28	1	0	3	2	14	0	0	0	3	0	111	1308
8:00 AM	3	38	2	0	6	28	2	1	4	4	15	0	1	0	4	0	108	1320
8:05 AM	4	61	3	0	11	27	0	1	7	5	22	0	0	1	10	0	152	1390
8:10 AM	1	81	5	0	5	48	1	1	3	4	14	0	1	0	7	0	171	1459
8:15 AM	1	52	1	0	6	31	0	2	7	4	18	0	4	0	8	0	134	1476
8:20 AM	2	56	6	0	8	27	1	2	7	4	24	0	0	0	12	0	149	1524
8:25 AM	4	51	5	0	7	35	0	4	8	4	18	0	0	0	9	0	145	1555
8:30 AM	4	84	1	0	4	33	2	2	2	2	11	0	0	0	11	0	156	1589
8:35 AM	1	54	2	0	7	26	0	3	3	5	21	0	0	0	7	0	129	1606
8:40 AM	3	70	2	1	8	25	1	4	7	4	12	0	0	0	8	0	145	1646
8:45 AM	4	42	0	0	13	33	2	3	8	6	9	0	0	0	13	0	133	1652
8:50 AM	3	35	2	0	9	18	2	0	8	3	8	0	2	0	9	0	99	1632
8:55 AM	3	34	1	0	7	28	1	1	10	5	16	0	2	0	8	0	116	1637

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	24	776	36	0	88	424	4	16	68	52	216	0	20	4	100	0	1828
Heavy Trucks	0	40	0		0	20	0		0	0	8		0	0	0		68
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 PM

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

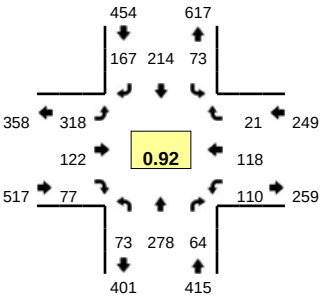
Type of peak hour being reported: Intersection Peak

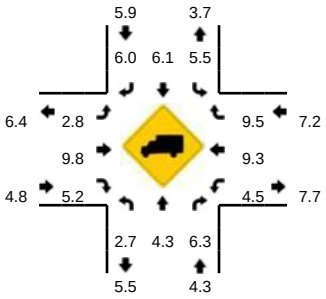
Method for determining peak hour: Total Entering Volume

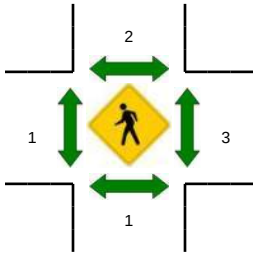
LOCATION: NE Hwy 99 -- NE 117th St
CITY/STATE: Vancouver, WA

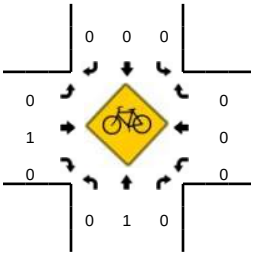
QC JOB #: 14675529
DATE: Thu, Apr 12 2018

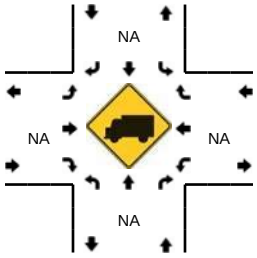
Peak-Hour: 8:00 AM -- 9:00 AM
Peak 15-Min: 8:10 AM -- 8:25 AM

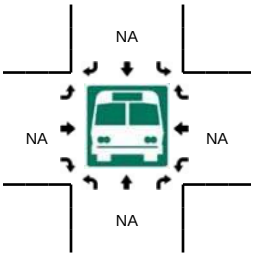












5-Min Count Period Beginning At	NE Hwy 99 (Northbound)				NE Hwy 99 (Southbound)				NE 117th St (Eastbound)				NE 117th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	21	2	0	2	5	5	1	18	6	2	0	3	4	0	0	70	
7:05 AM	2	17	4	0	2	6	12	0	19	1	5	0	5	3	0	0	76	
7:10 AM	5	26	4	0	2	12	8	0	29	4	2	0	3	4	1	0	100	
7:15 AM	5	13	3	0	2	5	10	0	35	11	3	0	3	9	3	0	102	
7:20 AM	6	18	4	0	4	18	12	0	31	5	5	0	6	6	1	0	116	
7:25 AM	3	28	3	0	2	22	9	0	22	8	4	0	10	9	2	0	122	
7:30 AM	3	15	6	0	1	16	12	0	30	17	3	0	7	5	1	0	116	
7:35 AM	1	14	3	0	2	8	9	0	26	6	4	0	7	13	1	0	94	
7:40 AM	7	20	5	0	4	14	16	0	30	11	6	0	5	5	1	0	124	
7:45 AM	3	22	8	0	5	17	11	0	27	8	3	0	7	6	4	0	121	
7:50 AM	4	20	2	0	5	17	9	0	24	12	4	0	13	7	1	0	118	
7:55 AM	5	16	2	0	8	17	10	0	27	14	3	0	9	7	1	0	119	1278
8:00 AM	5	20	3	0	1	10	11	0	29	10	7	0	10	9	2	0	117	1325
8:05 AM	7	22	5	0	7	20	17	0	29	8	7	0	9	10	1	0	142	1391
8:10 AM	9	27	6	0	4	18	20	0	21	9	8	0	8	17	4	0	151	1442
8:15 AM	5	25	4	0	6	18	17	0	32	13	4	0	9	10	1	0	144	1484
8:20 AM	7	32	5	0	7	20	12	0	30	8	7	0	5	14	1	0	148	1516
8:25 AM	4	23	5	0	9	24	21	0	25	8	3	0	7	6	1	0	136	1530
8:30 AM	2	23	1	0	3	26	9	0	28	14	5	0	10	8	2	0	131	1545
8:35 AM	12	17	5	0	9	15	14	0	27	4	7	0	17	14	2	0	143	1594
8:40 AM	8	25	10	0	3	21	8	0	28	16	9	0	9	7	3	0	147	1617
8:45 AM	4	24	5	0	10	15	14	0	22	11	7	0	2	6	2	0	122	1618
8:50 AM	2	23	7	0	7	15	11	0	16	9	5	0	12	8	1	0	116	1616
8:55 AM	8	17	8	0	7	12	13	0	31	12	8	0	12	9	1	0	138	1635

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	84	336	60	0	68	224	196	0	332	120	76	0	88	164	24	0	1772
Heavy Trucks	4	12	4		4	8	12		12	16	16		8	20	4		120
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad Stopped Buses																	

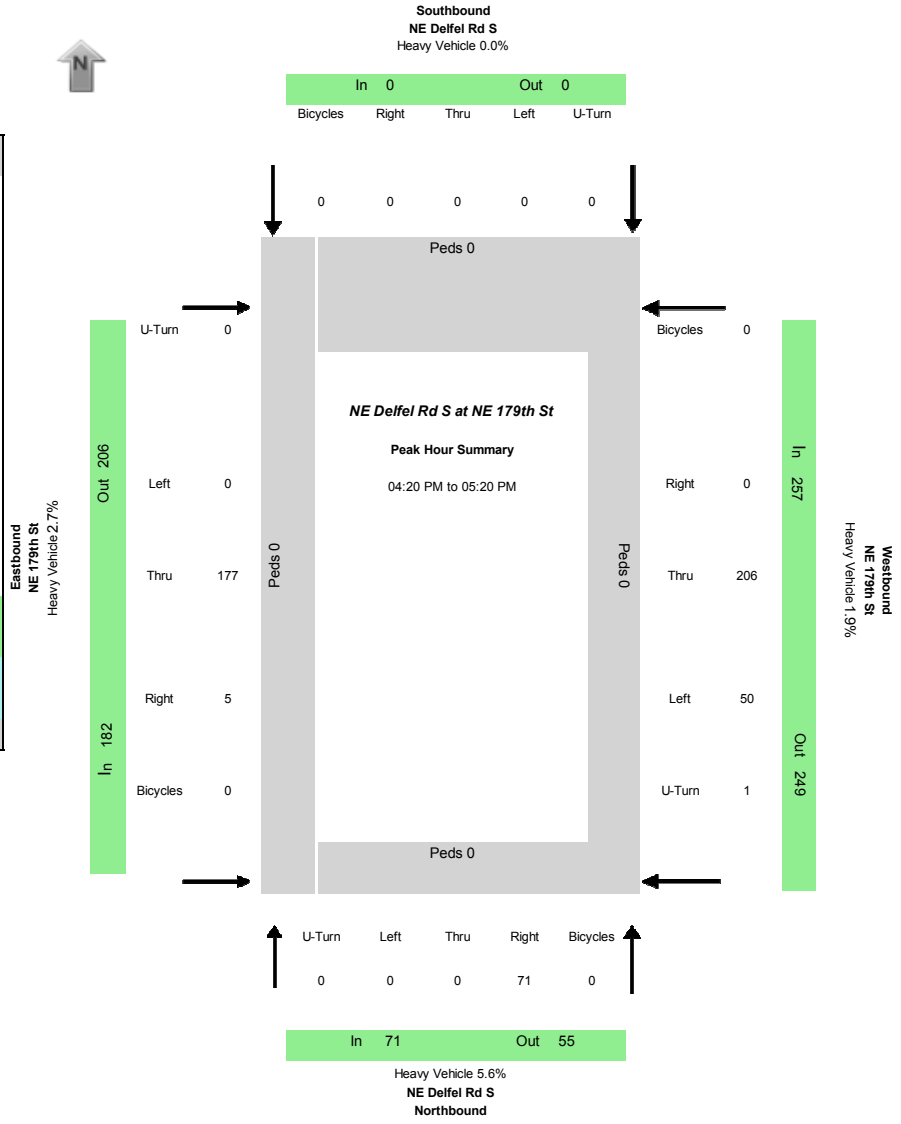
Comments:

Report generated on 4/24/2018 4:03 PM

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

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE Delfel Rd S*
E/W street	*NE 179th St*
City, State	Ridgefield WA
Site Notes	
Location	45.750407 - -122.665666
Start Date	Thursday, October 18, 2018
Start Time	04:00:00 PM
Weather	
Study ID #	
Peak Hour Start	04:20:00 PM
Peak 15 Min Start	04:45:00 PM
PHF (15-Min Int)	0.85



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
0	0	71	0	0	0	0	0	0	177	5	0	50	206	0	1	71	0	182	257	55	0	206	249
Percent Heavy Vehicles																							
0.0%	0.0%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	20.0%	0.0%	6.0%	1.0%	0.0%	0.0%	5.6%	0.0%	2.7%	1.9%	7.3%	0.0%	1.0%	3.2%

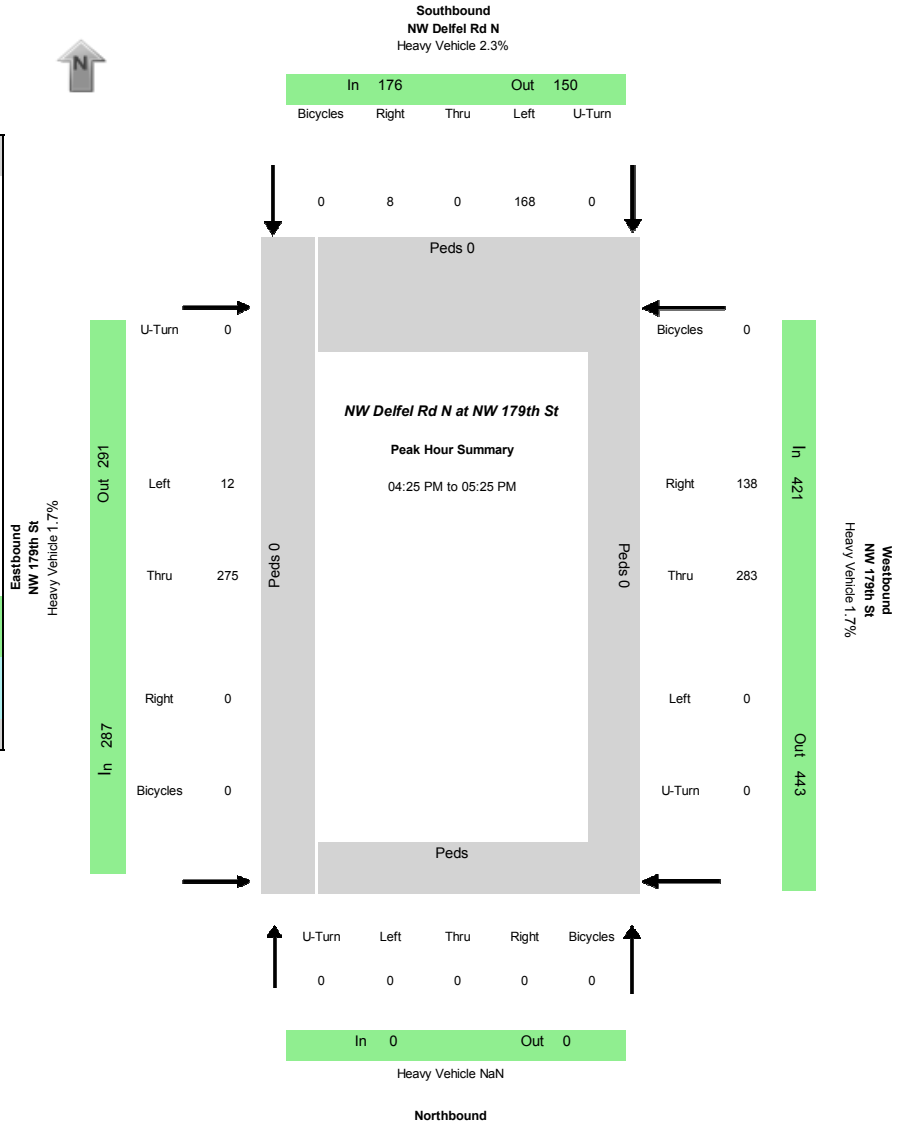
PHV- Bicycles																	PHV - Pedestrians				
Northbound				Southbound				Eastbound				Westbound					in Crosswalk				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	NB	SB	EB	WB	Sum
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

All Vehicle Volumes

	Northbound NE Delfel Rd S				Southbound NE Delfel Rd S				Eastbound NE 179th St				Westbound NE 179th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	0	0	3	0	0	0	0	0	0	8	1	0	3	16	0	0		
04:05:00 PM	1	0	4	0	0	0	0	0	0	6	0	0	7	12	0	0		
04:10:00 PM	1	0	4	0	0	0	0	0	0	16	0	0	3	13	0	0	98	
04:15:00 PM	0	0	5	0	0	0	0	0	0	14	1	0	3	9	0	0	99	
04:20:00 PM	0	0	2	0	0	0	0	0	0	11	0	0	4	11	0	0	97	
04:25:00 PM	0	0	9	0	0	0	0	0	0	14	0	0	6	16	0	0	105	
04:30:00 PM	0	0	8	0	0	0	0	0	0	15	0	0	2	15	0	0	113	
04:35:00 PM	0	0	7	0	0	0	0	0	0	14	1	0	3	15	0	0	125	
04:40:00 PM	0	0	2	0	0	0	0	0	0	16	1	0	3	17	0	0	119	
04:45:00 PM	0	0	7	0	0	0	0	0	0	21	0	0	5	22	0	0	134	
04:50:00 PM	0	0	11	0	0	0	0	0	0	20	0	0	7	16	0	0	148	
04:55:00 PM	0	0	5	0	0	0	0	0	0	16	1	0	4	15	0	0	150	472
05:00:00 PM	0	0	8	0	0	0	0	0	0	20	0	0	4	23	0	0	150	496
05:05:00 PM	0	0	5	0	0	0	0	0	0	10	1	0	6	14	0	0	132	502
05:10:00 PM	0	0	5	0	0	0	0	0	0	8	0	0	2	21	0	0	127	501
05:15:00 PM	0	0	2	0	0	0	0	0	0	12	1	0	4	21	0	1	113	510
05:20:00 PM	0	0	1	0	0	0	0	0	0	9	1	0	1	15	0	0	104	509
05:25:00 PM	0	0	1	0	0	0	0	0	0	13	3	0	4	16	0	0	105	501
05:30:00 PM	0	0	2	0	0	0	0	0	0	16	0	0	5	20	0	0	107	504
05:35:00 PM	0	0	3	0	0	0	0	0	0	8	2	0	2	18	0	0	113	497
05:40:00 PM	0	0	1	0	0	0	0	0	0	14	1	0	5	18	0	0	115	497
05:45:00 PM	0	0	1	0	0	0	0	0	0	10	1	0	5	14	0	0	103	473
05:50:00 PM	0	0	2	0	0	0	0	0	0	9	0	0	6	9	0	0	96	445
05:55:00 PM	0	0	6	0	0	0	0	0	0	12	0	0	0	15	0	0	90	437

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NW Delfel Rd N*
E/W street	*NW 179th St*
City, State	Ridgefield WA
Site Notes	
Location	45.750464 - -122.664199
Start Date	Thursday, October 18, 2018
Start Time	04:00:00 PM
Weather	
Study ID #	
Peak Hour Start	04:25:00 PM
Peak 15 Min Start	04:45:00 PM
PHF (15-Min Int)	0.93



Peak-Hour Volumes (PHV)																								
Northbound				**Southbound**				**Eastbound**				**Westbound**				**Entering**				**Leaving**			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
0	0	0	0	168	0	8	0	12	275	0	0	0	283	138	0	0	176	287	421	0	150	291	443
Percent Heavy Vehicles																							
0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	2.1%	0.7%	0.0%	#DIV/0!	2.3%	1.7%	1.7%	#DIV/0!	0.7%	2.1%	2.0%

PHV- Bicycles																PHV - Pedestrians				
Northbound				**Southbound**				**Eastbound**				**Westbound**					in Crosswalk			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	**Sum**	NB	SB	EB	WB	**Sum**
				0		0	0	0	0		0		0	0	0	0		0	0	0	0

All Vehicle Volumes

	Northbound				**Southbound** NW Delfel Rd N				**Eastbound** NW 179th St				**Westbound** NW 179th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM					8		1	0	0	18		0		18	14	0		
04:05:00 PM					12		1	0	0	14		0		20	9	0		
04:10:00 PM					13		2	0	1	30		0		18	13	0	192	
04:15:00 PM					13		2	0	0	23		0		14	17	0	202	
04:20:00 PM					15		0	0	0	20		0		16	10	0	207	
04:25:00 PM					16		2	0	3	23		0		27	15	0	216	
04:30:00 PM					12		2	0	0	27		0		19	7	0	214	
04:35:00 PM					22		1	0	0	22		0		23	13	0	234	
04:40:00 PM					11		0	0	0	23		0		20	13	0	215	
04:45:00 PM					16		0	0	3	28		0		28	11	0	234	
04:50:00 PM					11		0	0	1	32		0		21	17	0	235	
04:55:00 PM					10		0	0	0	27		0		26	7	0	238	861
05:00:00 PM					15		2	0	2	24		0		22	9	0	226	876
05:05:00 PM					6		1	0	1	19		0		20	8	0	199	875
05:10:00 PM					15		0	0	2	14		0		27	14	0	201	870
05:15:00 PM					17		0	0	0	16		0		25	17	0	202	876
05:20:00 PM					17		0	0	0	20		0		25	7	0	216	884
05:25:00 PM					12		0	0	0	15		0		20	13	0	204	858
05:30:00 PM					18		0	0	1	21		0		27	8	0	204	866
05:35:00 PM					17		0	0	0	14		0		19	20	0	205	855
05:40:00 PM					15		0	0	0	15		0		30	11	0	216	859
05:45:00 PM					14		1	0	0	14		0		20	13	0	203	835
05:50:00 PM					14		0	0	1	14		0		18	9	0	189	809
05:55:00 PM					14		0	0	0	18		0		21	11	0	182	803

Type of peak hour being reported: Intersection Peak

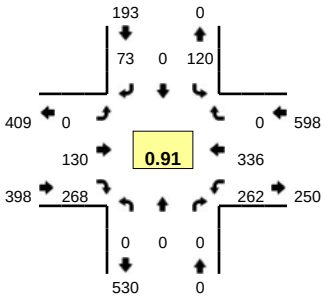
Method for determining peak hour: Total Entering Volume

LOCATION: I-5 SB Ramps -- NE 179th St

QC JOB #: 14497718

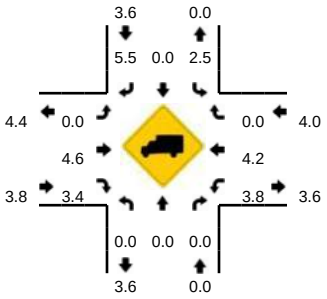
CITY/STATE: Ridgefield, WA

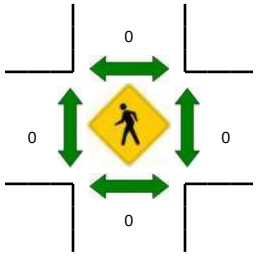
DATE: Wed, Sep 06 2017

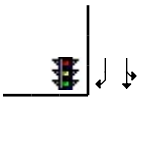


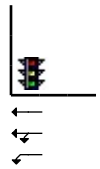
Peak-Hour: 4:15 PM -- 5:15 PM

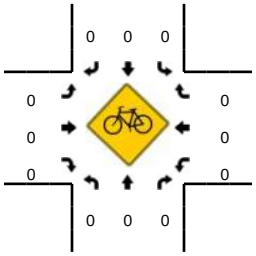
Peak 15-Min: 5:00 PM -- 5:15 PM

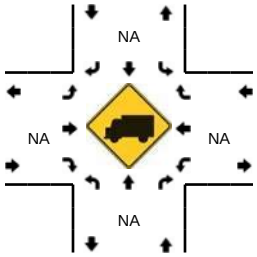


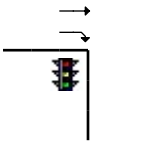


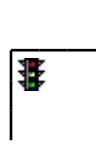


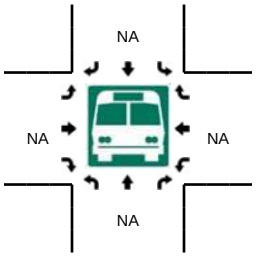












5-Min Count Period Beginning At	I-5 SB Ramps (Northbound)				I-5 SB Ramps (Southbound)				NE 179th St (Eastbound)				NE 179th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	8	0	7	0	0	13	20	0	21	20	0	0	89	
4:05 PM	0	0	0	0	11	0	10	0	0	12	24	0	10	30	0	0	97	
4:10 PM	0	0	0	0	4	1	10	0	0	14	24	0	25	25	0	0	103	
4:15 PM	0	0	0	0	12	0	3	0	0	13	31	0	11	24	0	0	94	
4:20 PM	0	0	0	0	14	0	3	0	0	10	29	0	33	24	0	0	113	
4:25 PM	0	0	0	0	10	0	7	0	0	10	17	0	24	20	0	0	88	
4:30 PM	0	0	0	0	11	0	5	0	0	1	19	0	17	28	0	0	81	
4:35 PM	0	0	0	0	3	0	5	0	0	14	17	0	20	21	0	0	80	
4:40 PM	0	0	0	0	11	0	3	0	0	7	25	0	16	27	0	0	89	
4:45 PM	0	0	0	0	9	0	9	0	0	20	22	0	26	31	0	0	117	
4:50 PM	0	0	0	0	8	0	8	0	0	14	16	0	24	33	0	0	103	
4:55 PM	0	0	0	0	10	0	12	0	0	7	20	0	22	28	0	0	99	1153
5:00 PM	0	0	0	0	8	0	2	0	0	9	26	0	19	27	0	0	91	1155
5:05 PM	0	0	0	0	13	0	9	0	0	14	23	0	21	29	0	0	109	1167
5:10 PM	0	0	0	0	11	0	7	0	0	11	23	0	29	44	0	0	125	1189
5:15 PM	0	0	0	0	9	0	12	0	0	13	12	0	21	20	0	0	87	1182
5:20 PM	0	0	0	0	5	0	7	0	0	10	26	0	15	21	0	0	84	1153
5:25 PM	0	0	0	0	7	0	3	0	0	6	24	0	18	22	0	0	80	1145
5:30 PM	0	0	0	0	10	0	7	0	0	8	13	0	15	23	0	0	76	1140
5:35 PM	0	0	0	0	10	0	4	0	0	12	13	0	18	29	0	0	86	1146
5:40 PM	0	0	0	0	6	0	6	0	0	8	22	0	23	27	0	0	92	1149
5:45 PM	0	0	0	0	11	0	10	0	0	12	20	0	24	31	0	0	108	1140
5:50 PM	0	0	0	0	6	0	4	0	0	12	22	0	11	24	0	0	79	1116
5:55 PM	0	0	0	0	6	0	5	0	0	12	13	0	12	25	0	0	73	1090

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	128	0	72	0	0	136	288	0	276	400	0	0	1300
Heavy Trucks	0	0	0		0	0	0		0	4	16		8	4	0		32
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:12 PM

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

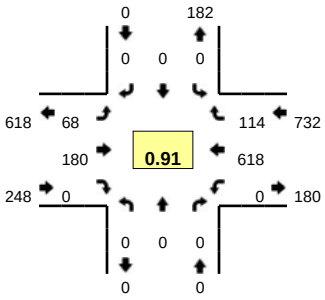
Type of peak hour being reported: Intersection Peak

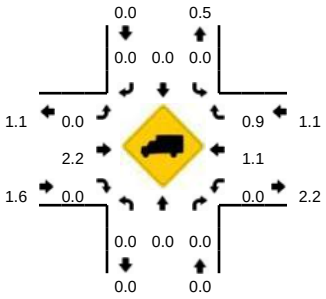
Method for determining peak hour: Total Entering Volume

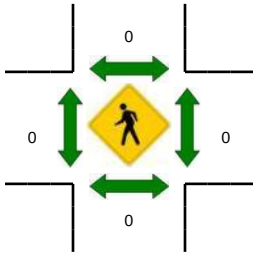
LOCATION: I-5 NB On Ramp -- NE 179th St
CITY/STATE: Ridgefield, WA

QC JOB #: 14675502
DATE: Thu, Apr 12 2018

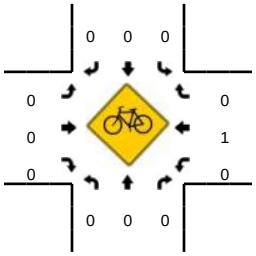
Peak-Hour: 4:50 PM -- 5:50 PM
Peak 15-Min: 5:10 PM -- 5:25 PM

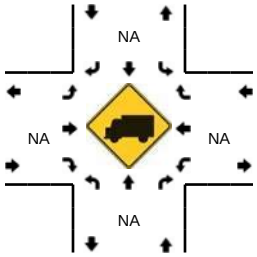




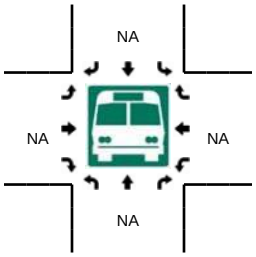












5-Min Count Period Beginning At	I-5 NB On Ramp (Northbound)				I-5 NB On Ramp (Southbound)				NE 179th St (Eastbound)				NE 179th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	0	0	0	0	2	15	0	0	0	38	5	0	60	
4:05 PM	0	0	0	0	0	0	0	0	7	24	0	0	0	48	4	0	83	
4:10 PM	0	0	0	0	0	0	0	0	8	17	0	0	0	58	5	0	88	
4:15 PM	0	0	0	0	0	0	0	0	2	11	0	0	0	58	10	0	81	
4:20 PM	0	0	0	0	0	0	0	0	5	18	0	0	0	46	13	0	82	
4:25 PM	0	0	0	0	0	0	0	0	8	22	0	0	0	41	4	0	75	
4:30 PM	0	0	0	0	0	0	0	0	2	15	0	0	0	39	10	0	66	
4:35 PM	0	0	0	0	0	0	0	0	3	19	0	0	0	51	10	0	83	
4:40 PM	0	0	0	0	0	0	0	0	5	13	0	0	0	41	7	0	66	
4:45 PM	0	0	0	0	0	0	0	0	7	14	0	0	0	45	8	0	74	
4:50 PM	0	0	0	0	0	0	0	0	5	15	0	0	0	35	11	0	66	
4:55 PM	0	0	0	0	0	0	0	0	3	15	0	0	0	51	8	0	77	901
5:00 PM	0	0	0	0	0	0	0	0	8	17	0	0	0	50	9	0	84	925
5:05 PM	0	0	0	0	0	0	0	0	4	12	0	0	0	54	12	0	82	924
5:10 PM	0	0	0	0	0	0	0	0	5	25	0	0	0	46	12	0	88	924
5:15 PM	0	0	0	0	0	0	0	0	6	13	0	0	0	56	12	0	87	930
5:20 PM	0	0	0	0	0	0	0	0	5	18	0	0	0	63	7	0	93	941
5:25 PM	0	0	0	0	0	0	0	0	5	12	0	0	0	55	11	0	83	949
5:30 PM	0	0	0	0	0	0	0	0	9	14	0	0	0	49	11	0	83	966
5:35 PM	0	0	0	0	0	0	0	0	6	12	0	0	0	40	3	0	61	944
5:40 PM	0	0	0	0	0	0	0	0	6	14	0	0	0	61	9	0	90	968
5:45 PM	0	0	0	0	0	0	0	0	6	13	0	0	0	58	9	0	86	980
5:50 PM	0	0	0	0	0	0	0	0	4	15	0	0	0	40	7	0	66	980
5:55 PM	0	0	0	0	0	0	0	0	4	7	0	0	0	36	10	0	57	960

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	0	0	0	0	64	224	0	0	0	660	124	0	1072
Heavy Trucks	0	0	0		0	0	0		0	8	0		0	8	0		16
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 PM

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

Type of peak hour being reported: Intersection Peak

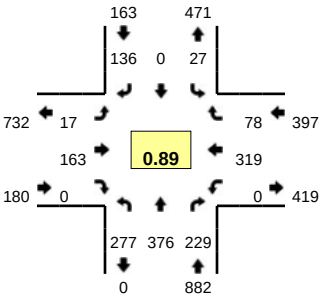
Method for determining peak hour: Total Entering Volume

LOCATION: NE 10th Ave/I-5 NB Off Ramp -- NE 179th St

QC JOB #: 14675504

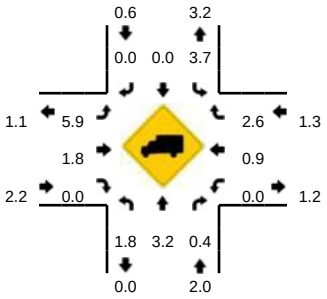
CITY/STATE: Ridgefield, WA

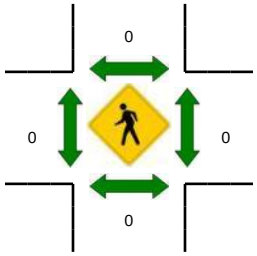
DATE: Thu, Apr 12 2018



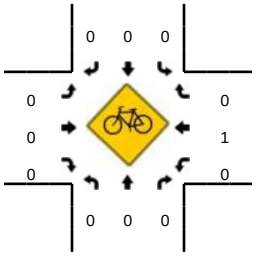
Peak-Hour: 4:50 PM -- 5:50 PM

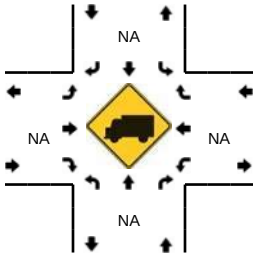
Peak 15-Min: 5:10 PM -- 5:25 PM

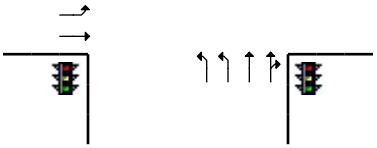


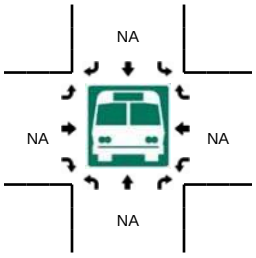












5-Min Count Period Beginning At	NE 10th Ave/I-5 NB Off Ramp (Northbound)				NE 10th Ave/I-5 NB Off Ramp (Southbound)				NE 179th St (Eastbound)				NE 179th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	15	21	15	0	1	0	8	0	1	14	0	0	0	20	5	0	100	
4:05 PM	17	15	12	0	10	0	7	0	3	21	0	0	0	28	6	0	119	
4:10 PM	24	26	16	0	9	0	18	0	2	15	0	0	0	21	8	0	139	
4:15 PM	23	33	21	0	6	0	7	0	0	11	0	0	0	38	6	0	145	
4:20 PM	21	31	15	0	5	0	14	0	0	18	0	0	0	24	3	0	131	
4:25 PM	20	32	19	0	3	0	9	0	1	21	0	0	0	16	7	0	128	
4:30 PM	16	37	11	0	1	0	13	0	1	14	0	0	0	20	5	0	118	
4:35 PM	23	32	13	0	2	0	10	0	0	19	0	0	0	28	6	0	133	
4:40 PM	14	33	22	0	3	0	12	0	1	12	0	0	0	22	3	0	122	
4:45 PM	26	38	18	0	2	0	9	0	0	14	0	0	0	18	3	0	128	
4:50 PM	14	33	23	0	1	0	8	0	1	14	0	0	0	24	8	0	126	
4:55 PM	23	33	12	0	4	0	11	0	0	15	0	0	0	25	8	0	131	1520
5:00 PM	27	23	17	0	2	0	14	0	1	16	0	0	0	18	6	0	124	1544
5:05 PM	24	30	18	0	0	0	13	0	0	12	0	0	0	29	5	0	131	1556
5:10 PM	17	35	15	0	3	0	12	0	1	24	0	0	0	29	4	0	140	1557
5:15 PM	24	41	28	0	4	0	12	0	1	12	0	0	0	32	9	0	163	1575
5:20 PM	35	36	26	0	0	0	7	0	4	14	0	0	0	28	5	0	155	1599
5:25 PM	28	26	13	0	3	0	10	0	1	11	0	0	0	28	9	0	129	1600
5:30 PM	23	30	22	0	2	0	9	0	2	12	0	0	0	28	6	0	134	1616
5:35 PM	15	27	20	0	4	0	13	0	2	10	0	0	0	15	8	0	114	1597
5:40 PM	25	32	19	0	3	0	9	0	3	11	0	0	0	36	3	0	141	1616
5:45 PM	22	30	16	0	1	0	18	0	1	12	0	0	0	27	7	0	134	1622
5:50 PM	15	28	17	0	0	0	8	0	2	13	0	0	0	24	2	0	109	1605
5:55 PM	14	25	15	0	4	0	5	0	0	7	0	0	0	27	3	0	100	1574

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	304	448	276	0	28	0	124	0	24	200	0	0	0	356	72	0	1832
Heavy Trucks	4	8	4		4	0	0		4	4	0		0	4	0		32
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

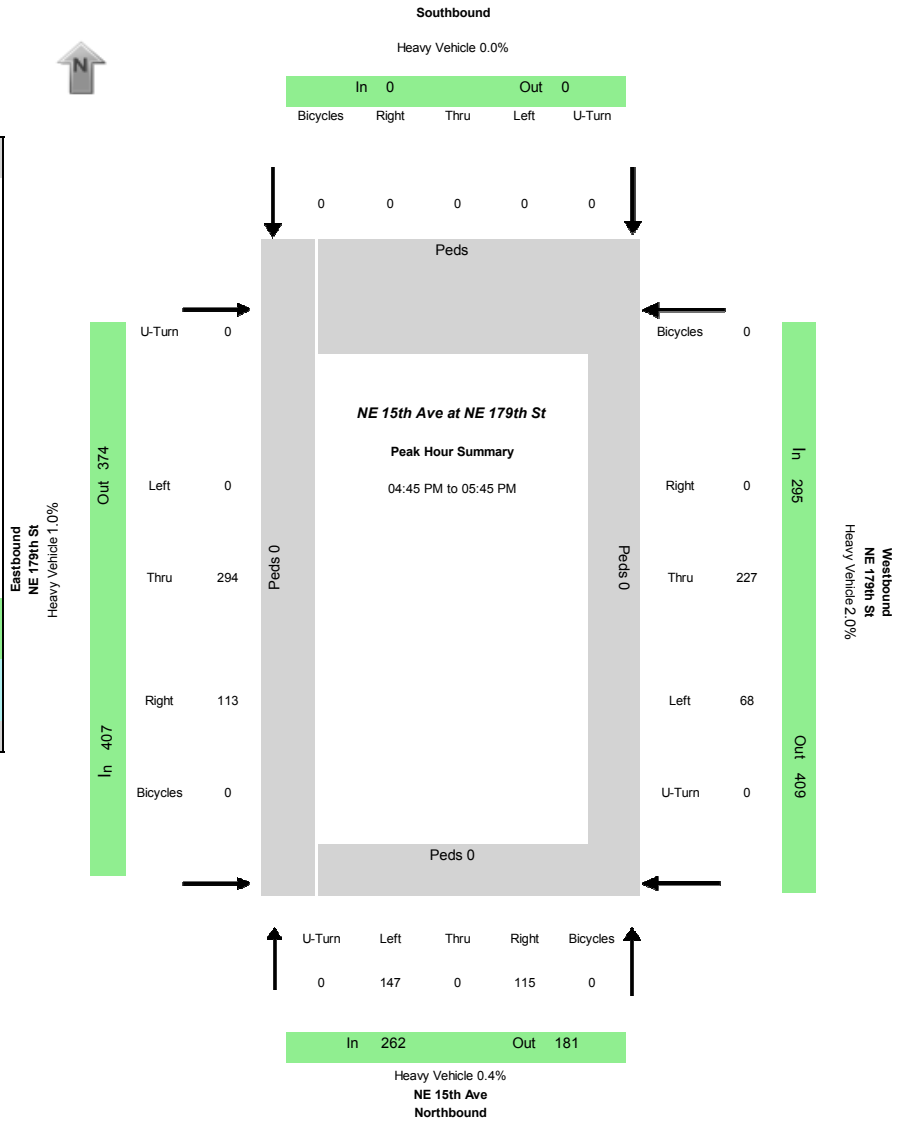
Comments:

Report generated on 4/24/2018 4:03 PM

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

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE 15th Ave*
E/W street	*NE 179th St*
City, State	Ridgefield WA
Site Notes	
Location	45.750681 - -122.655723
Start Date	Thursday, October 18, 2018
Start Time	04:00:00 PM
Weather	
Study ID #	
Peak Hour Start	04:45:00 PM
Peak 15 Min Start	05:10:00 PM
PHF (15-Min Int)	0.92



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
147	0	115	0	0	0	0	0	0	294	113	0	68	227	0	0	262	0	407	295	181	0	374	409

Percent Heavy Vehicles

0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.9%	0.0%	1.5%	2.2%	0.0%	0.0%	0.4%	0.0%	1.0%	2.0%	1.1%	0.0%	1.6%	0.7%

PHV- Bicycles

Northbound				Southbound				Eastbound				Westbound				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum
0		0	0						0	0	0	0	0		0	0

PHV - Pedestrians

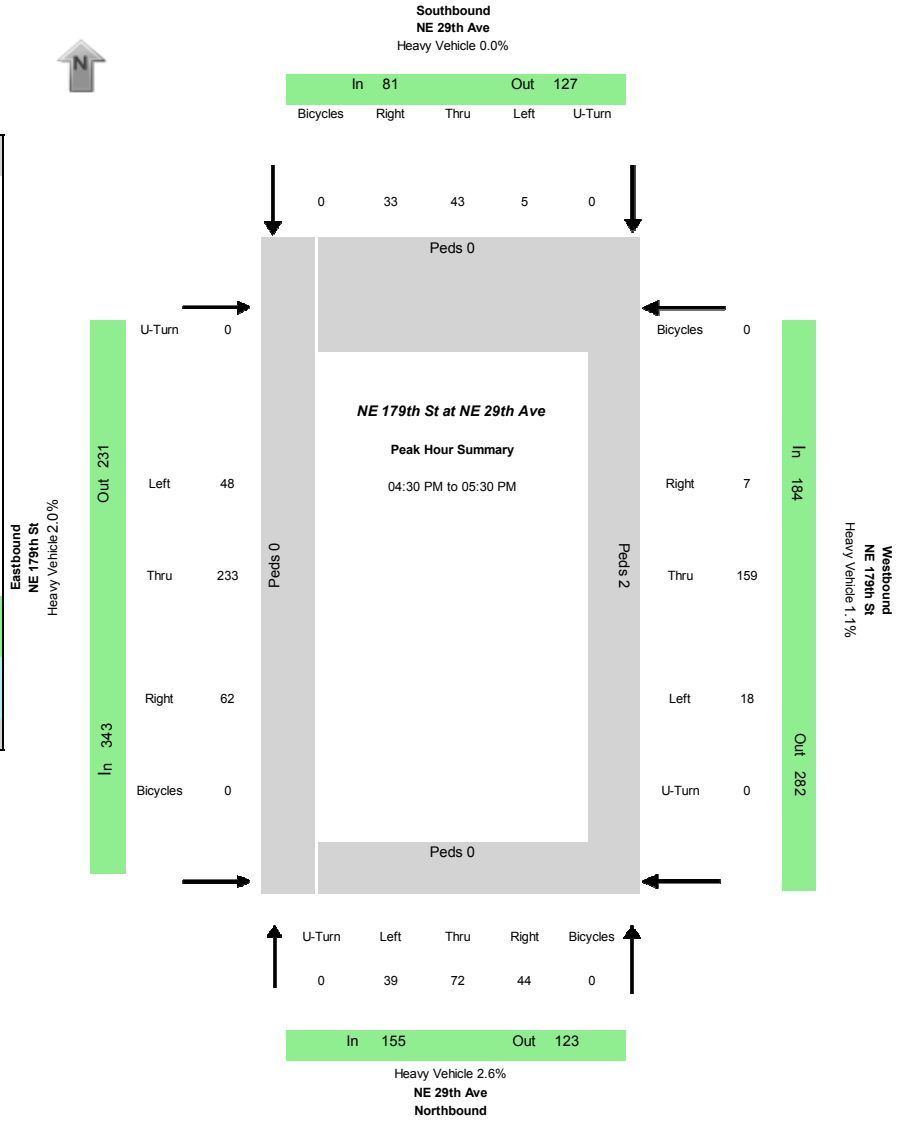
in Crosswalk					
NB	SB	EB	WB	Sum
0		0	0	0

All Vehicle Volumes

	Northbound NE 15th Ave				Southbound				Eastbound NE 179th St				Westbound NE 179th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	9		7	0						22	11	0	3	12		0		
04:05:00 PM	15		4	0						20	16	0	2	18		0		
04:10:00 PM	9		5	0						14	13	0	4	11		0	195	
04:15:00 PM	11		11	0						23	11	0	5	21		0	213	
04:20:00 PM	8		8	0						25	6	0	4	8		0	197	
04:25:00 PM	7		6	0						25	8	0	6	20		0	213	
04:30:00 PM	8		2	0						32	8	0	5	16		0	202	
04:35:00 PM	13		8	0						22	13	0	7	14		0	220	
04:40:00 PM	5		5	0						35	16	0	3	12		0	224	
04:45:00 PM	10		8	0						23	12	0	9	35		0	250	
04:50:00 PM	10		9	0						16	9	0	5	14		0	236	
04:55:00 PM	15		11	0						23	11	0	7	15		0	242	874
05:00:00 PM	13		13	0						26	10	0	4	17		0	228	893
05:05:00 PM	11		11	0						16	6	0	5	15		0	229	882
05:10:00 PM	14		9	0						26	5	0	4	19		0	224	903
05:15:00 PM	10		11	0						34	15	0	7	19		0	237	917
05:20:00 PM	10		11	0						31	11	0	6	19		0	261	946
05:25:00 PM	8		8	0						23	6	0	6	18		0	253	943
05:30:00 PM	16		8	0						26	10	0	5	19		0	241	956
05:35:00 PM	12		10	0						23	11	0	5	16		0	230	956
05:40:00 PM	18		6	0						27	7	0	5	21		0	245	964
05:45:00 PM	6		7	0						17	6	0	3	13		0	213	919
05:50:00 PM	7		8	0						12	12	0	2	10		0	187	907
05:55:00 PM	12		9	0						14	6	0	4	14		0	162	884

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE 29th Ave*
E/W street	*NE 179th St*
City, State	Ridgefield WA
Site Notes	
Location	45.750756 - -122.640992
Start Date	Thursday, October 18, 2018
Start Time	04:00:00 PM
Weather	
Study ID #	
Peak Hour Start	04:30:00 PM
Peak 15 Min Start	05:15:00 PM
PHF (15-Min Int)	0.94



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
39	72	44	0	5	43	33	0	48	233	62	0	18	159	7	0	155	81	343	184	123	127	231	282
Percent Heavy Vehicles																							
2.6%	2.8%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	2.1%	1.6%	0.0%	0.0%	1.3%	0.0%	0.0%	2.6%	0.0%	2.0%	1.1%	0.8%	2.4%	1.3%	2.1%

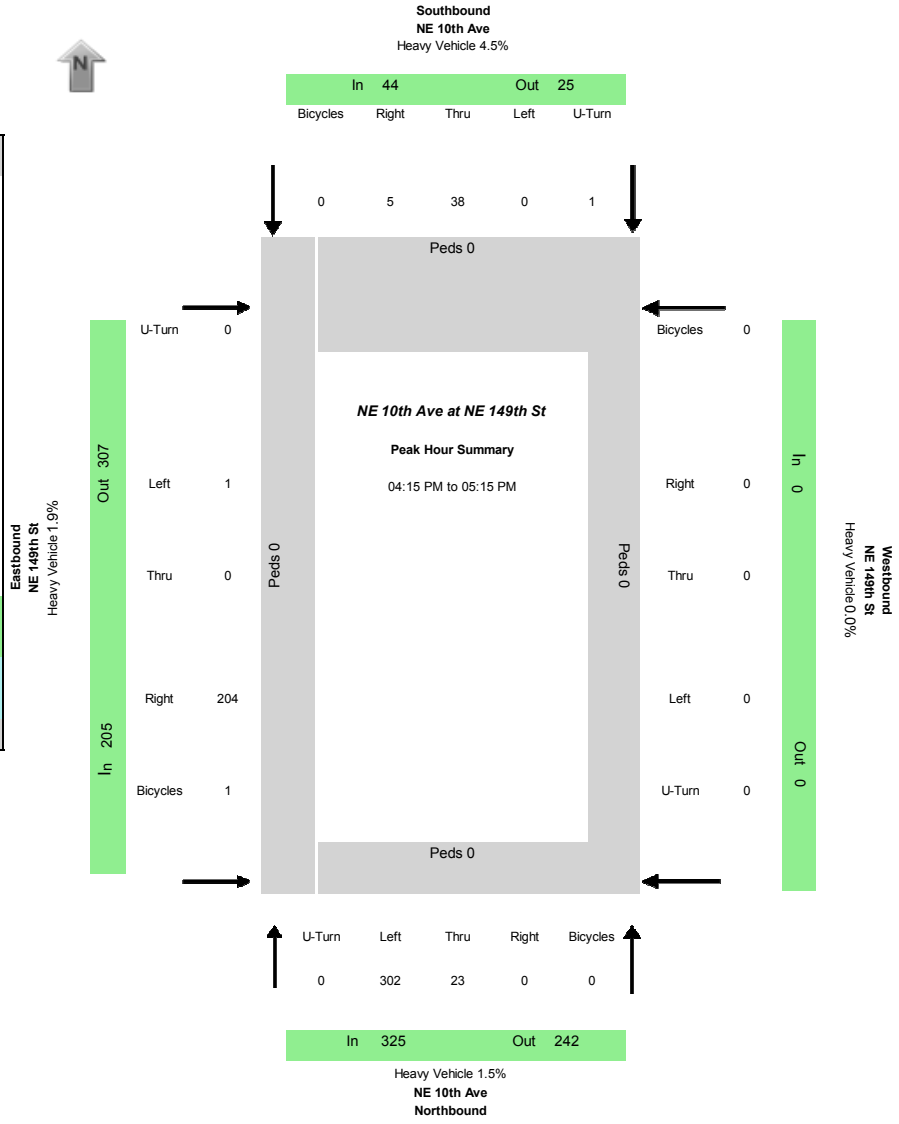
PHV- Bicycles																	PHV - Pedestrians				
Northbound				Southbound				Eastbound				Westbound					in Crosswalk				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	NB	SB	EB	WB	Sum
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2

All Vehicle Volumes

	Northbound NE 29th Ave				Southbound NE 29th Ave				Eastbound NE 179th St				Westbound NE 179th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	2	2	2	0	1	6	2	0	6	14	1	0	2	5	1	0		
04:05:00 PM	1	9	0	0	1	0	1	0	5	16	5	0	1	12	0	0		
04:10:00 PM	0	10	5	0	0	8	1	0	5	6	3	0	0	7	1	0	141	
04:15:00 PM	2	7	2	0	1	6	3	0	6	20	2	0	4	17	2	0	169	
04:20:00 PM	1	8	4	0	1	2	1	0	2	19	3	0	0	14	1	0	174	
04:25:00 PM	3	5	5	0	0	5	0	0	5	16	7	0	2	17	2	0	195	
04:30:00 PM	2	6	7	0	1	3	3	0	3	24	3	0	1	12	0	0	188	
04:35:00 PM	4	2	3	0	1	6	1	0	3	15	5	0	1	9	0	0	182	
04:40:00 PM	5	4	2	0	0	5	1	0	4	22	3	0	3	20	0	0	184	
04:45:00 PM	2	4	3	0	1	1	5	0	4	21	3	0	4	15	1	0	183	
04:50:00 PM	4	13	0	0	1	4	3	0	3	12	3	0	0	12	1	0	189	
04:55:00 PM	4	8	5	0	0	3	2	0	8	16	4	0	2	11	0	0	183	703
05:00:00 PM	4	3	7	0	0	4	1	0	5	16	7	0	1	16	1	0	184	724
05:05:00 PM	1	8	1	0	0	7	1	0	6	24	4	0	2	12	1	0	195	740
05:10:00 PM	3	7	1	0	1	4	1	0	4	16	6	0	2	15	1	0	193	755
05:15:00 PM	1	5	3	0	0	2	8	0	3	23	7	0	2	13	0	0	195	750
05:20:00 PM	6	3	6	0	0	0	3	0	4	26	8	0	0	10	2	0	196	762
05:25:00 PM	3	9	6	0	0	4	4	0	1	18	9	0	0	14	0	0	203	763
05:30:00 PM	6	8	0	0	0	8	3	0	2	14	5	0	1	9	0	0	192	754
05:35:00 PM	1	3	1	0	0	4	2	0	3	15	5	0	1	17	1	0	177	757
05:40:00 PM	2	10	2	0	0	2	2	0	1	15	4	0	0	13	0	0	160	739
05:45:00 PM	0	7	5	0	1	5	2	0	3	16	5	0	2	5	0	0	155	726
05:50:00 PM	3	3	3	0	0	3	0	0	2	10	2	0	0	8	1	0	137	705
05:55:00 PM	3	3	1	0	0	5	0	0	4	13	6	0	1	8	0	0	130	686

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	***NE 10th Ave***
E/W street	***NE 149th St***
City, State	Salmon Creek WA
Site Notes	
Location	45.729012 - -122.661714
Start Date	Thursday, October 18, 2018
Start Time	04:00:00 PM
Weather	
Study ID #	
Peak Hour Start	04:15:00 PM
Peak 15 Min Start	04:25:00 PM
PHF (15-Min Int)	0.91



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
302	23	0	0	0	38	5	1	1	0	204	0	0	0	0	0	325	44	205	0	242	25	307	0
Percent Heavy Vehicles																							
0.7%	13.0%	0.0%	0.0%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	4.5%	2.0%	0.0%	2.5%	12.0%	0.7%	0.0%

PHV- Bicycles

Northbound				Southbound				Eastbound				Westbound				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	**Sum**
0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1

PHV - Pedestrians in Crosswalk

NB	SB	EB	WB	**Sum**
0	0	0	0	0

All Vehicle Volumes

	Northbound NE 10th Ave				Southbound NE 10th Ave				Eastbound NE 149th St				Westbound NE 149th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	12	3	0	0	0	5	0	0	0	0	14	0	0	0	0	0		
04:05:00 PM	20	1	0	0	0	6	1	0	1	0	17	0	0	0	0	0		
04:10:00 PM	21	2	0	0	0	2	0	0	0	0	17	0	0	0	0	0	122	
04:15:00 PM	25	2	0	0	0	5	0	0	0	0	20	0	0	0	0	0	140	
04:20:00 PM	20	2	0	0	0	2	1	0	0	0	18	0	0	0	0	0	137	
04:25:00 PM	27	2	0	0	0	4	0	0	0	0	22	0	0	0	0	0	150	
04:30:00 PM	27	2	0	0	0	2	1	0	1	0	19	0	0	0	0	0	150	
04:35:00 PM	31	3	0	0	0	3	0	0	0	0	14	0	0	0	0	0	158	
04:40:00 PM	22	3	0	0	0	2	0	0	0	0	19	0	0	0	0	0	149	
04:45:00 PM	26	2	0	0	0	3	1	0	0	0	13	0	0	0	0	0	142	
04:50:00 PM	15	3	0	0	0	2	0	0	0	0	15	0	0	0	0	0	126	
04:55:00 PM	28	0	0	0	0	3	2	1	0	0	19	0	0	0	0	0	133	554
05:00:00 PM	29	0	0	0	0	3	0	0	0	0	12	0	0	0	0	0	132	564
05:05:00 PM	28	2	0	0	0	4	0	0	0	0	18	0	0	0	0	0	149	570
05:10:00 PM	24	2	0	0	0	5	0	0	0	0	15	0	0	0	0	0	142	574
05:15:00 PM	19	0	0	0	0	4	1	0	0	0	18	0	0	0	0	0	140	564
05:20:00 PM	34	2	0	0	0	4	0	0	1	0	12	0	0	0	0	0	141	574
05:25:00 PM	32	1	0	0	0	2	0	0	0	0	12	0	0	0	0	0	142	566
05:30:00 PM	27	1	0	0	0	1	0	0	0	0	15	0	0	0	0	0	144	558
05:35:00 PM	24	1	0	0	0	2	0	0	0	0	19	0	0	0	0	0	137	553
05:40:00 PM	22	3	0	0	0	3	1	0	0	0	12	0	0	0	0	0	131	548
05:45:00 PM	26	5	0	0	0	1	0	0	0	0	15	0	0	0	0	0	134	550
05:50:00 PM	20	2	0	0	0	3	0	0	0	0	16	0	0	0	0	0	129	556
05:55:00 PM	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	94	509

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: NE 10th Ave -- NE 141st St

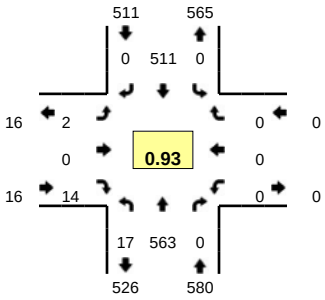
CITY/STATE: Vancouver, WA

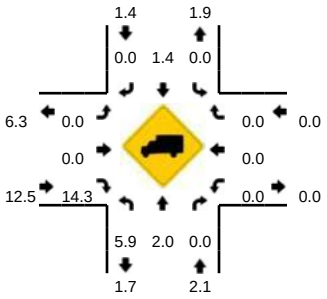
QC JOB #: 14675506

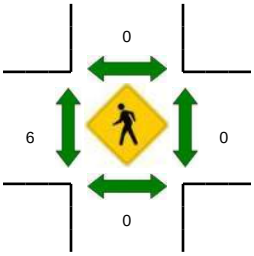
DATE: Thu, Apr 12 2018

Peak-Hour: 4:45 PM -- 5:45 PM

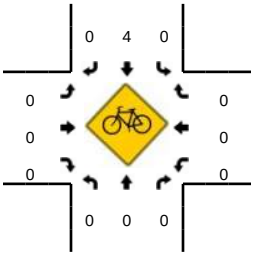
Peak 15-Min: 5:20 PM -- 5:35 PM

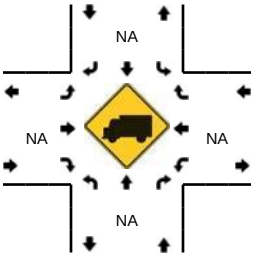


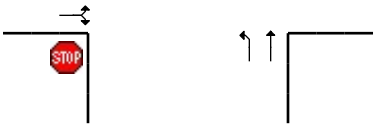


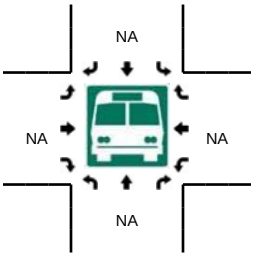












5-Min Count Period Beginning At	NE 10th Ave (Northbound)				NE 10th Ave (Southbound)				NE 141st St (Eastbound)				NE 141st St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	41	0	0	0	40	1	0	0	0	1	0	0	0	0	0	83	
4:05 PM	0	28	0	0	0	36	0	0	0	0	0	0	0	0	0	0	64	
4:10 PM	0	44	0	2	0	34	0	0	0	0	1	0	0	0	0	0	81	
4:15 PM	0	65	0	0	0	27	0	0	0	0	0	0	0	0	0	0	92	
4:20 PM	1	43	0	0	0	35	1	0	0	0	2	0	0	0	0	0	82	
4:25 PM	1	42	0	0	0	32	0	0	0	0	2	0	0	0	0	0	77	
4:30 PM	2	41	0	0	0	51	0	0	0	0	1	0	0	0	0	0	95	
4:35 PM	1	39	0	0	0	39	0	0	0	0	1	0	0	0	0	0	80	
4:40 PM	0	36	0	0	0	45	0	0	0	0	1	0	0	0	0	0	82	
4:45 PM	4	51	0	0	0	32	0	0	0	0	0	0	0	0	0	0	87	
4:50 PM	0	40	0	0	0	38	0	0	0	0	1	0	0	0	0	0	79	
4:55 PM	0	38	0	0	0	49	0	0	0	0	1	0	0	0	0	0	88	990
5:00 PM	3	45	0	0	0	52	0	0	0	0	0	0	0	0	0	0	100	1007
5:05 PM	1	49	0	0	0	49	0	0	1	0	1	0	0	0	0	0	101	1044
5:10 PM	1	35	0	1	0	43	0	0	0	0	3	0	0	0	0	0	83	1046
5:15 PM	2	43	0	0	0	45	0	0	0	0	3	0	0	0	0	0	93	1047
5:20 PM	1	59	0	0	0	27	0	0	0	0	1	0	0	0	0	0	88	1053
5:25 PM	0	66	0	0	0	46	0	0	0	0	3	0	0	0	0	0	115	1091
5:30 PM	0	52	0	0	0	43	0	0	0	0	1	0	0	0	0	0	96	1092
5:35 PM	1	34	0	0	0	45	0	0	1	0	0	0	0	0	0	0	81	1093
5:40 PM	3	51	0	0	0	42	0	0	0	0	0	0	0	0	0	0	96	1107
5:45 PM	1	40	0	0	0	37	0	0	0	0	2	0	0	0	0	0	80	1100
5:50 PM	2	36	0	0	0	22	0	0	0	0	3	0	0	0	0	0	63	1084
5:55 PM	0	49	0	0	0	24	0	0	0	0	2	0	0	0	0	0	75	1071

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	708	0	0	0	464	0	0	0	0	20	0	0	0	0	0	1196
Heavy Trucks	0	12	0		0	4	0		0	0	8		0	0	0		24
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 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

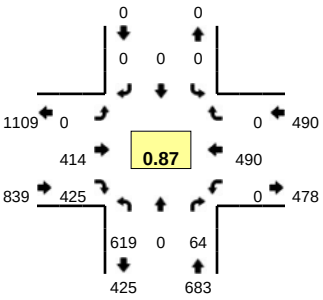
LOCATION: NE Tenney Rd -- NE 139th St

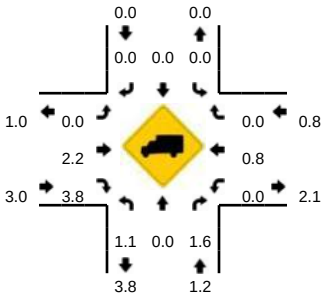
QC JOB #: 14675508

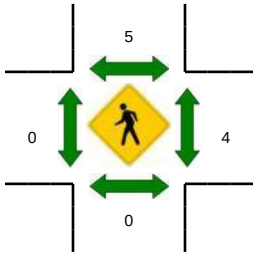
CITY/STATE: Vancouver, WA

DATE: Thu, Apr 12 2018

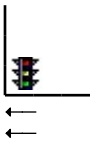
Peak-Hour: 4:20 PM -- 5:20 PM
Peak 15-Min: 4:55 PM -- 5:10 PM

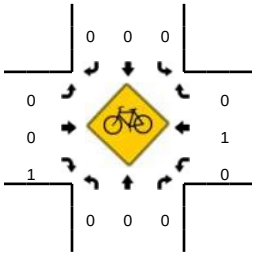


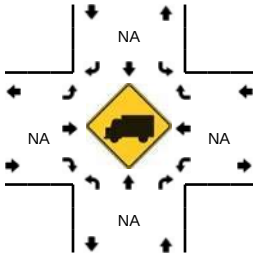


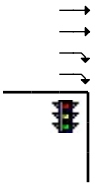


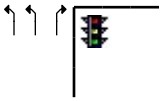


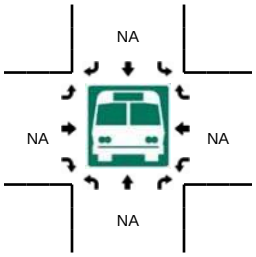












5-Min Count Period Beginning At	NE Tenney Rd (Northbound)				NE Tenney Rd (Southbound)				NE 139th St (Eastbound)				NE 139th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	45	0	8	0	0	0	0	0	0	44	33	0	0	33	0	0	163	
4:05 PM	42	0	4	0	0	0	0	0	0	29	27	0	0	39	0	0	141	
4:10 PM	39	0	4	0	0	0	0	0	0	42	34	0	0	37	0	0	156	
4:15 PM	51	0	6	0	0	0	0	0	0	26	26	0	0	27	0	0	136	
4:20 PM	39	0	6	0	0	0	0	0	0	34	37	0	0	51	0	0	167	
4:25 PM	53	0	6	0	0	0	0	0	0	22	29	0	0	31	0	0	141	
4:30 PM	47	0	4	0	0	0	0	0	0	33	35	0	0	41	0	0	160	
4:35 PM	46	0	3	0	0	0	0	0	0	22	29	0	0	45	0	0	145	
4:40 PM	52	0	2	0	0	0	0	0	0	30	34	0	0	34	0	0	152	
4:45 PM	45	0	5	0	0	0	0	0	0	40	32	0	0	37	0	0	159	
4:50 PM	52	0	8	0	0	0	0	0	0	26	34	0	0	58	0	0	178	
4:55 PM	68	0	4	0	0	0	0	0	0	35	29	0	0	48	0	0	184	1882
5:00 PM	65	0	5	0	0	0	0	0	0	42	40	0	0	31	0	0	183	1902
5:05 PM	58	0	12	0	0	0	0	0	0	54	52	0	0	38	0	0	214	1975
5:10 PM	51	0	7	0	0	0	0	0	0	37	39	0	0	26	0	0	160	1979
5:15 PM	43	0	2	0	0	0	0	0	0	39	35	0	0	50	0	0	169	2012
5:20 PM	59	0	5	0	0	0	0	0	0	23	22	0	0	37	0	0	146	1991
5:25 PM	43	0	7	0	0	0	0	0	0	30	15	0	0	47	0	0	142	1992
5:30 PM	61	0	4	0	0	0	0	0	0	24	29	0	0	35	0	0	153	1985
5:35 PM	45	0	6	0	0	0	0	0	0	28	40	0	0	32	0	0	151	1991
5:40 PM	47	0	6	0	0	0	0	0	0	29	28	0	0	40	0	0	150	1989
5:45 PM	61	0	4	0	0	0	0	0	0	30	28	0	0	38	0	0	161	1991
5:50 PM	50	0	3	0	0	0	0	0	0	20	22	0	0	44	0	0	139	1952
5:55 PM	47	0	3	0	0	0	0	0	0	34	14	0	0	40	0	0	138	1906

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	764	0	84	0	0	0	0	0	0	524	484	0	0	468	0	0	2324
Heavy Trucks	16	0	4		0	0	0		0	16	16		0	4	0		56
Pedestrians		0				12				0				8			20
Bicycles	0	0	0		0	0	0		0	0	0		0	1	0		1
Railroad																	
Stopped Buses																	

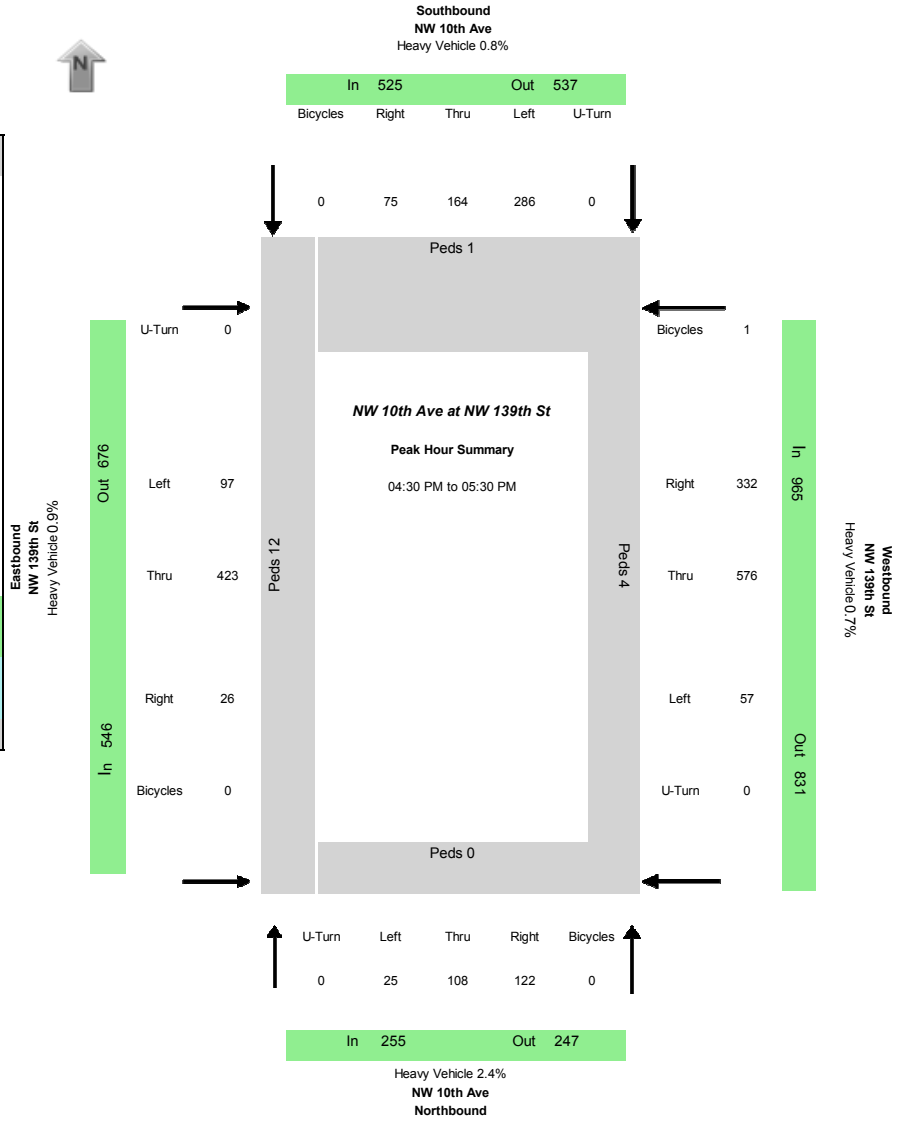
Comments:

Report generated on 4/24/2018 4:03 PM

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

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NW 10th Ave*
E/W street	*NW 139th St*
City, State	Salmon Creek WA
Site Notes	
Location	45.721851 - -122.661624
Start Date	Thursday, October 18, 2018
Start Time	04:00:00 PM
Weather	
Study ID #	
Peak Hour Start	04:30:00 PM
Peak 15 Min Start	05:05:00 PM
PHF (15-Min Int)	0.94



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
25	108	122	0	286	164	75	0	97	423	26	0	57	576	332	0	255	525	546	965	247	537	676	831

Percent Heavy Vehicles

0.0%	4.6%	0.8%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.9%	3.8%	0.0%	0.0%	0.5%	1.2%	0.0%	2.4%	0.8%	0.9%	0.7%	0.4%	1.7%	0.4%	1.1%

PHV- Bicycles

Northbound				Southbound				Eastbound				Westbound				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	**Sum**
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1

PHV - Pedestrians

in Crosswalk				
NB	SB	EB	WB	**Sum**
0	1	12	4	17

All Vehicle Volumes

	Northbound NW 10th Ave				Southbound NW 10th Ave				Eastbound NW 139th St				Westbound NW 139th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	3	9	6	0	20	11	10	0	6	25	0	0	0	47	13	0		
04:05:00 PM	10	9	18	0	22	6	7	0	11	23	0	0	4	40	21	0		
04:10:00 PM	1	10	7	0	30	16	4	0	4	36	1	0	1	31	20	0	482	
04:15:00 PM	1	6	13	0	20	10	6	0	10	36	0	0	1	42	28	0	505	
04:20:00 PM	0	9	7	0	30	7	7	0	7	23	1	0	4	39	17	0	485	
04:25:00 PM	2	9	2	0	20	11	10	0	14	34	4	0	1	45	37	0	513	
04:30:00 PM	0	4	6	0	30	16	9	0	13	22	4	0	2	34	36	0	516	
04:35:00 PM	3	18	14	0	25	18	11	0	3	30	2	0	5	52	32	0	578	
04:40:00 PM	2	8	6	0	33	9	4	0	4	24	2	0	1	37	25	0	544	
04:45:00 PM	5	6	10	0	22	12	3	0	7	50	1	0	8	53	32	0	577	
04:50:00 PM	0	5	8	0	21	10	11	0	10	47	3	0	2	47	24	0	552	
04:55:00 PM	4	11	15	0	12	14	0	0	9	24	2	0	3	50	28	0	569	2108
05:00:00 PM	2	8	8	0	29	21	7	0	7	31	1	0	5	35	21	0	535	2133
05:05:00 PM	3	8	19	0	21	13	3	0	14	54	1	0	2	61	27	0	573	2188
05:10:00 PM	3	12	14	0	36	18	8	0	4	30	2	0	5	43	21	0	597	2223
05:15:00 PM	1	6	8	0	15	12	7	0	6	37	5	0	12	53	25	0	609	2237
05:20:00 PM	1	9	8	0	21	13	6	0	14	33	2	0	8	53	31	0	582	2285
05:25:00 PM	1	13	6	0	21	8	6	0	6	41	1	0	4	58	30	0	581	2291
05:30:00 PM	3	9	11	0	19	8	8	0	6	34	0	0	4	37	28	0	561	2282
05:35:00 PM	3	5	15	0	27	11	4	0	10	17	4	0	3	42	21	0	524	2231
05:40:00 PM	0	10	7	0	11	5	3	0	10	43	3	0	6	37	29	0	493	2240
05:45:00 PM	0	4	9	0	22	12	6	0	8	20	0	0	5	46	27	0	485	2190
05:50:00 PM	0	7	10	0	22	11	5	0	2	19	6	0	0	33	27	0	465	2144
05:55:00 PM	0	13	13	0	10	5	7	0	5	20	3	0	4	49	30	0	460	2131

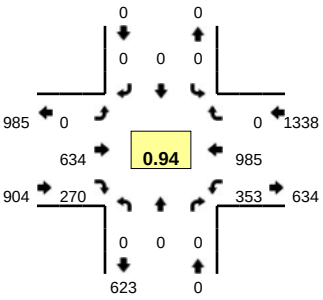
Type of peak hour being reported: Intersection Peak

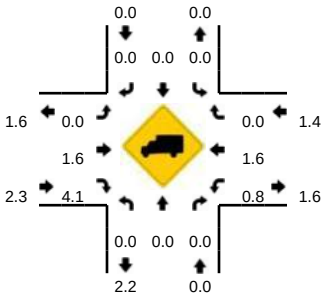
Method for determining peak hour: Total Entering Volume

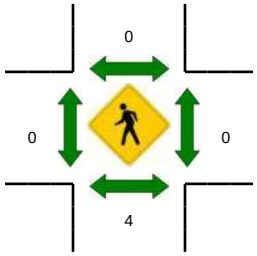
LOCATION: I-5 SB On Ramp -- NE 139th St
CITY/STATE: Vancouver, WA

QC JOB #: 14675510
DATE: Thu, Apr 12 2018

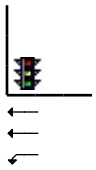
Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 5:10 PM -- 5:25 PM

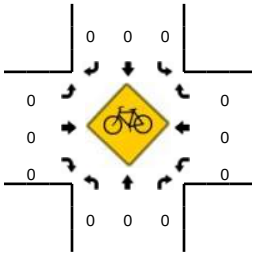


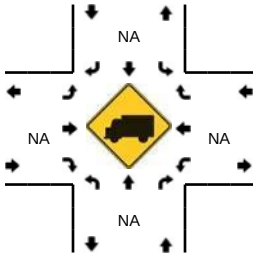


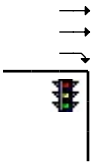




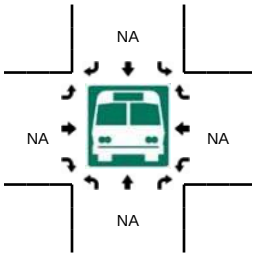












5-Min Count Period Beginning At	I-5 SB On Ramp (Northbound)				I-5 SB On Ramp (Southbound)				NE 139th St (Eastbound)				NE 139th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	0	0	0	0	0	51	21	0	26	66	0	0	164	
4:05 PM	0	0	0	0	0	0	0	0	0	45	18	0	17	63	0	0	143	
4:10 PM	0	0	0	0	0	0	0	0	0	55	20	0	34	68	0	0	177	
4:15 PM	0	0	0	0	0	0	0	0	0	54	27	0	26	83	0	0	190	
4:20 PM	0	0	0	0	0	0	0	0	0	40	11	0	16	85	0	0	152	
4:25 PM	0	0	0	0	0	0	0	0	0	37	16	0	25	64	0	0	142	
4:30 PM	0	0	0	0	0	0	0	0	0	53	25	0	26	89	0	0	193	
4:35 PM	0	0	0	0	0	0	0	0	0	47	19	0	26	72	0	0	164	
4:40 PM	0	0	0	0	0	0	0	0	0	34	19	0	30	88	0	0	171	
4:45 PM	0	0	0	0	0	0	0	0	0	56	20	0	27	95	0	0	198	
4:50 PM	0	0	0	0	0	0	0	0	0	42	19	0	33	85	0	0	179	
4:55 PM	0	0	0	0	0	0	0	0	0	66	20	0	29	65	0	0	180	2053
5:00 PM	0	0	0	0	0	0	0	0	0	56	32	0	28	76	0	0	192	2081
5:05 PM	0	0	0	0	0	0	0	0	0	73	22	0	34	67	0	0	196	2134
5:10 PM	0	0	0	0	0	0	0	0	0	65	29	0	35	70	0	0	199	2156
5:15 PM	0	0	0	0	0	0	0	0	0	59	18	0	30	81	0	0	188	2154
5:20 PM	0	0	0	0	0	0	0	0	0	42	30	0	32	108	0	0	212	2214
5:25 PM	0	0	0	0	0	0	0	0	0	41	17	0	23	89	0	0	170	2242
5:30 PM	0	0	0	0	0	0	0	0	0	63	19	0	16	68	0	0	166	2215
5:35 PM	0	0	0	0	0	0	0	0	0	48	21	0	37	77	0	0	183	2234
5:40 PM	0	0	0	0	0	0	0	0	0	56	23	0	23	72	0	0	174	2237
5:45 PM	0	0	0	0	0	0	0	0	0	45	22	0	44	78	0	0	189	2228
5:50 PM	0	0	0	0	0	0	0	0	0	39	15	0	18	86	0	0	158	2207
5:55 PM	0	0	0	0	0	0	0	0	0	50	19	0	12	60	0	0	141	2168

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	0	0	0	0	0	664	308	0	388	1036	0	0	2396
Heavy Trucks	0	0	0		0	0	0		0	0	8		0	16	0		24
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 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: I-5 NB Off Ramp -- NE 139th St

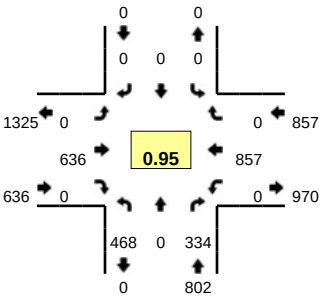
CITY/STATE: Vancouver, WA

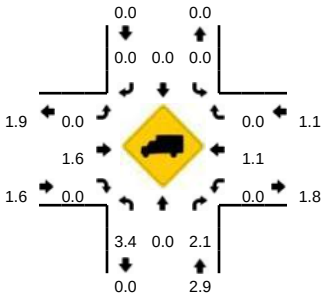
QC JOB #: 14675512

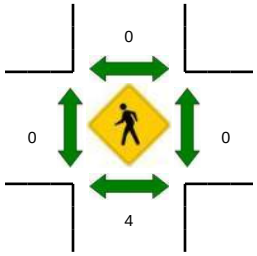
DATE: Thu, Apr 12 2018

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

Peak 15-Min: 5:10 PM -- 5:25 PM

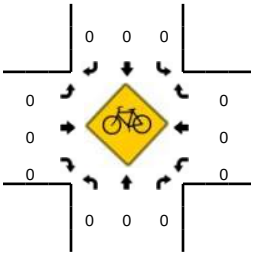


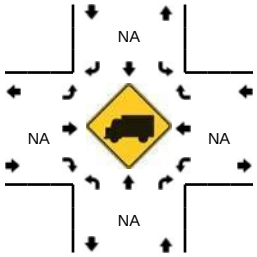


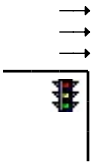




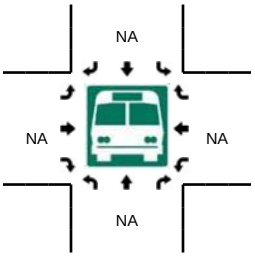












5-Min Count Period Beginning At	I-5 NB Off Ramp (Northbound)				I-5 NB Off Ramp (Southbound)				NE 139th St (Eastbound)				NE 139th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	36	0	19	0	0	0	0	0	0	49	0	0	0	50	0	0	154	
4:05 PM	37	0	26	0	0	0	0	0	0	50	0	0	0	45	0	0	158	
4:10 PM	40	0	25	0	0	0	0	0	0	52	0	0	0	60	0	0	177	
4:15 PM	43	0	25	0	0	0	0	0	0	51	0	0	0	69	0	0	188	
4:20 PM	36	0	22	0	0	0	0	0	0	47	0	0	0	63	0	0	168	
4:25 PM	36	0	24	0	0	0	0	0	0	33	0	0	0	53	0	0	146	
4:30 PM	40	0	31	0	0	0	0	0	0	56	0	0	0	72	0	0	199	
4:35 PM	34	0	29	0	0	0	0	0	0	46	0	0	0	65	0	0	174	
4:40 PM	33	0	33	0	0	0	0	0	0	36	0	0	0	86	0	0	188	
4:45 PM	52	0	19	0	0	0	0	0	0	54	0	0	0	69	0	0	194	
4:50 PM	39	0	25	0	0	0	0	0	0	38	0	0	0	76	0	0	178	
4:55 PM	40	0	34	0	0	0	0	0	0	66	0	0	0	59	0	0	199	2123
5:00 PM	34	0	23	0	0	0	0	0	0	60	0	0	0	64	0	0	181	2150
5:05 PM	31	0	24	0	0	0	0	0	0	68	0	0	0	68	0	0	191	2183
5:10 PM	38	0	27	0	0	0	0	0	0	68	0	0	0	70	0	0	203	2209
5:15 PM	40	0	24	0	0	0	0	0	0	61	0	0	0	69	0	0	194	2215
5:20 PM	52	0	34	0	0	0	0	0	0	38	0	0	0	86	0	0	210	2257
5:25 PM	35	0	31	0	0	0	0	0	0	45	0	0	0	73	0	0	184	2295
5:30 PM	45	0	28	0	0	0	0	0	0	52	0	0	0	40	0	0	165	2261
5:35 PM	32	0	21	0	0	0	0	0	0	57	0	0	0	81	0	0	191	2278
5:40 PM	36	0	22	0	0	0	0	0	0	48	0	0	0	69	0	0	175	2265
5:45 PM	42	0	33	0	0	0	0	0	0	51	0	0	0	73	0	0	199	2270
5:50 PM	38	0	31	0	0	0	0	0	0	41	0	0	0	67	0	0	177	2269
5:55 PM	32	0	22	0	0	0	0	0	0	38	0	0	0	39	0	0	131	2201

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	520	0	340	0	0	0	0	0	0	668	0	0	0	900	0	0	2428
Heavy Trucks	16	0	4		0	0	0		0	0	0		0	4	0		24
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 PM

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

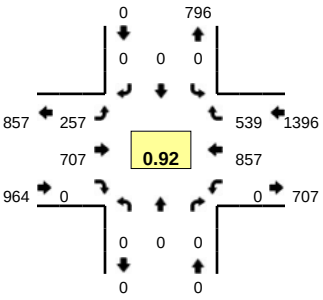
Type of peak hour being reported: Intersection Peak

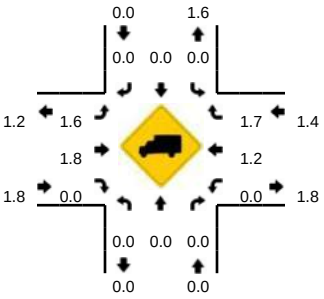
Method for determining peak hour: Total Entering Volume

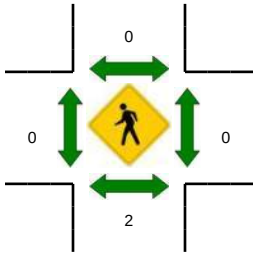
LOCATION: I-205 NB On Ramp -- NE 139th St
CITY/STATE: Vancouver, WA

QC JOB #: 14675514
DATE: Thu, Apr 12 2018

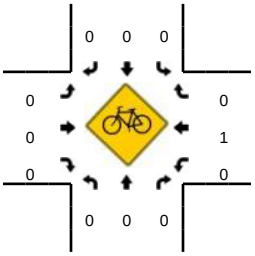
Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 5:10 PM -- 5:25 PM

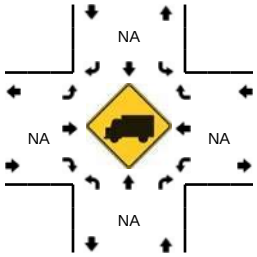




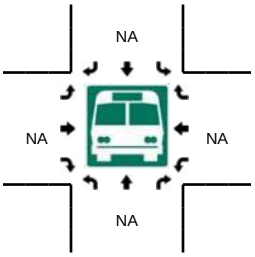












5-Min Count Period Beginning At	I-205 NB On Ramp (Northbound)				I-205 NB On Ramp (Southbound)				NE 139th St (Eastbound)				NE 139th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	0	0	0	0	27	45	0	0	0	52	34	0	158	
4:05 PM	0	0	0	0	0	0	0	0	14	57	0	0	0	41	31	0	143	
4:10 PM	0	0	0	0	0	0	0	0	22	57	0	0	0	68	53	0	200	
4:15 PM	0	0	0	0	0	0	0	0	21	56	0	0	0	64	37	0	178	
4:20 PM	0	0	0	0	0	0	0	0	14	50	0	0	0	60	34	0	158	
4:25 PM	0	0	0	0	0	0	0	0	18	44	0	0	0	56	52	0	170	
4:30 PM	0	0	0	0	0	0	0	0	15	66	0	0	0	68	39	0	188	
4:35 PM	0	0	0	0	0	0	0	0	18	56	0	0	0	72	59	0	205	
4:40 PM	0	0	0	0	0	0	0	0	18	54	0	0	0	81	32	0	185	
4:45 PM	0	0	0	0	0	0	0	0	19	47	0	0	0	76	53	0	195	
4:50 PM	0	0	0	0	0	0	0	0	19	50	0	0	0	69	43	0	181	
4:55 PM	0	0	0	0	0	0	0	0	23	68	0	0	0	61	44	0	196	2157
5:00 PM	0	0	0	0	0	0	0	0	25	61	0	0	0	63	36	0	185	2184
5:05 PM	0	0	0	0	0	0	0	0	30	61	0	0	0	69	47	0	207	2248
5:10 PM	0	0	0	0	0	0	0	0	29	73	0	0	0	68	48	0	218	2266
5:15 PM	0	0	0	0	0	0	0	0	27	53	0	0	0	75	59	0	214	2302
5:20 PM	0	0	0	0	0	0	0	0	16	59	0	0	0	88	45	0	208	2352
5:25 PM	0	0	0	0	0	0	0	0	18	59	0	0	0	67	34	0	178	2360
5:30 PM	0	0	0	0	0	0	0	0	26	59	0	0	0	50	49	0	184	2356
5:35 PM	0	0	0	0	0	0	0	0	24	54	0	0	0	76	34	0	188	2339
5:40 PM	0	0	0	0	0	0	0	0	13	47	0	0	0	70	51	0	181	2335
5:45 PM	0	0	0	0	0	0	0	0	39	54	0	0	0	73	38	0	204	2344
5:50 PM	0	0	0	0	0	0	0	0	19	52	0	0	0	65	33	0	169	2332
5:55 PM	0	0	0	0	0	0	0	0	19	43	0	0	0	41	32	0	135	2271

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	0	0	0	0	288	740	0	0	0	924	608	0	2560
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	8	12		20
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

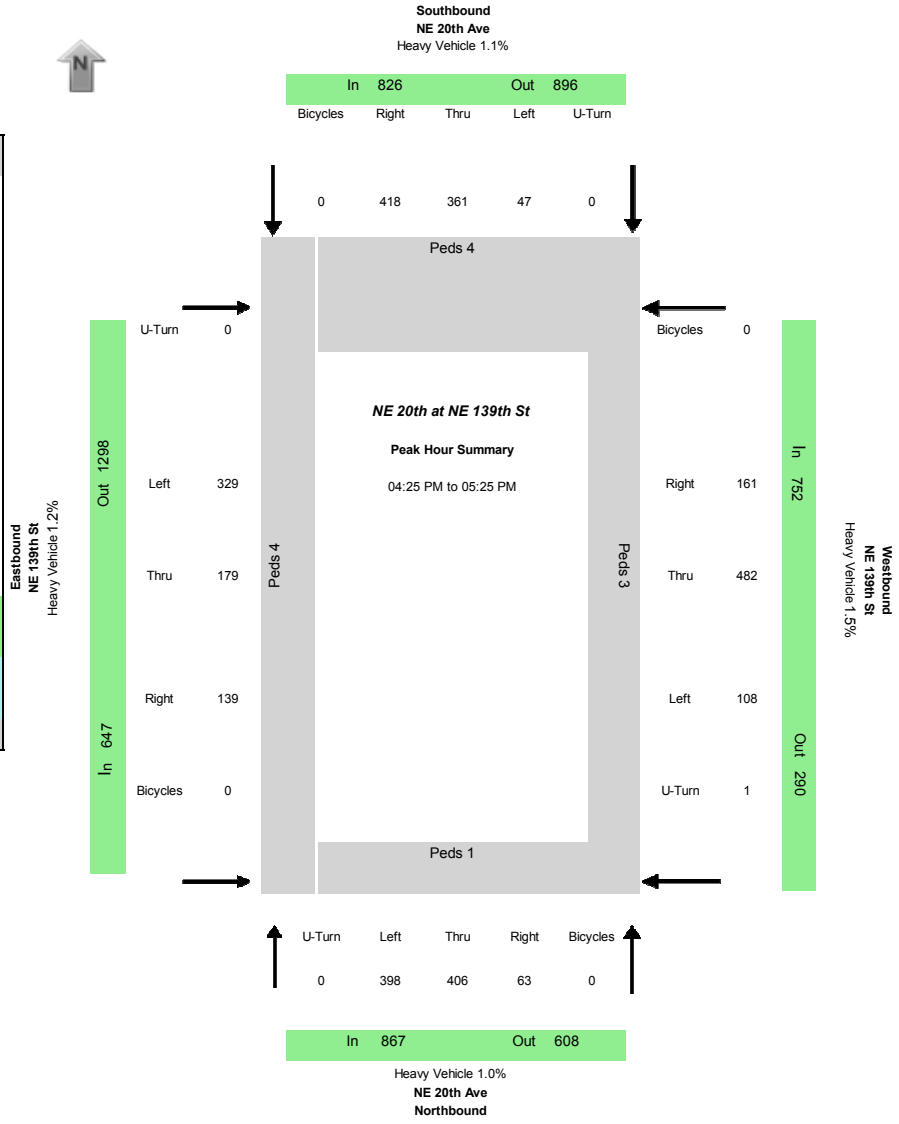
Comments:

Report generated on 4/24/2018 4:03 PM

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

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE 20th Ave*
E/W street	*NE 139th St*
City, State	Salmon Creek WA
Site Notes	
Location	45.721858 - -122.651381
Start Date	Tuesday, October 23, 2018
Start Time	04:00:00 PM
Weather	
Study ID #	
Peak Hour Start	04:25:00 PM
Peak 15 Min Start	05:10:00 PM
PHF (15-Min Int)	0.88



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
398	406	63	0	47	361	418	0	329	179	139	0	108	482	161	1	867	826	647	752	608	896	1298	290
Percent Heavy Vehicles																							
1.0%	0.5%	4.8%	0.0%	0.0%	1.4%	1.0%	0.0%	1.2%	1.7%	0.7%	0.0%	0.9%	1.0%	3.1%	0.0%	1.0%	1.1%	1.2%	1.5%	1.2%	1.2%	1.0%	2.1%

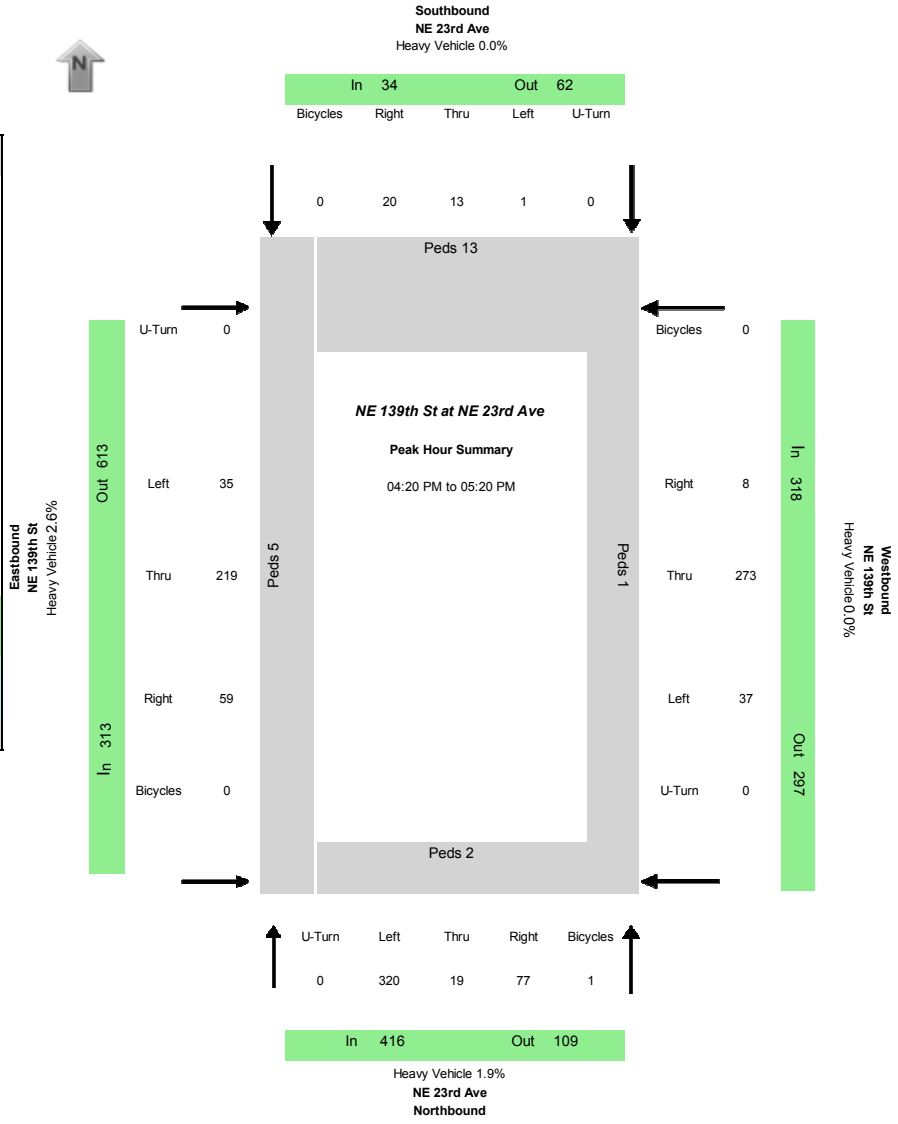
PHV- Bicycles																	PHV - Pedestrians				
Northbound				Southbound				Eastbound				Westbound					in Crosswalk				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	NB	SB	EB	WB	Sum
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	4	3	12

All Vehicle Volumes

	Northbound NE 20th Ave				Southbound NE 20th Ave				Eastbound NE 139th St				Westbound NE 139th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	15	28	10	0	7	38	29	0	26	23	8	0	8	38	14	0		
04:05:00 PM	30	39	9	0	4	26	29	0	30	20	4	0	8	24	15	0		
04:10:00 PM	31	36	17	0	10	27	33	0	29	18	7	0	5	40	6	0	741	
04:15:00 PM	27	24	10	0	4	22	42	0	37	26	8	0	10	42	17	0	766	
04:20:00 PM	34	42	8	0	8	41	28	0	32	16	12	0	4	33	18	0	804	
04:25:00 PM	29	47	8	0	1	35	26	0	26	11	10	0	13	43	13	0	807	
04:30:00 PM	27	32	10	0	2	21	27	0	16	17	12	0	5	51	10	0	768	
04:35:00 PM	22	33	9	0	6	38	29	0	32	9	15	0	9	30	15	0	739	
04:40:00 PM	45	51	4	0	4	24	30	0	21	14	10	0	9	26	12	0	727	
04:45:00 PM	26	34	0	0	3	18	31	0	22	21	7	0	11	56	12	0	738	
04:50:00 PM	22	32	6	0	7	35	44	0	34	16	15	0	9	28	14	0	753	
04:55:00 PM	38	31	3	0	5	31	27	0	26	8	11	0	7	33	7	0	730	3005
05:00:00 PM	34	31	3	0	2	30	33	0	19	18	9	0	9	46	11	0	734	3006
05:05:00 PM	39	19	5	0	2	28	44	0	33	14	13	0	5	35	11	0	720	3016
05:10:00 PM	33	37	1	0	5	40	45	0	27	18	12	0	9	37	19	0	776	3040
05:15:00 PM	49	35	12	0	6	25	38	0	32	16	14	0	13	49	10	1	831	3071
05:20:00 PM	34	24	2	0	4	36	44	0	41	17	11	0	9	48	27	0	880	3092
05:25:00 PM	34	27	5	0	10	42	23	0	22	14	6	0	5	27	35	0	847	3080
05:30:00 PM	55	24	8	0	4	27	35	0	18	13	9	0	12	24	9	0	785	3088
05:35:00 PM	31	21	8	0	3	24	33	0	35	26	5	0	11	33	9	0	727	3080
05:40:00 PM	37	34	5	0	4	41	25	0	21	12	10	0	4	24	10	0	704	3057
05:45:00 PM	45	32	5	0	2	22	22	0	18	12	6	0	2	27	5	0	664	3014
05:50:00 PM	32	24	6	0	3	28	28	0	21	12	5	0	8	30	7	0	629	2956
05:55:00 PM	32	28	6	0	3	23	24	0	36	8	13	0	5	24	5	0	609	2936

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224		
N/S street	*NE 23rd Ave*	
E/W street	*NE 139th St*	
City, State	Salmon Creek WA	
Site Notes		
Location	45.721874	-122.646228
Start Date	Thursday, October 18, 2018	
Start Time	04:00:00 PM	
Weather		
Study ID #		
Peak Hour Start	04:20:00 PM	
Peak 15 Min Start	05:05:00 PM	
PHF (15-Min Int)	0.88	



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
320	19	77	0	1	13	20	0	35	219	59	0	37	273	8	0	416	34	313	318	109	62	613	297
Percent Heavy Vehicles																							
2.2%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	2.3%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	2.6%	0.0%	1.8%	1.6%	1.1%	2.0%

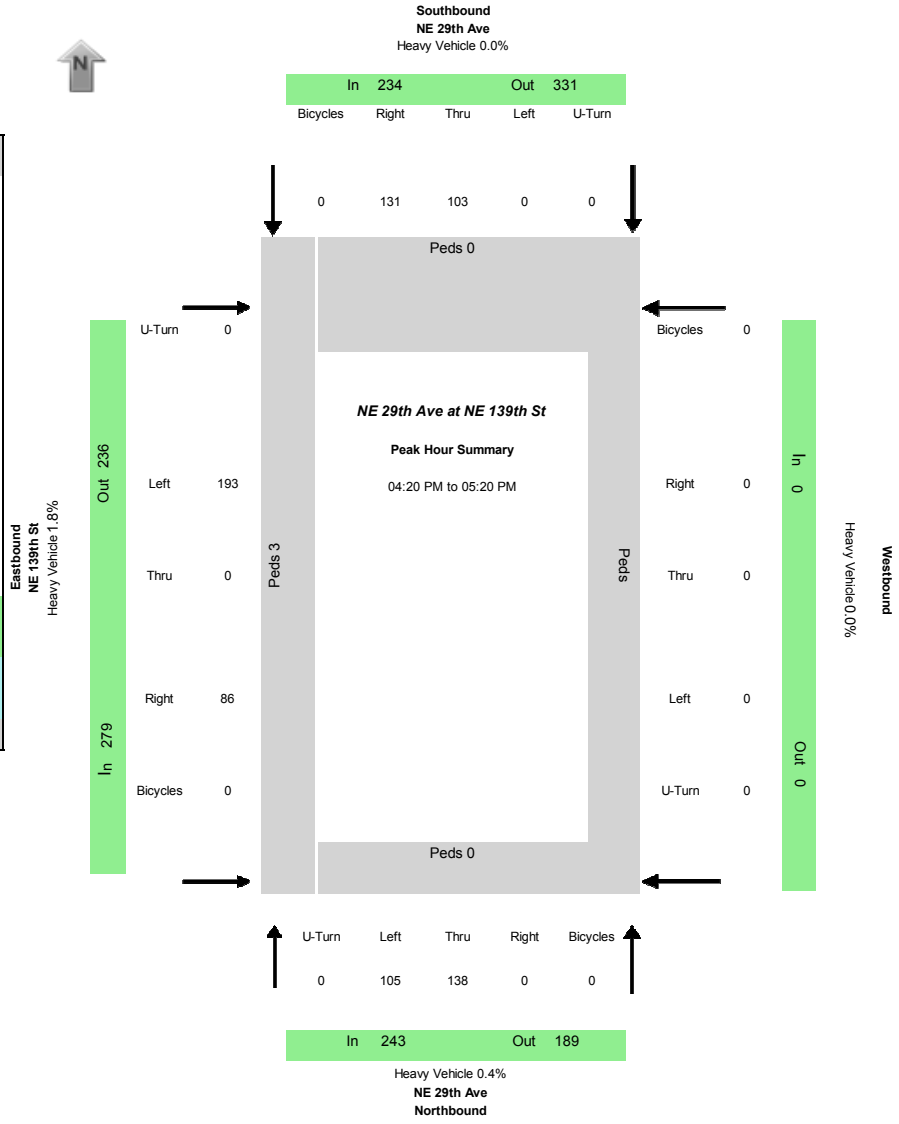
PHV- Bicycles																	PHV - Pedestrians				
Northbound				Southbound				Eastbound				Westbound					in Crosswalk				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	NB	SB	EB	WB	Sum
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	13	5	1	21

All Vehicle Volumes

	Northbound NE 23rd Ave				Southbound NE 23rd Ave				Eastbound NE 139th St				Westbound NE 139th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	29	1	2	0	0	0	1	0	0	14	8	0	4	13	0	0		
04:05:00 PM	27	1	4	0	0	1	3	0	2	26	3	0	2	19	0	0		
04:10:00 PM	19	0	5	0	0	2	2	0	3	26	2	0	1	24	1	0	245	
04:15:00 PM	18	1	4	0	0	1	2	0	3	15	4	0	6	15	0	0	242	
04:20:00 PM	29	3	6	0	0	0	1	0	0	20	5	0	3	26	1	0	248	
04:25:00 PM	19	1	9	0	0	2	1	0	5	16	3	0	4	20	2	0	245	
04:30:00 PM	37	0	2	0	0	0	1	0	3	16	7	0	4	20	0	0	266	
04:35:00 PM	30	1	5	0	1	1	3	0	6	22	6	0	3	26	1	0	277	
04:40:00 PM	29	0	7	0	0	0	1	0	4	17	4	0	3	23	0	0	283	
04:45:00 PM	25	2	10	0	0	1	4	0	5	13	6	0	5	17	0	0	281	
04:50:00 PM	21	0	2	0	0	3	0	0	3	17	4	0	3	16	1	0	246	
04:55:00 PM	22	5	3	0	0	1	3	0	0	17	4	0	1	24	1	0	239	1012
05:00:00 PM	27	0	10	0	0	3	2	0	0	13	5	0	2	12	1	0	226	1015
05:05:00 PM	22	3	8	0	0	1	0	0	4	22	4	0	4	32	0	0	256	1027
05:10:00 PM	31	2	6	0	0	1	3	0	2	23	6	0	5	33	1	0	288	1055
05:15:00 PM	28	2	9	0	0	0	1	0	3	23	5	0	0	24	0	0	308	1081
05:20:00 PM	26	3	9	0	1	1	3	0	2	22	3	0	1	18	0	0	297	1076
05:25:00 PM	23	2	8	0	0	1	3	0	5	14	8	0	3	14	0	0	265	1075
05:30:00 PM	26	4	3	0	0	0	6	0	0	19	6	0	1	14	0	0	249	1064
05:35:00 PM	18	2	6	0	0	2	0	0	3	16	1	0	3	21	2	0	234	1033
05:40:00 PM	24	0	13	0	0	1	4	0	1	18	9	0	2	14	0	0	239	1031
05:45:00 PM	26	4	4	0	0	3	2	0	9	26	4	0	5	25	0	0	268	1051
05:50:00 PM	16	1	3	0	0	0	2	0	4	22	6	0	1	14	0	0	263	1050
05:55:00 PM	17	1	2	0	0	0	2	0	6	15	4	0	2	10	1	0	237	1029

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE 29th Ave*
E/W street	*NE 139th St*
City, State	Salmon Creek WA
Site Notes	
Location	45.721866 - -122.641089
Start Date	Thursday, October 18, 2018
Start Time	04:00:00 PM
Weather	
Study ID #	
Peak Hour Start	04:20:00 PM
Peak 15 Min Start	05:05:00 PM
PHF (15-Min Int)	0.87



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
105	138	0	0	0	103	131	0	193	0	86	0	0	0	0	0	243	234	279	0	189	331	236	0
Percent Heavy Vehicles																							
0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	1.8%	0.0%	1.1%	1.2%	0.0%	0.0%

PHV- Bicycles																PHV - Pedestrians				
Northbound				Southbound				Eastbound				Westbound					in Crosswalk			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	NB	SB	EB	WB	Sum
0	0		0		0	0	0	0		0	0					0	0	0	3		3

All Vehicle Volumes

	Northbound NE 29th Ave				Southbound NE 29th Ave				Eastbound NE 139th St				Westbound				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	2	8		0		9	11	0	11		1	1						
04:05:00 PM	8	11		0		8	3	0	24		8	0						
04:10:00 PM	10	15		0		13	7	0	15		5	0					170	
04:15:00 PM	9	8		0		12	10	0	13		4	0					183	
04:20:00 PM	9	16		0		7	12	0	14		7	0					186	
04:25:00 PM	13	12		0		8	10	0	19		4	0					187	
04:30:00 PM	7	12		0		6	11	0	15		5	0					187	
04:35:00 PM	11	7		0		10	7	0	14		12	0					183	
04:40:00 PM	10	12		0		10	13	0	15		11	0					188	
04:45:00 PM	12	12		0		8	10	0	10		7	0					191	
04:50:00 PM	8	8		0		11	6	0	12		5	0					180	
04:55:00 PM	6	13		0		6	12	0	19		5	0					170	715
05:00:00 PM	6	7		0		5	11	0	16		5	0					161	722
05:05:00 PM	9	14		0		11	15	0	21		10	0					191	740
05:10:00 PM	8	9		0		5	15	0	15		6	0					188	733
05:15:00 PM	6	16		0		16	9	0	23		9	0					217	756
05:20:00 PM	5	19		0		6	7	0	16		8	0					198	752
05:25:00 PM	5	11		0		6	7	0	18		11	0					198	744
05:30:00 PM	2	12		0		5	12	0	11		9	0					170	739
05:35:00 PM	8	16		0		10	15	0	13		10	0					181	750
05:40:00 PM	5	10		0		8	11	0	16		8	0					181	737
05:45:00 PM	17	14		0		5	9	0	18		8	0					201	749
05:50:00 PM	5	14		0		7	6	0	16		7	0					184	754
05:55:00 PM	5	5		0		7	5	0	11		7	0					166	733

Type of peak hour being reported: Intersection Peak

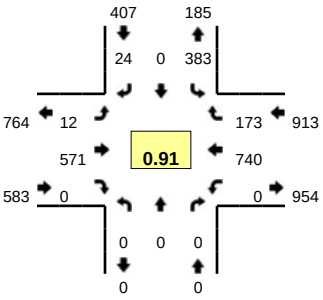
Method for determining peak hour: Total Entering Volume

LOCATION: NE 10th Ave -- NE Tenney Rd

CITY/STATE: Vancouver, WA

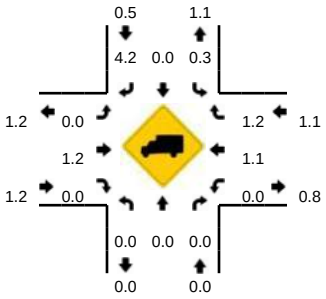
QC JOB #: 14675516

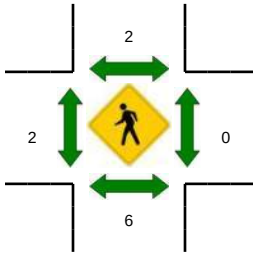
DATE: Thu, Apr 12 2018

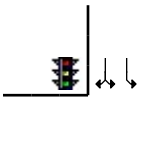


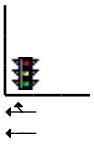
Peak-Hour: 4:35 PM -- 5:35 PM

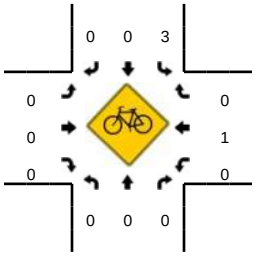
Peak 15-Min: 4:55 PM -- 5:10 PM

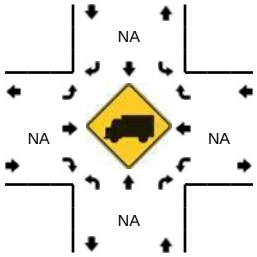


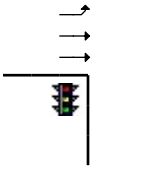




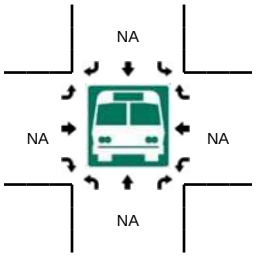












5-Min Count Period Beginning At	NE 10th Ave (Northbound)				NE 10th Ave (Southbound)				NE Tenney Rd (Eastbound)				NE Tenney Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	40	0	4	0	1	45	0	0	0	51	8	0	149	
4:05 PM	0	0	0	0	16	0	0	0	1	37	0	0	0	52	17	0	123	
4:10 PM	0	0	0	0	19	0	1	0	0	56	0	0	0	44	23	0	143	
4:15 PM	0	0	0	0	26	0	3	0	3	33	0	0	0	56	16	0	137	
4:20 PM	0	0	0	0	36	0	0	0	1	45	0	0	0	54	13	0	149	
4:25 PM	0	0	0	0	14	0	2	0	2	42	0	0	0	52	12	0	124	
4:30 PM	0	0	0	0	30	0	1	0	0	48	0	1	0	42	18	0	140	
4:35 PM	0	0	0	0	45	0	2	0	0	46	0	0	0	58	14	0	165	
4:40 PM	0	0	0	0	31	0	3	0	3	50	0	0	0	61	15	0	163	
4:45 PM	0	0	0	0	30	0	2	0	0	44	0	0	0	60	12	0	148	
4:50 PM	0	0	0	0	28	0	4	0	0	39	0	0	0	55	14	0	140	
4:55 PM	0	0	0	0	35	0	2	0	1	54	0	0	0	79	17	0	188	1769
5:00 PM	0	0	0	0	33	0	3	0	0	43	0	0	0	70	15	0	164	1784
5:05 PM	0	0	0	0	36	0	1	0	0	56	0	0	0	62	14	0	169	1830
5:10 PM	0	0	0	0	19	0	2	0	1	72	0	0	0	70	13	0	177	1864
5:15 PM	0	0	0	0	36	0	2	0	1	48	0	0	0	47	8	0	142	1869
5:20 PM	0	0	0	0	16	0	1	0	2	46	0	0	0	60	22	0	147	1867
5:25 PM	0	0	0	0	32	0	2	0	2	29	0	0	0	69	19	0	153	1896
5:30 PM	0	0	0	0	42	0	0	0	2	44	0	0	0	49	10	0	147	1903
5:35 PM	0	0	0	0	35	0	2	0	2	49	0	0	0	57	16	0	161	1899
5:40 PM	0	0	0	0	20	0	2	0	0	40	0	0	0	53	14	0	129	1865
5:45 PM	0	0	0	0	18	0	2	0	1	27	0	0	0	53	14	0	115	1832
5:50 PM	0	0	0	0	28	0	1	0	0	40	0	0	0	55	14	0	138	1830
5:55 PM	0	0	0	0	24	0	1	0	0	40	0	0	0	52	11	0	128	1770

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	416	0	24	0	4	612	0	0	0	844	184	0	2084
Heavy Trucks	0	0	0		4	0	0		0	12	0		0	16	0		32
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	1	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 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: I-5 SB On Ramp -- NE 134th St

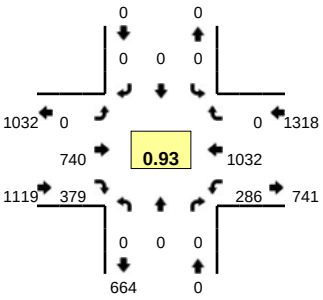
CITY/STATE: Vancouver, WA

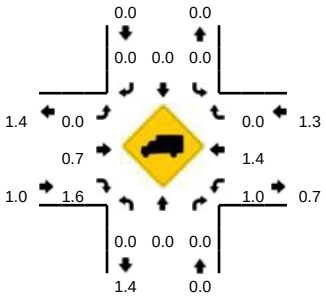
QC JOB #: 14675518

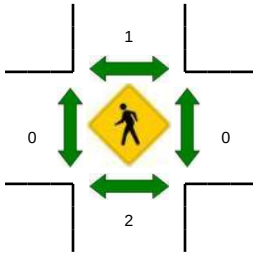
DATE: Thu, Apr 12 2018

Peak-Hour: 4:40 PM -- 5:40 PM

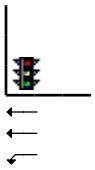
Peak 15-Min: 5:05 PM -- 5:20 PM

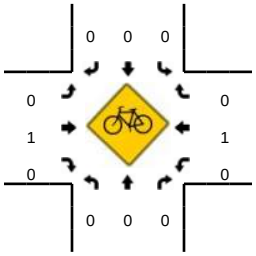


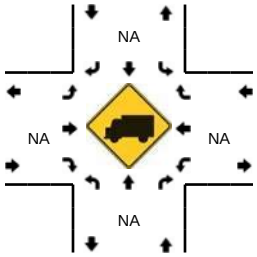


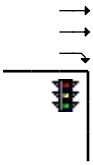




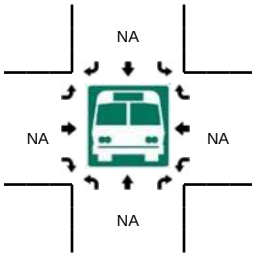












5-Min Count Period Beginning At	I-5 SB On Ramp (Northbound)				I-5 SB On Ramp (Southbound)				NE 134th St (Eastbound)				NE 134th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	0	0	0	0	0	69	27	0	17	75	0	0	188	
4:05 PM	0	0	0	0	0	0	0	0	0	46	28	0	24	79	0	0	177	
4:10 PM	0	0	0	0	0	0	0	0	0	53	26	0	16	92	0	0	187	
4:15 PM	0	0	0	0	0	0	0	0	0	57	18	0	26	72	0	0	173	
4:20 PM	0	0	0	0	0	0	0	0	0	56	27	0	26	75	0	0	184	
4:25 PM	0	0	0	0	0	0	0	0	0	52	24	0	35	71	0	0	182	
4:30 PM	0	0	0	0	0	0	0	0	0	52	17	0	37	72	0	0	178	
4:35 PM	0	0	0	0	0	0	0	0	0	54	28	0	32	91	0	0	205	
4:40 PM	0	0	0	0	0	0	0	0	0	64	41	0	16	89	0	0	210	
4:45 PM	0	0	0	0	0	0	0	0	0	52	28	0	31	79	0	0	190	
4:50 PM	0	0	0	0	0	0	0	0	0	48	31	0	20	86	0	0	185	
4:55 PM	0	0	0	0	0	0	0	0	0	76	36	0	14	96	0	0	222	2281
5:00 PM	0	0	0	0	0	0	0	0	0	55	26	0	26	83	0	0	190	2283
5:05 PM	0	0	0	0	0	0	0	0	0	70	34	0	28	93	0	1	226	2332
5:10 PM	0	0	0	0	0	0	0	0	0	68	31	0	25	97	0	0	221	2366
5:15 PM	0	0	0	0	0	0	0	0	0	63	44	0	29	69	0	0	205	2398
5:20 PM	0	0	0	0	0	0	0	0	0	43	29	0	28	92	0	0	192	2406
5:25 PM	0	0	0	0	0	0	0	0	0	54	24	0	30	102	0	0	210	2434
5:30 PM	0	0	0	0	0	0	0	0	0	70	27	0	23	60	0	0	180	2436
5:35 PM	0	0	0	0	0	0	0	0	0	77	28	0	15	86	0	0	206	2437
5:40 PM	0	0	0	0	0	0	0	0	0	45	27	0	26	88	0	0	186	2413
5:45 PM	0	0	0	0	0	0	0	0	0	56	19	0	26	82	0	0	183	2406
5:50 PM	0	0	0	0	0	0	0	0	0	53	27	0	18	76	0	0	174	2395
5:55 PM	0	0	0	0	0	0	0	0	0	49	27	0	16	83	0	0	175	2348

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	0	0	0	0	0	804	436	0	328	1036	0	4	2608
Heavy Trucks	0	0	0		0	0	0		0	8	16		0	20	0		44
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 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

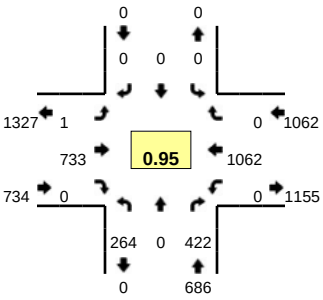
LOCATION: I-5 NB Off Ramp -- NE 134th St

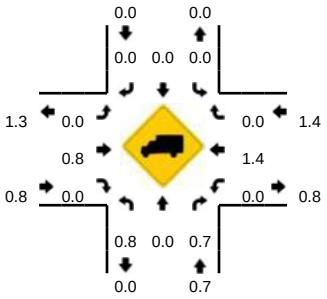
CITY/STATE: Vancouver, WA

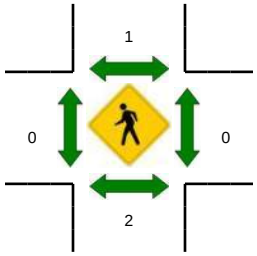
QC JOB #: 14675520

DATE: Thu, Apr 12 2018

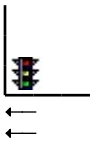
Peak-Hour: 4:40 PM -- 5:40 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

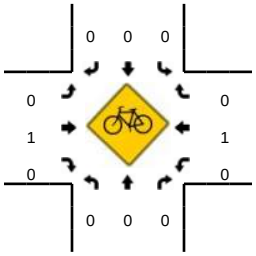


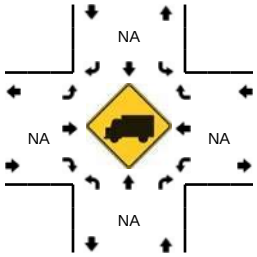


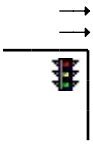


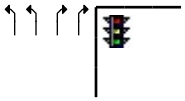


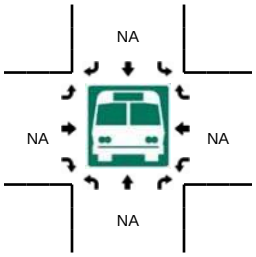












5-Min Count Period Beginning At	I-5 NB Off Ramp (Northbound)				I-5 NB Off Ramp (Southbound)				NE 134th St (Eastbound)				NE 134th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	16	0	29	0	0	0	0	0	0	63	0	0	0	83	0	0	191	
4:05 PM	25	0	32	0	0	0	0	0	0	50	0	0	0	75	0	0	182	
4:10 PM	21	0	38	0	0	0	0	0	0	50	0	0	0	95	0	0	204	
4:15 PM	12	0	31	0	0	0	0	0	0	60	0	0	0	79	0	0	182	
4:20 PM	15	0	47	0	0	0	0	0	0	55	0	0	0	95	0	0	212	
4:25 PM	16	0	25	0	0	0	0	0	0	55	0	0	0	83	0	0	179	
4:30 PM	10	0	31	0	0	0	0	0	0	52	0	0	0	99	0	0	192	
4:35 PM	18	0	36	0	0	0	0	0	0	52	0	0	0	95	0	0	201	
4:40 PM	23	0	47	0	0	0	0	0	0	63	0	0	0	91	0	0	224	
4:45 PM	15	0	30	0	0	0	0	0	0	52	0	1	0	89	0	0	187	
4:50 PM	21	0	42	0	0	0	0	0	0	47	0	0	0	84	0	0	194	
4:55 PM	35	0	26	0	0	0	0	0	0	59	0	0	0	76	0	0	196	2344
5:00 PM	17	0	26	0	0	0	0	0	0	71	0	0	0	95	0	0	209	2362
5:05 PM	28	0	25	0	0	0	0	0	0	73	0	0	0	92	0	0	218	2398
5:10 PM	34	0	33	0	0	0	0	0	0	49	0	0	0	85	0	0	201	2395
5:15 PM	8	0	43	0	0	0	0	0	0	74	0	0	0	98	0	0	223	2436
5:20 PM	25	0	40	0	0	0	0	0	0	50	0	0	0	97	0	0	212	2436
5:25 PM	28	0	50	0	0	0	0	0	0	47	0	0	0	92	0	0	217	2474
5:30 PM	17	0	27	0	0	0	0	0	0	69	0	0	0	73	0	0	186	2468
5:35 PM	13	0	33	0	0	0	0	0	0	79	0	0	0	90	0	0	215	2482
5:40 PM	12	0	32	0	0	0	0	0	0	44	0	0	0	83	0	0	171	2429
5:45 PM	7	0	33	0	0	0	0	0	0	59	0	0	0	103	0	0	202	2444
5:50 PM	15	0	30	0	0	0	0	0	0	52	0	0	0	83	0	0	180	2430
5:55 PM	22	0	23	0	0	0	0	0	0	49	0	0	0	74	0	0	168	2402

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	244	0	532	0	0	0	0	0	0	684	0	0	0	1148	0	0	2608
Heavy Trucks	8	0	4		0	0	0		0	4	0		0	20	0		36
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 PM

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

Type of peak hour being reported: Intersection Peak

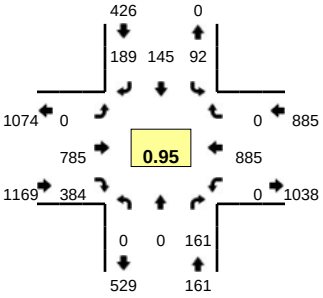
Method for determining peak hour: Total Entering Volume

LOCATION: I-205 SB Off Ramp/NE Hwy 99 -- NE 134th St

QC JOB #: 14675522

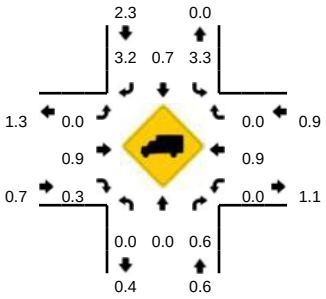
CITY/STATE: Vancouver, WA

DATE: Thu, Apr 12 2018



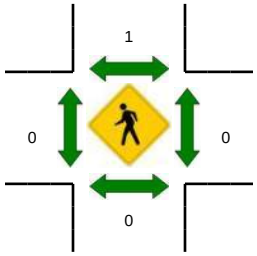
Peak-Hour: 4:40 PM -- 5:40 PM

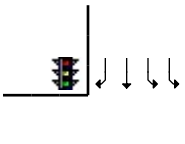
Peak 15-Min: 5:10 PM -- 5:25 PM

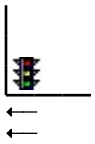


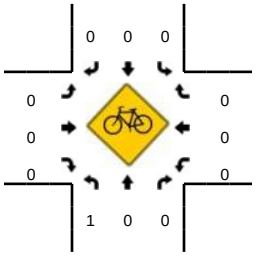


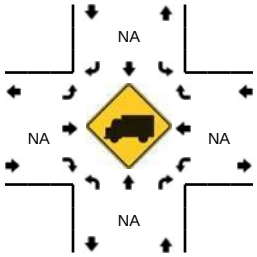
Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

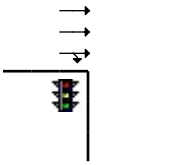


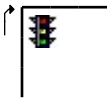


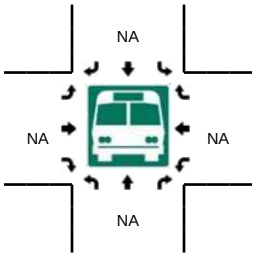












5-Min Count Period Beginning At	I-205 SB Off Ramp/NE Hwy 99 (Northbound)				I-205 SB Off Ramp/NE Hwy 99 (Southbound)				NE 134th St (Eastbound)				NE 134th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	6	0	9	10	15	0	0	59	35	0	0	69	0	0	203	
4:05 PM	0	0	13	0	9	15	12	0	0	63	18	0	0	62	0	0	192	
4:10 PM	0	0	17	0	9	11	26	0	0	56	28	0	0	74	0	0	221	
4:15 PM	0	0	12	0	18	14	12	0	0	64	28	0	0	64	0	0	212	
4:20 PM	0	0	11	0	12	10	16	0	0	66	35	0	0	80	0	0	230	
4:25 PM	0	0	11	0	15	18	13	0	0	62	21	0	0	67	0	0	207	
4:30 PM	0	0	12	0	4	12	15	0	0	51	30	0	0	86	0	0	210	
4:35 PM	0	0	14	0	15	13	22	0	0	53	28	0	0	80	0	0	225	
4:40 PM	0	0	12	0	6	11	10	0	0	71	45	0	0	79	0	0	234	
4:45 PM	0	0	14	0	7	12	16	0	0	57	32	0	0	76	0	0	214	
4:50 PM	0	0	13	0	10	12	17	0	0	62	24	0	0	70	0	0	208	
4:55 PM	0	0	12	0	13	9	19	0	0	54	32	0	0	69	0	0	208	2564
5:00 PM	0	0	11	0	5	9	16	0	0	65	30	0	0	67	0	0	203	2564
5:05 PM	0	0	8	0	9	16	15	0	0	75	23	0	0	73	0	0	219	2591
5:10 PM	0	0	15	0	6	18	18	0	0	58	28	0	0	76	0	0	219	2589
5:15 PM	0	0	19	0	11	15	12	0	0	70	34	0	0	79	0	0	240	2617
5:20 PM	0	0	12	0	6	14	15	0	0	69	31	0	0	88	0	0	235	2622
5:25 PM	0	0	17	0	8	11	19	0	0	61	30	0	0	73	0	0	219	2634
5:30 PM	0	0	15	0	6	14	12	0	0	67	33	0	0	61	0	0	208	2632
5:35 PM	0	0	13	0	5	4	20	0	0	76	42	0	0	74	0	0	234	2641
5:40 PM	0	0	16	0	16	15	21	0	0	47	32	0	0	63	0	0	210	2617
5:45 PM	0	0	12	0	10	13	24	0	0	68	23	0	0	75	0	0	225	2628
5:50 PM	0	0	10	0	5	9	12	0	0	53	31	0	0	76	0	0	196	2616
5:55 PM	0	0	11	0	3	12	20	0	0	38	26	0	0	49	0	0	159	2567

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	184	0	92	188	180	0	0	788	372	0	0	972	0	0	2776
Heavy Trucks	0	0	4		4	4	8		0	8	4		0	8	0		40
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

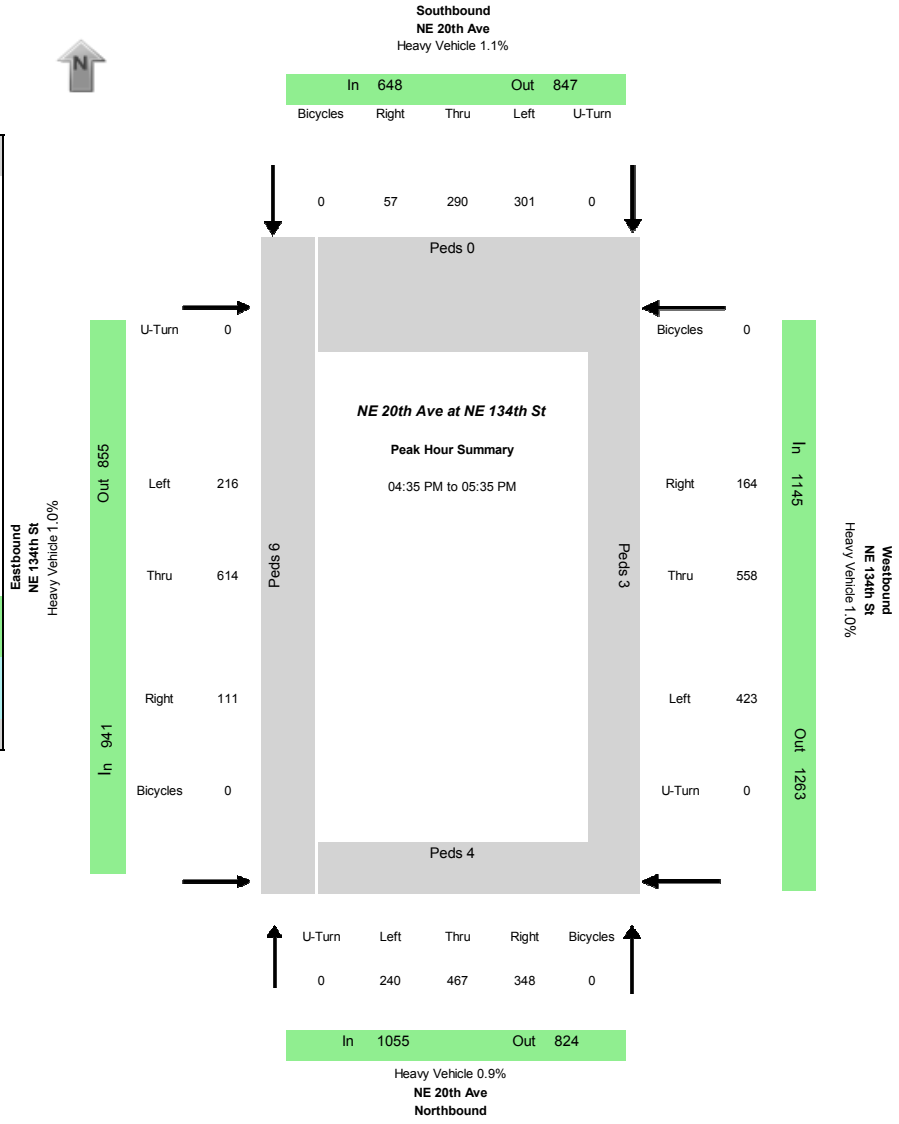
Comments:

Report generated on 4/24/2018 4:03 PM

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

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE 20th Ave*
E/W street	*NE 134th St*
City, State	Salmon Creek WA
Site Notes	
Location	45.7182 - -122.651335
Start Date	Thursday, October 18, 2018
Start Time	04:00:00 PM
Weather	
Study ID #	
Peak Hour Start	04:35:00 PM
Peak 15 Min Start	05:20:00 PM
PHF (15-Min Int)	0.96



Peak-Hour Volumes (PHV)																								
Northbound				Southbound				Eastbound				Westbound				Entering				Leaving				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB	
240	467	348	0	301	290	57	0	216	614	111	0	423	558	164	0	1055	648	941	1145	824	847	855	1263	
Percent Heavy Vehicles																								
1.3%	0.9%	0.9%	0.0%	1.7%	0.7%	0.0%	0.0%	0.5%	1.3%	0.0%	0.0%	0.5%	1.6%	0.6%	0.0%	0.9%	1.1%	1.0%	1.0%	0.5%	0.7%	1.4%	1.3%	

PHV- Bicycles																	PHV - Pedestrians				
Northbound				Southbound				Eastbound				Westbound					in Crosswalk				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	NB	SB	EB	WB	Sum
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	6	3	13

All Vehicle Volumes

	Northbound NE 20th Ave				Southbound NE 20th Ave				Eastbound NE 134th St				Westbound NE 134th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	14	37	13	0	14	26	2	0	14	61	11	0	40	60	16	0		
04:05:00 PM	20	45	24	0	19	27	6	0	16	46	7	0	31	40	15	0		
04:10:00 PM	5	31	27	0	15	22	1	0	18	72	6	0	19	44	19	0	883	
04:15:00 PM	14	36	32	0	18	20	5	0	18	42	13	0	37	58	18	0	886	
04:20:00 PM	36	47	32	0	27	34	2	0	24	40	5	0	30	38	14	0	919	
04:25:00 PM	28	44	28	0	12	22	4	0	18	29	11	0	38	57	18	0	949	
04:30:00 PM	8	44	30	0	21	17	5	0	18	58	15	0	28	60	19	0	961	
04:35:00 PM	14	33	28	0	37	32	6	0	19	46	18	0	32	47	14	0	958	
04:40:00 PM	28	40	36	0	24	15	6	0	17	46	3	0	31	39	17	0	951	
04:45:00 PM	14	35	22	0	19	23	5	0	25	64	8	0	37	63	15	0	958	
04:50:00 PM	14	26	29	0	27	29	4	0	7	43	12	0	30	47	17	0	917	
04:55:00 PM	20	34	30	0	21	40	3	0	25	43	9	0	30	36	12	0	918	3701
05:00:00 PM	22	45	29	0	19	18	4	0	17	41	14	0	46	40	18	0	901	3706
05:05:00 PM	21	42	29	0	34	23	7	0	11	61	3	0	26	57	11	0	941	3735
05:10:00 PM	31	56	29	0	33	24	3	0	10	45	8	0	30	30	9	0	946	3764
05:15:00 PM	25	47	37	0	21	24	3	0	9	45	7	0	40	43	7	0	941	3761
05:20:00 PM	9	24	31	0	22	17	11	0	32	66	15	0	48	59	14	0	964	3780
05:25:00 PM	21	42	23	0	24	30	4	0	24	51	11	0	35	35	16	0	972	3787
05:30:00 PM	21	43	25	0	20	15	1	0	20	63	3	0	38	62	14	0	989	3789
05:35:00 PM	21	61	34	0	32	23	3	0	14	38	12	0	22	37	10	0	948	3770
05:40:00 PM	13	32	28	0	27	20	3	0	21	53	16	0	40	42	14	0	941	3777
05:45:00 PM	21	36	34	0	27	11	2	0	20	43	8	0	32	35	17	0	902	3733
05:50:00 PM	12	36	27	0	30	29	2	0	14	51	8	0	22	56	13	0	895	3748
05:55:00 PM	21	33	23	0	9	12	4	0	6	26	7	0	20	39	10	0	796	3655

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: I-205 SB On Ramp -- NE 134th St

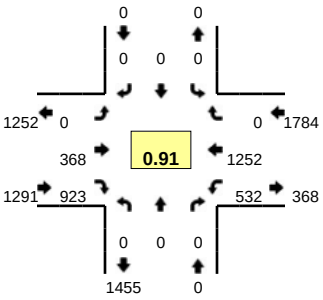
CITY/STATE: Vancouver, WA

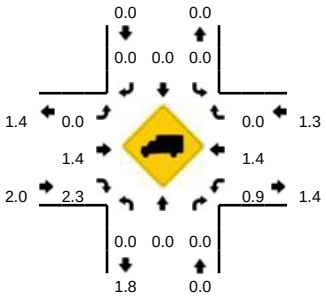
QC JOB #: 14675524

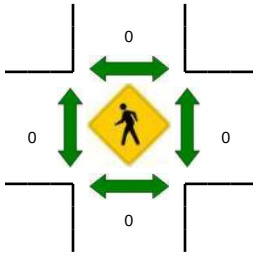
DATE: Thu, Apr 12 2018

Peak-Hour: 4:25 PM -- 5:25 PM

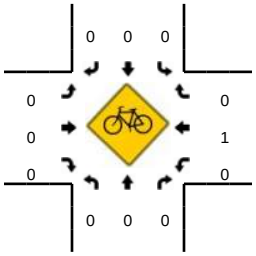
Peak 15-Min: 5:10 PM -- 5:25 PM

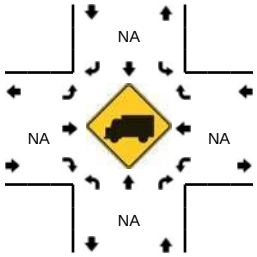




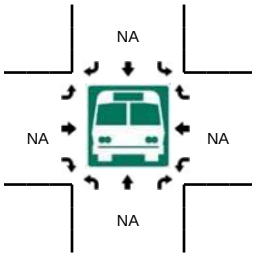












5-Min Count Period Beginning At	I-205 SB On Ramp (Northbound)				I-205 SB On Ramp (Southbound)				NE 134th St (Eastbound)				NE 134th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	0	0	0	0	0	40	49	0	32	86	0	0	207	
4:05 PM	0	0	0	0	0	0	0	0	0	25	63	0	38	93	0	0	219	
4:10 PM	0	0	0	0	0	0	0	0	0	45	58	0	42	112	0	0	257	
4:15 PM	0	0	0	0	0	0	0	0	0	38	68	0	45	107	0	0	258	
4:20 PM	0	0	0	0	0	0	0	0	0	27	85	0	48	116	0	0	276	
4:25 PM	0	0	0	0	0	0	0	0	0	29	51	0	61	110	0	0	251	
4:30 PM	0	0	0	0	0	0	0	0	0	35	66	0	56	113	0	0	270	
4:35 PM	0	0	0	0	0	0	0	0	0	22	88	0	39	100	0	0	249	
4:40 PM	0	0	0	0	0	0	0	0	0	29	83	0	46	100	0	0	258	
4:45 PM	0	0	0	0	0	0	0	0	0	29	59	0	31	120	0	0	239	
4:50 PM	0	0	0	0	0	0	0	0	0	40	66	0	33	91	0	0	230	
4:55 PM	0	0	0	0	0	0	0	0	0	26	73	0	36	83	0	0	218	2932
5:00 PM	0	0	0	0	0	0	0	0	0	26	72	0	38	106	0	0	242	2967
5:05 PM	0	0	0	0	0	0	0	0	0	28	85	0	55	107	0	0	275	3023
5:10 PM	0	0	0	0	0	0	0	0	0	25	92	0	53	92	0	0	262	3028
5:15 PM	0	0	0	0	0	0	0	0	0	37	96	0	37	131	0	0	301	3071
5:20 PM	0	0	0	0	0	0	0	0	0	42	92	0	47	99	0	0	280	3075
5:25 PM	0	0	0	0	0	0	0	0	0	31	75	0	37	96	0	0	239	3063
5:30 PM	0	0	0	0	0	0	0	0	0	22	71	0	39	96	0	0	228	3021
5:35 PM	0	0	0	0	0	0	0	0	0	35	81	0	33	102	0	0	251	3023
5:40 PM	0	0	0	0	0	0	0	0	0	28	76	0	40	108	0	0	252	3017
5:45 PM	0	0	0	0	0	0	0	0	0	37	80	0	38	96	0	0	251	3029
5:50 PM	0	0	0	0	0	0	0	0	0	25	64	0	23	77	0	0	189	2988
5:55 PM	0	0	0	0	0	0	0	0	0	13	73	0	27	71	0	0	184	2954

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	0	0	0	0	0	416	1120	0	548	1288	0	0	3372
Heavy Trucks	0	0	0		0	0	0		0	8	36		4	4	0		52
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	1	0		1
Railroad																	
Stopped Buses																	

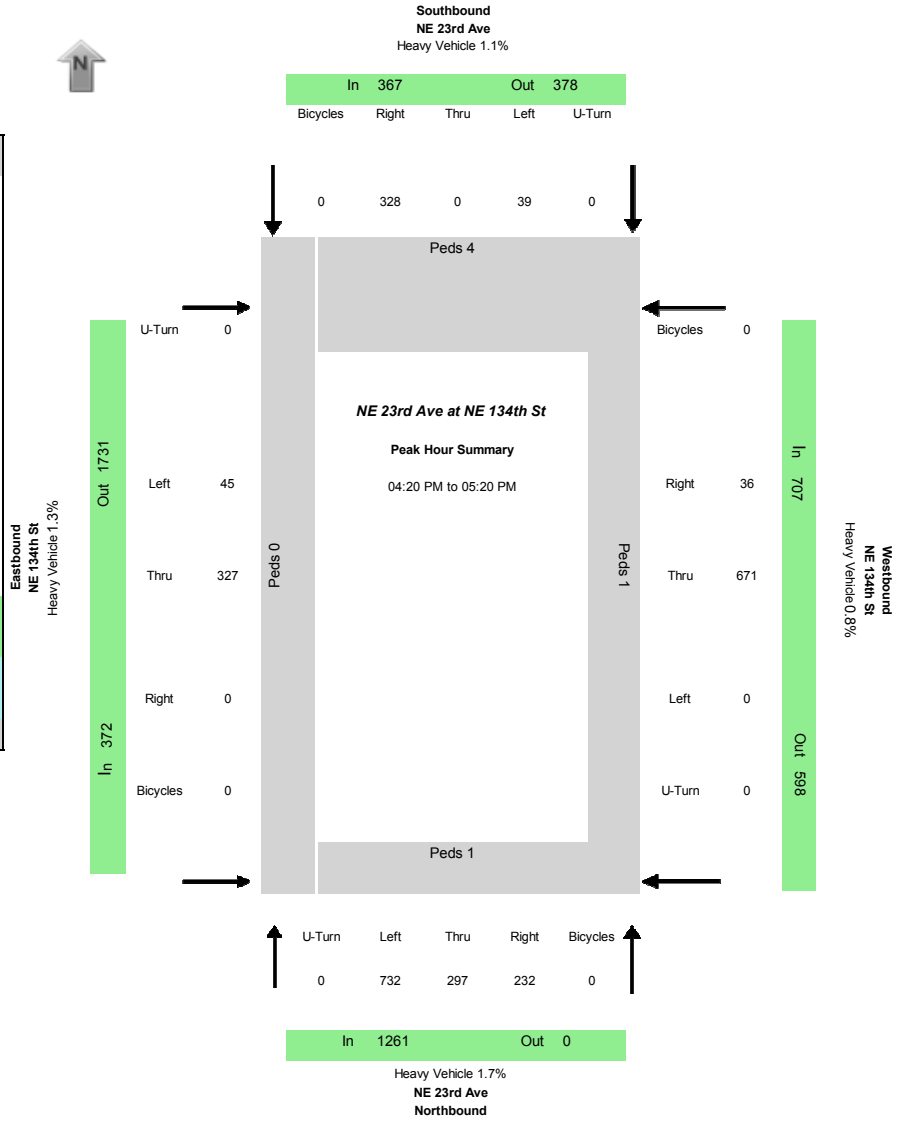
Comments:

Report generated on 4/24/2018 4:03 PM

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

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE 23rd Ave*
E/W street	*NE 134th St*
City, State	Salmon Creek WA
Site Notes	
Location	45.718053 - -122.647451
Start Date	Thursday, October 18, 2018
Start Time	04:00:00 PM
Weather	
Study ID #	
Peak Hour Start	04:20:00 PM
Peak 15 Min Start	05:05:00 PM
PHF (15-Min Int)	0.93



Peak-Hour Volumes (PHV)																								
Northbound				Southbound				Eastbound				Westbound				Entering				Leaving				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB	
732	297	232	0	39	0	328	0	45	327	0	0	0	671	36	0	1261	367	372	707	0	378	1731	598	
Percent Heavy Vehicles																								
1.5%	2.4%	1.3%	0.0%	2.6%	0.0%	0.9%	0.0%	2.2%	1.2%	0.0%	0.0%	0.0%	0.6%	5.6%	0.0%	1.7%	1.1%	1.3%	0.8%	#DIV/0!	2.6%	1.0%	1.3%	

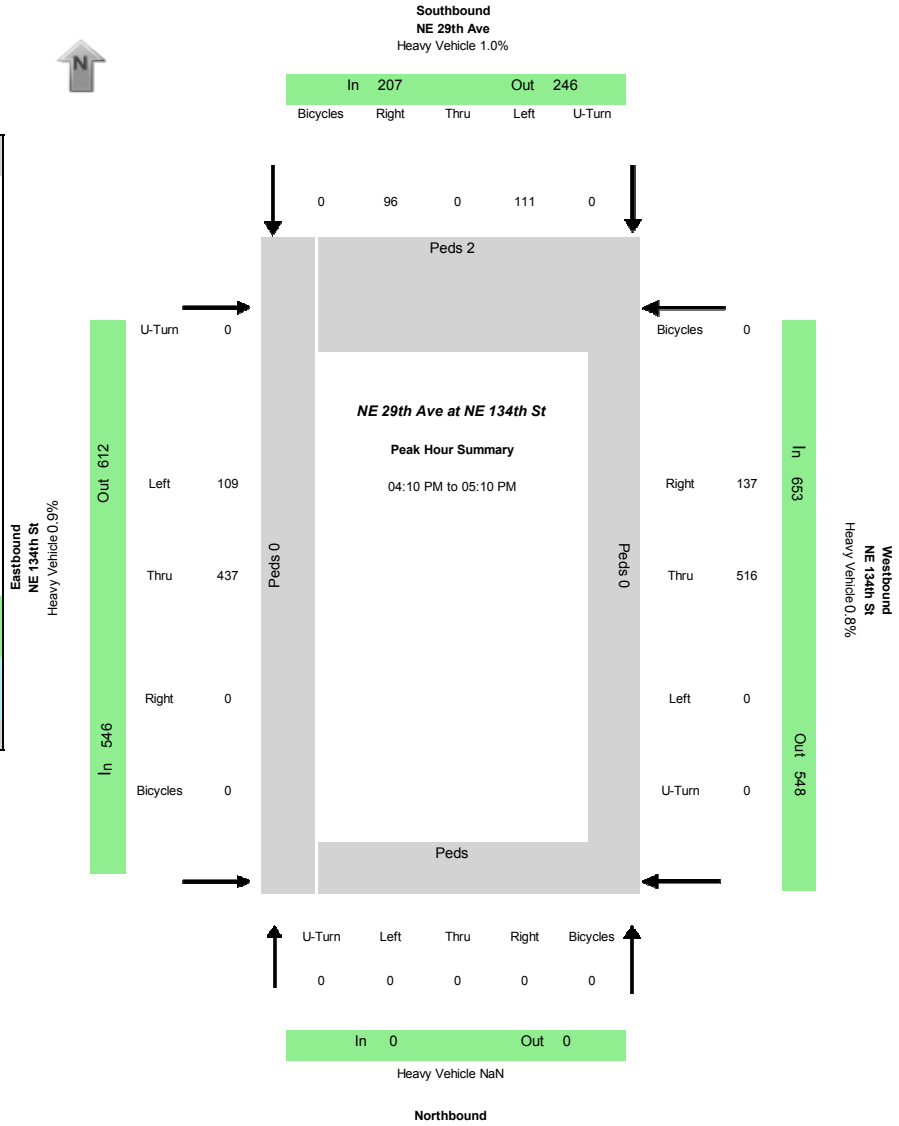
PHV- Bicycles																	PHV - Pedestrians				
																	in Crosswalk				
Northbound				Southbound				Eastbound				Westbound									
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	NB	SB	EB	WB	Sum
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0	1	6

All Vehicle Volumes

	Northbound NE 23rd Ave				Southbound NE 23rd Ave				Eastbound NE 134th St				Westbound NE 134th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	44	13	9	0	4	0	21	0	4	24	0	0	0	57	1	0		
04:05:00 PM	60	24	20	0	3	0	27	0	9	20	0	0	0	53	3	0		
04:10:00 PM	43	17	25	0	2	0	25	0	5	26	0	0	0	74	3	0	616	
04:15:00 PM	59	16	15	0	1	0	23	0	3	28	0	0	0	88	3	0	675	
04:20:00 PM	51	24	21	0	3	0	25	0	9	27	0	0	0	78	3	0	697	
04:25:00 PM	83	33	17	0	3	0	16	0	2	22	0	0	0	45	3	0	701	
04:30:00 PM	51	24	16	0	1	0	26	0	1	28	0	0	0	86	3	0	701	
04:35:00 PM	55	23	20	0	1	0	46	0	6	28	0	0	0	48	1	0	688	
04:40:00 PM	70	28	23	0	2	0	27	0	4	21	0	0	0	40	4	0	683	
04:45:00 PM	54	20	19	0	6	0	27	0	3	34	0	0	0	56	2	0	668	
04:50:00 PM	55	16	19	0	3	0	21	0	3	34	0	0	0	42	1	0	634	
04:55:00 PM	65	29	15	0	2	0	19	0	3	24	0	0	0	34	2	0	608	2608
05:00:00 PM	69	23	11	0	3	0	25	0	6	30	0	0	0	55	4	0	613	2657
05:05:00 PM	50	19	29	0	12	0	32	0	2	30	0	0	0	65	3	0	661	2680
05:10:00 PM	51	20	17	0	2	0	34	0	5	18	0	0	0	58	7	0	680	2672
05:15:00 PM	78	38	25	0	1	0	30	0	1	31	0	0	0	64	3	0	725	2707
05:20:00 PM	45	17	21	0	2	0	34	0	8	25	0	0	0	61	2	0	698	2681
05:25:00 PM	72	23	20	0	4	0	26	0	1	18	0	0	0	34	2	0	686	2657
05:30:00 PM	48	17	14	0	2	0	17	0	5	37	0	0	0	64	0	0	619	2625
05:35:00 PM	69	18	21	0	3	0	21	0	7	34	0	0	0	47	1	0	625	2618
05:40:00 PM	50	20	9	0	3	0	16	0	5	35	0	0	0	65	2	0	630	2604
05:45:00 PM	68	26	25	0	2	0	15	0	5	28	0	0	0	62	1	0	658	2615
05:50:00 PM	49	17	23	0	2	0	9	0	2	28	0	0	0	50	3	0	620	2604
05:55:00 PM	65	19	13	0	2	0	8	0	2	22	0	0	0	43	0	0	589	2585

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE 29th Ave*
E/W street	*NE 134th St*
City, State	Salmon Creek WA
Site Notes	
Location	45.718346 - -122.640445
Start Date	Thursday, October 18, 2018
Start Time	04:00:00 PM
Weather	
Study ID #	
Peak Hour Start	04:10:00 PM
Peak 15 Min Start	04:10:00 PM
PHF (15-Min Int)	0.80



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
0	0	0	0	111	0	96	0	109	437	0	0	0	516	137	0	0	207	546	653	0	246	612	548
Percent Heavy Vehicles																							
0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	0.9%	0.9%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	#DIV/0!	1.0%	0.9%	0.8%	#DIV/0!	0.4%	0.8%	1.1%

PHV- Bicycles

Northbound				Southbound				Eastbound				Westbound				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	**Sum**
						0	0	0	0		0			0	0	0

PHV - Pedestrians

in Crosswalk				
NB	SB	EB	WB	**Sum**
	2	0	0	2

All Vehicle Volumes

	Northbound				Southbound NE 29th Ave				Eastbound NE 134th St				Westbound NE 134th St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM					4		5	0	7	30		0		38	9	0		
04:05:00 PM					8		10	0	6	24		0		45	13	0		
04:10:00 PM					7		12	0	9	42		0		55	15	0	339	
04:15:00 PM					7		15	0	6	34		0		82	11	0	401	
04:20:00 PM					6		8	0	13	34		0		72	10	0	438	
04:25:00 PM					5		7	0	17	27		0		41	11	0	406	
04:30:00 PM					10		6	0	7	29		0		28	11	0	342	
04:35:00 PM					16		8	0	6	42		0		36	17	0	324	
04:40:00 PM					13		10	0	14	23		0		33	14	0	323	
04:45:00 PM					9		6	0	5	33		0		24	6	0	315	
04:50:00 PM					12		6	0	9	44		0		34	12	0	307	
04:55:00 PM					7		6	0	8	41		0		27	9	0	298	1366
05:00:00 PM					7		2	0	5	39		0		32	6	0	306	1364
05:05:00 PM					12		10	0	10	49		0		52	15	0	337	1406
05:10:00 PM					5		5	0	10	34		0		49	10	0	352	1379
05:15:00 PM					7		14	0	10	34		0		34	7	0	367	1330
05:20:00 PM					13		7	0	14	37		0		34	11	0	335	1303
05:25:00 PM					7		7	0	6	41		0		32	6	0	321	1294
05:30:00 PM					10		5	0	10	31		0		34	6	0	311	1299
05:35:00 PM					11		6	0	12	42		0		46	13	0	325	1304
05:40:00 PM					16		6	0	7	38		0		45	10	0	348	1319
05:45:00 PM					7		4	0	13	35		0		44	16	0	371	1355
05:50:00 PM					10		5	0	8	35		0		35	8	0	342	1339
05:55:00 PM					10		7	0	6	35		0		17	6	0	301	1322

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

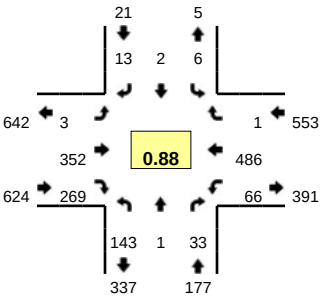
LOCATION: NE Salmon Creek Ave -- NE 134th St

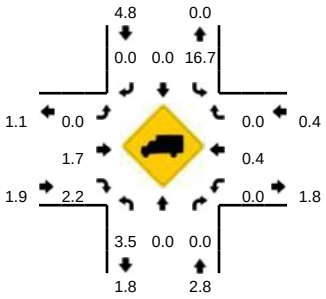
CITY/STATE: Vancouver, WA

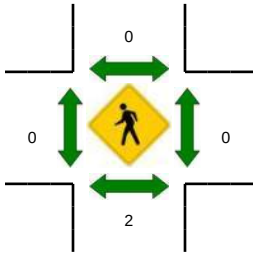
QC JOB #: 14675526

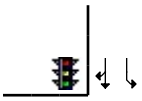
DATE: Thu, Apr 12 2018

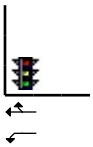
Peak-Hour: 4:50 PM -- 5:50 PM
Peak 15-Min: 5:05 PM -- 5:20 PM

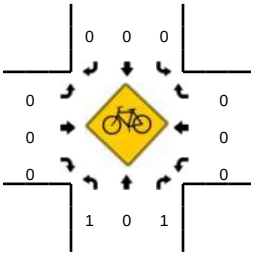


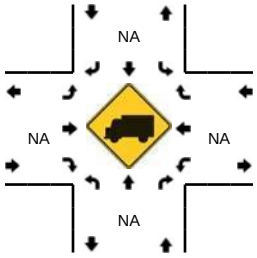


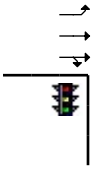




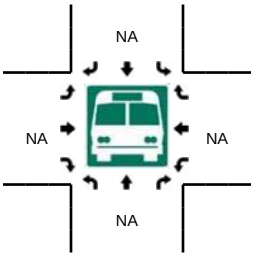












5-Min Count Period Beginning At	NE Salmon Creek Ave (Northbound)				NE Salmon Creek Ave (Southbound)				NE 134th St (Eastbound)				NE 134th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	12	0	6	0	1	0	1	0	1	27	12	0	5	39	0	0	104	
4:05 PM	11	0	2	0	0	0	3	0	2	34	19	0	3	51	0	0	125	
4:10 PM	10	0	5	0	1	0	0	0	1	20	11	0	4	91	0	0	143	
4:15 PM	11	0	5	0	0	0	0	0	0	36	20	0	6	78	0	0	156	
4:20 PM	7	0	6	0	0	0	2	0	0	22	23	0	6	78	1	0	145	
4:25 PM	16	0	5	0	0	0	0	0	0	27	15	0	10	49	0	0	122	
4:30 PM	8	0	4	0	0	0	1	0	2	19	12	0	3	37	0	0	86	
4:35 PM	10	0	1	0	0	0	0	0	1	24	18	0	6	47	0	0	107	
4:40 PM	14	1	2	0	0	0	0	0	0	30	11	0	4	28	0	0	90	
4:45 PM	6	0	7	0	0	0	0	0	0	22	16	0	2	24	0	0	77	
4:50 PM	12	0	1	0	1	0	1	0	0	24	22	0	2	36	1	0	100	
4:55 PM	12	0	2	0	1	0	0	0	1	30	17	0	4	29	0	0	96	1351
5:00 PM	10	0	3	0	1	1	3	0	0	35	21	0	3	36	0	0	113	1360
5:05 PM	17	0	0	0	1	0	3	0	0	27	20	0	6	40	0	0	114	1349
5:10 PM	7	1	7	0	0	1	1	0	1	32	25	0	14	65	0	0	154	1360
5:15 PM	13	0	3	0	1	0	1	0	0	35	25	0	2	44	0	0	124	1328
5:20 PM	13	0	3	0	0	0	0	0	0	32	16	0	7	39	0	0	110	1293
5:25 PM	14	0	2	0	0	0	0	0	0	36	26	0	5	24	0	0	107	1278
5:30 PM	10	0	3	0	0	0	0	0	0	26	18	0	5	40	0	0	102	1294
5:35 PM	11	0	3	0	1	0	4	0	0	23	15	0	10	54	0	0	121	1308
5:40 PM	13	0	3	0	0	0	0	0	0	22	39	0	4	43	0	0	124	1342
5:45 PM	11	0	3	0	0	0	0	0	1	30	25	0	4	36	0	0	110	1375
5:50 PM	6	0	2	0	0	0	0	0	0	17	12	0	4	15	0	0	56	1331
5:55 PM	7	0	4	0	0	0	1	0	0	18	11	0	4	31	0	0	76	1311

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	148	4	40	0	8	4	20	0	4	376	280	0	88	596	0	0	1568
Heavy Trucks	8	0	0		0	0	0		0	0	8		0	4	0		20
Pedestrians		0				0				0				0			0
Bicycles	1	0	0		0	0	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 PM

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

Type of peak hour being reported: Intersection Peak

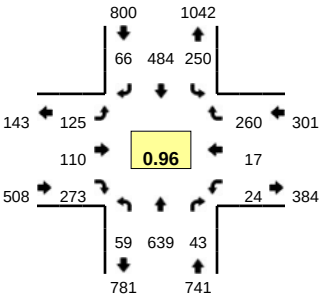
Method for determining peak hour: Total Entering Volume

LOCATION: NE 20th Ave/NE Hwy 99 -- NE Hwy 99

CITY/STATE: Vancouver, WA

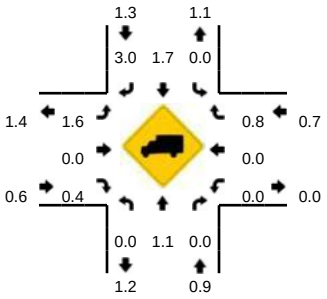
QC JOB #: 14675528

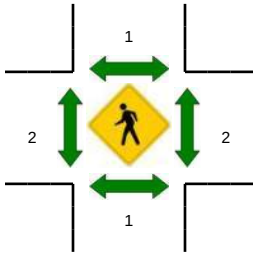
DATE: Thu, Apr 12 2018

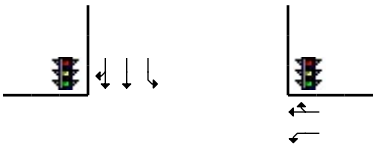


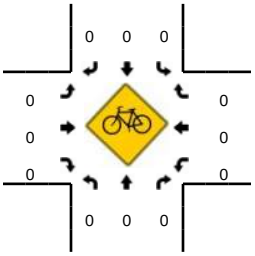
Peak-Hour: 4:45 PM -- 5:45 PM

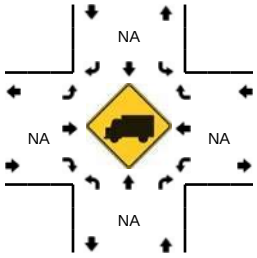
Peak 15-Min: 5:10 PM -- 5:25 PM

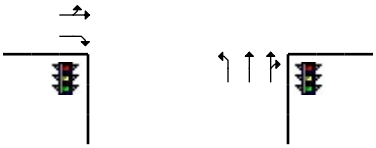


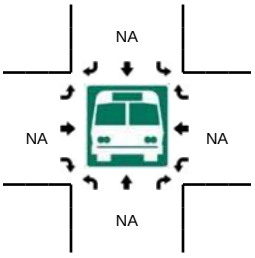












5-Min Count Period Beginning At	NE 20th Ave/NE Hwy 99 (Northbound)				NE 20th Ave/NE Hwy 99 (Southbound)				NE Hwy 99 (Eastbound)				NE Hwy 99 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	8	48	1	0	26	44	5	0	8	5	25	0	3	0	19	0	192	
4:05 PM	8	49	2	0	12	42	2	1	8	7	22	0	2	5	24	0	184	
4:10 PM	7	71	5	0	17	32	6	2	8	8	27	0	3	1	19	0	206	
4:15 PM	2	49	2	0	15	48	2	1	13	10	29	0	3	1	19	0	194	
4:20 PM	3	57	1	0	34	40	4	2	7	7	27	0	1	3	25	0	211	
4:25 PM	5	44	4	0	14	46	5	2	14	9	25	0	1	2	25	0	196	
4:30 PM	7	54	2	0	16	41	2	1	10	7	17	0	0	2	26	0	185	
4:35 PM	9	53	2	0	20	53	8	4	6	6	16	0	1	2	21	0	201	
4:40 PM	2	56	2	0	10	38	6	0	7	13	30	0	4	0	28	0	196	
4:45 PM	2	46	3	0	17	35	5	1	18	17	22	0	0	2	22	0	190	
4:50 PM	2	72	2	0	26	49	4	1	6	6	28	0	1	2	22	0	221	
4:55 PM	4	47	2	0	16	38	6	0	8	10	20	0	1	0	20	0	172	2348
5:00 PM	5	39	2	0	17	36	5	3	14	6	28	0	5	3	19	0	182	2338
5:05 PM	9	45	3	0	26	39	3	1	5	10	23	0	2	2	13	0	181	2335
5:10 PM	5	71	6	0	13	44	7	3	8	6	21	1	0	2	24	0	211	2340
5:15 PM	3	58	3	0	10	36	5	1	10	18	18	0	3	3	29	0	197	2343
5:20 PM	7	52	3	0	20	44	7	3	9	6	29	0	5	0	22	0	207	2339
5:25 PM	5	65	2	0	20	54	5	1	9	3	20	0	1	1	19	0	205	2348
5:30 PM	2	46	8	0	16	39	6	1	9	11	22	0	2	0	20	0	182	2345
5:35 PM	9	52	5	0	26	29	5	2	13	9	23	0	2	1	24	0	200	2344
5:40 PM	6	46	4	0	24	41	8	2	15	8	19	0	2	1	26	0	202	2350
5:45 PM	4	56	7	0	12	45	1	1	8	9	15	0	2	1	16	0	177	2337
5:50 PM	8	56	5	0	11	33	3	0	17	9	18	0	2	0	32	0	194	2310
5:55 PM	4	42	5	0	24	31	4	2	3	8	21	0	2	0	27	0	173	2311

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	60	724	48	0	172	496	76	28	108	120	272	4	32	20	300	0	2460
Heavy Trucks	0	12	0		0	0	0		4	0	0		0	0	4		20
Pedestrians		0				0				8				0			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 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 Hwy 99 -- NE 117th St

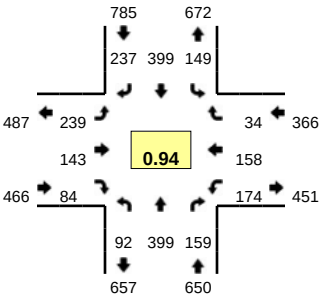
CITY/STATE: Vancouver, WA

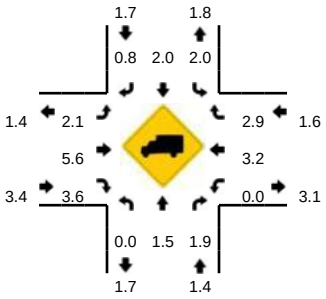
QC JOB #: 14675530

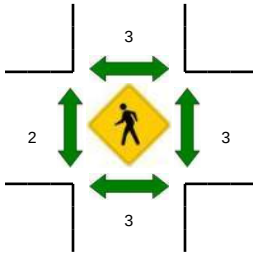
DATE: Thu, Apr 12 2018

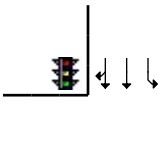
Peak-Hour: 4:35 PM -- 5:35 PM

Peak 15-Min: 5:10 PM -- 5:25 PM

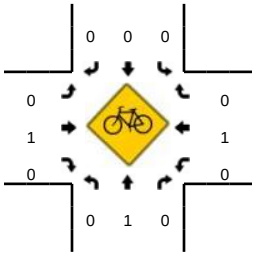


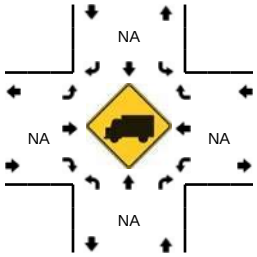


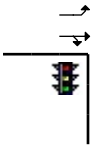


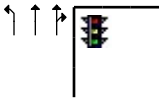


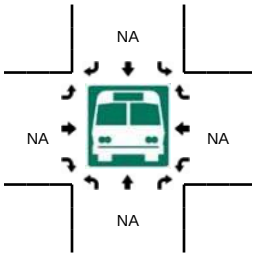












5-Min Count Period Beginning At	NE Hwy 99 (Northbound)				NE Hwy 99 (Southbound)				NE 117th St (Eastbound)				NE 117th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	9	28	15	0	7	32	16	0	25	13	4	0	12	12	2	0	175	
4:05 PM	5	33	11	0	19	32	22	0	16	18	6	0	13	5	3	0	183	
4:10 PM	6	35	11	0	17	24	12	0	22	12	6	0	14	7	3	0	169	
4:15 PM	6	41	11	0	15	26	27	0	27	4	6	0	8	14	4	0	189	
4:20 PM	6	33	21	0	13	25	16	0	24	11	7	0	10	12	1	0	179	
4:25 PM	2	37	11	0	10	38	27	0	16	10	4	0	14	20	4	0	193	
4:30 PM	5	25	9	0	11	29	23	0	31	12	4	0	4	12	5	0	170	
4:35 PM	6	38	14	0	12	41	20	0	20	9	13	0	14	15	2	0	204	
4:40 PM	14	22	10	0	13	38	17	0	15	11	8	0	14	15	7	0	184	
4:45 PM	8	28	15	0	16	29	14	0	23	13	8	0	11	8	5	0	178	
4:50 PM	5	41	21	0	8	33	26	0	17	16	4	0	16	17	1	0	205	
4:55 PM	13	34	11	0	9	31	17	0	17	12	5	0	11	8	1	0	169	2198
5:00 PM	5	30	14	0	9	33	15	0	11	10	5	0	14	16	1	0	163	2186
5:05 PM	7	28	12	0	17	24	16	0	21	12	7	0	12	15	2	0	173	2176
5:10 PM	6	42	16	0	12	40	23	0	21	13	8	0	14	19	6	0	220	2227
5:15 PM	6	47	13	0	6	32	18	0	30	16	10	0	17	11	0	0	206	2244
5:20 PM	4	20	8	0	19	27	25	0	22	12	6	0	14	16	3	0	176	2241
5:25 PM	12	28	11	0	17	36	22	0	20	12	4	0	20	11	4	0	197	2245
5:30 PM	6	41	14	0	11	35	24	0	22	7	6	0	17	7	2	0	192	2267
5:35 PM	11	26	11	0	13	20	19	0	14	17	6	0	10	14	4	0	165	2228
5:40 PM	6	41	12	0	13	37	28	0	16	9	6	0	16	12	6	0	202	2246
5:45 PM	2	33	6	0	13	32	19	0	20	8	13	0	13	17	3	0	179	2247
5:50 PM	3	21	17	0	8	24	27	0	24	10	7	0	13	9	4	0	167	2209
5:55 PM	9	39	13	0	3	19	19	0	13	10	7	0	9	15	3	0	159	2199

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	64	436	148	0	148	396	264	0	292	164	96	0	180	184	36	0	2408
Heavy Trucks	0	8	4		0	0	0		8	8	8		0	4	0		40
Pedestrians		4				8				0				4			16
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/24/2018 4:03 PM

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

APPENDIX E

CRASH DATA

OFFICER REPORTED CRASHES THAT OCCURRED *at* OR *within 300 feet of* MUTIPLE ROAD SEGMENTS IN CLARK COUNTY

01/01/2013 - 12/31/2017 - *See 2nd tab for road segment information*

Under 23 U.S. Code § 409 and 23 U.S. Code § 148, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

JURISDICTION	COUNTY	PRIMARY ROAD	SECONDARY ROAD	LOCATION	PRIMARY TRAFFICWAY	INTERSECTING TRAFFICWAY	CO ONLY INTERSECTING COUNTY ROAD MILEPOST	MILEPOST	SR ONLY HISTORY / SUSPENSE IND	REPORT NUMBER	COLLISION TYPE	DIRECTION 1	DIRECTION 2	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	# FAT	# VEH	# PEDS	# BIKES	VEHICLE 1 TYPE	VEHICLE 2 TYPE	JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION	LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	VEHICLE 2 ACTION	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 3 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 2)	BICYCLIST CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)
County Road	Clark	???			94200			0.02	No	E651723				03/06/2017	19:18	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup, Panel Truck or Vanette under 10,000 lb	Not at Intersection and Not Related	Raining	Wet	Dark-No Street Lights	From same direction - both going straight - both moving - sideswipe	Overtaking and Passing	Other*	East	West	Vehicle Backing		Under Influence of Alcohol			None					Lane of Primary Trafficway
County Road	Clark	10TH	136TH	Intersection	41150			0.1	No	E270205	HEAD ON	NBT	SB	09/06/2013	01:59	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	Circulating Roundabout	Raining	Wet	Dark-Street Lights On	From opposite direction - both moving - head-on	Going Straight Ahead	Going Straight Ahead	South	North	South	Vehicle Stopped	Operating Defective Equipment			None					Lane of Primary Trafficway
County Road	Clark	10TH	141ST	106 FT S OF 141ST	41150			0.31	No	E474521	REAR END	NB	NB	10/23/2015	10:36	Possible Injury	1	0	2	0	0	Passenger Car	Pickup, Panel Truck or Vanette under 10,000 lb	At Driveway	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear end	Going Straight Ahead	Going Straight Ahead	South	North	South	North	Inattention			None					Lane of Primary Trafficway
County Road	Clark	10TH	141ST	Intersection	41150			0.33	No	E315498	REAR END	SB	SB	03/17/2014	16:47	Possible Injury	1	0	3	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Pickup, Panel Truck or Vanette under 10,000 lb	Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear end	Going Straight Ahead	Stopped for Traffic	North	South	Vehicle Stopped	Vehicle Stopped	Inattention			None					Lane of Primary Trafficway
County Road	Clark	10TH	141ST	53 FT N OF 141ST	41150			0.34	No	E361035	REAR END	SB	SB	09/29/2014	15:53	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Raining	Wet	Daylight	From same direction - both going straight - one stopped - rear end	Going Straight Ahead	Stopped for Traffic	North	South	Vehicle Stopped	Vehicle Stopped	Inattention	Follow Too Closely		None					Lane of Primary Trafficway
County Road	Clark	10TH	146TH	Intersection	41150	41283	0	0.6	No	E500693	BIKE	WBR		12/23/2015	12:04	Possible Injury	1	0	1	0	1	Pickup, Panel Truck or Vanette under 10,000 lb		At Intersection and Related	Raining	Wet	Daylight	Vehicle - Pedalcyclist	Making Right Turn		East	North			Inattention					None			Lane of Primary Trafficway
County Road	Clark	10TH	148TH	Roadway	41150			0.69	No	E248576	FIXED OBJECT			06/06/2013	07:26	Suspected Minor Injury	1	0	1	0	0	Passenger Car		At Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	Culvert and/or other Appurtenance in Ditch	Going Straight Ahead		South	North			Unknown Driver Distraction								Past the Outside Shoulder of Primary Trafficway
County Road	Clark	10TH	149TH	Roadway	41150	41300	0	0.75	No	E717479	FIXED OBJECT			09/30/2017	18:50	No Apparent Injury	0	0	1	0	0	Pickup, Panel Truck or Vanette under 10,000 lb		At Intersection and Related	Clear or Partly Cloudy	Wet	Dusk	Fence	Making Right Turn		West	South			Unknown Driver Distraction								Past the Outside Shoulder of Primary Trafficway
County Road	Clark	139TH	10TH	Intersection	41120	41150	0.25	0	No	E645113	ANGLE	WBT	SBT	02/21/2017	06:05	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Raining	Wet	Dark-Street Lights On	Entering at angle	Going Straight Ahead	Going Straight Ahead	East	West	North	South	Disregard Stop and Go Light			None					Lane of Primary Trafficway
County Road	Clark	139TH	10TH	Intersection	41151	41150	0.25	0	No	E409928	REAR END	WB	WB	03/22/2015	00:13	Possible Injury	2	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From same direction - both going straight - one stopped - rear end	Going Straight Ahead	Stopped at Signal or Stop Sign	East	West	Vehicle Stopped	Vehicle Stopped	Other			None					Lane of Primary Trafficway
County Road	Clark	139TH	10TH	Intersection	41151	41150	0.25	0	No	E634302	REAR END	EB	EB	01/20/2017	18:39	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Raining	Wet	Dark-Street Lights On	From same direction - both going straight - one stopped - rear end	Starting in Traffic Lane	Stopped for Traffic	West	East	Vehicle Stopped	Vehicle Stopped	Inattention			None					Lane of Primary Trafficway
County Road	Clark	139TH	10TH	Intersection	41151	41150	0.24	~~0.24~~ 0.00	No	E590253	TURN	WB	SBL	09/28/2016	18:48	Suspected Minor Injury	1	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Dusk	Entering at angle	Going Straight Ahead	Making Left Turn	East	West	North	Southeast	Disregard Stop and Go Light			None					Lane of Primary Trafficway
County Road	Clark	139TH	20TH	Intersection	41120	43110	0.4	0.5	No	E670644	FIXED OBJECT	NBR		05/13/2017	02:40	No Apparent Injury	0	0	1	0	0	Pickup, Panel Truck or Vanette under 10,000 lb		Intersection Related but Not at Intersection	Raining	Wet	Dark-Street Lights On	Concrete Barrier/Jersey Barrier - Face	Making Right Turn		South	East			Under Influence of Alcohol	Inattention							Outside Shoulder of Primary Trafficway
County Road	Clark	139TH	20TH	Intersection	43180	43110	0.39	0.48	No	E315501	TURN	SBR	WB	03/17/2014	23:28	Possible Injury	2	0	3	0	0	Passenger Car	Passenger Car	At Intersection and Related	Overcast	Wet	Dark-Street Lights On	Entering at angle	Making Right Turn	Stopped at Signal or Stop Sign	North	West	Vehicle Stopped	Vehicle Stopped	Under Influence of Alcohol	Improper Turn		None					Lane of Primary Trafficway
County Road	Clark	139TH	20TH	Intersection	43180	43110	0.4	0.49	No	E368084	TURN	SBR	NBL	10/25/2014	13:29	Suspected Minor Injury	2	0	4	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Overcast	Wet	Daylight	From opposite direction - one left turn - one right turn	Making Right Turn	Making Left Turn	North	West	South	West	Did Not Grant RW to Vehicle			None					Lane of Primary Trafficway
County Road	Clark	139TH	20TH	Intersection	43180	43110	0.4	0.49	No	E368085	REAR END	EB	EB	10/25/2014	13:37	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Overcast	Wet	Daylight	From same direction - both going straight - one stopped - rear end	Going Straight Ahead	Stopped at Signal or Stop Sign	West	East	Vehicle Stopped	Vehicle Stopped	Inattention	Driver Distractions Outside Vehicle		None					Lane of Primary Trafficway

OFFICER REPORTED CRASHES THAT OCCURRED *at* OR *within 300 feet of* MUTIPLE ROAD SEGMENTS IN CLARK COUNTY

01/01/2013 - 12/31/2017 - *See 2nd tab for road segment information*

Under 23 U.S. Code § 409 and 23 U.S. Code § 148, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

JURISDICTION	COUNTY	PRIMARY ROAD	SECONDARY ROAD	LOCATION	PRIMARY TRAFFICWAY	INTERSECTING TRAFFICWAY	CO ONLY INTERSECTING COUNTY ROAD MILEPOST	MILEPOST	SR ONLY HISTORY / SUSPENSE IND	REPORT NUMBER	COLLISION TYPE	DIRECTION 1	DIRECTION 2	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	# FAT	# VEH	# PEDS	# BIKES	VEHICLE 1 TYPE	VEHICLE 2 TYPE	JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION	LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	VEHICLE 2 ACTION	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 3 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 2)	BICYCLIST CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)
State Route	Clark	139TH	20TH	158 FT W OF 20TH	005LX00747			0.37	No	E684399	REAR END	EB	EB	06/20/2017	15:07	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - sideswipe	Going Straight Ahead	Stopped for Traffic	West	East	Vehicle Stopped	Vehicle Stopped	Unknown Driver Distraction			None				Left Turn Lane LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
State Route	Clark	139TH	20TH		005LX00747			0.4	No	E454171	REAR END	SB	SB	08/08/2015	18:14	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Overcast	Dry	Daylight	From same direction - both going straight - one stopped - rear end	Going Straight Ahead	Stopped at Signal or Stop Sign	North	South	Vehicle Stopped	Vehicle Stopped	Inattention			None				Intersecting Road Decreasing Milepost
State Route	Clark	139TH	20TH		005LX00747			0.4	No	E528339	REAR END	NB	NB	03/23/2016	12:24	Possible Injury	1	0	2	0	0	Passenger Car	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - sideswipe	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	Vehicle Stopped	Vehicle Stopped	Inattention			None				Intersecting Road Increasing Milepost
State Route	Clark	139TH	20TH		005LX00747			0.4	No	E571748	BIKE	EB		08/05/2016	15:54	Suspected Serious Injury	1	0	1	0	1	Pickup, Panel Truck or Vanette under 10,000 lb		At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Vehicle - Pedalcyclist	Going Straight Ahead		West	East			None					Disregard Stop and Go Light		Lane 1 LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
State Route	Clark	139TH	20TH		005LX00747			0.4	No	E661065	REAR END	NB	NB	04/12/2017	21:00	No Apparent Injury	0	0	2	0	0	Passenger Car	Passenger Car	At Intersection and Related	Raining	Wet	Dark-Street Lights On	From same direction - both going straight - one stopped - rear end	Slowing	Stopped at Signal or Stop Sign	South	North	Vehicle Stopped	Vehicle Stopped	Exceeding Reas. Safe Speed			Driver Not Distracted				Intersecting Road Increasing Milepost
State Route	Clark	139TH	20TH		005LX00747			0.4	No	E707802	FIXED OBJECT	NB		09/02/2017	16:49	Suspected Serious Injury	1	0	1	0	0	Passenger Car		At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Retaining Wall (concrete, rock, brick, etc.)	Going Straight Ahead		South	North			Apparently Asleep							Past Right Shoulder LX Decreasing Milepost
County Road	Clark	139TH	3RD CT	Intersection	94200			2.35	No	E707132	TURN	EBL	WB	08/24/2017	08:53	No Apparent Injury	0	0	3	0	0	Passenger Car	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	West	North	East	West	Inattention	Other Driver Distractions Inside Vehicle	Did Not Grant RW to Vehicle	None					Lane of Primary Trafficway
County Road	Clark	139TH	FM DRIVEWAY	Driveway	41151			0.11	No	E609799	FIXED OBJECT	EBR		11/02/2016	11:01	Suspected Minor Injury	2	0	1	0	0	Passenger Car		At Driveway	Clear or Partly Cloudy	Dry	Daylight	Utility Pole	Making Right Turn		West	South			Exceeding Stated Speed Limit							Past the Outside Shoulder of Primary Trafficway
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E363284	TURN	EB	NBL	09/25/2014	14:55	No Apparent Injury	0	0	2	0	0	Passenger Car	Passenger Car	At Intersection and Related	Overcast	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	West	East	South	West	Did Not Grant RW to Vehicle			None				Lane 2 LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E363665	SIDESWIPE OVERTAKING	NBR	NBR	10/10/2014	22:13	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	Same direction -- both turning right - both moving -- sideswipe	Making Right Turn	Making Right Turn	South	East	South	East	Under Influence of Alcohol	Improper Turn		None				Lane 1 LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E399508	TURN	EB	NBL	02/07/2015	13:01	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Raining	Wet	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	West	East	South	West	Disregard Stop and Go Light			None				Left Turn Lane LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E413503	TURN	NBL	EB	04/02/2015	13:25	No Apparent Injury	0	0	2	0	0	Passenger Car	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Making Left Turn	Going Straight Ahead	South	West	West	East	None			None				Lane 1 LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E417773	REAR END	WB	WB	04/17/2015	08:48	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead	Going Straight Ahead	East	West	East	West	Disregard Stop and Go Light			Disregard Stop and Go Light				Lane 2 LX Decreasing Milepost
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E419956	TURN	WB	NBL	04/27/2015	10:31	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	East	West	South	West	Disregard Stop and Go Light			None				Lane 2 LX Decreasing Milepost

OFFICER REPORTED CRASHES THAT OCCURRED *at* OR *within 300 feet of* MUTIPLE ROAD SEGMENTS IN CLARK COUNTY

01/01/2013 - 12/31/2017 - *See 2nd tab for road segment information*

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JURISDICTION	COUNTY	PRIMARY ROAD	SECONDARY ROAD	LOCATION	PRIMARY TRAFFICWAY	INTERSECTING TRAFFICWAY	CO ONLY INTERSECTING COUNTY ROAD MILEPOST	MILEPOST	SR ONLY HISTORY / SUSPENSE IND	REPORT NUMBER	COLLISION TYPE	DIRECTION 1	DIRECTION 2	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	# FAT	# VEH	# PEDS	# BIKES	VEHICLE 1 TYPE	VEHICLE 2 TYPE	JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION	LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	VEHICLE 2 ACTION	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 3 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 2)	BICYCLIST CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E436791	TURN	EB	NBL	06/13/2015	10:55	No Apparent Injury	0	0	2	0	0	Passenger Car	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Slowing	Making Left Turn	West	East	South	West	Operating Defective Equipment			Driver Not Distracted				Lane 2 LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E452385	TURN	EB	NBL	08/15/2015	11:55	Possible Injury	2	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	West	East	South	West	None			None				Lane 1 LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E469639	TURN	WB	NBL	10/09/2015	16:10	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Overcast	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	East	West	South	West	Disregard Stop and Go Light			None				Lane 2 LX Decreasing Milepost
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E477145	TURN	WB	NBL	10/22/2015	13:33	No Apparent Injury	0	0	2	0	0	Passenger Car	School Bus	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	East	West	South	West	Disregard Stop and Go Light	Inattention		None				Lane 2 LX Decreasing Milepost
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E500696	TURN	NBR	WB	12/30/2015	08:55	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Ice	Daylight	Entering at angle	Making Right Turn	Going Straight Ahead	South	East	East	West	Other			None				Lane 2 LX Decreasing Milepost
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E519069	TURN	EB	NBL	02/25/2016	08:37	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	West	East	South	West	Other			Other				Lane 1 LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E523460	REAR END	EB	EB	03/08/2016	19:46	Possible Injury	2	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Raining	Wet	Dark-Street Lights On	From same direction - both going straight - one stopped - rear end	Going Straight Ahead	Stopped at Signal or Stop Sign	West	East	Vehicle Stopped	Vehicle Stopped	Follow Too Closely			None				Lane 2 LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E549947	TURN	EB	NBL	05/28/2016	12:19	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	West	East	South	West	None			None				Lane 2 LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E613276	TURN	EB	NBL	11/23/2016	06:17	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Raining	Wet	Dark-Street Lights On	Entering at angle	Slowing	Making Left Turn	West	East	South	North	Did Not Grant RW to Vehicle			None				Lane 1 LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E618508	TURN	NBR	EB	12/08/2016	16:18	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Snowing	Snow/Slush	Dusk	Entering at angle	Making Right Turn	Slowing	South	East	East	West	Exceeding Reas. Safe Speed			None				Lane 3 LX Decreasing Milepost
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E676348	TURN	EB	NBL	05/24/2017	08:55	Possible Injury	1	0	2	0	0	Passenger Car	Passenger Car	At Intersection and Related	Overcast	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	West	East	South	Northwest	Disregard Stop and Go Light			None				Lane 1 LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E730294	TURN	EB	NBL	10/31/2017	12:07	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	West	East	South	West	Disregard Stop and Go Light			None				Lane 1 LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E730299	TURN	EB	NBL	11/01/2017	17:12	No Apparent Injury	0	0	2	0	0	Passenger Car	Bus or Motor Stage	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	West	East	South	West	Under Influence of Alcohol			None				Lane 1 LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)

OFFICER REPORTED CRASHES THAT OCCURRED *at* OR *within 300 feet of* MUTIPLE ROAD SEGMENTS IN CLARK COUNTY

01/01/2013 - 12/31/2017 - *See 2nd tab for road segment information*

Under 23 U.S. Code § 409 and 23 U.S. Code § 148, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

JURISDICTION	COUNTY	PRIMARY ROAD	SECONDARY ROAD	LOCATION	PRIMARY TRAFFICWAY	INTERSECTING TRAFFICWAY	CO ONLY INTERSECTING COUNTY ROAD MILEPOST	MILEPOST	SR ONLY HISTORY / SUSPENSE IND	REPORT NUMBER	COLLISION TYPE	DIRECTION 1	DIRECTION 2	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	# FAT	# VEH	# PEDS	# BIKES	VEHICLE 1 TYPE	VEHICLE 2 TYPE	JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION	LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	VEHICLE 2 ACTION	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 3 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 2)	BICYCLIST CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)
State Route	Clark	139TH	I5 NB OFF	Intersection	005LX00747			0.28	No	E750176	TURN	WB	NBL	12/19/2017	17:10	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Raining	Wet	Dark-Street Lights Off	Entering at angle	Going Straight Ahead	Making Left Turn	East	West	South	West	Disregard Stop and Go Light			None				Lane 2 LX Decreasing Milepost
State Route	Clark	139TH	I5 SB ON	Intersection	005LX00747			0.18	No	E640532	TURN	EB	WBL	02/08/2017	07:35	Possible Injury	1	0	2	0	0	Passenger Car	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Raining	Wet	Dawn	From opposite direction - one left turn - one straight	Going Straight Ahead	Making Left Turn	West	East	East	South	Disregard Stop and Go Light			Other Driver Distractions Inside Vehicle				Lane 1 LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
State Route	Clark	139TH	I5/205 NB ON	Intersection	005LX00747			0.33	No	E364586	TURN	EBL	WB	10/06/2014	19:51	Possible Injury	1	0	2	0	0	Passenger Car	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	West	North	East	West	Did Not Grant RW to Vehicle			None				Lane 2 LX Decreasing Milepost
State Route	Clark	139TH	I5/205 NB ON	Intersection	005LX00747			0.33	No	E536480	REAR END	EBL	EBL	04/20/2016	12:16	Possible Injury	1	0	2	0	0	Passenger Car	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead	Slowing	West	North	West	North	Driver Interacting with Passengers, Anim	Driver Adjusting Audio or Entertainment		None				Left Turn Lane LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
State Route	Clark	139TH	I5/205 NB ON	Intersection	005LX00747			0.33	No	E741237	REAR END	EBL	EBL	11/17/2017	15:43	Unknown	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Overcast	Dry	Dusk	From same direction - both going straight - one stopped - rear end	Going Straight Ahead	Stopped for Traffic	West	North	West	North	Inattention	Follow Too Closely		None				Left Turn Lane LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)
County Road	Clark	139TH	TENNEY	106 FEET E OF TENNEY SB	41151	41150	0.24	~~0.29~~ 0.00	No	E551554	TURN	WB	SBL	06/01/2016	14:35	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	East	West	North	East	Disregard Stop and Go Light			None				Lane of Primary Trafficway
County Road	Clark	139TH	TENNEY SB	Median	41151	94200	2.42	0.25	No	E219049	FIXED OBJECT	EBR		01/01/2013	12:30	No Apparent Injury	0	0	1	0	0	Passenger Car		At Intersection and Related	Clear or Partly Cloudy	Ice	Daylight	Fence	Making Right Turn		West	South			Exceeding Reas. Safe Speed							Median of Primary Trafficway
County Road	Clark	139TH	TENNEY SB	Roadway	41151	94200	2.35	0.31	No	E464215	SIDESWIPE OVERTAKING	WB	WBR	09/23/2015	14:13	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - sideswipe	Changing Lanes	Going Straight Ahead	West	East	West	Southeast	Did Not Grant RW to Vehicle			None				Lane of Primary Trafficway
County Road	Clark	139TH	TENNEY SB	Roadway	94200	41151	0.31	2.35	No	E422144	REAR END	WB	WB	05/04/2015	17:09	Possible Injury	1	0	2	0	0	Passenger Car	Passenger Car	At Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear end	Changing Lanes	Stopped for Traffic	East	West	Vehicle Stopped	Vehicle Stopped	Follow Too Closely			None				Lane of Primary Trafficway
County Road	Clark	139TH	TENNEY SB	Roadway	94200			2.35	No	E692483	FIXED OBJECT	WB		07/03/2017	15:20	Possible Injury	1	0	2	0	0	Passenger Car		Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	Metal Sign Post	Going Straight Ahead		East	West			Other	Exceeding Reas. Safe Speed						Median of Primary Trafficway
County Road	Clark	139TH	TENNEY SB	106 FT E OF TENNEY SB	94200	41151	0.31	2.37	No	E294446	FIXED OBJECT	EB		12/21/2013	01:16	Possible Injury	1	0	1	0	0	Passenger Car		At Intersection and Related	Raining	Wet	Dark-Street Lights On	Curb, Raised Traffic Island or Raised Median Curb	Other*		West	East			Operating Defective Equipment	Exceeding Reas. Safe Speed						Other Location (City/County/Misc. Trafficway)
County Road	Clark	139TH		211 FT W OF 10TH	41151			0.04	No	E719347	SIDESWIPE OVERTAKING	WB	WB	09/15/2017	14:12	No Apparent Injury	0	0	2	0	0	School Bus	School Bus	Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - sideswipe	Going Straight Ahead	Changing Lanes	East	West	East	West	None			Inattention	Did Not Grant RW to Vehicle			Lane of Primary Trafficway
County Road	Clark	139TH		160 FT E OF TENNEY SB	41151			0.28	No	E523715	SIDESWIPE OVERTAKING	WB	WB	03/11/2016	09:07	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Not Related	Overcast	Wet	Daylight	From same direction - both going straight - both moving - sideswipe	Changing Lanes	Going Straight Ahead	East	West	East	West	Did Not Grant RW to Vehicle			None				Lane of Primary Trafficway
County Road	Clark	139TH		422 FT W OF 7TH AVE	94200			1.99	No	E313568	BIKE	WB		03/11/2014	17:15	Suspected Serious Injury	1	0	1	0	1	Pickup, Panel Truck or Vanette under 10,000 lb		Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	Vehicle - Pedalcyclist	Going Straight Ahead		East	West			None					Inattention		Lane of Primary Trafficway
State Route	Clark	139TH		106 FT E OF I5 SB NB OFF	005LX00747			0.3	No	E696813				07/30/2017	13:20	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - sideswipe	Changing Lanes	Going Straight Ahead	West	East	West	East	Did Not Grant RW to Vehicle			None				Left Turn Lane LX Increasing Milepost (Prior to 2002 Impact Location Code was not lane specific)

OFFICER REPORTED CRASHES THAT OCCURRED *at* OR *within 300 feet of* MUTIPLE ROAD SEGMENTS IN CLARK COUNTY

01/01/2013 - 12/31/2017 - *See 2nd tab for road segment information*

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JURISDICTION	COUNTY	PRIMARY ROAD	SECONDARY ROAD	LOCATION	PRIMARY TRAFFICWAY	INTERSECTING TRAFFICWAY	CO ONLY INTERSECTING COUNTY ROAD MILEPOST	MILEPOST	SR ONLY HISTORY / SUSPENSE IND	REPORT NUMBER	COLLISION TYPE	DIRECTION 1	DIRECTION 2	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	# FAT	# VEH	# PEDS	# BIKES	VEHICLE 1 TYPE	VEHICLE 2 TYPE	JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION	LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	VEHICLE 2 ACTION	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 3 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 2)	BICYCLIST CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)
County Road	Clark	20TH	139TH	Intersection	43110	41120	0.5	0.4	No	E704414	REAR END	NB	NB	08/23/2017	14:07	No Apparent Injury	0	0	4	0	0	Passenger Car	Pickup, Panel Truck or Vanette under 10,000 lb	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear end	Going Straight Ahead	Stopped for Traffic	South	North	South	West	Inattention	Follow Too Closely		None				Lane of Primary Trafficway
County Road	Clark	20TH	139TH	Intersection	43110	43180	0.49	0.4	No	E234629	REAR END	NB	NB	03/26/2013	10:37	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Ice	Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead	Starting in Traffic Lane	North	South	North	South	Follow Too Closely			None				Lane of Primary Trafficway
County Road	Clark	20TH		211 FT S OF 139TH	43110			0.36	No	E632070	FIXED OBJECT	NB		01/15/2017	11:14	No Apparent Injury	0	0	1	0	0	Pickup, Panel Truck or Vanette under 10,000 lb		Not at Intersection and Not Related	Clear or Partly Cloudy	Ice	Daylight	Bridge Rail - Through, Over or Under	Going Straight Ahead		South	North			Exceeding Reas. Safe Speed							Outside Shoulder of Primary Trafficway
County Road	Clark	20TH		211 FT N OF 139TH	43110			0.44	No	E566222	PED	NB		07/16/2016	21:45	Possible Injury	1	0	1	1	0	Pickup, Panel Truck or Vanette under 10,000 lb		Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	Vehicle going straight hits pedestrian	Slowing		North	South			Driver Not Distracted						Under Influence of Alcohol	Lane of Primary Trafficway
County Road	Clark	20TH		264 FT N OF 139TH	43110			0.45	No	E413497	TURN	NBL	SB	03/14/2015	12:41	No Apparent Injury	0	0	2	0	0	Passenger Car	Passenger Car	At Driveway	Raining	Wet	Daylight	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	South	Northwest	North	South	Did Not Grant RW to Vehicle			None				Lane of Primary Trafficway
County Road	Clark	20TH		422 FT N OF 139TH	43110			0.48	No	E540347	PED	EBR		05/03/2016	09:06	Suspected Minor Injury	1	0	1	1	0	Pickup, Panel Truck or Vanette under 10,000 lb		At Driveway	Clear or Partly Cloudy	Dry	Daylight	Vehicle turning right hits pedestrian	Making Right Turn		West	South			Did Not Grant RW to Vehicle						None	Lane of Primary Trafficway
State Route	Clark	I5 NB OFF	139TH	Intersection	005P100713			0.34	No	E728499	PED	NBR		10/25/2017	15:32	Possible Injury	1	0	1	1	0	Pickup, Panel Truck or Vanette under 10,000 lb		At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Vehicle turning right hits pedestrian	Making Right Turn		South	East			Inattention						None	Lane 1 Off Ramp Increasing Milepost Side of Mainline
State Route	Clark	I5 NB OFF		Ramp	005P100713			0.29	No	E503124	FIXED OBJECT	NB		01/05/2016	23:19	No Apparent Injury	0	0	2	0	0	Passenger Car		Not at Intersection and Not Related	Overcast	Ice	Dark-Street Lights On	Concrete Barrier/Jersey Barrier - Face	Slowing		South	North			None							Right Shoulder Off Ramp Increasing Milepost Side of Mainline
State Route	Clark	I5 NB OFF		Ramp	005P100713			0.32	No	E503516	FIXED OBJECT	NB		01/05/2016	23:30	No Apparent Injury	0	0	1	0	0	Passenger Car		Not at Intersection and Not Related	Clear or Partly Cloudy	Ice	Dark-Street Lights On	Concrete Barrier/Jersey Barrier - Face	Going Straight Ahead		South	East			None							Left Shoulder Off Ramp Increasing Milepost Side of Mainline
State Route	Clark	I5/205 NB ON	139TH	Ramp	005Q100824			0	Yes	E313659	RAMP			03/04/2014	09:00	No Apparent Injury	0	0	2	0	0	Bus or Motor Stage	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	East	West	North	Northwest	None			Inattention				Lane 2 On Ramp Increasing Milepost Side of Mainline
County Road	Clark	TENNEY	10TH	Intersection	94200	41150	0	2.81	No	E260825	TURN	WB	SBL	07/19/2013	13:39	No Apparent Injury	0	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	East	West	North	East	Disregard Stop and Go Light			None				Lane of Primary Trafficway
County Road	Clark	TENNEY	10TH	Intersection	94200	41150	0	2.81	No	E269505	TURN	WB	SBL	09/08/2013	10:25	Possible Injury	1	0	2	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	East	West	North	East	Disregard Stop and Go Light			None				Lane of Primary Trafficway
County Road	Clark	TENNEY	10TH	Intersection	94200	41150	0	2.81	No	E350435	REAR END	EB	EB	08/18/2014	18:00	Possible Injury	4	0	4	0	0	Pickup, Panel Truck or Vanette under 10,000 lb	Passenger Car	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear end	Going Straight Ahead	Stopped at Signal or Stop Sign	West	East	Vehicle Stopped	Vehicle Stopped	Follow Too Closely			None				Lane of Primary Trafficway
County Road	Clark	TENNEY	10TH	Intersection	94200	41150	0	2.81	No	E373361	TURN	WB	SBL	11/09/2014	14:26	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup, Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	East	West	North	East	Disregard Stop and Go Light			None				Lane of Primary Trafficway
County Road	Clark	TENNEY	10TH	Intersection	94200	41150	0	2.81	No	E460639	TURN	WB	SBL	09/11/2015	15:45	Suspected Minor Injury	1	0	2	0	0	Passenger Car	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	East	West	North	East	Disregard Stop and Go Light			None				Lane of Primary Trafficway
County Road	Clark	TENNEY NB	139TH	106 FT S OF 139TH	41157			0.13	No	E359293	REAR END	NB	NB	09/24/2014	07:29	No Apparent Injury	0	0	2	0	0	Passenger Car	School Bus	At Intersection and Related	Raining	Wet	Daylight	From same direction - both going straight - one stopped - rear end	Changing Lanes	Starting From Parked Position	South	North	South	North	Other Driver Distractions Inside Vehicle			None				Lane of Primary Trafficway
County Road	Clark	TENNEY SB	139TH	53 FT E OF 139TH	94200			2.36	No	E636153	FIXED OBJECT	WB		01/22/2017	03:38	No Apparent Injury	0	0	1	0	0	Pickup, Panel Truck or Vanette under 10,000 lb		Not at Intersection and Not Related	Raining	Wet	Dark-Street Lights On	Fence	Going Straight Ahead		East	West			Inattention							Past the Outside Shoulder of Primary Trafficway

APPENDIX F

IN-PROCESS DATA

AM	Phase 1: 179th Street Commercial Primary In 36 A Out 8	Phase 2:179th Street Commercial Primary In 53 B Out 13	Vancouver Clinic at Salmon Creek In 227 C Out 60	iTech Preparatory School In 206 D Out 129	E	AM In-Process Summary F
NE 179th Street/ NE Delfel Road South	1 1 1	3 1 1	2 1 1	1	1	0 0 0 0 0 6 3 0 0 1 0 0 0
NE 179th Street/ NE Delfel Road North	1 1 2	3 1 2	2 1 2	2	2	0 0 1 0 0 6 3 0 0 2 0 0 0
NE 179th Street/ I-5 SB Ramps	31 1 1 18 3	41 4 1 24 3	2 1 3	3	3	0 0 72 0 0 5 3 2 42 3 0 0 0
NE 179th Street/ I-5 NB On-Ramp	16 32 19 4	27 45 25 4	1 4	4	4	0 0 0 0 43 77 45 0 0 4 0 0 0
NE 179th Street/ NE 10th Avenue/ I-5 NB Off-Ramp	1 32 35 5 22	2 45 52 5 36	1 5 1	5	5	0 0 4 0 0 77 87 0 0 5 1 0 58

AM	Phase 1: 179th Street Commercial Primary In 36 A Out 8	Phase 2:179th Street Commercial Primary In 53 B Out 13	Vancouver Clinic at Salmon Creek In 227 C Out 60	iTech Preparatory School In 206 D Out 129	E	AM In-Process Summary F
NE 179th Street/ NE 15th Avenue	6 38 2 -1 -3 56 11	6 7 2 2 2 20 10	6 1	6	6	6 45 0 4 0 0 1 -1 77 21
NE 179th Street/ NE 29th Avenue	7 2 2 1 4	7 4 3 1 2 1 5	7 1 3 2 9	7	7	7 6 1 3 5 2 0 1 0 3 9 1 9
NE 149th Street/ NE 10th Avenue	8 5	8 2	8 2 2 5	8	8	8 2 0 0 0 2 0 0 0 0 0 5 0
NE 10th Avenue/ NE 141st Street	9 0 0	9 2	9 2 7 2	9	9	9 0 2 0 0 7 0 0 0 0 0 0 0
NE 139th Street/ NE Tenney Road	10 0 19	10 3	10 11 3	10 5 3	10	10 0 0 0 0 0 19 6 0 0

AM	Phase 1: 179th Street Commercial Primary In 36 A Out 8	Phase 2:179th Street Commercial Primary In 53 B Out 13	Vancouver Clinic at Salmon Creek In 227 C Out 60	iTech Preparatory School In 206 D Out 129	E	AM In-Process Summary F
NE 139th Street/ NE 10th Avenue	11	3 11	7 2 3 11	5 3 11	11	0 0 7 0 19 0 2 6 0 11 0 0 0
NE 139th Street/ RIRO Access	12	3 12	18 5 12	5 3 12	12	0 0 0 0 26 0 0 8 0 12 0 0 0
NE 139th Street/ I-5 SB On-Ramp	13	3 13	18 5 6 13	5 3 38 13	3 2 31 13	0 0 0 0 29 0 0 10 75 13 0 0 0
NE 139th Street/ I-5 NB Off-Ramp	14	3 14	18 11 14 46	5 41 14 62	3 33 14 46	0 0 0 0 29 0 0 85 0 14 0 0 154
NE 139th Street/ I-205 NB On-Ramp	15	3 2 15	64 11 12 15	67 41 15	49 33 15	0 0 0 3 180 0 13 86 0 15 0 0 0

AM	Phase 1: 179th Street Commercial Primary In 36 A Out 8	Phase 2:179th Street Commercial Primary In 53 B Out 13	Vancouver Clinic at Salmon Creek In 227 C Out 60	iTech Preparatory School In 206 D Out 129	E	AM In-Process Summary F
NE 139th Street/ NE 20th Avenue	16	16 2	64 2 23 3 16 47	67 41 16	49 33 16	0 0 6 0 180 0 16 2 0 47 2 97 3
NE 139th Street/ NE 23rd Avenue	17	17	47 89 17 21	67 41 17	49 33 17	0 0 0 0 163 89 17 21 0 0 0 91 0
NE 139th Street/ NE 29th Avenue	18	18	3 26 18 13 4 5 2	67 8 18 41 6	49 7 18 33 4	3 0 142 18 13 19 0 79 12 0 0 0 0
NE 136th Street/ NE 10th Avenue	19	19	19	19	19	0 0 0 0 0 0 19 0 0 0 0 0 0
NE Tenney Road/ NE 10th Avenue	20	20	20	20	20	0 0 0 0 0 0 20 0 0 0 0 0 0

AM	Phase 1: 179th Street Commercial Primary In 36 A Out 8	Phase 2:179th Street Commercial Primary In 53 B Out 13	Vancouver Clinic at Salmon Creek In 227 C Out 60	iTech Preparatory School In 206 D Out 129	E	AM In-Process Summary F
NE 134th Street/ I-5 SB On-Ramp	21	2 21	6 21	5 4 14 21	5 3 11 21	0 12 0 21
NE 134th Street/ I-5 NB Off-Ramp	22	22	6 22	5 18 22 26	5 14 22 17	0 10 0 22
NE 134th Street/ I-205 SB Off-Ramp/ Highway 99	23	2 1 23	44 6 23	31 18 23	22 14 23	0 55 0 23
NE 134th Street/ NE 20th Avenue	24	1 2 24	3 35 9 6 3 24 12 12	31 18 24	22 14 24	35 64 0 24
NE 134th Street/ I-205 SB On-Ramp	25	2 25	21 9 12 25	31 18 26 25	22 14 21 25	2 74 0 25

AM In-Process Summary			
0	0	0	
0 8 31			0 38 0
0	0	0	
0 39 0			0 38 3
0	0	44	
0 41 59			1 3 0
0	12	12	
0	0	0	

AM	Phase 1: 179th Street Commercial Primary In 36 A Out 8	Phase 2:179th Street Commercial Primary In 53 B Out 13	Vancouver Clinic at Salmon Creek In 227 C Out 60	iTech Preparatory School In 206 D Out 129	E	AM In-Process Summary F
NE 134th Street/ I-205 NB Off-Ramp/ NE 23rd Avenue	26	26	21 15 6 26 48	31 44 26 41	22 35 26 32	21 0 0 15 59 0 26 0 48 73 0 79 0
NE 134th Street/ NE 29th Avenue	27	27	5 6 20 27	75 72 47 44 27	55 54 37 36 27	0 0 135 6 126 0 27 0 0 0 104 80 0
NE 134th Street/ NE Salmon Creek Avenue	28	28	1 4 4 28 16	147 91 14 28 23	109 73 11 28 17	0 0 0 0 257 4 28 16 0 40 0 168 25
Highway 99/ NE 20th Avenue	29	29	6 29 24	29	29	0 6 0 0 0 0 29 0 24 0 0 0 0
Highway 99/ NE 117th Street	30	30	2 2 1 7 2 30 9	30	30	2 2 1 7 0 0 30 0 9 0 2 0 0

AM
PM

PM	179th Street Commercial Center Primary In 77 G Out 94	Phase 2:179th Street Commercial Primary In 128 B Out 157	Vancouver Clinic at Salmon Creek In 120 C Out 308	iTech Preparatory School In 80 D Out 129	 K	PM In-Process Summary L
NE 179th Street/ NE Delfel Road South	2 5 1	6 8 1	1 3 1	 1	 1	0 0 0 0 0 9 16 0 0 1 0 0 0
NE 179th Street/ NE Delfel Road North	1 2 1 5 2	1 2 1 8 2	2 3 2	 2	 2	0 0 2 0 0 9 16 0 0 2 0 0 0
NE 179th Street/ I-5 SB Ramps	80 3 6 76 3	137 7 9 129 3	1 3 3	 3	 3	0 0 217 0 0 10 18 1 205 3 0 0 0
NE 179th Street/ I-5 NB On-Ramp	86 83 82 4	147 144 138 4	3 4	 4	 4	0 0 0 0 233 227 223 0 0 PM I 4 0 0 0
NE 179th Street/ NE 10th Avenue/ I-5 NB Off-Ramp	2 83 2 168 5	4 144 5 285 121	1 2 5 3	 5	 5	0 0 7 0 9 227 453 0 0 5 3 0 191

PM	179th Street Commercial Center Primary In 77 G Out 94				Phase 2:179th Street Commercial Primary In 128 B Out 157				Vancouver Clinic at Salmon Creek In 120 C Out 308				iTech Preparatory School In 80 D Out 129								PM In-Process Summary L			
NE 179th Street/ NE 15th Avenue																					0	0	0	
	-11			-7	20			7													0			0
	166			26	37			24	1												9			0
	6	177	31		6	46	17		6	2			6				6				204			50
																					6	225	0	48
NE 179th Street/ NE 29th Avenue		4				7				1												11	1	0
	4				7																11			0
	9			8	15			13													24			21
	7				12							5									19			5
	7	6			7	10			7		3	12	7				7				7	16	3	12
NE 149th Street/ NE 10th Avenue										1												0	1	0
																					0			0
	1				1				3												0			0
	8	1			8	2			8	8	2		8				8				5			0
																					8	11	2	0
NE 10th Avenue/ NE 141st Street		1				1				4												0	6	0
																					0			0
																					0			0
																					0			0
	9	1			9	2			9	10			9				9				9	0	13	0
																						0	0	0
NE 139th Street/ NE Tenney Road																					0			0
	4				6				6			15	2			3					18			18
																					0			0
	10	4			10	7			10				10				10				10	11	0	0

PM	179th Street Commercial Center Primary In 77 G Out 94	Phase 2:179th Street Commercial Primary In 128 B Out 157	Vancouver Clinic at Salmon Creek In 120 C Out 308	iTech Preparatory School In 80 D Out 129	K	PM In-Process Summary L
NE 139th Street/ NE 10th Avenue	1 4 11 1	1 6 11 2	4 10 6 15 11	3 2 11	11	0 0 6 0 10 18 18 0 0 11 0 3 0
NE 139th Street/ RIRO Access	5 12	7 12	10 25 12	3 2 12	12	0 0 0 0 0 24 28 0 0 12 0 0 0
NE 139th Street/ I-5 SB On-Ramp	5 13	7 13	10 25 56 13	3 2 38 13	13	0 0 0 0 0 24 28 0 94 13 0 0 0
NE 139th Street/ I-5 NB Off-Ramp	5 14	7 14	10 81 12 14	41 2 24 14	14	0 0 0 0 0 24 122 0 0 14 0 0 36
NE 139th Street/ I-205 NB On-Ramp	5 3 15	7 5 15	59 22 81 15	41 26 15	15	0 0 0 12 67 48 122 0 0 15 0 0 0

PM	179th Street Commercial Center Primary In 77 G Out 94	Phase 2:179th Street Commercial Primary In 128 B Out 157	Vancouver Clinic at Salmon Creek In 120 C Out 308	iTech Preparatory School In 80 D Out 129	K	PM In-Process Summary L
NE 139th Street/ NE 20th Avenue	16 3	16 5	16 3 34	16	16	16 8 0 34 0 0 3 0 48 0 8 181 29
NE 139th Street/ NE 23rd Avenue	17	17	17 79	17	17	17 79 0 0 0 0 0 0 56 45 0 162 0
NE 139th Street/ NE 29th Avenue	18	18	18 34 6	18 41 6	18	18 75 12 0 7 5 0 17 0 33 0 0 0
NE 136th Street/ NE 10th Avenue	19 1	19 2	19	19	19	19 0 3 0 0 0 0 0 0 0 0 0 0
NE Tenney Road/ NE 10th Avenue	20	20	20	20	20	20 0 0 0 0 0 0 1 2 0 3 16 0 1 6 1 10

PM	179th Street Commercial Center Primary In 77 G Out 94	Phase 2:179th Street Commercial Primary In 128 B Out 157	Vancouver Clinic at Salmon Creek In 120 C Out 308	iTech Preparatory School In 80 D Out 129	 K	PM In-Process Summary L
NE 134th Street/ I-5 SB On-Ramp	3 7 21	5 12 21	6 21	2 4 14 21	21	0 0 0 0 0 10 23 0 20 21 0 0 0
NE 134th Street/ I-5 NB Off-Ramp	3 7 22	5 12 22	6 12 22	2 18 10 22	22	0 0 0 0 0 10 43 0 0 22 0 0 22
NE 134th Street/ I-205 SB Off-Ramp/ Highway 99	7 3 23	12 5 23	23 12 6 23	12 18 23	23	19 0 23 0 0 32 24 0 0 23 0 0 0
NE 134th Street/ NE 20th Avenue	3 24	5 24	29 28 6 7 2 24 6 6	12 18 24	24	0 29 0 0 0 36 24 19 2 0 24 0 6 6
NE 134th Street/ I-205 SB On-Ramp	25	25	13 8 64 25	12 18 26 25	25	0 0 0 0 0 25 26 0 90 25 0 0 0

PM	179th Street Commercial Center Primary In 77 G Out 94	Phase 2:179th Street Commercial Primary In 128 B Out 157	Vancouver Clinic at Salmon Creek In 120 C Out 308	iTech Preparatory School In 80 D Out 129	 K	PM In-Process Summary L
NE 134th Street/ I-205 NB Off-Ramp/ NE 23rd Avenue	26	26	72 10 3 26	26	26	72 0 0 10 0 15 44 0 0 26 0 26 16
NE 134th Street/ NE 29th Avenue	27	27	28 3 11 27	29 47 28 44 27	27	0 0 57 3 58 28 44 0 0 27 0 0 0
NE 134th Street/ NE Salmon Creek Avenue	28	28	6 2 22 28 9	57 91 14 28 7	28	0 0 0 0 0 63 93 22 14 28 9 0 7
Highway 99/ NE 20th Avenue	29	29	31 29 12	29	29	0 31 0 0 0 0 0 0 0 29 0 12 0
Highway 99/ NE 117th Street	30	30	9 12 3 4 1 30 5	30	30	9 12 3 4 1 0 0 0 0 30 0 5 0

Level-of-Service Analysis

Figures 6 and 7 summarize the year 2017 background traffic operations analysis results at the study intersections for the weekday AM and PM peak hours. As shown, all of the study intersections are forecast to continue to operate acceptably. Appendix "D" contains the year 2017 background traffic level-of-service worksheets.

Proposed Development Plan

Vancouver Clinic Building, LLC is proposing to expand their existing operations by adding a second medical office building and additional parking to the site. The final building size is still being refined and was assumed to be up to 120,000 square feet for traffic impact assessment purposes. The new building will be co-located with the existing Vancouver Clinic, sharing both surface parking and the existing site driveways on NE 139th Street and NE 23rd Avenue. In addition, two new driveways are proposed: one located near the east end of the site on NE 139th Street and a new shared connection to an existing private driveway on NE 29th Avenue. The existing driveway on NE 29th Avenue serves ManorCare Health Services – Salmon Creek (a skilled nursing/rehabilitation services provider). All four site driveways will be accessible to both the existing and proposed Vancouver Clinic buildings. Figure 2 illustrates the concept site plan. Completion of site construction and occupancy of the new building is anticipated in late 2017.

Trip Generation

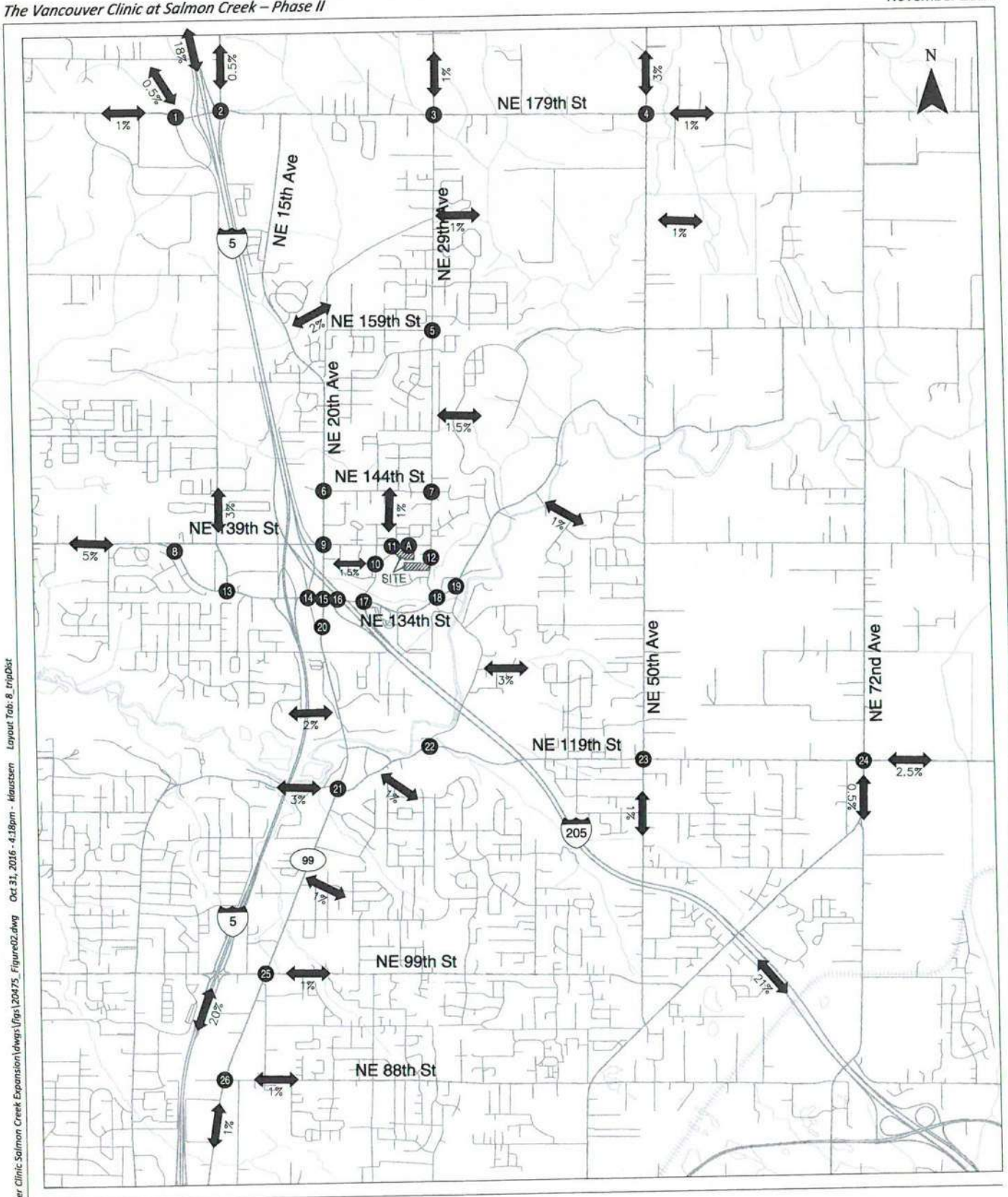
Trip generation estimates for the site were prepared based on information provided in the standard reference manual, *Trip Generation, 9th Edition*, published by the Institute of Transportation Engineers (ITE, Reference 6) as shown in Table 4.

Table 4 - Trip Generation Estimate

Land Use	ITE Land Use Code	Building Size (square feet)	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
				Total Trips	In	Out	Total Trips	In	Out
Medical-dental Office	720	120,000	4,336	287	227	60	428	120	308

Trip Distribution/Assignment

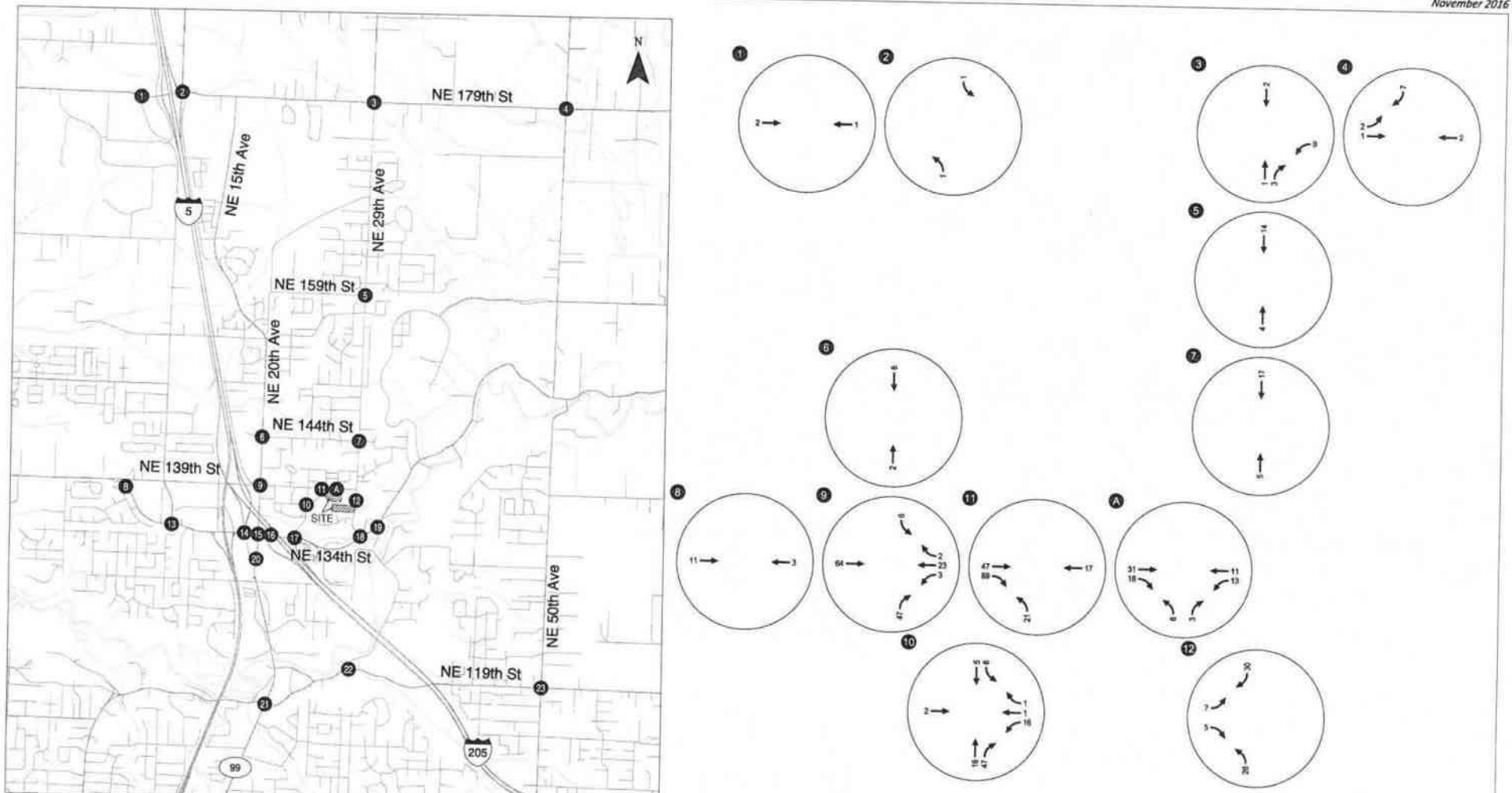
The site-generated trips shown in Table 4 were distributed onto the study area roadways based on a trip distribution pattern derived from the Southwest Washington Regional Transportation Council travel demand model (select zone analysis of Transportation Analysis Zone 378) as well as existing travel patterns in the site vicinity. Based on the 428-trip weekday PM peak hour site trip generation and per Clark County Code Section 40.350.020.D.5, a three-mile study radius is required.



Estimated Trip Distribution Pattern
Clark County, Washington

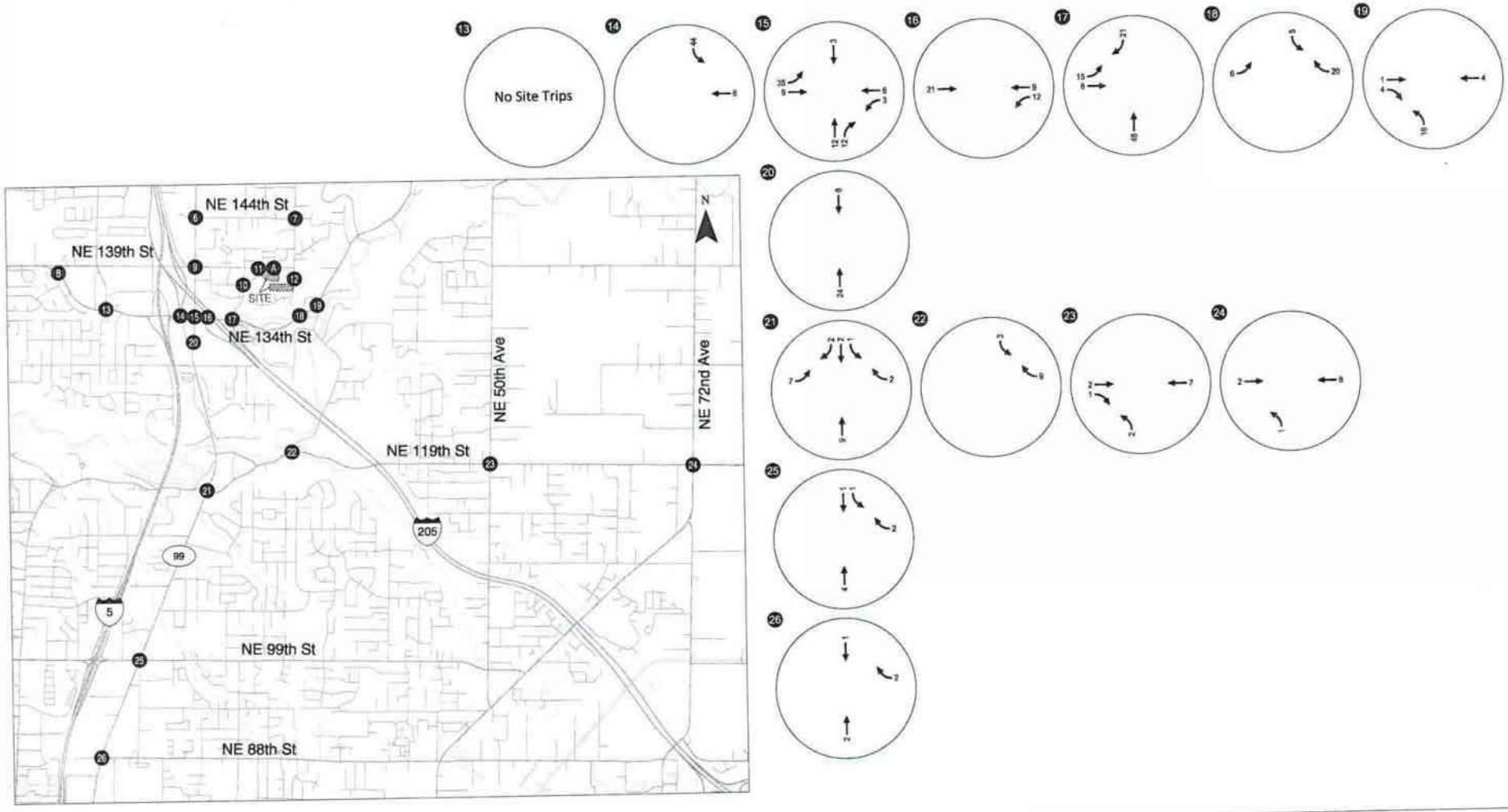
Figure **8**

H:\proj\file\20475 - Vancouver Clinic Salmon Creek Expansion\dwgs\figs\20475_ Figure02.dwg Oct 31, 2016 - 4:18pm - klaustsen Layout Tab: 8_tripDist



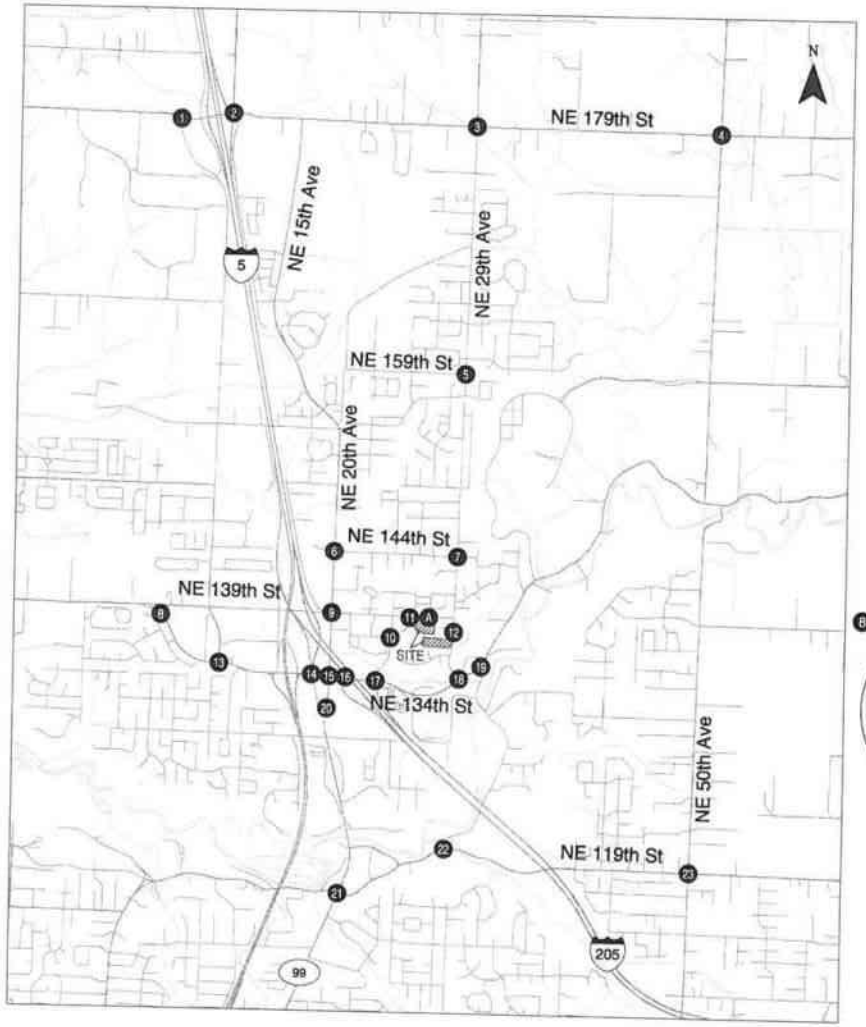
Site-Generated Trip Assignment
Weekday AM Peak Hour
Clark County, Washington

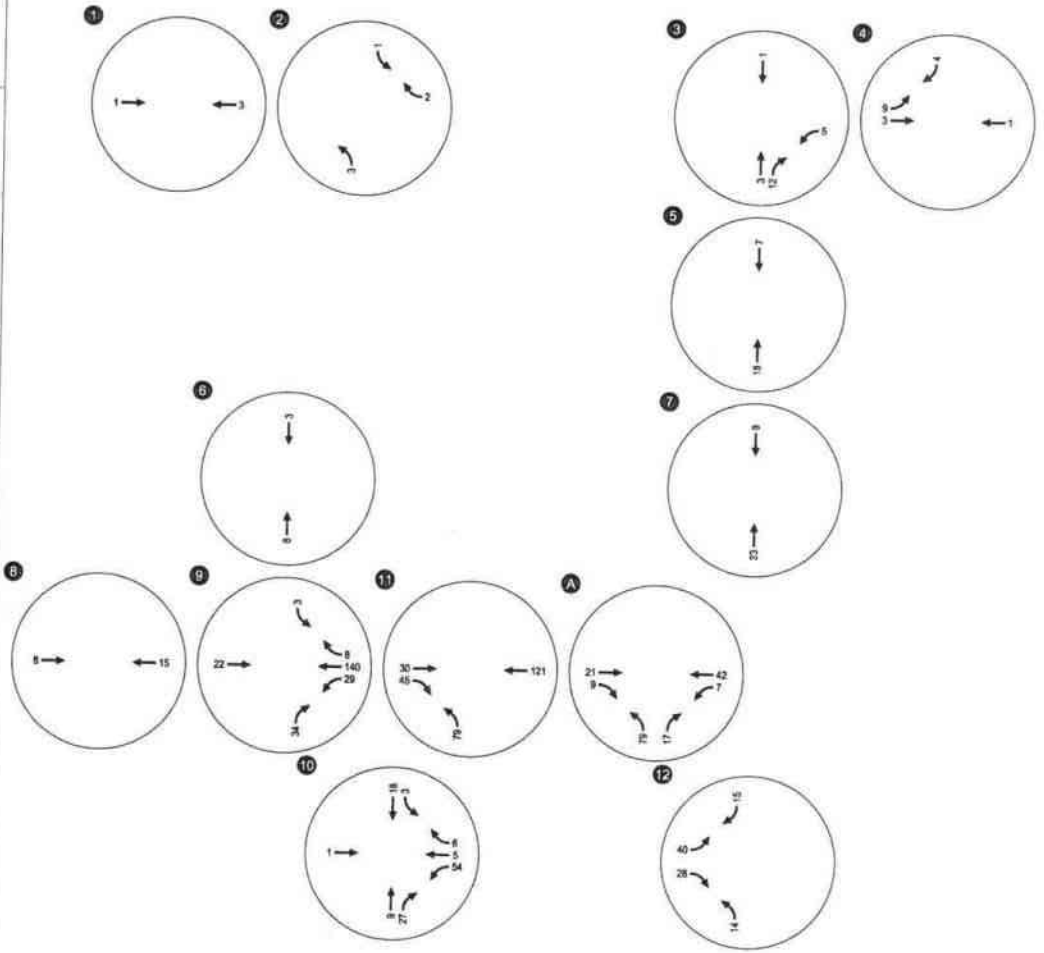
Figure **9A**



Site-Generated Trip Assignment
Weekday AM Peak Hour
Clark County, Washington

Figure **9B**



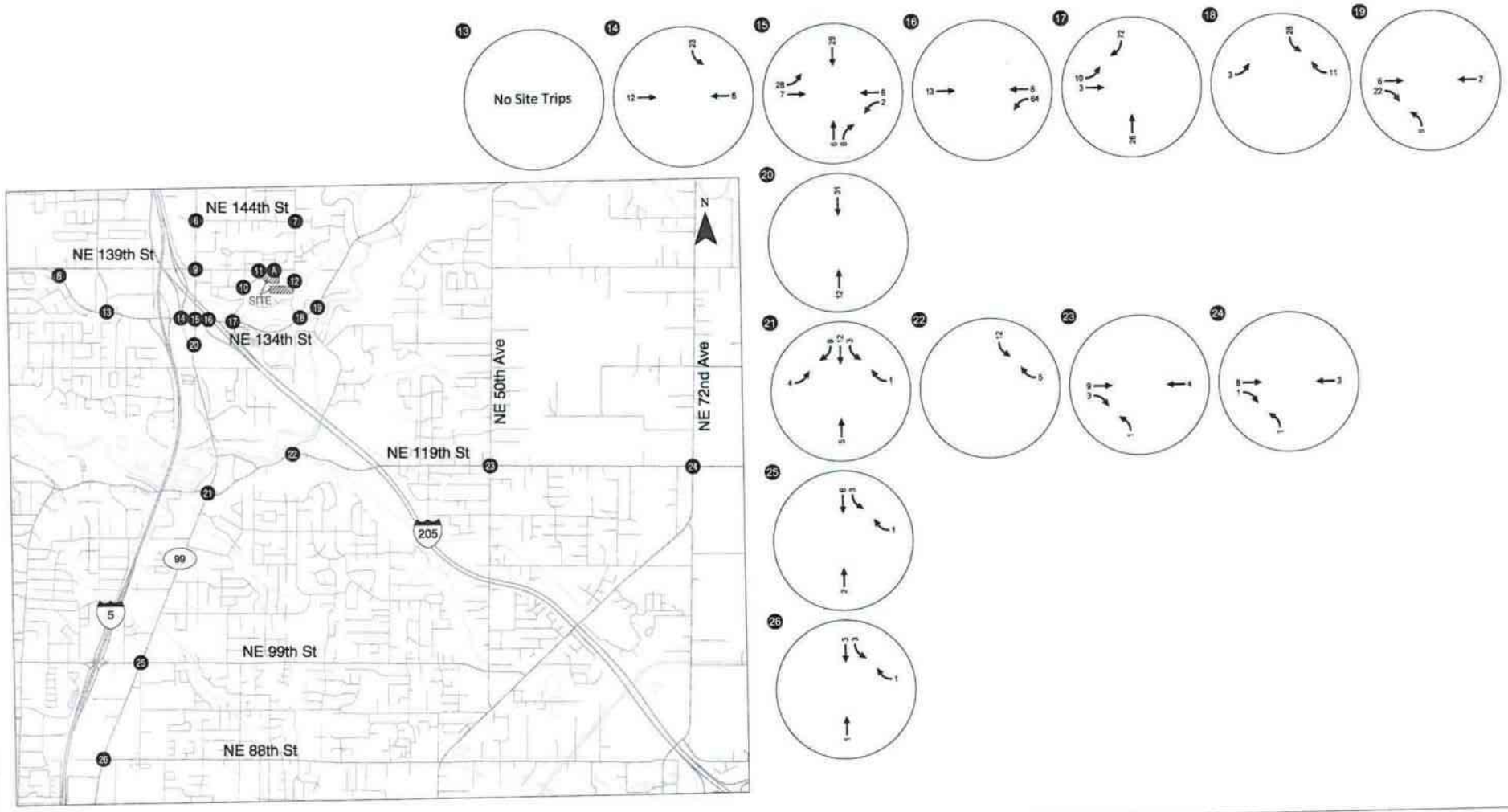


CM = CRITICAL MOVEMENT (TWSC)
LOS = INTERSECTION LEVEL OF SERVICE (AWSC) / CRITICAL MOVEMENT LEVEL OF SERVICE (TWSC)
Del = INTERSECTION AVERAGE CONTROL DELAY (AWSC) / CRITICAL MOVEMENT CONTROL DELAY (TWSC)
V/C = CRITICAL VOLUME-TO-CAPACITY RATIO
TWC = TWO-WAY STOP CONTROL
AWSC= ALL-WAY STOP CONTROL

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING/PLANNING

Site-Generated Trip Assignment
Weekday PM Peak Hour
Clark County, Washington

Figure
10A



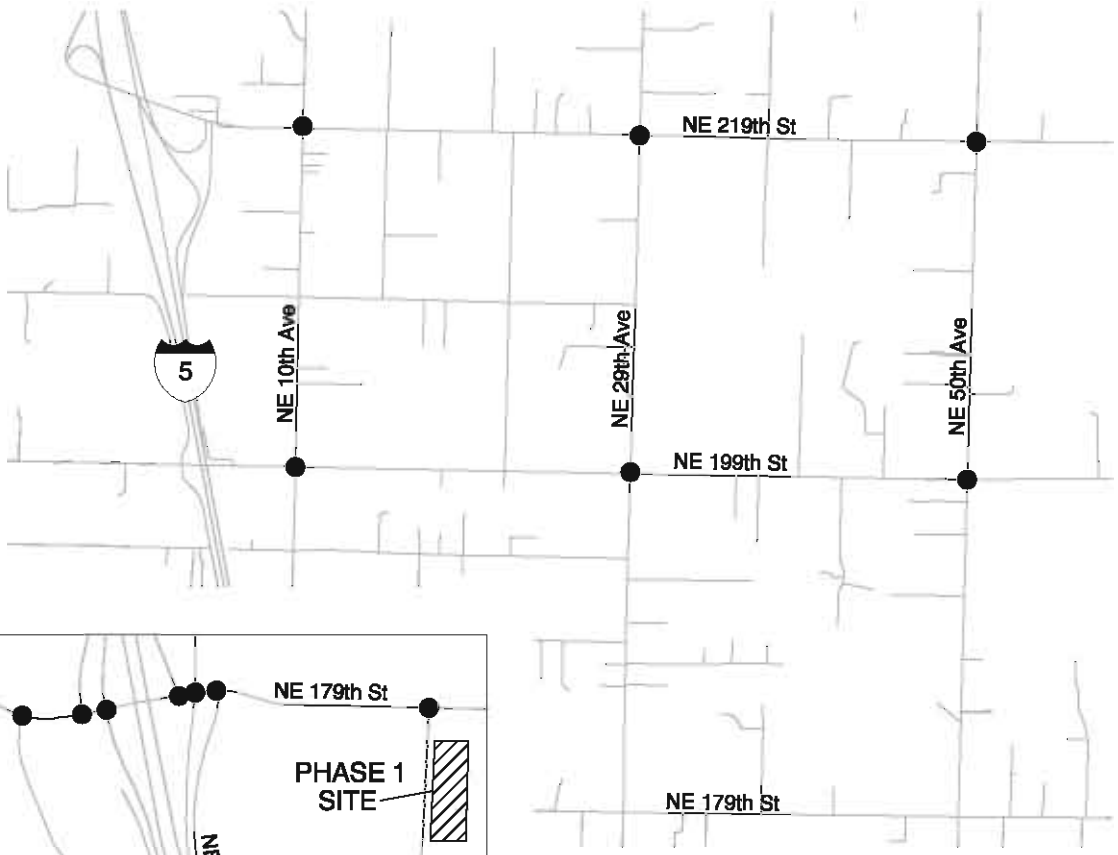
CM = CRITICAL MOVEMENT (TWSC)
LOS = INTERSECTION LEVEL OF SERVICE (AWSC) / CRITICAL MOVEMENT LEVEL OF SERVICE (TWSC)
Del = INTERSECTION AVERAGE CONTROL DELAY (AWSC) / CRITICAL MOVEMENT CONTROL DELAY (TWSC)
V/C = CRITICAL VOLUME-TO-CAPACITY RATIO
TWC = TWO-WAY STOP CONTROL
AWSC= ALL-WAY STOP CONTROL

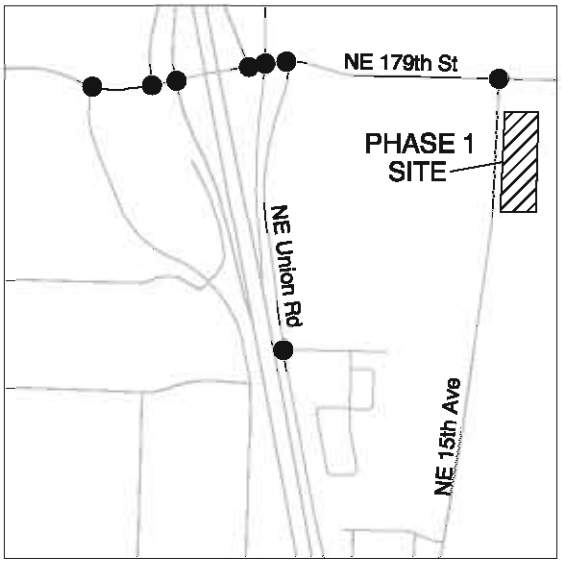
Site-Generated Trip Assignment
Weekday PM Peak Hour
Clark County, Washington

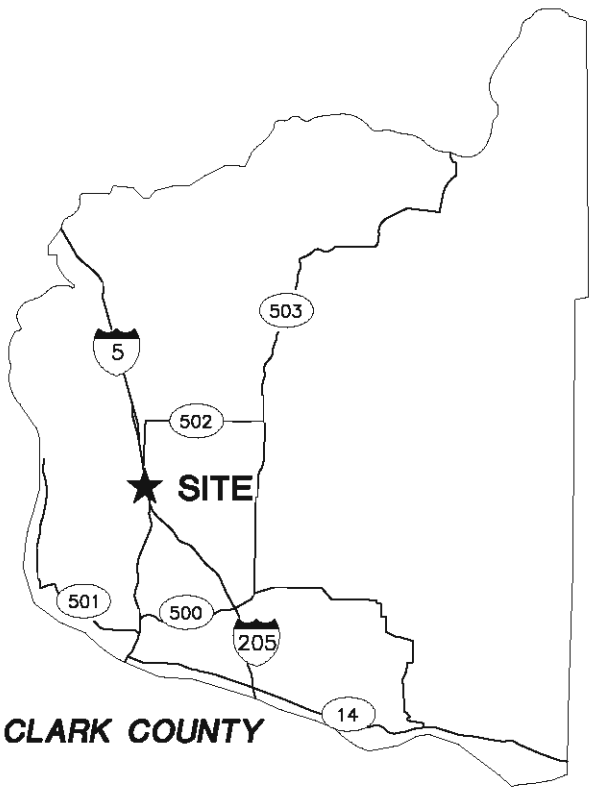
Figure
10B

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING/PLANNING

(NO SCALE)







LEGEND

● - STUDY INTERSECTIONS

SITE VICINITY MAP
CLARK COUNTY, WASHINGTON

FIGURE 1

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING

H:\proj\file\7859 - Clark County 179th Retail Rezone\dwgs\figs\7859_TIAFigs.dwg Jul 19, 2013 - 9:39am - amalinge Layout Tab: Fig01

Proposed Development Plan

Three Creeks Investors, LLC is proposing to develop the first 60,000 square feet of a 545,000 square foot integrated commercial development. Phase 1 site access is proposed via two driveways, a right-in/right-out driveway on NE 15th Avenue and a driveway connecting with a new full movement roadway located on the east side of NE 15th Avenue. Completion of site construction and occupancy of the development is anticipated in 2014 or 2015.

Trip Generation

A trip generation estimate was prepared for the proposed development based on information provided in the standard reference manual, *Trip Generation, 9th Edition*, published by the Institute of Transportation Engineers (ITE, Reference 2). The pass-by and diverted trip rates were also determined based on ITE's *Trip Generation, 9th Edition*. Based on the proposed development plan, ITE Land Use Code 820 (Shopping Center) was selected to estimate trips associated with the proposed development. Table 5 summarizes the daily, weekday a.m. and p.m. peak hour trips expected for the proposed development (daily trips have been rounded to the nearest ten).

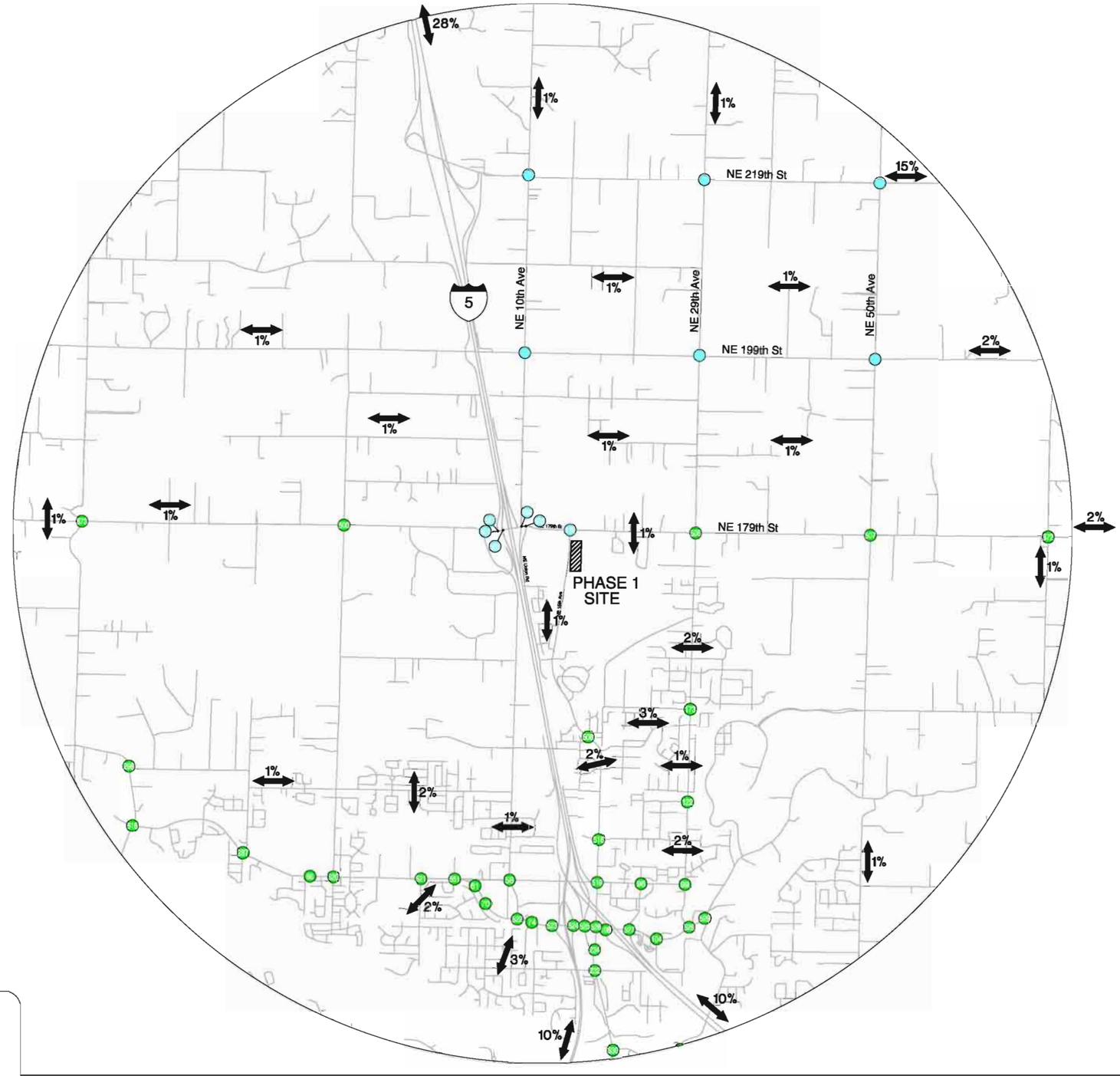
Table 5 - Trip Generation Estimate

Land Use	ITE Code	Size (Sq. Ft.)	Weekday Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
				Total	In	Out	Total	In	Out
Shopping Center (using equation)	820	60,000	4,870	114	71	43	425	204	221
Pass-by Trips (34%)			*(1,660)*	*(40)*	*(20)*	*(20)*	*(144)*	*(72)*	*(72)*
Diverted Trips (26%)			*(1,270)*	*(30)*	*(15)*	*(15)*	*(110)*	*(55)*	*(55)*
Net New Trips			**1,940**	**40**	**36**	**8**	**171**	**77**	**94**

Trip Distribution/Assignment

The site-generated trips shown in Table 3 were distributed onto the study area roadways based on a Select Zone Assignment prepared by the Southwest Washington Regional Transportation Council, a market study for the site, as well as the location of major trip origins and destinations in Clark County. Figure 8 illustrates the trip distribution pattern. Based on the trip distribution pattern, Figures 9 and 10 show the assignment of site-generated trips at the study intersections during the weekday a.m. and weekday p.m. peak hours, respectively.

Per prior approvals from County staff, approximately 50 percent of all diverted trips were assumed to be traveling south along I-5 and 50 percent were assumed to be traveling north along I-5. In addition, given the relatively low traffic volumes along NE 179th Avenue and NE 15th Avenue, approximately 70 percent of pass-by trips were assumed to be associated with I-5, of which approximately 50 percent were assumed to be traveling south along I-5 and 50 percent were assumed to be traveling north. Figures F-1 through F-6 in Appendix "F" illustrate the net new, pass-by, and diverted trips at the study intersections during the weekday a.m. and weekday p.m. peak hours, respectively.



LEGEND

- ○ - STUDY INTERSECTIONS
- ○ - CONCURRENCY INTERSECTIONS

ESTIMATED TRIP DISTRIBUTION PATTERN
CLARK COUNTY, WASHINGTON

FIGURE 8

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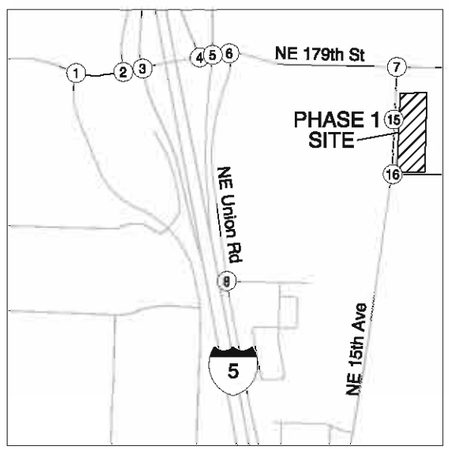
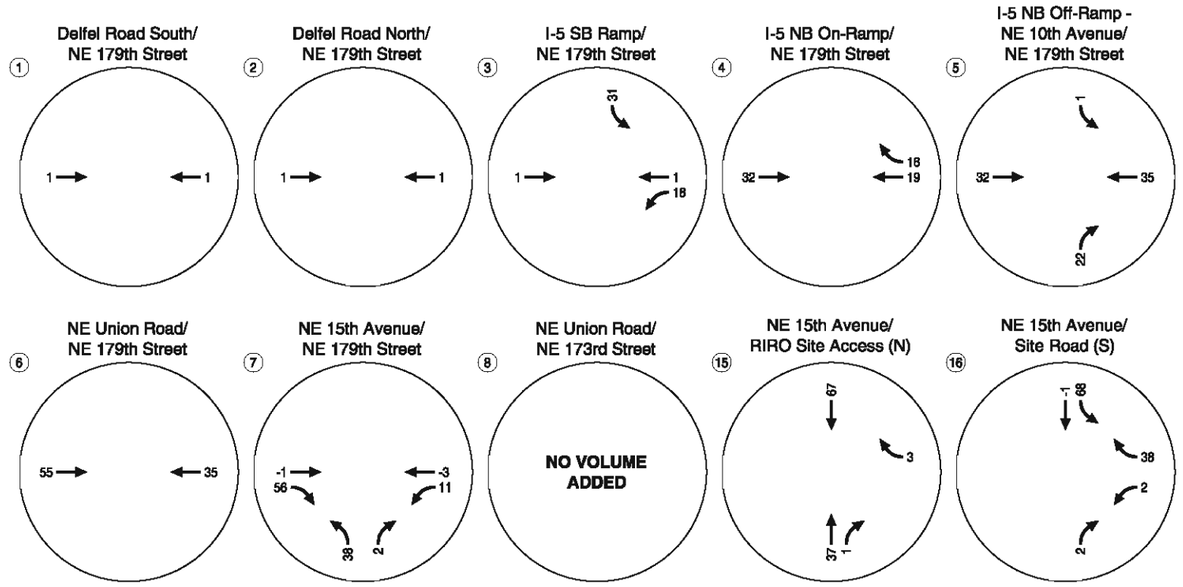




NOTE: Negative Volumes Reflect Pass-By Trips

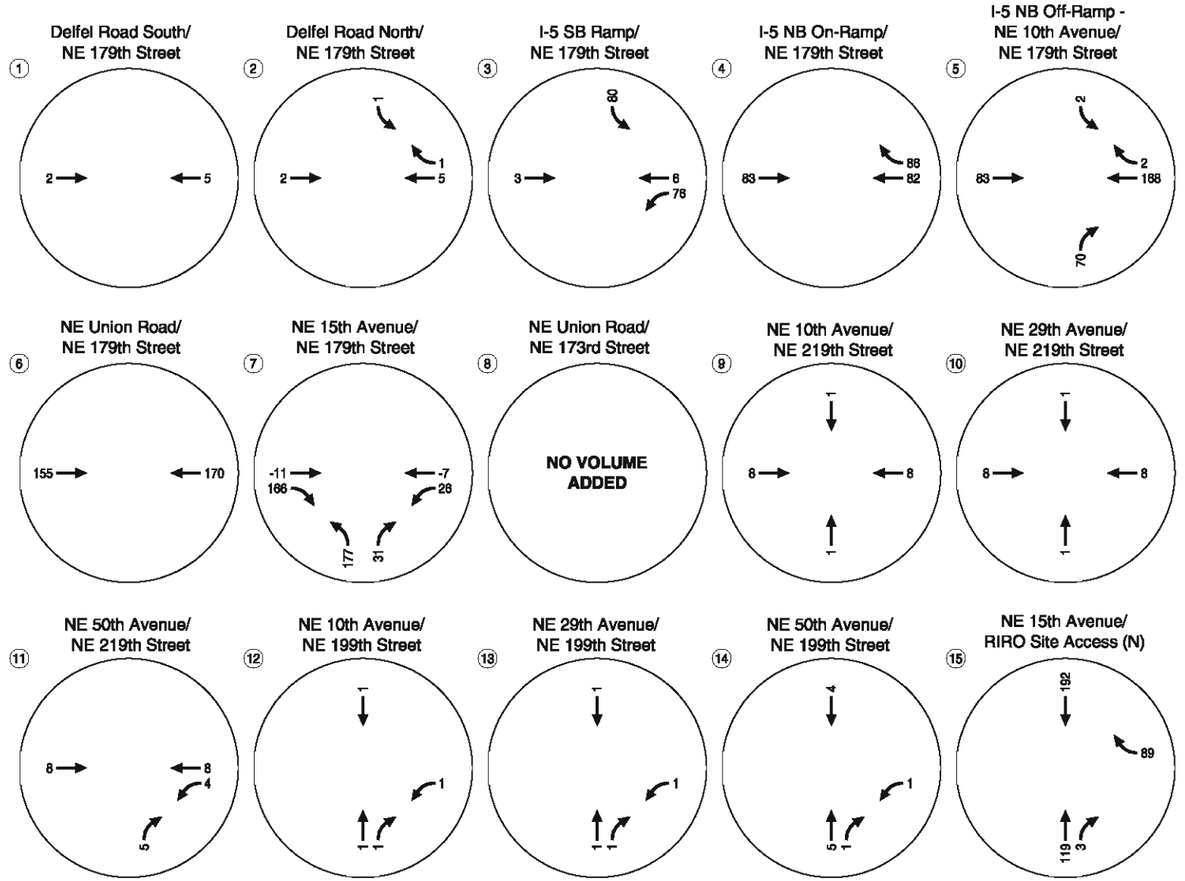
SITE-GENERATED TRIPS
WEEKDAY AM PEAK HOUR
CLARK COUNTY, WASHINGTON

FIGURE 9

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING

H:\projfile\17659 - Clark County 179th Retail Rezone\dwgs\figs\17659_TIAFigs.dwg Jul 19, 2013 - 4:32pm - amalinge Layout Tab: Fig9



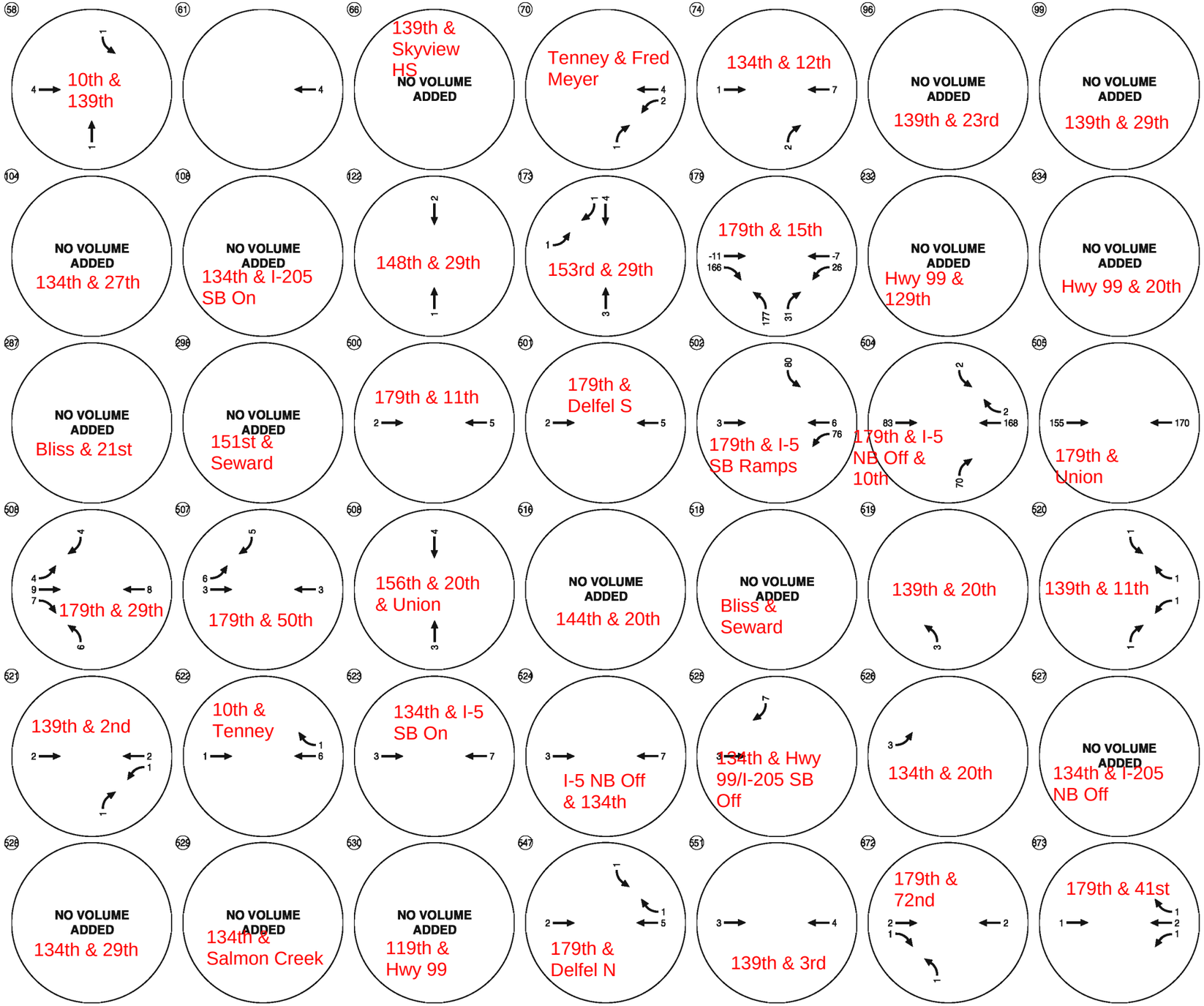


NOTE: Negative Volumes Reflect Pass-By Trips

SITE-GENERATED TRIPS
WEEKDAY PM PEAK HOUR
CLARK COUNTY, WASHINGTON

FIGURE 10

H:\projfile\7859 - Clark County 179th Retail Rezone\dwgs\figs\7859_TIAFigs.dwg Jul 19, 2013 - 4:33pm - amalinge Layout Tab: Fig10_



NOTE: INTERSECTION IDENTIFICATION REFLECTS CLARK COUNTY WEST MODEL NAMING CONVENTION.

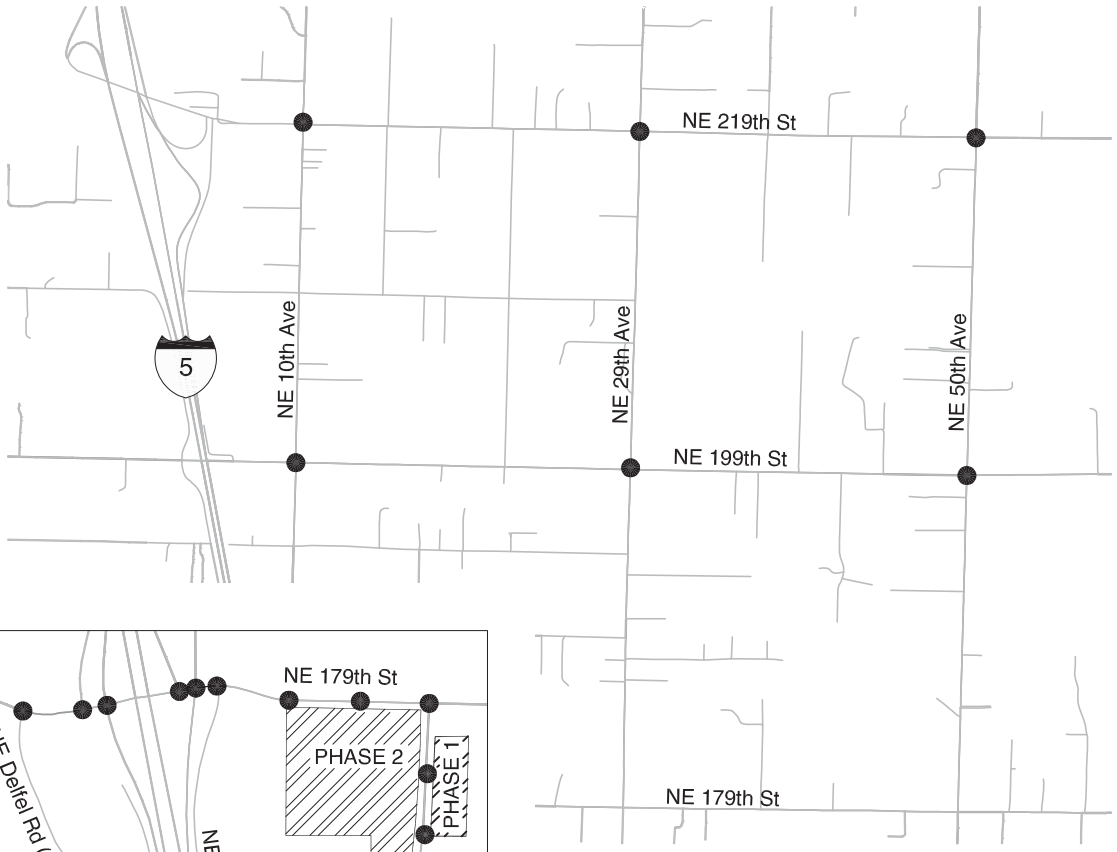
TRIP ASSIGNMENT FOR CONCURRENCY
CLARK COUNTY, WASHINGTON

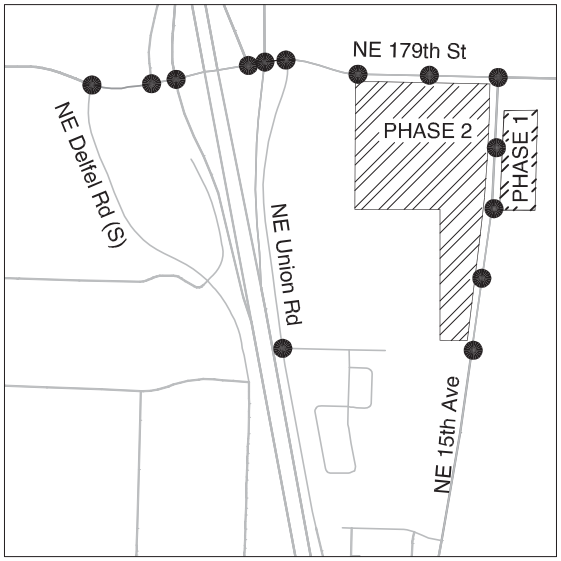
FIGURE 18

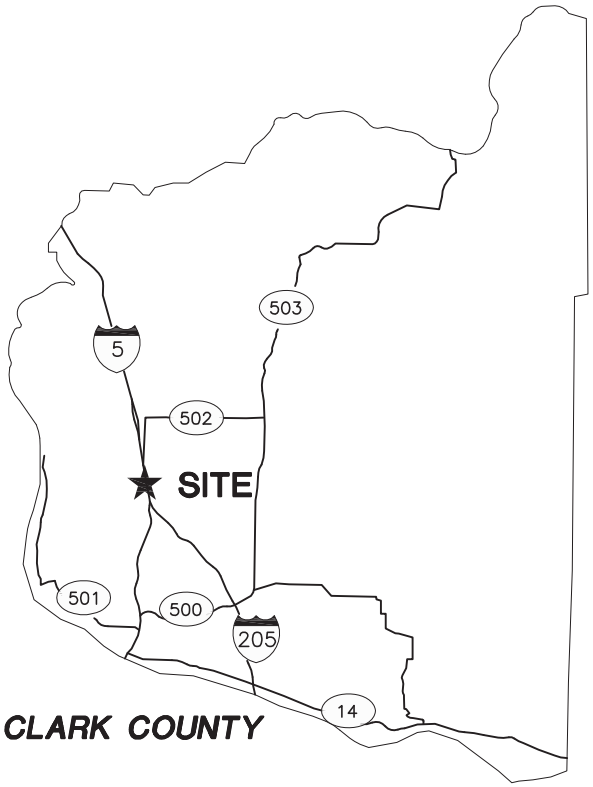
KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING

H:\projfile\7859 - Clark County 179th Retail Rezone\dwgs\figs\7859Fig_Concurrency.dwg Jul 22, 2013 - 7:23am - cbrehmer Layout Tab: Fig18

(NO SCALE)







LEGEND

● - STUDY INTERSECTIONS

SITE VICINITY MAP
CLARK COUNTY, WASHINGTON

FIGURE 1

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING

H:\projfile\7859 - Clark County 179th Retail Rezone\dwgs\figs\Phase 2\7859_TIAFigs_phase2.dwg Oct 11, 2013 - 1:27pm - amalinge Layout Tab: Fig01

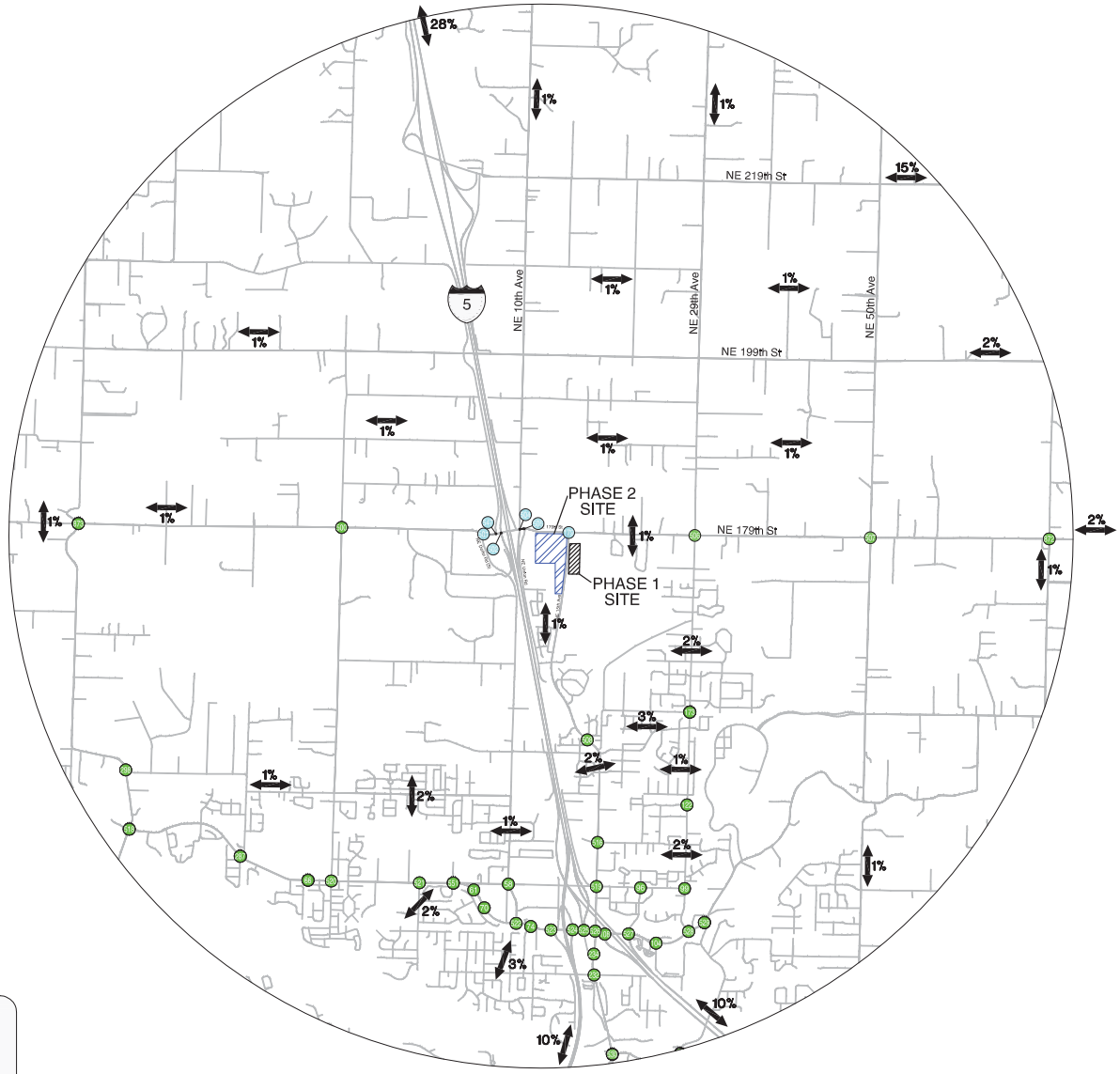
Table 5 - Trip Generation Estimate

Land Use	ITE Code	Size (Sq. Ft.)	Weekday Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
				Total	In	Out	Total	In	Out
Shopping Center (using equation)	820	260,000	12,640	280	174	106	1,136	545	591
Pass-by Trips (34%)			*(4,300)*	*(96)*	*(48)*	*(48)*	*(386)*	*(193)*	*(193)*
Diverted Trips (26%)			*(3,290)*	*(74)*	*(37)*	*(37)*	*(294)*	*(147)*	*(147)*
		Net New Trips	*5,050*	*110*	*89*	*21*	*456*	*205*	*251*
Shopping Center (using equation)	820	60,000 (Previously approved)	4,870	114	71	43	425	204	221
Pass-by Trips (34%)			*(1,660)*	*(40)*	*(20)*	*(20)*	*(144)*	*(72)*	*(72)*
Diverted Trips (26%)			*(1,270)*	*(30)*	*(15)*	*(15)*	*(110)*	*(55)*	*(55)*
		Net New Trips	*1,940*	*44*	*36*	*8*	*171*	*77*	*94*
Shopping Center (Difference)	**820**	**200,000**	**7,770**	**166**	**103**	**63**	**711**	**341**	**370**
Pass-by Trips (34%)			**(2,640)**	**(56)**	**(28)**	**(28)**	**(242)**	**(121)**	**(121)**
Diverted Trips (26%)			**(2,020)**	**(44)**	**(22)**	**(22)**	**(184)**	**(92)**	**(92)**
		Net New Trips	**3,110**	**66**	**53**	**13**	**285**	**128**	**157**

Trip Distribution/Assignment

The site-generated trips shown in Table 5 were distributed onto the study area roadways based on a Select Zone Assignment prepared by the Southwest Washington Regional Transportation Council, a market study for the site, as well as the location of major trip origins and destinations in Clark County. This pattern is consistent with the one used for Phase 1. Figure 10 illustrates the trip distribution pattern. Based on the trip distribution pattern, Figures 11 and 12 show the assignment of site-generated trips at the study intersections during the weekday a.m. and weekday p.m. peak hours, respectively.

Per prior approvals from County staff, approximately 50 percent of all diverted trips were assumed to be traveling south along I-5 and 50 percent were assumed to be traveling north along I-5. In addition, given the relatively low traffic volumes along NE 179th Avenue and NE 15th Avenue, approximately 70 percent of pass-by trips were assumed to be associated with I-5, of which approximately 50 percent were assumed to be traveling south along I-5 and 50 percent were assumed to be traveling north. Figures F-1 through F-6 in Appendix "F" illustrate the net new, pass-by, and diverted trips at the study intersections during the weekday a.m. and weekday p.m. peak hours, respectively.



LEGEND

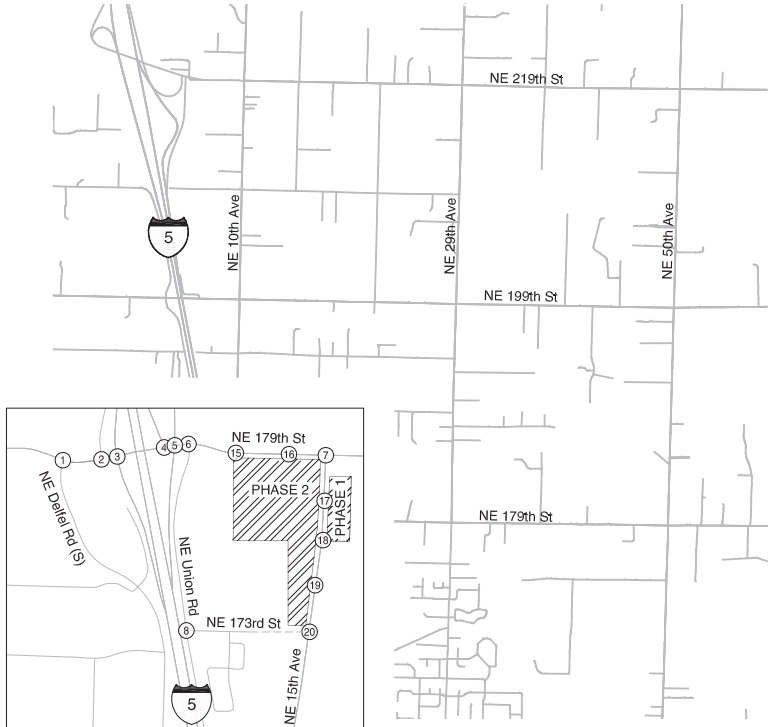
- STUDY INTERSECTIONS
- CONCURRENCY INTERSECTIONS

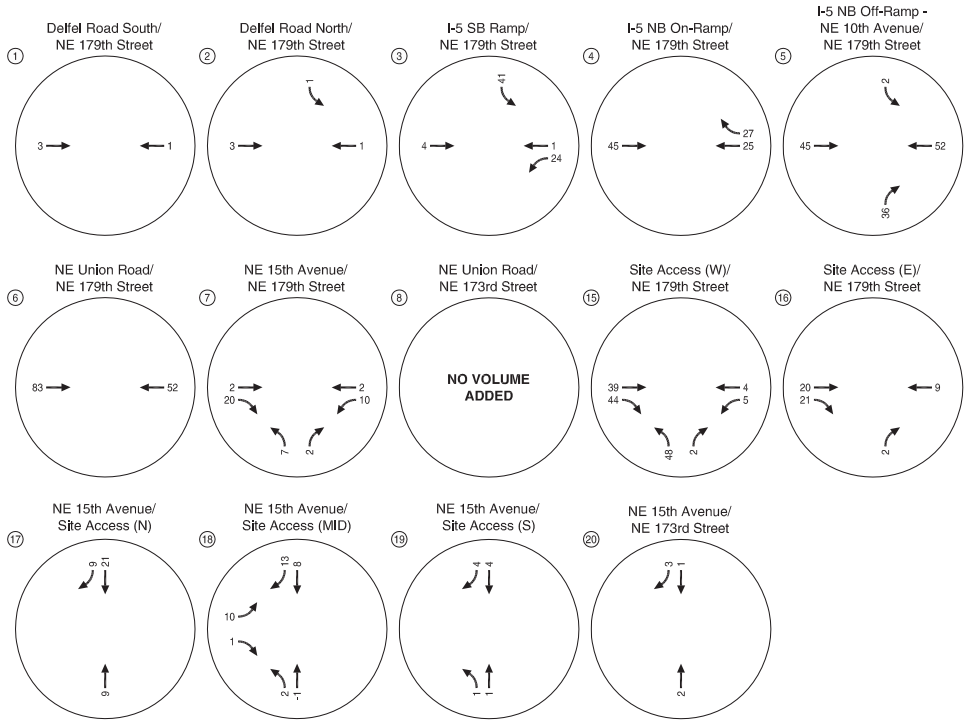
ESTIMATED TRIP DISTRIBUTION PATTERN
CLARK COUNTY, WASHINGTON

FIGURE 10

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING

H:\proj\file\7859 - Clark County 179th Retail Rezone\dwgs\figs\Phase 2\7859_TIAFigs_phase2.dwg Oct 12, 2013 - 2:27pm - amallinge Layout Tab: Fig10



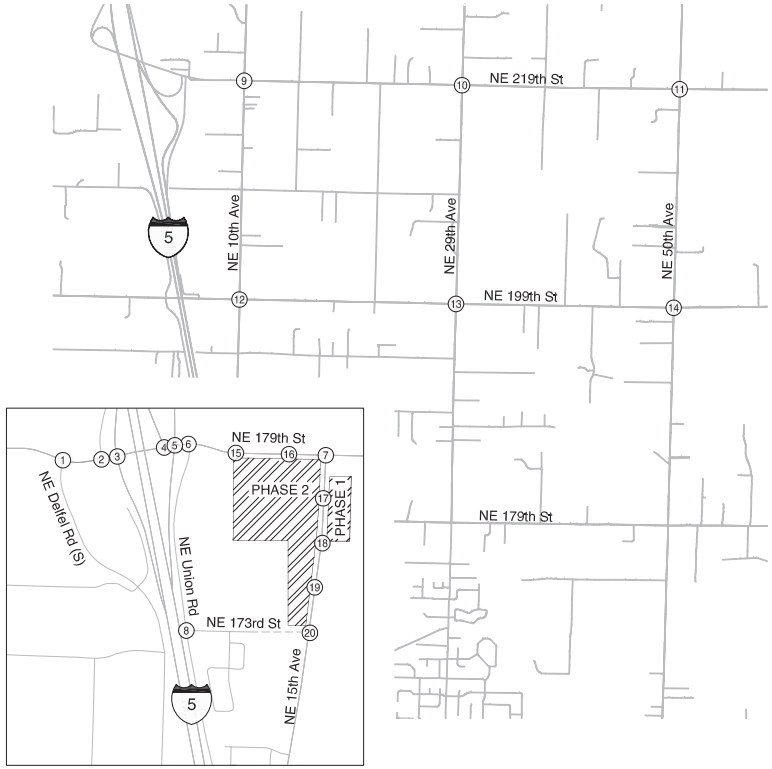


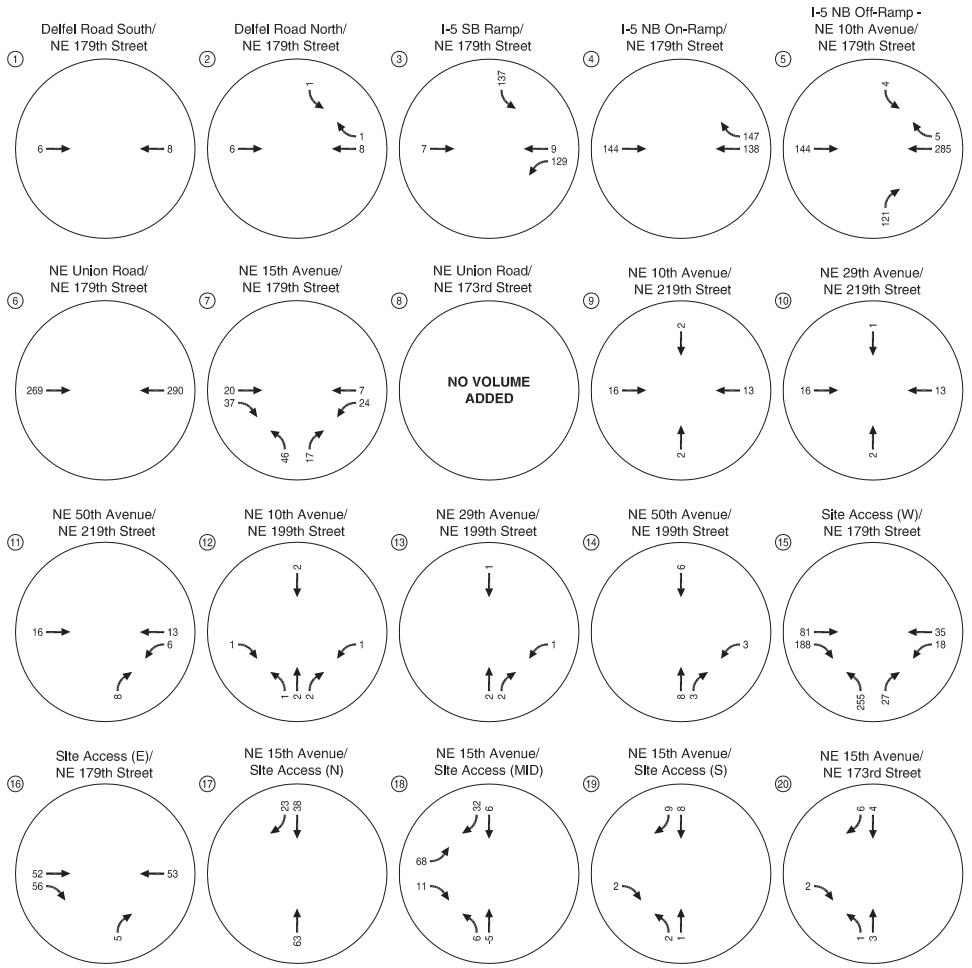
NOTE: NEGATIVE VALUES REFLECT PASS-BY TRIPS.

PHASE 2 SITE-GENERATED TRIPS
WEEKDAY AM PEAK HOUR
CLARK COUNTY, WASHINGTON

FIGURE 11

H:\proj\file\7859 - Clark County 179th Retail Rezone\dwgs\figs\Phase 2\7859_TIAFigs_phase2.dwg Oct 11, 2013 - 3:57pm - amalinge Layout Tab: Fig11





NOTE: NEGATIVE VALUES REFLECT PASS-BY TRIPS.

PHASE 2 SITE-GENERATED TRIPS
WEEKDAY PM PEAK HOUR
CLARK COUNTY, WASHINGTON

FIGURE 12

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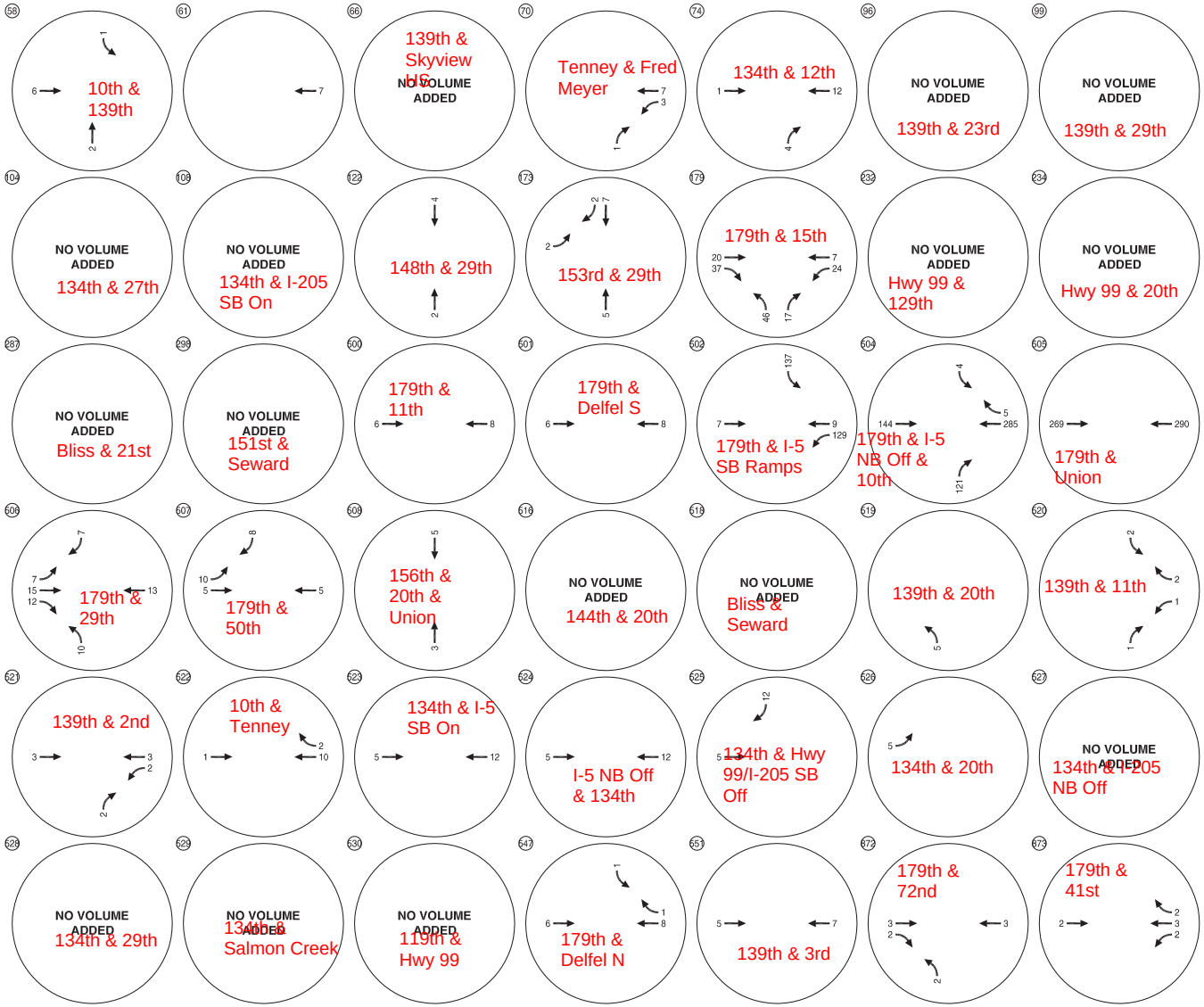


NOTE: INTERSECTION IDENTIFICATION REFLECTS
CLARK COUNTY WEST MODEL NAMING CONVENTION.

TRIP ASSIGNMENT FOR CONCURRENCY
CLARK COUNTY, WASHINGTON

FIGURE 20

H:\proj\file\7859 - Clark County 179th Retail Rezone\dwgs\figs\Phase 2\7859Fig_Concurrency.dwg Oct 16, 2013 - 10:03am - amallinge Layout Tab: Fig20

The appropriateness of using ITE school trip generation rates for the analysis in this TIA was reviewed to determine applicability for a magnet school such as iTech Prep. This research identified that both the Middle School and High School rates published in ITE's Trip Generation manual include both public and private schools as the primary data source. Studies of both rates also conclude that using head count students as the independent variable is preferred. The use of school buses varied considerably.

- High school trip generation rates are based on studies from the 1960's through the 2000's, and include data from a charter school. For the AM and PM peak periods, the high school trip generation rates rely on at least 40 studies (75 during the AM peak and 40 for the PM peak)
- For middle schools the data is more recent and includes studies only from the 1990's to current times. Trip generation rates for middle schools rely on 25 studies during the AM peak and 15 studies for the PM peak.

No specific data was available online for magnet schools. However, the fact that the ITE rates for high schools are based on a large number of studies and include both private and charter schools make these seem reasonable for use on the iTech Prep site. Also, the high school rate assumes a decent amount of school bus ridership. Middle school rates are also a mix of public and private schools and seem applicable to the iTech Prep facility.

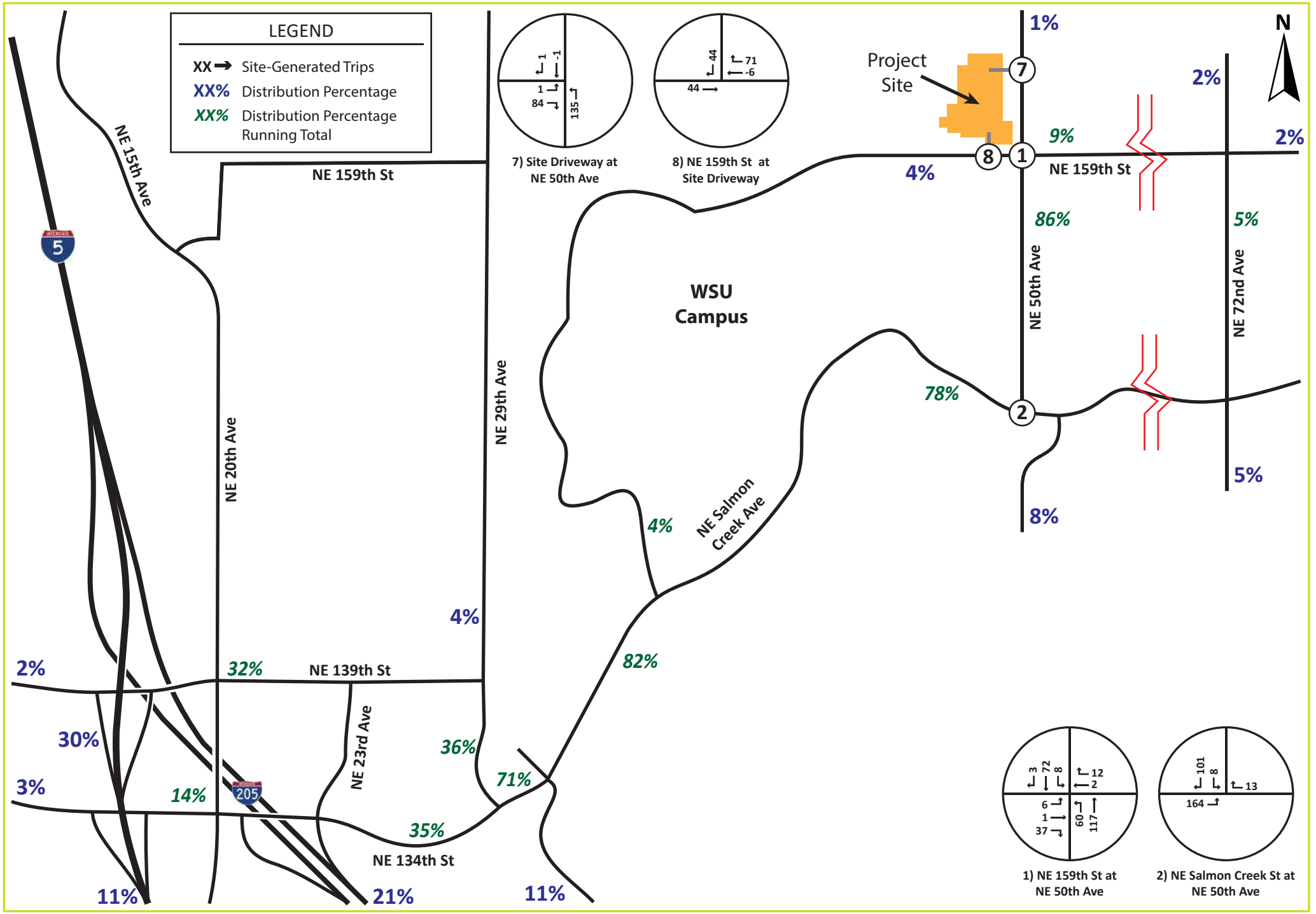
The total trip generation expected from this project was calculated by applying the unit measure for each land use category (total head count students) to the appropriate trip generation rate. The trip generation estimate for the iTech Prep School is shown in **Table 14**. This table reflects both the total trip generation expected for the project, as well as the net new trips that would be added through the expansion and relocation of the existing facility. Total trip generation will be used to assess localized traffic operations including the project's driveways. Net trip generation will be used to assess any potential impacts on the areawide transportation system, particularly along the NE 134th Street corridor.

Table 14. iTech Preparatory School Trip Generation Estimates

		Trip Generation Estimates						
			AM Peak Hour Trips			PM Peak Hour Trips		
Land Use (LU)	Head Count Students	Daily	In	Out	Total	In	Out	Total
Middle School Net New	300	486	90	72	162	42	51	93
High School								
Total at Build-out	*400*	*684*	*116*	*56*	*172*	*38*	*78*	*116*
Existing	*183*	*313*	*53*	*26*	*79*	*17*	*36*	*53*
Net New	217	371	63	30	93	21	42	63
Total Net New	**517**	**857**	**153**	**102**	**255**	**63**	**93**	**156**

4.2.2 Trip Distribution

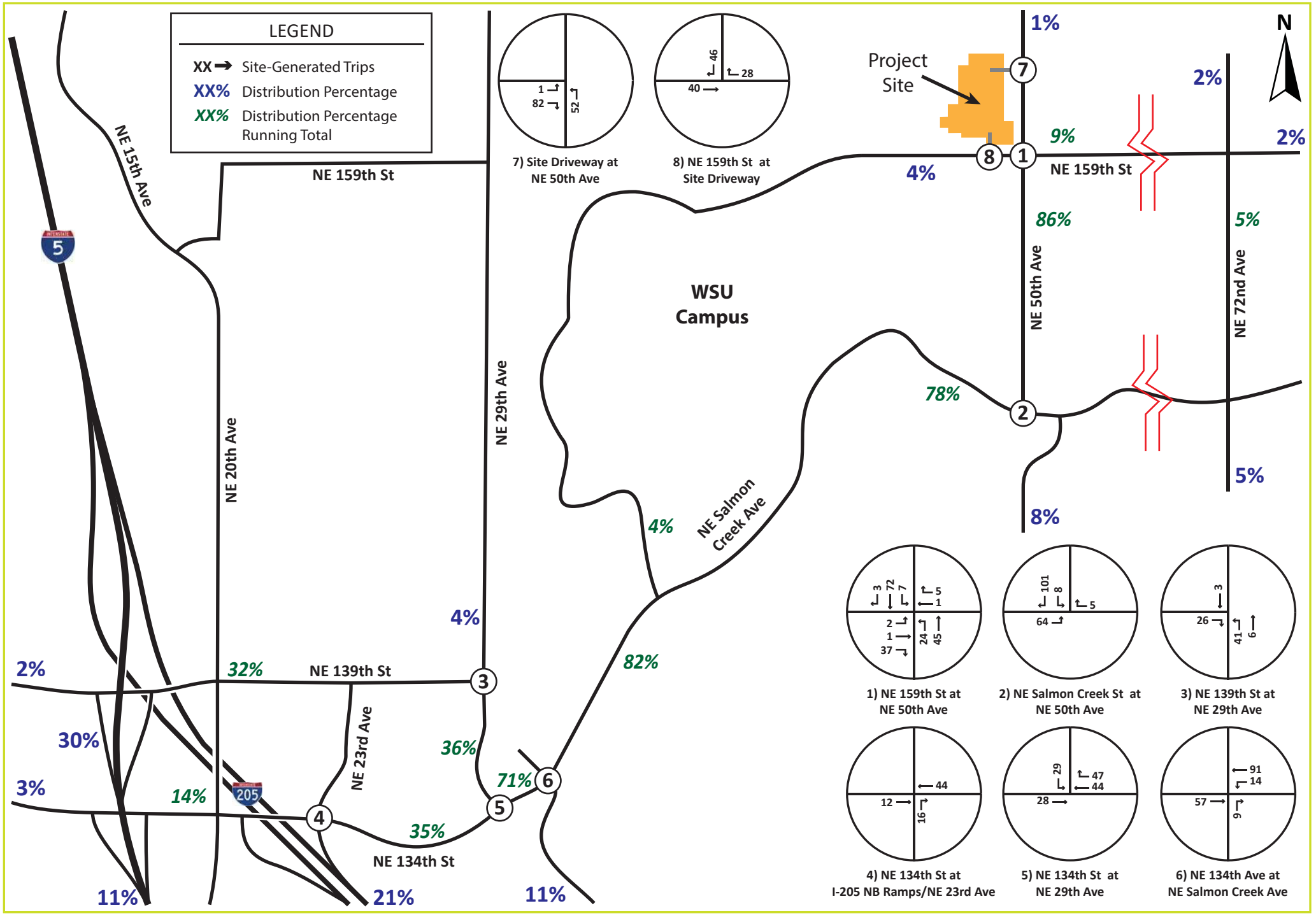
For this study, the directional distribution of traffic to and from the proposed project was estimated using a two-step process that considered both traffic generated by students and that generated by staff and faculty. Following is a brief explanation of each traffic assignment patterns.



SCJ ALLIANCE
ENGINEERING AND PLANNING SERVICES

iTech Prep School
Clark County, Washington
Traffic Impact Analysis

Figure 8
AM Peak Hour Project Related Trips



SCJ ALLIANCE
ENGINEERING AND PLANNING SERVICES

iTech Prep School
Clark County, Washington
Traffic Impact Analysis

Figure 9
PM Peak Hour Project Related Trips

APPENDIX G

10TH AVENUE REROUTES

AM	Reroute from 11th Avenue	Reroute for I-5 SB Off Ramp at 134th	Reroute for I-5 SB On Ramp at 139th	Reroute for I-5 SB On Ramp at 179th	Reroute for I-5 NB Off Ramp at 179th	10th Avenue Reroute
NE 179th Street/ NE Delfel Road South	-35 -20 20 1 35	25 1	1 15	5 1 -10	-5 1	0 0 0 0 -35 0 1 0 0 40 0 -20 45
NE 179th Street/ NE Delfel Road North	2	25 2	15 2	-10 2	-5 2	5 0 -5 0 5 0 2 0 0 0 0 20 0
NE 179th Street/ I-5 SB Ramps	3	25 3	15 3	-15 3	-5 3	25 0 0 0 15 -15 3 0 0 0 0 -5 0
NE 179th Street/ I-5 NB On-Ramp	4	4	15 4	4	-5 4	0 0 0 15 0 0 4 0 0 0 0 -5 0
NE 179th Street/ NE 10th Avenue/ I-5 NB Off-Ramp	5	5	5	5	5 -5	0 0 0 0 0 0 5 -5 0 0 0 0

AM	Reroute from 11th Avenue	Reroute for I-5 SB Off Ramp at 134th	Reroute for I-5 SB On Ramp at 139th	Reroute for I-5 SB On Ramp at 179th	Reroute for I-5 NB Off Ramp at 179th	10th Avenue Reroute
NE 179th Street/ NE 15th Avenue	6	6	6	6	6	0 0 0 0 0 0 0 0 0 6 0 0 0
NE 179th Street/ NE 29th Avenue	7	7	7	7	7	0 0 0 0 0 0 0 0 0 7 0 0 0
NE 149th Street/ NE 10th Avenue	15 5 25 -5 8 -10 10	5 20 8 -5	5 -5 8 10	15 10 S/S -10 8	-5 S/S 5 8 5	20 40 0 30 0 -10 8 -15 25 0
NE 10th Avenue/ NE 141st Street	9	15 5 S/S -5 9 -10	-10 5 S/S -5 9 5	15 9	9 5	0 20 0 0 0 0 0 0 0 9 0 0 0
NE 139th Street/ NE Tenney Road	10	10	10	10	10	0 0 0 0 0 0 0 0 0 10 0 0 0

AM	Reroute from 11th Avenue	Reroute for I-5 SB Off Ramp at 134th	Reroute for I-5 SB On Ramp at 139th	Reroute for I-5 SB On Ramp at 179th	Reroute for I-5 NB Off Ramp at 179th	10th Avenue Reroute
NE 139th Street/ NE 10th Avenue		10 5	-10	10 5		10 15 -5
			5 -5		5	5 -5 0 5 0 0
	11	11 -10	11	11	11	11 0 -10 0
NE 139th Street/ RIRO Access						0 0 0
			-15	5	5	0 -10 0 0 5 0
	12	12	12	12	12	12 0 0 0
NE 139th Street/ I-5 SB On-Ramp						0 0 0
			-15	5	5	0 -15 5 0 5 0
	13	13	13	13	13	13 0 0 0
NE 139th Street/ I-5 NB Off-Ramp						0 0 0
			-15			0 -15 0 0 0 0
	14	14	14	14	14 5	14 5 0 0
NE 139th Street/ I-205 NB On-Ramp						0 0 0
			-15			-15 0 0 0 0 0
	15	15	15	15	15	15 0 0 0

AM	Reroute from 11th Avenue	Reroute for I-5 SB Off Ramp at 134th	Reroute for I-5 SB On Ramp at 139th	Reroute for I-5 SB On Ramp at 179th	Reroute for I-5 NB Off Ramp at 179th	10th Avenue Reroute
NE 139th Street/ NE 20th Avenue	16	16	16	16	16	0 0 0 0 0 0 0 0 0 0 16 0 0 0
NE 139th Street/ NE 23rd Avenue	17	17	17	17	17	0 0 0 0 0 0 0 0 0 0 17 0 0 0
NE 139th Street/ NE 29th Avenue	18	18	18	18	18	0 0 0 0 0 0 0 0 0 0 18 0 0 0
NE 136th Street/ NE 10th Avenue	19	5 19 -5 -10	19	10 19	19 0	5 10 0 0 0 0 0 0 0 0 19 -5 -10 0
NE Tenney Road/ NE 10th Avenue	20	-15 -10 20	20	10 20	0 20	0 0 10 0 0 0 0 0 0 0 20 0 0 0

AM	Reroute from 11th Avenue	Reroute for I-5 SB Off Ramp at 134th	Reroute for I-5 SB On Ramp at 139th	Reroute for I-5 SB On Ramp at 179th	Reroute for I-5 NB Off Ramp at 179th	10th Avenue Reroute
NE 134th Street/ I-5 SB On-Ramp	21	21 -25	21	21 5 5	21 0	21 0 5 5 0 0 0 0 -25 0
NE 134th Street/ I-5 NB Off-Ramp	22	22 -25	22	22 5	22 0	22 0 5 0 0 0 0 0 -25 0
NE 134th Street/ I-205 SB Off-Ramp/ Highway 99	23	23 -25	23	23 5	23 0	23 -25 0 0 0 5 0 0 0 0
NE 134th Street/ NE 20th Avenue	24	24	24	24 5	24 0	24 0 5 0 0 0 0 0 0 0
NE 134th Street/ I-205 SB On-Ramp	25	25	25	25 5	25 0	25 0 0 5 0 0 0 0 0 0

AM	Reroute from 11th Avenue	Reroute for I-5 SB Off Ramp at 134th	Reroute for I-5 SB On Ramp at 139th	Reroute for I-5 SB On Ramp at 179th	Reroute for I-5 NB Off Ramp at 179th	10th Avenue Reroute
NE 134th Street/ I-205 NB Off-Ramp/ NE 23rd Avenue	26	26	26	26	26 0	26 0 0 0 0 0 0 0 0 0 0 0 0
NE 134th Street/ NE 29th Avenue	27	27	27	27	27	27 0 0 0 0 0 0 0 0 0 0 0 0
NE 134th Street/ NE Salmon Creek Avenue	28	28	28	28	28	28 0 0 0 0 0 0 0 0 0 0 0 0
Highway 99/ NE 20th Avenue	29	29	29	29	29	29 0 0 0 0 0 0 0 0 0 0 0 0
Highway 99/ NE 117th Street	30	30	30	30	30	30 0 0 0 0 0 0 0 0 0 0 0 0

PM	Reroute from 11th Avenue	Reroute for I-5 SB Off Ramp at 134th	Reroute for I-5 SB On Ramp at 139th	Reroute for I-5 SB On Ramp at 179th	Reroute for I-5 NB Off Ramp at 179th	10th Avenue Reroute
NE 179th Street/ NE Delfel Road South	-30 -35 35 1 30	30 1	1 25	5 1 -10	-15 1	0 0 0 0 -30 0 0 -35 55 1 0 0 45
NE 179th Street/ NE Delfel Road North	2	30 2	25 2	-10 2	-15 2	5 0 -5 0 15 0 0 15 0 2 0 0 0
NE 179th Street/ I-5 SB Ramps	3	30 3	25 3	-15 3	-15 3	30 0 0 0 25 -15 0 -15 0 3 0 0 0
NE 179th Street/ I-5 NB On-Ramp	4	4	25 4	4	-15 4	0 0 0 25 0 0 0 -15 0 4 0 0 0
NE 179th Street/ NE 10th Avenue/ I-5 NB Off-Ramp	5	5	5	5	5 -15	0 0 0 0 0 0 0 0 0 5 -15 0 0

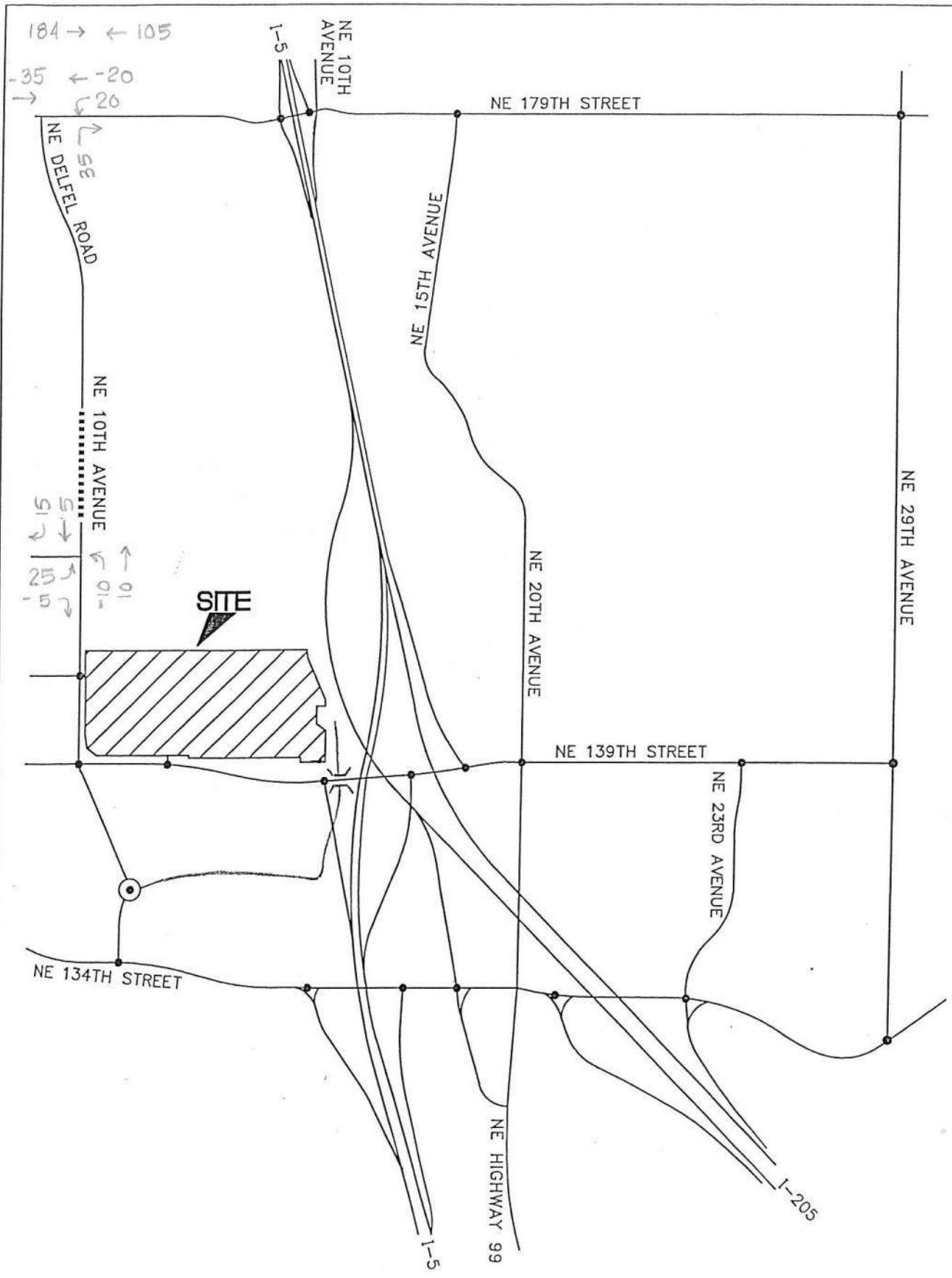
PM	Reroute from 11th Avenue	Reroute for I-5 SB Off Ramp at 134th	Reroute for I-5 SB On Ramp at 139th	Reroute for I-5 SB On Ramp at 179th	Reroute for I-5 NB Off Ramp at 179th	10th Avenue Reroute
NE 179th Street/ NE 15th Avenue	6	6	6	6	6	6 0 0 0 0 0 0 0 0 0 6 0 0 0
NE 179th Street/ NE 29th Avenue	7	7	7	7	7	7 0 0 0 0 0 0 0 0 0 7 0 0 0
NE 149th Street/ NE 10th Avenue	8 20 15 20 -10 -15 10 -10 15	8 10 20 -10	8	8 15 10 S/S -10	8 -15 S/S 15 15	8 30 50 0 30 0 0 -25 0 0 8 -20 40 0
NE 10th Avenue/ NE 141st Street	9	9 15 5 5 S/S S/S -5 -5 -15	9 -15 10	9 15	9 15	9 0 15 0 0 0 0 0 0 0 9 0 10 0
NE 139th Street/ NE Tenney Road	10	10	10	10	10	10 0 0 0 0 0 0 0 0 0 10 0 0 0

PM	Reroute from 11th Avenue	Reroute for I-5 SB Off Ramp at 134th	Reroute for I-5 SB On Ramp at 139th	Reroute for I-5 SB On Ramp at 179th	Reroute for I-5 NB Off Ramp at 179th	10th Avenue Reroute
NE 139th Street/ NE 10th Avenue	11	10 5 11 -15	-15 10 -10 11	10 5 11	5 11 10	10 15 -10 10 5 -10 0 0 0 11 0 -5 0
NE 139th Street/ RIRO Access	12	12	-25 12	5 12	5 12	0 0 0 0 0 -20 5 0 0 12 0 0 0
NE 139th Street/ I-5 SB On-Ramp	13	13	-25 13	5 13	5 13	0 0 0 0 0 -25 5 5 0 13 0 0 0
NE 139th Street/ I-5 NB Off-Ramp	14	14	-25 14	14	14 5	0 0 0 0 0 -25 0 0 0 14 5 0 0
NE 139th Street/ I-205 NB On-Ramp	15	15	-25 15	15	15	0 0 0 -25 0 0 0 0 0 15 0 0 0

PM	Reroute from 11th Avenue	Reroute for I-5 SB Off Ramp at 134th	Reroute for I-5 SB On Ramp at 139th	Reroute for I-5 SB On Ramp at 179th	Reroute for I-5 NB Off Ramp at 179th	10th Avenue Reroute
NE 139th Street/ NE 20th Avenue	16	16	16	16	16	0 0 0 0 0 0 0 0 0 0 16 0 0 0
NE 139th Street/ NE 23rd Avenue	17	17	17	17	17	0 0 0 0 0 0 0 0 0 0 17 0 0 0
NE 139th Street/ NE 29th Avenue	18	18	18	18	18	0 0 0 0 0 0 0 0 0 0 18 0 0 0
NE 136th Street/ NE 10th Avenue	19	5 19 -5 -15	19	10 19	19 10	5 10 0 0 0 0 0 0 0 0 19 -5 -5 0
NE Tenney Road/ NE 10th Avenue	20	-20 -10 20	20	10 20	10 20	0 0 10 0 0 0 0 -10 -10 0 20 0 0 0

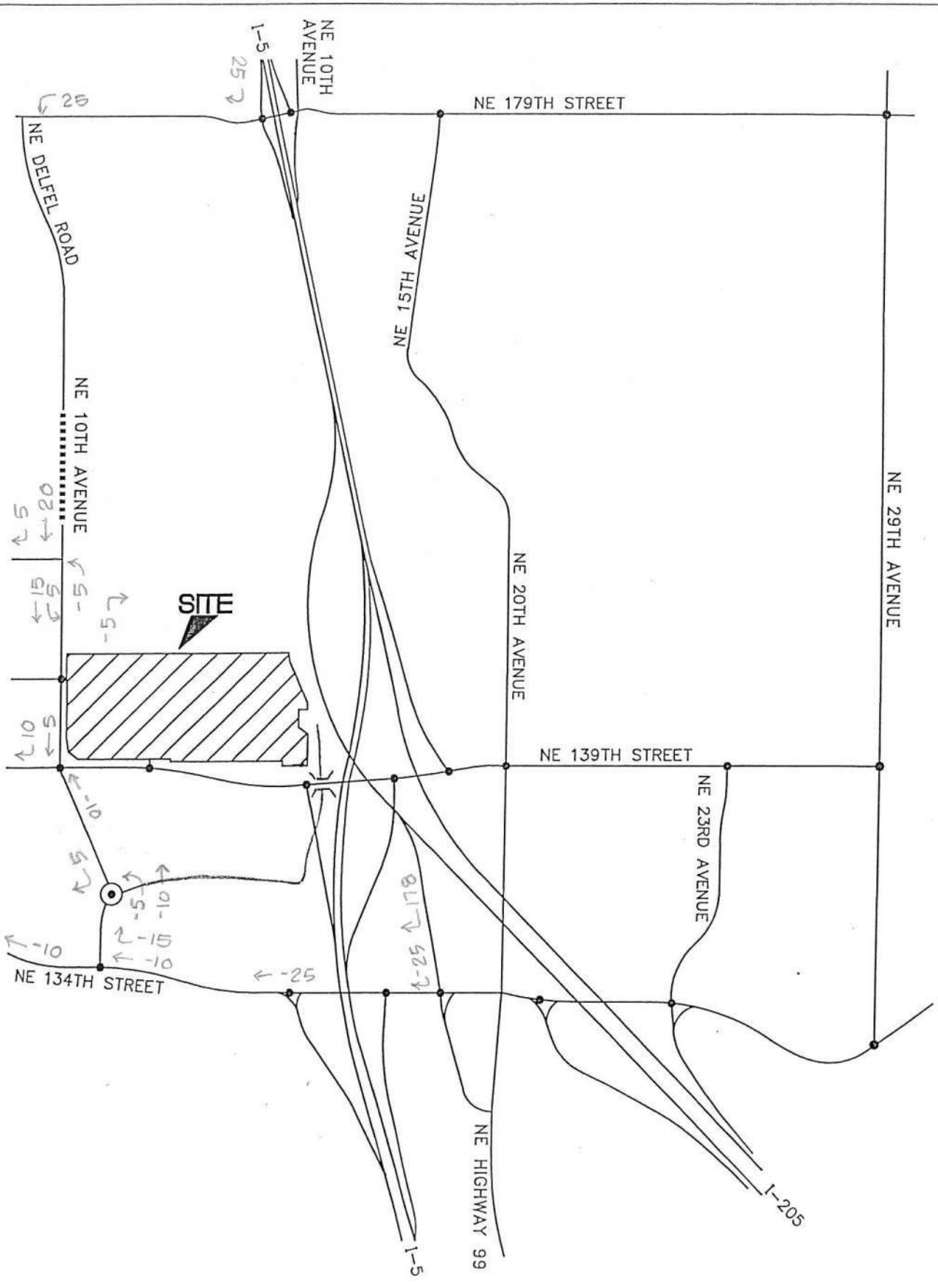
PM	Reroute from 11th Avenue	Reroute for I-5 SB Off Ramp at 134th	Reroute for I-5 SB On Ramp at 139th	Reroute for I-5 SB On Ramp at 179th	Reroute for I-5 NB Off Ramp at 179th	10th Avenue Reroute
NE 134th Street/ I-5 SB On-Ramp	21	21 -30	21	21 5 5	21 10	21 0 5 5 0 0 0 0 -20 0
NE 134th Street/ I-5 NB Off-Ramp	22	22 -30	22	22 5	22 5	22 0 5 0 0 0 0 -25 0
NE 134th Street/ I-205 SB Off-Ramp/ Highway 99	23	23 -30	23	23 5	23 5	23 -30 0 0 0 5 0 0 5 0
NE 134th Street/ NE 20th Avenue	24	24	24	24 5	24 5	24 0 5 0 0 0 0 5 0
NE 134th Street/ I-205 SB On-Ramp	25	25	25	25 5	25 5	25 0 0 5 0 0 0 5 0

PM	Reroute from 11th Avenue	Reroute for I-5 SB Off Ramp at 134th	Reroute for I-5 SB On Ramp at 139th	Reroute for I-5 SB On Ramp at 179th	Reroute for I-5 NB Off Ramp at 179th	10th Avenue Reroute
NE 134th Street/ I-205 NB Off-Ramp/ NE 23rd Avenue	26	26	26	26	26 5	26 0 0 0 0 0 0 0 0 0 5 0 0
NE 134th Street/ NE 29th Avenue	27	27	27	27	27	27 0 0 0 0 0 0 0 0 0 0 0 0
NE 134th Street/ NE Salmon Creek Avenue	28	28	28	28	28	28 0 0 0 0 0 0 0 0 0 0 0 0
Highway 99/ NE 20th Avenue	29	29	29	29	29	29 0 0 0 0 0 0 0 0 0 0 0 0
Highway 99/ NE 117th Street	30	30	30	30	30	30 0 0 0 0 0 0 0 0 0 0 0 0



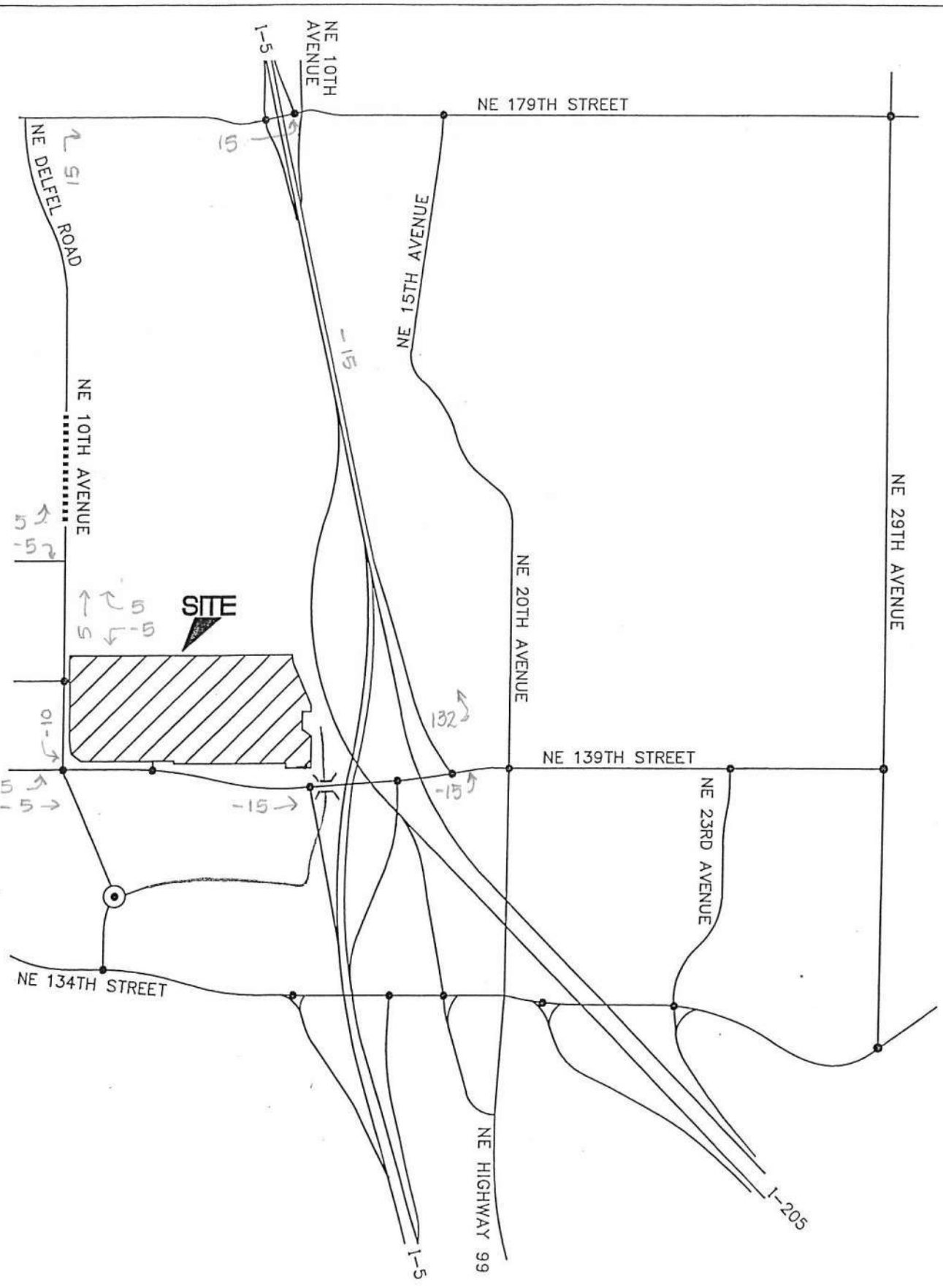
AM Peak Hour
Reroute from 11th Avenue
~20% diversion

JED 6/21/18



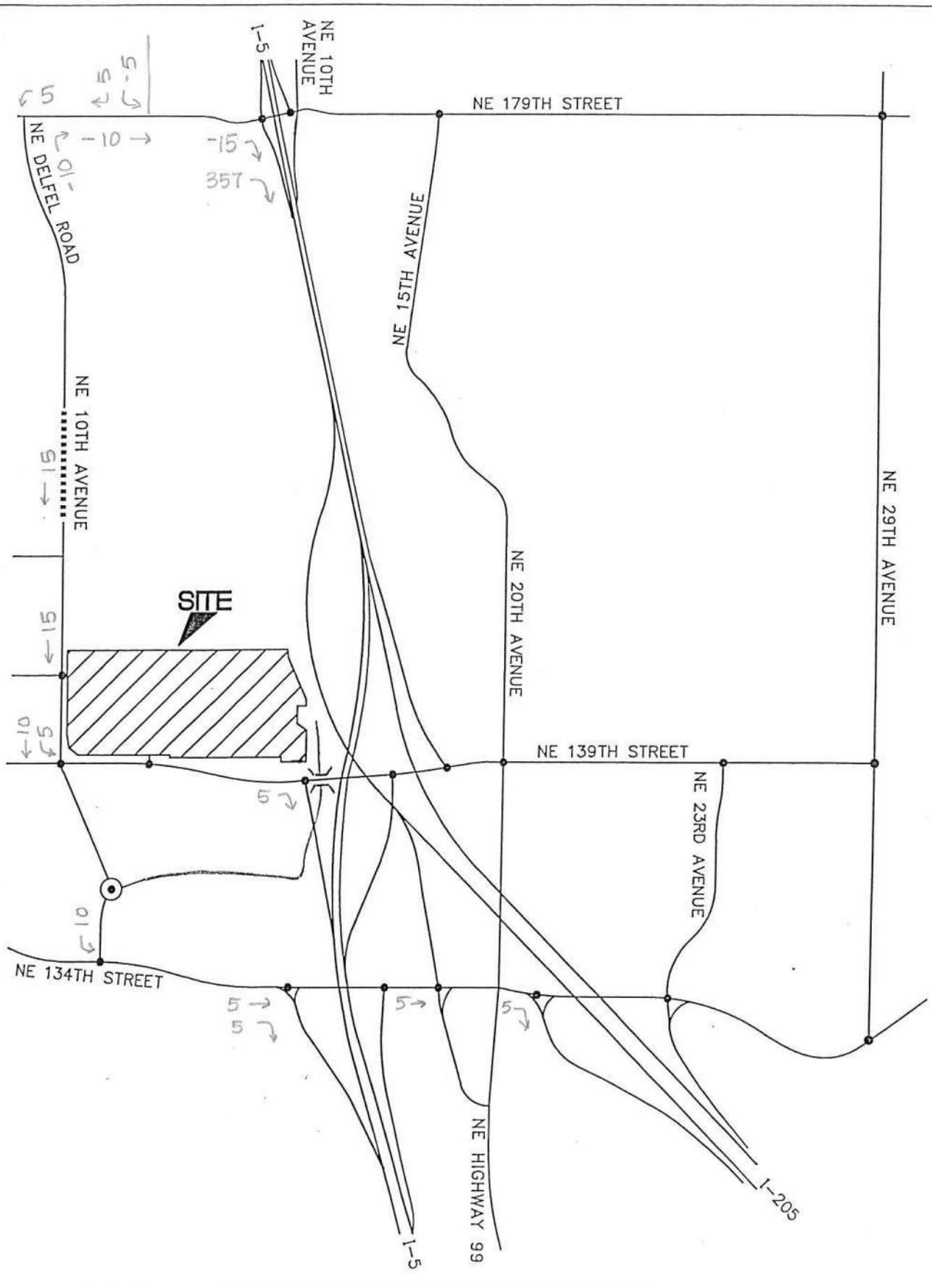
AM Peak Hour
Reroute for I-5 SB Off at 134th
≈15% diversion

JED 6/21/18



AM Peak Hour
Reroute for I-5 NB On at 139th
~ 10% diversion

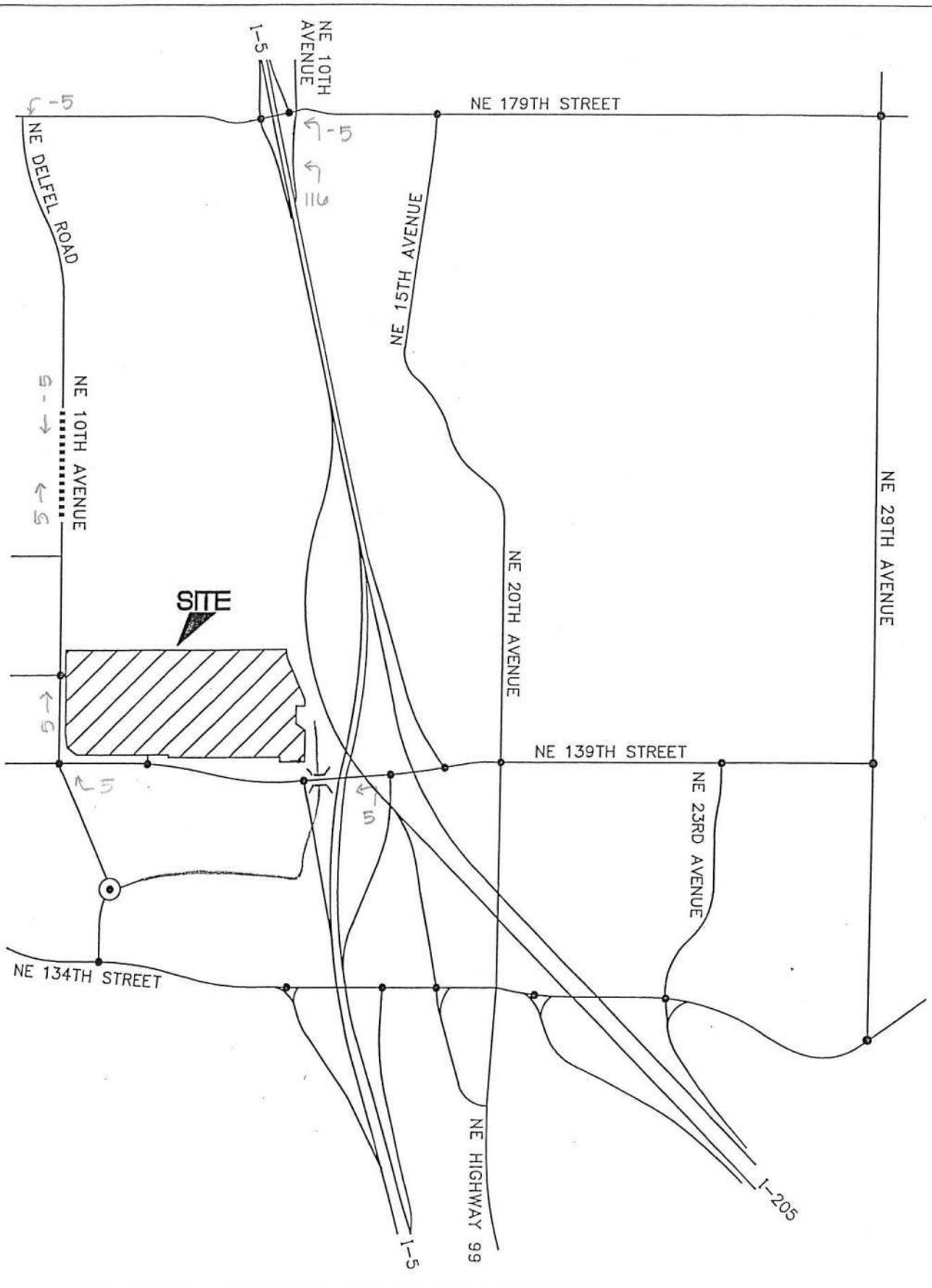
JED 6/21/18



AM Peak Hour
Reroute for I-5 SB On at 179th

~5% diversion

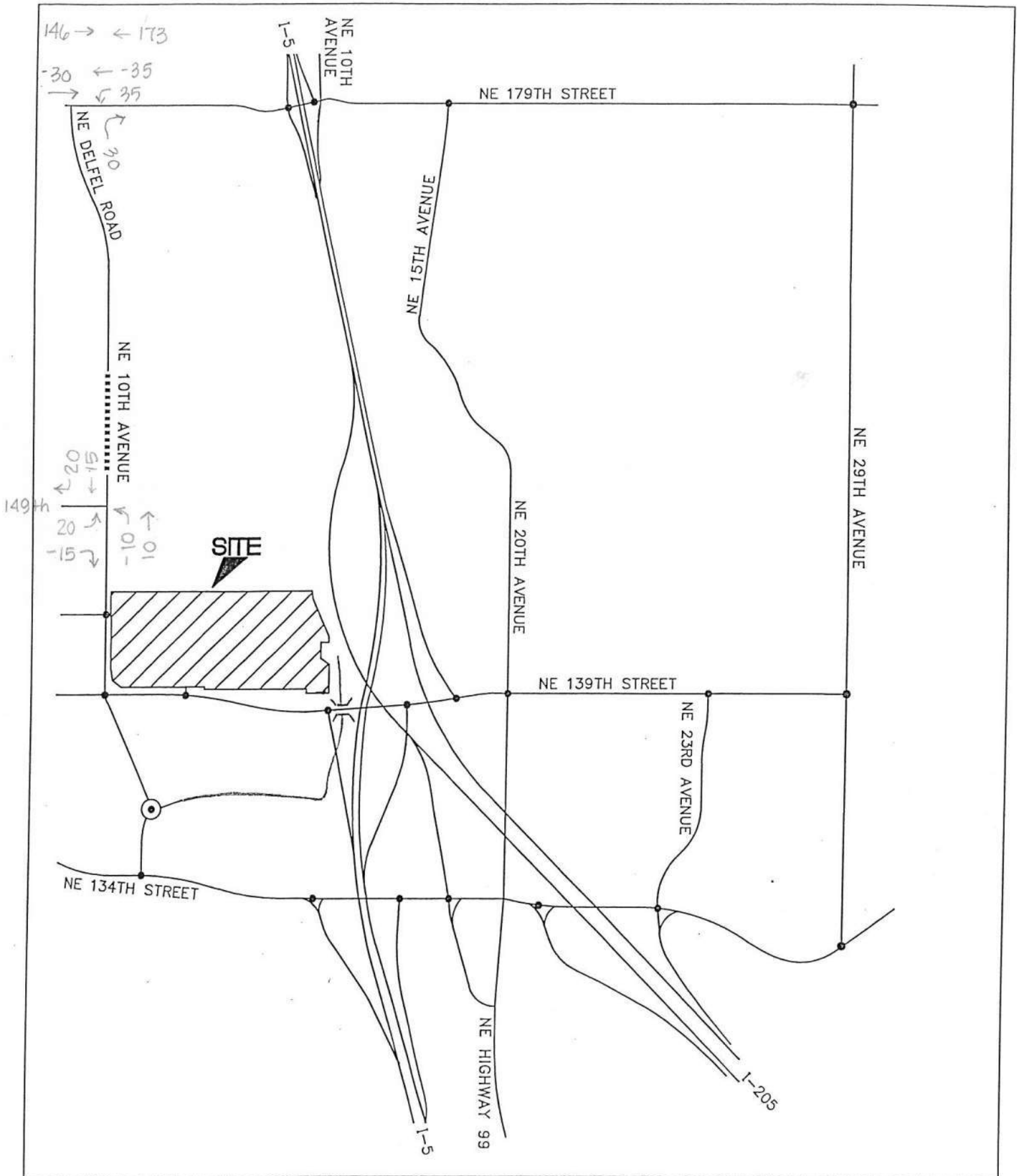
JED 6/21/18



AM Peak Hour
Reroute for I-5 NB Off. at 179th

≈5% diversion

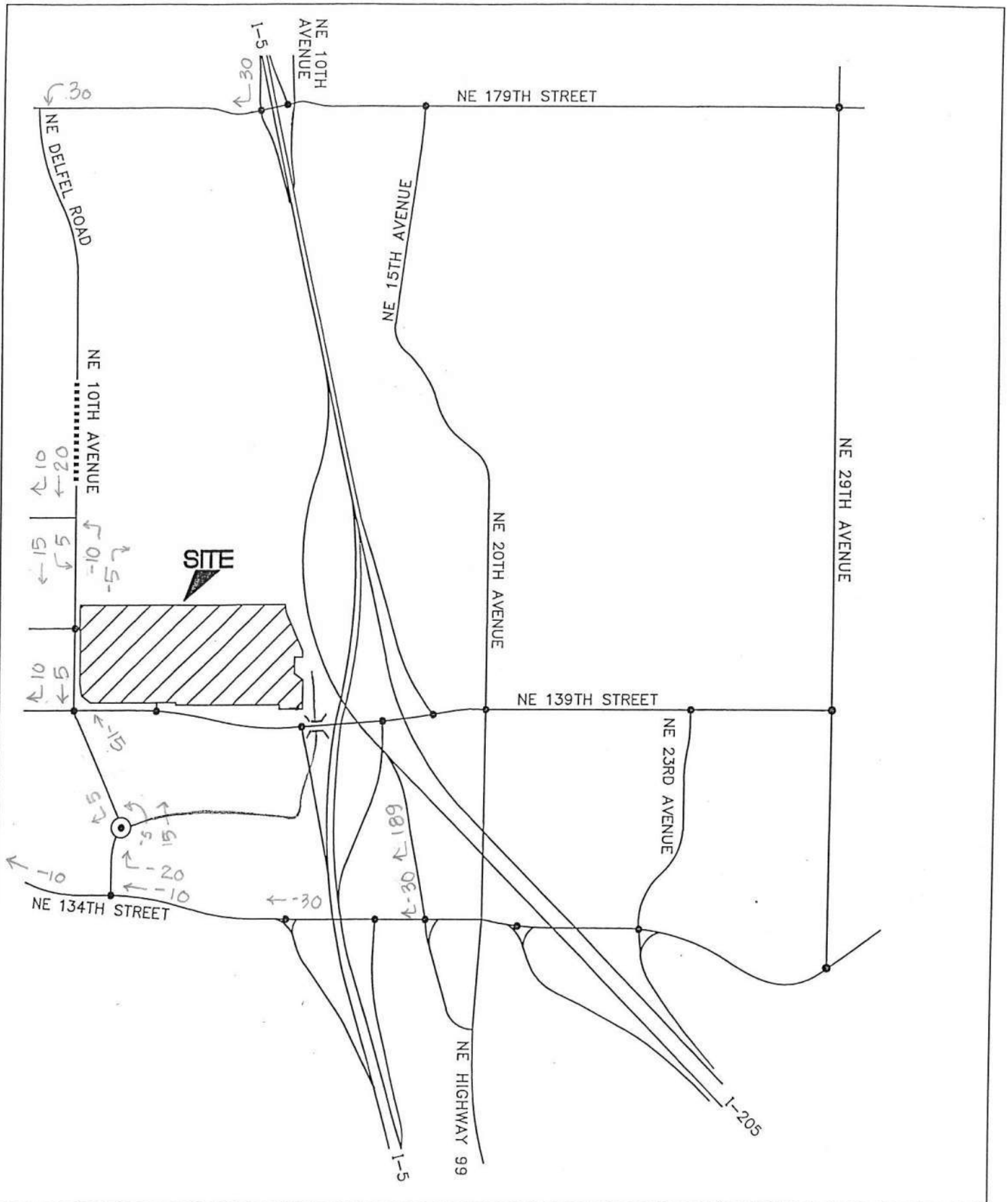
JED 6/21/18



PM Peak Hour
Reroute from 11th Avenue

~20% diversion

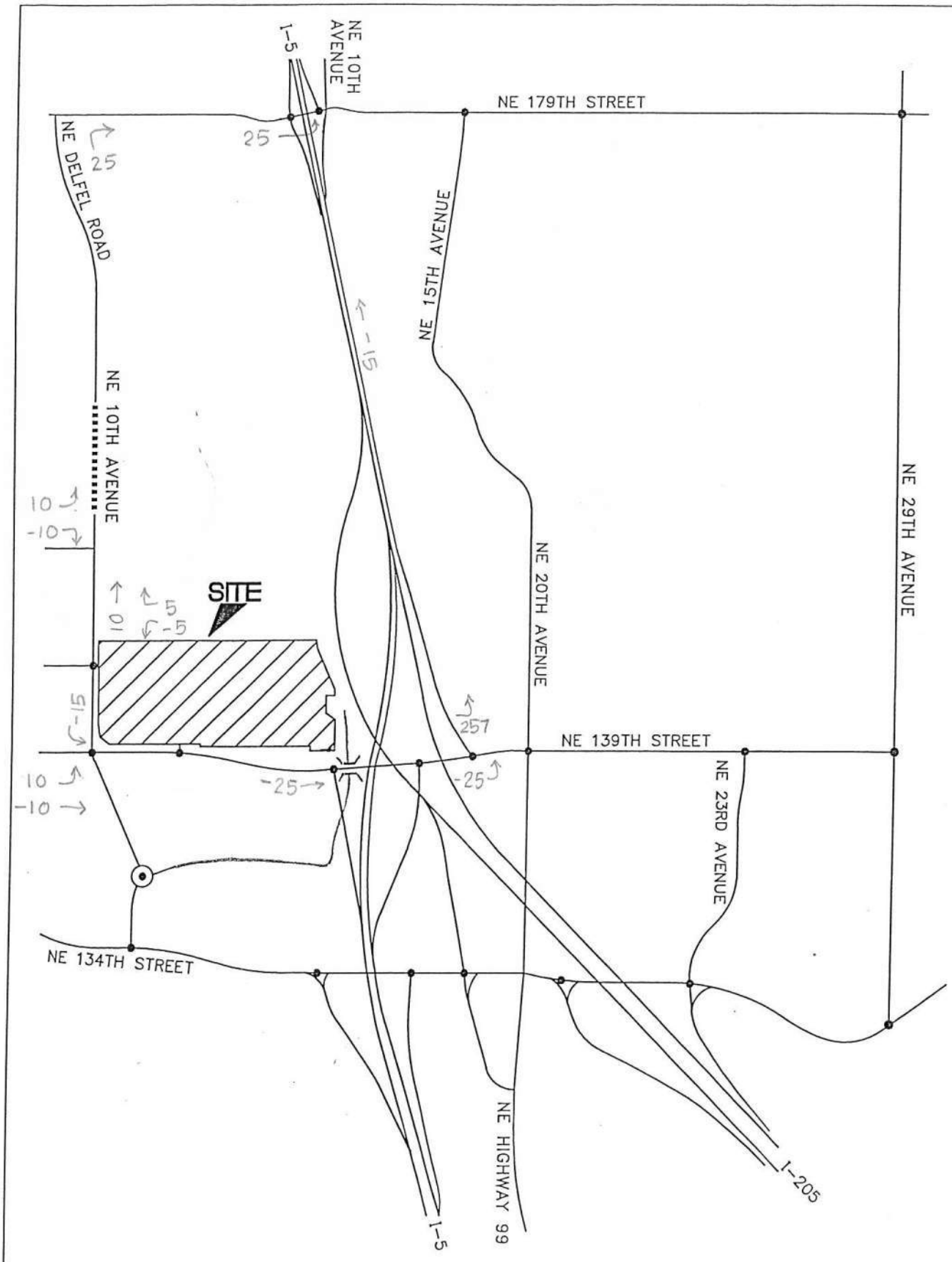
JED 6/21/18



PM Peak Hour
Reroute for I-5 SB Off at 134th

≈ 15% diversion

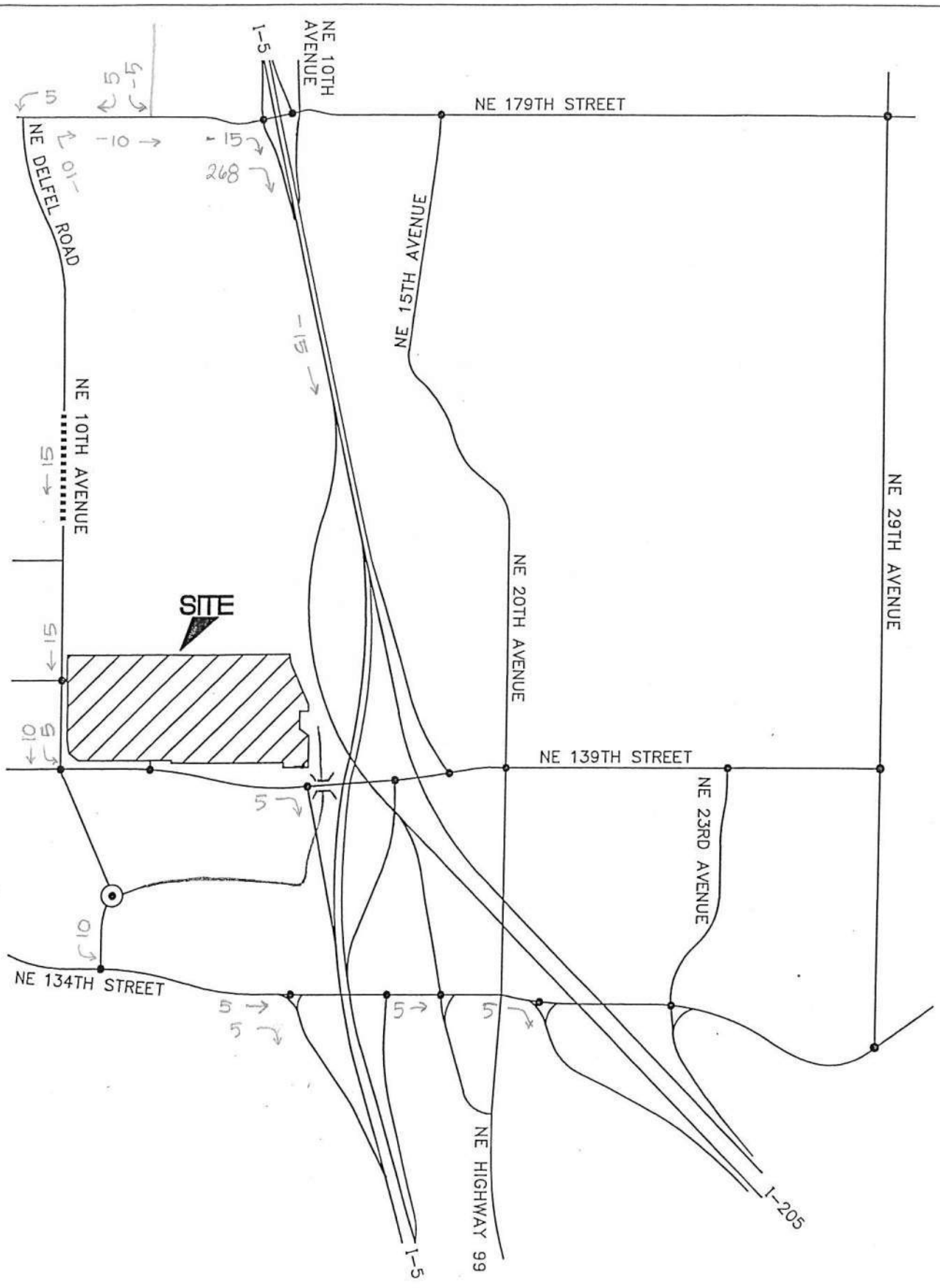
JED 6/21/18



PM Peak Hour
Reroute for I-5 NB on at 139th

~10% diversion

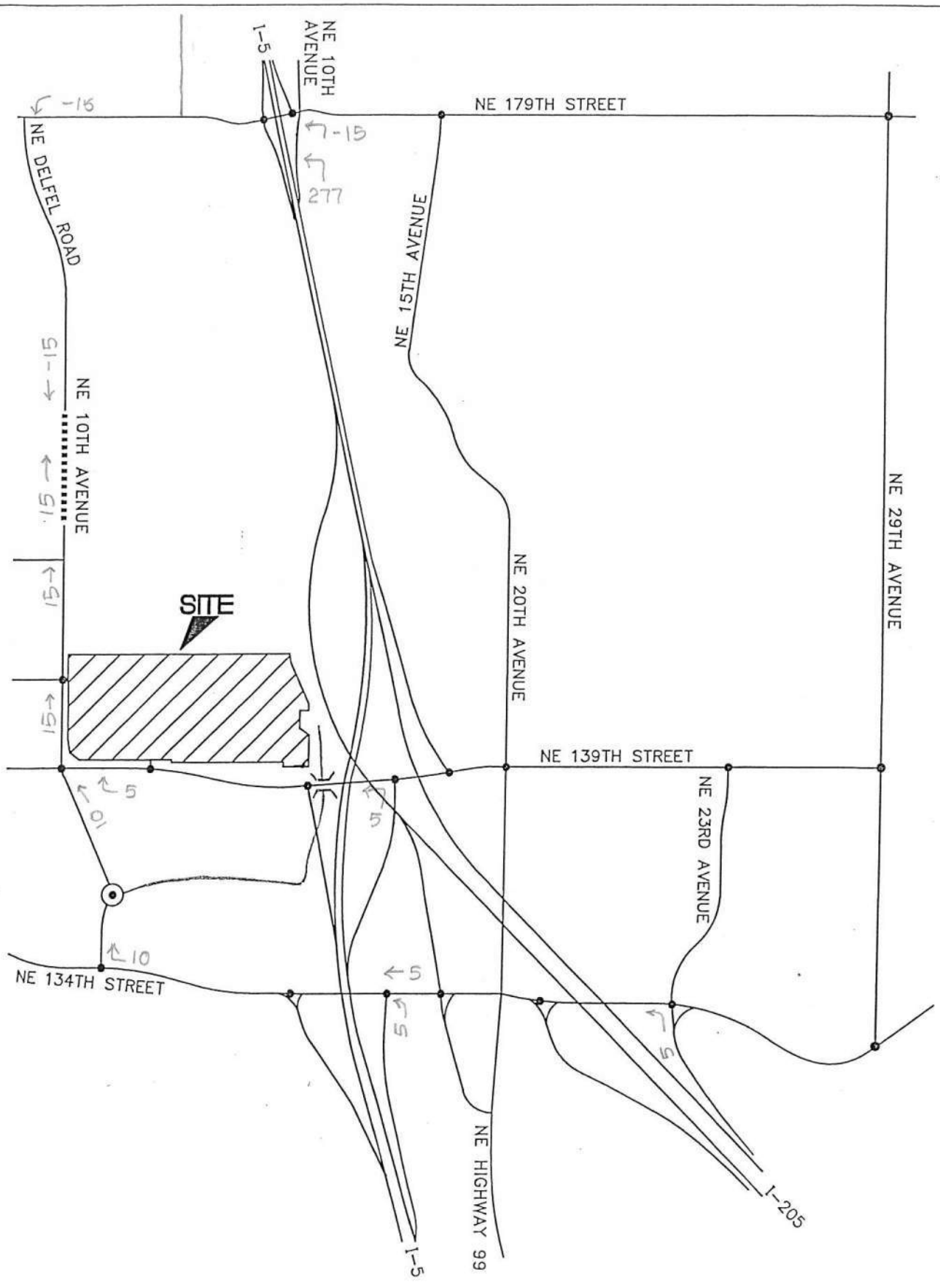
JED 6/21/18



PM Peak Hour
Reroute for I-5 SB on at 179th

~59% diversion

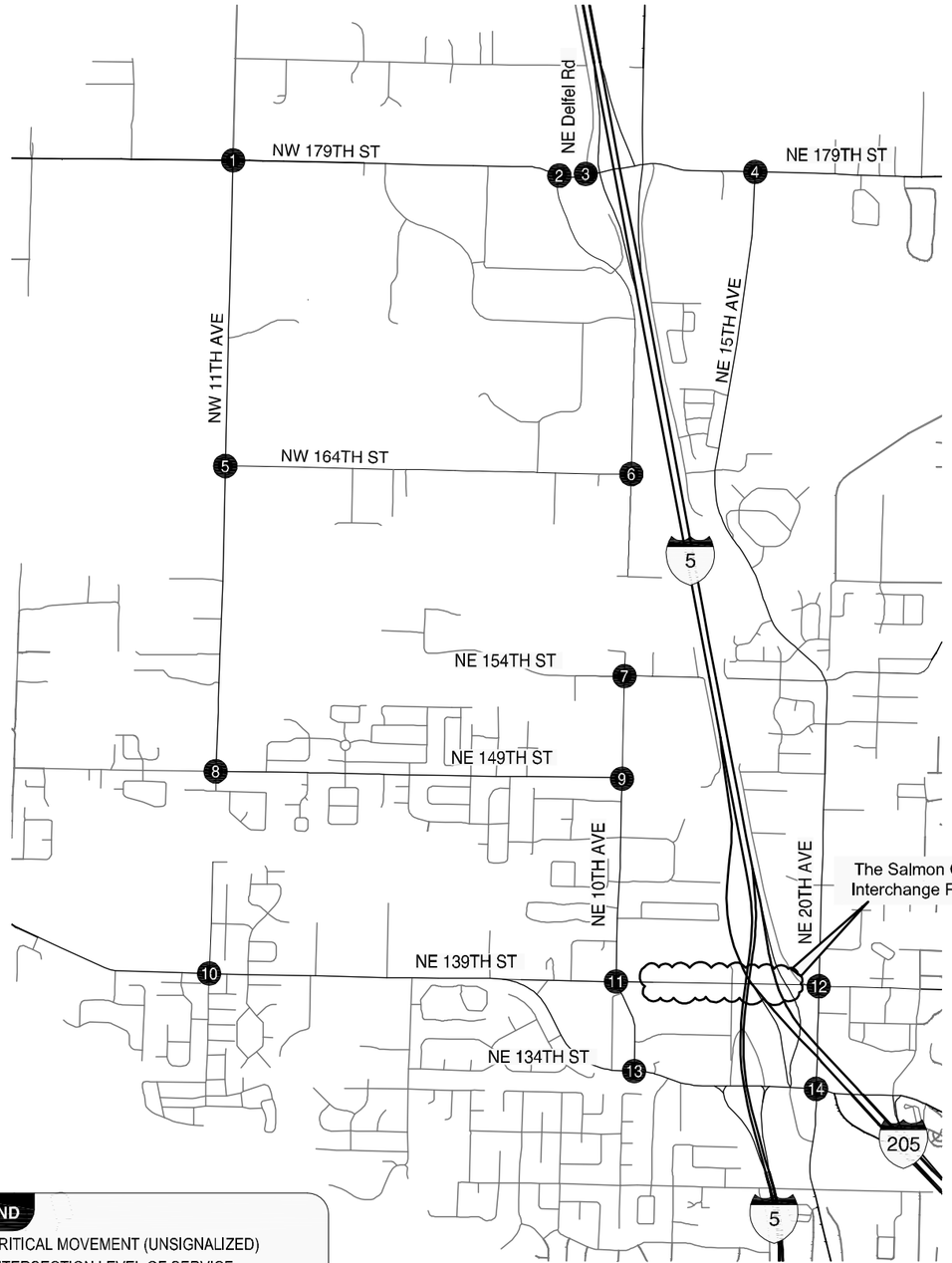
JED 6/21/18

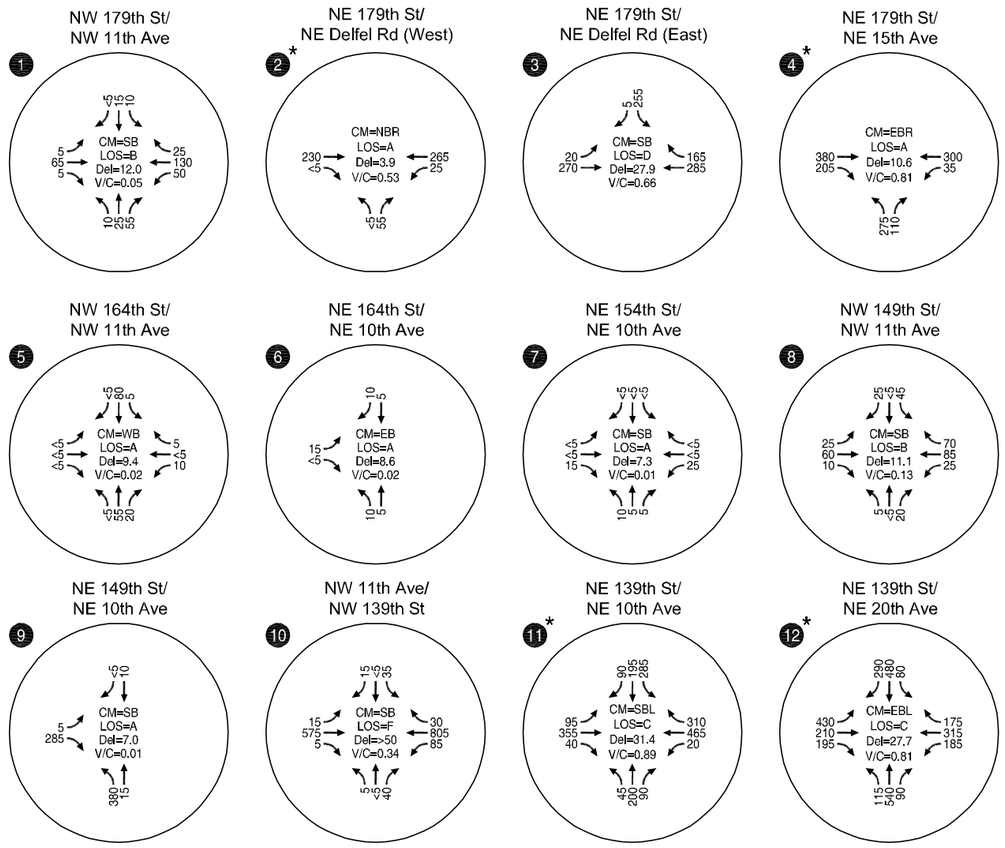


PM Peak Hour
Reroute for I-5 NB off at 179th

~5% diversion

JED 6/21/18





LEGEND

CM = CRITICAL MOVEMENT (UNSIGNALIZED)
LOS = INTERSECTION LEVEL OF SERVICE (SIGNALIZED)/CRITICAL MOVEMENT LEVEL OF SERVICE (UNSIGNALIZED)
Del = INTERSECTION AVERAGE CONTROL DELAY (SIGNALIZED)/CRITICAL MOVEMENT CONTROL DELAY (UNSIGNALIZED)
V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

* V/C - The HCM 2010 critical movement V/C ratio is reported, as Synchro 8 does not report the intersection V/C ratio

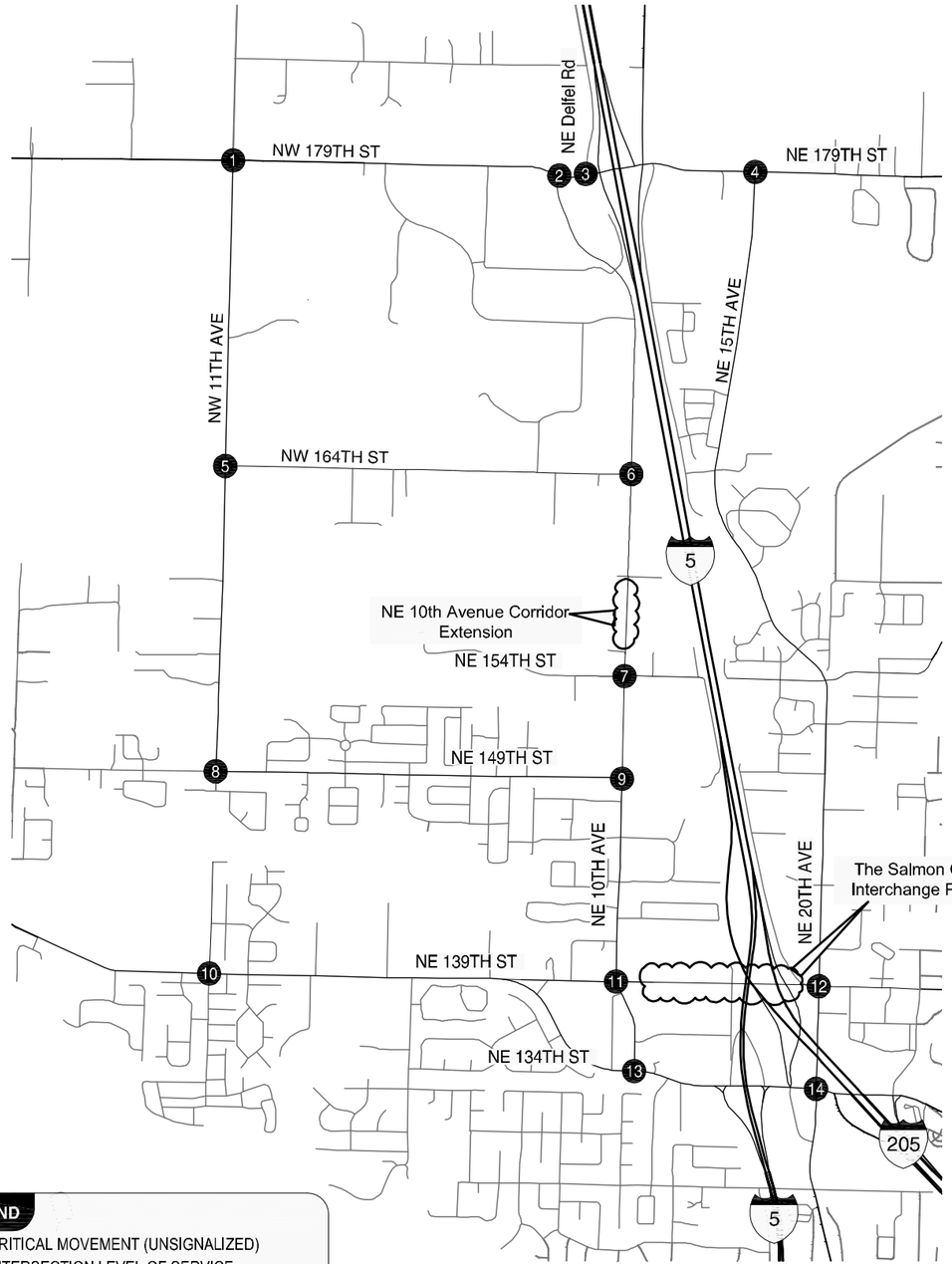
** V/C - Synchro 8 was not able to apply the HCM 2010 methodology to the intersection's signal phasing, therefore HCM 2000 results were reported

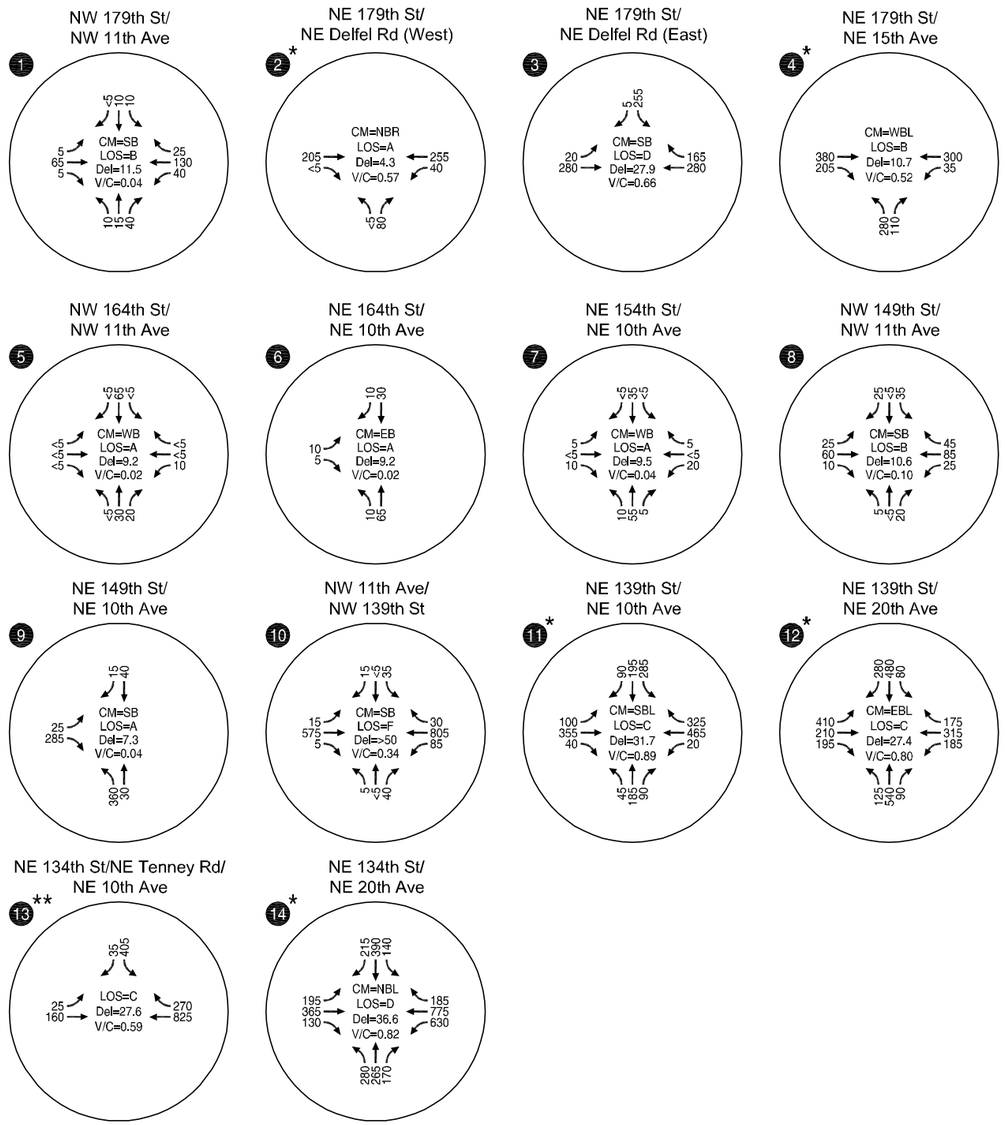
NB=Northbound	SB=Southbound	WB=Westbound	EB=Eastbound
NBR=Northbound-right	SBL=Southbound-Left	WBT=Westbound-Through	EBL=Eastbound-Left
NBL=Northbound-Left			EBR=Eastbound-Right

YEAR 2018 NO BUILD TRAFFIC CONDITIONS
WEEKDAY PM PEAK HOUR
CLARK COUNTY, WASHINGTON

FIGURE 7

H:\projfile\12460 - 10th Avenue and 149th Street Roundabout\dwgs\figs\12460.dwg Jun 03, 2014 - 6:16pm - jboudart Layout Tab: 07_NB_2018





LEGEND

CM = CRITICAL MOVEMENT (UNSIGNALIZED)
LOS = INTERSECTION LEVEL OF SERVICE (SIGNALIZED)/CRITICAL MOVEMENT LEVEL OF SERVICE (UNSIGNALIZED)
Del = INTERSECTION AVERAGE CONTROL DELAY (SIGNALIZED)/CRITICAL MOVEMENT CONTROL DELAY (UNSIGNALIZED)
V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

* V/C - The HCM 2010 critical movement V/C ratio is reported, as Synchro 8 does not report the intersection V/C ratio

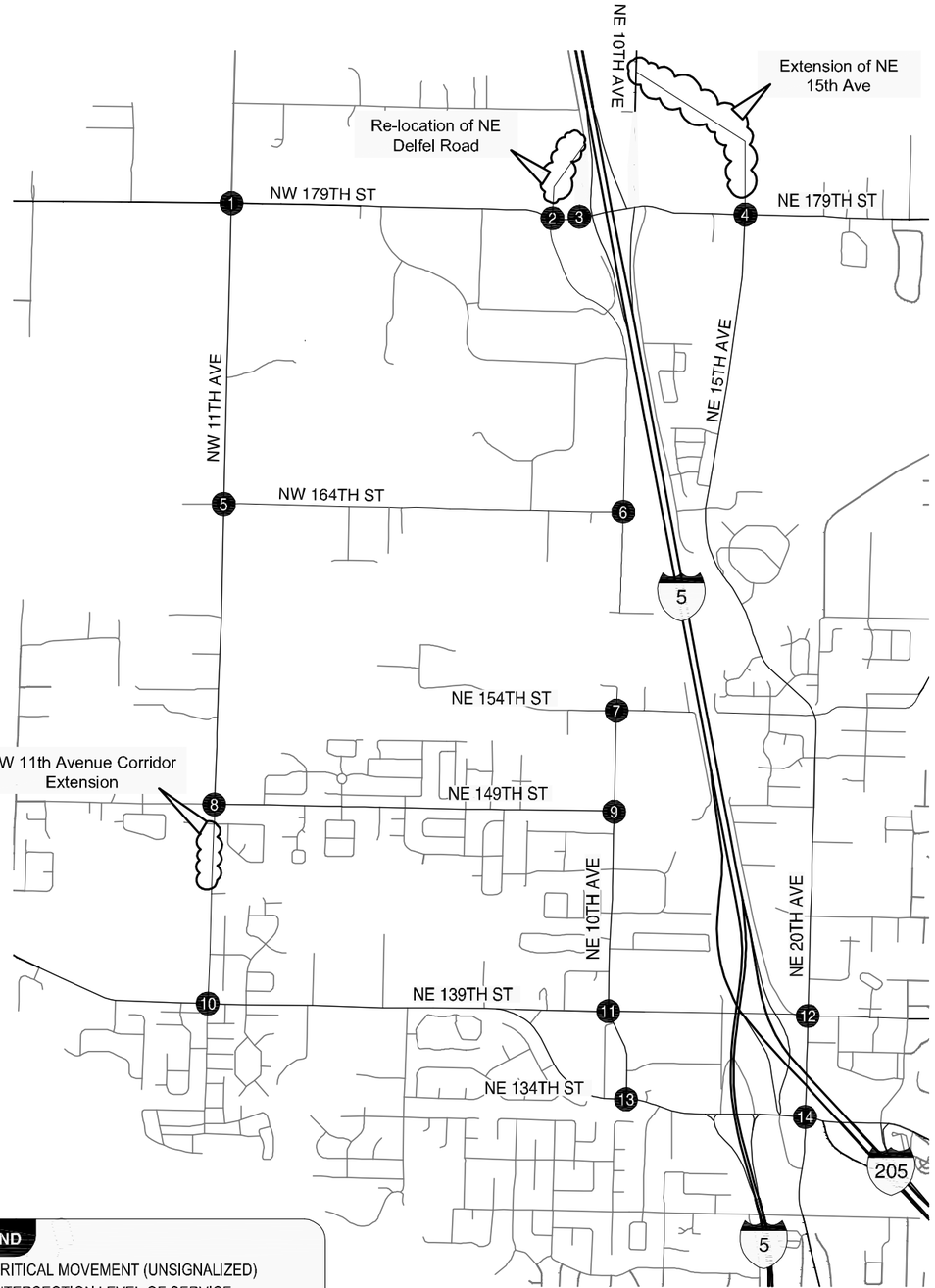
** V/C - Synchro 8 was not able to apply the HCM 2010 methodology to the intersection's signal phasing, therefore HCM 2000 results were reported

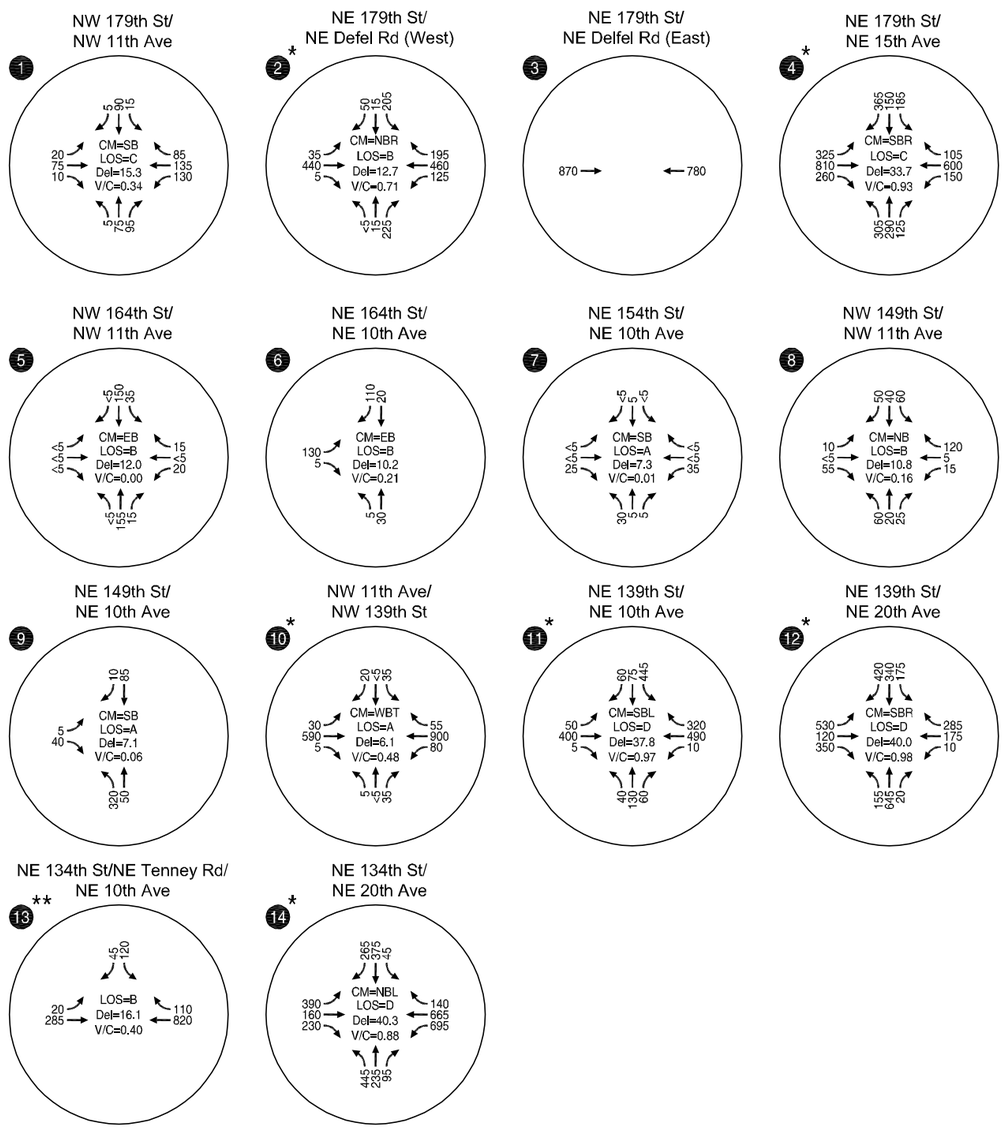
NB=Northbound	WB=Westbound	SB=Southbound	EB=Eastbound
NBL=Northbound-Left	WBL=Westbound-Left	SBL=Southbound-Left	EBL=Eastbound-Left
NBR=Northbound-Right			EBR=Eastbound-Right

OPENING YEAR 2018 TRAFFIC CONDITIONS
WEEKDAY PM PEAK HOUR
CLARK COUNTY, WASHINGTON

FIGURE 9

H:\projfile\12460 - 10th Avenue and 149th Street Roundabout\dwgs\figs\12460.dwg Jun 03, 2014 - 6:17pm - jboudart Layout Tab: 09_2018





LEGEND

CM = CRITICAL MOVEMENT (UNSIGNALIZED)
LOS = INTERSECTION LEVEL OF SERVICE (SIGNALIZED)/CRITICAL MOVEMENT LEVEL OF SERVICE (UNSIGNALIZED)
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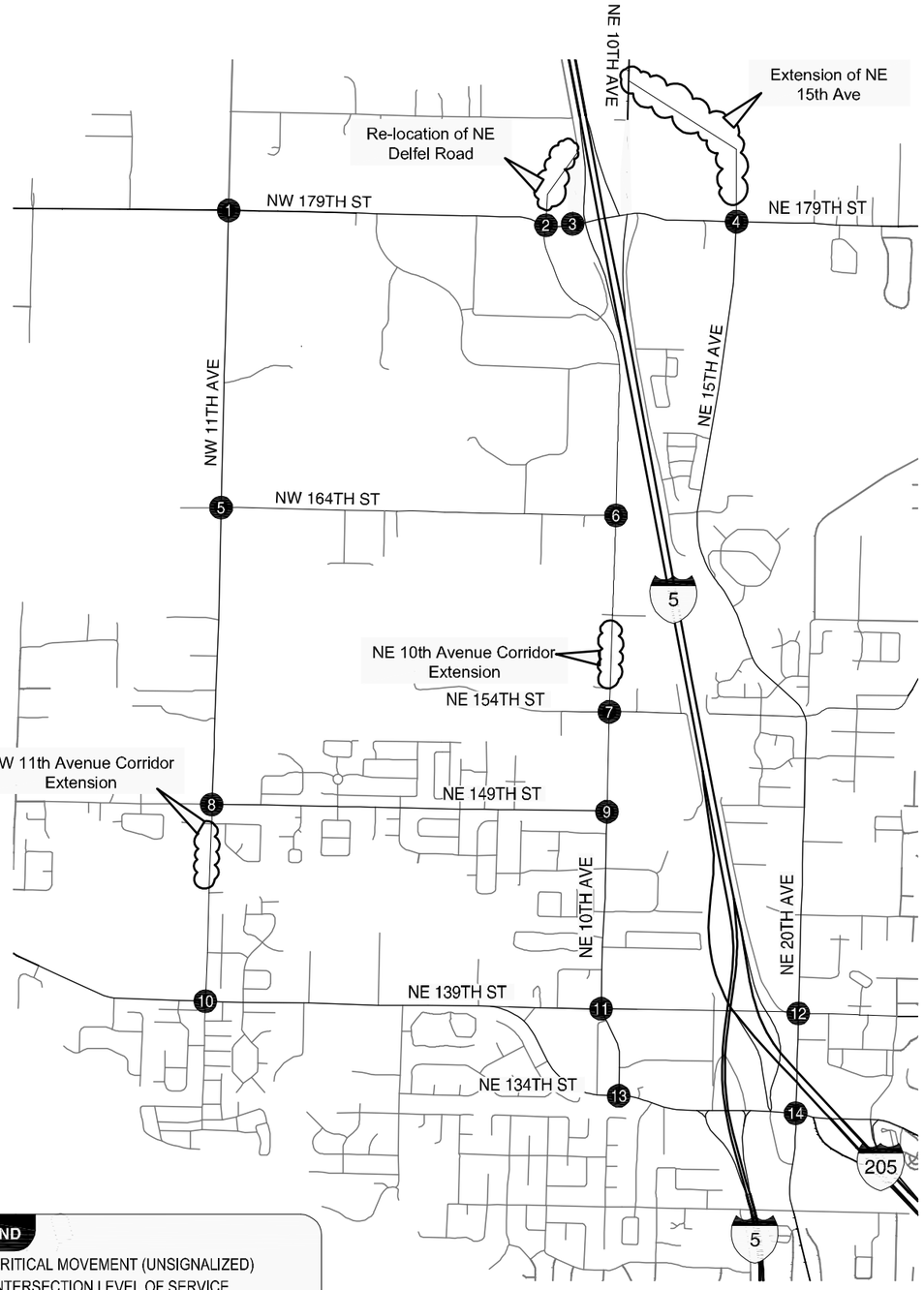
NB=Northbound
NBL=Northbound-Left
NBR=Northbound-Right
WB=Westbound
WBT=Westbound-Through
SB=Southbound
SBL=Southbound-Left
SBR=Southbound-Right
EB=Eastbound

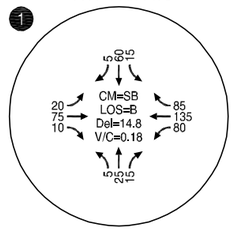
YEAR 2035 NO BUILD TRAFFIC CONDITIONS
WEEKDAY PM PEAK HOUR
CLARK COUNTY, WASHINGTON

FIGURE 11

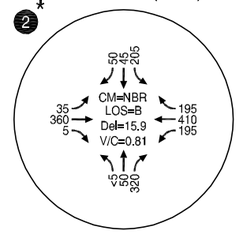
H:\projfile\12460 - 10th Avenue and 149th Street Roundabout\dwgs\figs\12460.dwg Jun 03, 2014 - 6:24pm - jboudart Layout Tab: 11_2035_NB_PM



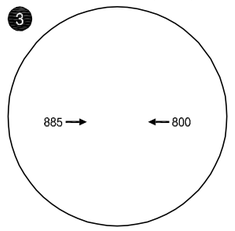
NW 179th St/ NW 11th Ave



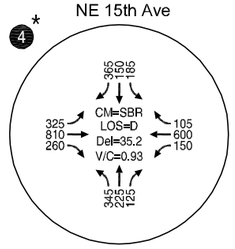
NE 179th St/ NE Defel Rd (West)



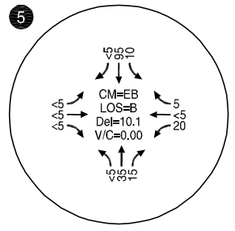
NE 179th St/ NE Delfel Rd (East)



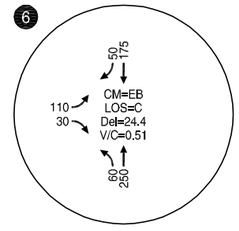
NE 179th St/ NE 15th Ave



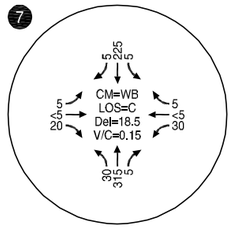
NW 164th St/ NW 11th Ave



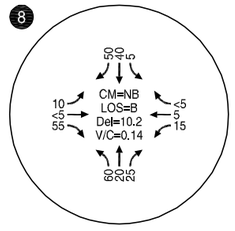
NE 164th St/ NE 10th Ave



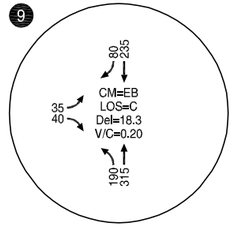
NE 154th St/ NE 10th Ave



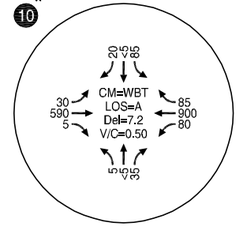
NW 149th St/ NW 11th Ave



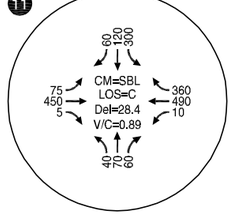
NE 149th St/ NE 10th Ave



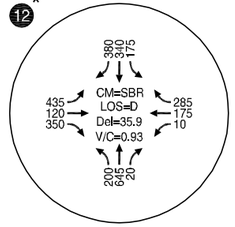
NW 11th Ave/ NW 139th St



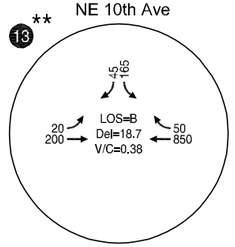
NE 139th St/ NE 10th Ave



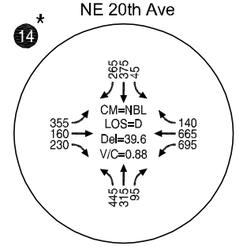
NE 139th St/ NE 20th Ave



NE 134th St/NE Tenney Rd/ NE 10th Ave



NE 134th St/ NE 20th Ave



LEGEND

CM = CRITICAL MOVEMENT (UNSIGNALIZED)
LOS = INTERSECTION LEVEL OF SERVICE (SIGNALIZED)/CRITICAL MOVEMENT LEVEL OF SERVICE (UNSIGNALIZED)
Del = INTERSECTION AVERAGE CONTROL DELAY (SIGNALIZED)/CRITICAL MOVEMENT CONTROL DELAY (UNSIGNALIZED)
V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

* V/C - The HCM 2010 critical movement V/C ratio is reported, as Synchro 8 does not report the intersection V/C ratio

** V/C - Synchro 8 was not able to apply the HCM 2010 methodology to the intersection's signal phasing, therefore HCM 2000 results were reported

NB=Northbound
NBL=Northbound-Left
NBR=Northbound-Right
WB=Westbound
WBT=Westbound-Through
SB=Southbound
SBL=Southbound-Left
SBR=Southbound-Right
EB=Eastbound

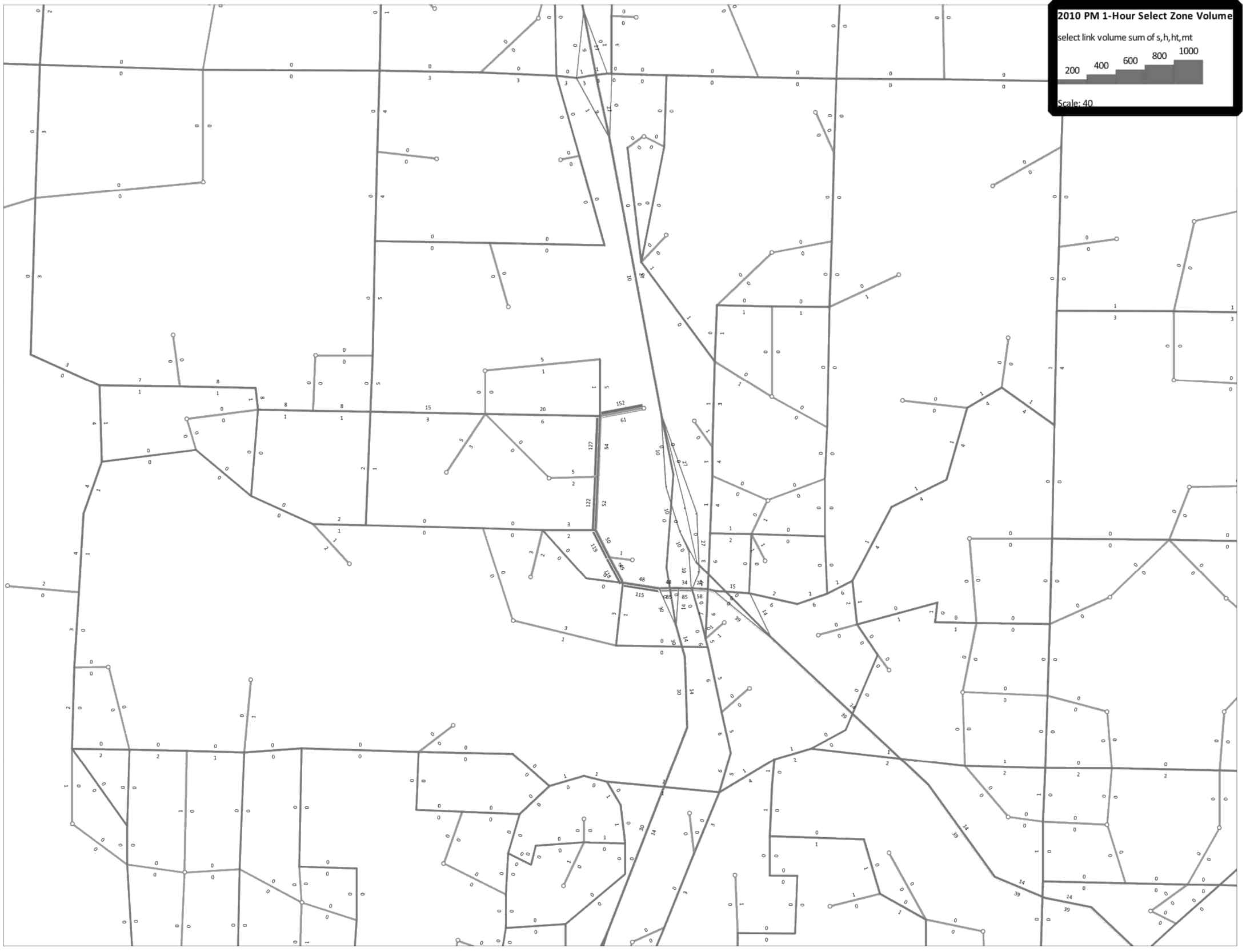
YEAR 2035 BUILD-OUT TRAFFIC CONDITIONS
WEEKDAY PM PEAK HOUR
CLARK COUNTY, WASHINGTON

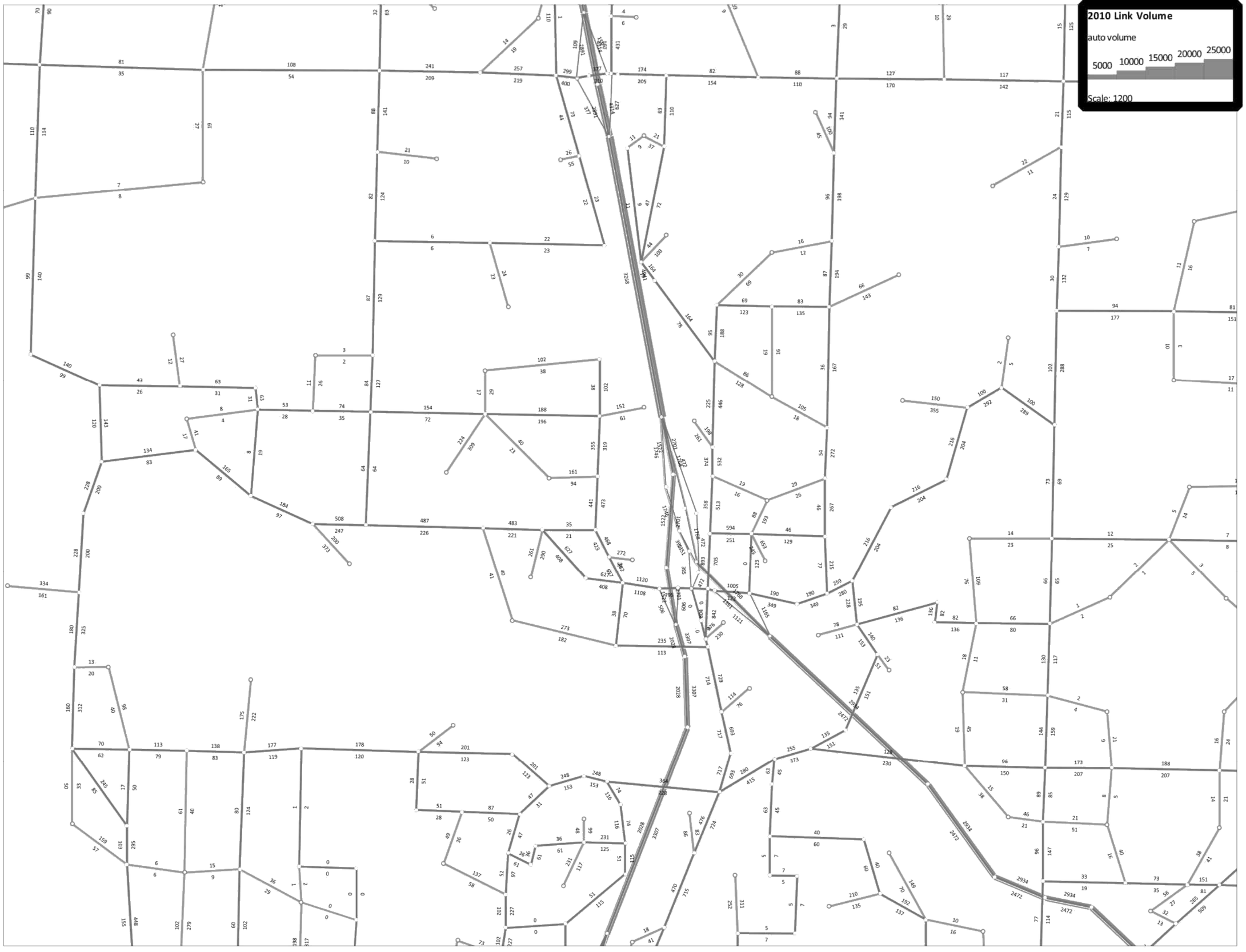
FIGURE 13

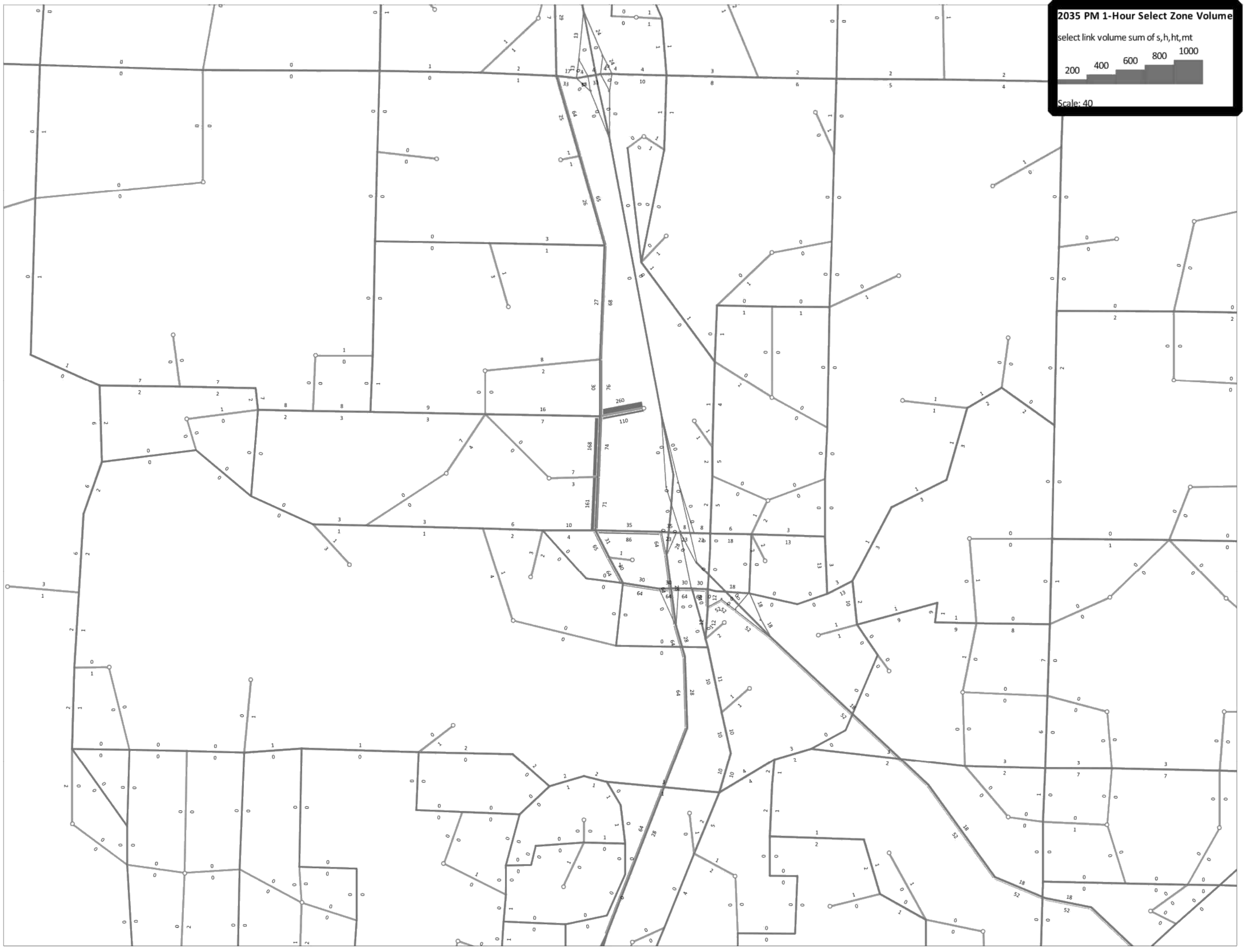
H:\projfile\12460 - 10th Avenue and 149th Street Roundabout\dwgs\figs\12460.dwg Jun 03, 2014 - 6:28pm - jboudart Layout Tab: 13_2035_PM

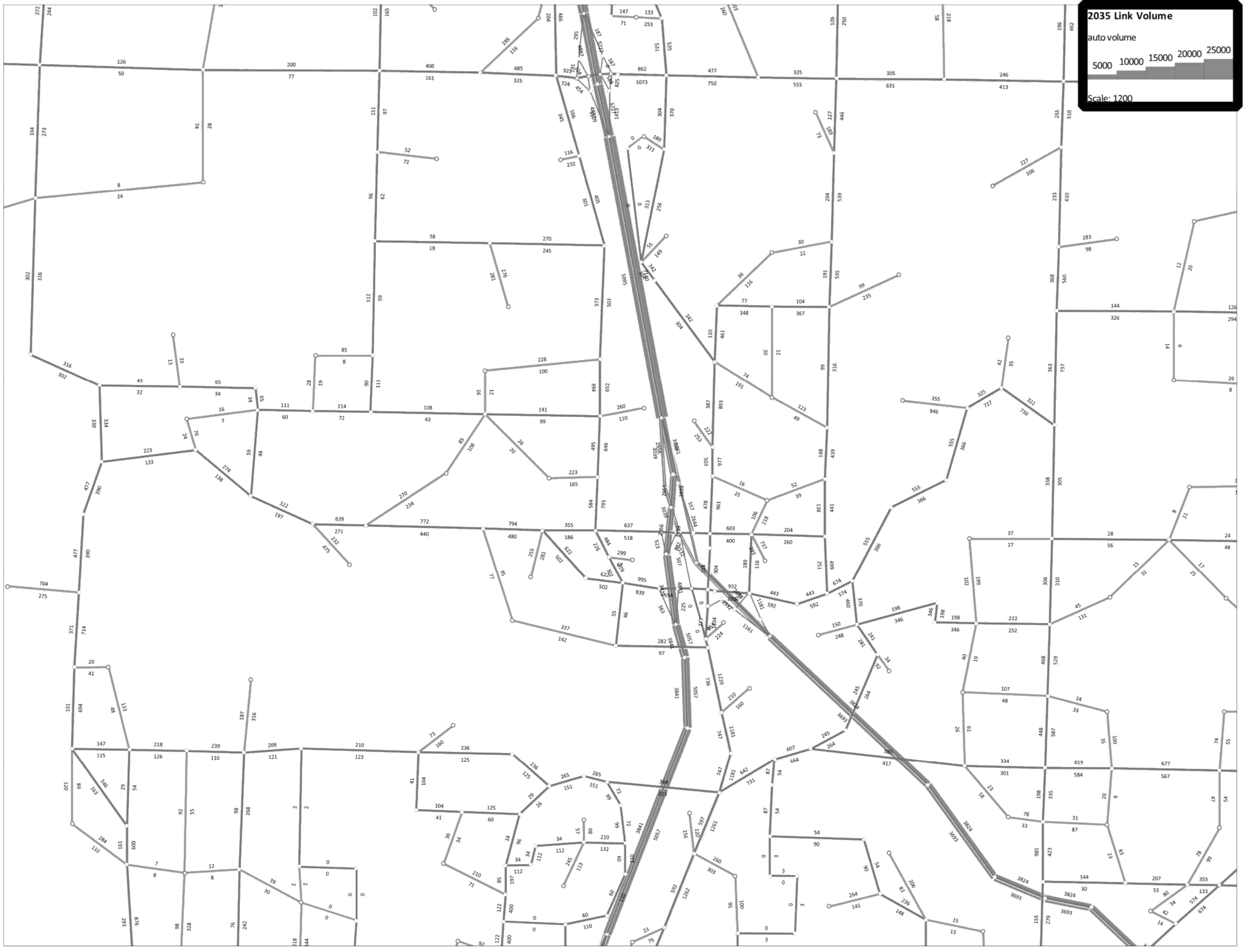
APPENDIX H

TRAVEL DEMAND PLOTS


2010 PM 1-Hour Select Zone Volume
select link volume sum of s,h,ht,mt
200
400
600
800
1000
Scale: 40


2010 Link Volume
auto volume
5000
10000
15000
20000
25000
Scale: 1200


2035 PM 1-Hour Select Zone Volume
select link volume sum of s,h,ht,mt
200
400
600
800
1000
Scale: 40


2035 Link Volume
auto volume
5000 10000 15000 20000 25000
Scale: 1200

APPENDIX I

TRAFFIC IMPACT FEE CALCULATIONS

Project: Salmon Creek Commercial
Job #: 2170410.01
Date: September 11,2018
Subject: **Traffic Impact Fee Estimates - Using Clark County Rates - Allocated by Use & County Rates**

AGGREGATED USING CLARK COUNTY RATES

Proposed Use	LUC	Size		Trip Rate	Daily Trips	Pass-by Factor	BEF	Tax Adj.	Fee Trips	Fee/Daily Trip	Estimated TIF
General Shopping Center	79.95 KSF	820	KSF	49.26 (x) + 1865	5,803	0.60	0.70	0.85	2,072	$536	**$1,110,592.00**

FULLY DISAGGREGATED USING CLARK COUNTY RATES

Proposed Use	LUC	Size		Trip Rate	Daily Trips	Pass-by Factor	BEF	Tax Adj.	Raw Trips	Adjusted Trips	Fee/Daily Trip	Estimated TIF	
Retail A	820	12.25	KSF	42.94	526	0.45	0.70	0.85	141	100	$536	$53,600.00	A
Retail B	820	9.45	KSF	42.94	406	0.45	0.70	0.85	109	77	$536	$41,272.00	A
Retail C (Grocery)	854	21.25	KSF	90.86	1,931	0.77	0.70	0.85	885	625	$536	$335,000.00	B
Retail D	820	8.20	KSF	42.94	352	0.45	0.70	0.85	94	66	$536	$35,376.00	A
Retail E (Pharmacy w/ DT)	880	13.00	KSF	90.06	1,171	0.45	0.70	0.85	314	222	$536	$118,992.00	C
Retail F	820	3.60	KSF	42.94	155	0.45	0.70	0.85	42	30	$536	$16,080.00	A
Retail F (QSR w/ DT)	934	3.60	KSF	496.12	1,786	0.50	0.70	0.85	531	375	$536	$201,000.00	D
Bank (2 DT)	912	4.20	KSF	148.15	622	0.45	0.70	0.85	167	118	$536	$63,248.00	E
Restaurant (QSR w/ DT)	934	4.40	KSF	496.12	2,183	0.50	0.70	0.85	649	459	$536	$246,024.00	D
									2,932	**2,072**		**$1,110,592.00**	

Use	Size (KSF)	Average/KSF	
General Retail	33.50	$4,368.00	A
Grocery Store	21.25	$15,764.71	B
Pharmacy	13.00	$9,153.23	C
QSR w/ DT	8.00	$55,878.00	D
Bank w/ DT	4.20	$15,059.05	E
		$1,110,592.00	

POTENTIAL CREDIT FOR EXISTING USES

Existing Use	Size	ITE LUC	ounty La	CC Trip Rate	Daily Trips	Pass-by Factor	BEF	Tax Adj.	Fee Trips	Fee/Daily Trip	Estimated TIF
DeWitt Construction*	12.00 KSF	110	Light In	6.97	84	1.00	1.00	0.85	71	$536	**$38,056.00**
Single-Family Residence	1 DU	210	SFR	9.52	10	1.00	1.00	0.85	9	$536	**$4,824.00**
											$42,880.00

* General light industrial was assumed as most appropriate use for DeWitt Construction based on Transportation Impact Study prepared by Kittelson & Associates, Inc. dated November 27, 2017.

APPENDIX J

SIGNAL TIMING INFORMATION

Signal Timing - Clark County Intersections

3265 - NE 179th Street & NE Delfel Rd
3280 - NE 179th Street & NE 15th Avenue
3100 - NE 139th Street & NE Tenney Road
3105 - NE 139th Street & NE 10th Avenue
3126 - NE 139th Street & NE 23rd Avenue
3130 - NE 139th Street & NE 29th Avenue
3026 - NE Tenney Road (NE 134th Street) & NE 10th Avenue
3061 - NE 134th Street & NE 29th Avenue
3066 - NE 134th Street & NE Salmon Creek Avenue
3207 - NE Highway 99 & NE 20th Avenue
3700 - NE 117th Street & NE Highway 99

Clark County GIS

Intersection Timing Sheet

Station ID [6.1]

Intersection : 3265 - NE Delfel Rd at NE 179th St (Standard File)

Unit Parameters [6.5]	I/O Mode [1.8.6]	Print Date	Date Implemented
Phase Mode:		6/20/2018 4:44:42 PM	

Communication [6.5]

Phase Timings [1.1.1]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Walk			5				5						5			
Ped Clearance			23				25						18			
Min Green		5	3	5	5	5	3	5					5			
Gap Ext		2	2	2	2	2	2	2					2			
Max1		25	30	30	10	25	30	20					25			
Max2		30	30	30	15	30	30	25					25			
Yellow Clr	3	4	3	3	4	4	3	3	3	3	3	3	4	3	3	3
Red Clr		1.7	1	2.6	1.7	1.7	1	2.6					1.7			
Red Revert		2	2		2	2	2	2					2			
Added Initial																
Max Initial																
Time Before Reduce		10			10	10		10								
Cars Before Reduce																
Time To Reduce		15			10	15		10								
Reduce By																
Min Gap																
Dynamic Max Limit		50			35	50		40								
Dynamic Max Step		10			5	10		5								
Auto Flash Entry		ON				ON										
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																

Phase Options [1.1.2]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Enable		ON	ON	ON	ON	ON	ON	ON					ON			
Lock Call																
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable		ON				ON										
Guar Passage																
Rest In Walk																
Cond Service																
Add Init Calc																

Phase Options Plus [1.1.3]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Reservice																
Ped Clr Thru Yellow																
Skip Red-NoCall																
Red Rest																
Max 2																
Max Inhibit																
Ped Delay																
Red Rest On Gap																
Conflicting P																
Green Ped Delay Time																
Omit Yel																
Ped Out																

Start Yel																	
Redirect P Calls From 1																	
Redirect P Calls To 1																	
Redirect P Calls From 2																	
Redirect P Calls To 2																	
Redirect P Calls From 3																	
Redirect P Calls To 3																	
Redirect P Calls From 4																	
Redirect P Calls To 4																	

Channel Assignment [1.8.1]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #		2		4	16	13		8		7	13	3	1											
Type	VEH	VEH	VEH	VEH	OLP	OLP	VEH	VEH	PED	PED	PED	PED	OLP	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH
Flash	RED	RED	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Alt Hz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Dimming Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

I/O Channel Plus [1.8.4]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	10	21	22	23	24
Flash Red																								
Flash Yellow											ON													
Flash Green																								
Inh Red Flash in Preempt																								
Color Flash Rate																								
Override Type																								
Olap Ovrd											16													

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1	4	5															NORMAL		3	2.6
Overlap 2																	NORMAL		3	3
Overlap 3																	NORMAL		3	3
Overlap 4																	NORMAL		3	3
Overlap 5																	NORMAL		3	3
Overlap 6																	NORMAL		3	3
Overlap 7																	NORMAL		3	3
Overlap 8																	NORMAL		3	3
Overlap 9																	NORMAL		3	3
Overlap 10																	NORMAL		3	3
Overlap 11																	NORMAL		3	3
Overlap 12																	NORMAL		3	3
Overlap 13	6	13															NORMAL		3	3
Overlap 14																	NORMAL		3	3
Overlap 15																	NORMAL		3	3
Overlap 16	5										6						FYA-4		4	1.7

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases								Conflicting Overlaps								Conflicting Peds							
Overlap 1																	3							
Overlap 2																								
Overlap 3																								
Overlap 4																								
Overlap 5																								
Overlap 6																								
Overlap 7																								
Overlap 8																								
Overlap 9																								
Overlap 10																								
Overlap 11																								
Overlap 12																								
Overlap 13																								
Overlap 14																								
Overlap 15																								
Overlap 16																	13							

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	2	4	3					
Ring 2	13	6	5	7	8			
Ring 3								
Ring 4								

Phase Startup, Concur [1.1.4]

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		35	30	15	15	20	15	15					15			
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		43	30	15	20	23	15	15					15			
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		70	30	20	15	30	30	15					30			
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase		ON														

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		40	30	30	15	15	30	25					15			
Mode	NON	MIN	NON	NON	NON	OMT	NON	NON	NON	NON	NON	NON	MIN	NON	NON	NON
Coord Phase													ON			

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Coordination, Pattern 1-16 [2.4]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	80	88	120	100												
Offset Time		73	105	92												
Split Number	1	2	3	4												
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern 17-32 [2.4]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time																
Offset Time																
Split Number																
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern+ 1-8 [2.5]

Pattern	1	2	3	4	5	6	7	8
Short	17	17	17	17	17	17	17	17
Long	33	33	33	33	33	33	33	17
Dwell								
No Short P 1								
No Short P 2								
No Short P 3								
No Short P 4								
Early Yield								
Offset	BEGGRN	ENDGRN	ENDGRN	ENDGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN
CNA								
Max 2								
Float								
Min Veh Perm								
Min Ped Perm								
Percentage								
MI								
Ret Hold								
ASC								
Ph Opt Table	3	3	3	3	3	3		
Ph Time Table	1	1	1	1	1	1		
Det Grp	1	2	2	3	2	2		
Call Inh	1	1	1	1	1	1		
Olp Off 1								

Olp Off 8								
Dia Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT
Force Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT

TB Coor, Day Plan [4.4]

Day Plan Table 1	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		16	18													
Minute		30														
Action	54	1	54													

Day Plan Table 2	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour	16	19	21	23												
Minute																
Action	3	54	4	54												

Day Plan Table 3	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour	16	17	19	22												
Minute																
Action	2	3	54	4												

Day Plan Table 4	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour	1															
Minute																
Action	54															

Day Plan Table 5	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour	8	12														
Minute																
Action	2	54														

Day Plan Table 6	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour	9	12														
Minute	30															
Action	2	54														

Day Plan Table 7	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

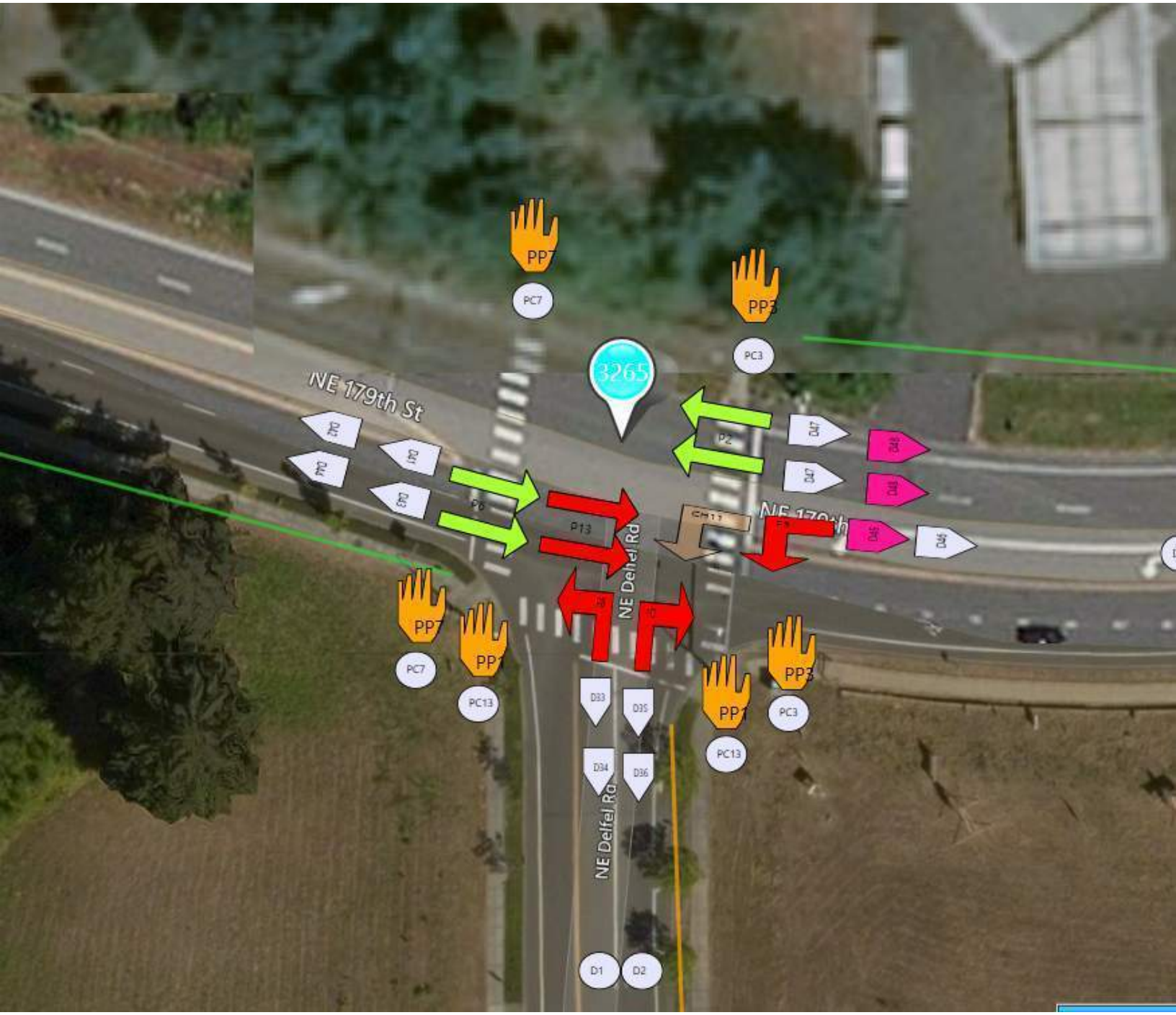
Day Plan Table 8	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 9	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 10	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 11	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 12	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																


NE 179th St
NE Delfel Rd
3265
PP7
PC7
PP3
PC3
P2
P6
P13
PP7
PC7
PP1
PC13
PP1
PC13
PP3
PC3
D33
D35
D34
D36
D1
D2

Clark County GIS

Intersection Timing Sheet

Station ID [6.1]

Intersection : 3280 - NE 15th Av at NE 179th St (Standard File)

Unit Parameters [6.5]	I/O Mode [1.8.6]	Print Date	Date Implemented
Phase Mode:		6/20/2018 4:43:23 PM	

Communication [6.5]

Phase Timings [1.1.1]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Walk						5		5								
Ped Clearance						5		18								
Min Green		5				5		5								
Gap Ext		2				2		1								
Max1		25				25		25								
Max2		30				30		30								
Yellow Clr	3	4	3	3	3	4	3	3	3	3	3	3	3	3	3	3
Red Clr		1.9				1.9		2.6								
Red Revert		5				5		5								
Added Initial																
Max Initial																
Time Before Reduce		20				20		20								
Cars Before Reduce																
Time To Reduce		15				15		10								
Reduce By																
Min Gap																
Dynamic Max Limit		50				50		40								
Dynamic Max Step		10				10		5								
Auto Flash Entry		ON				ON										
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																

Phase Options [1.1.2]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Enable		ON				ON		ON								
Lock Call																
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON				ON										
Sim Gap Enable		ON				ON										
Guar Passage																
Rest In Walk																
Cond Service																
Add Init Calc																

Phase Options Plus [1.1.3]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Reservice																
Ped Clr Thru Yellow																
Skip Red-NoCall																
Red Rest																
Max 2																
Max Inhibit																
Ped Delay																
Red Rest On Gap																
Conflicting P																
Green Ped Delay Time																
Omit Yel																
Ped Out																

Start Yel																
Redirect P Calls From 1																
Redirect P Calls To 1																
Redirect P Calls From 2																
Redirect P Calls To 2																
Redirect P Calls From 3																
Redirect P Calls To 3																
Redirect P Calls From 4																
Redirect P Calls To 4																

Channel Assignment [1.8.1]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	1	2	3	4	5	6	7	8	1	2	3	4	2	4	6	8								
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED								
Flash	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Alt Hz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Dimming Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

I/O Channel Plus [1.8.4]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	10	21	22	23	24
Flash Red																								
Flash Yellow																								
Flash Green																								
Inh Red Flash in Preempt																								
Color Flash Rate																								
Override Type																								
Olap Ovrd																								

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2																	NORMAL		3.5	1.5
Overlap 3																	NORMAL		3.5	1.5
Overlap 4																	NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9																	NORMAL		3.5	1.5
Overlap 10																	NORMAL		3.5	1.5
Overlap 11																	NORMAL		3.5	1.5
Overlap 12																	NORMAL		3.5	1.5
Overlap 13																	NORMAL		3.5	1.5
Overlap 14																	NORMAL		3.5	1.5
Overlap 15																	NORMAL		3.5	1.5
Overlap 16																	NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases								Conflicting Overlaps								Conflicting Peds							
Overlap 1																								
Overlap 2																								
Overlap 3																								
Overlap 4																								
Overlap 5																								
Overlap 6																								
Overlap 7																								
Overlap 8																								
Overlap 9																								
Overlap 10																								
Overlap 11																								
Overlap 12																								
Overlap 13																								
Overlap 14																								
Overlap 15																								
Overlap 16																								

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	1	2	3	4				
Ring 2	5	6	7	8				
Ring 3								
Ring 4								

Phase Startup, Concur [1.1.4]

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		50				50		30								
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		50				50		30								
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		50				50		30								
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		50				50		40								
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		50				50		40								
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		50				50		40								
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Coordination, Pattern 1-16 [2.4]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	130	130	130	150	150	150										
Offset Time																
Split Number	1	2	3	4	5	6										
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern 17-32 [2.4]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time																
Offset Time																
Split Number																
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern+ 1-8 [2.5]

Pattern	1	2	3	4	5	6	7	8
Short	17	17	17	17	17	17	17	17
Long	33	33	33	33	33	33	17	17
Dwell								
No Short P 1								
No Short P 2								
No Short P 3								
No Short P 4								
Early Yield								
Offset	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN
CNA								
Max 2								
Float								
Min Veh Perm								
Min Ped Perm								
Percentage								
MI								
Ret Hold								
ASC								
Ph Opt Table	5	5	5	5	5	5		
Ph Time Table	2	2	2	2	2	2		
Det Grp	2	2	2	2	2	2		
Call Inh	1	1	1	1	1	1		
Olp Off 1								

Olp Off 8								
Dia Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT
Force Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT

TB Coor, Day Plan [4.4]

Day Plan Table 1	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		6	15	15	18	18	20									
Minute		30	30	32	30	32										
Action	54	1	54	4	54	1	54									

Day Plan Table 2	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 3	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 4	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 5	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		6	15	15	18	18	20									
Minute		30	30	32	30	32										
Action	54	1	54	4	54	1	54									

Day Plan Table 6	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		8	19													
Minute		30														
Action	54	1	54													

Day Plan Table 7	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		8	19													
Minute		30														
Action	54	1	54													

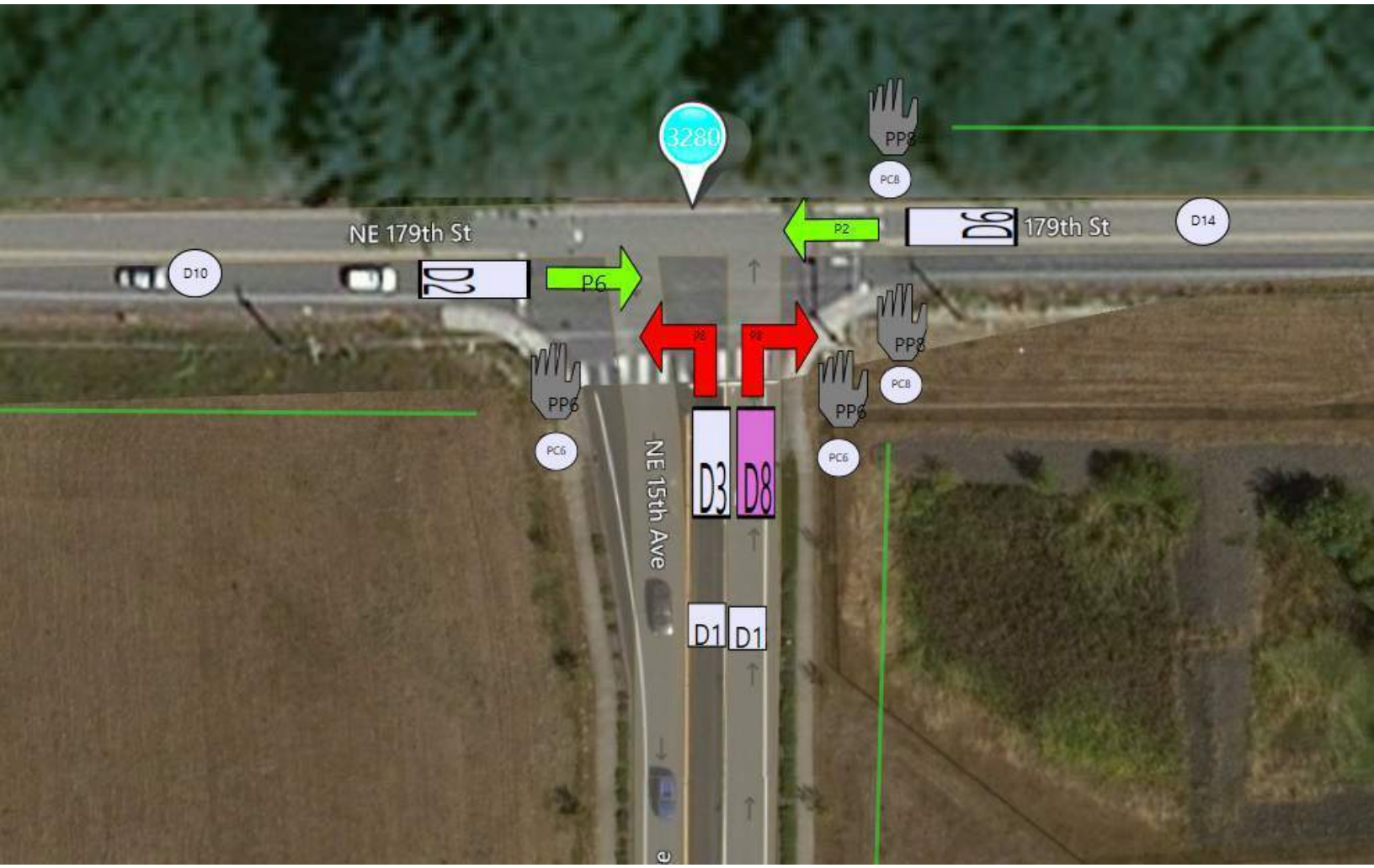
Day Plan Table 8	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 9	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 10	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 11	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 12	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																


3280
PP8
PC8
NE 179th St
P2
D6
179th St
D14
D10
D2
P6
PP8
PC8
PP6
PC6
PP6
PC6
NE 15th Ave
D3
D8
D1
D1

ID: 3100
Name: NE Tenney at NE 139th St Post SCIP
Configuration: Standard

Pattern	Cycle Time	Offset Time	Split Number	Seq Number
Pattern 1	130	11	1	1
Pattern 2	130	11	2	1
Pattern 3	130	11	3	1
Pattern 4	150	8	4	1
Pattern 5	150	8	5	1
Pattern 6	150	8	6	1
Pattern 7	0	0	0	1
Pattern 8	0	0	0	1
Pattern 9	0	0	0	1
Pattern 10	0	0	0	1
Pattern 11	0	0	0	1
Pattern 12	0	0	0	1
Pattern 13	0	0	0	1
Pattern 14	0	0	0	1
Pattern 15	0	0	0	1
Pattern 16	0	0	0	1
Pattern 17	0	0	0	1
Pattern 18	0	0	0	1
Pattern 19	0	0	0	1
Pattern 20	0	0	0	1
Pattern 21	0	0	0	1
Pattern 22	0	0	0	1
Pattern 23	0	0	0	1
Pattern 24	0	0	0	1
Pattern 25	0	0	0	1
Pattern 26	0	0	0	1
Pattern 27	0	0	0	1
Pattern 28	0	0	0	1
Pattern 29	0	0	0	1
Pattern 30	0	0	0	1
Pattern 31	0	0	0	1
Pattern 32	0	0	0	1
Pattern 33	0	0	0	1
Pattern 34	0	0	0	1
Pattern 35	0	0	0	1
Pattern 36	0	0	0	1
Pattern 37	0	0	0	1
Pattern 38	0	0	0	1
Pattern 39	0	0	0	1
Pattern 40	0	0	0	1
Pattern 41	0	0	0	1
Pattern 42	0	0	0	1
Pattern 43	0	0	0	1
Pattern 44	0	0	0	1
Pattern 45	0	0	0	1
Pattern 46	0	0	0	1
Pattern 47	0	0	0	1
Pattern 48	0	0	0	1

ID: 3100

Name: NE Tennev at NE 139th St Post SCIP

Configuration: Standard

Param	Phs 1	Phs 2	Phs 3	Phs 4	Phs 5	Phs 6	Phs 7	Phs 8	Phs 9	Phs 10	Phs 11	Phs 12	Phs 13	Phs 14	Phs 15	Phs 16
Walk	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
Ped Clearance	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0
Min Green	0	5	0	0	0	5	0	5	0	5	0	0	0	5	0	5
Passage	0	3	0	0	0	3	0	2	0	3	0	0	0	3	0	2
Max1	0	25	0	0	0	25	0	25	0	20	0	0	0	20	0	20
Max2	0	35	0	0	0	35	0	35	0	30	0	0	0	30	0	30
Yellow	3	3.6	3	3	3	3.6	3	3.6	3	3.6	3	3	3.6	3	3	3.6
Red	0	2	0	0	0	2	0	2.4	0	2	0	0	0	2	0	2.4
Red Revert	0	5	0	0	0	5	0	5	0	5	0	0	0	5	0	5
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	0	20	0	0	0	20	0	20	0	20	0	0	0	20	0	20
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	20	0	0	0	20	0	20	0	10	0	0	0	10	0	10
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	0	60	0	0	0	60	0	60	0	50	0	0	0	50	0	50
Dynamic Max Step	0	10	0	0	0	10	0	10	0	5	0	0	0	5	0	5
Startup	RED	GREEN	RED	RED	RED	GREEN	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED
Enable	Off	On	Off	Off	Off	On	Off	On	Off	On	Off	Off	Off	On	Off	On
Auto Entry	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Auto Exit	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act1	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act2	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Lock Call	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Min Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Max Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ped Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Soft Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Dual Entry	Off	On	Off	Off	Off	On	Off	Off	Off	On	Off	Off	Off	On	Off	Off
Sim Gap Enable	On	On	On	On	On	On	On	On	On	On	On	On	On	On	On	On
Guar Passage	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Rest In Walk	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Cond Service	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Add Init Calc	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ring	1	1	1	1	2	2	2	2	1	1	1	1	2	2	2	2
Concur 1	5	5	7	7	1	1	3	3	13	13	15	15	9	9	11	11
Concur 2	6	6	8	8	2	2	4	4	14	14	16	16	10	10	12	12
Concur 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3100
Name: NE Tenney at NE 139th St Post SCIP
Configuration: Standard

Table	Param	Day Plan 1	Day Plan 2	Day Plan 3	Day Plan 4	Day Plan 5	Day Plan 6	Day Plan 7	Day Plan 8	Day Plan 9	Day Plan 10	Day Plan 11	Day Plan 12	Day Plan 13	Day Plan 14	Day Plan 15	Day Plan 16
1	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
1	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
1	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
2	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
5	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
5	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
6	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3105
Name: NE 10th Av at NE 139th St
Configuration: Standard

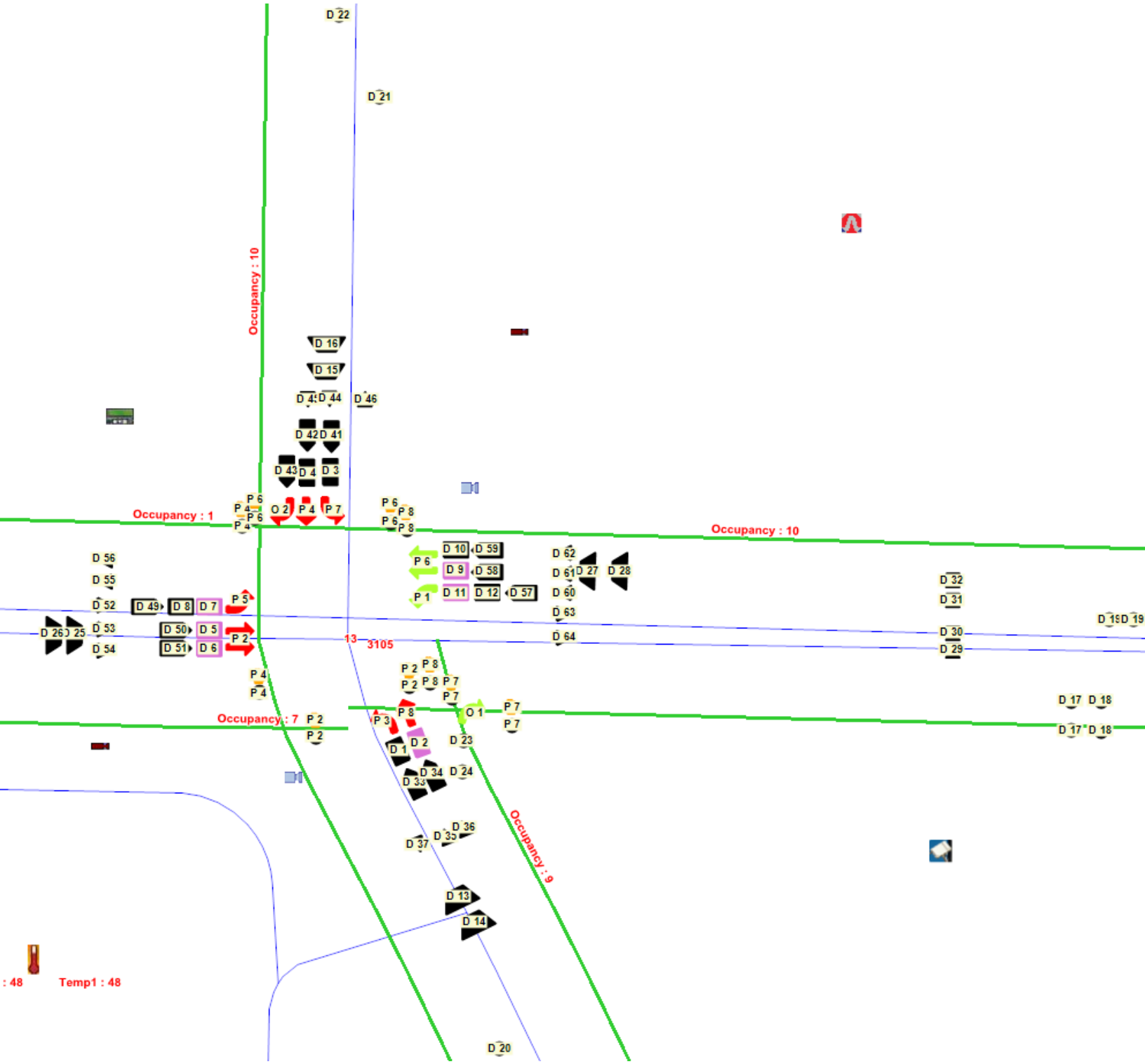
Pattern	Cycle Time	Offset Time	Split Number	Seq Number
Pattern 1	0	0	0	2
Pattern 2	0	0	0	2
Pattern 3	0	0	0	2
Pattern 4	0	0	0	2
Pattern 5	0	0	0	2
Pattern 6	90	0	1	2
Pattern 7	90	0	1	2
Pattern 8	90	0	1	2
Pattern 9	90	0	2	2
Pattern 10	90	0	2	2
Pattern 11	100	0	3	2
Pattern 12	100	0	4	2
Pattern 13	100	0	5	2
Pattern 14	100	0	6	2
Pattern 15	100	0	6	2
Pattern 16	110	0	7	2
Pattern 17	110	0	8	2
Pattern 18	110	0	9	2
Pattern 19	110	0	10	2
Pattern 20	110	0	10	2
Pattern 21	120	0	11	2
Pattern 22	120	0	12	2
Pattern 23	120	0	13	2
Pattern 24	120	0	14	2
Pattern 25	120	0	14	2
Pattern 26	130	0	15	2
Pattern 27	130	0	16	2
Pattern 28	130	0	17	2
Pattern 29	130	0	18	2
Pattern 30	130	0	19	2
Pattern 31	140	0	20	2
Pattern 32	140	0	21	2
Pattern 33	140	0	22	2
Pattern 34	140	0	22	2
Pattern 35	140	0	22	2
Pattern 36	0	0	0	2
Pattern 37	0	0	0	2
Pattern 38	0	0	0	2
Pattern 39	0	0	0	2
Pattern 40	0	0	0	2
Pattern 41	0	0	0	2
Pattern 42	0	0	0	2
Pattern 43	0	0	0	2
Pattern 44	0	0	0	2
Pattern 45	0	0	0	2
Pattern 46	0	0	0	2
Pattern 47	0	0	0	2
Pattern 48	130	0	15	2

ID: 3105
Name: NE 10th Av at NE 139th St
Configuration: Standard

Param	Phs 1	Phs 2	Phs 3	Phs 4	Phs 5	Phs 6	Phs 7	Phs 8	Phs 9	Phs 10	Phs 11	Phs 12	Phs 13	Phs 14	Phs 15	Phs 16
Walk	0	5	0	5	0	5	5	5	0	0	0	0	0	0	0	0
Ped Clearance	0	15	0	22	0	24	8	22	0	0	0	0	0	0	0	0
Min Green	5	5	5	5	5	5	5	5	0	0	0	0	0	0	0	0
Passage	1.5	1.2	2	2	1.2	1.2	1.2	2	0	0	0	0	0	0	0	0
Max1	20	20	20	35	20	20	20	35	0	0	0	0	0	0	0	0
Max2	30	30	30	45	30	30	30	45	0	0	0	0	0	0	0	0
Yellow	3	3.6	3	3.6	3	3.6	3	3.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	2.4	2.6	2.4	2.5	2.4	2.6	2.4	2.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert	5	5	5	5	5	5	5	5	0	0	0	0	0	0	0	0
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	15	15	20	20	15	15	15	20	0	0	0	0	0	0	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	10	10	10	20	10	10	10	20	0	0	0	0	0	0	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	35	40	40	70	35	40	40	70	0	0	0	0	0	0	0	0
Dynamic Max Step	5	5	5	10	5	5	5	10	0	0	0	0	0	0	0	0
Startup	RED	WALK	RED	RED	RED	WALK	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED
Enable	On	On	On	On	On	On	On	On	Off	Off	Off	Off	Off	Off	Off	Off
Auto Entry	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Auto Exit	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act1	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act2	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Lock Call	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Min Recall	Off	Off	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off
Max Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ped Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Soft Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Dual Entry	Off	On	Off	On	Off	On	Off	On	Off	Off	Off	Off	Off	Off	Off	Off
Sim Gap Enable	On	On	On	On	On	On	On	On	Off	Off	Off	Off	Off	Off	Off	Off
Guar Passage	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Rest In Walk	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Cond Service	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Add Init Calc	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ring	1	1	1	1	2	2	2	2	0	0	0	0	0	0	0	0
Concur 1	5	5	7	7	1	1	3	3	0	0	0	0	0	0	0	0
Concur 2	6	6	8	8	2	2	4	4	0	0	0	0	0	0	0	0
Concur 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3105
Name: NE 10th Av at NE 139th St
Configuration: Standard

Table	Param	Day Plan 1	Day Plan 2	Day Plan 3	Day Plan 4	Day Plan 5	Day Plan 6	Day Plan 7	Day Plan 8	Day Plan 9	Day Plan 10	Day Plan 11	Day Plan 12	Day Plan 13	Day Plan 14	Day Plan 15	Day Plan 16
1	Hour	0	6	7	7	9	9	11	15	16	17	18	19	0	0	0	0
1	Minute	0	0	0	30	28	30	0	58	0	0	30	0	0	0	0	0
1	Action	54	9	13	23	54	17	22	54	21	26	16	54	0	0	0	0
2	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Hour	0	6	7	7	9	9	11	15	16	17	18	19	0	0	0	0
5	Minute	0	0	0	30	28	30	0	58	0	0	30	0	0	0	0	0
5	Action	54	9	13	23	54	17	22	54	21	26	16	54	0	0	0	0
6	Hour	0	8	10	11	13	16	18	19	0	0	0	0	0	0	0	0
6	Minute	0	0	0	0	30	30	0	0	0	0	0	0	0	0	0	0
6	Action	54	25	17	22	17	22	17	17	0	0	0	0	0	0	0	0
7	Hour	0	8	10	12	13	16	18	19	0	0	0	0	0	0	0	0
7	Minute	0	0	0	0	30	30	0	0	0	0	0	0	0	0	0	0
7	Action	54	25	17	22	17	22	17	54	0	0	0	0	0	0	0	0
8	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0


D 22
D 21
Occupancy : 10
D 16
D 15
D 4
D 44
D 46
D 42
D 41
D 43
D 4
D 3
P 6
P 4
P 6
O 2
P 4
P 7
P 6
P 8
P 6
P 8
Occupancy : 1
Occupancy : 10
D 10
D 59
P 6
D 9
D 58
P 1
D 11
D 12
D 57
D 62
D 61
D 27
D 28
D 60
D 63
D 64
D 56
D 55
D 52
D 49
D 8
D 7
P 5
D 26
D 25
D 53
D 50
D 5
P 2
D 54
D 51
D 6
13
3105
D 32
D 31
D 30
D 29
D 19
D 19
P 4
P 4
P 2
P 8
P 2
P 8
P 7
P 7
Occupancy : 7
P 2
P 2
P 8
P 3
O 1
P 7
P 7
D 17
D 18
D 17
D 18
D 1
D 2
D 23
D 34
D 24
D 33
D 37
D 35
D 36
Occupancy : 9
D 13
D 14
D 20
: 48
Temp1 : 48

Clark County GIS

Intersection Timing Sheet

Station ID [6.1]

Intersection : 3126 - NE 23rd Av at NE 139th St - Post SCIP (Standard File)

Unit Parameters [6.5]	I/O Mode [1.8.6]	Print Date	Date Implemented
Phase Mode:		6/20/2018 4:40:02 PM	

Communication [6.5]

Phase Timings [1.1.1]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Walk		5				5	5	5								
Ped Clearance		16				14	17	13								
Min Green	5	5			5	5	5	5								
Gap Ext	2	2			1	1	1	1								
Max1	15	25			15	25	20	25								
Max2	20	35			20	35	25	35								
Yellow Clr	3	3.6	3	3	3	3.6	3	3.6	3	3	3	3	3	3	3	3
Red Clr	2.4	2			2.4	2	2.2	2								
Red Revert	5	5			5	5	5	5								
Added Initial																
Max Initial																
Time Before Reduce	10	20			10	20	10	20								
Cars Before Reduce																
Time To Reduce	10	20			10	20	10	10								
Reduce By																
Min Gap	2	2			2	2	2	2								
Dynamic Max Limit	25	70			25	70	35	60								
Dynamic Max Step	5	10			5	10	5	10								
Auto Flash Entry		ON				ON										
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																

Phase Options [1.1.2]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Enable	ON	ON			ON	ON	ON	ON								
Lock Call																
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON				ON										
Sim Gap Enable		ON				ON			ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk																
Cond Service																
Add Init Calc																

Phase Options Plus [1.1.3]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Reservice																
Ped Clr Thru Yellow																
Skip Red-NoCall																
Red Rest																
Max 2																
Max Inhibit																
Ped Delay																
Red Rest On Gap																
Conflicting P																
Green Ped Delay Time																
Omit Yel																
Ped Out																

Start Yel																	
Redirect P Calls From 1																	
Redirect P Calls To 1																	
Redirect P Calls From 2																	
Redirect P Calls To 2																	
Redirect P Calls From 3																	
Redirect P Calls To 3																	
Redirect P Calls From 4																	
Redirect P Calls To 4																	

Channel Assignment [1.8.1]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	1	2	3	4	5	6	7	8	1	2	3	4	2	7	6	8	1	3	5	7				
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED	PED	PED	PED	PED	VEH	VEH	VEH	VEH
Flash	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Alt Hz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Dimming Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

I/O Channel Plus [1.8.4]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	10	21	22	23	24
Flash Red																								
Flash Yellow																								
Flash Green																								
Inh Red Flash in Preempt																								
Color Flash Rate																								
Override Type																								
Olap Ovrd																								

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2																	NORMAL		3.5	1.5
Overlap 3																	NORMAL		3.5	1.5
Overlap 4																	NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9																	NORMAL		3.5	1.5
Overlap 10																	NORMAL		3.5	1.5
Overlap 11																	NORMAL		3.5	1.5
Overlap 12																	NORMAL		3.5	1.5
Overlap 13																	NORMAL		3.5	1.5
Overlap 14																	NORMAL		3.5	1.5
Overlap 15																	NORMAL		3.5	1.5
Overlap 16																	NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases								Conflicting Overlaps								Conflicting Peds							
Overlap 1																								
Overlap 2																								
Overlap 3																								
Overlap 4																								
Overlap 5																								
Overlap 6																								
Overlap 7																								
Overlap 8																								
Overlap 9																								
Overlap 10																								
Overlap 11																								
Overlap 12																								
Overlap 13																								
Overlap 14																								
Overlap 15																								
Overlap 16																								

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	1	2		3	4	7	8	
Ring 2	5	6						
Ring 3								
Ring 4								

Phase Startup, Concur [1.1.4]

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	40			15	40	30	45								
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	40			15	40	30	45								
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	40			15	40	30	45								
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	50			15	50	35	50								
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	50			15	50	35	50								
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	50			15	50	35	50								
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Coordination, Pattern 1-16 [2.4]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	130	130	130	150	150	150										
Offset Time																
Split Number	1	2	3	4	5	6										
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern 17-32 [2.4]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time																
Offset Time																
Split Number																
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern+ 1-8 [2.5]

Pattern	1	2	3	4	5	6	7	8
Short	17	17	17	17	17	17	17	17
Long	33	33	33	33	33	33	17	17
Dwell								
No Short P 1								
No Short P 2								
No Short P 3								
No Short P 4								
Early Yield								
Offset	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN
CNA								
Max 2								
Float								
Min Veh Perm								
Min Ped Perm								
Percentage								
MI								
Ret Hold								
ASC								
Ph Opt Table	5	5	5	5	5	5		
Ph Time Table	2	2	2	2	2	2		
Det Grp	2	2	2	2	2	2		
Call Inh	1	1	1	1	1	1		
Olp Off 1								

Olp Off 8								
Dia Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT
Force Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT

TB Coor, Day Plan [4.4]

Day Plan Table 1	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		6	15	15	18	18	20									
Minute		30	30	32	30	32										
Action	54	1	54	4	54	1	54									

Day Plan Table 2	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 3	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 4	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 5	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		6	15	15	18	18	20									
Minute		30	30	32	30	32										
Action	54	1	54	4	54	1	54									

Day Plan Table 6	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		8	19													
Minute		30														
Action	54	1	54													

Day Plan Table 7	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		8	19													
Minute		30														
Action	54	1	54													

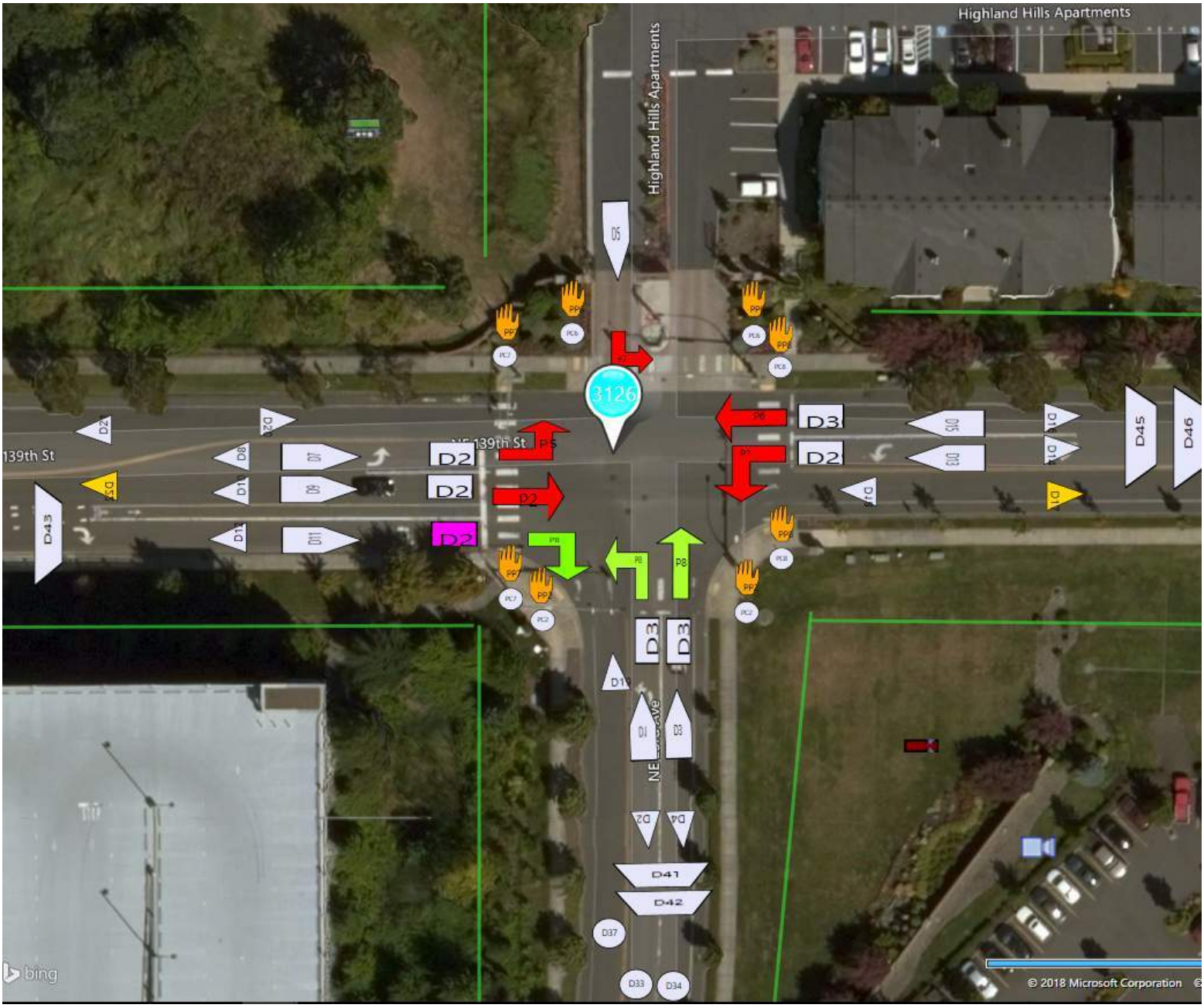
Day Plan Table 8	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 9	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 10	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 11	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 12	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																


Highland Hills Apartments
Highland Hills Apartments
3126
139th St
NE 139th St
D2
D3
D45
D46
D43
D41
D42
NE Juanita Dr
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Clark County GIS

Intersection Timing Sheet

Station ID [6.1]

Intersection : 3130 - NE 29th Av at NE 139th St (Standard File)

Unit Parameters [6.5]	I/O Mode [1.8.6]	Print Date	Date Implemented
Phase Mode:		6/20/2018 4:41:16 PM	

Communication [6.5]

Phase Timings [1.1.1]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Walk	5				5				5							
Ped Clearance	14				14				23							
Min Green		5	5	5		5	5	5	5	5						
Gap Ext		2	2	2		2	2	2		2						
Max1		20	10	20		20	10	20	10	10						
Max2		25	15	25		25	15	25	15	15						
Yellow Clr	3	3	3	3.6	3	3	3	3.6	3	3.6	3	3	3	3	3	3
Red Clr		2.4	3	1.9		2.4	3.3	1.9	2.4	1.9						
Red Revert		2	2.4	2		2	2	2	5	2						
Added Initial																
Max Initial																
Time Before Reduce		15	10	20		15	10	20	5	10						
Cars Before Reduce																
Time To Reduce		15	10	20		15	10	20	5	10						
Reduce By																
Min Gap																
Dynamic Max Limit		50	40	70		50	40	70		40						
Dynamic Max Step		5	5	10		5	5	10		5						
Auto Flash Entry																
Auto Flash Exit																
Non-Actuated 1																
Non-Actuated 2																

Phase Options [1.1.2]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Enable	ON	ON	ON	ON	ON	ON		ON	ON	ON						
Lock Call																
Min Recall				ON				ON								
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable		ON		ON		ON		ON								
Guar Passage																
Rest In Walk																
Cond Service																
Add Init Calc																

Phase Options Plus [1.1.3]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Reservice																
Ped Clr Thru Yellow																
Skip Red-NoCall																
Red Rest																
Max 2																
Max Inhibit																
Ped Delay																
Red Rest On Gap																
Conflicting P																
Green Ped Delay Time																
Omit Yel																
Ped Out																

Start Yel																	
Redirect P Calls From 1																	
Redirect P Calls To 1																	
Redirect P Calls From 2																	
Redirect P Calls To 2																	
Redirect P Calls From 3																	
Redirect P Calls To 3																	
Redirect P Calls From 4																	
Redirect P Calls To 4																	

Channel Assignment [1.8.1]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	1	2	10	9	5	6	7	8	4	9	1	5	1	2	3	4	1	3	5	7				
Type	VEH	VEH	OLP	OLP	VEH	VEH	VEH	VEH	PED	PED	PED	PED	OLP	OLP	OLP	OLP	PED	PED	PED	PED	VEH	VEH	VEH	VEH
Flash	RED	RED	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Alt Hz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Dimming Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

I/O Channel Plus [1.8.4]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	10	21	22	23	24
Flash Red																								
Flash Yellow										ON														
Flash Green																								
Inh Red Flash in Preempt																								
Color Flash Rate																								
Override Type																								
Olap Ovrd										10														

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2																	NORMAL		3.5	1.5
Overlap 3	2																NORMAL		3.5	1.5
Overlap 4																	NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9	4	9															NORMAL		3.5	1.5
Overlap 10	3	10							4								FYA-4		3	3.3
Overlap 11																	NORMAL		3.5	1.5
Overlap 12									8								NORMAL		3	3.3
Overlap 13																	NORMAL		3.5	1.5
Overlap 14																	NORMAL		3.5	1.5
Overlap 15																	NORMAL		3.5	1.5
Overlap 16																	NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases								Conflicting Overlaps								Conflicting Peds							
Overlap 1																								
Overlap 2																								
Overlap 3																								
Overlap 4																	2							
Overlap 5																								
Overlap 6																								
Overlap 7																								
Overlap 8																								
Overlap 9																								
Overlap 10																								
Overlap 11																								
Overlap 12																								
Overlap 13																								
Overlap 14																								
Overlap 15																								
Overlap 16																								

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	1	2	3	9	4	10		
Ring 2	5	6	8					
Ring 3								
Ring 4								

Phase Startup, Concur [1.1.4]

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	25	25		30	25	25		80	25	25						
Mode	NON	NON	OMT	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	25	25		30	25	25		80	25	25						
Mode	NON	NON	OMT	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	25	25		30	25	25		80	25	25						
Mode	NON	NON	OMT	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	25	25		50	25	25		100	25	25						
Mode	NON	NON	OMT	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	25	25		50	25	25		100	25	25						
Mode	NON	NON	OMT	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	25	25		50	25	25		100	25	25						
Mode	NON	NON	OMT	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Coordination, Pattern 1-16 [2.4]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	130	130	130	150	150	150										
Offset Time	44	44	44	108	108	108										
Split Number	1	2	3	4	5	6										
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern 17-32 [2.4]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time															130	130
Offset Time																
Split Number															31	32
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern+ 1-8 [2.5]

Pattern	1	2	3	4	5	6	7	8
Short	17	17	17	17	17	17	17	17
Long	33	33	33	33	33	33	17	17
Dwell								
No Short P 1	12	12	12	12	12	12		
No Short P 2								
No Short P 3								
No Short P 4								
Early Yield								
Offset	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN
CNA								
Max 2								
Float								
Min Veh Perm								
Min Ped Perm								
Percentage								
MI								
Ret Hold								
ASC								
Ph Opt Table	5	5	5	5	5	5		
Ph Time Table	2	2	2	2	2	2		
Det Grp	2	2	2	2	2	2		
Call Inh	1	1	1	1	1	1		
Olp Off 1								

Olp Off 8								
Dia Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT
Force Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT

TB Coor, Day Plan [4.4]

Day Plan Table 1	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		6	15	15	18	18	20									
Minute		30	30	32	30	32										
Action	54	1	54	4	54	1	54									

Day Plan Table 2	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 3	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 4	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 5	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		6	15	15	18	18	20									
Minute		30	30	32	30	32										
Action	54	1	54	4	54	1	54									

Day Plan Table 6	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		8	19													
Minute		30														
Action	54	1	54													

Day Plan Table 7	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		8	19													
Minute		30														
Action	54	1	54													

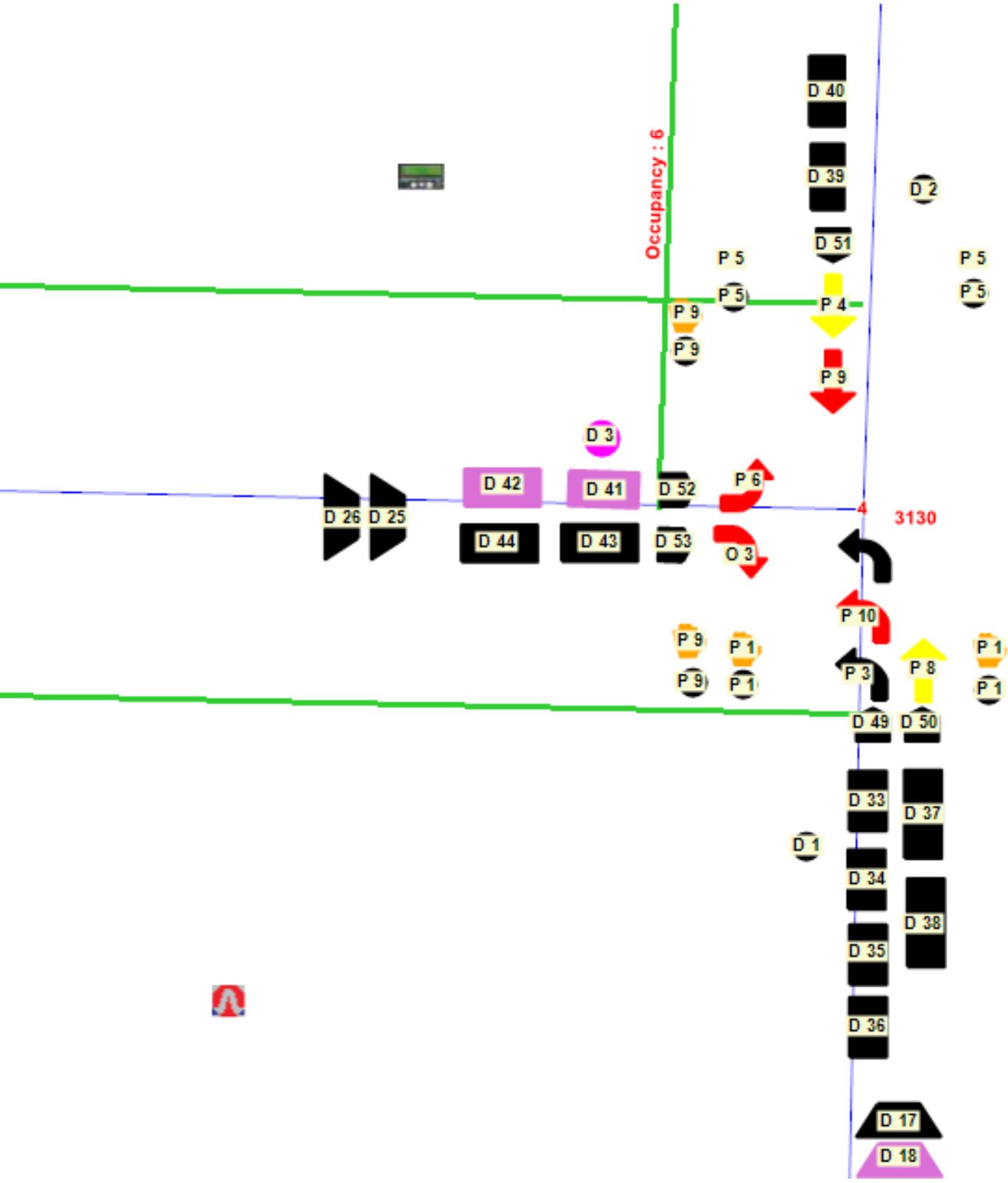
Day Plan Table 8	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 9	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 10	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 11	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 12	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																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D 40
D 39
D 2
D 51
P 5
P 5
P 5
P 5
P 4
P 9
P 9
P 9
D 3
D 42
D 41
D 52
P 6
D 26
D 25
D 44
D 43
D 53
O 3
4
3130
P 10
P 9
P 1
P 3
P 8
P 1
P 9
P 1
D 49
D 50
D 33
D 37
D 1
D 34
D 38
D 35
D 36
D 17
D 18

ID: 3026
Name: NE 10th Av at NE Tenney Rd - Post SCIP
Configuration: Standard

Pattern	Cycle Time	Offset Time	Split Number	Seq Number
Pattern 1	130	58	1	1
Pattern 2	130	58	2	1
Pattern 3	130	58	3	1
Pattern 4	150	94	4	1
Pattern 5	150	94	5	1
Pattern 6	150	94	6	1
Pattern 7	0	0	0	1
Pattern 8	0	0	0	1
Pattern 9	0	0	0	1
Pattern 10	0	0	0	1
Pattern 11	0	0	0	1
Pattern 12	0	0	0	1
Pattern 13	0	0	0	1
Pattern 14	0	0	0	1
Pattern 15	0	0	0	1
Pattern 16	0	0	0	1
Pattern 17	0	0	0	1
Pattern 18	0	0	0	1
Pattern 19	0	0	0	1
Pattern 20	0	0	0	1
Pattern 21	0	0	0	1
Pattern 22	0	0	0	1
Pattern 23	0	0	0	1
Pattern 24	0	0	0	1
Pattern 25	0	0	0	1
Pattern 26	0	0	0	1
Pattern 27	0	0	0	1
Pattern 28	0	0	0	1
Pattern 29	0	0	0	1
Pattern 30	0	0	0	1
Pattern 31	0	0	0	1
Pattern 32	0	0	0	1
Pattern 33	0	0	0	1
Pattern 34	0	0	0	1
Pattern 35	0	0	0	1
Pattern 36	0	0	0	1
Pattern 37	0	0	0	1
Pattern 38	0	0	0	1
Pattern 39	0	0	0	1
Pattern 40	0	0	0	1
Pattern 41	0	0	0	1
Pattern 42	0	0	0	1
Pattern 43	0	0	0	1
Pattern 44	0	0	0	1
Pattern 45	0	0	0	1
Pattern 46	0	0	0	1
Pattern 47	0	0	0	1
Pattern 48	0	0	0	1

ID: 3026
Name: NE 10th Av at NE Tennev Rd - Post SCIP
Configuration: Standard

Param	Phs 1	Phs 2	Phs 3	Phs 4	Phs 5	Phs 6	Phs 7	Phs 8	Phs 9	Phs 10	Phs 11	Phs 12	Phs 13	Phs 14	Phs 15	Phs 16
Walk	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
Ped Clearance	0	0	0	0	0	17	21	0	0	0	0	0	0	0	0	0
Min Green	0	5	0	0	5	5	5	5	0	5	0	0	0	5	0	5
Passage	0	2	0	0	2	2	1.5	1.5	0	2	0	0	0	2	0	2
Max1	0	25	0	0	25	25	25	25	0	20	0	0	0	20	0	25
Max2	0	35	0	0	35	35	30	30	0	25	0	0	0	25	0	50
Yellow	3	3.6	3	3	3	3.6	3.2	3.2	3	3.6	3	3	3	3.6	3	3.2
Red	0	1.6	0	0	2.2	1.6	2.3	2.3	0	1.6	0	0	0	1.6	0	2.3
Red Revert	0	5	0	0	5	5	5	5	0	5	0	0	0	5	0	5
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	0	15	0	0	10	15	10	15	0	15	0	0	0	15	0	15
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	5	15	0	0	10	15	5	15	0	15	0	0	0	15	5	15
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	10	70	0	0	25	70	35	40	0	50	0	0	0	50	0	40
Dynamic Max Step	5	10	0	0	5	10	5	5	0	10	0	0	0	10	0	10
Startup	RED	GREEN	RED	RED	RED	WALK	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED
Enable	Off	On	Off	Off	On	On	On	On	Off	On	Off	Off	Off	On	Off	On
Auto Entry	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Auto Exit	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act1	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act2	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Lock Call	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Min Recall	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Max Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ped Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Soft Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Dual Entry	Off	On	Off	Off	Off	On	Off	Off	Off	On	Off	Off	Off	On	Off	Off
Sim Gap Enable	Off	On	Off	Off	Off	On	Off	Off	Off	On	Off	Off	Off	On	Off	Off
Guar Passage	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Rest In Walk	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Cond Service	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Add Init Calc	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ring	1	1	1	1	2	2	2	2	1	1	1	1	2	2	2	2
Concur 1	5	5	7	7	1	1	3	3	13	13	15	15	9	9	11	11
Concur 2	6	6	8	8	2	2	4	4	14	14	16	16	10	10	12	12
Concur 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3026
Name: NE 10th Av at NE Tenney Rd - Post SCIP
Configuration: Standard

Table	Param	Day Plan 1	Day Plan 2	Day Plan 3	Day Plan 4	Day Plan 5	Day Plan 6	Day Plan 7	Day Plan 8	Day Plan 9	Day Plan 10	Day Plan 11	Day Plan 12	Day Plan 13	Day Plan 14	Day Plan 15	Day Plan 16
1	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
1	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
1	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
2	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
5	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
5	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
6	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clark County GIS

Intersection Timing Sheet

Station ID [6.1]

Intersection : 3061 - NE 29th Av at NE 134th St - v.76 (Standard File)

Unit Parameters [6.5]	I/O Mode [1.8.6]	Print Date	Date Implemented
Phase Mode:		6/20/2018 4:37:35 PM	

Communication [6.5]

Phase Timings [1.1.1]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Walk			5				5			5						
Ped Clearance			19				17			12						
Min Green	5	5		5		5		5	5	5						
Gap Ext	2	2		2		2		2	2	2						
Max1	25	25		25		25		25	25	20						
Max2	35	35		35		35		35	35	20						
Yellow Clr	3	4.3	3	3.9		3.2	3	3.9	3	4.3	3	3	3	3	3	3
Red Clr	2.9	2		2.2		2		2.2	2.9	2						
Red Revert	2	2	2	2	2	2	2	2	2	2						
Added Initial	1	1.5		1	1	1.5		1	1							
Max Initial																
Time Before Reduce	15	20				20	20	15	15	20						
Cars Before Reduce																
Time To Reduce	15	20				20	20	10	10	20						
Reduce By																
Min Gap																
Dynamic Max Limit	30	70		40		70		40	30							
Dynamic Max Step	5	10		5		10		5	5							
Auto Flash Entry		ON				ON										
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																

Phase Options [1.1.2]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Enable	ON	ON	ON	ON		ON	ON	ON	ON	ON						
Lock Call																
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable		ON		ON		ON		ON								
Guar Passage																
Rest In Walk																
Cond Service																
Add Init Calc																

Phase Options Plus [1.1.3]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Reservice																
Ped Clr Thru Yellow																
Skip Red-NoCall																
Red Rest																
Max 2																
Max Inhibit																
Ped Delay																
Red Rest On Gap																
Conflicting P																
Green Ped Delay Time																
Omit Yel																
Ped Out																

Start Yel																	
Redirect P Calls From 1																	
Redirect P Calls To 1																	
Redirect P Calls From 2																	
Redirect P Calls To 2																	
Redirect P Calls From 3																	
Redirect P Calls To 3																	
Redirect P Calls From 4																	
Redirect P Calls To 4																	

Channel Assignment [1.8.1]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	14	9	3	4	5	6	7	8	1	2	3	4	10	7	6	3	1	3	5	7				16
Type	OLP	OLP	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED	PED	PED	PED	PED	VEH	VEH	VEH	OLP
Flash	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	RED
Alt Hz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Dimming Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

I/O Channel Plus [1.8.4]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	10	21	22	23	24
Flash Red																								
Flash Yellow													ON											
Flash Green																								
Inh Red Flash in Preempt																								
Color Flash Rate																								
Override Type																								
Olap Ovrd													14											

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2																	NORMAL		3.5	1.5
Overlap 3																	NORMAL		3.5	1.5
Overlap 4																	NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9	2	10															NORMAL		3.5	1.5
Overlap 10																	NORMAL		3.5	1.5
Overlap 11																	NORMAL		3.5	1.5
Overlap 12																	NORMAL		3.5	1.5
Overlap 13																	NORMAL		3.5	1.5
Overlap 14	1	9							2								FYA-4		3	2.9
Overlap 15																	NORMAL		3.5	1.5
Overlap 16																	NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases								Conflicting Overlaps								Conflicting Peds							
Overlap 1																								
Overlap 2																								
Overlap 3																								
Overlap 4																								
Overlap 5																								
Overlap 6																								
Overlap 7																								
Overlap 8																								
Overlap 9																								
Overlap 10																								
Overlap 11																								
Overlap 12																								
Overlap 13																								
Overlap 14	10																10							
Overlap 15																								
Overlap 16																								

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	1	10	2	9	3	4		
Ring 2	6	7	8					
Ring 3								
Ring 4								

Phase Startup, Concur [1.1.4]

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		20	25	25		60	25	25	20	20						
Mode	OMT	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		20	25	25		60	25	25	20	20						
Mode	OMT	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		20	25	25		60	25	25	20	20						
Mode	OMT	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		35	30	25		75	30	25	20	25						
Mode	OMT	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		35	30	25		75	30	25	20	25						
Mode	OMT	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase		ON														

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		35	30	25		75	30	25	20	25						
Mode	OMT	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase		ON														

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		20	20	20		60	20	20	20	20						
Mode	OMT	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		20	25	25		60	25	25	20	20						
Mode	OMT	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		20	30	25		65	30	25	20	25						
Mode	OMT	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Coordination, Pattern 1-16 [2.4]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	110	110	110	130	130	130					100	110	120	130	140	
Offset Time	70	70	70	104	104	104					64	70	57	104	56	
Split Number	1	2	3	4	5	6					11	12	13	14	15	
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern 17-32 [2.4]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time																
Offset Time																
Split Number																
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern+ 1-8 [2.5]

Pattern	1	2	3	4	5	6	7	8
Short	17	17	17	17	17	17	17	17
Long	33	33	33	33	33	33	17	17
Dwell								
No Short P 1								
No Short P 2								
No Short P 3								
No Short P 4								
Early Yield								
Offset	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN
CNA								
Max 2								
Float								
Min Veh Perm								
Min Ped Perm								
Percentage								
MI								
Ret Hold								
ASC								
Ph Opt Table	3	3	3	5	5	5		
Ph Time Table	1	1	1	2	2	2		
Det Grp	1	1	1	1	1	1		
Call Inh	1	1	1	1	1	1		
Olp Off 1								

Olp Off 8								
Dia Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT
Force Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT

TB Coor, Day Plan [4.4]

Day Plan Table 1	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		6	15	15	18	18	20									
Minute		30	30	32	30	32										
Action	54	1	54	4	54	1	54									

Day Plan Table 2	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 3	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 4	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 5	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		6	15	15	18	18	20									
Minute		30	30	32	30	32										
Action	54	1	54	4	54	1	54									

Day Plan Table 6	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		8	19													
Minute		30														
Action	54	1	54													

Day Plan Table 7	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		8	19													
Minute		30														
Action	54	1	54													

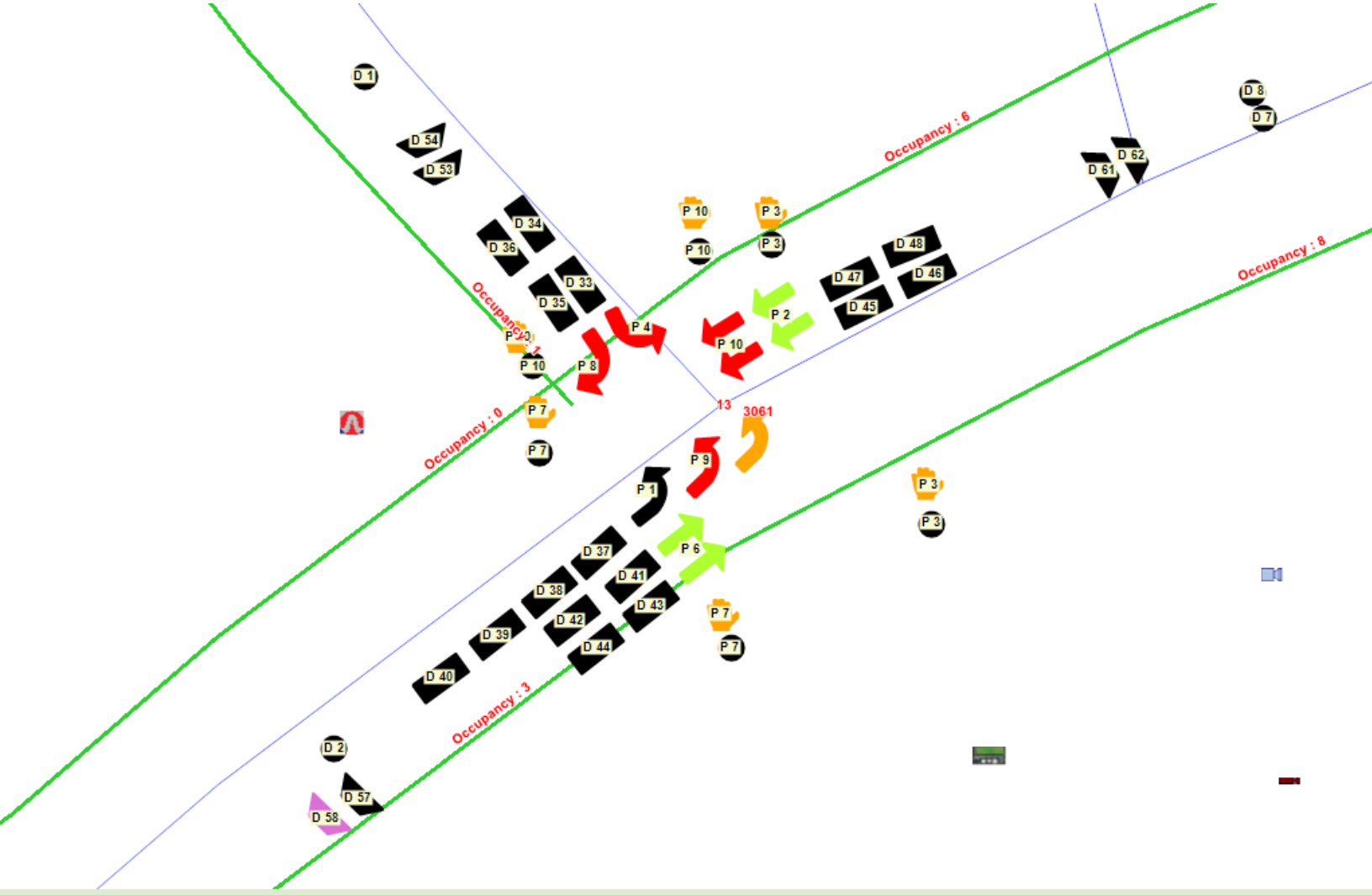
Day Plan Table 8	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 9	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 10	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 11	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 12	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																


D 1
D 54
D 53
D 34
D 36
D 33
D 35
D 8
D 7
D 62
D 61
D 48
D 46
D 47
D 45
Occupancy : 6
Occupancy : 8
Occupancy : 0
Occupancy : 3
P 10
P 3
P 4
P 2
P 8
P 7
P 9
P 1
P 6
13
3061
D 37
D 38
D 39
D 40
D 41
D 42
D 43
D 44
D 2
D 57
D 58

Clark County GIS

Intersection Timing Sheet

Station ID [6.1]

Intersection : 3066 - Salmon Creek at 134 V/76 (Standard File)

Unit Parameters [6.5]	I/O Mode [1.8.6]	Print Date	Date Implemented
Phase Mode:		6/20/2018 4:38:47 PM	

Communication [6.5]

Phase Timings [1.1.1]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Walk									5		5		5		5	
Ped Clearance									18		18		18		18	
Min Green	5	5	5	5	5	5	5	5	5		5		5		5	
Gap Ext	2	2	2	2	2	2	2	2	2		2		2		2	
Max1	20	20	20	20	20	20	20	20	20		20		20		20	
Max2	25	25	25	25	25	25	25	25	25		25		25		25	
Yellow Clr	3.1	3.9	3	4	3.1	3.9	4	3	3.9	3	4	3	3.9	3	3	3
Red Clr	2.4	2.1	2.4	2.9	2.4	2.1	2.4	2.9	2.1		2.9		2.1		2.4	
Red Revert	2	2	2	2	2	2	2	2	2		2		2		2	
Added Initial																
Max Initial																
Time Before Reduce	10	20	10	20	10	20	10	20	20		20		20		20	
Cars Before Reduce																
Time To Reduce	10	10	10	10	10	10	10	10	10		10		10		10	
Reduce By																
Min Gap																
Dynamic Max Limit	35	60	35	60	35	60	35	60	60		60		60		60	
Dynamic Max Step	5	10	5	10	5	10	5	10	10		10		10		10	
Auto Flash Entry		ON				ON										
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																

Phase Options [1.1.2]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Enable	ON	ON	ON	ON	ON	ON	ON	ON	ON		ON		ON		ON	
Lock Call																
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable	ON	ON	ON	ON	ON	ON	ON	ON	ON		ON		ON		ON	
Guar Passage																
Rest In Walk																
Cond Service																
Add Init Calc																

Phase Options Plus [1.1.3]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Reservice																
Ped Clr Thru Yellow																
Skip Red-NoCall																
Red Rest																
Max 2																
Max Inhibit																
Ped Delay																
Red Rest On Gap																
Conflicting P																
Green Ped Delay Time																
Omit Yel																
Ped Out																

Start Yel																	
Redirect P Calls From 1																	
Redirect P Calls To 1																	
Redirect P Calls From 2																	
Redirect P Calls To 2																	
Redirect P Calls From 3																	
Redirect P Calls To 3																	
Redirect P Calls From 4																	
Redirect P Calls To 4																	

Channel Assignment [1.8.1]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	16	13	10	11	14	9	12	15	1	1	1	1	9	11	13	15	1	3	5	7				
Type	OLP	OLP	OLP	OLP	OLP	OLP	OLP	OLP	OLP	OLP	OLP	OLP	PED	PED	PED	PED	PED	PED	PED	PED	VEH	VEH	VEH	VEH
Flash	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Alt Hz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Dimming Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

I/O Channel Plus [1.8.4]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	10	21	22	23	24
Flash Red																								
Flash Yellow													ON	ON	ON	ON								
Flash Green																								
Inh Red Flash in Preempt																								
Color Flash Rate																								
Override Type																								
Olap Ovrd													16	10	14	12								

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2																	NORMAL		3.5	1.5
Overlap 3																	NORMAL		3.5	1.5
Overlap 4																	NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9	6	13															NORMAL		3.5	1.5
Overlap 10	3								4								FYA-4		3	2.4
Overlap 11	4	11															NORMAL		3.5	1.5
Overlap 12	7								8								FYA-4		4	2.4
Overlap 13	2	9															NORMAL		3.5	1.5
Overlap 14	5								6								FYA-4		3.1	2.4
Overlap 15	8	15															NORMAL		3.5	1.5
Overlap 16	1								2								FYA-4		3.1	2.4

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases								Conflicting Overlaps								Conflicting Peds							
Overlap 1																	4							
Overlap 2																	8							
Overlap 3																	6							
Overlap 4																	2							
Overlap 5																								
Overlap 6																								
Overlap 7																								
Overlap 8																								
Overlap 9																								
Overlap 10																								
Overlap 11																								
Overlap 12																								
Overlap 13																								
Overlap 14																								
Overlap 15																								
Overlap 16																								

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	9	2	1	11	4	3		
Ring 2	13	6	5	15	8	7		
Ring 3								
Ring 4								

Phase Startup, Concur [1.1.4]

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	30	15	20	15	30	15	20	15		15		15		15	
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	30	15	20	15	30	15	20	15		15		15		15	
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	30	15	20	15	30	15	20	15		15		15		15	
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	35	20	25	15	40	15	30	15		15		15		15	
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	35	20	25	15	40	15	30	15		15		15		15	
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase		ON														

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	35	20	25	15	40	15	30	15		15		15		15	
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase		ON														

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	20	15	20	15	20	15	20	15		15		15		15	
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	30	15	20	15	30	15	20	15		15		15		15	
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	35	15	25	15	35	15	25	15		15		15		15	
Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Coordination, Pattern 1-16 [2.4]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	110	110	110	130	130	130					100	110	120	130	140	
Offset Time	61	61	61	98	98	98					81	61	76	98	62	
Split Number	1	2	3	4	5	6					11	12	13	14	15	
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern 17-32 [2.4]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time																
Offset Time																
Split Number																
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern+ 1-8 [2.5]

Pattern	1	2	3	4	5	6	7	8
Short	17	17	17	17	17	17	17	17
Long	33	33	33	33	33	17	17	17
Dwell								
No Short P 1								
No Short P 2								
No Short P 3								
No Short P 4								
Early Yield								
Offset	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN
CNA								
Max 2								
Float								
Min Veh Perm								
Min Ped Perm								
Percentage								
MI								
Ret Hold								
ASC								
Ph Opt Table	3	3	3	5	5	5		
Ph Time Table	1	1	1	2	2	2		
Det Grp	1	1	1	1	1	1		
Call Inh	1	1	1	1	1	1		
Olp Off 1								

Olp Off 8								
Dia Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT
Force Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT

TB Coor, Day Plan [4.4]

Day Plan Table 1	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		6	15	15	18	18	20									
Minute		30	30	32	30	32										
Action	54	1	54	4	54	1	54									

Day Plan Table 2	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 3	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 4	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 5	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		6	15	15	18	18	20									
Minute		30	30	32	30	32										
Action	54	1	54	4	54	1	54									

Day Plan Table 6	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		8	19													
Minute		30														
Action	54	1	54													

Day Plan Table 7	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		8	19													
Minute		30														
Action	54	1	54													

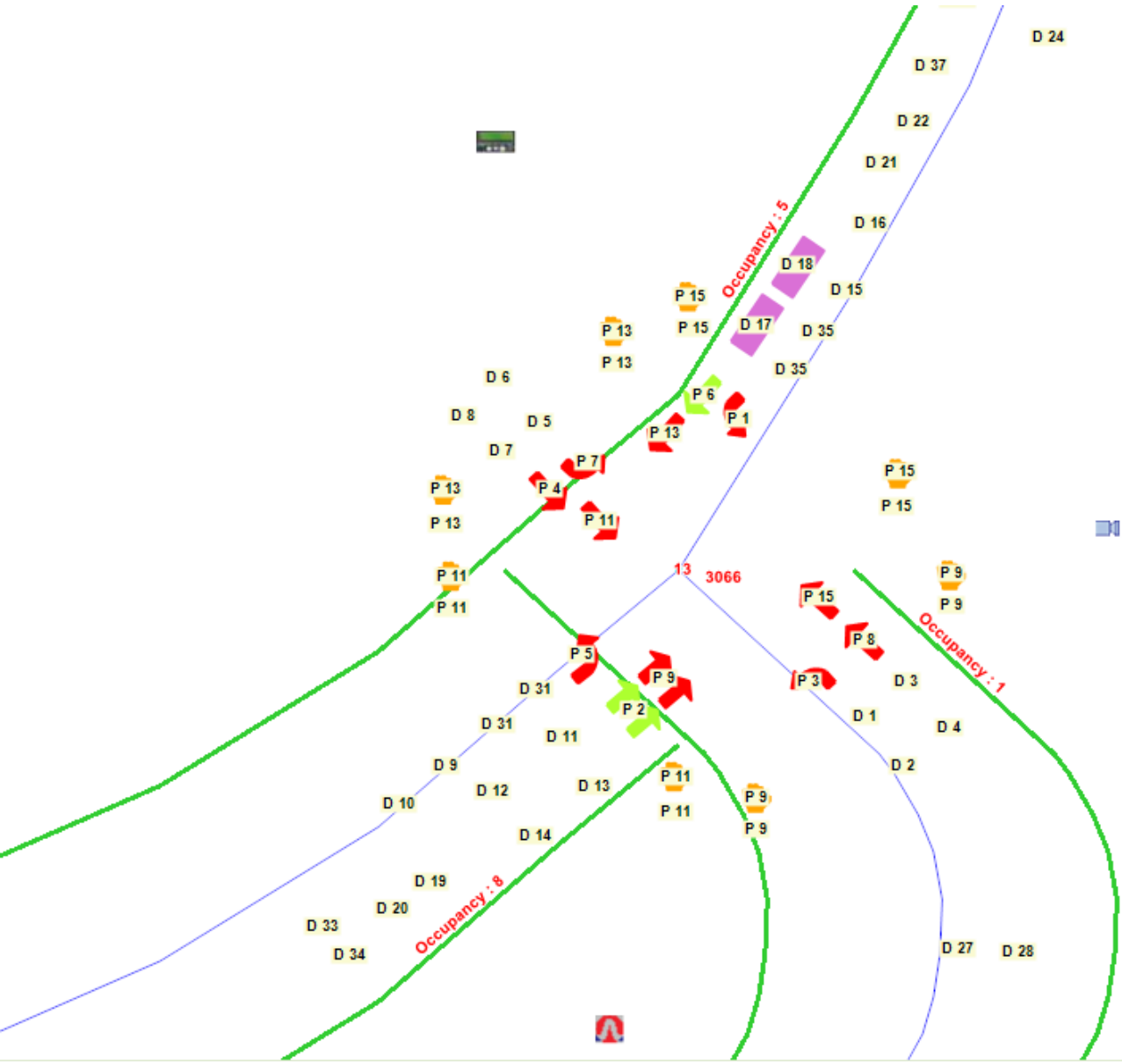
Day Plan Table 8	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 9	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 10	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 11	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 12	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																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D 21
D 16
D 18
D 15
D 17
D 35
D 35
D 6
D 8
D 5
D 7
P 15
P 13
P 15
P 13
P 13
P 6
P 1
P 7
P 4
P 11
P 13
P 13
P 15
P 15
P 11
P 11
13
3066
P 9
P 9
P 15
P 8
P 3
D 3
D 1
D 4
D 2
P 5
P 9
P 2
D 31
D 31
D 11
D 9
D 12
D 13
D 10
P 11
P 11
P 9
P 9
D 14
D 19
D 20
D 33
D 34
D 27
D 28
Occupancy : 5
Occupancy : 1
Occupancy : 8

Clark County GIS

Intersection Timing Sheet

Station ID [6.1]

Intersection : 3207 - NE 20th Av at NE Hwy 99 - 2017 Rephase (Standard File)

Unit Parameters [6.5]	I/O Mode [1.8.6]	Print Date	Date Implemented
Phase Mode:		6/20/2018 4:42:22 PM	

Communication [6.5]

Phase Timings [1.1.1]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Walk		6		5		5		5								
Ped Clearance		25		18		26		9								
Min Green		5	5	5		5	5	5								
Gap Ext		1	1	1		1	1	1								
Max1		15	15	20		15	15	20								
Max2		20	20	25		20	20	25								
Yellow Clr	3	3	3	4	3	3.2	3	4	3	3	3	3	3	3	3	3
Red Clr		3.6	2.9	1.7		3.2	2.9	1.7								
Red Revert		5		5		5		5								
Added Initial																
Max Initial																
Time Before Reduce		30	10	30		30	10	30								
Cars Before Reduce																
Time To Reduce		30	15	30		30	15	30								
Reduce By																
Min Gap																
Dynamic Max Limit		50		70		50		70								
Dynamic Max Step		5		10		5		10								
Auto Flash Entry				ON				ON								
Auto Flash Exit				ON				ON								
Non-Actuated 1																
Non-Actuated 2																

Phase Options [1.1.2]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Enable		ON	ON	ON		ON	ON	ON								
Lock Call																
Min Recall				ON				ON								
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON	ON	ON		ON	ON	ON								
Sim Gap Enable		ON		ON		ON		ON								
Guar Passage																
Rest In Walk																
Cond Service																
Add Init Calc																

Phase Options Plus [1.1.3]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Reservice																
Ped Clr Thru Yellow																
Skip Red-NoCall																
Red Rest																
Max 2																
Max Inhibit																
Ped Delay																
Red Rest On Gap																
Conflicting P																
Green Ped Delay Time																
Omit Yel																
Ped Out																

Start Yel																
Redirect P Calls From 1																
Redirect P Calls To 1																
Redirect P Calls From 2																
Redirect P Calls To 2																
Redirect P Calls From 3																
Redirect P Calls To 3																
Redirect P Calls From 4																
Redirect P Calls To 4																

Channel Assignment [1.8.1]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	1	2	3	4	5	6	7	8	1	2	3	4	2	4	6	8								
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED								
Flash	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Alt Hz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Dimming Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

I/O Channel Plus [1.8.4]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	10	21	22	23	24
Flash Red																								
Flash Yellow																								
Flash Green																								
Inh Red Flash in Preempt																								
Color Flash Rate																								
Override Type																								
Olap Ovrd																								

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2																	NORMAL		3.5	1.5
Overlap 3	3	6															NORMAL		3	3.6
Overlap 4																	NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9																	NORMAL		3.5	1.5
Overlap 10																	NORMAL		3.5	1.5
Overlap 11																	NORMAL		3.5	1.5
Overlap 12																	NORMAL		3.5	1.5
Overlap 13																	NORMAL		3.5	1.5
Overlap 14																	NORMAL		3.5	1.5
Overlap 15																	NORMAL		3.5	1.5
Overlap 16																	NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases								Conflicting Overlaps								Conflicting Peds							
Overlap 1																								
Overlap 2																								
Overlap 3	4																6							
Overlap 4																								
Overlap 5																								
Overlap 6																								
Overlap 7																								
Overlap 8																								
Overlap 9																								
Overlap 10																								
Overlap 11																								
Overlap 12																								
Overlap 13																								
Overlap 14																								
Overlap 15																								
Overlap 16																								

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	1	2	3	4				
Ring 2	5	6	7	8				
Ring 3								
Ring 4								

Phase Startup, Concur [1.1.4]

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		35	30	65		35	30	65								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase								ON								

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		35	30	65		35	30	65								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase								ON								

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		35	30	65		35	30	65								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase								ON								

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		40	40	50		40	40	50								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase								ON								

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		40	40	50		40	40	50								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase								ON								

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		40	40	50		40	40	50								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase								ON								

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		30	30	60		30	30	60								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		35	30	65		35	30	65								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		40	30	50		40	30	50								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase								ON								

Split Table 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Coordination, Pattern 1-16 [2.4]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	110	110	110	130	130	130					100	110	120	130	140	
Offset Time	89	89	89	56	56	56					74	89	44	56	66	
Split Number	1	2	3	4	5	6					11	12	13	14	15	
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern 17-32 [2.4]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time																
Offset Time																
Split Number																
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern+ 1-8 [2.5]

Pattern	1	2	3	4	5	6	7	8
Short	17	17	17	17	17	17	17	17
Long	33	33	33	33	33	33	17	17
Dwell								
No Short P 1								
No Short P 2								
No Short P 3								
No Short P 4								
Early Yield								
Offset	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN
CNA								
Max 2								
Float								
Min Veh Perm								
Min Ped Perm								
Percentage								
MI								
Ret Hold								
ASC								
Ph Opt Table	3	3	3	5	5	5		
Ph Time Table	1	1	1	2	2	2		
Det Grp	1	1	1	1	1	1		
Call Inh	1	1	1	1	1	1		
Olp Off 1								

Olp Off 8								
Dia Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT
Force Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT

TB Coor, Day Plan [4.4]

Day Plan Table 1	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		6	15	15	18	18	20									
Minute		30	30	32	30	32										
Action	54	1	54	4	54	1	54									

Day Plan Table 2	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 3	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 4	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 5	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		6	15	15	18	18	20									
Minute		30	30	32	30	32										
Action	54	1	54	4	54	1	54									

Day Plan Table 6	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		8	19													
Minute		30														
Action	54	1	54													

Day Plan Table 7	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		8	19													
Minute		30														
Action	54	1	54													

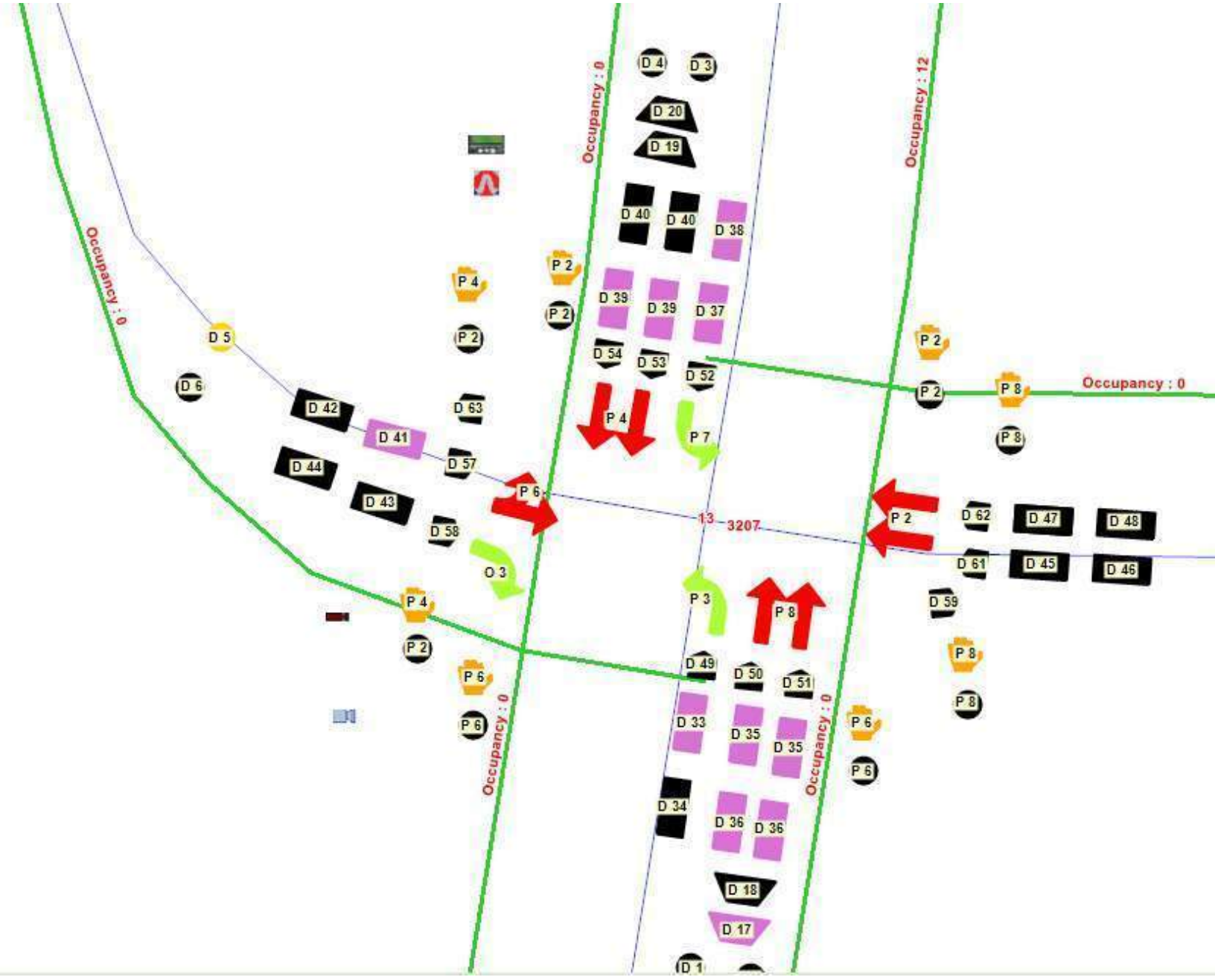
Day Plan Table 8	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 9	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 10	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 11	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 12	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																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D 38
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D 5
D 6
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P 2
P 2
P 8
P 8
13 3207
P 2
D 62
D 47
D 48
D 61
D 45
D 46
D 59
P 8
P 8
O 3
P 3
P 8
P 4
P 2
P 6
P 6
D 49
D 50
D 51
D 33
D 35
D 35
P 6
P 6
D 34
D 36
D 36
D 18
D 17
D 1

Clark County GIS

Intersection Timing Sheet

Station ID [6.1]

Intersection : 3700 - NE Hwy 99 at NE 117th St (Standard File)

Unit Parameters [6.5]	I/O Mode [1.8.6]	Print Date	Date Implemented
Phase Mode:		6/20/2018 4:46:08 PM	

Communication [6.5]

Phase Timings [1.1.1]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Walk		5		5		5		5								
Ped Clearance		22		14		23		14								
Min Green	5	5	5	5	5	5	5	5								
Gap Ext	2	2	2	2	2	2	2	2								
Max1	10	20	20	20	10	20	20	20								
Max2	15	25	25	25	15	25	25	25								
Yellow Clr	3	3.6	3	4.5	3	3.6	3.2	4.5	3	3	3	3	3	3	3	3
Red Clr	2.9	2.3	2.9	1.7	2.9	2.3	2.9	1.7								
Red Revert	5	5	5	5	5	5	5	5								
Added Initial																
Max Initial																
Time Before Reduce	5	15	15	20	5	15	15	20								
Cars Before Reduce																
Time To Reduce	10	15	15	20	15	15	15	20								
Reduce By																
Min Gap																
Dynamic Max Limit	25	50	45	60	25	50	45	60								
Dynamic Max Step	5	5	5	10	5	5	5	10								
Auto Flash Entry				ON				ON								
Auto Flash Exit				ON				ON								
Non-Actuated 1																
Non-Actuated 2																

Phase Options [1.1.2]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Lock Call																
Min Recall																
Max Recall																
Ped Recall																
Soft Recall				ON				ON								
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Guar Passage																
Rest In Walk																
Cond Service			ON				ON									
Add Init Calc																

Phase Options Plus [1.1.3]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Reservice				ON				ON								
Ped Clr Thru Yellow																
Skip Red-NoCall																
Red Rest																
Max 2																
Max Inhibit																
Ped Delay																
Red Rest On Gap																
Conflicting P																
Green Ped Delay Time																
Omit Yel																
Ped Out																

Start Yel																
Redirect P Calls From 1																
Redirect P Calls To 1																
Redirect P Calls From 2																
Redirect P Calls To 2																
Redirect P Calls From 3																
Redirect P Calls To 3																
Redirect P Calls From 4																
Redirect P Calls To 4																

Channel Assignment [1.8.1]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	1	2	3	4	5	6	7	8	2	4	6	8	1	2	3	4	1	3	5	7				
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	PED	PED	PED	PED	OLP	OLP	OLP	OLP	PED	PED	PED	PED	VEH	VEH	VEH	VEH
Flash	RED	RED	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Alt Hz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Dimming Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

I/O Channel Plus [1.8.4]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	10	21	22	23	24
Flash Red																								
Flash Yellow																								
Flash Green																								
Inh Red Flash in Preempt																								
Color Flash Rate																								
Override Type																								
Olap Ovrd																								

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2																	NORMAL		3.5	1.5
Overlap 3																	NORMAL		3.5	1.5
Overlap 4																	NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9																	NORMAL		3.5	1.5
Overlap 10																	NORMAL		3.5	1.5
Overlap 11																	NORMAL		3.5	1.5
Overlap 12																	NORMAL		3.5	1.5
Overlap 13																	NORMAL		3.5	1.5
Overlap 14																	NORMAL		3.5	1.5
Overlap 15																	NORMAL		3.5	1.5
Overlap 16																	NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases								Conflicting Overlaps								Conflicting Peds							
Overlap 1																								
Overlap 2																								
Overlap 3																								
Overlap 4																								
Overlap 5																								
Overlap 6																								
Overlap 7																								
Overlap 8																								
Overlap 9																								
Overlap 10																								
Overlap 11																								
Overlap 12																								
Overlap 13																								
Overlap 14																								
Overlap 15																								
Overlap 16																								

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	1	2	3	4				
Ring 2	5	6	7	8				
Ring 3								
Ring 4								

Phase Startup, Concur [1.1.4]

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	20	20	30	20	20	20	30								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase				ON												

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	20	20	30	20	20	20	30								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase				ON												

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	20	20	30	20	20	20	30								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase				ON												

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	25	25	25	35	25	25	25	35								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase				ON												

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	25	25	25	35	25	25	25	35								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase				ON												

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	25	25	25	35	25	25	25	35								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase				ON												

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	20	20	25	15	20	20	25								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase				ON												

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	20	20	30	20	20	20	30								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase				ON												

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	25	25	20	30	25	25	20	30								
Mode	NON	NON	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase				ON												

Split Table 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Coordination, Pattern 1-16 [2.4]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	90	90	90	110	110	110					80	90	100	110	120	
Offset Time	60	60	60									60				
Split Number	1	2	3	4	5	6					11	12	13	14	15	
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern 17-32 [2.4]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time																
Offset Time																
Split Number																
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern+ 1-8 [2.5]

Pattern	1	2	3	4	5	6	7	8
Short	17	17	17	17	17	17	17	17
Long	33	33	33	33	33	33	17	17
Dwell								
No Short P 1								
No Short P 2								
No Short P 3								
No Short P 4								
Early Yield								
Offset	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN
CNA								
Max 2								
Float								
Min Veh Perm	ON	ON	ON	ON	ON	ON		
Min Ped Perm	ON	ON	ON	ON	ON	ON		
Percentage								
MI								
Ret Hold								
ASC								
Ph Opt Table	3	3	3	5	5	5		
Ph Time Table	1	1	1	2	2	2		
Det Grp	1	1	1	2	2	2		
Call Inh	1	1	1	1	1	1		
Olp Off 1								

Olp Off 8								
Dia Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT
Force Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT

TB Coor, Day Plan [4.4]

Day Plan Table 1	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		6	15	15	18	18	20									
Minute		30	30	32	30	32										
Action	54	1	54	4	54	1	54									

Day Plan Table 2	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 3	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 4	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 5	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		6	15	15	18	18	20									
Minute		30	30	32	30	32										
Action	54	1	54	4	54	1	54									

Day Plan Table 6	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		8	19													
Minute		30														
Action	54	1	54													

Day Plan Table 7	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour		8	19													
Minute		30														
Action	54	1	54													

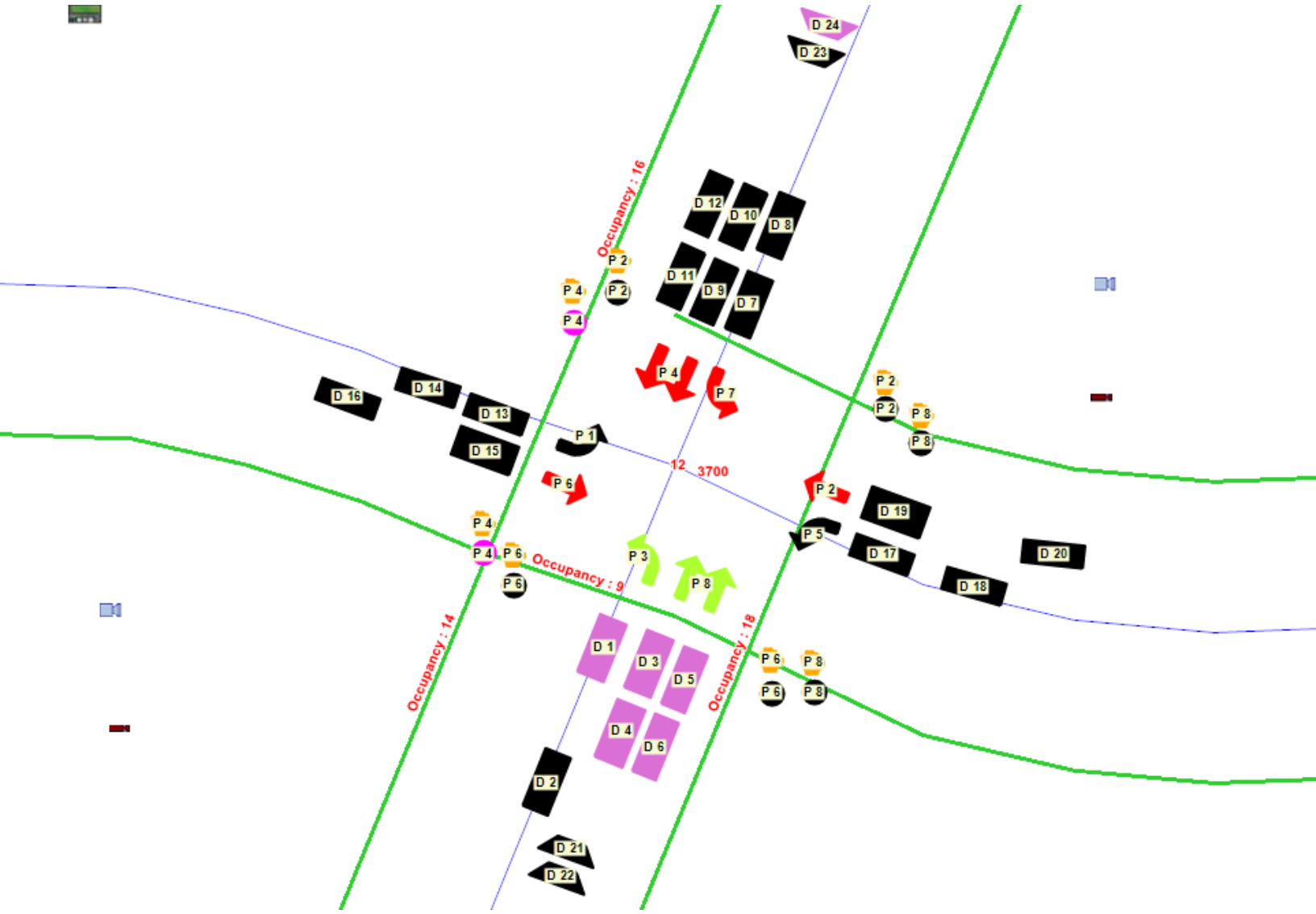
Day Plan Table 8	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 9	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 10	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 11	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action																

Day Plan Table 12	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																


D 24
D 23
Occupancy : 16
D 12
D 10
D 8
D 11
D 9
D 7
P 2
P 4
P 4
P 4
P 7
D 16
D 14
D 13
D 15
P 1
12
3700
P 6
P 2
P 2
P 8
P 8
P 2
D 19
P 5
D 17
D 20
D 18
P 4
P 4
P 6
P 6
Occupancy : 9
P 3
P 8
Occupancy : 14
Occupancy : 18
D 1
D 3
D 5
D 4
D 6
P 6
P 8
P 6
P 8
D 2
D 21
D 22

Signal Timing - WSDOT Intersections

3270 - NE 179th Street & I-5 SB Ramps
3275 - NE 179th Street & I-5 NB Ramps
3110 - NE 139th Street & I-5 SB On Ramp
3115 - NE 139th Street & I-5 NB Off-Ramp
3120 - NE 139th Street & NE 20th Avenue
3031 - NE 134th Street & I-5 SB On Ramp
3036 - NE 134th Street & I-5 NB Off Ramp
3041 - NE 134th Street & I-5 SB Off Ramp & NE Highway 99
3047 - NE 134th Street & NE 20th Avenue
3050 - NE 134th Street & I-205 NB Off Ramp & NE 23rd Avenue

Clark County | Timing Sheet | 4/19/2018 11:47:46 AM

Station : 3270 - SB I5 at NE 179th St (Permanent File)

Phase [1.1.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk		7														
Ped Clearance		13														
Min Green		7				7		7								
Gap Ext		3				3.5		3								
Max1		50				40		30								
Max2		50				50		30								
Yellow Clr	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr		1				1		1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert		2				2		2								
Added Initial																
Max Initial		7				7		7								
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap		3				3.5		3								
Dynamic Max Limit																
Dynamic Max Step																
Auto Flash Entry								ON								
Auto Flash Exit		ON														
Non-Actuated 1																
Non-Actuated 2																
Concurrent Ps	1	1	1	1	2	2	2	2								
Bike Clear																
Safe Clear Min																
Enable		ON				ON		ON								
Lock Call									ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON														
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry																
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk																
Cond Service																
Add Init Calc																

Close Loop Active	OFF

Prepared By **HagenR**	Date Implemented
Reviewed By / Date	Traffic Engineer

Station : 3270 - SB I5 at NE 179th St (Permanent File)

Preemption Times[3.1]/Phases[3.2]/Options [3.3]/Times+[3.4]

Channel	1	2	3	4	5	6
Lock Input	ON	ON		ON		
Override Auto Flash	ON	ON	ON	ON	ON	ON
Override Higher Preempt	ON	ON		ON		
Flash in Dwell	ON	ON		ON		
Link to Preempt						
Delay						
Min Duration			5		5	5
Min Green			5		5	5
Min Walk						
Ped Clear						
Track Green						
Min Dwell			5		5	5
Max Presence			300		300	300
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1			2		6	8
Dwell Cyc Veh 2						
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Ped1						
Exit 1			8		2	2
Exit 2						
Exit 3						
Exit 4						
Track Yellow Change	25.5	25.5	25.5	25.5	25.5	25.5
Track Red Clear	25.5	25.5	25.5	25.5	25.5	25.5
Enable	ON	ON	ON		ON	ON
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Ped Clear						
Yellow						
Red						

Low Priority Preempt [3]

Preempt	7	8	9	10
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2																	NORMAL		3.5	1.5
Overlap 3																	NORMAL		3.5	1.5
Overlap 4																	NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9																	NORMAL		3.5	1.5
Overlap 10																	NORMAL		3.5	1.5
Overlap 11																	NORMAL		3.5	1.5
Overlap 12																	NORMAL		3.5	1.5
Overlap 13																	NORMAL		3.5	1.5
Overlap 14																	NORMAL		3.5	1.5
Overlap 15																	NORMAL		3.5	1.5
Overlap 16																	NORMAL		3.5	1.5

Station : 3270 - SB I5 at NE 179th St (Permanent File)

Coordination, Pattern 1-16 [2.4]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	75	88	120	100												
Offset Time																
Split Number	1	2	3	4												
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Short																
Long	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Offset	ENDGRN	ENDGRN	ENDGRN	ENDGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN

Coordination, Pattern 17-32 [2.4]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time																
Offset Time																
Split Number																
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Short																
Long	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Offset	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN

Coordination, Splits [2.7.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1-Time		30				23		22								
1-Mode	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
1-Coord Phase		ON														
2-Time		42				23		23								
2-Mode	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
2-Coord Phase		ON														
3-Time		81				23		16								
3-Mode	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
3-Coord Phase		ON														
4-Time		30				50		20								
4-Mode	NON	NON	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
4-Coord Phase						ON										
5-Time																
5-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
5-Coord Phase																
6-Time																
6-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
6-Coord Phase																
7-Time																
7-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
7-Coord Phase																
8-Time																
8-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
8-Coord Phase																
9-Time																
9-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
9-Coord Phase																
10-Time																
10-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
10-Coord Phase																
11-Time																
11-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
11-Coord Phase																
12-Time																
12-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
12-Coord Phase																
13-Time																
13-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
13-Coord Phase																
14-Time																
14-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
14-Coord Phase																
15-Time																
15-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
15-Coord Phase																
16-Time																
16-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
16-Coord Phase																
17-Time																
17-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
17-Coord Phase																
18-Time																
18-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
18-Coord Phase																
19-Time																
19-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
19-Coord Phase																
20-Time																
20-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
20-Coord Phase																
21-Time																
21-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
21-Coord Phase																
22-Time																
22-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
22-Coord Phase																
23-Time																
23-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
23-Coord Phase																
24-Time																
24-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
24-Coord Phase																
25-Time																
25-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
25-Coord Phase																
26-Time																
26-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

26-Coord Phase																
27-Time																
27-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
27-Coord Phase																
28-Time																
28-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
28-Coord Phase																
29-Time																
29-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
29-Coord Phase																
30-Time																
30-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
30-Coord Phase																
31-Time																
31-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
31-Coord Phase																
32-Time																
32-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
32-Coord Phase																

Station : 3270 - SB I5 at NE 179th St (Permanent File)

TB Coor, Advanced Scheduler [4.3]

	Month												Day of Week							Day of Month										1									2									3		
Plan	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	Day Plan
1													1	1	1	1	1																																	1
2																																																		2
3																																																		3
4				1														1																					1											4
5				1														1																											1					5
6				1									1																																	1				6
7																																																		1
8																																																		1
9																																																		1
10																																																		1
11																																																		1
12																																																		1
13																																																		1
14																																																		1
15																																																		1
16																																																		1
17																																																		1
18																																																		1
19																																																		1
20																																																		1
21																																																		1
22																																																		1
23																																																		1
24																																																		1

Coordination

| Ha | Na | Ar | Dr | Ge | Cl | Sp | Se | Su | Lo | Di | Sp | Se | Sp | Sp | Sp

Station : 3270 - SB I5 at NE 179th St (Permanent File)

Ha	Ma	Ab	Da	Qa	Ca	Sa	Sa	Sa	Log	Div	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa
Day Plan 3											**Easy**																	
2		54	254																									
Day Plan 4											**Easy**																	
8		2	2	88		2	1		17			42				23		23										
12		54	254																									

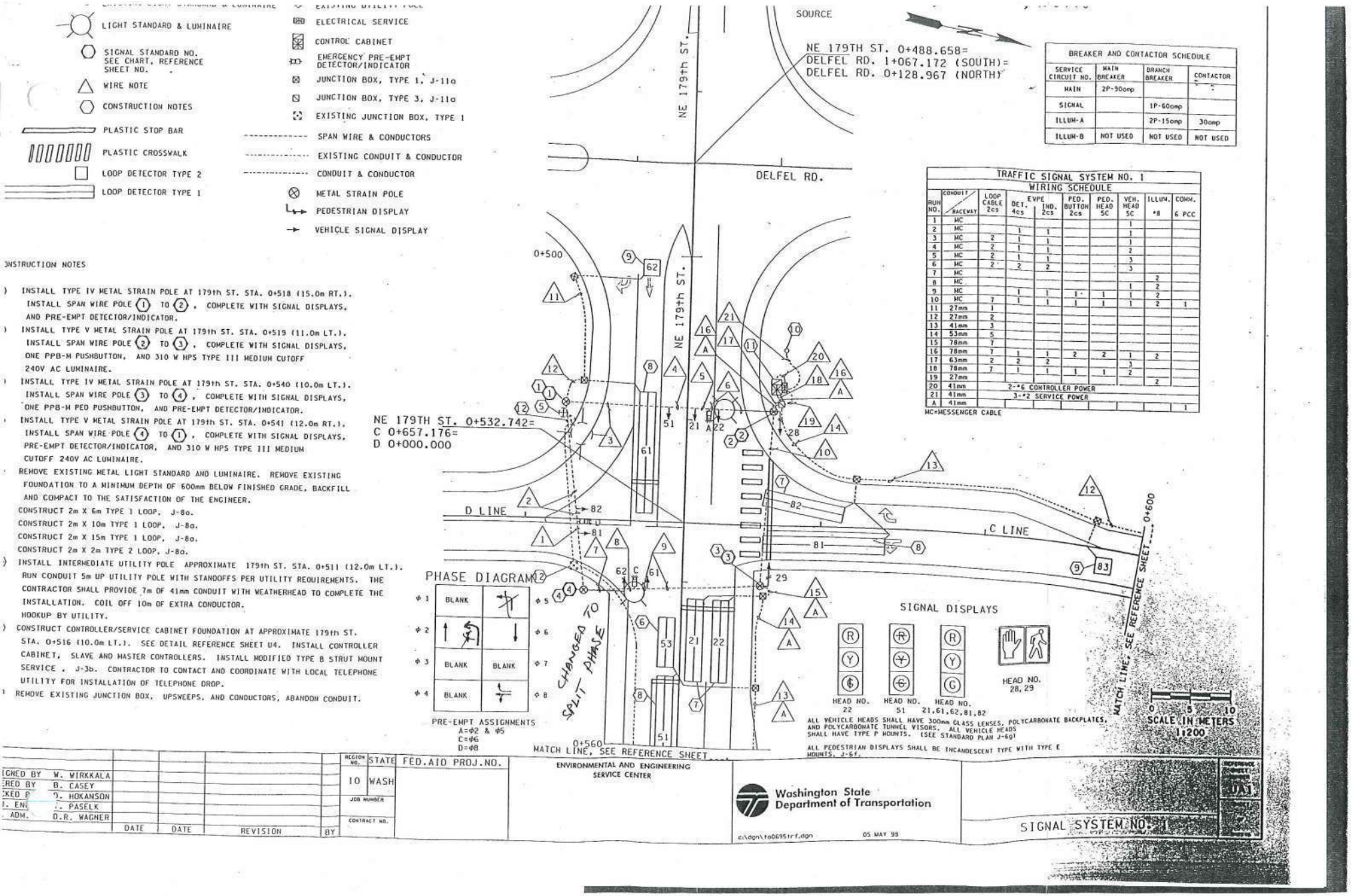
Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Table : 1 Ring 1	1	2	3	4				
Table : 1 Ring 2	5	6	7	8				
Table : 1 Ring 3								
Table : 1 Ring 4								
Table : 2 Ring 1	1	2	3	4				
Table : 2 Ring 2	6	5	7	8				
Table : 2 Ring 3								
Table : 2 Ring 4								
Table : 3 Ring 1	2	1	3	4				
Table : 3 Ring 2	5	6	7	8				
Table : 3 Ring 3								
Table : 3 Ring 4								
Table : 4 Ring 1	2	1	3	4				
Table : 4 Ring 2	6	5	7	8				
Table : 4 Ring 3								
Table : 4 Ring 4								
Table : 5 Ring 1	1	2	3	4				
Table : 5 Ring 2	5	6	8	7				
Table : 5 Ring 3								
Table : 5 Ring 4								
Table : 6 Ring 1	1	2	3	4				
Table : 6 Ring 2	6	5	8	7				
Table : 6 Ring 3								
Table : 6 Ring 4								
Table : 7 Ring 1	2	1	3	4				
Table : 7 Ring 2	5	6	8	7				
Table : 7 Ring 3								
Table : 7 Ring 4								
Table : 8 Ring 1	2	1	3	4				
Table : 8 Ring 2	6	5	8	7				
Table : 8 Ring 3								
Table : 8 Ring 4								
Table : 9 Ring 1	1	2	4	3				
Table : 9 Ring 2	5	6	7	8				
Table : 9 Ring 3								
Table : 9 Ring 4								
Table : 10 Ring 1	1	2	4	3				
Table : 10 Ring 2	6	5	7	8				
Table : 10 Ring 3								
Table : 10 Ring 4								
Table : 11 Ring 1	2	1	4	3				
Table : 11 Ring 2	5	6	7	8				
Table : 11 Ring 3								
Table : 11 Ring 4								
Table : 12 Ring 1	2	1	4	3				
Table : 12 Ring 2	6	5	7	8				
Table : 12 Ring 3								
Table : 12 Ring 4								
Table : 13 Ring 1	1	2	4	3				
Table : 13 Ring 2	5	6	8	7				
Table : 13 Ring 3								
Table : 13 Ring 4								
Table : 14 Ring 1	1	2	4	3				
Table : 14 Ring 2	6	5	8	7				
Table : 14 Ring 3								
Table : 14 Ring 4								
Table : 15 Ring 1	2	1	4	3				
Table : 15 Ring 2	5	6	8	7				
Table : 15 Ring 3								
Table : 15 Ring 4								
Table : 16 Ring 1	2	1	4	3				
Table : 16 Ring 2	6	5	8	7				
Table : 16 Ring 3								
Table : 16 Ring 4								

Channels/SDLC+, IO Logic [1.8.7]

	1	2	3	4	5	6	7	8	9	10
Result										
Fun 1										
Src 1	0									
Fun 2										
Src 2	0									
Fun 3										
Src 3	0									
Operator 1 Function	---									
Operand 1 Result	I									
Operand 1 IO	I									
Operand 1 Invert	-									
Operator 2 Function	---									
Operand 2 IO	I									
Operand 2 Invert	-									
Operator 3 Function	---									
Operand 3 IO	I									

User Comments:



BREAKER AND CONTACTOR SCHEDULE			
SERVICE CIRCUIT NO.	MAIN BREAKER	BRANCH BREAKER	CONTACTOR
MAIN	2P-90amp		
SIGNAL		1P-60amp	
ILLUM-A		2P-15amp	30amp
ILLUM-B	NOT USED	NOT USED	NOT USED

TRAFFIC SIGNAL SYSTEM NO. 1

WIRING SCHEDULE

RUN NO.	CONDUIT / RACEWAY	LOOP CABLE 2cs	EVPE DET. 4cs	EVPE IND. 2cs	PED. BUTTON 2cs	PED. HEAD 5C	VEH. HEAD 5C	ILLUM. #8	COMM. 6 PCC
1	MC						1		
2	MC		1				1		
3	MC	2	1	1			1		
4	MC	2	1	1			1		
5	MC	2	1	1			2		
6	MC	2	2	2			3		
7	MC						3		
8	MC							2	
9	MC		1	1		1	1	2	
10	MC	7	1	1	1	1	1	2	1
11	27mm	1							
12	27mm	2							
13	41mm	3							
14	53mm	5							
15	78mm	7							
16	78mm	7	1	1	2	2	1	2	
17	63mm	2	2	2			3		
18	78mm	7	1	1	1	1	2		
19	27mm							2	
20	41mm	2-#6 CONTROLLER POWER							
21	41mm	3-#2 SERVICE POWER							
A	41mm								1

MC=MESSENGER CABLE

ONSTRUCTION NOTES

) INSTALL TYPE IV METAL STRAIN POLE AT 179th ST. STA. 0+518 (15.0m RT.). INSTALL SPAN WIRE POLE (1) TO (2), COMPLETE WITH SIGNAL DISPLAYS, AND PRE-EMPT DETECTOR/INDICATOR.

) INSTALL TYPE V METAL STRAIN POLE AT 179th ST. STA. 0+519 (11.0m LT.). INSTALL SPAN WIRE POLE (2) TO (3), COMPLETE WITH SIGNAL DISPLAYS, ONE PPB-M PUSHBUTTON, AND 310 W HPS TYPE III MEDIUM CUTOFF 240V AC LUMINAIRE.

) INSTALL TYPE IV METAL STRAIN POLE AT 179th ST. STA. 0+540 (10.0m LT.). INSTALL SPAN WIRE POLE (3) TO (4), COMPLETE WITH SIGNAL DISPLAYS, ONE PPB-M PED PUSHBUTTON, AND PRE-EMPT DETECTOR/INDICATOR.

) INSTALL TYPE V METAL STRAIN POLE AT 179th ST. STA. 0+541 (12.0m RT.). INSTALL SPAN WIRE POLE (4) TO (1), COMPLETE WITH SIGNAL DISPLAYS, PRE-EMPT DETECTOR/INDICATOR, AND 310 W HPS TYPE III MEDIUM CUTOFF 240V AC LUMINAIRE.

REMOVE EXISTING METAL LIGHT STANDARD AND LUMINAIRE. REMOVE EXISTING FOUNDATION TO A MINIMUM DEPTH OF 600mm BELOW FINISHED GRADE, BACKFILL AND COMPACT TO THE SATISFACTION OF THE ENGINEER.

CONSTRUCT 2m X 6m TYPE 1 LOOP, J-8a.

CONSTRUCT 2m X 10m TYPE 1 LOOP, J-8a.

CONSTRUCT 2m X 15m TYPE 1 LOOP, J-8a.

CONSTRUCT 2m X 2m TYPE 2 LOOP, J-8a.

) INSTALL INTERMEDIATE UTILITY POLE APPROXIMATE 179th ST. STA. 0+511 (12.0m LT.). RUN CONDUIT 5m UP UTILITY POLE WITH STANDOFFS PER UTILITY REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE 7m OF 41mm CONDUIT WITH WEATHERHEAD TO COMPLETE THE INSTALLATION. COIL OFF 10m OF EXTRA CONDUCTOR. HOOKUP BY UTILITY.

) CONSTRUCT CONTROLLER/SERVICE CABINET FOUNDATION AT APPROXIMATE 179th ST. STA. 0+516 (10.0m LT.). SEE DETAIL REFERENCE SHEET U4. INSTALL CONTROLLER CABINET, SLAVE AND MASTER CONTROLLERS. INSTALL MODIFIED TYPE B STRUT MOUNT SERVICE, J-3b. CONTRACTOR TO CONTACT AND COORDINATE WITH LOCAL TELEPHONE UTILITY FOR INSTALLATION OF TELEPHONE DROP.

) REMOVE EXISTING JUNCTION BOX, UPSWEEPS, AND CONDUCTORS, ABANDON CONDUIT.

IGNED BY	W. WIRKKALA				REGION NO.	STATE	FED.AID PROJ.NO.	
ECKED BY	B. CASEY				10	WASH		
CKED BY	D. HOKANSON				JOB NUMBER			
. ENG	C. PASELK							
. ADM.	D.R. WAGNER				CONTRACT NO.			
		DATE	DATE	REVISION	BY			

ENVIRONMENTAL AND ENGINEERING SERVICE CENTER

Washington State Department of Transportation

c:\dgn\to0695trf.dgn 05 MAY 99

SIGNAL SYSTEM NO. 1

Clark County | Timing Sheet | 4/19/2018 11:53:16 AM

Station : 3275 - NB I5 at NE 179th St (Permanent File)

Phase [1.1.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk		7		7												
Ped Clearance		23		16												
Min Green	5	7	5	7		7	7	5								
Gap Ext	3	4	3	3		3	3	4								
Max1	15	35	15	45		40	45	35								
Max2	15	25	15	40		40	35	35								
Yellow Clr	3.5	3.5	3.5	4	3.5	3.5	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	1	1	1	1	1	1	1	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert	2	2	2	2		2	2	2								
Added Initial																
Max Initial	5	7	5	7		7	7	5								
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap	3	4	3	3		3	3	4								
Dynamic Max Limit																
Dynamic Max Step																
Auto Flash Entry																
Auto Flash Exit																
Non-Actuated 1																
Non-Actuated 2																
Concurrent Ps	1	1	1	1	2	2	2	2								
Bike Clear																
Safe Clear Min																
Enable	ON	ON	ON	ON		ON	ON	ON								
Lock Call									ON	ON	ON	ON	ON	ON	ON	ON
Min Recall																
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON				ON										
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk																
Cond Service																
Add Init Calc																

Close Loop Active	OFF

Prepared By **HagenR**	Date Implemented
Reviewed By / Date	Traffic Engineer

Station : 3275 - NB I5 at NE 179th St (Permanent File)

Preemption Times[3.1]/Phases[3.2]/Options [3.3]/Times+[3.4]

Channel	1	2	3	4	5	6
Lock Input	ON	ON				
Override Auto Flash	ON	ON	ON	ON	ON	ON
Override Higher Preempt	ON	ON				
Flash in Dwell	ON	ON				
Link to Preempt						
Delay						
Min Duration			5	5	5	5
Min Green			5	5	5	5
Min Walk						
Ped Clear			23	16		
Track Green						
Min Dwell			5	5	5	5
Max Presence			300	300	300	300
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1			2	4	1	3
Dwell Cyc Veh 2				7	6	8
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Ped1						
Exit 1			2	2	2	2
Exit 2			6	6	6	6
Exit 3						
Exit 4						
Track Yellow Change	25.5	25.5	25.5	25.5	25.5	25.5
Track Red Clear	25.5	25.5	25.5	25.5	25.5	25.5
Enable	ON	ON	ON	ON	ON	ON
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Ped Clear						
Yellow						
Red						

Low Priority Preempt [3]

Preempt	7	8	9	10
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2																	NORMAL		3.5	1.5
Overlap 3																	NORMAL		3.5	1.5
Overlap 4																	NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9																	NORMAL		3.5	1.5
Overlap 10																	NORMAL		3.5	1.5
Overlap 11																	NORMAL		3.5	1.5
Overlap 12																	NORMAL		3.5	1.5
Overlap 13																	NORMAL		3.5	1.5
Overlap 14																	NORMAL		3.5	1.5
Overlap 15																	NORMAL		3.5	1.5
Overlap 16																	NORMAL		3.5	1.5

Station : 3275 - NB I5 at NE 179th St (Permanent File)

Coordination, Pattern 1-16 [2.4]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	75	88	120													
Offset Time	17	75	2													
Split Number	1	2	3													
Seq Number	8	8	8	1	1	1	1	1	1	1	1	1	1	1	1	1
Short																
Long	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Offset	ENDGRN	ENDGRN	ENDGRN	ENDGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN

Coordination, Pattern 17-32 [2.4]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time																
Offset Time																
Split Number																
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Short																
Long	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Offset	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN	BEGGRN

Coordination, Splits [2.7.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1-Time	11	25	14	25		36	18	21								
1-Mode	NON	NON	NON	MAX	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON
1-Coord Phase							ON									
2-Time	14	25	15	34		39	30	19								
2-Mode	NON	NON	NON	MAX	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON
2-Coord Phase							ON									
3-Time	14	25	15	66		39	62	19								
3-Mode	NON	NON	NON	MAX	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON
3-Coord Phase							ON									
4-Time																
4-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
4-Coord Phase																
5-Time																
5-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
5-Coord Phase																
6-Time																
6-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
6-Coord Phase																
7-Time																
7-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
7-Coord Phase																
8-Time																
8-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
8-Coord Phase																
9-Time																
9-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
9-Coord Phase																
10-Time																
10-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
10-Coord Phase																
11-Time																
11-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
11-Coord Phase																
12-Time																
12-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
12-Coord Phase																
13-Time																
13-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
13-Coord Phase																
14-Time																
14-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
14-Coord Phase																
15-Time																
15-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
15-Coord Phase																
16-Time																
16-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
16-Coord Phase																
17-Time																
17-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
17-Coord Phase																
18-Time																
18-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
18-Coord Phase																
19-Time																
19-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
19-Coord Phase																
20-Time																
20-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
20-Coord Phase																
21-Time																
21-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
21-Coord Phase																
22-Time																
22-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
22-Coord Phase																
23-Time																
23-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
23-Coord Phase																
24-Time																
24-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
24-Coord Phase																
25-Time																
25-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
25-Coord Phase																
26-Time																
26-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

26-Coord Phase																
27-Time																
27-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
27-Coord Phase																
28-Time																
28-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
28-Coord Phase																
29-Time																
29-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
29-Coord Phase																
30-Time																
30-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
30-Coord Phase																
31-Time																
31-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
31-Coord Phase																
32-Time																
32-Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
32-Coord Phase																

Station : 3275 - NB I5 at NE 179th St (Permanent File)

TB Coor, Advanced Scheduler [4.3]

	Month												Day of Week							Day of Month									1									2									3		
Plan	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	Day Plan
1														1	1	1	1	1																																1
2																																																		2
3																																																		3
4				1															1																						1									4
5				1															1																											1				5
6				1									1																																		1			6
7																																																		1
8																																																		1
9																																																		1
10																																																		1
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22																																																		1
23																																																		1
24																																																		1

Coordination

| Ha | Na | Na | Na | Ga | Ga | Sa | Sa | Sa | Lo | Di | Sa | Sa | Sa

Station : 3275 - NB I5 at NE 179th St (Permanent File)

Ha	Nu	Arr	Dep	Qu	Ch	Sp1	Sp2	Sc1	Leg	Dri	Sp1	Sp2	Sp3	Sp4	Sp5	Sp6	Sp7	Sp8	Sp9	Sp0	Sp1	Sp2	Sp3	Sp4	Sp5	Sp6	Sp7	Sp8
Day Plan 3											**Easy**																	
2		54	254																									
Day Plan 4											**Easy**																	
8		2	2	88	75	2	8		17		14	25	15	34		39	30	19										
12		54	254																									

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Table : 1 Ring 1	1	2	3	4				
Table : 1 Ring 2	5	6	7	8				
Table : 1 Ring 3								
Table : 1 Ring 4								
Table : 2 Ring 1	1	2	3	4				
Table : 2 Ring 2	6	5	7	8				
Table : 2 Ring 3								
Table : 2 Ring 4								
Table : 3 Ring 1	2	1	3	4				
Table : 3 Ring 2	5	6	7	8				
Table : 3 Ring 3								
Table : 3 Ring 4								
Table : 4 Ring 1	2	1	3	4				
Table : 4 Ring 2	6	5	7	8				
Table : 4 Ring 3								
Table : 4 Ring 4								
Table : 5 Ring 1	1	2	3	4				
Table : 5 Ring 2	5	6	8	7				
Table : 5 Ring 3								
Table : 5 Ring 4								
Table : 6 Ring 1	1	2	3	4				
Table : 6 Ring 2	6	5	8	7				
Table : 6 Ring 3								
Table : 6 Ring 4								
Table : 7 Ring 1	2	1	3	4				
Table : 7 Ring 2	5	6	8	7				
Table : 7 Ring 3								
Table : 7 Ring 4								
Table : 8 Ring 1	2	1	3	4				
Table : 8 Ring 2	6	5	8	7				
Table : 8 Ring 3								
Table : 8 Ring 4								
Table : 9 Ring 1	1	2	4	3				
Table : 9 Ring 2	5	6	7	8				
Table : 9 Ring 3								
Table : 9 Ring 4								
Table : 10 Ring 1	1	2	4	3				
Table : 10 Ring 2	6	5	7	8				
Table : 10 Ring 3								
Table : 10 Ring 4								
Table : 11 Ring 1	2	1	4	3				
Table : 11 Ring 2	5	6	7	8				
Table : 11 Ring 3								
Table : 11 Ring 4								
Table : 12 Ring 1	2	1	4	3				
Table : 12 Ring 2	6	5	7	8				
Table : 12 Ring 3								
Table : 12 Ring 4								
Table : 13 Ring 1	1	2	4	3				
Table : 13 Ring 2	5	6	8	7				
Table : 13 Ring 3								
Table : 13 Ring 4								
Table : 14 Ring 1	1	2	4	3				
Table : 14 Ring 2	6	5	8	7				
Table : 14 Ring 3								
Table : 14 Ring 4								
Table : 15 Ring 1	2	1	4	3				
Table : 15 Ring 2	5	6	8	7				
Table : 15 Ring 3								
Table : 15 Ring 4								
Table : 16 Ring 1	2	1	4	3				
Table : 16 Ring 2	6	5	8	7				
Table : 16 Ring 3								
Table : 16 Ring 4								

Channels/SDLC+, IO Logic [1.8.7]

	1	2	3	4	5	6	7	8	9	10
Result										
Fun 1										
Src 1	0									
Fun 2										
Src 2	0									
Fun 3										
Src 3	0									
Operator 1 Function	—									
Operand 1 Result	1									
Operand 1 IO	1									
Operand 1 Invert	-									
Operator 2 Function	---									
Operand 2 IO	1									
Operand 2 Invert	-									
Operator 3 Function	—									
Operand 3 IO	1									

User Comments:

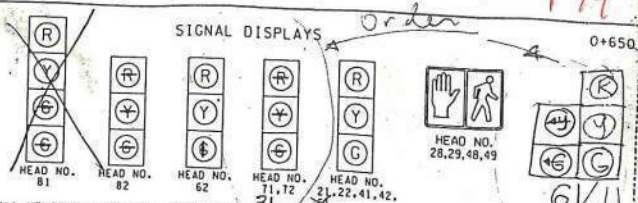
179th Modifications I-5 NB off & 179th

TRAFFIC SIGNAL SYSTEM NO. 2
WIRING SCHEDULE

FACE/WAY	LOOP CABLE 2cs	DET. 4cs	EVPE IND. 2cs	PED. BUTTON 2cs	PED. HEAD 5C	VEH. HEAD 5C *	ILLUM. #8	COMM. 6 PCC
MC						1		
MC		1	1			1		
MC		1	1			2		
MC	5	1	1	1	1	2		
MC	5	1	1	1	1	3		
MC	5	2	2	1	1	3		
MC	3			2	1		2	
NOT USED								
MC	3	1	1	2	1		2	
MC	3	1	1	2	1	1	2	
MC	3	1	1	3	2	1	2	
MC	3	1	1	3	2	2	2	
MC	3	2	2	3	2	2	2	
NOT USED								
27mm	1							
27mm	2							
35mm	3							
35mm	4							
41mm	5							
41mm	6							
91mm	8	4	4	4				
78mm					3	5		
91mm	13	4	4	4				
27mm							2	
41mm	3-#2 SERVICE POWER							
41mm	2-#6 CONTROLLER POWER							
41mm	8							1
41mm								

*MESSENGER CABLE

SIGNAL DISPLAYS



ALL VEHICLE HEADS SHALL HAVE 300mm GLASS LENSES, POLYCARBONATE BACKPLATES, AND POLYCARBONATE TUNNEL VISORS. VEHICLE HEADS NO.11,21,22,41, 42,61,62,71,81 & 82 SHALL HAVE TYPE P MOUNTS.(SEE STANDARD PLAN J-6g). VEHICLE HEAD NO. 72 SHALL HAVE A TYPE K MOUNT. (SEE STANDARD PLAN J-6f)

ALL RED BALLS AND RED ARROWS SHALL BE LIGHT EMITTING DIODE (LED) DISPLAYS. SEE SPECIAL PROVISIONS.

ALL PEDESTRIAN DISPLAYS SHALL BE LIGHT EMITTING DIODE (LED) TYPE WITH TYPE E MOUNTS, J-6f. SEE SPECIAL PROVISIONS.

BREAKER AND CONTACTOR SCHEDULE

SERVICE CIRCUIT NO.	MAIN BREAKER	BRANCH BREAKER	CONTACTOR
MAIN	2P-90amp		
SIGNAL		1P-60amp	
ILLUM-A		2P-15amp	30amp
ILLUM-B		2P-15amp	30amp

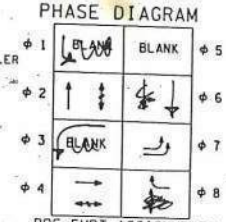
CONSTRUCTION NOTES

1. INSTALL TYPE V METAL STRAIN POLE AT 179th ST. STA. 0+691 (10.0m RT.).
2. INSTALL SPAN WIRE POLE (1) TO (2). COMPLETE WITH SIGNAL DISPLAYS, PRE-EMPT DETECTOR/INDICATOR, SIGN, AND 400 W HPS TYPE III MEDIUM CUTOFF, 240 V AC LUMINAIRE.
3. INSTALL TYPE IV METAL STRAIN POLE AT 179th ST. STA.0+696 (15.0m LT.).
4. INSTALL SPAN WIRE POLE (2) TO (3). COMPLETE WITH SIGNAL DISPLAYS, PRE-EMPT DETECTOR/INDICATOR, AND ONE PPB-M PUSH BUTTON.
5. INSTALL TYPE V METAL STRAIN POLE AT 179th ST. STA. 0+728 (15.0m LT.).
6. INSTALL SPAN WIRE POLE (3) TO (4). COMPLETE WITH SIGNAL DISPLAYS, TWO PPB-M PED PUSHBUTTONS, PRE-EMPT DETECTOR/INDICATOR, AND 400 W HPS TYPE III MEDIUM CUTOFF 240 V AC LUMINAIRE.
7. INSTALL TYPE IV METAL STRAIN POLE AT 179th ST. STA. 0+724 (12.0m RT.).
8. INSTALL SPAN WIRE POLE (4) TO (1). COMPLETE WITH SIGNAL DISPLAYS, ONE PPB-M PED PUSHBUTTON, SIGN, AND PRE-EMPT DETECTOR/INDICATOR.
9. CONSTRUCT 2m X 6m TYPE 1 LOOP, J-8a.
10. CONSTRUCT 2m X 10m TYPE 1 LOOP, J-8a.
11. CONSTRUCT 2m X 15m TYPE 1 LOOP, J-8a.
12. CONSTRUCT 2m X 2m TYPE 2 LOOP, J-8a.
13. CONSTRUCT CONTROLLER/SERVICE CABINET FOUNDATION AT APPROXIMATE 179th ST. STA. 0+691 (13.0m RT.). SEE DETAIL REFERENCE SHEET UC1. RELOCATE EXISTING CONTROLLER CABINET AND CONTROLLER. INSTALL MODIFIED TYPE B SERVICE.
14. RUN CONDUIT 5m UP UTILITY POLE WITH STANDOFFS PER UTILITY REQUIREMENTS. CONTRACTOR SHALL PROVIDE 7m OF 41mm CONDUIT WITH WEATHERHEAD TO COMPLETE THE INSTALLATION. COIL OFF 10m OF EXTRA CONDUCTOR. HOOKUP BY UTILITY.

NOTE:

ABANDON ALL EXISTING DETECTION LOOPS AND EXISTING CONDUITS/ CONDUCTORS ASSOCIATED WITH EXISTING SIGNAL SYSTEM. REMOVE EXISTING SIGNAL STANDARDS, SIGNAL DISPLAYS AND ASSOCIATED WIRING. (SEE SPECIAL PROVISIONS)

PHASE DIAGRAM



PRE-EMPT ASSIGNMENTS
A=φ2
B=φ4 & φ7
C=φ6
D=φ8

DESIGNED BY	W. WIRKKALA
DRAWN BY	B. CASEY
CHECKED BY	D. HOKANSON
SUPV. ENGR.	T. PASELK
REGION ADM.	D.R. WAGNER
DATE	

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER		
CONTRACT NO.		

ENVIRONMENTAL AND ENGINEERING SERVICE CENTER

Washington State Department of Transportation

SR 5 NB
NE 179th STREET INTERCHANGE

REFERENCE SHEET NUMBER UB1

ID: 3110
Name: NE 139th St at I-5 SB Onramp
Configuration: Standard

Pattern	Cycle Time	Offset Time	Split Number	Seq Number
Pattern 1	130	120	1	1
Pattern 2	130	120	2	1
Pattern 3	130	120	3	1
Pattern 4	150	80	4	1
Pattern 5	150	80	5	1
Pattern 6	150	80	6	1
Pattern 7	0	0	0	1
Pattern 8	0	0	0	1
Pattern 9	0	0	0	1
Pattern 10	0	0	0	1
Pattern 11	0	0	0	1
Pattern 12	0	0	0	1
Pattern 13	0	0	0	1
Pattern 14	0	0	0	1
Pattern 15	0	0	0	1
Pattern 16	0	0	0	1
Pattern 17	0	0	0	1
Pattern 18	0	0	0	1
Pattern 19	0	0	0	1
Pattern 20	0	0	0	1
Pattern 21	0	0	0	1
Pattern 22	0	0	0	1
Pattern 23	0	0	0	1
Pattern 24	0	0	0	1
Pattern 25	0	0	0	1
Pattern 26	0	0	0	1
Pattern 27	0	0	0	1
Pattern 28	0	0	0	1
Pattern 29	0	0	0	1
Pattern 30	0	0	0	1
Pattern 31	0	0	0	1
Pattern 32	0	0	0	1
Pattern 33	0	0	0	1
Pattern 34	0	0	0	1
Pattern 35	0	0	0	1
Pattern 36	0	0	0	1
Pattern 37	0	0	0	1
Pattern 38	0	0	0	1
Pattern 39	0	0	0	1
Pattern 40	0	0	0	1
Pattern 41	0	0	0	1
Pattern 42	0	0	0	1
Pattern 43	0	0	0	1
Pattern 44	0	0	0	1
Pattern 45	0	0	0	1
Pattern 46	0	0	0	1
Pattern 47	0	0	0	1
Pattern 48	0	0	0	1

ID: 3110
Name: NE 139th St at I-5 SB Onramp
Configuration: Standard

Param	Phs 1	Phs 2	Phs 3	Phs 4	Phs 5	Phs 6	Phs 7	Phs 8	Phs 9	Phs 10	Phs 11	Phs 12	Phs 13	Phs 14	Phs 15	Phs 16
Walk	0	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0
Ped Clearance	0	15	0	0	0	0	0	0	0	15	0	0	0	0	0	0
Min Green	5	5	0	0	0	5	0	0	5	5	2	2	0	5	0	0
Passage	2	2	0	0	0	2	0	0	2	2	2	2	0	2	0	0
Max1	25	25	0	0	0	25	0	0	20	20	10	10	0	20	0	0
Max2	35	35	0	0	0	35	0	0	25	25	10	10	0	25	0	0
Yellow	3	3.5	3	3	3	3.8	3	3	3	3.5	3	3	3	3.8	3	3
Red	3.1	1.6	0	0	0	1.6	0	0	3.1	1.6	3.1	3.1	0	1.6	0	0
Red Revert	2	2	0	0	0	2	0	0	2	2	2	2	0	2	0	0
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	15	15	0	0	0	15	0	0	15	15	5	5	0	15	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	15	15	0	0	0	15	0	0	10	10	5	5	0	15	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	40	60	0	0	0	60	0	0	40	60	0	0	0	60	0	0
Dynamic Max Step	5	10	0	0	0	10	0	0	5	10	0	0	0	10	0	0
Startup	RED	WALK	RED	RED	RED	GREEN	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED
Enable	On	On	Off	Off	Off	On	Off	Off	On	On	On	On	Off	On	Off	Off
Auto Entry	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Auto Exit	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act1	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act2	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Lock Call	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Min Recall	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Max Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ped Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Soft Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Dual Entry	Off	On	Off	Off	Off	On	Off	Off	Off	On	Off	Off	Off	On	Off	Off
Sim Gap Enable	Off	On	Off	Off	Off	On	Off	Off	Off	On	Off	Off	Off	On	Off	Off
Guar Passage	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Rest In Walk	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Cond Service	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Add Init Calc	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ring	1	1	1	1	2	2	2	2	1	1	1	1	2	2	2	2
Concur 1	6	6	0	0	0	1	0	0	14	14	6	14	0	9	0	0
Concur 2	0	0	0	0	0	2	0	0	0	0	0	0	0	10	0	0
Concur 3	0	0	0	0	0	11	0	0	0	0	0	0	0	12	0	0
Concur 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3110
Name: NE 139th St at I-5 SB Onramp
Configuration: Standard

Table	Param	Day Plan 1	Day Plan 2	Day Plan 3	Day Plan 4	Day Plan 5	Day Plan 6	Day Plan 7	Day Plan 8	Day Plan 9	Day Plan 10	Day Plan 11	Day Plan 12	Day Plan 13	Day Plan 14	Day Plan 15	Day Plan 16
1	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
1	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
1	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
2	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
5	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
5	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
6	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3115
Name: NE 139th St at I-5 NB Offramp
Configuration: Standard

Pattern	Cycle Time	Offset Time	Split Number	Seq Number
Pattern 1	130	88	1	1
Pattern 2	130	88	2	1
Pattern 3	130	88	3	1
Pattern 4	150	99	4	1
Pattern 5	150	99	5	1
Pattern 6	150	99	6	1
Pattern 7	0	0	0	1
Pattern 8	0	0	0	1
Pattern 9	0	0	0	1
Pattern 10	0	0	0	1
Pattern 11	0	0	0	1
Pattern 12	0	0	0	1
Pattern 13	0	0	0	1
Pattern 14	0	0	0	1
Pattern 15	0	0	0	1
Pattern 16	0	0	0	1
Pattern 17	0	0	0	1
Pattern 18	0	0	0	1
Pattern 19	0	0	0	1
Pattern 20	0	0	0	1
Pattern 21	0	0	0	1
Pattern 22	0	0	0	1
Pattern 23	0	0	0	1
Pattern 24	0	0	0	1
Pattern 25	0	0	0	1
Pattern 26	0	0	0	1
Pattern 27	0	0	0	1
Pattern 28	0	0	0	1
Pattern 29	0	0	0	1
Pattern 30	0	0	0	1
Pattern 31	0	0	0	1
Pattern 32	0	0	0	1
Pattern 33	0	0	0	1
Pattern 34	0	0	0	1
Pattern 35	0	0	0	1
Pattern 36	0	0	0	1
Pattern 37	0	0	0	1
Pattern 38	0	0	0	1
Pattern 39	0	0	0	1
Pattern 40	0	0	0	1
Pattern 41	0	0	0	1
Pattern 42	0	0	0	1
Pattern 43	0	0	0	1
Pattern 44	0	0	0	1
Pattern 45	0	0	0	1
Pattern 46	0	0	0	1
Pattern 47	0	0	0	1
Pattern 48	0	0	0	1

ID: 3115
Name: NE 139th St at I-5 NB Offramp
Configuration: Standard

Param	Phs 1	Phs 2	Phs 3	Phs 4	Phs 5	Phs 6	Phs 7	Phs 8	Phs 9	Phs 10	Phs 11	Phs 12	Phs 13	Phs 14	Phs 15	Phs 16
Walk	0	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0
Ped Clearance	0	15	0	0	0	0	0	0	0	15	0	0	0	0	0	0
Min Green	0	5	0	0	0	5	2	5	0	5	0	0	0	5	2	5
Passage	0	2	0	0	0	2	2	2	0	2	0	0	0	2	2	2
Max1	0	25	0	0	0	25	25	25	0	20	0	0	0	20	25	25
Max2	0	35	0	0	0	35	35	35	0	25	0	0	0	25	35	35
Yellow	3	3.8	3	3	3	3.5	3.9	3.9	3	3.8	3	3	3	3.5	3.9	3.9
Red	0	2	0	0	0	2.2	2.1	2.1	0	2	0	0	0	2.2	2.1	2.1
Red Revert	0	2	0	2	0	2	2	2	0	2	0	0	0	2	2	2
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	0	15	0	0	0	15	5	15	0	15	0	0	0	15	5	15
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	15	0	0	0	15	5	15	0	10	0	0	0	15	5	15
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	0	60	0	0	0	60	40	40	0	60	0	0	0	60	40	40
Dynamic Max Step	0	10	0	0	0	10	5	5	0	10	0	0	0	10	5	5
Startup	RED	WALK	RED	RED	RED	GREEN	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED
Enable	Off	On	Off	Off	Off	On	On	On	Off	On	Off	Off	Off	On	On	On
Auto Entry	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Auto Exit	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act1	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act2	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Lock Call	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Min Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Max Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ped Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Soft Recall	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Dual Entry	Off	On	Off	Off	Off	On	Off	Off	Off	On	Off	Off	Off	On	Off	Off
Sim Gap Enable	Off	On	Off	Off	Off	On	Off	Off	Off	On	Off	Off	Off	On	Off	Off
Guar Passage	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Rest In Walk	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Cond Service	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Add Init Calc	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ring	1	1	1	1	2	2	2	2	1	1	1	1	2	2	2	2
Concur 1	5	5	7	7	1	1	3	3	13	13	15	15	9	9	11	11
Concur 2	6	6	8	8	2	2	4	4	14	14	16	16	10	10	12	12
Concur 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3115
Name: NE 139th St at I-5 NB Offramp
Configuration: Standard

Table	Param	Day Plan 1	Day Plan 2	Day Plan 3	Day Plan 4	Day Plan 5	Day Plan 6	Day Plan 7	Day Plan 8	Day Plan 9	Day Plan 10	Day Plan 11	Day Plan 12	Day Plan 13	Day Plan 14	Day Plan 15	Day Plan 16
1	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
1	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
1	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
2	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
5	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
5	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
6	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3120
Name: NE 20th Av at NE 139th St Post SCIP
Configuration: Standard

Pattern	Cycle Time	Offset Time	Split Number	Seq Number
Pattern 1	130	80	1	1
Pattern 2	130	80	2	1
Pattern 3	130	80	3	1
Pattern 4	150	92	4	1
Pattern 5	150	92	5	1
Pattern 6	150	92	6	1
Pattern 7	0	0	0	1
Pattern 8	0	0	0	1
Pattern 9	0	0	0	1
Pattern 10	0	0	0	1
Pattern 11	0	0	0	1
Pattern 12	0	0	0	1
Pattern 13	0	0	0	1
Pattern 14	0	0	0	1
Pattern 15	0	0	0	1
Pattern 16	0	0	0	1
Pattern 17	0	0	0	1
Pattern 18	0	0	0	1
Pattern 19	0	0	0	1
Pattern 20	0	0	0	1
Pattern 21	0	0	0	1
Pattern 22	0	0	0	1
Pattern 23	0	0	0	1
Pattern 24	0	0	0	1
Pattern 25	0	0	0	1
Pattern 26	0	0	0	1
Pattern 27	0	0	0	1
Pattern 28	0	0	0	1
Pattern 29	0	0	0	1
Pattern 30	0	0	0	1
Pattern 31	0	0	0	1
Pattern 32	0	0	0	1
Pattern 33	0	0	0	1
Pattern 34	0	0	0	1
Pattern 35	0	0	0	1
Pattern 36	0	0	0	1
Pattern 37	0	0	0	1
Pattern 38	0	0	0	1
Pattern 39	0	0	0	1
Pattern 40	0	0	0	1
Pattern 41	0	0	0	1
Pattern 42	0	0	0	1
Pattern 43	0	0	0	1
Pattern 44	0	0	0	1
Pattern 45	0	0	0	1
Pattern 46	0	0	0	1
Pattern 47	0	0	0	1
Pattern 48	0	0	0	1

ID: 3120
Name: NE 20th Av at NE 139th St Post SCIP
Configuration: Standard

Param	Phs 1	Phs 2	Phs 3	Phs 4	Phs 5	Phs 6	Phs 7	Phs 8	Phs 9	Phs 10	Phs 11	Phs 12	Phs 13	Phs 14	Phs 15	Phs 16
Walk	0	5	0	5	0	5	0	5	0	0	0	0	0	0	0	0
Ped Clearance	0	23	0	29	0	18	0	27	0	0	0	0	0	0	0	0
Min Green	5	5	5	5	5	5	5	5	0	0	5	0	0	0	0	0
Passage	2	2	2	2	2	2	2	2	0	0	2	0	0	0	0	0
Max1	20	20	25	25	20	20	20	45	0	0	25	0	0	0	0	0
Max2	25	25	35	35	25	25	25	50	0	0	35	0	0	0	0	0
Yellow	3	3.6	3	4	3	3.6	3	4	3	3	3	3	3	3	3	3
Red	2.5	2.3	2.5	2.1	2.5	2.4	2.5	2.5	0	0	2.5	0	0	0	0	0
Red Revert	5	5	5	5	5	5	5	5	0	0	5	0	0	0	0	0
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	10	10	20	20	10	10	10	20	0	0	20	0	0	0	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	10	15	20	20	10	15	15	20	0	0	20	0	0	0	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	35	35	70	70	35	35	50	70	0	0	70	0	0	0	0	0
Dynamic Max Step	5	5	10	10	5	5	5	10	0	0	10	0	0	0	0	0
Startup	RED	RED	RED	WALK	RED	RED	RED	WALK	RED	RED	RED	RED	RED	RED	RED	RED
Enable	On	On	On	On	On	On	On	On	Off	Off	On	Off	Off	Off	Off	Off
Auto Entry	Off	Off	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off
Auto Exit	Off	Off	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off
Non Act1	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act2	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Lock Call	Off	Off	Off	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off
Min Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Max Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ped Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Soft Recall	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Dual Entry	Off	On	Off	On	Off	On	Off	On	Off	Off	Off	Off	Off	Off	Off	Off
Sim Gap Enable	On	On	On	On	On	On	On	On	Off	Off	On	Off	Off	Off	Off	Off
Guar Passage	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Rest In Walk	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Cond Service	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Add Init Calc	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ring	1	1	1	1	2	2	2	2	0	0	1	0	0	0	0	0
Concur 1	5	5	7	7	1	1	3	3	0	0	7	0	0	0	0	0
Concur 2	6	6	8	8	2	2	4	4	0	0	8	0	0	0	0	0
Concur 3	0	0	0	0	0	0	11	11	0	0	0	0	0	0	0	0
Concur 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3120
Name: NE 20th Av at NE 139th St Post SCIP
Configuration: Standard

Table	Param	Day Plan 1	Day Plan 2	Day Plan 3	Day Plan 4	Day Plan 5	Day Plan 6	Day Plan 7	Day Plan 8	Day Plan 9	Day Plan 10	Day Plan 11	Day Plan 12	Day Plan 13	Day Plan 14	Day Plan 15	Day Plan 16
1	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
1	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
1	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
2	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
5	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
5	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
6	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3031
Name: I-5 SB On at 134th - V.76
Configuration: Standard

Pattern	Cycle Time	Offset Time	Split Number	Seq Number
Pattern 1	130	84	1	1
Pattern 2	130	84	2	1
Pattern 3	130	84	3	1
Pattern 4	150	110	4	1
Pattern 5	150	110	5	1
Pattern 6	150	110	6	1
Pattern 7	0	0	0	1
Pattern 8	0	0	0	1
Pattern 9	0	0	0	1
Pattern 10	0	0	0	1
Pattern 11	0	0	0	1
Pattern 12	0	0	0	1
Pattern 13	0	0	0	1
Pattern 14	0	0	0	1
Pattern 15	0	0	0	1
Pattern 16	0	0	0	1
Pattern 17	0	0	0	1
Pattern 18	0	0	0	1
Pattern 19	0	0	0	1
Pattern 20	0	0	0	1
Pattern 21	0	0	0	1
Pattern 22	0	0	0	1
Pattern 23	0	0	0	1
Pattern 24	0	0	0	1
Pattern 25	0	0	0	1
Pattern 26	0	0	0	1
Pattern 27	0	0	0	1
Pattern 28	0	0	0	1
Pattern 29	0	0	0	1
Pattern 30	0	0	0	1
Pattern 31	0	0	0	1
Pattern 32	0	0	0	1
Pattern 33	0	0	0	1
Pattern 34	0	0	0	1
Pattern 35	0	0	0	1
Pattern 36	0	0	0	1
Pattern 37	0	0	0	1
Pattern 38	0	0	0	1
Pattern 39	0	0	0	1
Pattern 40	0	0	0	1
Pattern 41	0	0	0	1
Pattern 42	0	0	0	1
Pattern 43	0	0	0	1
Pattern 44	0	0	0	1
Pattern 45	0	0	0	1
Pattern 46	0	0	0	1
Pattern 47	0	0	0	1
Pattern 48	0	0	0	1

ID: 3031
Name: I-5 SB On at 134th - V.76
Configuration: Standard

Param	Phs 1	Phs 2	Phs 3	Phs 4	Phs 5	Phs 6	Phs 7	Phs 8	Phs 9	Phs 10	Phs 11	Phs 12	Phs 13	Phs 14	Phs 15	Phs 16
Walk	0	0	0	0	0	0	0	5	0	0	0	0	0	5	0	0
Ped Clearance	0	0	0	0	0	0	0	21	0	0	0	0	0	7	0	0
Min Green	0	5	0	0	5	5	0	5	0	0	0	0	5	5	0	0
Passage	0	2	0	0	2	2	0	2	0	0	0	0	2	2	0	0
Max1	0	20	0	0	20	20	0	20	0	0	0	0	20	20	0	0
Max2	0	25	0	0	25	25	0	20	0	0	0	0	25	25	0	0
Yellow	3	3.2	3	3	3	3.2	3	3	3	3	3	3	3	3.2	3	3
Red	0	2	0	0	2.2	2	0	2.2	0	0	0	0	2.2	2	0	0
Red Revert	0	5	0	0	5	5	0	0	0	0	0	0	5	5	0	0
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	0	20	0	0	15	20	0	10	0	0	0	0	15	20	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	20	0	0	15	20	0	10	0	0	0	0	15	20	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	0	60	0	0	40	60	0	0	0	0	0	0	50	0	0	0
Dynamic Max Step	0	10	0	0	5	10	0	0	0	0	0	0	5	0	0	0
Startup	RED	GREEN	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	WALK	RED	RED
Enable	Off	On	Off	Off	On	On	Off	On	Off	Off	Off	Off	On	On	Off	Off
Auto Entry	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Auto Exit	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act1	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act2	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Lock Call	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Min Recall	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Max Recall	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ped Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Soft Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Dual Entry	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Sim Gap Enable	Off	On	Off	Off	On	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Guar Passage	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Rest In Walk	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Cond Service	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Add Init Calc	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ring	1	1	1	1	2	2	2	2	1	1	1	1	2	2	2	2
Concur 1	0	5	0	0	2	2	0	0	0	0	0	0	2	2	0	0
Concur 2	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 3	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 4	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3031
Name: I-5 SB On at 134th - V.76
Configuration: Standard

Table	Param	Day Plan 1	Day Plan 2	Day Plan 3	Day Plan 4	Day Plan 5	Day Plan 6	Day Plan 7	Day Plan 8	Day Plan 9	Day Plan 10	Day Plan 11	Day Plan 12	Day Plan 13	Day Plan 14	Day Plan 15	Day Plan 16
1	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
1	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
1	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
2	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
5	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
5	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
6	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3036
Name: 134 at I-5 NB Off - V.76
Configuration: Standard

Pattern	Cycle Time	Offset Time	Split Number	Seq Number
Pattern 1	130	111	1	1
Pattern 2	130	111	2	1
Pattern 3	130	111	3	1
Pattern 4	150	123	4	1
Pattern 5	150	123	5	1
Pattern 6	150	123	6	1
Pattern 7	0	0	0	1
Pattern 8	0	0	0	1
Pattern 9	0	0	0	1
Pattern 10	0	0	0	1
Pattern 11	0	0	0	1
Pattern 12	0	0	0	1
Pattern 13	0	0	0	1
Pattern 14	0	0	0	1
Pattern 15	0	0	0	1
Pattern 16	0	0	0	1
Pattern 17	0	0	0	1
Pattern 18	0	0	0	1
Pattern 19	0	0	0	1
Pattern 20	0	0	0	1
Pattern 21	0	0	0	1
Pattern 22	0	0	0	1
Pattern 23	0	0	0	1
Pattern 24	0	0	0	1
Pattern 25	0	0	0	1
Pattern 26	0	0	0	1
Pattern 27	0	0	0	1
Pattern 28	0	0	0	1
Pattern 29	0	0	0	1
Pattern 30	0	0	0	1
Pattern 31	0	0	0	1
Pattern 32	0	0	0	1
Pattern 33	0	0	0	1
Pattern 34	0	0	0	1
Pattern 35	0	0	0	1
Pattern 36	0	0	0	1
Pattern 37	0	0	0	1
Pattern 38	0	0	0	1
Pattern 39	0	0	0	1
Pattern 40	0	0	0	1
Pattern 41	0	0	0	1
Pattern 42	0	0	0	1
Pattern 43	0	0	0	1
Pattern 44	0	0	0	1
Pattern 45	0	0	0	1
Pattern 46	0	0	0	1
Pattern 47	0	0	0	1
Pattern 48	0	0	0	1

ID: 3036
Name: 134 at I-5 NB Off - V.76
Configuration: Standard

Param	Phs 1	Phs 2	Phs 3	Phs 4	Phs 5	Phs 6	Phs 7	Phs 8	Phs 9	Phs 10	Phs 11	Phs 12	Phs 13	Phs 14	Phs 15	Phs 16
Walk	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
Ped Clearance	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0
Min Green	0	5	5	5	0	5	0	0	0	0	0	0	0	0	0	0
Passage	0	2	1	1	0	1	0	0	0	0	0	0	0	0	0	0
Max1	0	20	25	25	0	25	0	0	0	0	0	0	0	0	0	0
Max2	0	25	50	50	0	50	0	0	0	0	0	0	0	0	0	0
Yellow	3	3.2	4	4	3	3.2	3	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	0	2.3	3.1	3.1	0	2.7	0	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert	0	5	5	5	0	5	0	0	0	0	0	0	0	0	0	0
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	0	20	10	20	0	20	0	0	0	0	0	0	0	0	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	20	10	20	0	20	0	0	0	0	0	0	0	0	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	0	70	30	60	0	70	0	0	0	0	0	0	0	0	0	0
Dynamic Max Step	0	10	5	5	0	10	0	0	0	0	0	0	0	0	0	0
Startup	RED	GREEN	RED	RED	RED	WALK	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED
Enable	Off	On	On	On	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Auto Entry	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Auto Exit	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act1	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act2	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Lock Call	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Min Recall	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Max Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ped Recall	Off	Off	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Soft Recall	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Dual Entry	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Sim Gap Enable	Off	On	Off	Off	Off	On	Off	Off	On	On	On	On	On	On	On	On
Guar Passage	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Rest In Walk	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Cond Service	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Add Init Calc	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ring	1	1	1	1	2	2	1	1	0	0	0	0	0	0	0	0
Concur 1	5	5	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Concur 2	6	6	0	0	2	2	0	0	0	0	0	0	0	0	0	0
Concur 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3036
Name: 134 at I-5 NB Off - V.76
Configuration: Standard

Table	Param	Day Plan 1	Day Plan 2	Day Plan 3	Day Plan 4	Day Plan 5	Day Plan 6	Day Plan 7	Day Plan 8	Day Plan 9	Day Plan 10	Day Plan 11	Day Plan 12	Day Plan 13	Day Plan 14	Day Plan 15	Day Plan 16
1	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
1	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
1	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
2	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
5	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
5	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
6	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3041
Name: 134th at Hwy 99 and Ramps V.76 update
Configuration: Standard

Pattern	Cycle Time	Offset Time	Split Number	Seq Number
Pattern 1	130	123	1	1
Pattern 2	130	123	2	1
Pattern 3	130	123	3	1
Pattern 4	150	125	4	1
Pattern 5	150	125	5	1
Pattern 6	150	125	6	1
Pattern 7	0	0	0	1
Pattern 8	0	0	0	1
Pattern 9	0	0	0	1
Pattern 10	0	0	0	1
Pattern 11	0	0	0	1
Pattern 12	0	0	0	1
Pattern 13	0	0	0	1
Pattern 14	0	0	0	1
Pattern 15	0	0	0	1
Pattern 16	0	0	0	1
Pattern 17	0	0	0	1
Pattern 18	0	0	0	1
Pattern 19	0	0	0	1
Pattern 20	0	0	0	1
Pattern 21	0	0	0	1
Pattern 22	0	0	0	1
Pattern 23	0	0	0	1
Pattern 24	0	0	0	1
Pattern 25	0	0	0	1
Pattern 26	0	0	0	1
Pattern 27	0	0	0	1
Pattern 28	0	0	0	1
Pattern 29	0	0	0	1
Pattern 30	0	0	0	1
Pattern 31	0	0	0	1
Pattern 32	0	0	0	1
Pattern 33	0	0	0	1
Pattern 34	0	0	0	1
Pattern 35	0	0	0	1
Pattern 36	0	0	0	1
Pattern 37	0	0	0	1
Pattern 38	0	0	0	1
Pattern 39	0	0	0	1
Pattern 40	0	0	0	1
Pattern 41	0	0	0	1
Pattern 42	0	0	0	1
Pattern 43	0	0	0	1
Pattern 44	0	0	0	1
Pattern 45	0	0	0	1
Pattern 46	0	0	0	1
Pattern 47	0	0	0	1
Pattern 48	0	0	0	1

ID: 3041

Name: 134th at Hwy 99 and Ramps V.76 update

Configuration: Standard

Param	Phs 1	Phs 2	Phs 3	Phs 4	Phs 5	Phs 6	Phs 7	Phs 8	Phs 9	Phs 10	Phs 11	Phs 12	Phs 13	Phs 14	Phs 15	Phs 16
Walk	0	5	0	0	0	5	0	5	0	0	0	0	0	0	0	0
Ped Clearance	0	12	0	0	0	7	0	27	0	0	0	0	0	0	0	0
Min Green	0	5	5	0	0	5	0	5	0	0	0	0	0	0	0	0
Passage	0	2	2	0	0	2	0	2	0	0	0	0	0	0	0	0
Max1	0	20	20	0	0	20	0	20	0	0	0	0	0	0	0	0
Max2	0	25	25	0	0	25	0	25	0	0	0	0	0	0	0	0
Yellow	3	3.2	3	3	3	3.2	3	3.2	3	3	3	3	3	3	3	3
Red	0	0.3	3.9	0	0	2.3	0	3.2	0	0	0	0	0	0	0	0
Red Revert	0	5	5	0	0	5	0	5	0	0	0	0	0	0	0	0
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	0	20	15	0	0	20	0	15	0	0	0	0	0	0	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	20	15	0	0	20	0	15	0	0	0	0	0	0	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	0	60	50	0	0	60	0	50	0	0	0	0	0	0	0	0
Dynamic Max Step	0	10	5	0	0	10	0	5	0	0	0	0	0	0	0	0
Startup	RED	WALK	RED	RED	RED	WALK	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED
Enable	Off	On	On	Off	Off	On	Off	On	Off	Off	Off	Off	Off	Off	Off	Off
Auto Entry	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Auto Exit	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act1	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act2	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Lock Call	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Min Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Max Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ped Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Soft Recall	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Dual Entry	Off	On	On	Off	Off	On	Off	On	Off	Off	Off	Off	Off	Off	Off	Off
Sim Gap Enable	Off	On	On	Off	Off	On	Off	On	Off	Off	Off	Off	Off	Off	Off	Off
Guar Passage	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Rest In Walk	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Cond Service	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Add Init Calc	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ring	1	1	1	1	2	2	2	2	0	0	0	0	0	0	0	0
Concur 1	5	5	7	7	1	1	3	3	0	0	0	0	0	0	0	0
Concur 2	6	6	8	8	2	2	4	4	0	0	0	0	0	0	0	0
Concur 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3041
Name: 134th at Hwy 99 and Ramps V.76 update
Configuration: Standard

Table	Param	Day Plan 1	Day Plan 2	Day Plan 3	Day Plan 4	Day Plan 5	Day Plan 6	Day Plan 7	Day Plan 8	Day Plan 9	Day Plan 10	Day Plan 11	Day Plan 12	Day Plan 13	Day Plan 14	Day Plan 15	Day Plan 16
1	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
1	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
1	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
2	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
5	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
5	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
6	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3047
Name: NE 20th Av at NE 134th St V.76 Update
Configuration: Standard

Pattern	Cycle Time	Offset Time	Split Number	Seq Number
Pattern 1	130	0	1	1
Pattern 2	130	0	2	1
Pattern 3	130	0	3	1
Pattern 4	150	0	4	1
Pattern 5	150	0	5	1
Pattern 6	150	0	6	1
Pattern 7	0	0	0	1
Pattern 8	0	0	0	1
Pattern 9	0	0	0	1
Pattern 10	0	0	0	1
Pattern 11	0	0	0	1
Pattern 12	0	0	0	1
Pattern 13	0	0	0	1
Pattern 14	0	0	0	1
Pattern 15	0	0	0	1
Pattern 16	0	0	0	1
Pattern 17	0	0	0	1
Pattern 18	0	0	0	1
Pattern 19	0	0	0	1
Pattern 20	0	0	0	1
Pattern 21	0	0	0	1
Pattern 22	0	0	0	1
Pattern 23	0	0	0	1
Pattern 24	0	0	0	1
Pattern 25	0	0	0	1
Pattern 26	0	0	0	1
Pattern 27	0	0	0	1
Pattern 28	0	0	0	1
Pattern 29	0	0	0	1
Pattern 30	0	0	0	1
Pattern 31	0	0	0	1
Pattern 32	0	0	0	1
Pattern 33	0	0	0	1
Pattern 34	0	0	0	1
Pattern 35	0	0	0	1
Pattern 36	0	0	0	1
Pattern 37	0	0	0	1
Pattern 38	0	0	0	1
Pattern 39	0	0	0	1
Pattern 40	0	0	0	1
Pattern 41	0	0	0	1
Pattern 42	0	0	0	1
Pattern 43	0	0	0	1
Pattern 44	0	0	0	1
Pattern 45	0	0	0	1
Pattern 46	0	0	0	1
Pattern 47	0	0	0	1
Pattern 48	0	0	0	1

ID: 3047
Name: NE 20th Av at NE 134th St V.76 Update
Configuration: Standard

Param	Phs 1	Phs 2	Phs 3	Phs 4	Phs 5	Phs 6	Phs 7	Phs 8	Phs 9	Phs 10	Phs 11	Phs 12	Phs 13	Phs 14	Phs 15	Phs 16
Walk	0	5	0	5	0	5	0	5	0	0	0	0	0	0	0	0
Ped Clearance	0	29	0	38	0	30	0	38	0	0	0	0	0	0	0	0
Min Green	5	5	5	5	5	5	5	5	5	0	0	0	0	0	0	0
Passage	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0
Max1	20	20	20	20	20	20	20	20	15	0	0	0	0	0	0	0
Max2	25	25	25	25	25	25	25	25	20	0	0	0	0	0	0	0
Yellow	3	3.6	3	4	3	3.6	3	4	3	3	3	3	3	3	3	3
Red	0	2.8	4.3	2.9	4.3	2.9	4.3	2.9	0	0	0	0	0	0	0	0
Red Revert	5	5	5	5	5	5	5	5	5	0	0	0	0	0	0	0
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	20	20	10	15	15	20	20	15	10	0	0	0	0	0	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	15	20	10	15	15	20	20	15	10	0	0	0	0	0	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	60	60	40	50	40	60	70	40	30	0	0	0	0	0	0	0
Dynamic Max Step	10	10	5	5	5	10	10	5	5	0	0	0	0	0	0	0
Startup	RED	WALK	RED	RED	RED	WALK	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED
Enable	On	On	On	On	On	On	On	On	On	Off	Off	Off	Off	Off	Off	Off
Auto Entry	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Auto Exit	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act1	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act2	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Lock Call	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Min Recall	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Max Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ped Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Soft Recall	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Dual Entry	Off	On	Off	On	Off	On	Off	On	Off	Off	Off	Off	Off	Off	Off	Off
Sim Gap Enable	On	On	On	On	On	On	On	On	On	Off	Off	Off	Off	Off	Off	Off
Guar Passage	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Rest In Walk	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Cond Service	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Add Init Calc	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ring	1	1	1	1	2	2	2	2	1	0	0	0	0	0	0	0
Concur 1	5	5	7	7	1	1	3	3	5	0	0	0	0	0	0	0
Concur 2	6	6	8	8	2	2	4	4	6	0	0	0	0	0	0	0
Concur 3	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0
Concur 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3047
Name: NE 20th Av at NE 134th St V.76 Update
Configuration: Standard

Table	Param	Day Plan 1	Day Plan 2	Day Plan 3	Day Plan 4	Day Plan 5	Day Plan 6	Day Plan 7	Day Plan 8	Day Plan 9	Day Plan 10	Day Plan 11	Day Plan 12	Day Plan 13	Day Plan 14	Day Plan 15	Day Plan 16
1	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
1	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
1	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
2	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
5	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
5	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
6	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3050
Name: NE 23rd Av - I-205 NB Offramp at NE 134
Configuration: Standard

Pattern	Cycle Time	Offset Time	Split Number	Seq Number
Pattern 1	130	8	1	5
Pattern 2	130	8	2	5
Pattern 3	130	8	3	5
Pattern 4	150	0	4	5
Pattern 5	150	0	5	5
Pattern 6	150	0	6	5
Pattern 7	0	0	0	1
Pattern 8	0	0	0	1
Pattern 9	0	0	0	1
Pattern 10	0	0	0	1
Pattern 11	0	0	0	1
Pattern 12	0	0	0	1
Pattern 13	0	0	0	1
Pattern 14	0	0	0	1
Pattern 15	0	0	0	1
Pattern 16	0	0	0	1
Pattern 17	0	0	0	1
Pattern 18	0	0	0	1
Pattern 19	0	0	0	1
Pattern 20	0	0	0	1
Pattern 21	0	0	0	1
Pattern 22	0	0	0	1
Pattern 23	0	0	0	1
Pattern 24	0	0	0	1
Pattern 25	0	0	0	1
Pattern 26	0	0	0	1
Pattern 27	0	0	0	1
Pattern 28	0	0	0	1
Pattern 29	0	0	0	1
Pattern 30	0	0	0	1
Pattern 31	0	0	0	1
Pattern 32	0	0	0	1
Pattern 33	0	0	0	1
Pattern 34	0	0	0	1
Pattern 35	0	0	0	1
Pattern 36	0	0	0	1
Pattern 37	0	0	0	1
Pattern 38	0	0	0	1
Pattern 39	0	0	0	1
Pattern 40	0	0	0	1
Pattern 41	0	0	0	1
Pattern 42	0	0	0	1
Pattern 43	0	0	0	1
Pattern 44	0	0	0	1
Pattern 45	0	0	0	1
Pattern 46	0	0	0	1
Pattern 47	0	0	0	1
Pattern 48	0	0	0	1

ID: 3050

Name: NE 23rd Av - I-205 NB Offramp at NE 134

Configuration: Standard

Param	Phs 1	Phs 2	Phs 3	Phs 4	Phs 5	Phs 6	Phs 7	Phs 8	Phs 9	Phs 10	Phs 11	Phs 12	Phs 13	Phs 14	Phs 15	Phs 16
Walk	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0
Ped Clearance	0	20	0	0	0	0	17	0	0	0	0	0	0	0	0	0
Min Green	5	5	0	0	0	5	5	5	0	0	0	0	0	0	0	0
Passage	2	2	0	0	0	2	2	2	0	0	0	0	0	0	0	0
Max1	15	30	0	0	0	30	30	25	0	0	0	0	0	0	0	0
Max2	20	35	0	0	0	35	35	30	0	0	0	0	0	0	0	0
Yellow	3	3.6	3	3	3	3.6	3.2	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	2.9	2.5	0	0	0	2.2	2.4	2.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert	5	5	0	0	0	5	5	5	0	0	0	0	0	0	0	0
Added Initial	1.1	1	0	0	0	1.2	1	1.2	0	0	0	0	0	0	0	0
Max Initial	10	20	0	0	0	20	15	15	0	0	0	0	0	0	0	0
Time Before Reduce	15	20	0	0	0	20	20	15	0	0	0	0	0	0	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	10	20	0	0	0	20	10	10	0	0	0	0	0	0	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	40	70	0	0	0	70	50	45	0	0	0	0	0	0	0	0
Dynamic Max Step	5	10	0	0	0	10	10	5	0	0	0	0	0	0	0	0
Startup	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED
Enable	On	On	Off	Off	Off	On	On	On	Off	Off	Off	Off	Off	Off	Off	Off
Auto Entry	Off	Off	Off	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off
Auto Exit	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act1	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Non Act2	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Lock Call	Off	Off	Off	Off	Off	Off	Off	Off	On	On	On	On	On	On	On	On
Min Recall	Off	On	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Max Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ped Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Soft Recall	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Dual Entry	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Sim Gap Enable	Off	On	Off	Off	Off	On	Off	Off	On	On	On	On	On	On	On	On
Guar Passage	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Rest In Walk	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Cond Service	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Add Init Calc	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Ring	1	1	1	1	2	2	1	1	0	0	0	0	0	0	0	0
Concur 1	5	5	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Concur 2	6	6	0	0	2	2	0	0	0	0	0	0	0	0	0	0
Concur 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concur 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 3050
Name: NE 23rd Av - I-205 NB Offramp at NE 134
Configuration: Standard

Table	Param	Phs 1	Phs 2	Phs 3	Phs 4	Phs 5	Phs 6	Phs 7	Phs 8	Phs 9	Phs 10	Phs 11	Phs 12	Phs 13	Phs 14	Phs 15	Phs 16
1	Time	22	43	0	0	0	65	40	25	0	0	0	0	0	0	0	0
1	Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
1	Coord-Ph	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2	Time	22	43	0	0	0	65	40	25	0	0	0	0	0	0	0	0
2	Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
2	Coord-Ph	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
3	Time	22	43	0	0	0	65	40	25	0	0	0	0	0	0	0	0
3	Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
3	Coord-Ph	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
4	Time	22	53	0	0	0	75	50	25	0	0	0	0	0	0	0	0
4	Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
4	Coord-Ph	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
5	Time	22	53	0	0	0	75	50	25	0	0	0	0	0	0	0	0
5	Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
5	Coord-Ph	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
6	Time	22	53	0	0	0	75	50	25	0	0	0	0	0	0	0	0
6	Mode	NON	MIN	NON	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
6	Coord-Ph	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
7	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
7	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
8	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
8	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
9	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
9	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
10	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
10	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
11	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
11	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
12	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
12	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
13	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
13	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
14	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
14	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
15	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
15	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
16	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
16	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
17	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
17	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
18	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
18	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
19	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
19	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
20	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
20	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
21	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
21	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
22	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
22	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
23	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
23	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
24	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
24	Coord-Ph	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

ID: 3050
Name: NE 23rd Av - I-205 NB Offramp at NE 134
Configuration: Standard

Table	Param	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9	Plan 10	Plan 11	Plan 12	Plan 13	Plan 14	Plan 15	Plan 16
1	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
1	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
1	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
2	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Hour	0	6	15	15	20	0	0	0	0	0	0	0	0	0	0	0
5	Minute	0	30	0	2	0	0	0	0	0	0	0	0	0	0	0	0
5	Action	54	1	54	4	54	0	0	0	0	0	0	0	0	0	0	0
6	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Hour	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Action	54	1	54	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Minute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX K

OPERATIONS AND QUEUING SUMMARY TABLES

Intersection Operations – Clark County Intersections

	Intersection	Lane Group	Analysis Results																													
			2018 Existing						2020 Pre-Development						2020 Post-Development						2020 Post-Development with Right-In						2020 Post-Development with RIRO					
			AM			PM			AM			PM			AM			PM			AM			PM			AM			PM		
			V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay
1	NE 179th Street/ NE Delfel Road (West)	Overall	0.12	B	13.3	0.12	B	12.7	0.16	C	23.8	0.16	B	18.3	0.17	C	24.6	0.18	B	19.8												
		EBT+R	0.09	A	4.2	0.10	A	7.4	0.08	A	6.5	0.10	A	9.7	0.09	A	7.2	0.11	B	10.3												
		WBL	0.45	E	62.0	0.36	D	42.6	0.57	E	57.5	0.51	D	36.6	0.56	D	54.9	0.56	D	37.1												
		WBT	0.05	A	1.3	0.09	A	1.1	0.04	A	0.9	0.09	A	3.7	0.04	A	1.0	0.09	A	3.8												
		NBL	0.03	D	51.1	0.00	A	0.0	0.03	D	50.0	0.00	A	0.0	0.03	D	50.0	0.00	A	0.0												
		NBR	0.02	D	51.1	0.06	D	38.8	0.06	D	50.2	0.09	D	38.0	0.06	D	50.3	0.11	D	38.1												
2	NE 179th Street/ NE Delfel Road (East)	EBL	0.01	A	8.0	0.01	A	8.3	0.01	A	8.1	0.01	A	8.5	0.01	A	8.1	0.02	A	8.5												
		SBL	0.50	C	17.4	0.40	C	17.8	0.56	C	19.9	0.47	C	20.5	0.58	C	20.7	0.50	D	22.3												
6	NE 179th Street/ NE 15th Avenue	Overall	0.33	A	5.6	0.43	A	7.0	0.41	A	6.6	0.73	B	17.5	0.41	A	6.7	0.73	B	17.8												
		EBT+R	0.26	A	4.0	0.49	A	6.2	0.36	A	5.1	0.65	B	11.8	0.37	A	5.2	0.65	B	12.0												
		WBL+T	0.37	A	4.4	0.43	A	5.9	0.46	A	5.6	0.72	B	15.7	0.47	A	5.6	0.73	B	16.1												
		NBL	0.23	B	12.5	0.31	A	9.9	0.31	B	11.9	0.73	C	28.0	0.31	B	11.8	0.73	C	28.6												
		NBR	0.03	B	11.8	0.08	A	9.2	0.04	B	10.9	0.11	B	19.1	0.04	B	10.9	0.11	B	19.5												
7	NE 179th Street/ NE 29th Avenue	EB	0.29	B	10.3	0.49	B	12.3	0.32	B	10.9	0.62	C	16.2	0.33	B	10.9	0.62	C	16.5												
		WB	0.35	B	10.9	0.28	B	10.1	0.41	B	11.9	0.35	B	11.5	0.41	B	11.9	0.36	B	11.6												
		NB	0.23	A	9.8	0.25	B	10.1	0.26	B	10.4	0.33	B	11.7	0.27	B	10.5	0.33	B	11.7												
		SB	0.22	A	9.6	0.13	A	9.2	0.25	B	10.1	0.17	A	10.0	0.25	B	10.1	0.17	A	10.0												
8	NE 10th Avenue/ NE 149th Street	EBL	0.01	B	10.2	0.00	C	15.3	0.06	B	10.6	0.11	C	17.8	0.07	B	10.8	0.12	C	18.7												
		EBR	0.33	B	10.1	0.22	A	9.5	0.37	B	10.8	0.23	B	10.0	0.38	B	11.1	0.24	B	10.2												
		NBL	0.05	A	7.4	0.21	A	7.9	0.05	A	7.6	0.23	A	8.2	0.05	A	7.6	0.24	A	8.4												
9	NE 10th Avenue/ NE 141st Street/Site Access	EB	0.06	B	12.7	0.04	B	14.3	0.07	B	13.3	0.05	C	15.1	0.06	B	13.3	0.06	C	16.8	0.06	B	13.3	0.06	C	16.4	0.06	B	13.3	0.06	C	16.4
		WBL	0.02	C	20.7	0.00	A	0.0	0.02	C	22.7	0.00	A	0.0	0.35	E	35.3	2.04	F	572.6	0.34	D	33.4	1.91	F	509.3	0.27	D	30.8	1.52	F	346.2
		WBT+R	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.03	B	10.5	0.11	B	14.5	0.03	B	10.4	0.11	B	13.9	0.03	B	10.4	0.11	B	13.9
		NBL	0.01	A	8.6	0.02	A	8.7	0.01	A	8.8	0.02	A	8.8	0.01	A	8.8	0.02	A	8.7	0.01	A	8.8	0.02	A	8.7	0.01	A	8.8	0.02	A	8.7
		SBL	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.02	A	8.2	0.06	A	9.7	0.02	A	8.1	0.06	A	9.7	0.02	A	8.1	0.06	A	9.3
10	NE Tenney Road/ NE 139th Street	Overall	0.32	D	35.5	0.42	D	36.7	0.33	D	35.4	0.45	D	36.2	0.33	D	35.5	0.45	D	36.4												
		EBT+R	0.65	D	45.4	0.78	E	57.3	0.67	D	45.3	0.79	E	56.0	0.68	D	45.3	0.79	E	55.9												
		EBR	0.17	D	38.4	0.21	D	44.8	0.18	D	37.7	0.22	D	43.3	0.19	D	37.6	0.23	D	43.0												
		WBT	0.70	D	2.6	0.63	D	51.4	0.71	D	46.5	0.64	D	50.3	0.72	D	46.4	0.65	D	50.1												
		NBL	0.18	A	0.2	0.29	A	5.9	0.19	A	5.3	0.32	A	6.5	0.19	A	5.4	0.32	A	6.8												
		NBR	0.01	A	2.1	0.06	A	3.7	0.01	A	2.1	0.06	A	4.3	0.01	A	2.2	0.06	A	4.7												
11	NE 139th Street/ NE 10th Avenue	Overall	0.54	C	26.6	0.67	C	33.2	0.57	C	27.1	0.70	D	35.4	0.59	C	30.1	0.81	D	43.2	0.59	C	29.7	0.79	D	41.0	0.59	C	28.5	0.80	D	42.5
		EBL	0.36	C	33.1	0.50	D	40.8	0.42	C	34.1	0.57	D	44.7	0.39	C	33.9	0.73	E	58.4	0.38	C	33.7	0.71	D	55.6	0.55	D	37.4	0.73	E	57.6
		EBT+R	0.35	C	23.0	0.40	C	24.6	0.37	C	23.3	0.40	C	24.6	0.33	C	22.9	0.37	C	26.3	0.33	C	22.9	0.38	C	26.7	0.36	C	24.0	0.38	C	26.7
		WBL	0.27	D	35.1	0.37	D	41.7	0.28	D	35.8	0.40	D	44.4	0.35	D	38.5	0.44	D	50.5	0.29	D	38.2	0.43	D	49.0	0.32	D	37.4	0.51	D	50.2
		WBT+R	0.73	C	30.4	0.85	D	37.2	0.75	C	31.3	0.88	D	40.2	0.79	D	35.5	0.92	D	48.3	0.77	C	34.8	0.89	D	45.8	0.75	C	32.4	0.91	D	47.1
		NBL	0.28	D	36.3	0.36	D	46.0	0.30	D	37.1	0.39	D	48.8	0.31	D	39.7	0.43	D	55.0	0.31	D	39.6	0.43	D	53.7	0.30	D	38.5	0.42	D	54.3
		NBT	0.19	C	24.2	0.34	D	35.1	0.18	C	25.0	0.36	D	37.5	0.30	C	27.9	0.48	D	44.3	0.23	C	27.8	0.47	D	42.9	0.22	C	26.4	0.47	D	43.5
		NBR	0.02	C	20.2	0.08	C	26.4	0.02	C	21.0	0.09	C	28.6	0.02	C	23.4	0.09	C	33.5	0.02	C	23.2	0.09	C	32.4	0.02	C	22.1	0.09	C	32.8
		SBL	0.72	C	31.1	0.76	D	42.6	0.74	C	32.0	0.78	D	45.8	0.80	D	38.1	0.91	E	63.7	0.8	D	38.1	0.90	E	59.2	0.77	C	34.3	0.90	E	61.4
		SBT	0.16	B	13.2	0.26	C	21.8	0.18	B	13.7	0.29	C	23.6	0.20	B	15.3	0.35	C	25.7	0.2	B	15.2	0.34	C	24.5	0.19	B	13.9	0.33	C	24.9
		SBR	0.05	A	9.2	0.05	B	13.9	0.06	A	9.5	0.06	B	14.8	0.07	A	9.3	0.08	B	15.5	0.07	A	9.2	0.08	B	14.6	0.06	A	9.6	0.07	B	15.0
12	NE 139th Street/ RIRO	SBR																								0.02	B	10.7	0.09	B	13.1

			Intersection Operations – Clark County Intersections																													
	Intersection	Lane Group	Analysis Results																													
			2018 Existing						2020 Pre-Development						2020 Post-Development						2020 Post-Development with Right-In						2020 Post-Development with RIRO					
			AM			PM			AM			PM			AM			PM			AM			PM			AM			PM		
			V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay
16	NE 139th Street/ NE 20th Avenue	Overall	0.32	D	38.4	0.62	D	40.6	0.39	D	37.8	0.72	D	41.6	0.39	D	37.7	0.74	D	41.6												
		EBL	0.53	D	52.0	0.49	D	44.6	0.47	E	55.1	0.50	D	44.4	0.46	D	54.5	0.50	D	44.2												
		EBT	0.13	B	13.9	0.12	B	19.1	0.25	B	16.4	0.16	C	20.5	0.25	B	16.7	0.17	C	20.7												
		EBR	0.05	A	4.7	0.11	A	9.3	0.05	A	8.9	0.12	A	9.7	0.06	A	7.8	0.16	A	9.9												
		WBL	0.11	D	44.9	0.48	E	58.1	0.11	D	49.1	0.58	E	59.6	0.11	D	47.1	0.58	E	59.6												
		WBT	0.14	C	20.3	0.47	D	35.5	0.22	C	28.7	0.68	D	41.9	0.23	C	29.2	0.73	D	43.6												
		WBR	0.04	B	12.4	0.14	C	26.2	0.05	B	13.7	0.18	C	27.7	0.05	B	14.0	0.19	C	28.0												
		NBL	0.70	E	59.8	0.80	E	59.4	0.71	E	59.8	0.81	E	60.1	0.72	E	59.8	0.82	E	60.1												
		NBT	0.40	D	44.6	0.48	D	39.8	0.41	D	44.3	0.48	D	39.1	0.41	D	44.2	0.48	D	39.0												
		NBR	0.07	C	33.3	0.05	C	28.8	0.10	C	32.8	0.07	C	28.0	0.10	C	32.1	0.07	C	27.9												
		SBL	0.36	E	59.4	0.28	E	59.4	0.40	E	59.3	0.31	E	59.4	0.40	E	59.3	0.31	E	59.4												
		SBT	0.51	D	51.2	0.71	E	55.2	0.52	D	51.1	0.73	E	55.4	0.52	D	51.1	0.73	E	55.4												
		SBR	0.22	D	39.7	0.62	C	34.2	0.35	D	39.3	0.64	C	34.2	0.37	D	39.2	0.64	C	34.1												
17	NE 139th Street/ NE 23rd Avenue	Overall	0.31	C	32.7	0.48	D	42.9	0.43	C	29.5	0.66	D	40.8	0.44	C	29.9	0.69	D	41.3												
		EBL	0.23	D	54.9	0.45	E	70.5	0.23	D	45.7	0.47	E	70.8	0.23	D	45.9	0.47	E	70.8												
		EBT	0.13	B	10.8	0.25	B	19.3	0.31	B	18.1	0.37	C	26.0	0.32	B	18.8	0.39	C	28.3												
		EBR	0.09	B	16.8	0.04	A	3.9	0.16	B	15.4	0.08	A	3.9	0.16	B	13.6	0.08	A	3.9												
		WBL	0.54	D	41.5	0.42	E	68.2	0.54	D	38.3	0.44	F	83.1	0.54	D	37.1	0.44	F	85.2												
		WBT+R	0.15	B	12.3	0.31	C	28.8	0.25	B	18.6	0.57	C	28.9	0.26	B	20.0	0.60	C	30.2												
		NBL	0.68	E	61.3	0.85	E	68.9	0.72	E	61.3	0.88	E	64.7	0.74	E	61.2	0.88	E	62.8												
		NBT+R	0.04	D	50.1	0.11	D	44.4	0.04	D	48.1	0.10	D	37.9	0.04	D	46.9	0.10	D	35.8												
		SB	0.66	F	92.0	0.51	E	73.6	0.64	F	87.8	0.53	E	74.8	0.64	F	87.7	0.53	E	74.8												
18	NE 139th Street/ NE 29th Avenue	Overall	0.25	D	40.5	0.34	D	42.3	0.37	C	34.1	0.42	D	44.2	0.38	D	35.2	0.43	D	44.6												
		EBL	0.07	A	9.7	0.21	C	20.7	0.09	D	27.2	0.26	C	26.8	0.09	C	26.7	0.26	C	25.8												
		EBR	0.04	A	5.9	0.06	C	31.3	0.14	A	6.7	0.09	D	43.4	0.14	B	11.5	0.09	D	48.0												
		NBL	0.34	C	33.5	0.47	D	41.0	0.57	C	31.4	0.68	D	43.4	0.57	C	31.3	0.69	D	44.1												
		NBT	0.11	C	30.7	0.27	D	39.4	0.11	C	24.6	0.27	D	35.1	0.11	C	24.5	0.27	C	34.9												
		SBT+R	0.74	E	56.5	0.72	E	66.4	0.77	D	54.9	0.74	E	65.8	0.77	D	54.9	0.74	E	65.5												
19	NE 136th Street/ NE 10th Avenue	EB	0.07	A	4.6	0.10	A	5.9	0.08	A	4.7	0.10	A	6.1	0.08	A	4.8	0.11	A	6.4												
		WB	0.04	A	4.2	0.16	A	5.7	0.04	A	4.1	0.47	A	5.7	0.04	A	4.2	0.17	A	5.9												
		NB	0.02	A	5.0	0.20	A	5.5	0.14	A	4.9	0.20	A	5.5	0.15	A	5.0	0.23	A	5.8												
		SB	0.17	A	4.8	0.32	A	6.9	0.19	A	5.0	0.35	A	7.3	0.20	A	5.1	0.40	A	7.9												
20	NE Tenney Road/NE 134th Street/ NE 10th Avenue	Overall	0.28	B	10.2	0.46	B	18.8	0.30	B	10.8	0.48	B	19.3	0.30	B	11.2	0.51	C	20.6												
		EBL	0.01	A	1.6	0.03	A	2.9	0.01	A	1.7	0.04	A	3.3	0.01	A	1.8	0.04	A	3.7												
		EBT	0.23	A	1.9	0.22	A	2.9	0.24	A	2.1	0.24	A	3.1	0.24	A	2.2	0.24	A	3.5												
		WBT+R	0.23	A	3.8	0.39	A	7.9	0.23	A	4.1	0.41	A	8.6	0.24	A	4.2	0.43	A	9.6												
		SB	0.60	E	57.7	0.77	E	65.8	0.62	E	57.7	0.78	E	65.4	0.63	E	57.6	0.80	E	64.7												
24	NE 134th Street/ NE 20th Avenue	Overall	0.50	D	36.1	0.56	D	45.1	0.55	D	36.9	0.59	D	45.4	0.55	D	37.0	.6.4	D	45.8												
		EBL	0.16	D	43.7	0.32	E	55.6	0.21	D	44.1	0.40	E	60.6	0.21	D	43.7	0.38	E	60.9												
		EBT	0.33	C	31.3	0.33	D	36.9	0.39	C	33.8	0.37	D	41.7	0.39	C	34.0	0.08	D	42.8												
		EBR	0.03	B	12.9	0.07	E	62.4	0.03	B	13.9	0.08	E	55.0	0.03	B	14.0	0.71	D	53.8												
		WBL	0.56	C	26.2	0.70	D	44.1	0.56	C	26.7	0.71	D	41.0	0.56	C	27.0	0.51	D	41.6												
		WBT	0.41	C	24.1	0.45	C	31.7	0.48	C	25.4	0.49	C	30.5	0.48	C	25.7	0.08	C	31.6												
		WBR	0.06	A	7.5	0.07	B	10.6	0.07	A	8.0	0.07	A	8.8	0.07	A	8.2	0.61	A	8.8												
		NBL	0.42	E	56.0	0.59	E	63.8	0.43	E	56.0	0.61	E	63.9	0.43	E	56.1	0.74	E	43.8												
		NBT	0.62	D	54.0	0.72	E	60.1	0.65	D	54.0	0.73	E	60.2	0.65	D	53.9	0.50	E	60.2												
		NBR	0.70	D	43.9	0.48	D	36.1	0.73	D	44.0	0.50	D	35.4	0.73	D	43.9	0.68	D	35.3												
		SBL	0.53	D	54.3	0.64	E	63.0	0.54	D	54.5	0.65	E	63.0	0.56	D	54.6	0.44	E	63.3												
		SBT	0.23	D	46.5	0.41	D	51.4	0.24	D	45.8	0.45	D	51.3	0.23	D	45.5	0.44	D	50.6												
		SBR	0.01	B	18.2	0.04	C	26.1	0.01	B	17.6	0.04	C	26.2	0.01	B	17.3	0.04	C	25.8												

Intersection Operations – Clark County Intersections

	Intersection	Lane Group	Analysis Results																													
			2018 Existing						2020 Pre-Development						2020 Post-Development						2020 Post-Development with Right-In						2020 Post-Development with RIRO					
			AM			PM			AM			PM			AM			PM			AM			PM			AM			PM		
			V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay
27	NE 134th Street/ NE 29th Avenue	Overall	0.39	B	14.0	0.45	B	19.0	0.60	C	20.8	0.56	C	21.2	0.60	C	20.9	0.56	C	21.4												
		EBL	0.46	D	48.5	0.62	E	57.6	0.50	D	48.2	0.63	E	57.7	0.50	D	48.2	0.63	E	57.7												
		EBT	0.36	A	6.1	0.19	A	2.9	0.53	B	13.4	0.22	A	4.5	0.53	B	13.5	0.22	A	4.6												
		WBT+R	0.24	B	10.4	0.36	B	12.4	0.47	B	17.9	0.46	B	15.5	0.47	B	18.1	0.47	B	15.8												
		SBL	0.52	D	44.9	0.60	E	56.5	0.75	D	44.0	0.70	E	55.9	0.74	D	43.6	0.70	E	55.7												
		SBR	0.07	D	41.1	0.08	D	49.8	0.07	C	31.3	0.08	D	45.1	0.07	C	31.2	0.08	D	44.9												
28	NE 134th Street/ NE Salmon Creek Avenue	Overall	0.47	B	13.1	0.47	B	17.4	0.65	B	15.9	0.56	B	18.5	0.66	B	15.9	0.57	B	18.6												
		EBL	0.05	A	3.8	0.01	B	10.8	0.08	A	5.9	0.01	B	10.8	0.08	A	5.9	0.01	B	10.9												
		EBT+R	0.45	A	7.2	0.32	B	13.8	0.64	B	10.5	0.39	B	15.3	0.64	B	10.4	0.39	B	15.3												
		WBL	0.12	A	7.2	0.15	A	7.1	0.32	A	9.9	0.22	A	7.7	0.32	A	9.9	0.22	A	7.8												
		WBT+R	0.30	B	10.3	0.45	B	12.5	0.52	B	12.7	0.55	B	14.3	0.52	B	12.7	0.55	B	14.4												
		NBL	0.57	D	38.7	0.50	D	42.4	0.71	D	45.7	0.56	D	43.6	0.72	D	46.5	0.56	D	43.7												
		NBT+R	0.06	D	39.7	0.03	D	43.8	0.10	D	40.9	0.03	D	43.8	0.10	D	41.0	0.03	D	43.7												
		SBL	0.08	D	45.3	0.05	D	51.1	0.09	D	45.3	0.05	D	51.0	0.09	D	45.3	0.05	D	51.1												
		SBT+R	0.01	D	47.8	0.02	D	53.7	0.01	D	47.8	0.02	D	53.6	0.01	D	47.8	0.02	D	53.7												
29	NE Highway 99/ NE 20th Avenue	Overall	0.46	C	25.2	0.62	D	39.5	0.49	C	25.4	0.66	D	39.9	0.49	C	25.4	0.66	D	39.9												
		EBL+T	0.57	D	47.9	0.79	E	64.0	0.59	D	48.3	0.80	E	63.5	0.59	D	48.3	0.80	E	63.5												
		EBR	0.13	D	37.1	0.18	D	39.1	0.14	D	36.9	0.19	D	38.6	0.14	D	36.9	0.19	D	38.6												
		WBL	0.12	D	45.9	0.43	D	53.9	0.12	D	46.1	0.45	D	54.0	0.12	D	46.2	0.45	D	54.0												
		WBT+R	0.08	D	45.5	0.26	D	51.1	0.08	D	45.8	0.27	D	50.9	0.08	D	45.9	0.27	D	50.9												
		NBL	0.28	D	48.6	0.45	E	58.3	0.29	D	48.7	0.46	E	58.2	0.29	D	48.7	0.46	E	58.2												
		NBT+R	0.44	B	17.2	0.50	C	30.5	0.48	B	17.9	0.55	C	32.6	0.48	B	17.8	0.55	C	32.7												
		SBL	0.60	D	48.9	0.82	E	65.5	0.61	D	49.4	0.82	E	65.7	0.61	D	49.4	0.82	E	65.7												
		SBT+R	0.22	B	12.1	0.33	B	19.9	0.23	B	12.2	0.37	C	21.1	0.23	B	12.2	0.37	C	21.1												
30	NE Highway 99/ NE 117th Street	Overall	0.53	C	30.5	0.62	C	31.9	0.56	C	31.1	0.66	C	32.9	0.56	C	31.1	0.66	C	33.1												
		EBL	0.74	D	36.1	0.72	D	40.4	0.76	D	36.6	0.75	D	41.6	0.76	D	36.4	0.75	D	41.4												
		EBT+R	0.41	C	26.5	0.64	D	36.4	0.41	C	25.8	0.65	D	36.6	0.40	C	25.6	0.64	D	36.1												
		WBL	0.52	D	38.0	0.64	D	39.7	0.55	D	38.6	0.66	D	40.4	0.55	D	38.6	0.66	D	40.4												
		WBT+R	0.56	D	37.8	0.67	D	41.0	0.59	D	38.6	0.69	D	41.2	0.59	D	38.3	0.69	D	41.6												
		NBL	0.46	D	39.7	0.59	D	43.9	0.50	D	40.5	0.64	D	46.7	0.50	D	40.5	0.64	D	46.7												
		NBT+R	0.34	C	24.7	0.51	C	26.3	0.37	C	25.7	0.55	C	27.8	0.38	C	25.9	0.56	C	28.2												
		SBL	0.50	D	40.6	0.65	D	42.3	0.54	D	42.1	0.67	D	43.1	0.55	D	42.2	0.68	D	43.5												
		SBT+R	0.30	C	24.6	0.48	C	23.1	0.32	C	25.3	0.52	C	24.1	0.32	C	25.5	0.53	C	24.3												
9	NE 10th Avenue/ NE 141st Street/Site Access	Overall													0.56	A	7.0	0.74	B	14.8	0.56	A	7.1	0.68	B	13.0	0.54	A	5.9	0.65	B	11.6
		EB													0.02	B	18.0	0.01	C	20.3	0.02	B	18.0	0.01	B	18.8	0.02	B	18.1	0.01	B	18.7
		WBL													0.38	B	19.7	0.69	C	30.0	0.38	B	19.7	0.69	C	27.9	0.30	B	19.3	0.60	C	24.1
		WBT+R													0.01	B	18.0	0.03	C	20.4	0.01	B	18.0	0.03	B	18.8	0.01	B	18.0	0.03	B	18.8
		NBL													0.02	A	4.0	0.05	A	6.0	0.02	A	4.0	0.05	A	6.3	0.02	A	4.0	0.05	A	5.8
		NBT+R													0.41	A	5.1	0.79	B	15.4	0.36	A	4.9	0.72	B	12.9	0.36	A	4.9	0.72	B	12.0
		SBL													0.04	A	4.1	0.21	A	8.6	0.04	A	3.9	0.17	A	7.0	0.04	A	3.9	0.16	A	6.3
		SBT+R													0.59	A	6.4	0.53	A	8.6	0.59	A	6.4	0.53	A	8.1	0.59	A	6.4	0.52	A	7.4

	Intersection	Lane Group	Intersection Operations – WSDOT Intersections																											
			Analysis Results																											
			2018 Existing						2020 Pre-Development						2020 Post-Development						2020 Post-Development with Right-In						2020 Post-Development with RIRO					
			AM			PM			AM			PM			AM			PM			AM			PM			AM			PM		
			V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay
3	NE 179th Street/ I-5 SB Off-Ramp	Overall	0.30	C	33.1	0.33	C	26.4	0.39	D	36.1	0.59	C	27.9	0.39	D	36.1	0.60	C	27.7												
		EBT	.0.65	D	53	0.59	D	36.1	0.69	D	53.2	0.64	D	39.5	0.39	D	52.8	0.64	D	38.5												
		EBR	0.27	D	56	0.19	D	48.5	0.26	E	57.7	0.19	D	50.5	0.27	E	57.7	0.19	D	47.3												
		WBL	0.18	A	7.1	0.23	B	12.2	0.23	B	12.1	0.44	B	16.1	0.23	B	12.1	0.46	B	17												
		WBL+T	0.19	A	6.9	0.23	B	11.6	0.23	B	11.7	0.44	B	15	0.24	B	11.8	0.46	B	15.9												
		SBL+T	0.56	D	52.6	0.53	D	35.9	0.70	D	53.7	0.78	D	36.2	0.70	D	53.7	0.78	D	36.2												
		SBR	0.05	D	47.5	0.05	C	32.6	0.07	D	42.5	0.08	C	23.5	0.08	D	42.6	0.08	C	23.6												
4	NE 179th Street/ I-5 NB On-Ramp	EBL	0.08	A	9.4	0.09	A	9.8	0.11	B	10.1	0.20	B	13.5	0.11	B	10.1	0.21	B	13.7												
5	NE 179th Street/NE 10th Avenue/ I-5 NB Off-Ramp	Overall	0.25	C	31.4	0.40	C	24.1	0.30	C	29.9	0.67	C	23.9	0.30	C	29.9	0.69	C	23.9												
		EBL+T	0.13	A	1.4	0.21	A	1.5	0.21	A	4.7	0.25	A	3.6	0.21	A	4.8	0.55	A	3.7												
		WBT+R	0.16	A	9.6	0.28	B	16.3	0.21	B	10.2	0.67	C	23.3	0.22	B	10.2	0.67	C	23.4												
		NBL	0.35	D	48.6	0.37	C	27.6	0.36	D	48.8	0.32	C	25.3	0.36	D	48.8	0.32	C	25.3												
		NBT+R	0.60	D	51.8	0.68	C	31.9	0.60	D	52	0.74	C	32	0.60	D	52	0.74	C	32												
		SBL	0.47	D	54.1	0.25	D	39.7	0.50	D	53.9	0.37	D	41.2	0.50	D	53.9	0.37	D	41.2												
		SBR	0.14	D	46	0.09	C	32.4	0.15	D	45.5	0.10	C	32.9	0.14	A	45.5	0.10	C	32.9												
13	NE 139th Street/ I-5 SB On-Ramp	Overall	0.27	B	10.9	0.37	B	12.5	0.31	B	13.4	0.41	B	14.4	0.32	B	13.4	0.43	B	13.4												
		EBT	0.15	A	2.8	0.24	A	4.2	0.16	A	3.7	0.26	A	5.7	0.17	A	3.8	0.28	A	5.8												
		EBR	0.18	A	3.1	0.19	A	4.1	0.20	A	4.1	0.22	A	5.7	0.21	A	4.2	0.24	A	5.8												
		WBL	0.61	E	59.4	0.71	E	68.3	0.68	E	59.8	0.75	E	64.7	0.68	E	62.3	0.75	E	62.3												
		WBT	0.21	A	0.1	0.30	A	0.2	0.22	A	0.1	0.32	A	0.2	0.24	A	0.2	0.34	A	0.2												
14	NE 139th Street/ I-5 NB Off-Ramp	Overall	0.34	B	19.2	0.48	C	25.9	0.38	C	21	0.53	C	26.5	0.39	C	20.9	0.56	C	27.2												
		EBT	0.12	A	6.7	0.23	B	16.8	0.13	A	7.3	0.24	B	18.1	0.14	A	7.7	0.27	C	20.8												
		WBT	0.19	A	4.9	0.30	B	16.1	0.23	A	5.7	0.37	B	18.2	0.24	A	6.2	0.40	C	20.3												
		NBL	0.74	D	50.9	0.78	D	47.7	0.74	D	49.4	0.78	D	45.9	0.75	D	48.5	0.78	D	43.9												
		NBR	0.14	D	37.9	0.51	D	37.7	0.52	D	41.2	0.59	D	37.9	0.52	D	40.2	0.57	D	35.5												
15	NE 139th Street/ I-5 NB On-Ramp	EBL	0.16	A	9.7	0.38	B	13	0.17	B	10.3	0.44	C	15.1	0.18	B	10.5	0.48	C	16.3												
21	NE 134th Street/ I-5 SB On-Ramp	Overall	0.31	A	8	0.43	B	10.6	0.34	A	9.6	0.45	B	11.3	0.34	A	9.5	0.48	B	11.1												
		EBT	0.18	A	3.8	0.31	A	7.3	0.20	A	4.7	0.33	A	8.6	0.20	A	4.7	0.34	A	8.7												
		EBR	0.23	A	4.3	0.26	A	7.3	0.24	A	5.2	0.29	A	8.6	0.24	A	5.2	0.31	A	8.8												
		WBL	0.70	E	57	0.80	E	61.2	0.75	E	59.3	0.81	E	58.8	0.75	E	59	0.81	E	58.1												
		WBT	0.21	A	0.1	0.31	A	0.2	0.22	A	0.1	0.32	A	0.2	0.22	A	0.1	0.33	A	0.2												
22	NE 134th Street/ I-5 NB Off-Ramp	Overall	0.28	B	16.1	0.42	B	17.5	0.29	B	16.8	0.44	B	17.9	0.30	B	16.7	0.45	B	17.8												
		EBT	0.18	A	2	0.26	A	0.7	0.19	A	2	0.28	A	0.6	0.19	A	2.1	0.29	A	0.5												
		WBT	0.26	A	0.7	0.38	A	1.3	0.28	A	0.7	0.41	A	1.4	0.28	A	0.7	0.41	A	1.4												
		NBL	0.44	E	56.1	0.62	E	63.7	0.45	E	56.1	0.63	E	63.2	0.45	E	55.7	0.64	E	63.4												
		NBR	0.13	D	54.2	0.21	E	58.6	0.15	D	54.2	0.40	E	59.6	0.15	D	53.8	0.44	E	59.8												
23	NE 134th Street/NE Highway 99/ I-205 SB Off-Ramp	Overall	0.28	B	17.4	0.36	B	12.6	0.31	B	16.9	0.38	B	13.5	0.31	B	16.9	0.39	B	13.5												
		EBT+R	0.23	A	3.9	0.30	A	2.5	0.26	A	3.6	0.32	A	3.9	0.26	A	3.6	0.33	A	4												
		WBT	0.22	A	1	0.32	A	3.3	0.24	A	1.5	0.34	A	4.2	0.24	A	1.5	0.34	A	4												
		NBR	0.04	D	48.5	0.10	A	2.7	0.04	D	47.6	0.11	A	2.9	0.04	D	47.6	0.11	A	2.9												
		SBL	0.46	D	52	0.23	E	59.5	0.55	D	52.5	0.29	E	59.5	0.55	D	52.5	0.29	E	59.5												
		SBT	0.61	E	46.1	0.66	E	68.5	0.60	D	54.8	0.66	E	68.4	0.60	D	54.8	0.66	E	68.4												
		SBR	0.12	D	49.2	0.33	E	60.8	0.11	D	48.2	0.40	E	61.1	0.11	D	48.3	0.44	E	61.6												
25	NE 134th Street/ I-205 SB On-Ramp	WBL	0.30	A	9.7	0.51	B	11.2	0.41	B	11	0.63	B	13.6	0.41	B	11.1	0.64	B	13.7												
26	NE 134th Street/NE 23rd Avenue/ I-205 NB Off-Ramp	Overall	0.50	D	36.9	0.70	D	48.6	0.57	D	39	0.82	C	53.3	0.58	D	39	0.83	D	53.7												
		EBL	0.59	E	65	0.49	F	80.6	0.63	E	67.6	0.67	F	89.9	0.63	E	67.7	0.69	F	90.4												
		EBT	0.24	B	10.8	0.21	B	19	0.29	B	11.8	0.27	C	25.6	0.30	B	12	0.28	C	25.4												
		WBT+R	0.34	C	27	0.57	D	39	0.46	C	31.3	0.76	D	51.7	0.46	C	31.9	0.77	D	52.1												
		NBL	0.70	D	46	0.84	E	58	0.76	D	44.7	0.86	E	59	0.76	D	43.8	0.86	E	58.9												
		NBT	0.67	D	43.8	0.63	D	50	0.78	D	47.9	0.69	D	51.5	0.80	D	48.9	0.74	D	53.8												
		NBR	0.40	D	37.7	0.16	D	42	0.72	D	45.1	0.18	D	41	0.71	D	44.2	0.17	D	40.9												
		SBL	0.18	E	57.5	0.13	D	51	0.19	E	57.2	0.10	D	43	0.19	E	57.2	0.10	D	43												
		SBR	0.12	E	57.1	0.85	E	79	0.14	E	56.9	0.89	E	75	0.14	E	56.9	0.90	E	75.3												

APPENDIX L

HCM INTERSECTION OPERATIONS CALCULATIONS



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	176	2	43	95	2	15
Future Volume (vph)	176	2	43	95	2	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	1.00		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3498		1597	3195	1337	1196
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	3498		1597	3195	1337	1196
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77
Adj. Flow (vph)	229	3	56	123	3	19
RTOR Reduction (vph)	0	0	0	0	0	18
Lane Group Flow (vph)	232	0	56	123	3	1
Heavy Vehicles (%)	3%	3%	13%	13%	35%	35%
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	6		5	2	4	
Permitted Phases						4
Actuated Green, G (s)	87.5		7.7	100.9	7.8	7.8
Effective Green, g (s)	89.2		9.4	102.6	9.4	9.4
Actuated g/C Ratio	0.74		0.08	0.85	0.08	0.08
Clearance Time (s)	5.7		5.7	5.7	5.6	5.6
Vehicle Extension (s)	2.0		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2600		125	2731	104	93
v/s Ratio Prot	c0.07		c0.04	0.04	c0.00	
v/s Ratio Perm						0.00
v/c Ratio	0.09		0.45	0.05	0.03	0.02
Uniform Delay, d1	4.2		52.8	1.3	51.1	51.0
Progression Factor	1.00		1.16	0.97	1.00	1.00
Incremental Delay, d2	0.0		0.9	0.0	0.0	0.0
Delay (s)	4.2		62.0	1.3	51.1	51.1
Level of Service	A		E	A	D	D
Approach Delay (s)	4.2			20.3	51.1	
Approach LOS	A			C	D	

Intersection Summary			
HCM 2000 Control Delay	13.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.12		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	23.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

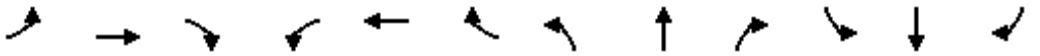
Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	234	168	91	240	7
Future Vol, veh/h	6	234	168	91	240	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	60	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	6	6	12	12	3	3
Mvmt Flow	7	275	198	107	282	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	305	0	-	0	403	152
Stage 1	-	-	-	-	251	-
Stage 2	-	-	-	-	152	-
Critical Hdwy	4.22	-	-	-	6.86	6.96
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	2.26	-	-	-	3.53	3.33
Pot Cap-1 Maneuver	1224	-	-	-	573	864
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	857	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1224	-	-	-	570	864
Mov Cap-2 Maneuver	-	-	-	-	570	-
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	852	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	17.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1224	-	-	-	576
HCM Lane V/C Ratio	0.006	-	-	-	0.504
HCM Control Delay (s)	8	-	-	-	17.4
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	2.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	126	357	316	196	0	0	0	0	96	1	58
Future Volume (vph)	0	126	357	316	196	0	0	0	0	96	1	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		1.00	1.00	0.91	0.91						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	0.98						0.95	1.00
Satd. Flow (prot)		1792	1553	1595	3164						1741	1380
Flt Permitted		1.00	1.00	0.95	0.98						0.95	1.00
Satd. Flow (perm)		1792	1553	1595	3164						1741	1380
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	145	410	363	225	0	0	0	0	110	1	67
RTOR Reduction (vph)	0	0	359	0	0	0	0	0	0	0	0	59
Lane Group Flow (vph)	0	145	51	192	396	0	0	0	0	0	111	8
Heavy Vehicles (%)	0%	6%	4%	3%	10%	0%	0%	0%	0%	4%	0%	17%
Turn Type		NA	Prot	Split	NA					Perm	NA	Perm
Protected Phases		6	6	2	2						8	
Permitted Phases										8		8
Actuated Green, G (s)		13.2	13.2	77.8	77.8						12.0	12.0
Effective Green, g (s)		14.9	14.9	79.5	79.5						13.6	13.6
Actuated g/C Ratio		0.12	0.12	0.66	0.66						0.11	0.11
Clearance Time (s)		5.7	5.7	5.7	5.7						5.6	5.6
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		222	192	1056	2096						197	156
v/s Ratio Prot		c0.08	0.03	0.12	c0.13							
v/s Ratio Perm											0.06	0.01
v/c Ratio		0.65	0.27	0.18	0.19						0.56	0.05
Uniform Delay, d1		50.1	47.6	7.8	7.8						50.4	47.4
Progression Factor		0.96	1.17	0.86	0.86						1.00	1.00
Incremental Delay, d2		5.2	0.3	0.4	0.2						2.2	0.0
Delay (s)		53.0	56.0	7.1	6.9						52.6	47.5
Level of Service		D	E	A	A						D	D
Approach Delay (s)		55.2			7.0			0.0			50.7	
Approach LOS		E			A			A			D	

Intersection Summary			
HCM 2000 Control Delay	33.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	34.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

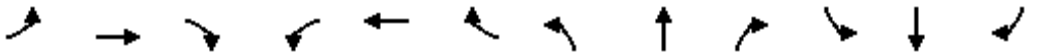
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	57	179	0	0	500	80	0	0	0	0	0	0
Future Vol, veh/h	57	179	0	0	500	80	0	0	0	0	0	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	95	95	84	84	95	95	95	84	95	84
Heavy Vehicles, %	5	2	2	2	6	11	2	2	2	0	2	0
Mvmt Flow	68	213	0	0	595	95	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	690	0	-	-	-	0	-	-	213
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.175	-	-	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.2475	-	-	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	886	-	0	0	-	-	0	0	826
Stage 1	-	-	0	0	-	-	0	0	-
Stage 2	-	-	0	0	-	-	0	0	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	886	-	-	-	-	-	-	0	826
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

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

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	-	886	-	-	-
HCM Lane V/C Ratio	-	0.077	-	-	-
HCM Control Delay (s)	0	9.4	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	131	0	0	278	39	116	180	80	54	0	193
Future Volume (vph)	16	131	0	0	278	39	116	180	80	54	0	193
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0		2.4
Lane Util. Factor		1.00			0.95		0.97	0.95		1.00		1.00
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00		1.00
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00		1.00
Frt		1.00			0.98		1.00	0.95		1.00		0.85
Flt Protected		0.99			1.00		0.95	1.00		0.95		1.00
Satd. Flow (prot)		1798			3398		3045	3279		1656		1553
Flt Permitted		0.95			1.00		0.95	1.00		0.95		1.00
Satd. Flow (perm)		1720			3398		3045	3279		1656		1553
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)	18	144	0	0	305	43	127	198	88	59	0	212
RTOR Reduction (vph)	0	0	0	0	5	0	0	47	0	0	0	183
Lane Group Flow (vph)	0	162	0	0	343	0	127	239	0	59	0	29
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	6%	5%	0%	0%	4%	5%	15%	5%	5%	9%	0%	4%
Turn Type	pm+pt	NA			NA		Split	NA		Prot		pm+ov
Protected Phases	5	2			6		8	8		7		5
Permitted Phases	2											7
Actuated Green, G (s)		82.6			73.2		13.0	13.0		7.6		13.0
Effective Green, g (s)		84.3			74.9		14.5	14.5		9.2		16.2
Actuated g/C Ratio		0.70			0.62		0.12	0.12		0.08		0.13
Clearance Time (s)		5.7			5.7		5.5	5.5		5.6		4.0
Vehicle Extension (s)		2.0			2.0		2.0	2.0		2.0		2.5
Lane Grp Cap (vph)		1212			2120		367	396		126		209
v/s Ratio Prot		0.01			c0.10		0.04	c0.07		c0.04		c0.01
v/s Ratio Perm		0.09										0.01
v/c Ratio		0.13			0.16		0.35	0.60		0.47		0.14
Uniform Delay, d1		5.9			9.4		48.4	50.0		53.1		45.7
Progression Factor		0.24			1.00		1.00	1.00		1.00		1.00
Incremental Delay, d2		0.0			0.2		0.2	1.8		1.0		0.2
Delay (s)		1.4			9.6		48.6	51.8		54.1		46.0
Level of Service		A			A		D	D		D		D
Approach Delay (s)		1.4			9.6			50.8			47.7	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	31.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	148	112	77	257	79	48
Future Volume (vph)	148	112	77	257	79	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	1.00			1.00	1.00	1.00
Frt	0.94			1.00	1.00	0.85
Flt Protected	1.00			0.99	0.95	1.00
Satd. Flow (prot)	1642			1842	1703	1524
Flt Permitted	1.00			0.88	0.95	1.00
Satd. Flow (perm)	1642			1636	1703	1524
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	154	117	80	268	82	50
RTOR Reduction (vph)	25	0	0	0	0	39
Lane Group Flow (vph)	246	0	0	348	82	11
Heavy Vehicles (%)	9%	9%	2%	2%	6%	6%
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	8	
Permitted Phases			2			8
Actuated Green, G (s)	19.9			19.9	6.4	6.4
Effective Green, g (s)	21.8			21.8	8.0	8.0
Actuated g/C Ratio	0.58			0.58	0.21	0.21
Clearance Time (s)	5.9			5.9	5.6	5.6
Vehicle Extension (s)	2.0			2.0	1.0	1.0
Lane Grp Cap (vph)	946			943	360	322
v/s Ratio Prot	0.15				c0.05	
v/s Ratio Perm				c0.21		0.01
v/c Ratio	0.26			0.37	0.23	0.03
Uniform Delay, d1	4.0			4.3	12.3	11.8
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			0.1	0.1	0.0
Delay (s)	4.0			4.4	12.5	11.8
Level of Service	A			A	B	B
Approach Delay (s)	4.0			4.4	12.2	
Approach LOS	A			A	B	

Intersection Summary			
HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	37.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	134	23	28	170	12	48	46	38	1	73	55
Future Vol, veh/h	18	134	23	28	170	12	48	46	38	1	73	55
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	6	6	6	5	5	5	2	2	2	2	2	2
Mvmt Flow	21	158	27	33	200	14	56	54	45	1	86	65
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	10.3	10.9	9.8	9.6
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	36%	10%	13%	1%
Vol Thru, %	35%	77%	81%	57%
Vol Right, %	29%	13%	6%	43%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	132	175	210	129
LT Vol	48	18	28	1
Through Vol	46	134	170	73
RT Vol	38	23	12	55
Lane Flow Rate	155	206	247	152
Geometry Grp	1	1	1	1
Degree of Util (X)	0.227	0.294	0.352	0.216
Departure Headway (Hd)	5.257	5.148	5.122	5.114
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	683	702	707	701
Service Time	3.29	3.156	3.128	3.147
HCM Lane V/C Ratio	0.227	0.293	0.349	0.217
HCM Control Delay	9.8	10.3	10.9	9.6
HCM Lane LOS	A	B	B	A
HCM 95th-tile Q	0.9	1.2	1.6	0.8

Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	306	68	45	26	3
Future Vol, veh/h	8	306	68	45	26	3
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	75	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	5	5	10	10
Mvmt Flow	9	348	77	51	30	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	238	32	34	0	-	0
Stage 1	32	-	-	-	-	-
Stage 2	206	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.15	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.245	-	-	-
Pot Cap-1 Maneuver	755	1048	1558	-	-	-
Stage 1	996	-	-	-	-	-
Stage 2	833	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	716	1047	1558	-	-	-
Mov Cap-2 Maneuver	708	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	791	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	4.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1558	-	708	1047	-	-
HCM Lane V/C Ratio	0.05	-	0.013	0.332	-	-
HCM Control Delay (s)	7.4	-	10.2	10.1	-	-
HCM Lane LOS	A	-	B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0	1.5	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	24	4	0	0	6	283	8	0	506	1
Future Vol, veh/h	1	0	24	4	0	0	6	283	8	0	506	1
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	7	0	0	6	0
Mvmt Flow	1	0	27	5	0	0	7	322	9	0	575	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	916	922	577	932	918	328	576	0	0	333	0	0
Stage 1	576	576	-	342	342	-	-	-	-	-	-	-
Stage 2	340	346	-	590	576	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	255	272	520	249	274	718	1007	-	-	1238	-	-
Stage 1	506	505	-	677	642	-	-	-	-	-	-	-
Stage 2	679	639	-	497	505	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	254	270	520	234	272	717	1006	-	-	1238	-	-
Mov Cap-2 Maneuver	254	270	-	234	272	-	-	-	-	-	-	-
Stage 1	502	505	-	671	636	-	-	-	-	-	-	-
Stage 2	674	633	-	471	505	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.7	20.7	0.2	0
HCM LOS	B	C		

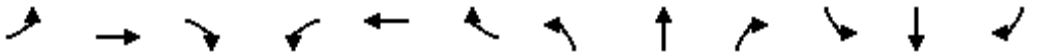
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1006	-	-	499	234	-	1238	-	-
HCM Lane V/C Ratio	0.007	-	-	0.057	0.019	-	-	-	-
HCM Control Delay (s)	8.6	-	-	12.7	20.7	0	0	-	-
HCM Lane LOS	A	-	-	B	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	-	0	-	-



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	343	256	0	475	318	13
Future Volume (vph)	343	256	0	475	318	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		0.95	0.97	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00
Frt	0.97	0.85		1.00	1.00	0.85
Flt Protected	1.00	1.00		1.00	0.95	1.00
Satd. Flow (prot)	3220	1374		3505	3400	1475
Flt Permitted	1.00	1.00		1.00	0.95	1.00
Satd. Flow (perm)	3220	1374		3505	3400	1475
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77
Adj. Flow (vph)	445	332	0	617	413	17
RTOR Reduction (vph)	21	177	0	0	0	5
Lane Group Flow (vph)	520	59	0	617	413	12
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	4%	7%	0%	3%	3%	8%
Turn Type	NA	Perm		NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases		2				8
Actuated Green, G (s)	30.9	30.9		30.9	87.5	87.5
Effective Green, g (s)	32.5	32.5		32.5	89.5	89.5
Actuated g/C Ratio	0.25	0.25		0.25	0.69	0.69
Clearance Time (s)	5.6	5.6		5.6	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	2.0	2.0
Lane Grp Cap (vph)	805	343		876	2340	1015
v/s Ratio Prot	0.16			c0.18	c0.12	
v/s Ratio Perm		0.04				0.01
v/c Ratio	0.65	0.17		0.70	0.18	0.01
Uniform Delay, d1	43.6	38.2		44.4	7.2	6.4
Progression Factor	1.00	1.00		1.00	0.67	0.33
Incremental Delay, d2	1.8	0.2		2.6	0.2	0.0
Delay (s)	45.4	38.4		47.0	5.0	2.1
Level of Service	D	D		D	A	A
Approach Delay (s)	43.3			47.0	4.9	
Approach LOS	D			D	A	

Intersection Summary			
HCM 2000 Control Delay	35.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	269	14	23	366	168	18	72	33	283	112	66
Future Volume (vph)	51	269	14	23	366	168	18	72	33	283	112	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	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	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1736	3440		1736	3283		1752	1845	1551	1736	1827	1533
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1736	3440		1736	3283		1752	1845	1551	1736	1827	1533
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	57	299	16	26	407	187	20	80	37	314	124	73
RTOR Reduction (vph)	0	4	0	0	60	0	0	0	27	0	0	35
Lane Group Flow (vph)	57	311	0	26	534	0	20	80	10	314	124	38
Confl. Peds. (#/hr)	1		4	4		1	4		2	2		4
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	3%	3%	3%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	5.5	17.6		2.8	14.9		1.7	15.3	18.1	17.7	31.0	36.5
Effective Green, g (s)	6.9	19.8		4.2	17.1		3.1	17.1	20.9	19.1	33.1	39.3
Actuated g/C Ratio	0.09	0.26		0.06	0.22		0.04	0.22	0.27	0.25	0.43	0.52
Clearance Time (s)	5.4	6.2		5.4	6.2		5.4	5.8	5.4	5.4	6.1	5.4
Vehicle Extension (s)	1.7	1.7		1.7	1.7		1.7	3.0	1.7	1.7	3.0	1.7
Lane Grp Cap (vph)	157	893		95	736		71	414	425	435	793	790
v/s Ratio Prot	0.03	c0.09		0.01	c0.16		0.01	c0.04	0.00	c0.18	0.07	0.00
v/s Ratio Perm									0.01			0.02
v/c Ratio	0.36	0.35		0.27	0.73		0.28	0.19	0.02	0.72	0.16	0.05
Uniform Delay, d1	32.6	22.9		34.5	27.4		35.5	24.0	20.2	26.1	13.1	9.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.1		0.6	3.0		0.8	0.2	0.0	5.0	0.1	0.0
Delay (s)	33.1	23.0		35.1	30.4		36.3	24.2	20.2	31.1	13.2	9.2
Level of Service	C	C		D	C		D	C	C	C	B	A
Approach Delay (s)		24.6			30.6			24.9			23.6	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	26.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	76.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	585	557	0	0	0
Future Vol, veh/h	0	585	557	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	5	3	0	0	0
Mvmt Flow	0	713	679	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	340
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	662
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	662
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	356	246	242	643	0	0
Future Volume (vph)	356	246	242	643	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		
Lane Util. Factor	0.95	1.00	0.97	0.95		
Frpb, ped/bikes	1.00	0.99	1.00	1.00		
Flpb, ped/bikes	1.00	1.00	1.00	1.00		
Frt	1.00	0.85	1.00	1.00		
Flt Protected	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	3374	1517	3433	3438		
Flt Permitted	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	3374	1517	3433	3438		
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	400	276	272	722	0	0
RTOR Reduction (vph)	0	53	0	0	0	0
Lane Group Flow (vph)	400	223	272	722	0	0
Confl. Peds. (#/hr)		1	1			
Heavy Vehicles (%)	7%	5%	2%	5%	0%	0%
Turn Type	NA	Perm	Prot	NA		
Protected Phases	2		1	6		
Permitted Phases		2				
Actuated Green, G (s)	104.0	104.0	14.8	130.0		
Effective Green, g (s)	105.1	105.1	16.9	130.0		
Actuated g/C Ratio	0.81	0.81	0.13	1.00		
Clearance Time (s)	5.1	5.1	6.1	5.4		
Vehicle Extension (s)	2.0	2.0	2.0	2.0		
Lane Grp Cap (vph)	2727	1226	446	3438		
v/s Ratio Prot	0.12		c0.08	c0.21		
v/s Ratio Perm		0.15				
v/c Ratio	0.15	0.18	0.61	0.21		
Uniform Delay, d1	2.7	2.8	53.4	0.0		
Progression Factor	1.00	1.00	1.08	1.00		
Incremental Delay, d2	0.1	0.3	1.6	0.1		
Delay (s)	2.8	3.1	59.4	0.1		
Level of Service	A	A	E	A		
Approach Delay (s)	2.9			16.3	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	39.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	352	0	0	588	283	202
Future Volume (vph)	352	0	0	588	283	202
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	1.00
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	4803			4988	1687	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	4803			4988	1687	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	391	0	0	653	314	224
RTOR Reduction (vph)	0	0	0	0	0	168
Lane Group Flow (vph)	391	0	0	653	314	56
Confl. Peds. (#/hr)		1	1			
Heavy Vehicles (%)	8%	0%	0%	4%	7%	2%
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases						8
Actuated Green, G (s)	87.6			87.7	30.6	30.6
Effective Green, g (s)	89.4			89.4	32.6	32.6
Actuated g/C Ratio	0.69			0.69	0.25	0.25
Clearance Time (s)	5.8			5.7	6.0	6.0
Vehicle Extension (s)	2.0			2.0	2.0	2.0
Lane Grp Cap (vph)	3302			3430	423	396
v/s Ratio Prot	0.08			c0.13	c0.19	
v/s Ratio Perm						0.04
v/c Ratio	0.12			0.19	0.74	0.14
Uniform Delay, d1	6.9			7.3	44.8	37.8
Progression Factor	0.96			0.68	1.00	1.00
Incremental Delay, d2	0.1			0.1	6.1	0.1
Delay (s)	6.7			5.1	50.9	37.9
Level of Service	A			A	D	D
Approach Delay (s)	6.7			5.1	45.5	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	39.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

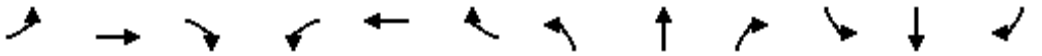
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	132	439	0	0	581	206	0	0	0	0	0	0
Future Vol, veh/h	132	439	0	0	581	206	0	0	0	0	0	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	-	-	Free	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	95	95	91	91	95	95	95	91	95	91
Heavy Vehicles, %	7	3	2	2	3	6	2	2	2	0	2	0
Mvmt Flow	145	482	0	0	638	226	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	638	0	-	-	-	0	-	-	241
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.24	-	-	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.27	-	-	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	909	-	0	0	-	0	0	0	760
Stage 1	-	-	0	0	-	0	0	0	-
Stage 2	-	-	0	0	-	0	0	0	-
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	909	-	-	-	-	-	-	0	760
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

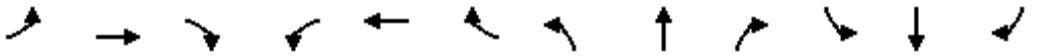
Approach	EB	WB	NB
HCM Control Delay, s	2.2	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT
Capacity (veh/h)	-	909	-	-
HCM Lane V/C Ratio	-	0.16	-	-
HCM Control Delay (s)	0	9.7	-	-
HCM Lane LOS	A	A	-	-
HCM 95th %tile Q(veh)	-	0.6	-	-



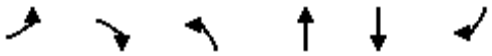
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	222	73	31	245	65	265	280	98	66	246	232
Future Volume (vph)	160	222	73	31	245	65	265	280	98	66	246	232
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3335	3438	1521	3433	3539	1562	3433	3539	1562	3367	3471	1540
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3335	3438	1521	3433	3539	1562	3433	3539	1562	3367	3471	1540
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	170	236	78	33	261	69	282	298	104	70	262	247
RTOR Reduction (vph)	0	0	29	0	0	30	0	0	74	0	0	154
Lane Group Flow (vph)	170	236	49	33	261	39	282	298	30	70	262	93
Confl. Peds. (#/hr)	2		1	1		2	1		6	6		1
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Actuated Green, G (s)	11.0	65.7	79.4	10.3	64.9	70.9	13.7	24.6	34.9	6.0	17.3	28.3
Effective Green, g (s)	12.5	67.6	82.4	11.8	66.9	73.9	15.2	27.1	37.9	7.5	19.4	31.3
Actuated g/C Ratio	0.10	0.52	0.63	0.09	0.51	0.57	0.12	0.21	0.29	0.06	0.15	0.24
Clearance Time (s)	5.5	5.9	5.5	5.5	6.0	5.5	5.5	6.5	5.5	5.5	6.1	5.5
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	320	1787	1010	311	1821	887	401	737	455	194	517	418
v/s Ratio Prot	c0.05	0.07	0.01	0.01	c0.07	0.00	c0.08	0.08	0.01	0.02	c0.08	0.02
v/s Ratio Perm			0.03			0.02			0.01			0.04
v/c Ratio	0.53	0.13	0.05	0.11	0.14	0.04	0.70	0.40	0.07	0.36	0.51	0.22
Uniform Delay, d1	56.0	16.1	9.0	54.3	16.5	12.4	55.2	44.5	33.3	58.9	50.9	39.6
Progression Factor	0.91	0.85	0.52	0.83	1.22	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	0.2	0.0	0.1	0.2	0.0	4.5	0.1	0.0	0.4	0.3	0.1
Delay (s)	52.0	13.9	4.7	44.9	20.3	12.4	59.8	44.6	33.3	59.4	51.2	39.7
Level of Service	D	B	A	D	C	B	E	D	C	E	D	D
Approach Delay (s)		25.8			21.1			49.1			47.3	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	38.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	120	129	82	165	0	133	5	17	4	12	34
Future Volume (vph)	10	120	129	82	165	0	133	5	17	4	12	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	3.9	4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.98			0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.89			0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1752	1845	1533	1787	1881		1752	1598			1694	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.25	
Satd. Flow (perm)	1752	1845	1533	1787	1881		1752	1598			426	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	11	135	145	92	185	0	149	6	19	4	13	38
RTOR Reduction (vph)	0	0	42	0	0	0	0	17	0	0	35	0
Lane Group Flow (vph)	11	135	103	92	185	0	149	8	0	0	20	0
Confl. Peds. (#/hr)	5		2	2		5	2		1	1		2
Confl. Bikes (#/hr)						1			2			1
Heavy Vehicles (%)	3%	3%	3%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA		Perm	NA	
Protected Phases	5	2	8	1	6		8	8			7	
Permitted Phases			2							7		
Actuated Green, G (s)	2.2	74.3	88.9	11.1	83.2		14.6	14.6			8.2	
Effective Green, g (s)	3.6	76.0	92.1	12.5	84.8		16.2	16.2			9.4	
Actuated g/C Ratio	0.03	0.58	0.71	0.10	0.65		0.12	0.12			0.07	
Clearance Time (s)	5.4	5.6	5.6	5.4	5.6		5.6	5.6			5.2	
Vehicle Extension (s)	1.0	2.0	1.0	2.0	1.0		1.0	1.0			1.0	
Lane Grp Cap (vph)	48	1078	1086	171	1226		218	199			30	
v/s Ratio Prot	0.01	0.07	0.01	c0.05	c0.10		c0.09	0.01				
v/s Ratio Perm			0.06								c0.05	
v/c Ratio	0.23	0.13	0.09	0.54	0.15		0.68	0.04			0.66	
Uniform Delay, d1	61.8	12.1	5.9	56.0	8.7		54.4	50.1			58.7	
Progression Factor	0.87	0.87	2.84	0.71	1.38		1.00	1.00			1.00	
Incremental Delay, d2	0.9	0.2	0.0	1.5	0.2		6.9	0.0			33.3	
Delay (s)	54.9	10.8	16.8	41.5	12.3		61.3	50.1			92.0	
Level of Service	D	B	B	D	B		E	D			F	
Approach Delay (s)		15.5			22.0			59.7			92.0	
Approach LOS		B			C			E			F	

Intersection Summary			
HCM 2000 Control Delay	32.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	38.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	58	49	66	57	105	179
Future Volume (vph)	58	49	66	57	105	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.91	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1719	1538	1703	1792	1704	
Flt Permitted	0.95	1.00	0.16	1.00	1.00	
Satd. Flow (perm)	1719	1538	288	1792	1704	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	66	56	75	65	119	203
RTOR Reduction (vph)	0	20	0	0	62	0
Lane Group Flow (vph)	66	36	75	65	260	0
Confl. Peds. (#/hr)	1					
Heavy Vehicles (%)	5%	5%	6%	6%	2%	2%
Turn Type	Prot	pm+ov	pm+pt	NA	NA	
Protected Phases	6	3	3	8	4	
Permitted Phases		6	8			
Actuated Green, G (s)	70.4	80.0	41.0	41.0	25.3	
Effective Green, g (s)	71.8	84.0	43.0	42.4	26.8	
Actuated g/C Ratio	0.55	0.65	0.33	0.33	0.21	
Clearance Time (s)	5.4	6.0	6.0	5.4	5.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	949	993	221	584	351	
v/s Ratio Prot	c0.04	0.00	c0.03	0.04	c0.15	
v/s Ratio Perm		0.02	0.08			
v/c Ratio	0.07	0.04	0.34	0.11	0.74	
Uniform Delay, d1	13.5	8.3	32.6	30.6	48.3	
Progression Factor	0.70	0.70	1.00	1.00	1.00	
Incremental Delay, d2	0.1	0.0	0.9	0.1	8.2	
Delay (s)	9.7	5.9	33.5	30.7	56.5	
Level of Service	A	A	C	C	E	
Approach Delay (s)	7.9			32.2	56.5	
Approach LOS	A			C	E	

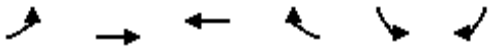
Intersection Summary			
HCM 2000 Control Delay	40.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	34.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Intersection Delay, s/veh	4.8
Intersection LOS	A

Approach	EB	WB	NB	SB	NW
Entry Lanes	1	1	1	1	0
Conflicting Circle Lanes	1	1	1	1	1
Adj Approach Flow, veh/h	68	37	152	179	0
Demand Flow Rate, veh/h	70	38	157	184	0
Vehicles Circulating, veh/h	184	150	86	16	242
Vehicles Exiting, veh/h	16	92	168	172	0
Follow-Up Headway, s	3.186	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.6	4.2	5.0	4.8	0.0
Approach LOS	A	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	70	38	157	184
Cap Entry Lane, veh/h	940	973	1037	1112
Entry HV Adj Factor	0.971	0.974	0.968	0.975
Flow Entry, veh/h	68	37	152	179
Cap Entry, veh/h	913	947	1004	1084
V/C Ratio	0.074	0.039	0.151	0.165
Control Delay, s/veh	4.6	4.2	5.0	4.8
LOS	A	A	A	A
95th %tile Queue, veh	0	0	1	1



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	585	366	176	173	2
Future Volume (vph)	7	585	366	176	173	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	0.95		0.97	
Frpb, ped/bikes	1.00	1.00	0.99		1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.95		1.00	
Flt Protected	0.95	1.00	1.00		0.95	
Satd. Flow (prot)	1805	3471	3301		3177	
Flt Permitted	0.39	1.00	1.00		0.95	
Satd. Flow (perm)	744	3471	3301		3177	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	8	672	421	202	199	2
RTOR Reduction (vph)	0	0	22	0	1	0
Lane Group Flow (vph)	8	672	601	0	200	0
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	0%	4%	4%	2%	10%	50%
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		8	
Permitted Phases	2					
Actuated Green, G (s)	107.2	107.2	101.0		12.1	
Effective Green, g (s)	108.4	108.4	102.2		13.6	
Actuated g/C Ratio	0.83	0.83	0.79		0.10	
Clearance Time (s)	5.2	5.2	5.2		5.5	
Vehicle Extension (s)	2.0	2.0	2.0		1.5	
Lane Grp Cap (vph)	638	2894	2595		332	
v/s Ratio Prot	0.00	c0.19	0.18		c0.06	
v/s Ratio Perm	0.01					
v/c Ratio	0.01	0.23	0.23		0.60	
Uniform Delay, d1	2.0	2.2	3.6		55.6	
Progression Factor	0.81	0.78	1.00		1.00	
Incremental Delay, d2	0.0	0.2	0.2		2.1	
Delay (s)	1.6	1.9	3.8		57.7	
Level of Service	A	A	A		E	
Approach Delay (s)		1.9	3.8		57.7	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	10.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	27.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



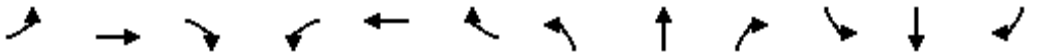
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	491	323	173	678	0	0
Future Volume (vph)	491	323	173	678	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		
Lane Util. Factor	0.95	1.00	1.00	0.95		
Frpb, ped/bikes	1.00	0.98	1.00	1.00		
Flpb, ped/bikes	1.00	1.00	1.00	1.00		
Frt	1.00	0.85	1.00	1.00		
Flt Protected	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	3471	1517	1671	3438		
Flt Permitted	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	3471	1517	1671	3438		
Peak-hour factor, PHF	1.00	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	491	347	186	729	0	0
RTOR Reduction (vph)	0	76	0	0	0	0
Lane Group Flow (vph)	491	271	186	729	0	0
Confl. Peds. (#/hr)		4	4			
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	4%	4%	8%	5%	0%	0%
Turn Type	NA	Perm	Prot	NA		
Protected Phases	6		5	2		
Permitted Phases		6				
Actuated Green, G (s)	100.2	100.2	19.4	130.0		
Effective Green, g (s)	101.4	101.4	20.6	130.0		
Actuated g/C Ratio	0.78	0.78	0.16	1.00		
Clearance Time (s)	5.2	5.2	5.2	5.2		
Vehicle Extension (s)	2.0	2.0	2.0	2.0		
Lane Grp Cap (vph)	2707	1183	264	3438		
v/s Ratio Prot	0.14		c0.11	0.21		
v/s Ratio Perm		c0.18				
v/c Ratio	0.18	0.23	0.70	0.21		
Uniform Delay, d1	3.7	3.8	51.8	0.0		
Progression Factor	1.00	1.00	0.97	1.00		
Incremental Delay, d2	0.1	0.5	6.7	0.1		
Delay (s)	3.8	4.3	57.0	0.1		
Level of Service	A	A	E	A		
Approach Delay (s)	4.0			11.7	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	8.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	36.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	488	0	0	721	127	340
Future Volume (vph)	488	0	0	721	127	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.88
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3471			3471	3273	2787
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3471			3471	3273	2787
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	519	0	0	767	135	362
RTOR Reduction (vph)	0	0	0	0	0	328
Lane Group Flow (vph)	519	0	0	767	135	34
Confl. Peds. (#/hr)		4	4			
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	4%	0%	0%	4%	7%	2%
Turn Type	NA			NA	Prot	Prot
Protected Phases	2			6	4	4
Permitted Phases						
Actuated Green, G (s)	108.4			108.0	9.0	9.0
Effective Green, g (s)	109.9			109.9	12.1	12.1
Actuated g/C Ratio	0.85			0.85	0.09	0.09
Clearance Time (s)	5.5			5.9	7.1	7.1
Vehicle Extension (s)	2.0			1.0	1.0	1.0
Lane Grp Cap (vph)	2934			2934	304	259
v/s Ratio Prot	0.15			c0.22	c0.04	0.01
v/s Ratio Perm						
v/c Ratio	0.18			0.26	0.44	0.13
Uniform Delay, d1	1.8			2.0	55.8	54.1
Progression Factor	1.01			0.23	1.00	1.00
Incremental Delay, d2	0.1			0.2	0.4	0.1
Delay (s)	2.0			0.7	56.1	54.2
Level of Service	A			A	E	D
Approach Delay (s)	2.0			0.7	54.7	
Approach LOS	A			A	D	

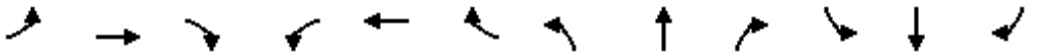
Intersection Summary			
HCM 2000 Control Delay	16.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	36.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	658	177	0	548	0	0	0	60	204	145	178
Future Volume (vph)	0	658	177	0	548	0	0	0	60	204	145	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0				4.0	4.0	4.0	4.0
Lane Util. Factor		0.91			0.95				1.00	0.97	1.00	1.00
Frpb, ped/bikes		0.99			1.00				1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00			1.00				1.00	1.00	1.00	1.00
Frt		0.97			1.00				0.86	1.00	1.00	0.85
Flt Protected		1.00			1.00				1.00	0.95	1.00	1.00
Satd. Flow (prot)		4833			3406				1611	3400	1845	1553
Flt Permitted		1.00			1.00				1.00	0.95	1.00	1.00
Satd. Flow (perm)		4833			3406				1611	3400	1845	1553
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	708	190	0	589	0	0	0	65	219	156	191
RTOR Reduction (vph)	0	16	0	0	0	0	0	0	56	0	0	164
Lane Group Flow (vph)	0	882	0	0	589	0	0	0	9	219	156	27
Confl. Peds. (#/hr)			2	2								
Heavy Vehicles (%)	0%	4%	1%	0%	6%	0%	0%	0%	2%	3%	3%	4%
Turn Type		NA			NA				Perm	Split	NA	Prot
Protected Phases		6			2					8	8	8
Permitted Phases									8			
Actuated Green, G (s)		102.9			102.9				17.1	17.1	17.1	17.1
Effective Green, g (s)		103.9			103.9				18.1	18.1	18.1	18.1
Actuated g/C Ratio		0.80			0.80				0.14	0.14	0.14	0.14
Clearance Time (s)		5.0			5.0				5.0	5.0	5.0	5.0
Vehicle Extension (s)		2.5			2.5				2.5	2.5	2.5	2.5
Lane Grp Cap (vph)		3862			2722				224	473	256	216
v/s Ratio Prot		c0.18			0.17					0.06	c0.08	0.02
v/s Ratio Perm									0.01			
v/c Ratio		0.23			0.22				0.04	0.46	0.61	0.12
Uniform Delay, d1		3.2			3.2				48.4	51.5	52.6	49.0
Progression Factor		1.20			0.27				1.00	1.00	1.00	1.00
Incremental Delay, d2		0.0			0.2				0.1	0.5	3.4	0.2
Delay (s)		3.9			1.0				48.5	52.0	56.1	49.2
Level of Service		A			A				D	D	E	D
Approach Delay (s)		3.9			1.0			48.5			52.2	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	37.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	695	46	264	409	156	119	287	391	196	127	17
Future Volume (vph)	153	695	46	264	409	156	119	287	391	196	127	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.95	0.88	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1562	3400	3505	2716	3400	3505	1558	3400	3505	1568
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1562	3400	3505	2716	3400	3505	1558	3400	3505	1568
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)	168	764	51	290	449	171	131	315	430	215	140	19
RTOR Reduction (vph)	0	0	22	0	0	95	0	0	106	0	0	10
Lane Group Flow (vph)	168	764	29	290	449	76	131	315	324	215	140	9
Confl. Peds. (#/hr)	1		4	4		1			1	1		
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Actuated Green, G (s)	35.4	57.4	66.1	16.4	38.5	50.8	8.7	15.9	32.3	12.3	19.5	54.9
Effective Green, g (s)	38.7	59.9	72.7	19.7	40.9	57.4	12.0	18.8	38.9	15.6	22.4	61.5
Actuated g/C Ratio	0.30	0.46	0.56	0.15	0.31	0.44	0.09	0.14	0.30	0.12	0.17	0.47
Clearance Time (s)	7.3	6.5	7.3	7.3	6.4	7.3	7.3	6.9	7.3	7.3	6.9	7.3
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	1021	2343	873	515	1102	1282	313	506	466	408	603	741
v/s Ratio Prot	0.05	c0.15	0.00	0.09	c0.13	0.01	0.04	0.09	c0.11	c0.06	0.04	0.00
v/s Ratio Perm			0.02			0.02			0.10			0.00
v/c Ratio	0.16	0.33	0.03	0.56	0.41	0.06	0.42	0.62	0.70	0.53	0.23	0.01
Uniform Delay, d1	33.7	22.2	12.9	51.2	35.0	20.8	55.7	52.3	40.3	53.7	46.4	18.2
Progression Factor	1.30	1.39	1.00	0.50	0.66	0.36	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.0	0.4	0.0	0.7	0.9	0.0	0.3	1.7	3.6	0.6	0.1	0.0
Delay (s)	43.7	31.3	12.9	26.2	24.1	7.5	56.0	54.0	43.9	54.3	46.5	18.2
Level of Service	D	C	B	C	C	A	E	D	D	D	D	B
Approach Delay (s)		32.4			21.7			49.4			49.5	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	36.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

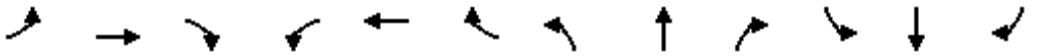
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑							↱
Traffic Vol, veh/h	0	416	936	304	828	0	0	0	0	0	0	0
Future Vol, veh/h	0	416	936	304	828	0	0	0	0	0	0	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	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	150	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	92	92	92	92	95	92	95	92	95	95	95
Heavy Vehicles, %	2	4	4	4	5	2	0	2	0	2	2	2
Mvmt Flow	0	452	1017	330	900	0	0	0	0	0	0	0

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	-	452	0	0			-	-	450
Stage 1	-	-	-	-	-	-			-	-	-
Stage 2	-	-	-	-	-	-			-	-	-
Critical Hdwy	-	-	-	4.18	-	-			-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			-	-	-
Follow-up Hdwy	-	-	-	2.24	-	-			-	-	3.32
Pot Cap-1 Maneuver	0	-	0	1091	-	0			0	0	556
Stage 1	0	-	0	-	-	0			0	0	-
Stage 2	0	-	0	-	-	0			0	0	-
Platoon blocked, %		-			-						
Mov Cap-1 Maneuver	-	-	-	1091	-	-			-	0	556
Mov Cap-2 Maneuver	-	-	-	-	-	-			-	0	-
Stage 1	-	-	-	-	-	-			-	0	-
Stage 2	-	-	-	-	-	-			-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	2.6	0
HCM LOS			A

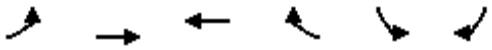
Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1
Capacity (veh/h)	-	1091	-	-
HCM Lane V/C Ratio	-	0.303	-	-
HCM Control Delay (s)	-	9.7	-	0
HCM Lane LOS	-	A	-	A
HCM 95th %tile Q(veh)	-	1.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	379	0	0	352	37	595	282	389	17	0	146
Future Volume (vph)	95	379	0	0	352	37	595	282	389	17	0	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	3.0			4.0		4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	1.00	0.95			0.95		0.97	1.00	1.00	1.00		1.00
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	0.99	1.00		1.00
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00	1.00		1.00
Frt	1.00	1.00			0.99		1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	1770	3539			3448		3400	1845	1546	1736		1553
Flt Permitted	0.95	1.00			1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	1770	3539			3448		3400	1845	1546	1736		1553
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	119	474	0	0	440	46	744	352	486	21	0	182
RTOR Reduction (vph)	0	0	0	0	5	0	0	0	310	0	0	171
Lane Group Flow (vph)	119	474	0	0	481	0	744	353	176	21	0	12
Confl. Peds. (#/hr)	1					1			1	1		
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	4%	4%	4%
Turn Type	Prot	NA			NA		Split	NA	Perm	Prot		Prot
Protected Phases	1	6			2		7	7		8		8
Permitted Phases					2				7			8
Actuated Green, G (s)	13.0	70.4			51.2		35.4	35.4	35.4	7.3		7.3
Effective Green, g (s)	14.9	73.2			53.3		37.0	37.0	37.0	8.8		8.8
Actuated g/C Ratio	0.11	0.56			0.41		0.28	0.28	0.28	0.07		0.07
Clearance Time (s)	5.9	5.8			6.1		5.6	5.6	5.6	5.5		5.5
Vehicle Extension (s)	2.0	2.0			2.0		2.0	2.0	2.0	2.0		2.0
Lane Grp Cap (vph)	202	1992			1413		967	525	440	117		105
v/s Ratio Prot	c0.07	0.13			c0.14		c0.22	0.19		c0.01		0.01
v/s Ratio Perm									0.11			
v/c Ratio	0.59	0.24			0.34		0.77	0.67	0.40	0.18		0.12
Uniform Delay, d1	54.6	14.3			26.3		42.6	41.1	37.5	57.2		57.0
Progression Factor	1.14	0.74			1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	2.7	0.3			0.7		3.4	2.7	0.2	0.3		0.2
Delay (s)	65.0	10.8			27.0		46.0	43.8	37.7	57.5		57.1
Level of Service	E	B			C		D	D	D	E		E
Approach Delay (s)		21.7			27.0			43.0			57.2	
Approach LOS		C			C			D			E	

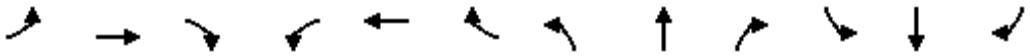
Intersection Summary			
HCM 2000 Control Delay	36.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	43	620	263	71	83	74
Future Volume (vph)	43	620	263	71	83	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.97		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1570	3539	3393		1719	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1570	3539	3393		1719	1583
Peak-hour factor, PHF	0.68	0.68	0.68	0.68	0.68	0.68
Adj. Flow (vph)	63	912	387	104	122	109
RTOR Reduction (vph)	0	0	13	0	0	94
Lane Group Flow (vph)	63	912	478	0	122	15
Heavy Vehicles (%)	15%	2%	3%	3%	5%	2%
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	1	6	2		4	
Permitted Phases						8
Actuated Green, G (s)	7.8	78.3	63.5		13.0	13.0
Effective Green, g (s)	9.7	79.5	65.8		15.1	15.1
Actuated g/C Ratio	0.09	0.72	0.60		0.14	0.14
Clearance Time (s)	5.9	5.2	6.3		6.1	6.1
Vehicle Extension (s)	2.0	2.0	2.0		2.0	2.0
Lane Grp Cap (vph)	138	2557	2029		235	217
v/s Ratio Prot	c0.04	c0.26	0.14		c0.07	
v/s Ratio Perm						0.01
v/c Ratio	0.46	0.36	0.24		0.52	0.07
Uniform Delay, d1	47.6	5.7	10.3		44.1	41.3
Progression Factor	1.00	1.00	0.98		1.00	1.00
Incremental Delay, d2	0.9	0.4	0.3		0.8	0.0
Delay (s)	48.5	6.1	10.4		44.9	41.4
Level of Service	D	A	B		D	D
Approach Delay (s)		8.8	10.4		43.2	
Approach LOS		A	B		D	

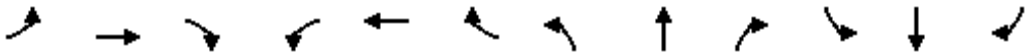
Intersection Summary			
HCM 2000 Control Delay	14.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	28.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	575	91	29	232	4	119	1	64	6	1	1
Future Volume (vph)	25	575	91	29	232	4	119	1	64	6	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	1.00		1.00	0.85		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1804	3452		1752	1815		1787	1597		1356	1758	
Flt Permitted	0.51	1.00		0.24	1.00		0.48	1.00		0.70	1.00	
Satd. Flow (perm)	967	3452		447	1815		906	1597		994	1758	
Peak-hour factor, PHF	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Adj. Flow (vph)	36	833	132	42	336	6	172	1	93	9	1	1
RTOR Reduction (vph)	0	7	0	0	0	0	0	79	0	0	1	0
Lane Group Flow (vph)	36	958	0	42	342	0	172	15	0	9	1	0
Confl. Peds. (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	0%	1%	9%	3%	4%	25%	1%	0%	0%	33%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	69.8	66.4		70.0	66.5		22.7	15.1		5.8	4.6	
Effective Green, g (s)	72.8	68.4		73.0	68.5		24.1	17.0		10.6	7.5	
Actuated g/C Ratio	0.66	0.62		0.66	0.62		0.22	0.15		0.10	0.07	
Clearance Time (s)	5.5	6.0		5.5	6.0		5.4	5.9		6.4	6.9	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	677	2146		355	1130		303	246		107	119	
v/s Ratio Prot	0.00	c0.28		c0.01	0.19		c0.07	0.01		0.00	0.00	
v/s Ratio Perm	0.03			0.07			c0.06			0.01		
v/c Ratio	0.05	0.45		0.12	0.30		0.57	0.06		0.08	0.01	
Uniform Delay, d1	6.6	10.9		7.1	9.6		37.2	39.7		45.2	47.8	
Progression Factor	0.58	0.60		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.6		0.1	0.7		1.5	0.0		0.1	0.0	
Delay (s)	3.8	7.2		7.2	10.3		38.7	39.7		45.3	47.8	
Level of Service	A	A		A	B		D	D		D	D	
Approach Delay (s)		7.1			10.0			39.0			45.8	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	13.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	44.2%	ICU Level of Service	A
Analysis Period (min)	15		

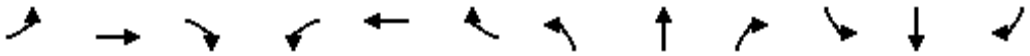
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	48	192	7	1	100	33	682	31	115	366	11
Future Volume (vph)	66	48	192	7	1	100	33	682	31	115	366	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85	1.00	0.85		1.00	0.99		1.00	1.00	
Flt Protected		0.97	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1825	1583	1805	1571		1805	3440		1805	3386	
Flt Permitted		0.97	1.00	0.38	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1825	1583	731	1571		1805	3440		1805	3386	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	73	53	213	8	1	111	37	758	34	128	407	12
RTOR Reduction (vph)	0	0	173	0	101	0	0	2	0	0	1	0
Lane Group Flow (vph)	0	126	40	8	11	0	37	790	0	128	418	0
Confl. Peds. (#/hr)							1					1
Heavy Vehicles (%)	2%	0%	2%	0%	0%	3%	0%	4%	10%	0%	6%	9%
Turn Type	Split	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases	6	6	3		2		3	8		7	4	
Permitted Phases			6	2								
Actuated Green, G (s)		10.9	17.1	7.8	7.8		6.2	55.5		11.2	60.5	
Effective Green, g (s)		13.3	20.9	10.4	10.4		8.1	57.2		13.1	62.2	
Actuated g/C Ratio		0.12	0.19	0.09	0.09		0.07	0.52		0.12	0.57	
Clearance Time (s)		6.4	5.9	6.6	6.6		5.9	5.7		5.9	5.7	
Vehicle Extension (s)		1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lane Grp Cap (vph)		220	300	69	148		132	1788		214	1914	
v/s Ratio Prot		c0.07	0.01		0.01		0.02	c0.23		c0.07	0.12	
v/s Ratio Perm			0.02	c0.01								
v/c Ratio		0.57	0.13	0.12	0.08		0.28	0.44		0.60	0.22	
Uniform Delay, d1		45.7	37.0	45.6	45.4		48.2	16.4		46.0	11.8	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.2	0.1	0.3	0.1		0.4	0.8		3.0	0.3	
Delay (s)		47.9	37.1	45.9	45.5		48.6	17.2		48.9	12.1	
Level of Service		D	D	D	D		D	B		D	B	
Approach Delay (s)		41.1			45.5			18.6			20.7	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	25.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	318	122	77	110	118	21	73	278	64	73	214	167
Future Volume (vph)	318	122	77	110	118	21	73	278	64	73	214	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		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	1.00	
Frt	1.00	0.94		1.00	0.98		1.00	0.97		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	1647		1719	1697		1752	3343		1703	3150	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1752	1647		1719	1697		1752	3343		1703	3150	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	346	133	84	120	128	23	79	302	70	79	233	182
RTOR Reduction (vph)	0	28	0	0	8	0	0	19	0	0	126	0
Lane Group Flow (vph)	346	189	0	120	143	0	79	353	0	79	289	0
Confl. Peds. (#/hr)	2		1	1		2	1		3	3		1
Confl. Bikes (#/hr)			1			1			1			
Heavy Vehicles (%)	3%	10%	5%	5%	9%	10%	3%	4%	6%	6%	6%	6%
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	22.1	23.6		10.1	11.6		7.0	25.9		6.3	25.4	
Effective Green, g (s)	24.0	25.5		12.0	13.5		8.9	28.1		8.4	27.6	
Actuated g/C Ratio	0.27	0.28		0.13	0.15		0.10	0.31		0.09	0.31	
Clearance Time (s)	5.9	5.9		5.9	5.9		5.9	6.2		6.1	6.2	
Vehicle Extension (s)	2.5	2.5		2.5	2.5		2.5	2.5		2.5	2.5	
Lane Grp Cap (vph)	467	466		229	254		173	1043		158	966	
v/s Ratio Prot	c0.20	0.11		0.07	c0.08		0.05	c0.11		c0.05	0.09	
v/s Ratio Perm												
v/c Ratio	0.74	0.41		0.52	0.56		0.46	0.34		0.50	0.30	
Uniform Delay, d1	30.2	26.1		36.3	35.5		38.3	23.8		38.8	23.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.9	0.4		1.6	2.3		1.4	0.9		1.8	0.8	
Delay (s)	36.1	26.5		38.0	37.8		39.7	24.7		40.6	24.6	
Level of Service	D	C		D	D		D	C		D	C	
Approach Delay (s)		32.4			37.9			27.3			27.2	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	30.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	177	5	50	206	0	71
Future Volume (vph)	177	5	50	206	0	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		4.0
Lane Util. Factor	0.95		1.00	0.95		1.00
Frt	1.00		1.00	1.00		0.85
Flt Protected	1.00		0.95	1.00		1.00
Satd. Flow (prot)	3490		1770	3539		1524
Flt Permitted	1.00		0.95	1.00		1.00
Satd. Flow (perm)	3490		1770	3539		1524
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	208	6	59	242	0	84
RTOR Reduction (vph)	1	0	0	0	0	79
Lane Group Flow (vph)	213	0	59	242	0	5
Heavy Vehicles (%)	3%	3%	2%	2%	6%	6%
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	6		5	2	4	
Permitted Phases						4
Actuated Green, G (s)	51.3		6.5	63.5		4.0
Effective Green, g (s)	53.0		8.2	65.2		5.6
Actuated g/C Ratio	0.60		0.09	0.74		0.06
Clearance Time (s)	5.7		5.7	5.7		5.6
Vehicle Extension (s)	2.0		2.0	2.0		2.0
Lane Grp Cap (vph)	2101		164	2622		96
v/s Ratio Prot	c0.06		c0.03	0.07		
v/s Ratio Perm						c0.00
v/c Ratio	0.10		0.36	0.09		0.06
Uniform Delay, d1	7.4		37.4	3.2		38.7
Progression Factor	1.00		1.12	0.31		1.00
Incremental Delay, d2	0.0		0.5	0.1		0.1
Delay (s)	7.4		42.6	1.1		38.8
Level of Service	A		D	A		D
Approach Delay (s)	7.4			9.2	38.8	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.12		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	16.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

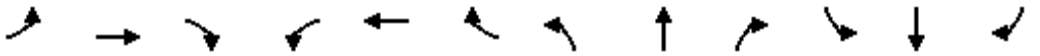
Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	275	283	138	168	8
Future Vol, veh/h	12	275	283	138	168	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	60	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	296	304	148	181	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	453	0	-	0	552	226
Stage 1	-	-	-	-	378	-
Stage 2	-	-	-	-	174	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1104	-	-	-	464	777
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	839	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1104	-	-	-	459	777
Mov Cap-2 Maneuver	-	-	-	-	459	-
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	829	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	17.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1104	-	-	-	468
HCM Lane V/C Ratio	0.012	-	-	-	0.404
HCM Control Delay (s)	8.3	-	-	-	17.8
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	1.9



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	130	268	262	336	0	0	0	0	120	0	73
Future Volume (vph)	0	130	268	262	336	0	0	0	0	120	0	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		1.00	1.00	0.91	0.91						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	0.99						0.95	1.00
Satd. Flow (prot)		1810	1568	1579	3297						1752	1524
Flt Permitted		1.00	1.00	0.95	0.99						0.95	1.00
Satd. Flow (perm)		1810	1568	1579	3297						1752	1524
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)	0	143	295	288	369	0	0	0	0	132	0	80
RTOR Reduction (vph)	0	0	255	0	0	0	0	0	0	0	0	69
Lane Group Flow (vph)	0	143	40	213	444	0	0	0	0	0	132	11
Heavy Vehicles (%)	0%	5%	3%	4%	4%	0%	0%	0%	0%	3%	0%	6%
Turn Type		NA	Perm	Split	NA					Perm	NA	Perm
Protected Phases		6		2	2						8	
Permitted Phases			6							8		8
Actuated Green, G (s)		10.4	10.4	50.0	50.0						11.1	11.1
Effective Green, g (s)		11.9	11.9	51.5	51.5						12.6	12.6
Actuated g/C Ratio		0.14	0.14	0.59	0.59						0.14	0.14
Clearance Time (s)		5.5	5.5	5.5	5.5						5.5	5.5
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		244	212	924	1929						250	218
v/s Ratio Prot		c0.08		c0.13	0.13							
v/s Ratio Perm			0.03								0.08	0.01
v/c Ratio		0.59	0.19	0.23	0.23						0.53	0.05
Uniform Delay, d1		35.7	33.8	8.8	8.7						34.9	32.5
Progression Factor		0.95	1.43	1.33	1.30						1.00	1.00
Incremental Delay, d2		2.3	0.2	0.6	0.3						0.9	0.0
Delay (s)		36.1	48.5	12.2	11.6						35.9	32.6
Level of Service		D	D	B	B						D	C
Approach Delay (s)		44.5			11.8			0.0			34.6	
Approach LOS		D			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	32.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

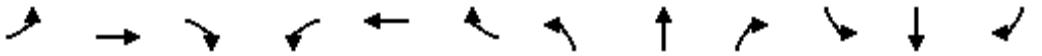
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	68	180	0	0	618	114	0	0	0	0	0	0
Future Vol, veh/h	68	180	0	0	618	114	0	0	0	0	0	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	95	95	91	91	95	95	95	91	95	91
Heavy Vehicles, %	0	2	2	2	1	1	2	2	2	0	2	0
Mvmt Flow	75	198	0	0	679	125	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	804	0	-	-	-	0	-	-	198
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.2	-	-	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	829	-	0	0	-	-	0	0	842
Stage 1	-	-	0	0	-	-	0	0	-
Stage 2	-	-	0	0	-	-	0	0	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	829	-	-	-	-	-	-	0	842
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

Approach	EB	WB	NB
HCM Control Delay, s	2.7	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	-	829	-	-	-
HCM Lane V/C Ratio	-	0.09	-	-	-
HCM Control Delay (s)	0	9.8	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	-	0.3	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	163	0	0	319	78	277	376	229	27	0	136
Future Volume (vph)	17	163	0	0	319	78	277	376	229	27	0	136
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0		2.4
Lane Util. Factor		1.00			0.95		0.97	0.95		1.00		1.00
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00		1.00
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00		1.00
Frt		1.00			0.97		1.00	0.94		1.00		0.85
Flt Protected		1.00			1.00		0.95	1.00		0.95		1.00
Satd. Flow (prot)		1847			3446		3433	3343		1736		1615
Flt Permitted		0.96			1.00		0.95	1.00		0.95		1.00
Satd. Flow (perm)		1773			3446		3433	3343		1736		1615
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	19	183	0	0	358	88	311	422	257	30	0	153
RTOR Reduction (vph)	0	0	0	0	19	0	0	118	0	0	0	130
Lane Group Flow (vph)	0	202	0	0	427	0	311	561	0	30	0	23
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	6%	2%	0%	0%	1%	3%	2%	3%	0%	4%	0%	0%
Turn Type	pm+pt	NA			NA		Split	NA		Prot		pm+ov
Protected Phases	5	2			6		8	8		7		5
Permitted Phases	2											7
Actuated Green, G (s)		46.5			36.9		20.3	20.3		4.4		10.0
Effective Green, g (s)		48.2			38.6		21.8	21.8		6.0		13.2
Actuated g/C Ratio		0.55			0.44		0.25	0.25		0.07		0.15
Clearance Time (s)		5.7			5.7		5.5	5.5		5.6		4.0
Vehicle Extension (s)		2.5			2.5		2.5	2.5		2.5		2.5
Lane Grp Cap (vph)		977			1511		850	828		118		242
v/s Ratio Prot		c0.02			c0.12		0.09	c0.17		c0.02		0.01
v/s Ratio Perm		0.10										0.01
v/c Ratio		0.21			0.28		0.37	0.68		0.25		0.09
Uniform Delay, d1		10.1			15.8		27.4	29.9		38.9		32.2
Progression Factor		0.14			1.00		1.00	1.00		1.00		1.00
Incremental Delay, d2		0.1			0.5		0.2	2.0		0.8		0.1
Delay (s)		1.5			16.3		27.6	31.9		39.7		32.4
Level of Service		A			B		C	C		D		C
Approach Delay (s)		1.5			16.3			30.6			33.6	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	297	113	68	227	147	115
Future Volume (vph)	297	113	68	227	147	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	1.00			1.00	1.00	1.00
Frt	0.96			1.00	1.00	0.85
Flt Protected	1.00			0.99	0.95	1.00
Satd. Flow (prot)	1811			1842	1805	1615
Flt Permitted	1.00			0.83	0.95	1.00
Satd. Flow (perm)	1811			1547	1805	1615
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	323	123	74	247	160	125
RTOR Reduction (vph)	14	0	0	0	0	90
Lane Group Flow (vph)	432	0	0	321	160	35
Heavy Vehicles (%)	1%	1%	2%	2%	0%	0%
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	8	
Permitted Phases			2			8
Actuated Green, G (s)	15.0			15.0	8.2	8.2
Effective Green, g (s)	16.9			16.9	9.8	9.8
Actuated g/C Ratio	0.49			0.49	0.28	0.28
Clearance Time (s)	5.9			5.9	5.6	5.6
Vehicle Extension (s)	2.0			2.0	1.0	1.0
Lane Grp Cap (vph)	882			753	509	456
v/s Ratio Prot	c0.24				c0.09	
v/s Ratio Perm				0.21		0.02
v/c Ratio	0.49			0.43	0.31	0.08
Uniform Delay, d1	6.0			5.8	9.8	9.1
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.2			0.1	0.1	0.0
Delay (s)	6.2			5.9	9.9	9.2
Level of Service	A			A	A	A
Approach Delay (s)	6.2			5.9	9.6	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	34.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	11
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	48	233	62	18	159	7	39	72	44	5	43	33
Future Vol, veh/h	48	233	62	18	159	7	39	72	44	5	43	33
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	1	1	1	3	3	3	0	0	0
Mvmt Flow	51	248	66	19	169	7	41	77	47	5	46	35
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	12.3	10.1	10.1	9.2
HCM LOS	B	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	14%	10%	6%
Vol Thru, %	46%	68%	86%	53%
Vol Right, %	28%	18%	4%	41%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	155	343	184	81
LT Vol	39	48	18	5
Through Vol	72	233	159	43
RT Vol	44	62	7	33
Lane Flow Rate	165	365	196	86
Geometry Grp	1	1	1	1
Degree of Util (X)	0.246	0.481	0.278	0.128
Departure Headway (Hd)	5.376	4.85	5.119	5.361
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	669	748	707	670
Service Time	3.391	2.85	3.119	3.377
HCM Lane V/C Ratio	0.247	0.488	0.277	0.128
HCM Control Delay	10.1	12.3	10.1	9.2
HCM Lane LOS	B	B	B	A
HCM 95th-tile Q	1	2.6	1.1	0.4

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	204	302	23	38	5
Future Vol, veh/h	1	204	302	23	38	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	75	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	5	5
Mvmt Flow	1	224	332	25	42	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	734	45	47	0	-	0
Stage 1	45	-	-	-	-	-
Stage 2	689	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	387	1025	1560	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	498	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	305	1025	1560	-	-	-
Mov Cap-2 Maneuver	349	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	392	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	7.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1560	-	349	1025	-	-
HCM Lane V/C Ratio	0.213	-	0.003	0.219	-	-
HCM Control Delay (s)	7.9	-	15.3	9.5	-	-
HCM Lane LOS	A	-	C	A	-	-
HCM 95th %tile Q(veh)	0.8	-	0	0.8	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	14	0	0	0	17	563	0	0	511	1
Future Vol, veh/h	2	0	14	0	0	0	17	563	0	0	511	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	14	0	0	0	6	2	0	0	1	0
Mvmt Flow	2	0	15	0	0	0	18	605	0	0	549	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1192	1192	550	1200	1193	605	551	0	0	605	0	0
Stage 1	550	550	-	642	642	-	-	-	-	-	-	-
Stage 2	642	642	-	558	551	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.34	7.1	6.5	6.2	4.16	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.426	3.5	4	3.3	2.254	-	-	2.2	-	-
Pot Cap-1 Maneuver	166	189	512	163	188	501	999	-	-	983	-	-
Stage 1	523	519	-	466	472	-	-	-	-	-	-	-
Stage 2	466	472	-	518	519	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	164	186	512	156	185	501	999	-	-	983	-	-
Mov Cap-2 Maneuver	164	186	-	156	185	-	-	-	-	-	-	-
Stage 1	514	519	-	458	463	-	-	-	-	-	-	-
Stage 2	458	463	-	503	519	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.3	0	0.3	0
HCM LOS	B	A		

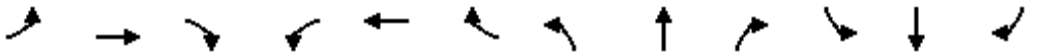
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	999	-	-	405	-	-	983	-	-
HCM Lane V/C Ratio	0.018	-	-	0.042	-	-	-	-	-
HCM Control Delay (s)	8.7	-	-	14.3	0	0	0	-	-
HCM Lane LOS	A	-	-	B	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-	-	0	-	-



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	414	425	0	490	619	64
Future Volume (vph)	414	425	0	490	619	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		0.95	0.97	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00
Frt	0.96	0.85		1.00	1.00	0.85
Flt Protected	1.00	1.00		1.00	0.95	1.00
Satd. Flow (prot)	3226	1413		3574	3467	1553
Flt Permitted	1.00	1.00		1.00	0.95	1.00
Satd. Flow (perm)	3226	1413		3574	3467	1553
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	476	489	0	563	711	74
RTOR Reduction (vph)	37	223	0	0	0	14
Lane Group Flow (vph)	630	75	0	563	711	60
Confl. Peds. (#/hr)						4
Heavy Vehicles (%)	2%	4%	0%	1%	1%	2%
Turn Type	NA	Perm		NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases		2				8
Actuated Green, G (s)	36.0	36.0		36.0	102.4	102.4
Effective Green, g (s)	37.6	37.6		37.6	104.4	104.4
Actuated g/C Ratio	0.25	0.25		0.25	0.70	0.70
Clearance Time (s)	5.6	5.6		5.6	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	2.0	2.0
Lane Grp Cap (vph)	808	354		895	2413	1080
v/s Ratio Prot	c0.20			0.16	c0.21	
v/s Ratio Perm		0.05				0.04
v/c Ratio	0.78	0.21		0.63	0.29	0.06
Uniform Delay, d1	52.3	44.5		50.0	8.7	7.2
Progression Factor	1.00	1.00		1.00	0.64	0.50
Incremental Delay, d2	4.9	0.3		1.4	0.3	0.1
Delay (s)	57.3	44.8		51.4	5.9	3.7
Level of Service	E	D		D	A	A
Approach Delay (s)	53.4			51.4	5.7	
Approach LOS	D			D	A	

Intersection Summary			
HCM 2000 Control Delay	36.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	423	26	57	576	332	25	108	122	286	164	75
Future Volume (vph)	97	423	26	57	576	332	25	108	122	286	164	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	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	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	3543		1787	3350		1770	1863	1566	1787	1881	1569
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1787	3543		1787	3350		1770	1863	1566	1787	1881	1569
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	103	450	28	61	613	353	27	115	130	304	174	80
RTOR Reduction (vph)	0	4	0	0	74	0	0	0	95	0	0	42
Lane Group Flow (vph)	103	474	0	61	892	0	27	115	35	304	174	38
Confl. Peds. (#/hr)	1					1	12		4	4		12
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	9.7	30.3		7.5	28.1		2.7	15.7	23.2	20.2	32.9	42.6
Effective Green, g (s)	11.1	32.5		8.9	30.3		4.1	17.5	26.0	21.6	35.0	45.4
Actuated g/C Ratio	0.12	0.34		0.09	0.31		0.04	0.18	0.27	0.22	0.36	0.47
Clearance Time (s)	5.4	6.2		5.4	6.2		5.4	5.8	5.4	5.4	6.1	5.4
Vehicle Extension (s)	1.7	1.7		1.7	1.7		1.7	3.0	1.7	1.7	3.0	1.7
Lane Grp Cap (vph)	205	1193		164	1051		75	337	421	399	682	738
v/s Ratio Prot	c0.06	0.13		0.03	c0.27		0.02	c0.06	0.01	c0.17	0.09	0.01
v/s Ratio Perm									0.01			0.02
v/c Ratio	0.50	0.40		0.37	0.85		0.36	0.34	0.08	0.76	0.26	0.05
Uniform Delay, d1	40.1	24.5		41.2	31.0		44.9	34.5	26.3	35.0	21.6	13.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.1		0.5	6.3		1.1	0.6	0.0	7.6	0.2	0.0
Delay (s)	40.8	24.6		41.7	37.2		46.0	35.1	26.4	42.6	21.8	13.9
Level of Service	D	C		D	D		D	D	C	D	C	B
Approach Delay (s)		27.5			37.5			32.0			32.0	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	33.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	96.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	831	965	0	0	0
Future Vol, veh/h	0	831	965	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	3	1	0	0	0
Mvmt Flow	0	894	1038	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	519
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	507
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	507
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	634	270	353	985	0	0
Future Volume (vph)	634	270	353	985	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		
Lane Util. Factor	0.95	1.00	0.97	0.95		
Frpb, ped/bikes	1.00	0.98	1.00	1.00		
Flpb, ped/bikes	1.00	1.00	1.00	1.00		
Frt	1.00	0.85	1.00	1.00		
Flt Protected	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	3539	1521	3467	3539		
Flt Permitted	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	3539	1521	3467	3539		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	674	287	376	1048	0	0
RTOR Reduction (vph)	0	60	0	0	0	0
Lane Group Flow (vph)	674	227	376	1048	0	0
Confl. Peds. (#/hr)		4	4			
Heavy Vehicles (%)	2%	4%	1%	2%	0%	0%
Turn Type	NA	Perm	Prot	NA		
Protected Phases	2		1	6		
Permitted Phases		2				
Actuated Green, G (s)	117.8	117.8	21.0	150.0		
Effective Green, g (s)	118.9	118.9	23.1	150.0		
Actuated g/C Ratio	0.79	0.79	0.15	1.00		
Clearance Time (s)	5.1	5.1	6.1	5.4		
Vehicle Extension (s)	2.0	2.0	2.0	2.0		
Lane Grp Cap (vph)	2805	1205	533	3539		
v/s Ratio Prot	0.19		c0.11	c0.30		
v/s Ratio Perm		0.15				
v/c Ratio	0.24	0.19	0.71	0.30		
Uniform Delay, d1	4.0	3.8	60.2	0.0		
Progression Factor	1.00	1.00	1.08	1.00		
Incremental Delay, d2	0.2	0.3	3.3	0.2		
Delay (s)	4.2	4.1	68.3	0.2		
Level of Service	A	A	E	A		
Approach Delay (s)	4.2			18.2	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	12.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑	↰	↱
Traffic Volume (vph)	636	0	0	857	468	334
Future Volume (vph)	636	0	0	857	468	334
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	1.00
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	5085			5136	1752	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	5085			5136	1752	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	669	0	0	902	493	352
RTOR Reduction (vph)	0	0	0	0	0	57
Lane Group Flow (vph)	669	0	0	902	493	295
Confl. Peds. (#/hr)		4	4			
Heavy Vehicles (%)	2%	0%	0%	1%	3%	2%
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases						8
Actuated Green, G (s)	85.7			85.8	52.5	52.5
Effective Green, g (s)	87.5			87.5	54.5	54.5
Actuated g/C Ratio	0.58			0.58	0.36	0.36
Clearance Time (s)	5.8			5.7	6.0	6.0
Vehicle Extension (s)	2.0			2.0	2.0	2.0
Lane Grp Cap (vph)	2966			2996	636	575
v/s Ratio Prot	0.13			c0.18	c0.28	
v/s Ratio Perm						0.19
v/c Ratio	0.23			0.30	0.78	0.51
Uniform Delay, d1	15.0			15.8	42.3	37.4
Progression Factor	1.11			1.00	1.00	1.00
Incremental Delay, d2	0.2			0.3	5.4	0.3
Delay (s)	16.8			16.1	47.7	37.7
Level of Service	B			B	D	D
Approach Delay (s)	16.8			16.1	43.5	
Approach LOS	B			B	D	

Intersection Summary			
HCM 2000 Control Delay	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

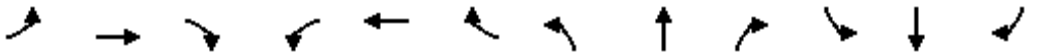
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	257	707	0	0	857	539	0	0	0	0	0	0
Future Vol, veh/h	257	707	0	0	857	539	0	0	0	0	0	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	-	-	Free	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	95	95	92	92	95	95	95	92	95	92
Heavy Vehicles, %	2	2	2	2	1	2	2	2	2	0	2	0
Mvmt Flow	279	768	0	0	932	586	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	932	0	-	-	-	0	-	-	384
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	730	-	0	0	-	0	0	0	614
Stage 1	-	-	0	0	-	0	0	0	-
Stage 2	-	-	0	0	-	0	0	0	-
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	730	-	-	-	-	-	-	0	614
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

Approach	EB	WB	NB
HCM Control Delay, s	3.5	0	0
HCM LOS			A

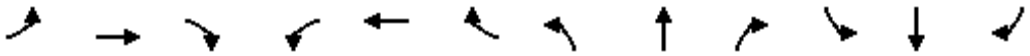
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT
Capacity (veh/h)	-	730	-	-
HCM Lane V/C Ratio	-	0.383	-	-
HCM Control Delay (s)	0	13	-	-
HCM Lane LOS	A	B	-	-
HCM 95th %tile Q(veh)	-	1.8	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	329	179	139	109	482	161	398	406	63	47	361	418
Future Volume (vph)	329	179	139	109	482	161	398	406	63	47	361	418
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	3574	1583	3433	3539	1558	3467	3574	1580	3467	3574	1588
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	3574	1583	3433	3539	1558	3467	3574	1580	3467	3574	1588
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	374	203	158	124	548	183	452	461	72	53	410	475
RTOR Reduction (vph)	0	0	43	0	0	98	0	0	48	0	0	79
Lane Group Flow (vph)	374	203	115	124	548	85	452	461	24	53	410	396
Confl. Peds. (#/hr)	4		1	1		4	4		3	3		4
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Actuated Green, G (s)	27.0	60.0	79.8	8.4	41.3	46.8	19.8	32.7	41.1	5.5	18.8	45.8
Effective Green, g (s)	28.5	61.9	82.8	9.9	43.3	49.8	21.3	35.2	44.1	7.0	20.9	48.8
Actuated g/C Ratio	0.22	0.48	0.64	0.08	0.33	0.38	0.16	0.27	0.34	0.05	0.16	0.38
Clearance Time (s)	5.5	5.9	5.5	5.5	6.0	5.5	5.5	6.5	5.5	5.5	6.1	5.5
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	760	1701	1008	261	1178	596	568	967	535	186	574	644
v/s Ratio Prot	0.11	0.06	0.02	0.04	c0.15	0.01	c0.13	0.13	0.00	0.02	c0.11	c0.13
v/s Ratio Perm			0.05			0.05			0.01			0.11
v/c Ratio	0.49	0.12	0.11	0.48	0.47	0.14	0.80	0.48	0.05	0.28	0.71	0.62
Uniform Delay, d1	44.4	18.9	9.2	57.6	34.2	26.2	52.3	39.7	28.8	59.1	51.7	33.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.1	0.0	0.5	1.3	0.0	7.1	0.1	0.0	0.3	3.5	1.2
Delay (s)	44.6	19.1	9.3	58.1	35.5	26.2	59.4	39.8	28.8	59.4	55.2	34.2
Level of Service	D	B	A	E	D	C	E	D	C	E	E	C
Approach Delay (s)		29.9			36.8			48.0			44.8	
Approach LOS		C			D			D			D	

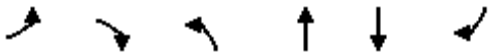
Intersection Summary			
HCM 2000 Control Delay	40.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	219	59	37	273	8	320	19	77	1	13	20
Future Volume (vph)	35	219	59	37	273	8	320	19	77	1	13	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.98			0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.88			0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1752	1845	1538	1805	1888		1770	1606			1724	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.33	
Satd. Flow (perm)	1752	1845	1538	1805	1888		1770	1606			575	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	40	249	67	42	310	9	364	22	88	1	15	23
RTOR Reduction (vph)	0	0	15	0	0	0	0	67	0	0	22	0
Lane Group Flow (vph)	40	249	52	42	319	0	364	43	0	0	17	0
Confl. Peds. (#/hr)	13		2	2		13	5		1	1		5
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	3%	3%	3%	0%	0%	0%	2%	2%	2%	0%	0%	0%
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA		Perm	NA	
Protected Phases	5	2	8	1	6		8	8			7	
Permitted Phases			2							7		
Actuated Green, G (s)	6.2	78.7	113.3	7.0	79.5		34.6	34.6			7.9	
Effective Green, g (s)	7.6	80.3	116.5	8.4	81.1		36.2	36.2			9.1	
Actuated g/C Ratio	0.05	0.54	0.78	0.06	0.54		0.24	0.24			0.06	
Clearance Time (s)	5.4	5.6	5.6	5.4	5.6		5.6	5.6			5.2	
Vehicle Extension (s)	1.0	2.0	1.0	2.0	1.0		1.0	1.0			1.0	
Lane Grp Cap (vph)	88	987	1194	101	1020		427	387			34	
v/s Ratio Prot	0.02	0.13	0.01	c0.02	c0.17		c0.21	0.03				
v/s Ratio Perm			0.02								c0.03	
v/c Ratio	0.45	0.25	0.04	0.42	0.31		0.85	0.11			0.51	
Uniform Delay, d1	69.2	18.7	3.9	68.4	19.0		54.3	44.4			68.3	
Progression Factor	1.00	1.00	1.00	0.98	1.47		1.00	1.00			1.00	
Incremental Delay, d2	1.4	0.6	0.0	1.0	0.8		14.6	0.0			5.3	
Delay (s)	70.5	19.3	3.9	68.2	28.8		68.9	44.4			73.6	
Level of Service	E	B	A	E	C		E	D			E	
Approach Delay (s)		22.2			33.4			63.2			73.6	
Approach LOS		C			C			E			E	

Intersection Summary			
HCM 2000 Control Delay	42.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	193	86	105	138	103	131
Future Volume (vph)	193	86	105	138	103	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.92	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1770	1583	1805	1900	1723	
Flt Permitted	0.95	1.00	0.18	1.00	1.00	
Satd. Flow (perm)	1770	1583	347	1900	1723	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	222	99	121	159	118	151
RTOR Reduction (vph)	0	30	0	0	48	0
Lane Group Flow (vph)	222	69	121	159	221	0
Confl. Peds. (#/hr)			3			3
Heavy Vehicles (%)	2%	2%	0%	0%	0%	0%
Turn Type	Prot	pm+ov	pm+pt	NA	NA	
Protected Phases	6	3	3	8	4	
Permitted Phases		6	8			
Actuated Green, G (s)	87.5	101.1	44.9	44.9	25.2	
Effective Green, g (s)	88.9	105.1	46.9	46.3	26.7	
Actuated g/C Ratio	0.59	0.70	0.31	0.31	0.18	
Clearance Time (s)	5.4	6.0	6.0	5.4	5.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1049	1109	260	586	306	
v/s Ratio Prot	c0.13	0.01	c0.05	0.08	c0.13	
v/s Ratio Perm		0.04	0.10			
v/c Ratio	0.21	0.06	0.47	0.27	0.72	
Uniform Delay, d1	14.2	7.0	39.7	39.1	58.2	
Progression Factor	1.43	4.45	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.0	1.3	0.3	8.2	
Delay (s)	20.7	31.3	41.0	39.4	66.4	
Level of Service	C	C	D	D	E	
Approach Delay (s)	24.0			40.1	66.4	
Approach LOS	C			D	E	

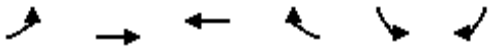
Intersection Summary			
HCM 2000 Control Delay	42.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	40.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Intersection Delay, s/veh	6.2
Intersection LOS	A

Approach	EB	WB	NB	SB	NW
Entry Lanes	1	1	1	1	0
Conflicting Circle Lanes	1	1	1	1	1
Adj Approach Flow, veh/h	70	142	200	323	0
Demand Flow Rate, veh/h	72	145	206	331	0
Vehicles Circulating, veh/h	396	224	89	98	272
Vehicles Exiting, veh/h	33	48	379	271	23
Follow-Up Headway, s	3.186	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.9	5.7	5.5	6.9	0.0
Approach LOS	A	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	72	145	206	331
Cap Entry Lane, veh/h	760	903	1034	1024
Entry HV Adj Factor	0.972	0.979	0.974	0.975
Flow Entry, veh/h	70	142	201	323
Cap Entry, veh/h	739	884	1007	999
V/C Ratio	0.095	0.161	0.199	0.323
Control Delay, s/veh	5.9	5.7	5.5	6.9
LOS	A	A	A	A
95th %tile Queue, veh	0	1	1	1



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	12	571	740	173	383	24
Future Volume (vph)	12	571	740	173	383	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	0.95		0.97	
Frpb, ped/bikes	1.00	1.00	0.99		1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.97		0.99	
Flt Protected	0.95	1.00	1.00		0.96	
Satd. Flow (prot)	1805	3574	3455		3476	
Flt Permitted	0.24	1.00	1.00		0.96	
Satd. Flow (perm)	464	3574	3455		3476	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	13	627	813	190	421	26
RTOR Reduction (vph)	0	0	9	0	3	0
Lane Group Flow (vph)	13	627	994	0	444	0
Confl. Peds. (#/hr)	2			2		2
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	0%	1%	1%	1%	0%	4%
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		8	
Permitted Phases	2					
Actuated Green, G (s)	116.0	116.0	108.8		23.3	
Effective Green, g (s)	117.2	117.2	110.0		24.8	
Actuated g/C Ratio	0.78	0.78	0.73		0.17	
Clearance Time (s)	5.2	5.2	5.2		5.5	
Vehicle Extension (s)	2.0	2.0	2.0		1.5	
Lane Grp Cap (vph)	391	2792	2533		574	
v/s Ratio Prot	0.00	c0.18	c0.29		c0.13	
v/s Ratio Perm	0.03					
v/c Ratio	0.03	0.22	0.39		0.77	
Uniform Delay, d1	4.6	4.3	7.5		59.9	
Progression Factor	0.64	0.62	1.00		1.00	
Incremental Delay, d2	0.0	0.2	0.5		5.9	
Delay (s)	2.9	2.9	7.9		65.8	
Level of Service	A	A	A		E	
Approach Delay (s)		2.9	7.9		65.8	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	18.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



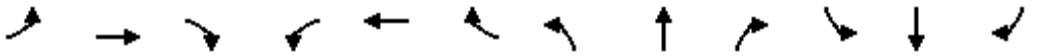
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	740	379	286	1032	0	0
Future Volume (vph)	740	379	286	1032	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		
Lane Util. Factor	0.95	1.00	1.00	0.95		
Frpb, ped/bikes	1.00	0.98	1.00	1.00		
Flpb, ped/bikes	1.00	1.00	1.00	1.00		
Frt	1.00	0.85	1.00	1.00		
Flt Protected	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	3574	1549	1787	3574		
Flt Permitted	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	3574	1549	1787	3574		
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	796	408	308	1110	0	0
RTOR Reduction (vph)	0	110	0	0	0	0
Lane Group Flow (vph)	796	298	308	1110	0	0
Confl. Peds. (#/hr)		2	2			
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	1%	2%	1%	1%	0%	0%
Turn Type	NA	Perm	Prot	NA		
Protected Phases	6		5	2		
Permitted Phases		6				
Actuated Green, G (s)	108.3	108.3	31.3	150.0		
Effective Green, g (s)	109.5	109.5	32.5	150.0		
Actuated g/C Ratio	0.73	0.73	0.22	1.00		
Clearance Time (s)	5.2	5.2	5.2	5.2		
Vehicle Extension (s)	2.0	2.0	2.0	2.0		
Lane Grp Cap (vph)	2609	1130	387	3574		
v/s Ratio Prot	0.22		c0.17	c0.31		
v/s Ratio Perm		0.19				
v/c Ratio	0.31	0.26	0.80	0.31		
Uniform Delay, d1	7.0	6.8	55.6	0.0		
Progression Factor	1.00	1.00	0.94	1.00		
Incremental Delay, d2	0.3	0.6	9.7	0.2		
Delay (s)	7.3	7.3	61.7	0.2		
Level of Service	A	A	E	A		
Approach Delay (s)	7.3			13.6	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	10.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	733	0	0	1062	264	422
Future Volume (vph)	733	0	0	1062	264	422
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.88
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3574			3574	3467	2814
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3574			3574	3467	2814
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	772	0	0	1118	278	444
RTOR Reduction (vph)	0	0	0	0	0	367
Lane Group Flow (vph)	772	0	0	1118	278	77
Confl. Peds. (#/hr)		2	2			
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	1%	0%	0%	1%	1%	1%
Turn Type	NA			NA	Prot	Prot
Protected Phases	2			6	4	4
Permitted Phases						
Actuated Green, G (s)	121.1			120.7	16.3	16.3
Effective Green, g (s)	122.6			122.6	19.4	19.4
Actuated g/C Ratio	0.82			0.82	0.13	0.13
Clearance Time (s)	5.5			5.9	7.1	7.1
Vehicle Extension (s)	2.0			1.0	1.0	1.0
Lane Grp Cap (vph)	2921			2921	448	363
v/s Ratio Prot	0.22			c0.31	c0.08	0.03
v/s Ratio Perm						
v/c Ratio	0.26			0.38	0.62	0.21
Uniform Delay, d1	3.2			3.6	61.8	58.5
Progression Factor	0.17			0.26	1.00	1.00
Incremental Delay, d2	0.2			0.4	1.9	0.1
Delay (s)	0.7			1.3	63.7	58.6
Level of Service	A			A	E	E
Approach Delay (s)	0.7			1.3	60.6	
Approach LOS	A			A	E	

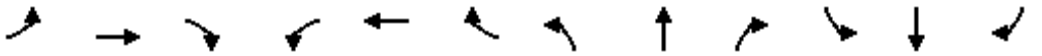
Intersection Summary			
HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	785	384	0	885	0	0	0	161	92	145	189
Future Volume (vph)	0	785	384	0	885	0	0	0	161	92	145	189
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0				4.0	4.0	4.0	4.0
Lane Util. Factor		0.91			0.95				1.00	0.97	1.00	1.00
Frpb, ped/bikes		1.00			1.00				1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00			1.00				1.00	1.00	1.00	1.00
Frt		0.95			1.00				0.86	1.00	1.00	0.85
Flt Protected		1.00			1.00				1.00	0.95	1.00	1.00
Satd. Flow (prot)		4899			3574				1627	3400	1881	1568
Flt Permitted		1.00			1.00				1.00	0.95	1.00	1.00
Satd. Flow (perm)		4899			3574				1627	3400	1881	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	826	404	0	932	0	0	0	169	97	153	199
RTOR Reduction (vph)	0	28	0	0	0	0	0	0	30	0	0	134
Lane Group Flow (vph)	0	1202	0	0	932	0	0	0	139	97	153	65
Confl. Peds. (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	0%	0%	1%	3%	1%	3%
Turn Type		NA			NA				Perm	Split	NA	Prot
Protected Phases		6			2					8	8	8
Permitted Phases									6			
Actuated Green, G (s)		122.4			122.4				122.4	17.6	17.6	17.6
Effective Green, g (s)		123.4			123.4				123.4	18.6	18.6	18.6
Actuated g/C Ratio		0.82			0.82				0.82	0.12	0.12	0.12
Clearance Time (s)		5.0			5.0				5.0	5.0	5.0	5.0
Vehicle Extension (s)		2.5			2.5				2.5	2.5	2.5	2.5
Lane Grp Cap (vph)		4030			2940				1338	421	233	194
v/s Ratio Prot		0.25			c0.26					0.03	c0.08	0.04
v/s Ratio Perm									0.09			
v/c Ratio		0.30			0.32				0.10	0.23	0.66	0.33
Uniform Delay, d1		3.1			3.2				2.6	59.2	62.7	60.0
Progression Factor		0.74			0.95				1.00	1.00	1.00	1.00
Incremental Delay, d2		0.2			0.3				0.2	0.2	5.8	0.7
Delay (s)		2.5			3.3				2.7	59.5	68.5	60.8
Level of Service		A			A				A	E	E	E
Approach Delay (s)		2.5			3.3			2.7			63.1	
Approach LOS		A			A			A			E	

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	47.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	216	614	111	423	558	164	240	467	348	301	290	57
Future Volume (vph)	216	614	111	423	558	164	240	467	348	301	290	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.95	0.88	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	5136	1578	3467	3574	2814	3467	3574	1587	3467	3574	1584
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	5136	1578	3467	3574	2814	3467	3574	1587	3467	3574	1584
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	225	640	116	441	581	171	250	486	362	314	302	59
RTOR Reduction (vph)	0	0	57	0	0	67	0	0	82	0	0	35
Lane Group Flow (vph)	225	640	59	441	581	104	250	486	281	314	302	24
Confl. Peds. (#/hr)			4	4			6		3	3		6
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Actuated Green, G (s)	27.2	54.8	69.8	23.8	51.5	69.4	15.0	25.5	49.3	17.9	28.4	55.6
Effective Green, g (s)	30.5	57.3	76.4	27.1	53.9	76.0	18.3	28.4	55.9	21.2	31.3	62.2
Actuated g/C Ratio	0.20	0.38	0.51	0.18	0.36	0.51	0.12	0.19	0.37	0.14	0.21	0.41
Clearance Time (s)	7.3	6.5	7.3	7.3	6.4	7.3	7.3	6.9	7.3	7.3	6.9	7.3
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	704	1961	803	626	1284	1500	422	676	591	490	745	656
v/s Ratio Prot	0.06	c0.12	0.01	c0.13	c0.16	0.01	0.07	c0.14	0.09	c0.09	0.08	0.01
v/s Ratio Perm			0.03			0.03			0.09			0.01
v/c Ratio	0.32	0.33	0.07	0.70	0.45	0.07	0.59	0.72	0.48	0.64	0.41	0.04
Uniform Delay, d1	50.9	32.7	18.8	57.7	36.8	18.9	62.3	57.1	35.9	60.8	51.3	26.1
Progression Factor	1.09	1.11	3.33	0.73	0.84	0.56	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.4	0.0	2.2	0.8	0.0	1.5	3.1	0.2	2.1	0.1	0.0
Delay (s)	55.6	36.9	62.4	44.1	31.7	10.6	63.8	60.1	36.1	63.0	51.4	26.1
Level of Service	E	D	E	D	C	B	E	E	D	E	D	C
Approach Delay (s)		44.2			33.2			53.0			54.6	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	45.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

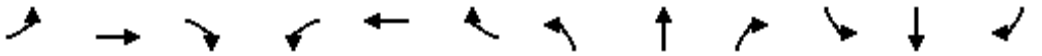
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑							↱
Traffic Vol, veh/h	0	368	923	532	1252	0	0	0	0	0	0	0
Future Vol, veh/h	0	368	923	532	1252	0	0	0	0	0	0	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	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	150	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	91	91	91	91	95	91	95	91	95	95	95
Heavy Vehicles, %	2	1	2	1	1	2	0	2	0	2	2	2
Mvmt Flow	0	404	1014	585	1376	0	0	0	0	0	0	0

Major/Minor	Major1			Major2						Minor2		
Conflicting Flow All	-	0	-	404	0	0				-	-	688
Stage 1	-	-	-	-	-	-				-	-	-
Stage 2	-	-	-	-	-	-				-	-	-
Critical Hdwy	-	-	-	4.12	-	-				-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-				-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-				-	-	-
Follow-up Hdwy	-	-	-	2.21	-	-				-	-	3.32
Pot Cap-1 Maneuver	0	-	0	1158	-	0				0	0	389
Stage 1	0	-	0	-	-	0				0	0	-
Stage 2	0	-	0	-	-	0				0	0	-
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	-	-	-	1158	-	-				-	0	389
Mov Cap-2 Maneuver	-	-	-	-	-	-				-	0	-
Stage 1	-	-	-	-	-	-				-	0	-
Stage 2	-	-	-	-	-	-				-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	3.4	0
HCM LOS			A

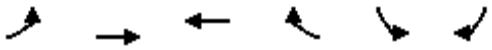
Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1
Capacity (veh/h)	-	1158	-	-
HCM Lane V/C Ratio	-	0.505	-	-
HCM Control Delay (s)	-	11.2	-	0
HCM Lane LOS	-	B	-	A
HCM 95th %tile Q(veh)	-	2.9	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	327	0	0	671	36	732	297	232	39	0	328
Future Volume (vph)	45	327	0	0	671	36	732	297	232	39	0	328
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	3.0			4.0		4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	1.00	0.95			0.95		0.97	1.00	1.00	1.00		1.00
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	0.99	1.00		1.00
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00	1.00		1.00
Frt	1.00	1.00			0.99		1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	1787	3574			3541		3433	1863	1561	1787		1599
Flt Permitted	0.95	1.00			1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	1787	3574			3541		3433	1863	1561	1787		1599
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	48	352	0	0	722	39	787	319	249	42	0	353
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	181	0	0	98
Lane Group Flow (vph)	48	352	0	0	759	0	787	319	68	42	0	255
Confl. Peds. (#/hr)	4		1	1		4			1	1		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Turn Type	Prot	NA			NA		Split	NA	Perm	Prot		Prot
Protected Phases	1	6			2		7	7		8		8
Permitted Phases					2				7			8
Actuated Green, G (s)	6.4	67.1			54.5		39.4	39.4	39.4	26.6		26.6
Effective Green, g (s)	8.3	69.9			56.6		41.0	41.0	41.0	28.1		28.1
Actuated g/C Ratio	0.06	0.47			0.38		0.27	0.27	0.27	0.19		0.19
Clearance Time (s)	5.9	5.8			6.1		5.6	5.6	5.6	5.5		5.5
Vehicle Extension (s)	2.0	2.0			2.0		2.0	2.0	2.0	2.0		2.0
Lane Grp Cap (vph)	98	1665			1336		938	509	426	334		299
v/s Ratio Prot	c0.03	0.10			c0.21		c0.23	0.17		0.02		c0.16
v/s Ratio Perm									0.04			
v/c Ratio	0.49	0.21			0.57		0.84	0.63	0.16	0.13		0.85
Uniform Delay, d1	68.8	23.7			37.0		51.4	47.8	41.4	50.7		58.9
Progression Factor	1.15	0.80			1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	1.3	0.3			1.8		6.4	1.7	0.1	0.1		19.5
Delay (s)	80.6	19.1			38.8		57.8	49.5	41.5	50.8		78.5
Level of Service	F	B			D		E	D	D	D		E
Approach Delay (s)		26.5			38.8			52.8			75.5	
Approach LOS		C			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	48.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

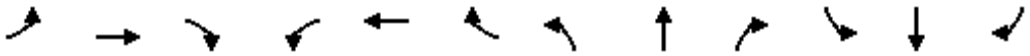
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	109	437	516	137	111	96
Future Volume (vph)	109	437	516	137	111	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.97		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1787	3574	3444		1787	1599
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1787	3574	3444		1787	1599
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	136	546	645	171	139	120
RTOR Reduction (vph)	0	0	10	0	0	104
Lane Group Flow (vph)	136	546	806	0	139	16
Confl. Peds. (#/hr)	2			2		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	1	6	2		4	
Permitted Phases						8
Actuated Green, G (s)	14.2	104.0	82.8		14.7	14.7
Effective Green, g (s)	16.1	105.2	85.1		16.8	16.8
Actuated g/C Ratio	0.12	0.81	0.65		0.13	0.13
Clearance Time (s)	5.9	5.2	6.3		6.1	6.1
Vehicle Extension (s)	2.0	2.0	2.0		2.0	2.0
Lane Grp Cap (vph)	221	2892	2254		230	206
v/s Ratio Prot	c0.08	0.15	c0.23		c0.08	
v/s Ratio Perm						0.01
v/c Ratio	0.62	0.19	0.36		0.60	0.08
Uniform Delay, d1	54.0	2.8	10.1		53.5	49.8
Progression Factor	1.00	1.00	1.18		1.00	1.00
Incremental Delay, d2	3.5	0.1	0.4		3.1	0.1
Delay (s)	57.6	2.9	12.4		56.5	49.8
Level of Service	E	A	B		E	D
Approach Delay (s)		13.8	12.4		53.4	
Approach LOS		B	B		D	

Intersection Summary			
HCM 2000 Control Delay	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.1
Intersection Capacity Utilization	42.2%	ICU Level of Service	A
Analysis Period (min)	15		

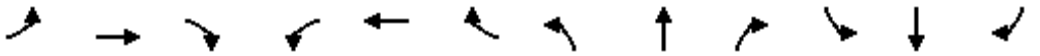
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	352	269	66	486	1	143	1	33	6	2	13
Future Volume (vph)	3	352	269	66	486	1	143	1	33	6	2	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	1.00		1.00	0.85		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3272		1804	1899		1736	1622		1543	1649	
Flt Permitted	0.39	1.00		0.32	1.00		0.55	1.00		0.73	1.00	
Satd. Flow (perm)	738	3272		614	1899		1012	1622		1188	1649	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	3	400	306	75	552	1	162	1	38	7	2	15
RTOR Reduction (vph)	0	63	0	0	0	0	0	31	0	0	14	0
Lane Group Flow (vph)	3	643	0	75	553	0	163	8	0	7	3	0
Confl. Peds. (#/hr)			2	2								
Heavy Vehicles (%)	0%	2%	2%	0%	0%	0%	4%	0%	0%	17%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	79.0	78.0		87.6	82.3		29.3	21.7		10.3	9.1	
Effective Green, g (s)	82.0	80.0		90.3	84.3		30.7	23.6		15.1	12.0	
Actuated g/C Ratio	0.63	0.62		0.69	0.65		0.24	0.18		0.12	0.09	
Clearance Time (s)	5.5	6.0		5.5	6.0		5.4	5.9		6.4	6.9	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	486	2013		488	1231		323	294		147	152	
v/s Ratio Prot	0.00	0.20		c0.01	c0.29		c0.06	0.00		0.00	0.00	
v/s Ratio Perm	0.00			0.10			c0.06			0.00		
v/c Ratio	0.01	0.32		0.15	0.45		0.50	0.03		0.05	0.02	
Uniform Delay, d1	9.4	12.0		7.1	11.3		41.9	43.8		51.0	53.7	
Progression Factor	1.14	1.12		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.4		0.1	1.2		0.5	0.0		0.0	0.0	
Delay (s)	10.8	13.8		7.1	12.5		42.4	43.8		51.1	53.7	
Level of Service	B	B		A	B		D	D		D	D	
Approach Delay (s)		13.8			11.9			42.6			52.9	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		

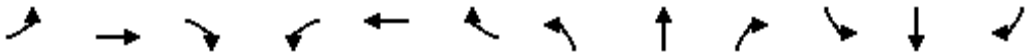
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	110	273	24	17	260	59	639	43	250	484	66
Future Volume (vph)	125	110	273	24	17	260	59	639	43	250	484	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	0.99	1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85	1.00	0.86		1.00	0.99		1.00	0.98	
Flt Protected		0.97	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1831	1600	1804	1598		1805	3536		1805	3461	
Flt Permitted		0.97	1.00	0.24	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1831	1600	447	1598		1805	3536		1805	3461	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	130	115	284	25	18	271	61	666	45	260	504	69
RTOR Reduction (vph)	0	0	215	0	236	0	0	3	0	0	6	0
Lane Group Flow (vph)	0	245	69	25	53	0	61	708	0	260	567	0
Confl. Peds. (#/hr)	1		1	1		1	2		2	2		2
Heavy Vehicles (%)	2%	0%	0%	0%	0%	1%	0%	1%	0%	0%	2%	3%
Turn Type	Split	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases	6	6	3		2		3	8		7	4	
Permitted Phases			6	2								
Actuated Green, G (s)		19.6	27.6	14.4	14.4		8.0	50.3		21.1	63.4	
Effective Green, g (s)		22.0	31.4	17.0	17.0		9.9	52.0		23.0	65.1	
Actuated g/C Ratio		0.17	0.24	0.13	0.13		0.08	0.40		0.18	0.50	
Clearance Time (s)		6.4	5.9	6.6	6.6		5.9	5.7		5.9	5.7	
Vehicle Extension (s)		1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lane Grp Cap (vph)		309	386	58	208		137	1414		319	1733	
v/s Ratio Prot		c0.13	0.01		0.03		0.03	c0.20		c0.14	0.16	
v/s Ratio Perm			0.03	c0.06								
v/c Ratio		0.79	0.18	0.43	0.26		0.45	0.50		0.82	0.33	
Uniform Delay, d1		51.8	39.1	52.0	50.8		57.4	29.3		51.5	19.4	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		12.2	0.1	1.9	0.2		0.8	1.3		14.0	0.5	
Delay (s)		64.0	39.1	53.9	51.1		58.3	30.5		65.5	19.9	
Level of Service		E	D	D	D		E	C		E	B	
Approach Delay (s)		50.7			51.3			32.7			34.1	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	39.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	239	143	84	174	158	34	92	399	159	149	399	237
Future Volume (vph)	239	143	84	174	158	34	92	399	159	149	399	237
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		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	1.00	
Frt	1.00	0.94		1.00	0.97		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1695		1805	1791		1805	3361		1770	3323	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1695		1805	1791		1805	3361		1770	3323	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	254	152	89	185	168	36	98	424	169	159	424	252
RTOR Reduction (vph)	0	24	0	0	8	0	0	43	0	0	90	0
Lane Group Flow (vph)	254	217	0	185	196	0	98	550	0	159	586	0
Confl. Peds. (#/hr)	3		3	3		3	2		3	3		2
Confl. Bikes (#/hr)			1			1			1			
Heavy Vehicles (%)	2%	6%	4%	0%	3%	3%	0%	2%	2%	2%	2%	1%
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	16.0	16.2		12.5	12.7		6.4	26.9		10.3	31.0	
Effective Green, g (s)	17.9	18.1		14.4	14.6		8.3	29.1		12.4	33.2	
Actuated g/C Ratio	0.20	0.20		0.16	0.16		0.09	0.32		0.14	0.37	
Clearance Time (s)	5.9	5.9		5.9	5.9		5.9	6.2		6.1	6.2	
Vehicle Extension (s)	2.5	2.5		2.5	2.5		2.5	2.5		2.5	2.5	
Lane Grp Cap (vph)	352	340		288	290		166	1086		243	1225	
v/s Ratio Prot	c0.14	c0.13		0.10	0.11		0.05	0.16		c0.09	c0.18	
v/s Ratio Perm												
v/c Ratio	0.72	0.64		0.64	0.67		0.59	0.51		0.65	0.48	
Uniform Delay, d1	33.7	33.0		35.4	35.5		39.2	24.6		36.8	21.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	6.7	3.4		4.3	5.5		4.6	1.7		5.6	1.3	
Delay (s)	40.4	36.4		39.7	41.0		43.9	26.3		42.3	23.1	
Level of Service	D	D		D	D		D	C		D	C	
Approach Delay (s)		38.4			40.4			28.8			26.8	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	31.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	154	2	90	82	2	56
Future Volume (vph)	154	2	90	82	2	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	1.00		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3497		1597	3195	1337	1196
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	3497		1597	3195	1337	1196
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77
Adj. Flow (vph)	200	3	117	106	3	73
RTOR Reduction (vph)	1	0	0	0	0	67
Lane Group Flow (vph)	202	0	117	106	3	6
Heavy Vehicles (%)	3%	3%	13%	13%	35%	35%
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	6		5	2	4	
Permitted Phases						4
Actuated Green, G (s)	80.1		13.9	99.7	9.0	9.0
Effective Green, g (s)	81.8		15.6	101.4	10.6	10.6
Actuated g/C Ratio	0.68		0.13	0.85	0.09	0.09
Clearance Time (s)	5.7		5.7	5.7	5.6	5.6
Vehicle Extension (s)	2.0		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2383		207	2699	118	105
v/s Ratio Prot	c0.06		c0.07	0.03	0.00	
v/s Ratio Perm						c0.01
v/c Ratio	0.08		0.57	0.04	0.03	0.06
Uniform Delay, d1	6.5		49.0	1.5	50.0	50.1
Progression Factor	1.00		1.13	0.61	1.00	1.00
Incremental Delay, d2	0.0		2.1	0.0	0.0	0.1
Delay (s)	6.5		57.5	0.9	50.0	50.2
Level of Service	A		E	A	D	D
Approach Delay (s)	6.5			30.6	50.2	
Approach LOS	A			C	D	

Intersection Summary			
HCM 2000 Control Delay	23.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.16		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	23.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

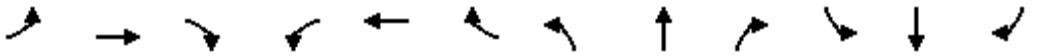
Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	254	198	95	246	12
Future Vol, veh/h	6	254	198	95	246	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	60	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	6	6	12	12	3	3
Mvmt Flow	7	299	233	112	289	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	345	0	-	0	453	172
Stage 1	-	-	-	-	289	-
Stage 2	-	-	-	-	164	-
Critical Hdwy	4.22	-	-	-	6.86	6.96
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	2.26	-	-	-	3.53	3.33
Pot Cap-1 Maneuver	1182	-	-	-	533	839
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	845	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1182	-	-	-	530	839
Mov Cap-2 Maneuver	-	-	-	-	530	-
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	840	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	19.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1182	-	-	-	539
HCM Lane V/C Ratio	0.006	-	-	-	0.563
HCM Control Delay (s)	8.1	-	-	-	19.9
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	3.5



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	151	358	371	202	0	0	0	0	172	1	85
Future Volume (vph)	0	151	358	371	202	0	0	0	0	172	1	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		1.00	1.00	0.91	0.91						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	0.98						0.95	1.00
Satd. Flow (prot)		1792	1553	1595	3166						1741	1380
Flt Permitted		1.00	1.00	0.95	0.98						0.95	1.00
Satd. Flow (perm)		1792	1553	1595	3166						1741	1380
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	174	411	426	232	0	0	0	0	198	1	98
RTOR Reduction (vph)	0	0	353	0	0	0	0	0	0	0	0	82
Lane Group Flow (vph)	0	174	58	217	441	0	0	0	0	0	199	16
Heavy Vehicles (%)	0%	6%	4%	3%	10%	0%	0%	0%	0%	4%	0%	17%
Turn Type		NA	Prot	Split	NA					Perm	NA	Perm
Protected Phases		6	6	2	2						8	
Permitted Phases										8		8
Actuated Green, G (s)		15.3	15.3	69.7	69.7						18.0	18.0
Effective Green, g (s)		17.0	17.0	71.4	71.4						19.6	19.6
Actuated g/C Ratio		0.14	0.14	0.60	0.60						0.16	0.16
Clearance Time (s)		5.7	5.7	5.7	5.7						5.6	5.6
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		253	220	949	1883						284	225
v/s Ratio Prot		c0.10	0.04	0.14	c0.14							
v/s Ratio Perm											0.11	0.01
v/c Ratio		0.69	0.26	0.23	0.23						0.70	0.07
Uniform Delay, d1		49.0	45.9	11.4	11.4						47.4	42.5
Progression Factor		0.96	1.25	1.01	1.00						1.00	1.00
Incremental Delay, d2		6.1	0.2	0.6	0.3						6.2	0.0
Delay (s)		53.2	57.7	12.1	11.7						53.7	42.5
Level of Service		D	E	B	B						D	D
Approach Delay (s)		56.3			11.8			0.0			50.0	
Approach LOS		E			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	36.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	38.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

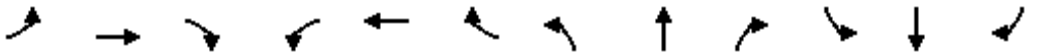
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	263	0	0	560	126	0	0	0	0	0	0
Future Vol, veh/h	74	263	0	0	560	126	0	0	0	0	0	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	95	95	84	84	95	95	95	84	95	84
Heavy Vehicles, %	5	2	2	2	6	11	2	2	2	0	2	0
Mvmt Flow	88	313	0	0	667	150	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	817	0	-	-	-	0	-	-	313
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.175	-	-	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.2475	-	-	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	793	-	0	0	-	-	0	0	726
Stage 1	-	-	0	0	-	-	0	0	-
Stage 2	-	-	0	0	-	-	0	0	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	793	-	-	-	-	-	-	0	726
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

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

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	-	793	-	-	-
HCM Lane V/C Ratio	-	0.111	-	-	-
HCM Control Delay (s)	0	10.1	-	-	-
HCM Lane LOS	A	B	-	-	-
HCM 95th %tile Q(veh)	-	0.4	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	213	0	0	376	41	117	187	141	60	0	201
Future Volume (vph)	17	213	0	0	376	41	117	187	141	60	0	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0		2.4
Lane Util. Factor		1.00			0.95		0.97	0.95		1.00		1.00
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00		1.00
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00		1.00
Frt		1.00			0.99		1.00	0.94		1.00		0.85
Flt Protected		1.00			1.00		0.95	1.00		0.95		1.00
Satd. Flow (prot)		1801			3413		3045	3216		1656		1553
Flt Permitted		0.96			1.00		0.95	1.00		0.95		1.00
Satd. Flow (perm)		1732			3413		3045	3216		1656		1553
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)	19	234	0	0	413	45	129	205	155	66	0	221
RTOR Reduction (vph)	0	0	0	0	4	0	0	129	0	0	0	190
Lane Group Flow (vph)	0	253	0	0	454	0	129	231	0	66	0	31
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	6%	5%	0%	0%	4%	5%	15%	5%	5%	9%	0%	4%
Turn Type	pm+pt	NA			NA		Split	NA		Prot		pm+ov
Protected Phases	5	2			6		8	8		7		5
Permitted Phases	2											7
Actuated Green, G (s)		82.3			72.8		12.8	12.8		8.1		13.6
Effective Green, g (s)		84.0			74.5		14.3	14.3		9.7		16.8
Actuated g/C Ratio		0.70			0.62		0.12	0.12		0.08		0.14
Clearance Time (s)		5.7			5.7		5.5	5.5		5.6		4.0
Vehicle Extension (s)		2.0			2.0		2.0	2.0		2.0		2.5
Lane Grp Cap (vph)		1216			2118		362	383		133		217
v/s Ratio Prot		c0.01			c0.13		0.04	c0.07		c0.04		0.01
v/s Ratio Perm		0.13										0.01
v/c Ratio		0.21			0.21		0.36	0.60		0.50		0.14
Uniform Delay, d1		6.3			10.0		48.6	50.2		52.8		45.3
Progression Factor		0.74			1.00		1.00	1.00		1.00		1.00
Incremental Delay, d2		0.0			0.2		0.2	1.8		1.1		0.2
Delay (s)		4.7			10.2		48.8	52.0		53.9		45.5
Level of Service		A			B		D	D		D		D
Approach Delay (s)		4.7			10.2			51.2			47.4	
Approach LOS		A			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	29.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	155	193	101	266	127	54
Future Volume (vph)	155	193	101	266	127	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	1.00			1.00	1.00	1.00
Frt	0.93			1.00	1.00	0.85
Flt Protected	1.00			0.99	0.95	1.00
Satd. Flow (prot)	1612			1837	1703	1524
Flt Permitted	1.00			0.82	0.95	1.00
Satd. Flow (perm)	1612			1528	1703	1524
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	161	201	105	277	132	56
RTOR Reduction (vph)	45	0	0	0	0	42
Lane Group Flow (vph)	317	0	0	382	132	14
Heavy Vehicles (%)	9%	9%	2%	2%	6%	6%
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	8	
Permitted Phases			2			8
Actuated Green, G (s)	19.0			19.0	8.1	8.1
Effective Green, g (s)	20.9			20.9	9.7	9.7
Actuated g/C Ratio	0.54			0.54	0.25	0.25
Clearance Time (s)	5.9			5.9	5.6	5.6
Vehicle Extension (s)	2.0			2.0	1.0	1.0
Lane Grp Cap (vph)	872			827	427	382
v/s Ratio Prot	0.20				c0.08	
v/s Ratio Perm				c0.25		0.01
v/c Ratio	0.36			0.46	0.31	0.04
Uniform Delay, d1	5.1			5.4	11.7	10.9
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			0.1	0.2	0.0
Delay (s)	5.1			5.6	11.9	10.9
Level of Service	A			A	B	B
Approach Delay (s)	5.1			5.6	11.6	
Approach LOS	A			A	B	

Intersection Summary			
HCM 2000 Control Delay	6.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	38.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	11
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	142	25	38	186	12	56	49	43	1	78	62
Future Vol, veh/h	20	142	25	38	186	12	56	49	43	1	78	62
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	6	6	6	5	5	5	2	2	2	2	2	2
Mvmt Flow	24	167	29	45	219	14	66	58	51	1	92	73
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	10.9	11.9	10.4	10.1
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	38%	11%	16%	1%
Vol Thru, %	33%	76%	79%	55%
Vol Right, %	29%	13%	5%	44%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	148	187	236	141
LT Vol	56	20	38	1
Through Vol	49	142	186	78
RT Vol	43	25	12	62
Lane Flow Rate	174	220	278	166
Geometry Grp	1	1	1	1
Degree of Util (X)	0.263	0.325	0.406	0.244
Departure Headway (Hd)	5.448	5.311	5.267	5.306
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	658	678	683	675
Service Time	3.488	3.346	3.3	3.346
HCM Lane V/C Ratio	0.264	0.324	0.407	0.246
HCM Control Delay	10.4	10.9	11.9	10.1
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.1	1.4	2	1

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	38	313	58	72	69	23
Future Vol, veh/h	38	313	58	72	69	23
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	75	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	5	5	10	10
Mvmt Flow	43	356	66	82	78	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	306	92	106	0	-	0
Stage 1	92	-	-	-	-	-
Stage 2	214	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.15	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.245	-	-	-
Pot Cap-1 Maneuver	690	971	1467	-	-	-
Stage 1	937	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	658	970	1467	-	-	-
Mov Cap-2 Maneuver	681	-	-	-	-	-
Stage 1	936	-	-	-	-	-
Stage 2	788	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	3.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1467	-	681	970	-	-
HCM Lane V/C Ratio	0.045	-	0.063	0.367	-	-
HCM Control Delay (s)	7.6	-	10.6	10.8	-	-
HCM Lane LOS	A	-	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	1.7	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	25	4	0	0	6	296	8	0	553	1
Future Vol, veh/h	1	0	25	4	0	0	6	296	8	0	553	1
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	7	0	0	6	0
Mvmt Flow	1	0	28	5	0	0	7	336	9	0	628	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	984	990	630	1001	987	343	630	0	0	347	0	0
Stage 1	629	629	-	357	357	-	-	-	-	-	-	-
Stage 2	355	361	-	644	630	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	229	248	485	223	249	704	962	-	-	1223	-	-
Stage 1	474	478	-	665	632	-	-	-	-	-	-	-
Stage 2	666	629	-	465	478	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	228	246	485	208	247	703	961	-	-	1223	-	-
Mov Cap-2 Maneuver	228	246	-	208	247	-	-	-	-	-	-	-
Stage 1	471	478	-	659	626	-	-	-	-	-	-	-
Stage 2	661	623	-	437	478	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.3	22.7	0.2	0
HCM LOS	B	C		

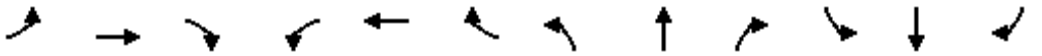
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	961	-	-	465	208	-	1223	-	-
HCM Lane V/C Ratio	0.007	-	-	0.064	0.022	-	-	-	-
HCM Control Delay (s)	8.8	-	-	13.3	22.7	0	0	-	-
HCM Lane LOS	A	-	-	B	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	-	0	-	-



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	376	266	0	500	331	14
Future Volume (vph)	376	266	0	500	331	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		0.95	0.97	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00
Frt	0.98	0.85		1.00	1.00	0.85
Flt Protected	1.00	1.00		1.00	0.95	1.00
Satd. Flow (prot)	3230	1374		3505	3400	1475
Flt Permitted	1.00	1.00		1.00	0.95	1.00
Satd. Flow (perm)	3230	1374		3505	3400	1475
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77
Adj. Flow (vph)	488	345	0	649	430	18
RTOR Reduction (vph)	18	187	0	0	0	6
Lane Group Flow (vph)	563	65	0	649	430	12
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	4%	7%	0%	3%	3%	8%
Turn Type	NA	Perm		NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases		2				8
Actuated Green, G (s)	32.1	32.1		32.1	86.3	86.3
Effective Green, g (s)	33.7	33.7		33.7	88.3	88.3
Actuated g/C Ratio	0.26	0.26		0.26	0.68	0.68
Clearance Time (s)	5.6	5.6		5.6	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	2.0	2.0
Lane Grp Cap (vph)	837	356		908	2309	1001
v/s Ratio Prot	0.17			c0.19	c0.13	
v/s Ratio Perm		0.05				0.01
v/c Ratio	0.67	0.18		0.71	0.19	0.01
Uniform Delay, d1	43.2	37.4		43.8	7.7	6.7
Progression Factor	1.00	1.00		1.00	0.67	0.31
Incremental Delay, d2	2.1	0.2		2.7	0.2	0.0
Delay (s)	45.3	37.7		46.5	5.3	2.1
Level of Service	D	D		D	A	A
Approach Delay (s)	43.0			46.5	5.2	
Approach LOS	D			D	A	

Intersection Summary			
HCM 2000 Control Delay	35.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	294	15	24	387	182	19	65	34	296	131	79
Future Volume (vph)	58	294	15	24	387	182	19	65	34	296	131	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	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	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1736	3441		1736	3281		1752	1845	1551	1736	1827	1533
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1736	3441		1736	3281		1752	1845	1551	1736	1827	1533
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	64	327	17	27	430	202	21	72	38	329	146	88
RTOR Reduction (vph)	0	4	0	0	61	0	0	0	28	0	0	43
Lane Group Flow (vph)	64	340	0	27	571	0	21	72	10	329	146	45
Confl. Peds. (#/hr)	1		4	4		1	4		2	2		4
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	3%	3%	3%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	5.5	18.4		2.9	15.8		1.7	15.0	17.9	18.5	31.5	37.0
Effective Green, g (s)	6.9	20.6		4.3	18.0		3.1	16.8	20.7	19.9	33.6	39.8
Actuated g/C Ratio	0.09	0.27		0.06	0.23		0.04	0.22	0.27	0.26	0.43	0.51
Clearance Time (s)	5.4	6.2		5.4	6.2		5.4	5.8	5.4	5.4	6.1	5.4
Vehicle Extension (s)	1.7	1.7		1.7	1.7		1.7	3.0	1.7	1.7	3.0	1.7
Lane Grp Cap (vph)	154	913		96	761		69	399	413	445	791	786
v/s Ratio Prot	0.04	c0.10		0.02	c0.17		0.01	0.04	0.00	c0.19	c0.08	0.01
v/s Ratio Perm									0.01			0.02
v/c Ratio	0.42	0.37		0.28	0.75		0.30	0.18	0.02	0.74	0.18	0.06
Uniform Delay, d1	33.4	23.2		35.2	27.7		36.2	24.8	21.0	26.5	13.6	9.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.1		0.6	3.6		0.9	0.2	0.0	5.5	0.1	0.0
Delay (s)	34.1	23.3		35.8	31.3		37.1	25.0	21.0	32.0	13.7	9.5
Level of Service	C	C		D	C		D	C	C	C	B	A
Approach Delay (s)		25.0			31.5			25.8			23.7	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	27.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	77.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	624	592	0	0	0
Future Vol, veh/h	0	624	592	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	5	3	0	0	0
Mvmt Flow	0	761	722	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	361
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	641
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	641
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	384	261	327	684	0	0
Future Volume (vph)	384	261	327	684	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		
Lane Util. Factor	0.95	1.00	0.97	0.95		
Frpb, ped/bikes	1.00	0.99	1.00	1.00		
Flpb, ped/bikes	1.00	1.00	1.00	1.00		
Frt	1.00	0.85	1.00	1.00		
Flt Protected	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	3374	1517	3433	3438		
Flt Permitted	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	3374	1517	3433	3438		
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	431	293	367	769	0	0
RTOR Reduction (vph)	0	55	0	0	0	0
Lane Group Flow (vph)	431	238	367	769	0	0
Confl. Peds. (#/hr)		1	1			
Heavy Vehicles (%)	7%	5%	2%	5%	0%	0%
Turn Type	NA	Perm	Prot	NA		
Protected Phases	2		1	6		
Permitted Phases		2				
Actuated Green, G (s)	100.3	100.3	18.5	130.0		
Effective Green, g (s)	101.4	101.4	20.6	130.0		
Actuated g/C Ratio	0.78	0.78	0.16	1.00		
Clearance Time (s)	5.1	5.1	6.1	5.4		
Vehicle Extension (s)	2.0	2.0	2.0	2.0		
Lane Grp Cap (vph)	2631	1183	543	3438		
v/s Ratio Prot	0.13		c0.11	c0.22		
v/s Ratio Perm		0.16				
v/c Ratio	0.16	0.20	0.68	0.22		
Uniform Delay, d1	3.6	3.7	51.6	0.0		
Progression Factor	1.00	1.00	1.11	1.00		
Incremental Delay, d2	0.1	0.4	2.6	0.1		
Delay (s)	3.7	4.1	59.6	0.1		
Level of Service	A	A	E	A		
Approach Delay (s)	3.9			19.4	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	13.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	380	0	0	697	299	364
Future Volume (vph)	380	0	0	697	299	364
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	1.00
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	4803			4988	1687	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	4803			4988	1687	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	422	0	0	774	332	404
RTOR Reduction (vph)	0	0	0	0	0	185
Lane Group Flow (vph)	422	0	0	774	332	219
Confl. Peds. (#/hr)		1	1			
Heavy Vehicles (%)	8%	0%	0%	4%	7%	2%
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases						8
Actuated Green, G (s)	85.7			85.8	32.5	32.5
Effective Green, g (s)	87.5			87.5	34.5	34.5
Actuated g/C Ratio	0.67			0.67	0.27	0.27
Clearance Time (s)	5.8			5.7	6.0	6.0
Vehicle Extension (s)	2.0			2.0	2.0	2.0
Lane Grp Cap (vph)	3232			3357	447	420
v/s Ratio Prot	0.09			c0.16	c0.20	
v/s Ratio Perm						0.14
v/c Ratio	0.13			0.23	0.74	0.52
Uniform Delay, d1	7.6			8.2	43.7	40.7
Progression Factor	0.94			0.69	1.00	1.00
Incremental Delay, d2	0.1			0.2	5.8	0.5
Delay (s)	7.3			5.8	49.4	41.2
Level of Service	A			A	D	D
Approach Delay (s)	7.3			5.8	44.9	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

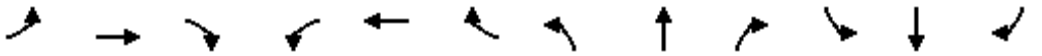
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	125	637	0	0	690	227	0	0	0	0	0	0
Future Vol, veh/h	125	637	0	0	690	227	0	0	0	0	0	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	-	-	Free	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	95	95	91	91	95	95	95	91	95	91
Heavy Vehicles, %	7	3	2	2	3	6	2	2	2	0	2	0
Mvmt Flow	137	700	0	0	758	249	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	758	0	-	-	-	0	-	-	350
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.24	-	-	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.27	-	-	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	817	-	0	0	-	0	0	0	646
Stage 1	-	-	0	0	-	0	0	0	-
Stage 2	-	-	0	0	-	0	0	0	-
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	817	-	-	-	-	-	-	0	646
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

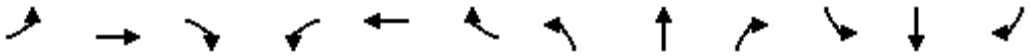
Approach	EB	WB	NB
HCM Control Delay, s	1.7	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT
Capacity (veh/h)	-	817	-	-
HCM Lane V/C Ratio	-	0.168	-	-
HCM Control Delay (s)	0	10.3	-	-
HCM Lane LOS	A	B	-	-
HCM 95th %tile Q(veh)	-	0.6	-	-



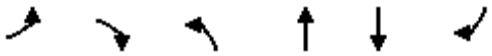
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	166	411	76	35	352	70	278	291	149	75	256	241
Future Volume (vph)	166	411	76	35	352	70	278	291	149	75	256	241
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3335	3438	1522	3433	3539	1562	3433	3539	1563	3367	3471	1541
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3335	3438	1522	3433	3539	1562	3433	3539	1563	3367	3471	1541
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	177	437	81	37	374	74	296	310	159	80	272	256
RTOR Reduction (vph)	0	0	30	0	0	33	0	0	111	0	0	99
Lane Group Flow (vph)	177	437	51	37	374	41	296	310	48	80	272	157
Confl. Peds. (#/hr)	2		1	1		2	1		6	6		1
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Actuated Green, G (s)	13.2	64.2	78.4	11.0	61.9	68.2	14.2	25.1	36.1	6.3	17.6	30.8
Effective Green, g (s)	14.7	66.1	81.4	12.5	63.9	71.2	15.7	27.6	39.1	7.8	19.7	33.8
Actuated g/C Ratio	0.11	0.51	0.63	0.10	0.49	0.55	0.12	0.21	0.30	0.06	0.15	0.26
Clearance Time (s)	5.5	5.9	5.5	5.5	6.0	5.5	5.5	6.5	5.5	5.5	6.1	5.5
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	377	1748	999	330	1739	855	414	751	470	202	525	448
v/s Ratio Prot	c0.05	c0.13	0.01	0.01	0.11	0.00	c0.09	0.09	0.01	0.02	c0.08	0.04
v/s Ratio Perm			0.03			0.02			0.02			0.06
v/c Ratio	0.47	0.25	0.05	0.11	0.22	0.05	0.71	0.41	0.10	0.40	0.52	0.35
Uniform Delay, d1	54.0	18.0	9.4	53.7	18.8	13.7	55.0	44.2	32.8	58.8	50.8	39.2
Progression Factor	1.01	0.89	0.95	0.91	1.51	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.3	0.0	0.1	0.3	0.0	4.8	0.1	0.0	0.5	0.4	0.2
Delay (s)	55.1	16.4	8.9	49.1	28.7	13.7	59.8	44.3	32.8	59.3	51.1	39.3
Level of Service	E	B	A	D	C	B	E	D	C	E	D	D
Approach Delay (s)		25.3			28.0			47.9			47.2	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	37.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	288	223	85	263	0	159	5	18	4	12	35
Future Volume (vph)	10	288	223	85	263	0	159	5	18	4	12	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	3.9	4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.98			0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.88			0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1752	1845	1534	1787	1881		1752	1596			1693	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.26	
Satd. Flow (perm)	1752	1845	1534	1787	1881		1752	1596			435	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	11	324	251	96	296	0	179	6	20	4	13	39
RTOR Reduction (vph)	0	0	74	0	0	0	0	17	0	0	36	0
Lane Group Flow (vph)	11	324	177	96	296	0	179	9	0	0	20	0
Confl. Peds. (#/hr)	5		2	2		5	2		1	1		2
Confl. Bikes (#/hr)						1			2			1
Heavy Vehicles (%)	3%	3%	3%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA		Perm	NA	
Protected Phases	5	2	8	1	6		8	8			7	
Permitted Phases			2							7		
Actuated Green, G (s)	2.2	71.5	88.4	11.5	80.8		16.9	16.9			8.3	
Effective Green, g (s)	3.6	73.2	91.6	12.9	82.4		18.5	18.5			9.5	
Actuated g/C Ratio	0.03	0.56	0.70	0.10	0.63		0.14	0.14			0.07	
Clearance Time (s)	5.4	5.6	5.6	5.4	5.6		5.6	5.6			5.2	
Vehicle Extension (s)	1.0	2.0	1.0	2.0	1.0		1.0	1.0			1.0	
Lane Grp Cap (vph)	48	1038	1080	177	1192		249	227			31	
v/s Ratio Prot	0.01	c0.18	0.02	c0.05	0.16		c0.10	0.01				
v/s Ratio Perm			0.09								c0.05	
v/c Ratio	0.23	0.31	0.16	0.54	0.25		0.72	0.04			0.64	
Uniform Delay, d1	61.8	15.1	6.4	55.7	10.3		53.3	48.1			58.6	
Progression Factor	0.73	1.15	2.39	0.66	1.76		1.00	1.00			1.00	
Incremental Delay, d2	0.9	0.8	0.0	1.6	0.4		8.0	0.0			29.1	
Delay (s)	45.7	18.1	15.4	38.3	18.6		61.3	48.1			87.7	
Level of Service	D	B	B	D	B		E	D			F	
Approach Delay (s)		17.4			23.5			59.6			87.7	
Approach LOS		B			C			E			F	

Intersection Summary			
HCM 2000 Control Delay	29.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	47.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	63	193	148	71	128	199
Future Volume (vph)	63	193	148	71	128	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.92	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1719	1538	1703	1792	1710	
Flt Permitted	0.95	1.00	0.15	1.00	1.00	
Satd. Flow (perm)	1719	1538	275	1792	1710	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	72	219	168	81	145	226
RTOR Reduction (vph)	0	85	0	0	54	0
Lane Group Flow (vph)	72	134	168	81	317	0
Confl. Peds. (#/hr)	1					
Heavy Vehicles (%)	5%	5%	6%	6%	2%	2%
Turn Type	Prot	pm+ov	pm+pt	NA	NA	
Protected Phases	6	3	3	8	4	
Permitted Phases		6	8			
Actuated Green, G (s)	60.9	75.6	50.5	50.5	29.7	
Effective Green, g (s)	62.3	79.6	52.5	51.9	31.2	
Actuated g/C Ratio	0.48	0.61	0.40	0.40	0.24	
Clearance Time (s)	5.4	6.0	6.0	5.4	5.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	823	941	294	715	410	
v/s Ratio Prot	0.04	c0.02	c0.07	0.05	c0.19	
v/s Ratio Perm		0.07	0.16			
v/c Ratio	0.09	0.14	0.57	0.11	0.77	
Uniform Delay, d1	18.4	10.7	28.7	24.6	46.1	
Progression Factor	1.47	0.61	1.00	1.00	1.00	
Incremental Delay, d2	0.2	0.1	2.7	0.1	8.8	
Delay (s)	27.2	6.7	31.4	24.6	54.9	
Level of Service	C	A	C	C	D	
Approach Delay (s)	11.7			29.2	54.9	
Approach LOS	B			C	D	

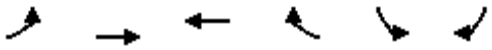
Intersection Summary			
HCM 2000 Control Delay	34.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Intersection Delay, s/veh	4.8
Intersection LOS	A

Approach	EB	WB	NB	SB	NW
Entry Lanes	1	1	1	1	0
Conflicting Circle Lanes	1	1	1	1	1
Adj Approach Flow, veh/h	71	38	143	202	0
Demand Flow Rate, veh/h	73	39	147	207	0
Vehicles Circulating, veh/h	202	141	90	11	237
Vehicles Exiting, veh/h	16	96	185	169	0
Follow-Up Headway, s	3.186	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.7	4.1	4.9	5.0	0.0
Approach LOS	A	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	73	39	147	207
Cap Entry Lane, veh/h	923	981	1033	1118
Entry HV Adj Factor	0.973	0.974	0.974	0.975
Flow Entry, veh/h	71	38	143	202
Cap Entry, veh/h	898	956	1005	1090
V/C Ratio	0.079	0.040	0.142	0.185
Control Delay, s/veh	4.7	4.1	4.9	5.0
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	1



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	608	371	168	190	2
Future Volume (vph)	7	608	371	168	190	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	0.95		0.97	
Frpb, ped/bikes	1.00	1.00	0.99		1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.95		1.00	
Flt Protected	0.95	1.00	1.00		0.95	
Satd. Flow (prot)	1805	3471	3308		3178	
Flt Permitted	0.39	1.00	1.00		0.95	
Satd. Flow (perm)	745	3471	3308		3178	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	8	699	426	193	218	2
RTOR Reduction (vph)	0	0	20	0	1	0
Lane Group Flow (vph)	8	699	599	0	219	0
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	0%	4%	4%	2%	10%	50%
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		8	
Permitted Phases	2					
Actuated Green, G (s)	106.4	106.4	100.2		12.9	
Effective Green, g (s)	107.6	107.6	101.4		14.4	
Actuated g/C Ratio	0.83	0.83	0.78		0.11	
Clearance Time (s)	5.2	5.2	5.2		5.5	
Vehicle Extension (s)	2.0	2.0	2.0		1.5	
Lane Grp Cap (vph)	634	2872	2580		352	
v/s Ratio Prot	0.00	c0.20	0.18		c0.07	
v/s Ratio Perm	0.01					
v/c Ratio	0.01	0.24	0.23		0.62	
Uniform Delay, d1	2.1	2.4	3.8		55.2	
Progression Factor	0.80	0.78	1.00		1.00	
Incremental Delay, d2	0.0	0.2	0.2		2.5	
Delay (s)	1.7	2.1	4.1		57.7	
Level of Service	A	A	A		E	
Approach Delay (s)		2.1	4.1		57.7	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	29.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



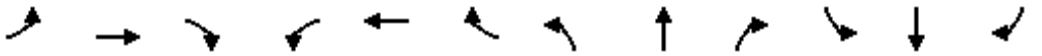
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	528	341	211	688	0	0
Future Volume (vph)	528	341	211	688	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		
Lane Util. Factor	0.95	1.00	1.00	0.95		
Frpb, ped/bikes	1.00	0.98	1.00	1.00		
Flpb, ped/bikes	1.00	1.00	1.00	1.00		
Frt	1.00	0.85	1.00	1.00		
Flt Protected	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	3471	1517	1671	3438		
Flt Permitted	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	3471	1517	1671	3438		
Peak-hour factor, PHF	1.00	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	528	367	227	740	0	0
RTOR Reduction (vph)	0	89	0	0	0	0
Lane Group Flow (vph)	528	278	227	740	0	0
Confl. Peds. (#/hr)		4	4			
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	4%	4%	8%	5%	0%	0%
Turn Type	NA	Perm	Prot	NA		
Protected Phases	6		5	2		
Permitted Phases		6				
Actuated Green, G (s)	97.3	97.3	22.3	130.0		
Effective Green, g (s)	98.5	98.5	23.5	130.0		
Actuated g/C Ratio	0.76	0.76	0.18	1.00		
Clearance Time (s)	5.2	5.2	5.2	5.2		
Vehicle Extension (s)	2.0	2.0	2.0	2.0		
Lane Grp Cap (vph)	2629	1149	302	3438		
v/s Ratio Prot	0.15		c0.14	0.22		
v/s Ratio Perm		c0.18				
v/c Ratio	0.20	0.24	0.75	0.22		
Uniform Delay, d1	4.5	4.7	50.5	0.0		
Progression Factor	1.00	1.00	1.00	1.00		
Incremental Delay, d2	0.2	0.5	8.9	0.1		
Delay (s)	4.7	5.2	59.3	0.1		
Level of Service	A	A	E	A		
Approach Delay (s)	4.9			14.0	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	9.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	39.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	523	0	0	763	132	397
Future Volume (vph)	523	0	0	763	132	397
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.88
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3471			3471	3273	2787
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3471			3471	3273	2787
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	556	0	0	812	140	422
RTOR Reduction (vph)	0	0	0	0	0	382
Lane Group Flow (vph)	556	0	0	812	140	40
Confl. Peds. (#/hr)		4	4			
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	4%	0%	0%	4%	7%	2%
Turn Type	NA			NA	Prot	Prot
Protected Phases	2			6	4	4
Permitted Phases						
Actuated Green, G (s)	108.2			107.8	9.2	9.2
Effective Green, g (s)	109.7			109.7	12.3	12.3
Actuated g/C Ratio	0.84			0.84	0.09	0.09
Clearance Time (s)	5.5			5.9	7.1	7.1
Vehicle Extension (s)	2.0			1.0	1.0	1.0
Lane Grp Cap (vph)	2928			2928	309	263
v/s Ratio Prot	0.16			c0.23	c0.04	0.01
v/s Ratio Perm						
v/c Ratio	0.19			0.28	0.45	0.15
Uniform Delay, d1	1.9			2.1	55.7	54.1
Progression Factor	1.01			0.21	1.00	1.00
Incremental Delay, d2	0.1			0.2	0.4	0.1
Delay (s)	2.0			0.7	56.1	54.2
Level of Service	A			A	E	D
Approach Delay (s)	2.0			0.7	54.6	
Approach LOS	A			A	D	

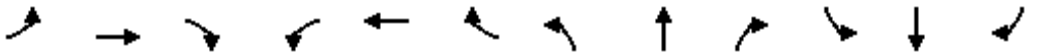
Intersection Summary			
HCM 2000 Control Delay	16.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	39.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	744	184	0	609	0	0	0	62	256	151	160
Future Volume (vph)	0	744	184	0	609	0	0	0	62	256	151	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0				4.0	4.0	4.0	4.0
Lane Util. Factor		0.91			0.95				1.00	0.97	1.00	1.00
Frpb, ped/bikes		1.00			1.00				1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00			1.00				1.00	1.00	1.00	1.00
Frt		0.97			1.00				0.86	1.00	1.00	0.85
Flt Protected		1.00			1.00				1.00	0.95	1.00	1.00
Satd. Flow (prot)		4843			3406				1611	3400	1845	1553
Flt Permitted		1.00			1.00				1.00	0.95	1.00	1.00
Satd. Flow (perm)		4843			3406				1611	3400	1845	1553
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	800	198	0	655	0	0	0	67	275	162	172
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	57	0	0	147
Lane Group Flow (vph)	0	983	0	0	655	0	0	0	10	275	162	25
Confl. Peds. (#/hr)			2	2								
Heavy Vehicles (%)	0%	4%	1%	0%	6%	0%	0%	0%	2%	3%	3%	4%
Turn Type		NA			NA				Perm	Split	NA	Prot
Protected Phases		6			2					8	8	8
Permitted Phases									8			
Actuated Green, G (s)		101.9			101.9				18.1	18.1	18.1	18.1
Effective Green, g (s)		102.9			102.9				19.1	19.1	19.1	19.1
Actuated g/C Ratio		0.79			0.79				0.15	0.15	0.15	0.15
Clearance Time (s)		5.0			5.0				5.0	5.0	5.0	5.0
Vehicle Extension (s)		2.5			2.5				2.5	2.5	2.5	2.5
Lane Grp Cap (vph)		3833			2695				236	499	271	228
v/s Ratio Prot		c0.20			0.19					0.08	c0.09	0.02
v/s Ratio Perm									0.01			
v/c Ratio		0.26			0.24				0.04	0.55	0.60	0.11
Uniform Delay, d1		3.5			3.5				47.6	51.5	51.9	48.1
Progression Factor		1.00			0.35				1.00	1.00	1.00	1.00
Incremental Delay, d2		0.0			0.2				0.1	1.1	3.0	0.2
Delay (s)		3.6			1.4				47.6	52.5	54.8	48.2
Level of Service		A			A				D	D	D	D
Approach Delay (s)		3.6			1.4			47.6			51.9	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	194	792	48	278	463	162	124	310	419	204	135	19
Future Volume (vph)	194	792	48	278	463	162	124	310	419	204	135	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.95	0.88	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1562	3400	3505	2716	3400	3505	1558	3400	3505	1568
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1562	3400	3505	2716	3400	3505	1558	3400	3505	1568
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)	213	870	53	305	509	178	136	341	460	224	148	21
RTOR Reduction (vph)	0	0	24	0	0	88	0	0	103	0	0	11
Lane Group Flow (vph)	213	870	29	305	509	90	136	341	357	224	148	10
Confl. Peds. (#/hr)	1		4	4		1			1	1		
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Actuated Green, G (s)	35.6	55.1	63.9	17.7	37.3	49.8	8.8	16.7	34.4	12.5	20.4	56.0
Effective Green, g (s)	38.9	57.6	70.5	21.0	39.7	56.4	12.1	19.6	41.0	15.8	23.3	62.6
Actuated g/C Ratio	0.30	0.44	0.54	0.16	0.31	0.43	0.09	0.15	0.32	0.12	0.18	0.48
Clearance Time (s)	7.3	6.5	7.3	7.3	6.4	7.3	7.3	6.9	7.3	7.3	6.9	7.3
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	1027	2253	847	549	1070	1261	316	528	491	413	628	755
v/s Ratio Prot	0.06	c0.17	0.00	0.09	c0.15	0.01	0.04	0.10	c0.12	c0.07	0.04	0.00
v/s Ratio Perm			0.02			0.02			0.11			0.00
v/c Ratio	0.21	0.39	0.03	0.56	0.48	0.07	0.43	0.65	0.73	0.54	0.24	0.01
Uniform Delay, d1	34.0	24.3	13.9	50.2	36.7	21.5	55.7	51.9	39.5	53.7	45.7	17.6
Progression Factor	1.29	1.37	1.00	0.52	0.66	0.37	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.0	0.5	0.0	0.6	1.2	0.0	0.3	2.0	4.5	0.8	0.1	0.0
Delay (s)	44.1	33.8	13.9	26.7	25.4	8.0	56.0	54.0	44.0	54.5	45.8	17.6
Level of Service	D	C	B	C	C	A	E	D	D	D	D	B
Approach Delay (s)		34.8			22.7			49.4			49.2	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	36.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

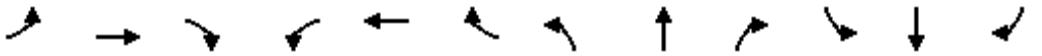
Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑							↱
Traffic Vol, veh/h	0	507	980	375	902	0	0	0	0	0	0	0
Future Vol, veh/h	0	507	980	375	902	0	0	0	0	0	0	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	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	150	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	92	92	92	92	95	92	95	92	95	95	95
Heavy Vehicles, %	2	4	4	4	5	2	0	2	0	2	2	2
Mvmt Flow	0	551	1065	408	980	0	0	0	0	0	0	0

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	-	551	0	0			-	-	490
Stage 1	-	-	-	-	-	-			-	-	-
Stage 2	-	-	-	-	-	-			-	-	-
Critical Hdwy	-	-	-	4.18	-	-			-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			-	-	-
Follow-up Hdwy	-	-	-	2.24	-	-			-	-	3.32
Pot Cap-1 Maneuver	0	-	0	1001	-	0			0	0	524
Stage 1	0	-	0	-	-	0			0	0	-
Stage 2	0	-	0	-	-	0			0	0	-
Platoon blocked, %		-			-						
Mov Cap-1 Maneuver	-	-	-	1001	-	-			-	0	524
Mov Cap-2 Maneuver	-	-	-	-	-	-			-	0	-
Stage 1	-	-	-	-	-	-			-	0	-
Stage 2	-	-	-	-	-	-			-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	3.2	0
HCM LOS			A

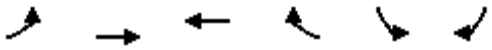
Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1
Capacity (veh/h)	-	1001	-	-
HCM Lane V/C Ratio	-	0.407	-	-
HCM Control Delay (s)	-	11	-	0
HCM Lane LOS	-	B	-	A
HCM 95th %tile Q(veh)	-	2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	453	0	0	445	38	619	341	478	18	0	173
Future Volume (vph)	114	453	0	0	445	38	619	341	478	18	0	173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	3.0			4.0		4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	1.00	0.95			0.95		0.97	1.00	1.00	1.00		1.00
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	0.99	1.00		1.00
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00	1.00		1.00
Frt	1.00	1.00			0.99		1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	1770	3539			3457		3400	1845	1546	1736		1553
Flt Permitted	0.95	1.00			1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	1770	3539			3457		3400	1845	1546	1736		1553
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	142	566	0	0	556	48	774	426	598	22	0	216
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	269	0	0	201
Lane Group Flow (vph)	143	566	0	0	600	0	774	426	329	23	0	15
Confl. Peds. (#/hr)	1					1			1	1		
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	4%	4%	4%
Turn Type	Prot	NA			NA		Split	NA	Perm	Prot		Prot
Protected Phases	1	6			2		7	7		8		8
Permitted Phases					2				7			8
Actuated Green, G (s)	14.7	68.3			47.4		37.1	37.1	37.1	7.7		7.7
Effective Green, g (s)	16.6	71.1			49.5		38.7	38.7	38.7	9.2		9.2
Actuated g/C Ratio	0.13	0.55			0.38		0.30	0.30	0.30	0.07		0.07
Clearance Time (s)	5.9	5.8			6.1		5.6	5.6	5.6	5.5		5.5
Vehicle Extension (s)	2.0	2.0			2.0		2.0	2.0	2.0	2.0		2.0
Lane Grp Cap (vph)	226	1935			1316		1012	549	460	122		109
v/s Ratio Prot	c0.08	0.16			c0.17		0.23	c0.23		c0.01		0.01
v/s Ratio Perm									0.21			
v/c Ratio	0.63	0.29			0.46		0.76	0.78	0.72	0.19		0.14
Uniform Delay, d1	53.8	15.9			30.2		41.5	41.7	40.7	56.9		56.7
Progression Factor	1.18	0.72			1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	4.0	0.4			1.1		3.1	6.2	4.4	0.3		0.2
Delay (s)	67.6	11.8			31.3		44.7	47.9	45.1	57.2		56.9
Level of Service	E	B			C		D	D	D	E		E
Approach Delay (s)		23.0			31.3			45.6			56.9	
Approach LOS		C			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	39.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



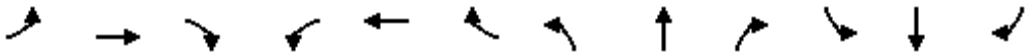
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	51	771	354	178	221	77
Future Volume (vph)	51	771	354	178	221	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.95		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1570	3539	3329		1719	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1570	3539	3329		1719	1583
Peak-hour factor, PHF	0.68	0.68	0.68	0.68	0.68	0.68
Adj. Flow (vph)	75	1134	521	262	325	113
RTOR Reduction (vph)	0	0	45	0	0	84
Lane Group Flow (vph)	75	1134	738	0	325	29
Heavy Vehicles (%)	15%	2%	3%	3%	5%	2%
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	1	6	2		4	
Permitted Phases						8
Actuated Green, G (s)	8.6	65.6	50.0		25.7	25.7
Effective Green, g (s)	10.5	66.8	52.3		27.8	27.8
Actuated g/C Ratio	0.10	0.61	0.48		0.25	0.25
Clearance Time (s)	5.9	5.2	6.3		6.1	6.1
Vehicle Extension (s)	2.0	2.0	2.0		2.0	2.0
Lane Grp Cap (vph)	149	2149	1582		434	400
v/s Ratio Prot	0.05	c0.32	0.22		c0.19	
v/s Ratio Perm						0.02
v/c Ratio	0.50	0.53	0.47		0.75	0.07
Uniform Delay, d1	47.3	12.5	19.4		37.9	31.3
Progression Factor	1.00	1.00	0.88		1.00	1.00
Incremental Delay, d2	1.0	0.9	0.8		6.1	0.0
Delay (s)	48.2	13.4	17.9		44.0	31.3
Level of Service	D	B	B		D	C
Approach Delay (s)		15.6	17.9		40.7	
Approach LOS		B	B		D	

Intersection Summary			
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	41.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	855	99	55	409	4	140	1	107	6	1	1
Future Volume (vph)	26	855	99	55	409	4	140	1	107	6	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	1.00		1.00	0.85		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3481		1752	1820		1787	1595		1356	1758	
Flt Permitted	0.35	1.00		0.12	1.00		0.48	1.00		0.66	1.00	
Satd. Flow (perm)	656	3481		222	1820		906	1595		939	1758	
Peak-hour factor, PHF	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Adj. Flow (vph)	38	1239	143	80	593	6	203	1	155	9	1	1
RTOR Reduction (vph)	0	5	0	0	0	0	0	133	0	0	1	0
Lane Group Flow (vph)	38	1377	0	80	599	0	203	23	0	9	1	0
Confl. Peds. (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	0%	1%	9%	3%	4%	25%	1%	0%	0%	33%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	69.1	65.7		72.9	67.6		21.6	14.0		5.8	4.6	
Effective Green, g (s)	72.1	67.7		75.9	69.6		23.0	15.9		10.6	7.5	
Actuated g/C Ratio	0.66	0.62		0.69	0.63		0.21	0.14		0.10	0.07	
Clearance Time (s)	5.5	6.0		5.5	6.0		5.4	5.9		6.4	6.9	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	481	2142		247	1151		285	230		104	119	
v/s Ratio Prot	0.00	c0.40		c0.02	0.33		c0.08	0.01		0.00	0.00	
v/s Ratio Perm	0.05			0.20			c0.07			0.01		
v/c Ratio	0.08	0.64		0.32	0.52		0.71	0.10		0.09	0.01	
Uniform Delay, d1	7.6	13.5		9.7	11.1		38.9	40.8		45.2	47.8	
Progression Factor	0.77	0.69		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	1.3		0.3	1.7		6.8	0.1		0.1	0.0	
Delay (s)	5.9	10.5		9.9	12.7		45.7	40.9		45.3	47.8	
Level of Service	A	B		A	B		D	D		D	D	
Approach Delay (s)		10.4			12.4			43.6			45.8	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	15.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.6%	ICU Level of Service	B
Analysis Period (min)	15		

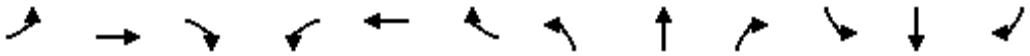
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	50	200	7	1	104	34	733	32	120	387	11
Future Volume (vph)	69	50	200	7	1	104	34	733	32	120	387	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85	1.00	0.85		1.00	0.99		1.00	1.00	
Flt Protected		0.97	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1825	1583	1805	1571		1805	3441		1805	3387	
Flt Permitted		0.97	1.00	0.40	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1825	1583	752	1571		1805	3441		1805	3387	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	77	56	222	8	1	116	38	814	36	133	430	12
RTOR Reduction (vph)	0	0	179	0	105	0	0	2	0	0	1	0
Lane Group Flow (vph)	0	133	43	8	12	0	38	848	0	133	441	0
Confl. Peds. (#/hr)							1					1
Heavy Vehicles (%)	2%	0%	2%	0%	0%	3%	0%	4%	10%	0%	6%	9%
Turn Type	Split	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases	6	6	3		2		3	8		7	4	
Permitted Phases			6	2								
Actuated Green, G (s)		11.2	17.4	7.5	7.5		6.2	55.3		11.4	60.5	
Effective Green, g (s)		13.6	21.2	10.1	10.1		8.1	57.0		13.3	62.2	
Actuated g/C Ratio		0.12	0.19	0.09	0.09		0.07	0.52		0.12	0.57	
Clearance Time (s)		6.4	5.9	6.6	6.6		5.9	5.7		5.9	5.7	
Vehicle Extension (s)		1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lane Grp Cap (vph)		225	305	69	144		132	1783		218	1915	
v/s Ratio Prot		c0.07	0.01		0.01		0.02	c0.25		c0.07	0.13	
v/s Ratio Perm			0.02	c0.01								
v/c Ratio		0.59	0.14	0.12	0.08		0.29	0.48		0.61	0.23	
Uniform Delay, d1		45.6	36.8	45.9	45.7		48.2	16.9		45.9	11.9	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.8	0.1	0.3	0.1		0.4	0.9		3.5	0.3	
Delay (s)		48.3	36.9	46.1	45.8		48.7	17.9		49.4	12.2	
Level of Service		D	D	D	D		D	B		D	B	
Approach Delay (s)		41.2			45.8			19.2			20.8	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	51.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	338	127	80	114	123	24	76	298	67	77	225	176
Future Volume (vph)	338	127	80	114	123	24	76	298	67	77	225	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		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	1.00	
Frt	1.00	0.94		1.00	0.98		1.00	0.97		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	1647		1719	1694		1752	3346		1703	3151	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1752	1647		1719	1694		1752	3346		1703	3151	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	367	138	87	124	134	26	83	324	73	84	245	191
RTOR Reduction (vph)	0	27	0	0	8	0	0	19	0	0	134	0
Lane Group Flow (vph)	367	198	0	124	152	0	83	378	0	84	302	0
Confl. Peds. (#/hr)	2		1	1		2	1		3	3		1
Confl. Bikes (#/hr)			1			1			1			
Heavy Vehicles (%)	3%	10%	5%	5%	9%	10%	3%	4%	6%	6%	6%	6%
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	22.9	24.7		10.0	11.8		6.6	25.1		6.1	24.8	
Effective Green, g (s)	24.8	26.6		11.9	13.7		8.5	27.3		8.2	27.0	
Actuated g/C Ratio	0.28	0.30		0.13	0.15		0.09	0.30		0.09	0.30	
Clearance Time (s)	5.9	5.9		5.9	5.9		5.9	6.2		6.1	6.2	
Vehicle Extension (s)	2.5	2.5		2.5	2.5		2.5	2.5		2.5	2.5	
Lane Grp Cap (vph)	482	486		227	257		165	1014		155	945	
v/s Ratio Prot	c0.21	0.12		0.07	c0.09		0.05	c0.11		c0.05	0.10	
v/s Ratio Perm												
v/c Ratio	0.76	0.41		0.55	0.59		0.50	0.37		0.54	0.32	
Uniform Delay, d1	29.9	25.4		36.5	35.6		38.7	24.6		39.1	24.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	6.7	0.4		2.1	3.0		1.8	1.1		3.0	0.9	
Delay (s)	36.6	25.8		38.6	38.6		40.5	25.7		42.1	25.3	
Level of Service	D	C		D	D		D	C		D	C	
Approach Delay (s)		32.5			38.6			28.2			28.0	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	163	5	107	195	0	119
Future Volume (vph)	163	5	107	195	0	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		4.0
Lane Util. Factor	0.95		1.00	0.95		1.00
Frt	1.00		1.00	1.00		0.85
Flt Protected	1.00		0.95	1.00		1.00
Satd. Flow (prot)	3489		1770	3539		1524
Flt Permitted	1.00		0.95	1.00		1.00
Satd. Flow (perm)	3489		1770	3539		1524
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	192	6	126	229	0	140
RTOR Reduction (vph)	1	0	0	0	0	130
Lane Group Flow (vph)	197	0	126	229	0	11
Heavy Vehicles (%)	3%	3%	2%	2%	6%	6%
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	6		5	2	4	
Permitted Phases						4
Actuated Green, G (s)	46.2		10.6	62.5		5.0
Effective Green, g (s)	47.9		12.3	64.2		6.6
Actuated g/C Ratio	0.54		0.14	0.73		0.07
Clearance Time (s)	5.7		5.7	5.7		5.6
Vehicle Extension (s)	2.0		2.0	2.0		2.0
Lane Grp Cap (vph)	1899		247	2581		114
v/s Ratio Prot	c0.06		c0.07	0.06		
v/s Ratio Perm						c0.01
v/c Ratio	0.10		0.51	0.09		0.09
Uniform Delay, d1	9.7		35.1	3.4		37.9
Progression Factor	1.00		1.02	1.05		1.00
Incremental Delay, d2	0.0		0.7	0.1		0.1
Delay (s)	9.7		36.6	3.7		38.0
Level of Service	A		D	A		D
Approach Delay (s)	9.7			15.4	38.0	
Approach LOS	A			B	D	

Intersection Summary			
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.16		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	18.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

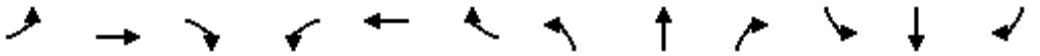
Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	310	325	146	172	13
Future Vol, veh/h	12	310	325	146	172	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	60	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	333	349	157	185	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	506	0	-	0	620	253
Stage 1	-	-	-	-	428	-
Stage 2	-	-	-	-	192	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1055	-	-	-	420	746
Stage 1	-	-	-	-	625	-
Stage 2	-	-	-	-	822	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1055	-	-	-	415	746
Mov Cap-2 Maneuver	-	-	-	-	415	-
Stage 1	-	-	-	-	625	-
Stage 2	-	-	-	-	812	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	20.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1055	-	-	-	428
HCM Lane V/C Ratio	0.012	-	-	-	0.465
HCM Control Delay (s)	8.5	-	-	-	20.5
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	2.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	170	265	477	352	0	0	0	0	342	0	106
Future Volume (vph)	0	170	265	477	352	0	0	0	0	342	0	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		1.00	1.00	0.91	0.91						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	0.98						0.95	1.00
Satd. Flow (prot)		1810	1568	1579	3265						1752	1524
Flt Permitted		1.00	1.00	0.95	0.98						0.95	1.00
Satd. Flow (perm)		1810	1568	1579	3265						1752	1524
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)	0	187	291	524	387	0	0	0	0	376	0	116
RTOR Reduction (vph)	0	0	244	0	0	0	0	0	0	0	0	84
Lane Group Flow (vph)	0	187	47	299	612	0	0	0	0	0	376	32
Heavy Vehicles (%)	0%	5%	3%	4%	4%	0%	0%	0%	0%	3%	0%	6%
Turn Type		NA	Perm	Split	NA					Perm	NA	Perm
Protected Phases		6		2	2						8	
Permitted Phases			6							8		8
Actuated Green, G (s)		12.6	12.6	36.0	36.0						22.9	22.9
Effective Green, g (s)		14.1	14.1	37.5	37.5						24.4	24.4
Actuated g/C Ratio		0.16	0.16	0.43	0.43						0.28	0.28
Clearance Time (s)		5.5	5.5	5.5	5.5						5.5	5.5
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		290	251	672	1391						485	422
v/s Ratio Prot		c0.10		c0.19	0.19							
v/s Ratio Perm			0.03								0.21	0.02
v/c Ratio		0.64	0.19	0.44	0.44						0.78	0.08
Uniform Delay, d1		34.6	32.0	17.9	17.8						29.3	23.5
Progression Factor		1.04	1.57	0.80	0.79						1.00	1.00
Incremental Delay, d2		3.7	0.1	1.8	0.9						6.9	0.0
Delay (s)		39.5	50.5	16.1	15.0						36.2	23.5
Level of Service		D	D	B	B						D	C
Approach Delay (s)		46.2			15.4			0.0			33.2	
Approach LOS		D			B			A			C	

Intersection Summary					
HCM 2000 Control Delay	27.9	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.59				
Actuated Cycle Length (s)	88.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	80.6%	ICU Level of Service		D	
Analysis Period (min)	15				
c Critical Lane Group					

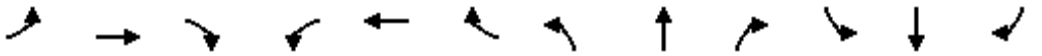
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	96	414	0	0	851	352	0	0	0	0	0	0
Future Vol, veh/h	96	414	0	0	851	352	0	0	0	0	0	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	95	95	91	91	95	95	95	91	95	91
Heavy Vehicles, %	0	2	2	2	1	1	2	2	2	0	2	0
Mvmt Flow	105	455	0	0	935	387	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1322	0	-	-	-	0	-	-	455
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.2	-	-	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	529	-	0	0	-	-	0	0	604
Stage 1	-	-	0	0	-	-	0	0	-
Stage 2	-	-	0	0	-	-	0	0	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	529	-	-	-	-	-	-	0	604
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

Approach	EB	WB	NB
HCM Control Delay, s	2.5	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	-	529	-	-	-
HCM Lane V/C Ratio	-	0.199	-	-	-
HCM Control Delay (s)	0	13.5	-	-	-
HCM Lane LOS	A	B	-	-	-
HCM 95th %tile Q(veh)	-	0.7	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	397	0	0	785	90	276	391	429	35	0	141
Future Volume (vph)	18	397	0	0	785	90	276	391	429	35	0	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0		2.4
Lane Util. Factor		1.00			0.95		0.97	0.95		1.00		1.00
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00		1.00
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00		1.00
Frt		1.00			0.98		1.00	0.92		1.00		0.85
Flt Protected		1.00			1.00		0.95	1.00		0.95		1.00
Satd. Flow (prot)		1856			3508		3433	3280		1736		1615
Flt Permitted		0.95			1.00		0.95	1.00		0.95		1.00
Satd. Flow (perm)		1770			3508		3433	3280		1736		1615
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	20	446	0	0	882	101	310	439	482	39	0	158
RTOR Reduction (vph)	0	0	0	0	8	0	0	244	0	0	0	135
Lane Group Flow (vph)	0	466	0	0	975	0	310	677	0	39	0	23
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	6%	2%	0%	0%	1%	3%	2%	3%	0%	4%	0%	0%
Turn Type	pm+pt	NA			NA		Split	NA		Prot		pm+ov
Protected Phases	5	2			6		8	8		7		5
Permitted Phases	2											7
Actuated Green, G (s)		44.4			34.8		23.0	23.0		3.8		9.4
Effective Green, g (s)		46.1			36.5		24.5	24.5		5.4		12.6
Actuated g/C Ratio		0.52			0.41		0.28	0.28		0.06		0.14
Clearance Time (s)		5.7			5.7		5.5	5.5		5.6		4.0
Vehicle Extension (s)		2.5			2.5		2.5	2.5		2.5		2.5
Lane Grp Cap (vph)		934			1455		955	913		106		231
v/s Ratio Prot		c0.04			c0.28		0.09	c0.21		c0.02		0.01
v/s Ratio Perm		0.22										0.01
v/c Ratio		0.50			0.67		0.32	0.74		0.37		0.10
Uniform Delay, d1		13.5			20.9		25.2	28.9		39.7		32.8
Progression Factor		0.25			1.00		1.00	1.00		1.00		1.00
Incremental Delay, d2		0.2			2.5		0.1	3.1		1.6		0.1
Delay (s)		3.6			23.3		25.3	32.0		41.2		32.9
Level of Service		A			C		C	C		D		C
Approach Delay (s)		3.6			23.3			30.3			34.5	
Approach LOS		A			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	72.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	318	322	121	236	378	168
Future Volume (vph)	318	322	121	236	378	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	1.00			1.00	1.00	1.00
Frt	0.93			1.00	1.00	0.85
Flt Protected	1.00			0.98	0.95	1.00
Satd. Flow (prot)	1753			1832	1805	1615
Flt Permitted	1.00			0.49	0.95	1.00
Satd. Flow (perm)	1753			919	1805	1615
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	346	350	132	257	411	183
RTOR Reduction (vph)	30	0	0	0	0	126
Lane Group Flow (vph)	666	0	0	389	411	57
Heavy Vehicles (%)	1%	1%	2%	2%	0%	0%
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	8	
Permitted Phases			2			8
Actuated Green, G (s)	43.5			43.5	22.6	22.6
Effective Green, g (s)	45.4			45.4	24.2	24.2
Actuated g/C Ratio	0.59			0.59	0.31	0.31
Clearance Time (s)	5.9			5.9	5.6	5.6
Vehicle Extension (s)	2.0			2.0	1.0	1.0
Lane Grp Cap (vph)	1025			537	562	503
v/s Ratio Prot	0.38				c0.23	
v/s Ratio Perm				c0.42		0.04
v/c Ratio	0.65			0.72	0.73	0.11
Uniform Delay, d1	10.8			11.6	23.8	19.0
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	1.1			4.1	4.2	0.0
Delay (s)	11.8			15.7	28.0	19.1
Level of Service	B			B	C	B
Approach Delay (s)	11.8			15.7	25.3	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	77.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	86.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	13.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	61	266	83	24	186	7	57	78	58	5	46	45
Future Vol, veh/h	61	266	83	24	186	7	57	78	58	5	46	45
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	1	1	1	3	3	3	0	0	0
Mvmt Flow	65	283	88	26	198	7	61	83	62	5	49	48
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	16.2	11.5	11.7	10
HCM LOS	C	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	30%	15%	11%	5%
Vol Thru, %	40%	65%	86%	48%
Vol Right, %	30%	20%	3%	47%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	193	410	217	96
LT Vol	57	61	24	5
Through Vol	78	266	186	46
RT Vol	58	83	7	45
Lane Flow Rate	205	436	231	102
Geometry Grp	1	1	1	1
Degree of Util (X)	0.329	0.62	0.351	0.164
Departure Headway (Hd)	5.766	5.115	5.479	5.792
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	622	707	653	616
Service Time	3.822	3.157	3.531	3.858
HCM Lane V/C Ratio	0.33	0.617	0.354	0.166
HCM Control Delay	11.7	16.2	11.5	10
HCM Lane LOS	B	C	B	A
HCM 95th-tile Q	1.4	4.3	1.6	0.6

Intersection	
Int Delay, s/veh	6.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	192	305	66	91	35
Future Vol, veh/h	31	192	305	66	91	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	75	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	5	5
Mvmt Flow	34	211	335	73	100	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	862	119	138	0	-	0
Stage 1	119	-	-	-	-	-
Stage 2	743	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	325	933	1446	-	-	-
Stage 1	906	-	-	-	-	-
Stage 2	470	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	250	933	1446	-	-	-
Mov Cap-2 Maneuver	315	-	-	-	-	-
Stage 1	906	-	-	-	-	-
Stage 2	361	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	6.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1446	-	315	933	-	-
HCM Lane V/C Ratio	0.232	-	0.108	0.226	-	-
HCM Control Delay (s)	8.2	-	17.8	10	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.9	-	0.4	0.9	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	15	0	0	0	18	609	0	0	552	1
Future Vol, veh/h	2	0	15	0	0	0	18	609	0	0	552	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	14	0	0	0	6	2	0	0	1	0
Mvmt Flow	2	0	16	0	0	0	19	655	0	0	594	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1288	1288	594	1296	1289	655	595	0	0	655	0	0
Stage 1	594	594	-	694	694	-	-	-	-	-	-	-
Stage 2	694	694	-	602	595	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.34	7.1	6.5	6.2	4.16	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.426	3.5	4	3.3	2.254	-	-	2.2	-	-
Pot Cap-1 Maneuver	142	165	483	140	165	470	962	-	-	942	-	-
Stage 1	495	496	-	436	447	-	-	-	-	-	-	-
Stage 2	436	447	-	490	496	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	140	162	483	133	162	470	962	-	-	942	-	-
Mov Cap-2 Maneuver	140	162	-	133	162	-	-	-	-	-	-	-
Stage 1	485	496	-	427	438	-	-	-	-	-	-	-
Stage 2	427	438	-	474	496	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.1	0	0.3	0
HCM LOS	C	A		

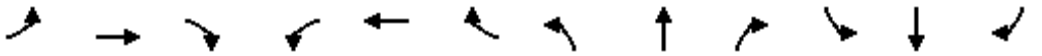
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	962	-	-	375	-	-	942	-	-
HCM Lane V/C Ratio	0.02	-	-	0.049	-	-	-	-	-
HCM Control Delay (s)	8.8	-	-	15.1	0	0	0	-	-
HCM Lane LOS	A	-	-	C	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-	-	0	-	-



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	449	442	0	528	655	67
Future Volume (vph)	449	442	0	528	655	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		0.95	0.97	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00
Frt	0.96	0.85		1.00	1.00	0.85
Flt Protected	1.00	1.00		1.00	0.95	1.00
Satd. Flow (prot)	3235	1413		3574	3467	1553
Flt Permitted	1.00	1.00		1.00	0.95	1.00
Satd. Flow (perm)	3235	1413		3574	3467	1553
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	516	508	0	607	753	77
RTOR Reduction (vph)	32	231	0	0	0	15
Lane Group Flow (vph)	677	84	0	607	753	62
Confl. Peds. (#/hr)						4
Heavy Vehicles (%)	2%	4%	0%	1%	1%	2%
Turn Type	NA	Perm		NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases		2				8
Actuated Green, G (s)	38.2	38.2		38.2	100.2	100.2
Effective Green, g (s)	39.8	39.8		39.8	102.2	102.2
Actuated g/C Ratio	0.27	0.27		0.27	0.68	0.68
Clearance Time (s)	5.6	5.6		5.6	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	2.0	2.0
Lane Grp Cap (vph)	858	374		948	2362	1058
v/s Ratio Prot	c0.21			0.17	c0.22	
v/s Ratio Perm		0.06				0.04
v/c Ratio	0.79	0.22		0.64	0.32	0.06
Uniform Delay, d1	51.2	43.0		48.8	9.7	7.9
Progression Factor	1.00	1.00		1.00	0.63	0.53
Incremental Delay, d2	4.9	0.3		1.5	0.3	0.1
Delay (s)	56.0	43.3		50.3	6.5	4.3
Level of Service	E	D		D	A	A
Approach Delay (s)	52.1			50.3	6.3	
Approach LOS	D			D	A	

Intersection Summary			
HCM 2000 Control Delay	36.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	448	27	59	617	360	26	110	127	293	186	88
Future Volume (vph)	111	448	27	59	617	360	26	110	127	293	186	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	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	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.94		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	3544		1787	3348		1770	1863	1566	1787	1881	1569
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1787	3544		1787	3348		1770	1863	1566	1787	1881	1569
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	118	477	29	63	656	383	28	117	135	312	198	94
RTOR Reduction (vph)	0	4	0	0	75	0	0	0	100	0	0	50
Lane Group Flow (vph)	118	502	0	63	964	0	28	117	35	312	198	44
Confl. Peds. (#/hr)	1					1	12		4	4		12
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	10.4	33.9		7.5	31.0		2.7	15.9	23.4	21.3	34.2	44.6
Effective Green, g (s)	11.8	36.1		8.9	33.2		4.1	17.7	26.2	22.7	36.3	47.4
Actuated g/C Ratio	0.12	0.36		0.09	0.33		0.04	0.17	0.26	0.22	0.36	0.47
Clearance Time (s)	5.4	6.2		5.4	6.2		5.4	5.8	5.4	5.4	6.1	5.4
Vehicle Extension (s)	1.7	1.7		1.7	1.7		1.7	3.0	1.7	1.7	3.0	1.7
Lane Grp Cap (vph)	207	1261		156	1096		71	325	404	400	673	733
v/s Ratio Prot	c0.07	0.14		0.04	c0.29		0.02	c0.06	0.01	c0.17	0.11	0.01
v/s Ratio Perm									0.01			0.02
v/c Ratio	0.57	0.40		0.40	0.88		0.39	0.36	0.09	0.78	0.29	0.06
Uniform Delay, d1	42.4	24.5		43.7	32.2		47.4	36.9	28.5	37.0	23.4	14.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.3	0.1		0.6	8.0		1.3	0.7	0.0	8.8	0.2	0.0
Delay (s)	44.7	24.6		44.4	40.2		48.8	37.5	28.6	45.8	23.6	14.8
Level of Service	D	C		D	D		D	D	C	D	C	B
Approach Delay (s)		28.4			40.5			34.3			33.7	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	35.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	101.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	868	1037	0	0	0
Future Vol, veh/h	0	868	1037	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	3	1	0	0	0
Mvmt Flow	0	933	1115	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	558
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	478
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	478
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	658	286	461	1057	0	0
Future Volume (vph)	658	286	461	1057	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		
Lane Util. Factor	0.95	1.00	0.97	0.95		
Frpb, ped/bikes	1.00	0.98	1.00	1.00		
Flpb, ped/bikes	1.00	1.00	1.00	1.00		
Frt	1.00	0.85	1.00	1.00		
Flt Protected	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	3539	1521	3467	3539		
Flt Permitted	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	3539	1521	3467	3539		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	700	304	490	1124	0	0
RTOR Reduction (vph)	0	46	0	0	0	0
Lane Group Flow (vph)	700	258	490	1124	0	0
Confl. Peds. (#/hr)		4	4			
Heavy Vehicles (%)	2%	4%	1%	2%	0%	0%
Turn Type	NA	Perm	Prot	NA		
Protected Phases	2		1	6		
Permitted Phases		2				
Actuated Green, G (s)	112.7	112.7	26.1	150.0		
Effective Green, g (s)	113.8	113.8	28.2	150.0		
Actuated g/C Ratio	0.76	0.76	0.19	1.00		
Clearance Time (s)	5.1	5.1	6.1	5.4		
Vehicle Extension (s)	2.0	2.0	2.0	2.0		
Lane Grp Cap (vph)	2684	1153	651	3539		
v/s Ratio Prot	0.20		c0.14	c0.32		
v/s Ratio Perm		0.17				
v/c Ratio	0.26	0.22	0.75	0.32		
Uniform Delay, d1	5.4	5.3	57.6	0.0		
Progression Factor	1.00	1.00	1.05	1.00		
Incremental Delay, d2	0.2	0.5	4.1	0.2		
Delay (s)	5.7	5.7	64.7	0.2		
Level of Service	A	A	E	A		
Approach Delay (s)	5.7			19.8	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	660	0	0	1013	492	383
Future Volume (vph)	660	0	0	1013	492	383
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	1.00
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	5085			5136	1752	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	5085			5136	1752	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	695	0	0	1066	518	403
RTOR Reduction (vph)	0	0	0	0	0	50
Lane Group Flow (vph)	695	0	0	1066	518	353
Confl. Peds. (#/hr)		4	4			
Heavy Vehicles (%)	2%	0%	0%	1%	3%	2%
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases						8
Actuated Green, G (s)	83.0			83.1	55.2	55.2
Effective Green, g (s)	84.8			84.8	57.2	57.2
Actuated g/C Ratio	0.57			0.57	0.38	0.38
Clearance Time (s)	5.8			5.7	6.0	6.0
Vehicle Extension (s)	2.0			2.0	2.0	2.0
Lane Grp Cap (vph)	2874			2903	668	603
v/s Ratio Prot	0.14			c0.21	c0.30	
v/s Ratio Perm						0.22
v/c Ratio	0.24			0.37	0.78	0.59
Uniform Delay, d1	16.4			17.9	40.8	37.0
Progression Factor	1.09			1.00	1.00	1.00
Incremental Delay, d2	0.2			0.4	5.1	0.9
Delay (s)	18.1			18.2	45.9	37.9
Level of Service	B			B	D	D
Approach Delay (s)	18.1			18.2	42.4	
Approach LOS	B			B	D	

Intersection Summary			
HCM 2000 Control Delay	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

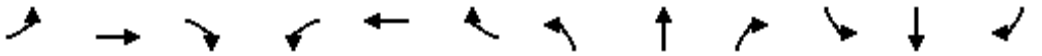
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	254	783	0	0	1013	628	0	0	0	0	0	0
Future Vol, veh/h	254	783	0	0	1013	628	0	0	0	0	0	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	-	-	Free	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	95	95	92	92	95	95	95	92	95	92
Heavy Vehicles, %	2	2	2	2	1	2	2	2	2	0	2	0
Mvmt Flow	276	851	0	0	1101	683	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1101	0	-	-	-	0	-	-	426
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	630	-	0	0	-	0	0	0	577
Stage 1	-	-	0	0	-	0	0	0	-
Stage 2	-	-	0	0	-	0	0	0	-
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	630	-	-	-	-	-	-	0	577
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

Approach	EB	WB	NB
HCM Control Delay, s	3.7	0	0
HCM LOS			A

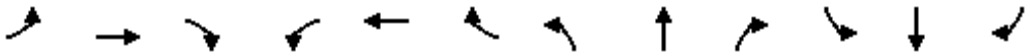
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT
Capacity (veh/h)	-	630	-	-
HCM Lane V/C Ratio	-	0.438	-	-
HCM Control Delay (s)	0	15.1	-	-
HCM Lane LOS	A	C	-	-
HCM 95th %tile Q(veh)	-	2.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	342	234	145	142	682	175	422	422	100	52	375	435
Future Volume (vph)	342	234	145	142	682	175	422	422	100	52	375	435
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	3574	1583	3433	3539	1558	3467	3574	1580	3467	3574	1588
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	3574	1583	3433	3539	1558	3467	3574	1580	3467	3574	1588
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	389	266	165	161	775	199	480	480	114	59	426	494
RTOR Reduction (vph)	0	0	44	0	0	92	0	0	74	0	0	78
Lane Group Flow (vph)	389	266	121	161	775	107	480	480	40	59	426	416
Confl. Peds. (#/hr)	4		1	1		4	4		3	3		4
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Actuated Green, G (s)	27.5	58.2	78.8	9.0	39.6	45.2	20.6	33.8	42.8	5.6	19.2	46.7
Effective Green, g (s)	29.0	60.1	81.8	10.5	41.6	48.2	22.1	36.3	45.8	7.1	21.3	49.7
Actuated g/C Ratio	0.22	0.46	0.63	0.08	0.32	0.37	0.17	0.28	0.35	0.05	0.16	0.38
Clearance Time (s)	5.5	5.9	5.5	5.5	6.0	5.5	5.5	6.5	5.5	5.5	6.1	5.5
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	773	1652	996	277	1132	577	589	997	556	189	585	655
v/s Ratio Prot	0.11	0.07	0.02	0.05	c0.22	0.01	c0.14	0.13	0.01	0.02	c0.12	c0.14
v/s Ratio Perm			0.06			0.06			0.02			0.12
v/c Ratio	0.50	0.16	0.12	0.58	0.68	0.18	0.81	0.48	0.07	0.31	0.73	0.64
Uniform Delay, d1	44.2	20.3	9.7	57.6	38.5	27.6	52.0	39.0	28.0	59.1	51.6	32.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.2	0.0	2.0	3.4	0.1	8.1	0.1	0.0	0.3	3.8	1.5
Delay (s)	44.4	20.5	9.7	59.6	41.9	27.7	60.1	39.1	28.0	59.4	55.4	34.2
Level of Service	D	C	A	E	D	C	E	D	C	E	E	C
Approach Delay (s)		29.7			41.9			47.3			45.0	
Approach LOS		C			D			D			D	

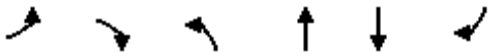
Intersection Summary			
HCM 2000 Control Delay	41.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	284	106	38	446	8	412	20	80	1	14	21
Future Volume (vph)	36	284	106	38	446	8	412	20	80	1	14	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.98			0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.88			0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1752	1845	1541	1805	1893		1770	1607			1725	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.34	
Satd. Flow (perm)	1752	1845	1541	1805	1893		1770	1607			586	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	41	323	120	43	507	9	468	23	91	1	16	24
RTOR Reduction (vph)	0	0	27	0	1	0	0	64	0	0	23	0
Lane Group Flow (vph)	41	323	93	43	515	0	468	50	0	0	18	0
Confl. Peds. (#/hr)	13		2	2		13	5		1	1		5
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	3%	3%	3%	0%	0%	0%	2%	2%	2%	0%	0%	0%
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA		Perm	NA	
Protected Phases	5	2	8	1	6		8	8			7	
Permitted Phases			2							7		
Actuated Green, G (s)	6.1	70.0	113.5	6.7	70.6		43.5	43.5			8.0	
Effective Green, g (s)	7.5	71.6	116.7	8.1	72.2		45.1	45.1			9.2	
Actuated g/C Ratio	0.05	0.48	0.78	0.05	0.48		0.30	0.30			0.06	
Clearance Time (s)	5.4	5.6	5.6	5.4	5.6		5.6	5.6			5.2	
Vehicle Extension (s)	1.0	2.0	1.0	2.0	1.0		1.0	1.0			1.0	
Lane Grp Cap (vph)	87	880	1198	97	911		532	483			35	
v/s Ratio Prot	0.02	0.18	0.02	c0.02	c0.27		c0.26	0.03				
v/s Ratio Perm			0.04								c0.03	
v/c Ratio	0.47	0.37	0.08	0.44	0.57		0.88	0.10			0.53	
Uniform Delay, d1	69.3	24.8	3.9	68.8	27.7		49.9	37.9			68.3	
Progression Factor	1.00	1.00	1.00	1.19	0.95		1.00	1.00			1.00	
Incremental Delay, d2	1.5	1.2	0.0	1.1	2.4		14.9	0.0			6.5	
Delay (s)	70.8	26.0	3.9	83.1	28.9		64.7	37.9			74.8	
Level of Service	E	C	A	F	C		E	D			E	
Approach Delay (s)		24.3			33.1			59.5			74.8	
Approach LOS		C			C			E			E	

Intersection Summary			
HCM 2000 Control Delay	40.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	218	122	184	156	112	143
Future Volume (vph)	218	122	184	156	112	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.92	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1770	1583	1805	1900	1723	
Flt Permitted	0.95	1.00	0.17	1.00	1.00	
Satd. Flow (perm)	1770	1583	328	1900	1723	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	251	140	211	179	129	164
RTOR Reduction (vph)	0	44	0	0	47	0
Lane Group Flow (vph)	251	96	211	179	246	0
Confl. Peds. (#/hr)			3			3
Heavy Vehicles (%)	2%	2%	0%	0%	0%	0%
Turn Type	Prot	pm+ov	pm+pt	NA	NA	
Protected Phases	6	3	3	8	4	
Permitted Phases		6	8			
Actuated Green, G (s)	81.1	98.9	51.3	51.3	27.4	
Effective Green, g (s)	82.5	102.9	53.3	52.7	28.9	
Actuated g/C Ratio	0.55	0.69	0.36	0.35	0.19	
Clearance Time (s)	5.4	6.0	6.0	5.4	5.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	973	1085	311	667	331	
v/s Ratio Prot	c0.14	0.01	c0.09	0.09	0.14	
v/s Ratio Perm		0.05	c0.15			
v/c Ratio	0.26	0.09	0.68	0.27	0.74	
Uniform Delay, d1	17.7	7.9	37.6	34.8	57.1	
Progression Factor	1.48	5.51	1.00	1.00	1.00	
Incremental Delay, d2	0.6	0.0	5.8	0.2	8.7	
Delay (s)	26.8	43.4	43.4	35.1	65.8	
Level of Service	C	D	D	D	E	
Approach Delay (s)	32.7			39.5	65.8	
Approach LOS	C			D	E	

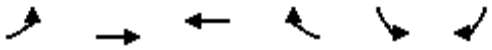
Intersection Summary			
HCM 2000 Control Delay	44.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	47.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Intersection Delay, s/veh	6.4
Intersection LOS	A

Approach	EB	WB	NB	SB	NW
Entry Lanes	1	1	1	1	0
Conflicting Circle Lanes	1	1	1	1	1
Adj Approach Flow, veh/h	73	148	199	352	0
Demand Flow Rate, veh/h	75	151	205	361	0
Vehicles Circulating, veh/h	423	223	93	94	273
Vehicles Exiting, veh/h	32	50	405	280	24
Follow-Up Headway, s	3.186	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.1	5.7	5.5	7.3	0.0
Approach LOS	A	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	75	151	205	361
Cap Entry Lane, veh/h	740	904	1030	1029
Entry HV Adj Factor	0.973	0.979	0.974	0.975
Flow Entry, veh/h	73	148	200	352
Cap Entry, veh/h	720	886	1003	1003
V/C Ratio	0.101	0.167	0.199	0.351
Control Delay, s/veh	6.1	5.7	5.5	7.3
LOS	A	A	A	A
95th %tile Queue, veh	0	1	1	2



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	12	596	776	173	408	25
Future Volume (vph)	12	596	776	173	408	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	0.95		0.97	
Frpb, ped/bikes	1.00	1.00	1.00		1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.97		0.99	
Flt Protected	0.95	1.00	1.00		0.95	
Satd. Flow (prot)	1805	3574	3459		3477	
Flt Permitted	0.23	1.00	1.00		0.95	
Satd. Flow (perm)	438	3574	3459		3477	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	13	655	853	190	448	27
RTOR Reduction (vph)	0	0	8	0	3	0
Lane Group Flow (vph)	13	655	1035	0	472	0
Confl. Peds. (#/hr)	2			2		2
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	0%	1%	1%	1%	0%	4%
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		8	
Permitted Phases	2					
Actuated Green, G (s)	114.8	114.8	107.6		24.5	
Effective Green, g (s)	116.0	116.0	108.8		26.0	
Actuated g/C Ratio	0.77	0.77	0.73		0.17	
Clearance Time (s)	5.2	5.2	5.2		5.5	
Vehicle Extension (s)	2.0	2.0	2.0		1.5	
Lane Grp Cap (vph)	367	2763	2508		602	
v/s Ratio Prot	0.00	c0.18	c0.30		c0.14	
v/s Ratio Perm	0.03					
v/c Ratio	0.04	0.24	0.41		0.78	
Uniform Delay, d1	5.0	4.7	8.1		59.3	
Progression Factor	0.67	0.62	1.00		1.00	
Incremental Delay, d2	0.0	0.2	0.5		6.1	
Delay (s)	3.3	3.1	8.6		65.4	
Level of Service	A	A	A		E	
Approach Delay (s)		3.1	8.6		65.4	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



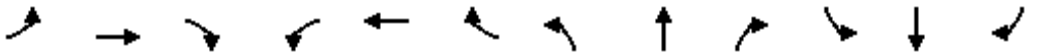
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	785	399	317	1076	0	0
Future Volume (vph)	785	399	317	1076	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		
Lane Util. Factor	0.95	1.00	1.00	0.95		
Frpb, ped/bikes	1.00	0.98	1.00	1.00		
Flpb, ped/bikes	1.00	1.00	1.00	1.00		
Frt	1.00	0.85	1.00	1.00		
Flt Protected	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	3574	1549	1787	3574		
Flt Permitted	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	3574	1549	1787	3574		
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	844	429	341	1157	0	0
RTOR Reduction (vph)	0	113	0	0	0	0
Lane Group Flow (vph)	844	316	341	1157	0	0
Confl. Peds. (#/hr)		2	2			
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	1%	2%	1%	1%	0%	0%
Turn Type	NA	Perm	Prot	NA		
Protected Phases	6		5	2		
Permitted Phases		6				
Actuated Green, G (s)	105.3	105.3	34.3	150.0		
Effective Green, g (s)	106.5	106.5	35.5	150.0		
Actuated g/C Ratio	0.71	0.71	0.24	1.00		
Clearance Time (s)	5.2	5.2	5.2	5.2		
Vehicle Extension (s)	2.0	2.0	2.0	2.0		
Lane Grp Cap (vph)	2537	1099	422	3574		
v/s Ratio Prot	0.24		c0.19	c0.32		
v/s Ratio Perm		0.20				
v/c Ratio	0.33	0.29	0.81	0.32		
Uniform Delay, d1	8.3	7.9	54.0	0.0		
Progression Factor	1.00	1.00	0.91	1.00		
Incremental Delay, d2	0.4	0.7	9.7	0.2		
Delay (s)	8.6	8.6	58.8	0.2		
Level of Service	A	A	E	A		
Approach Delay (s)	8.6			13.6	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	777	0	0	1122	280	461
Future Volume (vph)	777	0	0	1122	280	461
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.88
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3574			3574	3467	2814
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3574			3574	3467	2814
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	818	0	0	1181	295	485
RTOR Reduction (vph)	0	0	0	0	0	331
Lane Group Flow (vph)	818	0	0	1181	295	154
Confl. Peds. (#/hr)		2	2			
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	1%	0%	0%	1%	1%	1%
Turn Type	NA			NA	Prot	Prot
Protected Phases	2			6	4	4
Permitted Phases						
Actuated Green, G (s)	120.2			119.8	17.2	17.2
Effective Green, g (s)	121.7			121.7	20.3	20.3
Actuated g/C Ratio	0.81			0.81	0.14	0.14
Clearance Time (s)	5.5			5.9	7.1	7.1
Vehicle Extension (s)	2.0			1.0	1.0	1.0
Lane Grp Cap (vph)	2899			2899	469	380
v/s Ratio Prot	0.23			c0.33	c0.09	0.05
v/s Ratio Perm						
v/c Ratio	0.28			0.41	0.63	0.40
Uniform Delay, d1	3.5			4.0	61.3	59.3
Progression Factor	0.10			0.25	1.00	1.00
Incremental Delay, d2	0.2			0.4	1.9	0.3
Delay (s)	0.6			1.4	63.2	59.6
Level of Service	A			A	E	E
Approach Delay (s)	0.6			1.4	60.9	
Approach LOS	A			A	E	

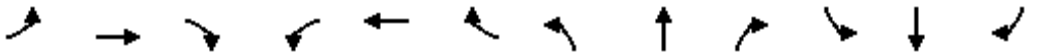
Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	853	399	0	949	0	0	0	167	119	151	186
Future Volume (vph)	0	853	399	0	949	0	0	0	167	119	151	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0				4.0	4.0	4.0	4.0
Lane Util. Factor		0.91			0.95				1.00	0.97	1.00	1.00
Frpb, ped/bikes		1.00			1.00				1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00			1.00				1.00	1.00	1.00	1.00
Frt		0.95			1.00				0.86	1.00	1.00	0.85
Flt Protected		1.00			1.00				1.00	0.95	1.00	1.00
Satd. Flow (prot)		4906			3574				1627	3400	1881	1568
Flt Permitted		1.00			1.00				1.00	0.95	1.00	1.00
Satd. Flow (perm)		4906			3574				1627	3400	1881	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	898	420	0	999	0	0	0	176	125	159	196
RTOR Reduction (vph)	0	27	0	0	0	0	0	0	32	0	0	115
Lane Group Flow (vph)	0	1291	0	0	999	0	0	0	144	125	159	81
Confl. Peds. (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	0%	0%	1%	3%	1%	3%
Turn Type		NA			NA				Perm	Split	NA	Prot
Protected Phases		6			2					8	8	8
Permitted Phases									6			
Actuated Green, G (s)		121.8			121.8				121.8	18.2	18.2	18.2
Effective Green, g (s)		122.8			122.8				122.8	19.2	19.2	19.2
Actuated g/C Ratio		0.82			0.82				0.82	0.13	0.13	0.13
Clearance Time (s)		5.0			5.0				5.0	5.0	5.0	5.0
Vehicle Extension (s)		2.5			2.5				2.5	2.5	2.5	2.5
Lane Grp Cap (vph)		4016			2925				1331	435	240	200
v/s Ratio Prot		0.26			c0.28					0.04	c0.08	0.05
v/s Ratio Perm									0.09			
v/c Ratio		0.32			0.34				0.11	0.29	0.66	0.40
Uniform Delay, d1		3.3			3.4				2.7	59.2	62.3	60.1
Progression Factor		1.09			1.14				1.00	1.00	1.00	1.00
Incremental Delay, d2		0.2			0.3				0.2	0.3	6.1	1.0
Delay (s)		3.9			4.2				2.9	59.5	68.4	61.1
Level of Service		A			A				A	E	E	E
Approach Delay (s)		3.9			4.2			2.9			63.1	
Approach LOS		A			A			A			E	

Intersection Summary			
HCM 2000 Control Delay	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	261	663	115	442	609	171	250	492	368	313	331	59
Future Volume (vph)	261	663	115	442	609	171	250	492	368	313	331	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.95	0.88	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	5136	1579	3467	3574	2814	3467	3574	1587	3467	3574	1584
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	5136	1579	3467	3574	2814	3467	3574	1587	3467	3574	1584
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	272	691	120	460	634	178	260	512	383	326	345	61
RTOR Reduction (vph)	0	0	60	0	0	66	0	0	81	0	0	36
Lane Group Flow (vph)	272	691	60	460	634	112	260	513	302	326	345	25
Confl. Peds. (#/hr)			4	4			6		3	3		6
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Actuated Green, G (s)	26.0	52.7	68.0	24.6	51.4	69.7	15.3	26.4	51.0	18.3	29.4	55.4
Effective Green, g (s)	29.3	55.2	74.6	27.9	53.8	76.3	18.6	29.3	57.6	21.6	32.3	62.0
Actuated g/C Ratio	0.20	0.37	0.50	0.19	0.36	0.51	0.12	0.20	0.38	0.14	0.22	0.41
Clearance Time (s)	7.3	6.5	7.3	7.3	6.4	7.3	7.3	6.9	7.3	7.3	6.9	7.3
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	677	1890	785	644	1281	1506	429	698	609	499	769	654
v/s Ratio Prot	c0.08	0.13	0.01	c0.13	c0.18	0.01	0.07	c0.14	0.09	c0.09	0.10	0.01
v/s Ratio Perm			0.03			0.03			0.10			0.01
v/c Ratio	0.40	0.37	0.08	0.71	0.49	0.07	0.61	0.73	0.50	0.65	0.45	0.04
Uniform Delay, d1	52.7	34.6	19.7	57.3	37.5	18.8	62.2	56.7	35.2	60.7	51.1	26.2
Progression Factor	1.15	1.19	2.79	0.68	0.79	0.47	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.5	0.0	2.0	0.9	0.0	1.7	3.5	0.2	2.3	0.2	0.0
Delay (s)	60.6	41.7	55.0	41.0	30.5	8.8	63.9	60.2	35.4	63.0	51.3	26.2
Level of Service	E	D	E	D	C	A	E	E	D	E	D	C
Approach Delay (s)		48.0			31.2			52.8			54.4	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	45.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

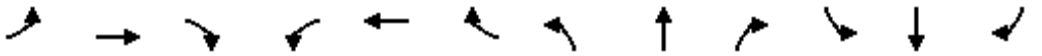
Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑							↱
Traffic Vol, veh/h	0	408	965	643	1333	0	0	0	0	0	0	0
Future Vol, veh/h	0	408	965	643	1333	0	0	0	0	0	0	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	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	150	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	91	91	91	91	95	91	95	91	95	95	95
Heavy Vehicles, %	2	1	2	1	1	2	0	2	0	2	2	2
Mvmt Flow	0	448	1060	707	1465	0	0	0	0	0	0	0

Major/Minor	Major1			Major2						Minor2		
Conflicting Flow All	-	0	-	448	0	0				-	-	732
Stage 1	-	-	-	-	-	-				-	-	-
Stage 2	-	-	-	-	-	-				-	-	-
Critical Hdwy	-	-	-	4.12	-	-				-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-				-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-				-	-	-
Follow-up Hdwy	-	-	-	2.21	-	-				-	-	3.32
Pot Cap-1 Maneuver	0	-	0	1116	-	0				0	0	364
Stage 1	0	-	0	-	-	0				0	0	-
Stage 2	0	-	0	-	-	0				0	0	-
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	-	-	-	1116	-	-				-	0	364
Mov Cap-2 Maneuver	-	-	-	-	-	-				-	0	-
Stage 1	-	-	-	-	-	-				-	0	-
Stage 2	-	-	-	-	-	-				-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.4	0
HCM LOS			A

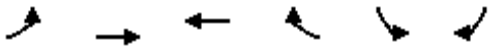
Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1
Capacity (veh/h)	-	1116	-	-
HCM Lane V/C Ratio	-	0.633	-	-
HCM Control Delay (s)	-	13.6	-	0
HCM Lane LOS	-	B	-	A
HCM 95th %tile Q(veh)	-	4.7	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	355	0	0	742	37	766	335	257	41	0	413
Future Volume (vph)	57	355	0	0	742	37	766	335	257	41	0	413
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	3.0			4.0		4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	1.00	0.95			0.95		0.97	1.00	1.00	1.00		1.00
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	0.99	1.00		1.00
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00	1.00		1.00
Frt	1.00	1.00			0.99		1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	1787	3574			3543		3433	1863	1561	1787		1599
Flt Permitted	0.95	1.00			1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	1787	3574			3543		3433	1863	1561	1787		1599
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	61	382	0	0	798	40	824	360	276	44	0	444
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	199	0	0	83
Lane Group Flow (vph)	61	382	0	0	835	0	824	360	77	44	0	361
Confl. Peds. (#/hr)	4		1	1		4			1	1		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Turn Type	Prot	NA			NA		Split	NA	Perm	Prot		Prot
Protected Phases	1	6			2		7	7		8		8
Permitted Phases					2				7			8
Actuated Green, G (s)	5.8	56.4			44.4		40.3	40.3	40.3	36.4		36.4
Effective Green, g (s)	7.7	59.2			46.5		41.9	41.9	41.9	37.9		37.9
Actuated g/C Ratio	0.05	0.39			0.31		0.28	0.28	0.28	0.25		0.25
Clearance Time (s)	5.9	5.8			6.1		5.6	5.6	5.6	5.5		5.5
Vehicle Extension (s)	2.0	2.0			2.0		2.0	2.0	2.0	2.0		2.0
Lane Grp Cap (vph)	91	1410			1098		958	520	436	451		404
v/s Ratio Prot	c0.03	0.11			c0.24		c0.24	0.19		0.02		c0.23
v/s Ratio Perm									0.05			
v/c Ratio	0.67	0.27			0.76		0.86	0.69	0.18	0.10		0.89
Uniform Delay, d1	69.9	30.8			46.7		51.3	48.3	41.0	42.9		54.1
Progression Factor	1.10	0.82			1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	13.2	0.4			5.0		7.7	3.2	0.1	0.0		20.9
Delay (s)	89.9	25.6			51.7		59.0	51.5	41.0	43.0		75.0
Level of Service	F	C			D		E	D	D	D		E
Approach Delay (s)		34.4			51.7			53.7			72.1	
Approach LOS		C			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	53.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		

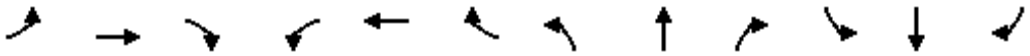
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	116	482	581	200	172	100
Future Volume (vph)	116	482	581	200	172	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.96		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1787	3574	3415		1787	1599
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1787	3574	3415		1787	1599
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	145	602	726	250	215	125
RTOR Reduction (vph)	0	0	17	0	0	103
Lane Group Flow (vph)	145	603	959	0	215	22
Confl. Peds. (#/hr)	2			2		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	1	6	2		4	
Permitted Phases						8
Actuated Green, G (s)	14.9	98.3	76.4		20.4	20.4
Effective Green, g (s)	16.8	99.5	78.7		22.5	22.5
Actuated g/C Ratio	0.13	0.77	0.61		0.17	0.17
Clearance Time (s)	5.9	5.2	6.3		6.1	6.1
Vehicle Extension (s)	2.0	2.0	2.0		2.0	2.0
Lane Grp Cap (vph)	230	2735	2067		309	276
v/s Ratio Prot	c0.08	0.17	c0.28		c0.12	
v/s Ratio Perm						0.01
v/c Ratio	0.63	0.22	0.46		0.70	0.08
Uniform Delay, d1	53.7	4.3	14.1		50.5	45.1
Progression Factor	1.00	1.00	1.05		1.00	1.00
Incremental Delay, d2	4.1	0.2	0.7		5.4	0.0
Delay (s)	57.7	4.5	15.5		55.9	45.1
Level of Service	E	A	B		E	D
Approach Delay (s)		14.8	15.5		52.0	
Approach LOS		B	B		D	

Intersection Summary			
HCM 2000 Control Delay	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.1
Intersection Capacity Utilization	48.5%	ICU Level of Service	A
Analysis Period (min)	15		

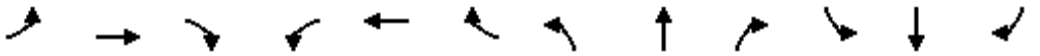
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	429	302	83	598	1	158	1	41	6	2	14
Future Volume (vph)	3	429	302	83	598	1	158	1	41	6	2	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	1.00		1.00	0.85		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3285		1805	1900		1736	1621		1543	1647	
Flt Permitted	0.31	1.00		0.27	1.00		0.55	1.00		0.73	1.00	
Satd. Flow (perm)	594	3285		513	1900		1013	1621		1179	1647	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	3	488	343	94	680	1	180	1	47	7	2	16
RTOR Reduction (vph)	0	60	0	0	0	0	0	38	0	0	15	0
Lane Group Flow (vph)	3	771	0	94	681	0	180	10	0	7	3	0
Confl. Peds. (#/hr)			2	2								
Heavy Vehicles (%)	0%	2%	2%	0%	0%	0%	4%	0%	0%	17%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	77.4	76.4		88.8	82.3		29.3	21.7		10.4	9.2	
Effective Green, g (s)	80.4	78.4		90.3	84.3		30.7	23.6		15.2	12.1	
Actuated g/C Ratio	0.62	0.60		0.69	0.65		0.24	0.18		0.12	0.09	
Clearance Time (s)	5.5	6.0		5.5	6.0		5.4	5.9		6.4	6.9	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	390	1981		439	1232		323	294		147	153	
v/s Ratio Prot	0.00	0.23		c0.01	c0.36		c0.06	0.01		0.00	0.00	
v/s Ratio Perm	0.00			0.13			c0.07			0.00		
v/c Ratio	0.01	0.39		0.21	0.55		0.56	0.03		0.05	0.02	
Uniform Delay, d1	10.7	13.4		7.6	12.5		42.4	43.8		50.9	53.6	
Progression Factor	1.01	1.10		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.6		0.1	1.8		1.2	0.0		0.0	0.0	
Delay (s)	10.8	15.3		7.7	14.3		43.6	43.8		51.0	53.6	
Level of Service	B	B		A	B		D	D		D	D	
Approach Delay (s)		15.3			13.5			43.6			52.9	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	18.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.1%	ICU Level of Service	B
Analysis Period (min)	15		

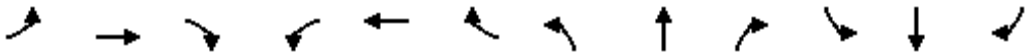
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	114	284	25	18	270	61	677	45	260	534	69
Future Volume (vph)	130	114	284	25	18	270	61	677	45	260	534	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	0.99	1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85	1.00	0.86		1.00	0.99		1.00	0.98	
Flt Protected		0.97	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1831	1600	1804	1598		1805	3536		1805	3464	
Flt Permitted		0.97	1.00	0.23	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1831	1600	439	1598		1805	3536		1805	3464	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	135	119	296	26	19	281	64	705	47	271	556	72
RTOR Reduction (vph)	0	0	222	0	244	0	0	3	0	0	6	0
Lane Group Flow (vph)	0	254	74	26	56	0	64	749	0	271	622	0
Confl. Peds. (#/hr)	1		1	1		1	2		2	2		2
Heavy Vehicles (%)	2%	0%	0%	0%	0%	1%	0%	1%	0%	0%	2%	3%
Turn Type	Split	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases	6	6	3		2		3	8		7	4	
Permitted Phases			6	2								
Actuated Green, G (s)		20.3	28.5	14.7	14.7		8.2	48.6		21.8	62.2	
Effective Green, g (s)		22.7	32.3	17.3	17.3		10.1	50.3		23.7	63.9	
Actuated g/C Ratio		0.17	0.25	0.13	0.13		0.08	0.39		0.18	0.49	
Clearance Time (s)		6.4	5.9	6.6	6.6		5.9	5.7		5.9	5.7	
Vehicle Extension (s)		1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lane Grp Cap (vph)		319	397	58	212		140	1368		329	1702	
v/s Ratio Prot		c0.14	0.01		0.04		0.04	c0.21		c0.15	0.18	
v/s Ratio Perm			0.03	c0.06								
v/c Ratio		0.80	0.19	0.45	0.27		0.46	0.55		0.82	0.37	
Uniform Delay, d1		51.4	38.5	52.0	50.6		57.3	31.0		51.1	20.5	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		12.1	0.1	2.0	0.2		0.9	1.6		14.6	0.6	
Delay (s)		63.5	38.6	54.0	50.9		58.2	32.6		65.7	21.1	
Level of Service		E	D	D	D		E	C		E	C	
Approach Delay (s)		50.1			51.1			34.6			34.5	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	39.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	79.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	253	149	87	181	164	36	96	420	165	158	427	255
Future Volume (vph)	253	149	87	181	164	36	96	420	165	158	427	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		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	1.00	
Frt	1.00	0.94		1.00	0.97		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1695		1805	1790		1805	3362		1770	3322	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1695		1805	1790		1805	3362		1770	3322	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	269	159	93	193	174	38	102	447	176	168	454	271
RTOR Reduction (vph)	0	24	0	0	9	0	0	43	0	0	92	0
Lane Group Flow (vph)	269	228	0	193	203	0	102	580	0	168	633	0
Confl. Peds. (#/hr)	3		3	3		3	2		3	3		2
Confl. Bikes (#/hr)			1			1			1			
Heavy Vehicles (%)	2%	6%	4%	0%	3%	3%	0%	2%	2%	2%	2%	1%
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	16.4	16.7		12.7	13.0		6.1	25.9		10.6	30.6	
Effective Green, g (s)	18.3	18.6		14.6	14.9		8.0	28.1		12.7	32.8	
Actuated g/C Ratio	0.20	0.21		0.16	0.17		0.09	0.31		0.14	0.36	
Clearance Time (s)	5.9	5.9		5.9	5.9		5.9	6.2		6.1	6.2	
Vehicle Extension (s)	2.5	2.5		2.5	2.5		2.5	2.5		2.5	2.5	
Lane Grp Cap (vph)	359	350		292	296		160	1049		249	1210	
v/s Ratio Prot	c0.15	c0.13		0.11	0.11		0.06	0.17		c0.09	c0.19	
v/s Ratio Perm												
v/c Ratio	0.75	0.65		0.66	0.69		0.64	0.55		0.67	0.52	
Uniform Delay, d1	33.7	32.7		35.4	35.3		39.6	25.7		36.7	22.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.9	3.9		5.0	5.9		7.1	2.1		6.4	1.6	
Delay (s)	41.6	36.6		40.4	41.2		46.7	27.8		43.1	24.1	
Level of Service	D	D		D	D		D	C		D	C	
Approach Delay (s)		39.2			40.8			30.5			27.7	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	32.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	154	2	102	82	2	59
Future Volume (vph)	154	2	102	82	2	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	1.00		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3497		1597	3195	1337	1196
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	3497		1597	3195	1337	1196
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77
Adj. Flow (vph)	200	3	132	106	3	77
RTOR Reduction (vph)	1	0	0	0	0	70
Lane Group Flow (vph)	202	0	132	106	3	7
Heavy Vehicles (%)	3%	3%	13%	13%	35%	35%
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	6		5	2	4	
Permitted Phases						4
Actuated Green, G (s)	78.1		15.9	99.7	9.0	9.0
Effective Green, g (s)	79.8		17.6	101.4	10.6	10.6
Actuated g/C Ratio	0.66		0.15	0.85	0.09	0.09
Clearance Time (s)	5.7		5.7	5.7	5.6	5.6
Vehicle Extension (s)	2.0		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2325		234	2699	118	105
v/s Ratio Prot	c0.06		c0.08	0.03	0.00	
v/s Ratio Perm						c0.01
v/c Ratio	0.09		0.56	0.04	0.03	0.06
Uniform Delay, d1	7.1		47.6	1.5	50.0	50.2
Progression Factor	1.00		1.11	0.62	1.00	1.00
Incremental Delay, d2	0.0		1.8	0.0	0.0	0.1
Delay (s)	7.2		54.9	1.0	50.0	50.3
Level of Service	A		D	A	D	D
Approach Delay (s)	7.2			30.9	50.2	
Approach LOS	A			C	D	

Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.17		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	24.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

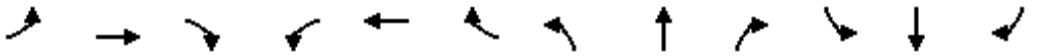
Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	256	207	95	246	15
Future Vol, veh/h	7	256	207	95	246	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	60	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	6	6	12	12	3	3
Mvmt Flow	8	301	244	112	289	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	355	0	-	0	466	178
Stage 1	-	-	-	-	299	-
Stage 2	-	-	-	-	167	-
Critical Hdwy	4.22	-	-	-	6.86	6.96
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	2.26	-	-	-	3.53	3.33
Pot Cap-1 Maneuver	1172	-	-	-	523	831
Stage 1	-	-	-	-	723	-
Stage 2	-	-	-	-	842	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1172	-	-	-	519	831
Mov Cap-2 Maneuver	-	-	-	-	519	-
Stage 1	-	-	-	-	723	-
Stage 2	-	-	-	-	836	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	20.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1172	-	-	-	530
HCM Lane V/C Ratio	0.007	-	-	-	0.579
HCM Control Delay (s)	8.1	-	-	-	20.7
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	3.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	153	358	371	205	0	0	0	0	172	1	91
Future Volume (vph)	0	153	358	371	205	0	0	0	0	172	1	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		1.00	1.00	0.91	0.91						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	0.98						0.95	1.00
Satd. Flow (prot)		1792	1553	1595	3166						1741	1380
Flt Permitted		1.00	1.00	0.95	0.98						0.95	1.00
Satd. Flow (perm)		1792	1553	1595	3166						1741	1380
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	176	411	426	236	0	0	0	0	198	1	105
RTOR Reduction (vph)	0	0	352	0	0	0	0	0	0	0	0	88
Lane Group Flow (vph)	0	176	59	217	445	0	0	0	0	0	199	17
Heavy Vehicles (%)	0%	6%	4%	3%	10%	0%	0%	0%	0%	4%	0%	17%
Turn Type		NA	Prot	Split	NA					Perm	NA	Perm
Protected Phases		6	6	2	2						8	
Permitted Phases										8		8
Actuated Green, G (s)		15.5	15.5	69.5	69.5						18.0	18.0
Effective Green, g (s)		17.2	17.2	71.2	71.2						19.6	19.6
Actuated g/C Ratio		0.14	0.14	0.59	0.59						0.16	0.16
Clearance Time (s)		5.7	5.7	5.7	5.7						5.6	5.6
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		256	222	946	1878						284	225
v/s Ratio Prot		c0.10	0.04	0.14	c0.14							
v/s Ratio Perm											0.11	0.01
v/c Ratio		0.69	0.27	0.23	0.24						0.70	0.08
Uniform Delay, d1		48.8	45.8	11.5	11.5						47.4	42.5
Progression Factor		0.96	1.26	1.01	1.00						1.00	1.00
Incremental Delay, d2		6.0	0.2	0.6	0.3						6.2	0.1
Delay (s)		52.8	57.7	12.1	11.8						53.7	42.6
Level of Service		D	E	B	B						D	D
Approach Delay (s)		56.2			11.9			0.0			49.8	
Approach LOS		E			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	36.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	38.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

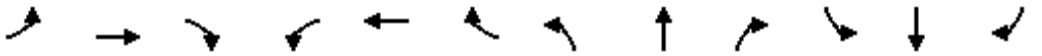
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	264	0	0	563	126	0	0	0	0	0	0
Future Vol, veh/h	75	264	0	0	563	126	0	0	0	0	0	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	95	95	84	84	95	95	95	84	95	84
Heavy Vehicles, %	5	2	2	2	6	11	2	2	2	0	2	0
Mvmt Flow	89	314	0	0	670	150	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	820	0	-	-	-	0	-	-	314
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.175	-	-	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.2475	-	-	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	791	-	0	0	-	-	0	0	726
Stage 1	-	-	0	0	-	-	0	0	-
Stage 2	-	-	0	0	-	-	0	0	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	791	-	-	-	-	-	-	0	726
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

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

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	-	791	-	-	-
HCM Lane V/C Ratio	-	0.113	-	-	-
HCM Control Delay (s)	0	10.1	-	-	-
HCM Lane LOS	A	B	-	-	-
HCM 95th %tile Q(veh)	-	0.4	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	214	0	0	378	41	117	187	141	60	0	202
Future Volume (vph)	17	214	0	0	378	41	117	187	141	60	0	202
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0		2.4
Lane Util. Factor		1.00			0.95		0.97	0.95		1.00		1.00
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00		1.00
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00		1.00
Frt		1.00			0.99		1.00	0.94		1.00		0.85
Flt Protected		1.00			1.00		0.95	1.00		0.95		1.00
Satd. Flow (prot)		1801			3413		3045	3216		1656		1553
Flt Permitted		0.96			1.00		0.95	1.00		0.95		1.00
Satd. Flow (perm)		1732			3413		3045	3216		1656		1553
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)	19	235	0	0	415	45	129	205	155	66	0	222
RTOR Reduction (vph)	0	0	0	0	4	0	0	129	0	0	0	191
Lane Group Flow (vph)	0	254	0	0	456	0	129	231	0	66	0	31
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	6%	5%	0%	0%	4%	5%	15%	5%	5%	9%	0%	4%
Turn Type	pm+pt	NA			NA		Split	NA		Prot		pm+ov
Protected Phases	5	2			6		8	8		7		5
Permitted Phases	2											7
Actuated Green, G (s)		82.3			72.8		12.8	12.8		8.1		13.6
Effective Green, g (s)		84.0			74.5		14.3	14.3		9.7		16.8
Actuated g/C Ratio		0.70			0.62		0.12	0.12		0.08		0.14
Clearance Time (s)		5.7			5.7		5.5	5.5		5.6		4.0
Vehicle Extension (s)		2.0			2.0		2.0	2.0		2.0		2.5
Lane Grp Cap (vph)		1216			2118		362	383		133		217
v/s Ratio Prot		c0.01			c0.13		0.04	c0.07		c0.04		0.01
v/s Ratio Perm		0.13										0.01
v/c Ratio		0.21			0.22		0.36	0.60		0.50		0.14
Uniform Delay, d1		6.3			10.0		48.6	50.2		52.8		45.3
Progression Factor		0.75			1.00		1.00	1.00		1.00		1.00
Incremental Delay, d2		0.0			0.2		0.2	1.8		1.1		0.2
Delay (s)		4.8			10.2		48.8	52.0		53.9		45.5
Level of Service		A			B		D	D		D		D
Approach Delay (s)		4.8			10.2			51.2			47.4	
Approach LOS		A			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	29.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	156	193	101	268	127	54
Future Volume (vph)	156	193	101	268	127	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	1.00			1.00	1.00	1.00
Frt	0.93			1.00	1.00	0.85
Flt Protected	1.00			0.99	0.95	1.00
Satd. Flow (prot)	1613			1838	1703	1524
Flt Permitted	1.00			0.82	0.95	1.00
Satd. Flow (perm)	1613			1528	1703	1524
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	162	201	105	279	132	56
RTOR Reduction (vph)	45	0	0	0	0	42
Lane Group Flow (vph)	319	0	0	384	132	14
Heavy Vehicles (%)	9%	9%	2%	2%	6%	6%
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	8	
Permitted Phases			2			8
Actuated Green, G (s)	19.0			19.0	8.2	8.2
Effective Green, g (s)	20.9			20.9	9.8	9.8
Actuated g/C Ratio	0.54			0.54	0.25	0.25
Clearance Time (s)	5.9			5.9	5.6	5.6
Vehicle Extension (s)	2.0			2.0	1.0	1.0
Lane Grp Cap (vph)	871			825	431	385
v/s Ratio Prot	0.20				c0.08	
v/s Ratio Perm				c0.25		0.01
v/c Ratio	0.37			0.47	0.31	0.04
Uniform Delay, d1	5.1			5.5	11.7	10.9
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			0.2	0.1	0.0
Delay (s)	5.2			5.6	11.8	10.9
Level of Service	A			A	B	B
Approach Delay (s)	5.2			5.6	11.6	
Approach LOS	A			A	B	

Intersection Summary			
HCM 2000 Control Delay	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	38.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	11
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	143	25	38	187	12	57	49	43	1	78	62
Future Vol, veh/h	20	143	25	38	187	12	57	49	43	1	78	62
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	6	6	6	5	5	5	2	2	2	2	2	2
Mvmt Flow	24	168	29	45	220	14	67	58	51	1	92	73
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	10.9	11.9	10.5	10.1
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	38%	11%	16%	1%
Vol Thru, %	33%	76%	79%	55%
Vol Right, %	29%	13%	5%	44%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	149	188	237	141
LT Vol	57	20	38	1
Through Vol	49	143	187	78
RT Vol	43	25	12	62
Lane Flow Rate	175	221	279	166
Geometry Grp	1	1	1	1
Degree of Util (X)	0.266	0.327	0.409	0.245
Departure Headway (Hd)	5.459	5.32	5.275	5.316
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	657	675	683	673
Service Time	3.501	3.358	3.31	3.359
HCM Lane V/C Ratio	0.266	0.327	0.408	0.247
HCM Control Delay	10.5	10.9	11.9	10.1
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.1	1.4	2	1

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	38	317	60	75	81	23
Future Vol, veh/h	38	317	60	75	81	23
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	75	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	5	5	10	10
Mvmt Flow	43	360	68	85	92	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	328	106	119	0	-	0
Stage 1	106	-	-	-	-	-
Stage 2	222	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.15	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.245	-	-	-
Pot Cap-1 Maneuver	671	954	1451	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	820	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	638	953	1451	-	-	-
Mov Cap-2 Maneuver	669	-	-	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	781	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	3.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1451	-	669	953	-	-
HCM Lane V/C Ratio	0.047	-	0.065	0.378	-	-
HCM Control Delay (s)	7.6	-	10.8	11.1	-	-
HCM Lane LOS	A	-	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	1.8	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	25	56	0	17	6	284	98	21	548	1
Future Vol, veh/h	1	0	25	56	0	17	6	284	98	21	548	1
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	7	0	0	6	0
Mvmt Flow	1	0	28	64	0	19	7	323	111	24	623	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1073	1121	624	1080	1066	380	624	0	0	436	0	0
Stage 1	671	671	-	394	394	-	-	-	-	-	-	-
Stage 2	402	450	-	686	672	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	200	208	489	197	224	671	967	-	-	1134	-	-
Stage 1	449	458	-	635	609	-	-	-	-	-	-	-
Stage 2	629	575	-	441	458	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	190	202	489	181	217	670	966	-	-	1134	-	-
Mov Cap-2 Maneuver	190	202	-	181	217	-	-	-	-	-	-	-
Stage 1	446	448	-	629	604	-	-	-	-	-	-	-
Stage 2	606	570	-	406	448	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.3	29.5	0.1	0.3
HCM LOS	B	D		

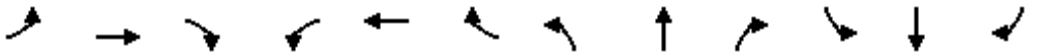
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	966	-	-	461	181	670	1134	-	-
HCM Lane V/C Ratio	0.007	-	-	0.064	0.352	0.029	0.021	-	-
HCM Control Delay (s)	8.8	-	-	13.3	35.3	10.5	8.2	-	-
HCM Lane LOS	A	-	-	B	E	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	1.5	0.1	0.1	-	-



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	384	266	0	504	331	14
Future Volume (vph)	384	266	0	504	331	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		0.95	0.97	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00
Frt	0.98	0.85		1.00	1.00	0.85
Flt Protected	1.00	1.00		1.00	0.95	1.00
Satd. Flow (prot)	3235	1374		3505	3400	1475
Flt Permitted	1.00	1.00		1.00	0.95	1.00
Satd. Flow (perm)	3235	1374		3505	3400	1475
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77
Adj. Flow (vph)	499	345	0	655	430	18
RTOR Reduction (vph)	17	189	0	0	0	6
Lane Group Flow (vph)	572	66	0	655	430	12
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	4%	7%	0%	3%	3%	8%
Turn Type	NA	Perm		NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases		2				8
Actuated Green, G (s)	32.3	32.3		32.3	86.1	86.1
Effective Green, g (s)	33.9	33.9		33.9	88.1	88.1
Actuated g/C Ratio	0.26	0.26		0.26	0.68	0.68
Clearance Time (s)	5.6	5.6		5.6	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	2.0	2.0
Lane Grp Cap (vph)	843	358		913	2304	999
v/s Ratio Prot	0.18			c0.19	c0.13	
v/s Ratio Perm		0.05				0.01
v/c Ratio	0.68	0.19		0.72	0.19	0.01
Uniform Delay, d1	43.2	37.3		43.7	7.7	6.8
Progression Factor	1.00	1.00		1.00	0.67	0.32
Incremental Delay, d2	2.2	0.3		2.7	0.2	0.0
Delay (s)	45.3	37.6		46.4	5.4	2.2
Level of Service	D	D		D	A	A
Approach Delay (s)	43.0			46.4	5.2	
Approach LOS	D			D	A	

Intersection Summary			
HCM 2000 Control Delay	35.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	286	15	24	379	232	19	77	34	321	141	91
Future Volume (vph)	74	286	15	24	379	232	19	77	34	321	141	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	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	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.94		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1736	3440		1736	3245		1752	1845	1551	1736	1827	1534
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1736	3440		1736	3245		1752	1845	1551	1736	1827	1534
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	82	318	17	27	421	258	21	86	38	357	157	101
RTOR Reduction (vph)	0	4	0	0	105	0	0	0	29	0	0	47
Lane Group Flow (vph)	82	331	0	27	574	0	21	86	10	357	157	54
Confl. Peds. (#/hr)	1		4	4		1	4		2	2		4
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	3%	3%	3%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	8.7	22.2		2.9	16.4		1.8	15.0	17.9	19.9	32.8	41.5
Effective Green, g (s)	10.1	24.4		4.3	18.6		3.2	16.8	20.7	21.3	34.9	44.3
Actuated g/C Ratio	0.12	0.29		0.05	0.22		0.04	0.20	0.25	0.26	0.42	0.54
Clearance Time (s)	5.4	6.2		5.4	6.2		5.4	5.8	5.4	5.4	6.1	5.4
Vehicle Extension (s)	1.7	1.7		1.7	1.7		1.7	3.0	1.7	1.7	3.0	1.7
Lane Grp Cap (vph)	211	1013		90	728		67	374	387	446	770	820
v/s Ratio Prot	0.05	c0.10		0.02	c0.18		0.01	0.05	0.00	c0.21	c0.09	0.01
v/s Ratio Perm									0.00			0.03
v/c Ratio	0.39	0.33		0.30	0.79		0.31	0.23	0.02	0.80	0.20	0.07
Uniform Delay, d1	33.5	22.8		37.8	30.2		38.7	27.6	23.4	28.8	15.2	9.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.1		0.7	5.2		1.0	0.3	0.0	9.4	0.1	0.0
Delay (s)	33.9	22.9		38.5	35.5		39.7	27.9	23.4	38.1	15.3	9.3
Level of Service	C	C		D	D		D	C	C	D	B	A
Approach Delay (s)		25.0			35.6			28.4			27.6	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	30.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	82.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	641	634	0	0	0
Future Vol, veh/h	0	641	634	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	5	3	0	0	0
Mvmt Flow	0	782	773	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	387
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	617
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	617
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	395	267	327	726	0	0
Future Volume (vph)	395	267	327	726	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		
Lane Util. Factor	0.95	1.00	0.97	0.95		
Frpb, ped/bikes	1.00	0.99	1.00	1.00		
Flpb, ped/bikes	1.00	1.00	1.00	1.00		
Frt	1.00	0.85	1.00	1.00		
Flt Protected	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	3374	1517	3433	3438		
Flt Permitted	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	3374	1517	3433	3438		
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	444	300	367	816	0	0
RTOR Reduction (vph)	0	55	0	0	0	0
Lane Group Flow (vph)	444	245	367	816	0	0
Confl. Peds. (#/hr)		1	1			
Heavy Vehicles (%)	7%	5%	2%	5%	0%	0%
Turn Type	NA	Perm	Prot	NA		
Protected Phases	2		1	6		
Permitted Phases		2				
Actuated Green, G (s)	100.3	100.3	18.5	130.0		
Effective Green, g (s)	101.4	101.4	20.6	130.0		
Actuated g/C Ratio	0.78	0.78	0.16	1.00		
Clearance Time (s)	5.1	5.1	6.1	5.4		
Vehicle Extension (s)	2.0	2.0	2.0	2.0		
Lane Grp Cap (vph)	2631	1183	543	3438		
v/s Ratio Prot	0.13		c0.11	c0.24		
v/s Ratio Perm		0.16				
v/c Ratio	0.17	0.21	0.68	0.24		
Uniform Delay, d1	3.6	3.8	51.6	0.0		
Progression Factor	1.00	1.00	1.16	1.00		
Incremental Delay, d2	0.1	0.4	2.6	0.2		
Delay (s)	3.8	4.2	62.3	0.2		
Level of Service	A	A	E	A		
Approach Delay (s)	3.9			19.4	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	13.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	391	0	0	723	315	364
Future Volume (vph)	391	0	0	723	315	364
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	1.00
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	4803			4988	1687	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	4803			4988	1687	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	434	0	0	803	350	404
RTOR Reduction (vph)	0	0	0	0	0	174
Lane Group Flow (vph)	434	0	0	803	350	230
Confl. Peds. (#/hr)		1	1			
Heavy Vehicles (%)	8%	0%	0%	4%	7%	2%
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases						8
Actuated Green, G (s)	84.1			84.2	34.1	34.1
Effective Green, g (s)	85.9			85.9	36.1	36.1
Actuated g/C Ratio	0.66			0.66	0.28	0.28
Clearance Time (s)	5.8			5.7	6.0	6.0
Vehicle Extension (s)	2.0			2.0	2.0	2.0
Lane Grp Cap (vph)	3173			3295	468	439
v/s Ratio Prot	0.09			c0.16	c0.21	
v/s Ratio Perm						0.15
v/c Ratio	0.14			0.24	0.75	0.52
Uniform Delay, d1	8.2			8.9	42.8	39.7
Progression Factor	0.93			0.69	1.00	1.00
Incremental Delay, d2	0.1			0.2	5.7	0.5
Delay (s)	7.7			6.3	48.5	40.2
Level of Service	A			A	D	D
Approach Delay (s)	7.7			6.3	44.0	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay	20.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

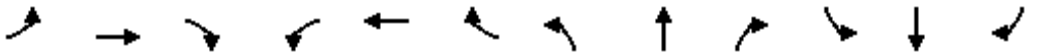
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	128	645	0	0	716	227	0	0	0	0	0	0
Future Vol, veh/h	128	645	0	0	716	227	0	0	0	0	0	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	-	-	Free	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	95	95	91	91	95	95	95	91	95	91
Heavy Vehicles, %	7	3	2	2	3	6	2	2	2	0	2	0
Mvmt Flow	141	709	0	0	787	249	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	787	0	-	-	-	0	-	-	354
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.24	-	-	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.27	-	-	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	796	-	0	0	-	0	0	0	642
Stage 1	-	-	0	0	-	0	0	0	-
Stage 2	-	-	0	0	-	0	0	0	-
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	796	-	-	-	-	-	-	0	642
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

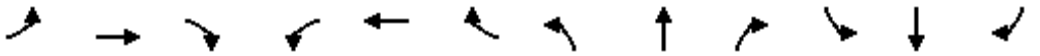
Approach	EB	WB	NB
HCM Control Delay, s	1.7	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT
Capacity (veh/h)	-	796	-	-
HCM Lane V/C Ratio	-	0.177	-	-
HCM Control Delay (s)	0	10.5	-	-
HCM Lane LOS	A	B	-	-
HCM 95th %tile Q(veh)	-	0.6	-	-



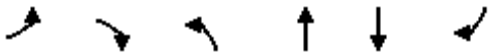
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	167	411	83	35	372	70	283	291	149	75	256	242
Future Volume (vph)	167	411	83	35	372	70	283	291	149	75	256	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3335	3438	1522	3433	3539	1562	3433	3539	1563	3367	3471	1541
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3335	3438	1522	3433	3539	1562	3433	3539	1563	3367	3471	1541
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	178	437	88	37	396	74	301	310	159	80	272	257
RTOR Reduction (vph)	0	0	33	0	0	34	0	0	110	0	0	91
Lane Group Flow (vph)	178	437	55	37	396	40	301	310	49	80	272	166
Confl. Peds. (#/hr)	2		1	1		2	1		6	6		1
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Actuated Green, G (s)	13.7	63.2	77.6	11.8	61.2	67.5	14.4	25.3	37.1	6.3	17.6	31.3
Effective Green, g (s)	15.2	65.1	80.6	13.3	63.2	70.5	15.9	27.8	40.1	7.8	19.7	34.3
Actuated g/C Ratio	0.12	0.50	0.62	0.10	0.49	0.54	0.12	0.21	0.31	0.06	0.15	0.26
Clearance Time (s)	5.5	5.9	5.5	5.5	6.0	5.5	5.5	6.5	5.5	5.5	6.1	5.5
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	389	1721	990	351	1720	847	419	756	482	202	525	454
v/s Ratio Prot	c0.05	c0.13	0.01	0.01	0.11	0.00	c0.09	0.09	0.01	0.02	c0.08	0.04
v/s Ratio Perm			0.03			0.02			0.02			0.06
v/c Ratio	0.46	0.25	0.06	0.11	0.23	0.05	0.72	0.41	0.10	0.40	0.52	0.37
Uniform Delay, d1	53.6	18.6	9.7	53.0	19.3	14.0	54.9	44.0	32.1	58.8	50.8	39.0
Progression Factor	1.01	0.88	0.81	0.89	1.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.3	0.0	0.0	0.3	0.0	4.9	0.1	0.0	0.5	0.4	0.2
Delay (s)	54.5	16.7	7.8	47.1	29.2	14.0	59.8	44.2	32.1	59.3	51.1	39.2
Level of Service	D	B	A	D	C	B	E	D	C	E	D	D
Approach Delay (s)		25.2			28.3			47.8			47.2	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	37.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	288	223	85	267	0	175	5	18	4	12	35
Future Volume (vph)	10	288	223	85	267	0	175	5	18	4	12	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	3.9	4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.98			0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.88			0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1752	1845	1535	1787	1881		1752	1596			1693	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.26	
Satd. Flow (perm)	1752	1845	1535	1787	1881		1752	1596			435	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	11	324	251	96	300	0	197	6	20	4	13	39
RTOR Reduction (vph)	0	0	74	0	0	0	0	17	0	0	36	0
Lane Group Flow (vph)	11	324	177	96	300	0	197	9	0	0	20	0
Confl. Peds. (#/hr)	5		2	2		5	2		1	1		2
Confl. Bikes (#/hr)						1			2			1
Heavy Vehicles (%)	3%	3%	3%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA		Perm	NA	
Protected Phases	5	2	8	1	6		8	8			7	
Permitted Phases			2							7		
Actuated Green, G (s)	2.2	70.1	88.4	11.5	79.4		18.3	18.3			8.3	
Effective Green, g (s)	3.6	71.8	91.6	12.9	81.0		19.9	19.9			9.5	
Actuated g/C Ratio	0.03	0.55	0.70	0.10	0.62		0.15	0.15			0.07	
Clearance Time (s)	5.4	5.6	5.6	5.4	5.6		5.6	5.6			5.2	
Vehicle Extension (s)	1.0	2.0	1.0	2.0	1.0		1.0	1.0			1.0	
Lane Grp Cap (vph)	48	1019	1081	177	1172		268	244			31	
v/s Ratio Prot	0.01	c0.18	0.03	c0.05	0.16		c0.11	0.01				
v/s Ratio Perm			0.09								c0.05	
v/c Ratio	0.23	0.32	0.16	0.54	0.26		0.74	0.04			0.64	
Uniform Delay, d1	61.8	15.8	6.4	55.7	11.0		52.5	46.9			58.6	
Progression Factor	0.73	1.14	2.11	0.64	1.78		1.00	1.00			1.00	
Incremental Delay, d2	0.9	0.8	0.0	1.6	0.5		8.7	0.0			29.1	
Delay (s)	45.9	18.8	13.6	37.1	20.0		61.2	46.9			87.7	
Level of Service	D	B	B	D	B		E	D			F	
Approach Delay (s)		17.0			24.1			59.6			87.7	
Approach LOS		B			C			E			F	

Intersection Summary			
HCM 2000 Control Delay	29.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	63	193	150	71	128	200
Future Volume (vph)	63	193	150	71	128	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.92	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1719	1538	1703	1792	1709	
Flt Permitted	0.95	1.00	0.15	1.00	1.00	
Satd. Flow (perm)	1719	1538	275	1792	1709	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	72	219	170	81	145	227
RTOR Reduction (vph)	0	85	0	0	54	0
Lane Group Flow (vph)	72	134	170	81	318	0
Confl. Peds. (#/hr)	1					
Heavy Vehicles (%)	5%	5%	6%	6%	2%	2%
Turn Type	Prot	pm+ov	pm+pt	NA	NA	
Protected Phases	6	3	3	8	4	
Permitted Phases		6	8			
Actuated Green, G (s)	60.7	75.5	50.7	50.7	29.8	
Effective Green, g (s)	62.1	79.5	52.7	52.1	31.3	
Actuated g/C Ratio	0.48	0.61	0.41	0.40	0.24	
Clearance Time (s)	5.4	6.0	6.0	5.4	5.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	821	940	296	718	411	
v/s Ratio Prot	0.04	c0.02	c0.07	0.05	c0.19	
v/s Ratio Perm		0.07	0.16			
v/c Ratio	0.09	0.14	0.57	0.11	0.77	
Uniform Delay, d1	18.5	10.7	28.6	24.4	46.0	
Progression Factor	1.43	1.06	1.00	1.00	1.00	
Incremental Delay, d2	0.2	0.1	2.7	0.1	8.8	
Delay (s)	26.7	11.5	31.3	24.5	54.9	
Level of Service	C	B	C	C	D	
Approach Delay (s)	15.2			29.1	54.9	
Approach LOS	B			C	D	

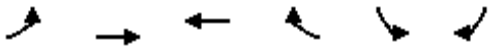
Intersection Summary			
HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Intersection Delay, s/veh	4.9
Intersection LOS	A

Approach	EB	WB	NB	SB	NW
Entry Lanes	1	1	1	1	0
Conflicting Circle Lanes	1	1	1	1	1
Adj Approach Flow, veh/h	71	38	155	213	0
Demand Flow Rate, veh/h	73	39	159	219	0
Vehicles Circulating, veh/h	214	153	90	11	249
Vehicles Exiting, veh/h	16	96	197	181	0
Follow-Up Headway, s	3.186	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.8	4.2	5.0	5.1	0.0
Approach LOS	A	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	73	39	159	219
Cap Entry Lane, veh/h	912	970	1033	1118
Entry HV Adj Factor	0.973	0.974	0.974	0.975
Flow Entry, veh/h	71	38	155	214
Cap Entry, veh/h	887	945	1006	1090
V/C Ratio	0.080	0.040	0.154	0.196
Control Delay, s/veh	4.8	4.2	5.0	5.1
LOS	A	A	A	A
95th %tile Queue, veh	0	0	1	1



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	608	371	180	200	2
Future Volume (vph)	7	608	371	180	200	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	0.95		0.97	
Frpb, ped/bikes	1.00	1.00	0.99		1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.95		1.00	
Flt Protected	0.95	1.00	1.00		0.95	
Satd. Flow (prot)	1805	3471	3300		3179	
Flt Permitted	0.39	1.00	1.00		0.95	
Satd. Flow (perm)	733	3471	3300		3179	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	8	699	426	207	230	2
RTOR Reduction (vph)	0	0	24	0	1	0
Lane Group Flow (vph)	8	699	609	0	231	0
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	0%	4%	4%	2%	10%	50%
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		8	
Permitted Phases	2					
Actuated Green, G (s)	105.9	105.9	99.7		13.4	
Effective Green, g (s)	107.1	107.1	100.9		14.9	
Actuated g/C Ratio	0.82	0.82	0.78		0.11	
Clearance Time (s)	5.2	5.2	5.2		5.5	
Vehicle Extension (s)	2.0	2.0	2.0		1.5	
Lane Grp Cap (vph)	622	2859	2561		364	
v/s Ratio Prot	0.00	c0.20	0.18		c0.07	
v/s Ratio Perm	0.01					
v/c Ratio	0.01	0.24	0.24		0.63	
Uniform Delay, d1	2.2	2.5	4.0		55.0	
Progression Factor	0.81	0.79	1.00		1.00	
Incremental Delay, d2	0.0	0.2	0.2		2.7	
Delay (s)	1.8	2.2	4.2		57.6	
Level of Service	A	A	A		E	
Approach Delay (s)		2.2	4.2		57.6	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	29.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



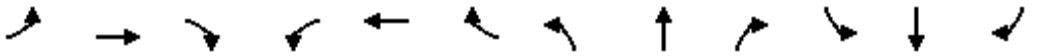
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	533	344	211	697	0	0
Future Volume (vph)	533	344	211	697	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		
Lane Util. Factor	0.95	1.00	1.00	0.95		
Frpb, ped/bikes	1.00	0.98	1.00	1.00		
Flpb, ped/bikes	1.00	1.00	1.00	1.00		
Frt	1.00	0.85	1.00	1.00		
Flt Protected	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	3471	1517	1671	3438		
Flt Permitted	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	3471	1517	1671	3438		
Peak-hour factor, PHF	1.00	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	533	370	227	749	0	0
RTOR Reduction (vph)	0	90	0	0	0	0
Lane Group Flow (vph)	533	280	227	749	0	0
Confl. Peds. (#/hr)		4	4			
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	4%	4%	8%	5%	0%	0%
Turn Type	NA	Perm	Prot	NA		
Protected Phases	6		5	2		
Permitted Phases		6				
Actuated Green, G (s)	97.3	97.3	22.3	130.0		
Effective Green, g (s)	98.5	98.5	23.5	130.0		
Actuated g/C Ratio	0.76	0.76	0.18	1.00		
Clearance Time (s)	5.2	5.2	5.2	5.2		
Vehicle Extension (s)	2.0	2.0	2.0	2.0		
Lane Grp Cap (vph)	2629	1149	302	3438		
v/s Ratio Prot	0.15		c0.14	0.22		
v/s Ratio Perm		c0.18				
v/c Ratio	0.20	0.24	0.75	0.22		
Uniform Delay, d1	4.5	4.7	50.5	0.0		
Progression Factor	1.00	1.00	0.99	1.00		
Incremental Delay, d2	0.2	0.5	8.8	0.1		
Delay (s)	4.7	5.2	59.0	0.1		
Level of Service	A	A	E	A		
Approach Delay (s)	4.9			13.8	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	528	0	0	769	135	397
Future Volume (vph)	528	0	0	769	135	397
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.88
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3471			3471	3273	2787
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3471			3471	3273	2787
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	562	0	0	818	144	422
RTOR Reduction (vph)	0	0	0	0	0	381
Lane Group Flow (vph)	562	0	0	818	144	41
Confl. Peds. (#/hr)		4	4			
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	4%	0%	0%	4%	7%	2%
Turn Type	NA			NA	Prot	Prot
Protected Phases	2			6	4	4
Permitted Phases						
Actuated Green, G (s)	107.8			107.4	9.6	9.6
Effective Green, g (s)	109.3			109.3	12.7	12.7
Actuated g/C Ratio	0.84			0.84	0.10	0.10
Clearance Time (s)	5.5			5.9	7.1	7.1
Vehicle Extension (s)	2.0			1.0	1.0	1.0
Lane Grp Cap (vph)	2918			2918	319	272
v/s Ratio Prot	0.16			c0.24	c0.04	0.01
v/s Ratio Perm						
v/c Ratio	0.19			0.28	0.45	0.15
Uniform Delay, d1	2.0			2.2	55.4	53.7
Progression Factor	1.01			0.22	1.00	1.00
Incremental Delay, d2	0.1			0.2	0.4	0.1
Delay (s)	2.1			0.7	55.7	53.8
Level of Service	A			A	E	D
Approach Delay (s)	2.1			0.7	54.3	
Approach LOS	A			A	D	

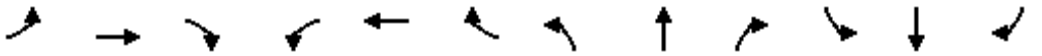
Intersection Summary			
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	748	185	0	612	0	0	0	62	256	151	163
Future Volume (vph)	0	748	185	0	612	0	0	0	62	256	151	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0				4.0	4.0	4.0	4.0
Lane Util. Factor		0.91			0.95				1.00	0.97	1.00	1.00
Frpb, ped/bikes		1.00			1.00				1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00			1.00				1.00	1.00	1.00	1.00
Frt		0.97			1.00				0.86	1.00	1.00	0.85
Flt Protected		1.00			1.00				1.00	0.95	1.00	1.00
Satd. Flow (prot)		4843			3406				1611	3400	1845	1553
Flt Permitted		1.00			1.00				1.00	0.95	1.00	1.00
Satd. Flow (perm)		4843			3406				1611	3400	1845	1553
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	804	199	0	658	0	0	0	67	275	162	175
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	57	0	0	149
Lane Group Flow (vph)	0	988	0	0	658	0	0	0	10	275	162	26
Confl. Peds. (#/hr)			2	2								
Heavy Vehicles (%)	0%	4%	1%	0%	6%	0%	0%	0%	2%	3%	3%	4%
Turn Type		NA			NA				Perm	Split	NA	Prot
Protected Phases		6			2					8	8	8
Permitted Phases									8			
Actuated Green, G (s)		101.9			101.9				18.1	18.1	18.1	18.1
Effective Green, g (s)		102.9			102.9				19.1	19.1	19.1	19.1
Actuated g/C Ratio		0.79			0.79				0.15	0.15	0.15	0.15
Clearance Time (s)		5.0			5.0				5.0	5.0	5.0	5.0
Vehicle Extension (s)		2.5			2.5				2.5	2.5	2.5	2.5
Lane Grp Cap (vph)		3833			2695				236	499	271	228
v/s Ratio Prot		c0.20			0.19					0.08	c0.09	0.02
v/s Ratio Perm									0.01			
v/c Ratio		0.26			0.24				0.04	0.55	0.60	0.11
Uniform Delay, d1		3.5			3.5				47.6	51.5	51.9	48.1
Progression Factor		1.00			0.35				1.00	1.00	1.00	1.00
Incremental Delay, d2		0.0			0.2				0.1	1.1	3.0	0.2
Delay (s)		3.6			1.4				47.6	52.5	54.8	48.3
Level of Service		A			A				D	D	D	D
Approach Delay (s)		3.6			1.4			47.6			51.9	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	194	796	48	278	465	164	125	313	419	211	135	19
Future Volume (vph)	194	796	48	278	465	164	125	313	419	211	135	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.95	0.88	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1562	3400	3505	2716	3400	3505	1558	3400	3505	1568
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1562	3400	3505	2716	3400	3505	1558	3400	3505	1568
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)	213	875	53	305	511	180	137	344	460	232	148	21
RTOR Reduction (vph)	0	0	24	0	0	88	0	0	103	0	0	11
Lane Group Flow (vph)	213	875	29	305	511	92	137	344	357	232	148	10
Confl. Peds. (#/hr)	1		4	4		1			1	1		
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Actuated Green, G (s)	35.9	54.8	63.6	17.7	36.7	49.4	8.8	16.8	34.5	12.7	20.7	56.6
Effective Green, g (s)	39.2	57.3	70.2	21.0	39.1	56.0	12.1	19.7	41.1	16.0	23.6	63.2
Actuated g/C Ratio	0.30	0.44	0.54	0.16	0.30	0.43	0.09	0.15	0.32	0.12	0.18	0.49
Clearance Time (s)	7.3	6.5	7.3	7.3	6.4	7.3	7.3	6.9	7.3	7.3	6.9	7.3
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	1035	2241	843	549	1054	1253	316	531	492	418	636	762
v/s Ratio Prot	0.06	c0.17	0.00	0.09	c0.15	0.01	0.04	0.10	c0.12	c0.07	0.04	0.00
v/s Ratio Perm			0.02			0.02			0.11			0.00
v/c Ratio	0.21	0.39	0.03	0.56	0.48	0.07	0.43	0.65	0.73	0.56	0.23	0.01
Uniform Delay, d1	33.8	24.6	14.0	50.2	37.2	21.7	55.7	51.9	39.4	53.6	45.5	17.3
Progression Factor	1.29	1.37	1.00	0.53	0.66	0.38	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.0	0.5	0.0	0.6	1.3	0.0	0.3	2.0	4.5	0.9	0.1	0.0
Delay (s)	43.7	34.0	14.0	27.0	25.7	8.2	56.1	53.9	43.9	54.6	45.5	17.3
Level of Service	D	C	B	C	C	A	E	D	D	D	D	B
Approach Delay (s)		34.9			23.0			49.3			49.3	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	37.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

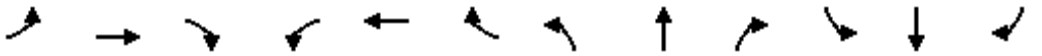
Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑							↱
Traffic Vol, veh/h	0	509	989	375	906	0	0	0	0	0	0	0
Future Vol, veh/h	0	509	989	375	906	0	0	0	0	0	0	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	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	150	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	92	92	92	92	95	92	95	92	95	95	95
Heavy Vehicles, %	2	4	4	4	5	2	0	2	0	2	2	2
Mvmt Flow	0	553	1075	408	985	0	0	0	0	0	0	0

Major/Minor	Major1			Major2						Minor2		
Conflicting Flow All	-	0	-	553	0	0				-	-	492
Stage 1	-	-	-	-	-	-				-	-	-
Stage 2	-	-	-	-	-	-				-	-	-
Critical Hdwy	-	-	-	4.18	-	-				-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-				-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-				-	-	-
Follow-up Hdwy	-	-	-	2.24	-	-				-	-	3.32
Pot Cap-1 Maneuver	0	-	0	999	-	0				0	0	522
Stage 1	0	-	0	-	-	0				0	0	-
Stage 2	0	-	0	-	-	0				0	0	-
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	-	-	-	999	-	-				-	0	522
Mov Cap-2 Maneuver	-	-	-	-	-	-				-	0	-
Stage 1	-	-	-	-	-	-				-	0	-
Stage 2	-	-	-	-	-	-				-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	3.2	0
HCM LOS			A

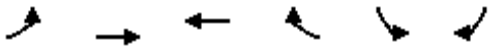
Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1
Capacity (veh/h)	-	999	-	-
HCM Lane V/C Ratio	-	0.408	-	-
HCM Control Delay (s)	-	11.1	-	0
HCM Lane LOS	-	B	-	A
HCM 95th %tile Q(veh)	-	2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	455	0	0	446	38	622	357	478	18	0	173
Future Volume (vph)	114	455	0	0	446	38	622	357	478	18	0	173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	3.0			4.0		4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	1.00	0.95			0.95		0.97	1.00	1.00	1.00		1.00
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	0.99	1.00		1.00
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00	1.00		1.00
Frt	1.00	1.00			0.99		1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	1770	3539			3457		3400	1845	1546	1736		1553
Flt Permitted	0.95	1.00			1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	1770	3539			3457		3400	1845	1546	1736		1553
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	142	569	0	0	558	48	778	446	598	22	0	216
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	266	0	0	201
Lane Group Flow (vph)	143	569	0	0	602	0	778	446	332	23	0	15
Confl. Peds. (#/hr)	1					1			1	1		
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	4%	4%	4%
Turn Type	Prot	NA			NA		Split	NA	Perm	Prot		Prot
Protected Phases	1	6			2		7	7		8		8
Permitted Phases					2				7			8
Actuated Green, G (s)	14.7	67.6			46.7		37.8	37.8	37.8	7.7		7.7
Effective Green, g (s)	16.6	70.4			48.8		39.4	39.4	39.4	9.2		9.2
Actuated g/C Ratio	0.13	0.54			0.38		0.30	0.30	0.30	0.07		0.07
Clearance Time (s)	5.9	5.8			6.1		5.6	5.6	5.6	5.5		5.5
Vehicle Extension (s)	2.0	2.0			2.0		2.0	2.0	2.0	2.0		2.0
Lane Grp Cap (vph)	226	1916			1297		1030	559	468	122		109
v/s Ratio Prot	c0.08	0.16			c0.17		0.23	c0.24		c0.01		0.01
v/s Ratio Perm									0.21			
v/c Ratio	0.63	0.30			0.46		0.76	0.80	0.71	0.19		0.14
Uniform Delay, d1	53.8	16.3			30.7		40.9	41.6	40.2	56.9		56.7
Progression Factor	1.18	0.72			1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	4.0	0.4			1.2		2.8	7.3	4.0	0.3		0.2
Delay (s)	67.7	12.0			31.9		43.8	48.9	44.2	57.2		56.9
Level of Service	E	B			C		D	D	D	E		E
Approach Delay (s)		23.2			31.9			45.2			56.9	
Approach LOS		C			C			D			E	

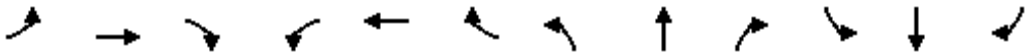
Intersection Summary			
HCM 2000 Control Delay	39.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	51	772	354	180	221	77
Future Volume (vph)	51	772	354	180	221	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.95		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1570	3539	3328		1719	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1570	3539	3328		1719	1583
Peak-hour factor, PHF	0.68	0.68	0.68	0.68	0.68	0.68
Adj. Flow (vph)	75	1135	521	265	325	113
RTOR Reduction (vph)	0	0	46	0	0	84
Lane Group Flow (vph)	75	1135	740	0	325	29
Heavy Vehicles (%)	15%	2%	3%	3%	5%	2%
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	1	6	2		4	
Permitted Phases						8
Actuated Green, G (s)	8.6	65.4	49.8		25.9	25.9
Effective Green, g (s)	10.5	66.6	52.1		28.0	28.0
Actuated g/C Ratio	0.10	0.61	0.47		0.25	0.25
Clearance Time (s)	5.9	5.2	6.3		6.1	6.1
Vehicle Extension (s)	2.0	2.0	2.0		2.0	2.0
Lane Grp Cap (vph)	149	2142	1576		437	402
v/s Ratio Prot	0.05	c0.32	0.22		c0.19	
v/s Ratio Perm						0.02
v/c Ratio	0.50	0.53	0.47		0.74	0.07
Uniform Delay, d1	47.3	12.6	19.6		37.7	31.1
Progression Factor	1.00	1.00	0.88		1.00	1.00
Incremental Delay, d2	1.0	0.9	0.8		5.9	0.0
Delay (s)	48.2	13.5	18.1		43.6	31.2
Level of Service	D	B	B		D	C
Approach Delay (s)		15.7	18.1		40.4	
Approach LOS		B	B		D	

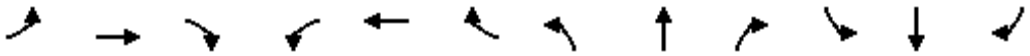
Intersection Summary			
HCM 2000 Control Delay	20.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	42.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	855	100	55	410	4	141	1	107	6	1	1
Future Volume (vph)	26	855	100	55	410	4	141	1	107	6	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	1.00		1.00	0.85		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3480		1752	1820		1787	1595		1356	1758	
Flt Permitted	0.35	1.00		0.12	1.00		0.48	1.00		0.66	1.00	
Satd. Flow (perm)	655	3480		222	1820		906	1595		939	1758	
Peak-hour factor, PHF	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Adj. Flow (vph)	38	1239	145	80	594	6	204	1	155	9	1	1
RTOR Reduction (vph)	0	5	0	0	0	0	0	133	0	0	1	0
Lane Group Flow (vph)	38	1379	0	80	600	0	204	23	0	9	1	0
Confl. Peds. (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	0%	1%	9%	3%	4%	25%	1%	0%	0%	33%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	69.2	65.8		73.0	67.7		21.5	13.9		5.8	4.6	
Effective Green, g (s)	72.2	67.8		76.0	69.7		22.9	15.8		10.6	7.5	
Actuated g/C Ratio	0.66	0.62		0.69	0.63		0.21	0.14		0.10	0.07	
Clearance Time (s)	5.5	6.0		5.5	6.0		5.4	5.9		6.4	6.9	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	481	2144		247	1153		283	229		104	119	
v/s Ratio Prot	0.00	c0.40		c0.02	0.33		c0.08	0.01		0.00	0.00	
v/s Ratio Perm	0.05			0.20			c0.07			0.01		
v/c Ratio	0.08	0.64		0.32	0.52		0.72	0.10		0.09	0.01	
Uniform Delay, d1	7.6	13.4		9.6	11.0		39.0	40.9		45.2	47.8	
Progression Factor	0.77	0.68		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	1.3		0.3	1.7		7.4	0.1		0.1	0.0	
Delay (s)	5.9	10.4		9.9	12.7		46.5	41.0		45.3	47.8	
Level of Service	A	B		A	B		D	D		D	D	
Approach Delay (s)		10.3			12.4			44.1			45.8	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	15.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.6%	ICU Level of Service	B
Analysis Period (min)	15		

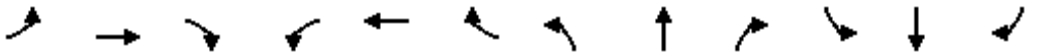
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	50	201	7	1	104	34	737	32	120	387	11
Future Volume (vph)	69	50	201	7	1	104	34	737	32	120	387	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85	1.00	0.85		1.00	0.99		1.00	1.00	
Flt Protected		0.97	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1825	1583	1805	1571		1805	3441		1805	3387	
Flt Permitted		0.97	1.00	0.40	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1825	1583	760	1571		1805	3441		1805	3387	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	77	56	223	8	1	116	38	819	36	133	430	12
RTOR Reduction (vph)	0	0	180	0	105	0	0	2	0	0	1	0
Lane Group Flow (vph)	0	133	43	8	12	0	38	853	0	133	441	0
Confl. Peds. (#/hr)							1					1
Heavy Vehicles (%)	2%	0%	2%	0%	0%	3%	0%	4%	10%	0%	6%	9%
Turn Type	Split	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases	6	6	3		2		3	8		7	4	
Permitted Phases			6	2								
Actuated Green, G (s)		11.2	17.4	7.4	7.4		6.2	55.4		11.4	60.6	
Effective Green, g (s)		13.6	21.2	10.0	10.0		8.1	57.1		13.3	62.3	
Actuated g/C Ratio		0.12	0.19	0.09	0.09		0.07	0.52		0.12	0.57	
Clearance Time (s)		6.4	5.9	6.6	6.6		5.9	5.7		5.9	5.7	
Vehicle Extension (s)		1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lane Grp Cap (vph)		225	305	69	142		132	1786		218	1918	
v/s Ratio Prot		c0.07	0.01		0.01		0.02	c0.25		c0.07	0.13	
v/s Ratio Perm			0.02	c0.01								
v/c Ratio		0.59	0.14	0.12	0.08		0.29	0.48		0.61	0.23	
Uniform Delay, d1		45.6	36.8	45.9	45.8		48.2	16.9		45.9	11.9	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.8	0.1	0.3	0.1		0.4	0.9		3.5	0.3	
Delay (s)		48.3	36.9	46.2	45.9		48.7	17.8		49.4	12.2	
Level of Service		D	D	D	D		D	B		D	B	
Approach Delay (s)		41.2			45.9			19.1			20.8	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	51.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	339	127	80	114	123	25	76	299	67	78	225	176
Future Volume (vph)	339	127	80	114	123	25	76	299	67	78	225	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		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	1.00	
Frt	1.00	0.94		1.00	0.97		1.00	0.97		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	1647		1719	1692		1752	3346		1703	3151	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1752	1647		1719	1692		1752	3346		1703	3151	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	368	138	87	124	134	27	83	325	73	85	245	191
RTOR Reduction (vph)	0	27	0	0	8	0	0	19	0	0	134	0
Lane Group Flow (vph)	368	198	0	124	153	0	83	379	0	85	302	0
Confl. Peds. (#/hr)	2		1	1		2	1		3	3		1
Confl. Bikes (#/hr)			1			1			1			
Heavy Vehicles (%)	3%	10%	5%	5%	9%	10%	3%	4%	6%	6%	6%	6%
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	23.0	24.9		10.0	11.9		6.6	24.9		6.1	24.6	
Effective Green, g (s)	24.9	26.8		11.9	13.8		8.5	27.1		8.2	26.8	
Actuated g/C Ratio	0.28	0.30		0.13	0.15		0.09	0.30		0.09	0.30	
Clearance Time (s)	5.9	5.9		5.9	5.9		5.9	6.2		6.1	6.2	
Vehicle Extension (s)	2.5	2.5		2.5	2.5		2.5	2.5		2.5	2.5	
Lane Grp Cap (vph)	484	490		227	259		165	1007		155	938	
v/s Ratio Prot	c0.21	0.12		0.07	c0.09		0.05	c0.11		c0.05	0.10	
v/s Ratio Perm												
v/c Ratio	0.76	0.40		0.55	0.59		0.50	0.38		0.55	0.32	
Uniform Delay, d1	29.8	25.2		36.5	35.5		38.7	24.8		39.1	24.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	6.6	0.4		2.1	2.8		1.8	1.1		3.1	0.9	
Delay (s)	36.4	25.6		38.6	38.3		40.5	25.9		42.2	25.5	
Level of Service	D	C		D	D		D	C		D	C	
Approach Delay (s)		32.3			38.4			28.4			28.2	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	163	5	129	195	0	137
Future Volume (vph)	163	5	129	195	0	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		4.0
Lane Util. Factor	0.95		1.00	0.95		1.00
Frt	1.00		1.00	1.00		0.85
Flt Protected	1.00		0.95	1.00		1.00
Satd. Flow (prot)	3489		1770	3539		1524
Flt Permitted	1.00		0.95	1.00		1.00
Satd. Flow (perm)	3489		1770	3539		1524
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	192	6	152	229	0	161
RTOR Reduction (vph)	1	0	0	0	0	149
Lane Group Flow (vph)	197	0	152	229	0	12
Heavy Vehicles (%)	3%	3%	2%	2%	6%	6%
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	6		5	2	4	
Permitted Phases						4
Actuated Green, G (s)	45.0		11.8	62.5		5.0
Effective Green, g (s)	46.7		13.5	64.2		6.6
Actuated g/C Ratio	0.53		0.15	0.73		0.07
Clearance Time (s)	5.7		5.7	5.7		5.6
Vehicle Extension (s)	2.0		2.0	2.0		2.0
Lane Grp Cap (vph)	1851		271	2581		114
v/s Ratio Prot	c0.06		c0.09	0.06		
v/s Ratio Perm						c0.01
v/c Ratio	0.11		0.56	0.09		0.11
Uniform Delay, d1	10.3		34.5	3.4		37.9
Progression Factor	1.00		1.03	1.07		1.00
Incremental Delay, d2	0.0		1.5	0.1		0.1
Delay (s)	10.3		37.1	3.8		38.1
Level of Service	B		D	A		D
Approach Delay (s)	10.3			17.1	38.1	
Approach LOS	B			B	D	

Intersection Summary			
HCM 2000 Control Delay	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	19.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

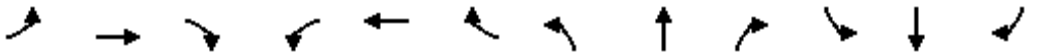
Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	322	341	146	172	19
Future Vol, veh/h	18	322	341	146	172	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	60	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	346	367	157	185	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	524	0	-	0	657	262
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	212	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1039	-	-	-	398	737
Stage 1	-	-	-	-	613	-
Stage 2	-	-	-	-	803	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1039	-	-	-	391	737
Mov Cap-2 Maneuver	-	-	-	-	391	-
Stage 1	-	-	-	-	613	-
Stage 2	-	-	-	-	788	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	22.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1039	-	-	-	410
HCM Lane V/C Ratio	0.019	-	-	-	0.501
HCM Control Delay (s)	8.5	-	-	-	22.3
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	2.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	182	265	477	357	0	0	0	0	342	0	117
Future Volume (vph)	0	182	265	477	357	0	0	0	0	342	0	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		1.00	1.00	0.91	0.91						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	0.98						0.95	1.00
Satd. Flow (prot)		1810	1568	1579	3265						1752	1524
Flt Permitted		1.00	1.00	0.95	0.98						0.95	1.00
Satd. Flow (perm)		1810	1568	1579	3265						1752	1524
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)	0	200	291	524	392	0	0	0	0	376	0	129
RTOR Reduction (vph)	0	0	241	0	0	0	0	0	0	0	0	93
Lane Group Flow (vph)	0	200	50	299	617	0	0	0	0	0	376	36
Heavy Vehicles (%)	0%	5%	3%	4%	4%	0%	0%	0%	0%	3%	0%	6%
Turn Type		NA	Perm	Split	NA					Perm	NA	Perm
Protected Phases		6		2	2						8	
Permitted Phases			6							8		8
Actuated Green, G (s)		13.7	13.7	34.9	34.9						22.9	22.9
Effective Green, g (s)		15.2	15.2	36.4	36.4						24.4	24.4
Actuated g/C Ratio		0.17	0.17	0.41	0.41						0.28	0.28
Clearance Time (s)		5.5	5.5	5.5	5.5						5.5	5.5
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		312	270	653	1350						485	422
v/s Ratio Prot		c0.11		c0.19	0.19							
v/s Ratio Perm			0.03								0.21	0.02
v/c Ratio		0.64	0.19	0.46	0.46						0.78	0.08
Uniform Delay, d1		33.9	31.1	18.7	18.7						29.3	23.5
Progression Factor		1.04	1.51	0.80	0.80						1.00	1.00
Incremental Delay, d2		3.3	0.1	2.0	1.0						6.9	0.0
Delay (s)		38.5	47.3	17.0	15.9						36.2	23.6
Level of Service		D	D	B	B						D	C
Approach Delay (s)		43.7			16.2			0.0			33.0	
Approach LOS		D			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	27.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

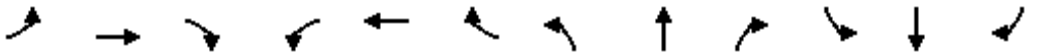
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	102	420	0	0	856	352	0	0	0	0	0	0
Future Vol, veh/h	102	420	0	0	856	352	0	0	0	0	0	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	95	95	91	91	95	95	95	91	95	91
Heavy Vehicles, %	0	2	2	2	1	1	2	2	2	0	2	0
Mvmt Flow	112	462	0	0	941	387	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1327	0	-	-	-	0	-	-	462
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.2	-	-	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	527	-	0	0	-	-	0	0	599
Stage 1	-	-	0	0	-	-	0	0	-
Stage 2	-	-	0	0	-	-	0	0	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	527	-	-	-	-	-	-	0	599
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

Approach	EB	WB	NB
HCM Control Delay, s	2.7	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	-	527	-	-	-
HCM Lane V/C Ratio	-	0.213	-	-	-
HCM Control Delay (s)	0	13.7	-	-	-
HCM Lane LOS	A	B	-	-	-
HCM 95th %tile Q(veh)	-	0.8	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	401	0	0	789	90	276	391	429	35	0	142
Future Volume (vph)	20	401	0	0	789	90	276	391	429	35	0	142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0		2.4
Lane Util. Factor		1.00			0.95		0.97	0.95		1.00		1.00
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00		1.00
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00		1.00
Frt		1.00			0.98		1.00	0.92		1.00		0.85
Flt Protected		1.00			1.00		0.95	1.00		0.95		1.00
Satd. Flow (prot)		1855			3508		3433	3280		1736		1615
Flt Permitted		0.95			1.00		0.95	1.00		0.95		1.00
Satd. Flow (perm)		1758			3508		3433	3280		1736		1615
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	22	451	0	0	887	101	310	439	482	39	0	160
RTOR Reduction (vph)	0	0	0	0	8	0	0	244	0	0	0	137
Lane Group Flow (vph)	0	473	0	0	980	0	310	677	0	39	0	23
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	6%	2%	0%	0%	1%	3%	2%	3%	0%	4%	0%	0%
Turn Type	pm+pt	NA			NA		Split	NA		Prot		pm+ov
Protected Phases	5	2			6		8	8		7		5
Permitted Phases	2											7
Actuated Green, G (s)		44.4			34.8		23.0	23.0		3.8		9.4
Effective Green, g (s)		46.1			36.5		24.5	24.5		5.4		12.6
Actuated g/C Ratio		0.52			0.41		0.28	0.28		0.06		0.14
Clearance Time (s)		5.7			5.7		5.5	5.5		5.6		4.0
Vehicle Extension (s)		2.5			2.5		2.5	2.5		2.5		2.5
Lane Grp Cap (vph)		928			1455		955	913		106		231
v/s Ratio Prot		c0.04			c0.28		0.09	c0.21		c0.02		0.01
v/s Ratio Perm		0.22										0.01
v/c Ratio		0.51			0.67		0.32	0.74		0.37		0.10
Uniform Delay, d1		13.6			20.9		25.2	28.9		39.7		32.8
Progression Factor		0.25			1.00		1.00	1.00		1.00		1.00
Incremental Delay, d2		0.3			2.5		0.1	3.1		1.6		0.1
Delay (s)		3.7			23.4		25.3	32.0		41.2		32.9
Level of Service		A			C		C	C		D		C
Approach Delay (s)		3.7			23.4			30.3			34.5	
Approach LOS		A			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	322	322	121	240	378	168
Future Volume (vph)	322	322	121	240	378	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	1.00			1.00	1.00	1.00
Frt	0.93			1.00	1.00	0.85
Flt Protected	1.00			0.98	0.95	1.00
Satd. Flow (prot)	1754			1832	1805	1615
Flt Permitted	1.00			0.49	0.95	1.00
Satd. Flow (perm)	1754			916	1805	1615
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	350	350	132	261	411	183
RTOR Reduction (vph)	30	0	0	0	0	126
Lane Group Flow (vph)	670	0	0	393	411	57
Heavy Vehicles (%)	1%	1%	2%	2%	0%	0%
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	8	
Permitted Phases			2			8
Actuated Green, G (s)	44.6			44.6	23.0	23.0
Effective Green, g (s)	46.5			46.5	24.6	24.6
Actuated g/C Ratio	0.59			0.59	0.31	0.31
Clearance Time (s)	5.9			5.9	5.6	5.6
Vehicle Extension (s)	2.0			2.0	1.0	1.0
Lane Grp Cap (vph)	1031			538	561	502
v/s Ratio Prot	0.38				c0.23	
v/s Ratio Perm				c0.43		0.04
v/c Ratio	0.65			0.73	0.73	0.11
Uniform Delay, d1	10.9			11.8	24.3	19.5
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	1.1			4.4	4.2	0.0
Delay (s)	12.0			16.1	28.6	19.5
Level of Service	B			B	C	B
Approach Delay (s)	12.0			16.1	25.8	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	79.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	86.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	13.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	61	269	84	24	189	7	58	78	58	5	46	45
Future Vol, veh/h	61	269	84	24	189	7	58	78	58	5	46	45
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	1	1	1	3	3	3	0	0	0
Mvmt Flow	65	286	89	26	201	7	62	83	62	5	49	48
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	16.5	11.6	11.7	10
HCM LOS	C	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	30%	15%	11%	5%
Vol Thru, %	40%	65%	86%	48%
Vol Right, %	30%	20%	3%	47%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	194	414	220	96
LT Vol	58	61	24	5
Through Vol	78	269	189	46
RT Vol	58	84	7	45
Lane Flow Rate	206	440	234	102
Geometry Grp	1	1	1	1
Degree of Util (X)	0.332	0.627	0.357	0.165
Departure Headway (Hd)	5.789	5.126	5.493	5.819
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	619	705	653	613
Service Time	3.848	3.171	3.547	3.888
HCM Lane V/C Ratio	0.333	0.624	0.358	0.166
HCM Control Delay	11.7	16.5	11.6	10
HCM Lane LOS	B	C	B	A
HCM 95th-tile Q	1.5	4.4	1.6	0.6

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	199	313	84	113	35
Future Vol, veh/h	31	199	313	84	113	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	75	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	5	5
Mvmt Flow	34	219	344	92	124	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	923	143	163	0	-	0
Stage 1	143	-	-	-	-	-
Stage 2	780	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	299	905	1416	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	452	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	226	905	1416	-	-	-
Mov Cap-2 Maneuver	296	-	-	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	342	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.3	6.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1416	-	296	905	-	-
HCM Lane V/C Ratio	0.243	-	0.115	0.242	-	-
HCM Control Delay (s)	8.4	-	18.7	10.2	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	1	-	0.4	0.9	-	-

Intersection	
Int Delay, s/veh	68.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	15	190	0	45	18	590	170	49	532	1
Future Vol, veh/h	2	0	15	190	0	45	18	590	170	49	532	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	14	0	0	0	6	2	0	0	1	0
Mvmt Flow	2	0	16	204	0	48	19	634	183	53	572	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1467	1534	573	1451	1443	726	573	0	0	817	0	0
Stage 1	678	678	-	765	765	-	-	-	-	-	-	-
Stage 2	789	856	-	686	678	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.34	7.1	6.5	6.2	4.16	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.426	3.5	4	3.3	2.254	-	-	2.2	-	-
Pot Cap-1 Maneuver	107	118	497	~ 110	133	428	980	-	-	820	-	-
Stage 1	445	455	-	399	415	-	-	-	-	-	-	-
Stage 2	387	377	-	441	455	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	89	108	497	~ 100	122	428	980	-	-	820	-	-
Mov Cap-2 Maneuver	89	108	-	~ 100	122	-	-	-	-	-	-	-
Stage 1	436	426	-	391	407	-	-	-	-	-	-	-
Stage 2	337	370	-	399	426	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.8	$ 465.7	0.2	0.8
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	980	-	-	323	100	428	820	-	-
HCM Lane V/C Ratio	0.02	-	-	0.057	2.043	0.113	0.064	-	-
HCM Control Delay (s)	8.7	-	-	16.8	$ 572.6	14.5	9.7	-	-
HCM Lane LOS	A	-	-	C	F	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	17.4	0.4	0.2	-	-

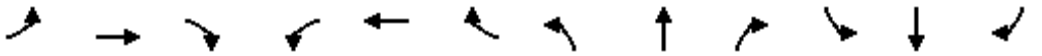
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	463	442	0	544	655	67
Future Volume (vph)	463	442	0	544	655	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		0.95	0.97	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00
Frt	0.96	0.85		1.00	1.00	0.85
Flt Protected	1.00	1.00		1.00	0.95	1.00
Satd. Flow (prot)	3241	1413		3574	3467	1553
Flt Permitted	1.00	1.00		1.00	0.95	1.00
Satd. Flow (perm)	3241	1413		3574	3467	1553
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	532	508	0	625	753	77
RTOR Reduction (vph)	29	234	0	0	0	15
Lane Group Flow (vph)	691	86	0	625	753	62
Confl. Peds. (#/hr)						4
Heavy Vehicles (%)	2%	4%	0%	1%	1%	2%
Turn Type	NA	Perm		NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases		2				8
Actuated Green, G (s)	38.8	38.8		38.8	99.6	99.6
Effective Green, g (s)	40.4	40.4		40.4	101.6	101.6
Actuated g/C Ratio	0.27	0.27		0.27	0.68	0.68
Clearance Time (s)	5.6	5.6		5.6	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	2.0	2.0
Lane Grp Cap (vph)	872	380		962	2348	1051
v/s Ratio Prot	c0.21			0.17	c0.22	
v/s Ratio Perm		0.06				0.04
v/c Ratio	0.79	0.23		0.65	0.32	0.06
Uniform Delay, d1	50.9	42.6		48.5	10.0	8.1
Progression Factor	1.00	1.00		1.00	0.64	0.57
Incremental Delay, d2	5.0	0.3		1.5	0.3	0.1
Delay (s)	55.9	43.0		50.1	6.8	4.7
Level of Service	E	D		D	A	A
Approach Delay (s)	51.9			50.1	6.6	
Approach LOS	D			D	A	

Intersection Summary			
HCM 2000 Control Delay	36.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	145	428	27	59	597	451	26	136	127	383	230	124
Future Volume (vph)	145	428	27	59	597	451	26	136	127	383	230	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	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	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.94		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	3542		1787	3310		1770	1863	1565	1787	1881	1567
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1787	3542		1787	3310		1770	1863	1565	1787	1881	1567
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	154	455	29	63	635	480	28	145	135	407	245	132
RTOR Reduction (vph)	0	4	0	0	120	0	0	0	103	0	0	68
Lane Group Flow (vph)	154	480	0	63	995	0	28	145	32	407	245	64
Confl. Peds. (#/hr)	1					1	12		4	4		12
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	12.0	39.3		7.6	34.9		2.8	16.6	24.2	26.9	40.4	52.4
Effective Green, g (s)	13.4	41.5		9.0	37.1		4.2	18.4	27.0	28.3	42.5	55.2
Actuated g/C Ratio	0.12	0.37		0.08	0.33		0.04	0.16	0.24	0.25	0.38	0.49
Clearance Time (s)	5.4	6.2		5.4	6.2		5.4	5.8	5.4	5.4	6.1	5.4
Vehicle Extension (s)	1.7	1.7		1.7	1.7		1.7	3.0	1.7	1.7	3.0	1.7
Lane Grp Cap (vph)	211	1298		142	1084		65	302	373	446	706	764
v/s Ratio Prot	c0.09	0.14		0.04	c0.30		0.02	c0.08	0.01	c0.23	0.13	0.01
v/s Ratio Perm									0.01			0.03
v/c Ratio	0.73	0.37		0.44	0.92		0.43	0.48	0.09	0.91	0.35	0.08
Uniform Delay, d1	48.2	26.3		49.7	36.6		53.3	43.1	33.5	41.2	25.4	15.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.2	0.1		0.8	11.8		1.7	1.2	0.0	22.5	0.3	0.0
Delay (s)	58.4	26.3		50.5	48.3		55.0	44.3	33.5	63.7	25.7	15.5
Level of Service	E	C		D	D		D	D	C	E	C	B
Approach Delay (s)		34.1			48.5			40.5			43.7	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	43.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	113.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	938	1108	0	0	0
Future Vol, veh/h	0	938	1108	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	3	1	0	0	0
Mvmt Flow	0	1009	1191	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	596
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	452
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	452
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	709	305	461	1128	0	0
Future Volume (vph)	709	305	461	1128	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		
Lane Util. Factor	0.95	1.00	0.97	0.95		
Frpb, ped/bikes	1.00	0.98	1.00	1.00		
Flpb, ped/bikes	1.00	1.00	1.00	1.00		
Frt	1.00	0.85	1.00	1.00		
Flt Protected	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	3539	1521	3467	3539		
Flt Permitted	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	3539	1521	3467	3539		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	754	324	490	1200	0	0
RTOR Reduction (vph)	0	46	0	0	0	0
Lane Group Flow (vph)	754	278	490	1200	0	0
Confl. Peds. (#/hr)		4	4			
Heavy Vehicles (%)	2%	4%	1%	2%	0%	0%
Turn Type	NA	Perm	Prot	NA		
Protected Phases	2		1	6		
Permitted Phases		2				
Actuated Green, G (s)	112.7	112.7	26.1	150.0		
Effective Green, g (s)	113.8	113.8	28.2	150.0		
Actuated g/C Ratio	0.76	0.76	0.19	1.00		
Clearance Time (s)	5.1	5.1	6.1	5.4		
Vehicle Extension (s)	2.0	2.0	2.0	2.0		
Lane Grp Cap (vph)	2684	1153	651	3539		
v/s Ratio Prot	0.21		c0.14	c0.34		
v/s Ratio Perm		0.18				
v/c Ratio	0.28	0.24	0.75	0.34		
Uniform Delay, d1	5.6	5.3	57.6	0.0		
Progression Factor	1.00	1.00	1.01	1.00		
Incremental Delay, d2	0.3	0.5	4.0	0.2		
Delay (s)	5.8	5.8	62.3	0.2		
Level of Service	A	A	E	A		
Approach Delay (s)	5.8			18.2	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	13.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	711	0	0	1055	521	383
Future Volume (vph)	711	0	0	1055	521	383
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	1.00
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	5085			5136	1752	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	5085			5136	1752	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	748	0	0	1111	548	403
RTOR Reduction (vph)	0	0	0	0	0	39
Lane Group Flow (vph)	748	0	0	1111	548	364
Confl. Peds. (#/hr)		4	4			
Heavy Vehicles (%)	2%	0%	0%	1%	3%	2%
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases						8
Actuated Green, G (s)	79.8			79.9	58.4	58.4
Effective Green, g (s)	81.6			81.6	60.4	60.4
Actuated g/C Ratio	0.54			0.54	0.40	0.40
Clearance Time (s)	5.8			5.7	6.0	6.0
Vehicle Extension (s)	2.0			2.0	2.0	2.0
Lane Grp Cap (vph)	2766			2793	705	637
v/s Ratio Prot	0.15			c0.22	c0.31	
v/s Ratio Perm						0.23
v/c Ratio	0.27			0.40	0.78	0.57
Uniform Delay, d1	18.3			19.9	39.0	34.7
Progression Factor	1.12			1.00	1.00	1.00
Incremental Delay, d2	0.2			0.4	4.9	0.8
Delay (s)	20.8			20.3	43.9	35.5
Level of Service	C			C	D	D
Approach Delay (s)	20.8			20.3	40.3	
Approach LOS	C			C	D	

Intersection Summary			
HCM 2000 Control Delay	27.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

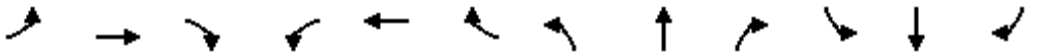
Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	266	822	0	0	1055	628	0	0	0	0	0	0
Future Vol, veh/h	266	822	0	0	1055	628	0	0	0	0	0	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	-	-	Free	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	95	95	92	92	95	95	95	92	95	92
Heavy Vehicles, %	2	2	2	2	1	2	2	2	2	0	2	0
Mvmt Flow	289	893	0	0	1147	683	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1147	0	-	-	-	0	-	-	447
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	605	-	0	0	-	0	0	0	559
Stage 1	-	-	0	0	-	0	0	0	-
Stage 2	-	-	0	0	-	0	0	0	-
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	605	-	-	-	-	-	-	0	559
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

Approach	EB	WB	NB
HCM Control Delay, s	4	0	0
HCM LOS			A

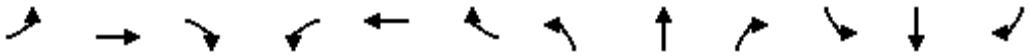
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT
Capacity (veh/h)	-	605	-	-
HCM Lane V/C Ratio	-	0.478	-	-
HCM Control Delay (s)	0	16.3	-	-
HCM Lane LOS	A	C	-	-
HCM 95th %tile Q(veh)	-	2.6	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	345	240	175	142	715	175	428	422	100	52	375	438
Future Volume (vph)	345	240	175	142	715	175	428	422	100	52	375	438
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	3574	1583	3433	3539	1558	3467	3574	1580	3467	3574	1588
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	3574	1583	3433	3539	1558	3467	3574	1580	3467	3574	1588
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	392	273	199	161	812	199	486	480	114	59	426	498
RTOR Reduction (vph)	0	0	44	0	0	92	0	0	74	0	0	78
Lane Group Flow (vph)	392	273	155	161	813	107	486	480	40	59	426	420
Confl. Peds. (#/hr)	4		1	1		4	4		3	3		4
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Actuated Green, G (s)	27.8	58.0	78.8	9.0	39.1	44.7	20.8	34.0	43.0	5.6	19.2	47.0
Effective Green, g (s)	29.3	59.9	81.8	10.5	41.1	47.7	22.3	36.5	46.0	7.1	21.3	50.0
Actuated g/C Ratio	0.23	0.46	0.63	0.08	0.32	0.37	0.17	0.28	0.35	0.05	0.16	0.38
Clearance Time (s)	5.5	5.9	5.5	5.5	6.0	5.5	5.5	6.5	5.5	5.5	6.1	5.5
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	781	1646	996	277	1118	571	594	1003	559	189	585	659
v/s Ratio Prot	0.11	0.08	0.03	0.05	c0.23	0.01	c0.14	0.13	0.01	0.02	c0.12	c0.14
v/s Ratio Perm			0.07			0.06			0.02			0.12
v/c Ratio	0.50	0.17	0.16	0.58	0.73	0.19	0.82	0.48	0.07	0.31	0.73	0.64
Uniform Delay, d1	44.0	20.5	9.9	57.6	39.5	28.0	51.9	38.8	27.8	59.1	51.6	32.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.2	0.0	2.0	4.2	0.1	8.2	0.1	0.0	0.3	3.8	1.5
Delay (s)	44.2	20.7	9.9	59.6	43.6	28.0	60.1	39.0	27.9	59.4	55.4	34.1
Level of Service	D	C	A	E	D	C	E	D	C	E	E	C
Approach Delay (s)		28.9			43.2			47.3			44.9	
Approach LOS		C			D			D			D	

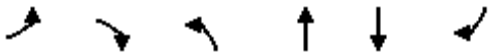
Intersection Summary			
HCM 2000 Control Delay	41.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	290	106	38	451	8	440	20	80	1	14	21
Future Volume (vph)	36	290	106	38	451	8	440	20	80	1	14	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.98			0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.88			0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1752	1845	1542	1805	1893		1770	1607			1725	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.34	
Satd. Flow (perm)	1752	1845	1542	1805	1893		1770	1607			586	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	41	330	120	43	512	9	500	23	91	1	16	24
RTOR Reduction (vph)	0	0	27	0	1	0	0	62	0	0	23	0
Lane Group Flow (vph)	41	330	93	43	521	0	500	52	0	0	18	0
Confl. Peds. (#/hr)	13		2	2		13	5		1	1		5
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	3%	3%	3%	0%	0%	0%	2%	2%	2%	0%	0%	0%
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA		Perm	NA	
Protected Phases	5	2	8	1	6		8	8			7	
Permitted Phases			2							7		
Actuated Green, G (s)	6.1	67.0	113.5	6.7	67.6		46.5	46.5			8.0	
Effective Green, g (s)	7.5	68.6	116.7	8.1	69.2		48.1	48.1			9.2	
Actuated g/C Ratio	0.05	0.46	0.78	0.05	0.46		0.32	0.32			0.06	
Clearance Time (s)	5.4	5.6	5.6	5.4	5.6		5.6	5.6			5.2	
Vehicle Extension (s)	1.0	2.0	1.0	2.0	1.0		1.0	1.0			1.0	
Lane Grp Cap (vph)	87	843	1199	97	873		567	515			35	
v/s Ratio Prot	0.02	0.18	0.02	c0.02	c0.28		c0.28	0.03				
v/s Ratio Perm			0.04								c0.03	
v/c Ratio	0.47	0.39	0.08	0.44	0.60		0.88	0.10			0.53	
Uniform Delay, d1	69.3	26.9	3.9	68.8	30.0		48.3	35.8			68.3	
Progression Factor	1.00	1.00	1.00	1.22	0.91		1.00	1.00			1.00	
Incremental Delay, d2	1.5	1.4	0.0	1.1	2.9		14.6	0.0			6.5	
Delay (s)	70.8	28.3	3.9	85.2	30.2		62.8	35.8			74.8	
Level of Service	E	C	A	F	C		E	D			E	
Approach Delay (s)		25.9			34.4			57.8			74.8	
Approach LOS		C			C			E			E	

Intersection Summary			
HCM 2000 Control Delay	41.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	220	124	187	156	112	144
Future Volume (vph)	220	124	187	156	112	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.92	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1770	1583	1805	1900	1722	
Flt Permitted	0.95	1.00	0.17	1.00	1.00	
Satd. Flow (perm)	1770	1583	327	1900	1722	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	253	143	215	179	129	166
RTOR Reduction (vph)	0	45	0	0	48	0
Lane Group Flow (vph)	253	98	215	179	247	0
Confl. Peds. (#/hr)			3			3
Heavy Vehicles (%)	2%	2%	0%	0%	0%	0%
Turn Type	Prot	pm+ov	pm+pt	NA	NA	
Protected Phases	6	3	3	8	4	
Permitted Phases		6	8			
Actuated Green, G (s)	80.9	98.7	51.5	51.5	27.6	
Effective Green, g (s)	82.3	102.7	53.5	52.9	29.1	
Actuated g/C Ratio	0.55	0.68	0.36	0.35	0.19	
Clearance Time (s)	5.4	6.0	6.0	5.4	5.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	971	1083	311	670	334	
v/s Ratio Prot	c0.14	0.01	c0.09	0.09	0.14	
v/s Ratio Perm		0.05	c0.16			
v/c Ratio	0.26	0.09	0.69	0.27	0.74	
Uniform Delay, d1	17.8	7.9	37.6	34.7	56.9	
Progression Factor	1.41	6.04	1.00	1.00	1.00	
Incremental Delay, d2	0.6	0.0	6.5	0.2	8.6	
Delay (s)	25.8	48.0	44.1	34.9	65.5	
Level of Service	C	D	D	C	E	
Approach Delay (s)	33.8			39.9	65.5	
Approach LOS	C			D	E	

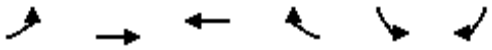
Intersection Summary			
HCM 2000 Control Delay	44.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Intersection Delay, s/veh	6.9
Intersection LOS	A

Approach	EB	WB	NB	SB	NW
Entry Lanes	1	1	1	1	0
Conflicting Circle Lanes	1	1	1	1	1
Adj Approach Flow, veh/h	73	148	227	399	0
Demand Flow Rate, veh/h	75	151	233	409	0
Vehicles Circulating, veh/h	471	251	93	94	301
Vehicles Exiting, veh/h	32	50	453	308	24
Follow-Up Headway, s	3.186	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.4	5.9	5.8	7.9	0.0
Approach LOS	A	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	75	151	233	409
Cap Entry Lane, veh/h	706	879	1030	1029
Entry HV Adj Factor	0.973	0.979	0.975	0.975
Flow Entry, veh/h	73	148	227	399
Cap Entry, veh/h	687	861	1004	1002
V/C Ratio	0.106	0.172	0.226	0.398
Control Delay, s/veh	6.4	5.9	5.8	7.9
LOS	A	A	A	A
95th %tile Queue, veh	0	1	1	2



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	12	596	776	199	452	25
Future Volume (vph)	12	596	776	199	452	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	0.95		0.97	
Frpb, ped/bikes	1.00	1.00	0.99		1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.97		0.99	
Flt Protected	0.95	1.00	1.00		0.95	
Satd. Flow (prot)	1805	3574	3445		3480	
Flt Permitted	0.22	1.00	1.00		0.95	
Satd. Flow (perm)	416	3574	3445		3480	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	13	655	853	219	497	27
RTOR Reduction (vph)	0	0	10	0	3	0
Lane Group Flow (vph)	13	655	1062	0	521	0
Confl. Peds. (#/hr)	2			2		2
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	0%	1%	1%	1%	0%	4%
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		8	
Permitted Phases	2					
Actuated Green, G (s)	112.7	112.7	105.5		26.6	
Effective Green, g (s)	113.9	113.9	106.7		28.1	
Actuated g/C Ratio	0.76	0.76	0.71		0.19	
Clearance Time (s)	5.2	5.2	5.2		5.5	
Vehicle Extension (s)	2.0	2.0	2.0		1.5	
Lane Grp Cap (vph)	345	2713	2450		651	
v/s Ratio Prot	0.00	c0.18	c0.31		c0.15	
v/s Ratio Perm	0.03					
v/c Ratio	0.04	0.24	0.43		0.80	
Uniform Delay, d1	5.7	5.3	9.0		58.3	
Progression Factor	0.65	0.63	1.00		1.00	
Incremental Delay, d2	0.0	0.2	0.6		6.4	
Delay (s)	3.7	3.5	9.6		64.7	
Level of Service	A	A	A		E	
Approach Delay (s)		3.5	9.6		64.7	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



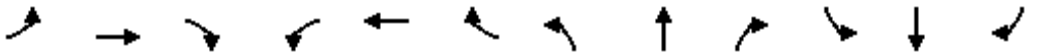
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	804	418	317	1096	0	0
Future Volume (vph)	804	418	317	1096	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		
Lane Util. Factor	0.95	1.00	1.00	0.95		
Frpb, ped/bikes	1.00	0.98	1.00	1.00		
Flpb, ped/bikes	1.00	1.00	1.00	1.00		
Frt	1.00	0.85	1.00	1.00		
Flt Protected	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	3574	1549	1787	3574		
Flt Permitted	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	3574	1549	1787	3574		
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	865	449	341	1178	0	0
RTOR Reduction (vph)	0	113	0	0	0	0
Lane Group Flow (vph)	865	336	341	1178	0	0
Confl. Peds. (#/hr)		2	2			
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	1%	2%	1%	1%	0%	0%
Turn Type	NA	Perm	Prot	NA		
Protected Phases	6		5	2		
Permitted Phases		6				
Actuated Green, G (s)	105.3	105.3	34.3	150.0		
Effective Green, g (s)	106.5	106.5	35.5	150.0		
Actuated g/C Ratio	0.71	0.71	0.24	1.00		
Clearance Time (s)	5.2	5.2	5.2	5.2		
Vehicle Extension (s)	2.0	2.0	2.0	2.0		
Lane Grp Cap (vph)	2537	1099	422	3574		
v/s Ratio Prot	0.24		c0.19	c0.33		
v/s Ratio Perm		0.22				
v/c Ratio	0.34	0.31	0.81	0.33		
Uniform Delay, d1	8.3	8.1	54.0	0.0		
Progression Factor	1.00	1.00	0.90	1.00		
Incremental Delay, d2	0.4	0.7	9.7	0.2		
Delay (s)	8.7	8.8	58.1	0.2		
Level of Service	A	A	E	A		
Approach Delay (s)	8.7			13.2	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	796	0	0	1136	286	461
Future Volume (vph)	796	0	0	1136	286	461
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.88
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3574			3574	3467	2814
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3574			3574	3467	2814
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	838	0	0	1196	301	485
RTOR Reduction (vph)	0	0	0	0	0	318
Lane Group Flow (vph)	838	0	0	1196	301	167
Confl. Peds. (#/hr)		2	2			
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	1%	0%	0%	1%	1%	1%
Turn Type	NA			NA	Prot	Prot
Protected Phases	2			6	4	4
Permitted Phases						
Actuated Green, G (s)	120.1			119.7	17.3	17.3
Effective Green, g (s)	121.6			121.6	20.4	20.4
Actuated g/C Ratio	0.81			0.81	0.14	0.14
Clearance Time (s)	5.5			5.9	7.1	7.1
Vehicle Extension (s)	2.0			1.0	1.0	1.0
Lane Grp Cap (vph)	2897			2897	471	382
v/s Ratio Prot	0.23			c0.33	c0.09	0.06
v/s Ratio Perm						
v/c Ratio	0.29			0.41	0.64	0.44
Uniform Delay, d1	3.5			4.0	61.3	59.5
Progression Factor	0.07			0.25	1.00	1.00
Incremental Delay, d2	0.2			0.4	2.1	0.3
Delay (s)	0.5			1.4	63.4	59.8
Level of Service	A			A	E	E
Approach Delay (s)	0.5			1.4	61.2	
Approach LOS	A			A	E	

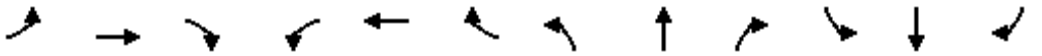
Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	865	406	0	957	0	0	0	167	119	151	192
Future Volume (vph)	0	865	406	0	957	0	0	0	167	119	151	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0				4.0	4.0	4.0	4.0
Lane Util. Factor		0.91			0.95				1.00	0.97	1.00	1.00
Frpb, ped/bikes		1.00			1.00				1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00			1.00				1.00	1.00	1.00	1.00
Frt		0.95			1.00				0.86	1.00	1.00	0.85
Flt Protected		1.00			1.00				1.00	0.95	1.00	1.00
Satd. Flow (prot)		4905			3574				1627	3400	1881	1568
Flt Permitted		1.00			1.00				1.00	0.95	1.00	1.00
Satd. Flow (perm)		4905			3574				1627	3400	1881	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	911	427	0	1007	0	0	0	176	125	159	202
RTOR Reduction (vph)	0	27	0	0	0	0	0	0	32	0	0	113
Lane Group Flow (vph)	0	1311	0	0	1007	0	0	0	144	125	159	89
Confl. Peds. (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	0%	0%	1%	3%	1%	3%
Turn Type		NA			NA				Perm	Split	NA	Prot
Protected Phases		6			2					8	8	8
Permitted Phases									6			
Actuated Green, G (s)		121.8			121.8				121.8	18.2	18.2	18.2
Effective Green, g (s)		122.8			122.8				122.8	19.2	19.2	19.2
Actuated g/C Ratio		0.82			0.82				0.82	0.13	0.13	0.13
Clearance Time (s)		5.0			5.0				5.0	5.0	5.0	5.0
Vehicle Extension (s)		2.5			2.5				2.5	2.5	2.5	2.5
Lane Grp Cap (vph)		4015			2925				1331	435	240	200
v/s Ratio Prot		0.27			c0.28					0.04	c0.08	0.06
v/s Ratio Perm									0.09			
v/c Ratio		0.33			0.34				0.11	0.29	0.66	0.44
Uniform Delay, d1		3.4			3.4				2.7	59.2	62.3	60.5
Progression Factor		1.13			1.07				1.00	1.00	1.00	1.00
Incremental Delay, d2		0.2			0.3				0.2	0.3	6.1	1.1
Delay (s)		4.0			4.0				2.9	59.5	68.4	61.6
Level of Service		A			A				A	E	E	E
Approach Delay (s)		4.0			4.0			2.9			63.3	
Approach LOS		A			A			A			E	

Intersection Summary			
HCM 2000 Control Delay	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	261	675	115	442	614	174	253	495	368	341	333	59
Future Volume (vph)	261	675	115	442	614	174	253	495	368	341	333	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.95	0.88	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	5136	1579	3467	3574	2814	3467	3574	1587	3467	3574	1584
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	5136	1579	3467	3574	2814	3467	3574	1587	3467	3574	1584
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	272	703	120	460	640	181	264	516	383	355	347	61
RTOR Reduction (vph)	0	0	61	0	0	66	0	0	81	0	0	36
Lane Group Flow (vph)	272	703	59	460	640	115	264	516	302	355	347	25
Confl. Peds. (#/hr)			4	4			6		3	3		6
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Actuated Green, G (s)	25.9	51.7	67.2	24.6	50.5	69.7	15.5	26.5	51.1	19.2	30.2	56.1
Effective Green, g (s)	29.2	54.2	73.8	27.9	52.9	76.3	18.8	29.4	57.7	22.5	33.1	62.7
Actuated g/C Ratio	0.19	0.36	0.49	0.19	0.35	0.51	0.13	0.20	0.38	0.15	0.22	0.42
Clearance Time (s)	7.3	6.5	7.3	7.3	6.4	7.3	7.3	6.9	7.3	7.3	6.9	7.3
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	674	1855	776	644	1260	1506	434	700	610	520	788	662
v/s Ratio Prot	0.08	c0.14	0.01	c0.13	c0.18	0.01	0.08	c0.14	0.09	c0.10	0.10	0.01
v/s Ratio Perm			0.03			0.03			0.10			0.01
v/c Ratio	0.40	0.38	0.08	0.71	0.51	0.08	0.61	0.74	0.50	0.68	0.44	0.04
Uniform Delay, d1	52.8	35.4	20.1	57.3	38.3	18.8	62.1	56.7	35.1	60.4	50.5	25.8
Progression Factor	1.15	1.19	2.67	0.69	0.80	0.47	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	0.0	2.0	0.9	0.0	1.7	3.5	0.2	2.9	0.1	0.0
Delay (s)	60.9	42.8	53.8	41.6	31.6	8.8	63.8	60.2	35.3	63.3	50.6	25.8
Level of Service	E	D	D	D	C	A	E	E	D	E	D	C
Approach Delay (s)		48.5			32.0			52.8			54.5	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	45.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

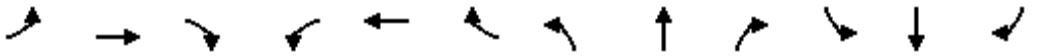
Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑							↱
Traffic Vol, veh/h	0	411	1002	643	1341	0	0	0	0	0	0	0
Future Vol, veh/h	0	411	1002	643	1341	0	0	0	0	0	0	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	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	150	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	91	91	91	91	95	91	95	91	95	95	95
Heavy Vehicles, %	2	1	2	1	1	2	0	2	0	2	2	2
Mvmt Flow	0	452	1101	707	1474	0	0	0	0	0	0	0

Major/Minor	Major1			Major2						Minor2		
Conflicting Flow All	-	0	-	452	0	0				-	-	737
Stage 1	-	-	-	-	-	-				-	-	-
Stage 2	-	-	-	-	-	-				-	-	-
Critical Hdwy	-	-	-	4.12	-	-				-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-				-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-				-	-	-
Follow-up Hdwy	-	-	-	2.21	-	-				-	-	3.32
Pot Cap-1 Maneuver	0	-	0	1112	-	0				0	0	361
Stage 1	0	-	0	-	-	0				0	0	-
Stage 2	0	-	0	-	-	0				0	0	-
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	-	-	-	1112	-	-				-	0	361
Mov Cap-2 Maneuver	-	-	-	-	-	-				-	0	-
Stage 1	-	-	-	-	-	-				-	0	-
Stage 2	-	-	-	-	-	-				-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.4	0
HCM LOS			A

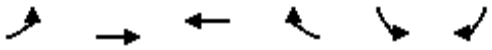
Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1
Capacity (veh/h)	-	1112	-	-
HCM Lane V/C Ratio	-	0.635	-	-
HCM Control Delay (s)	-	13.7	-	0
HCM Lane LOS	-	B	-	A
HCM 95th %tile Q(veh)	-	4.8	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	358	0	0	744	37	772	363	257	41	0	413
Future Volume (vph)	57	358	0	0	744	37	772	363	257	41	0	413
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	3.0			4.0		4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	1.00	0.95			0.95		0.97	1.00	1.00	1.00		1.00
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	0.99	1.00		1.00
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00	1.00		1.00
Frt	1.00	1.00			0.99		1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	1787	3574			3543		3433	1863	1561	1787		1599
Flt Permitted	0.95	1.00			1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	1787	3574			3543		3433	1863	1561	1787		1599
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	61	385	0	0	800	40	830	390	276	44	0	444
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	199	0	0	82
Lane Group Flow (vph)	61	385	0	0	837	0	830	390	77	44	0	362
Confl. Peds. (#/hr)	4		1	1		4			1	1		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Turn Type	Prot	NA			NA		Split	NA	Perm	Prot		Prot
Protected Phases	1	6			2		7	7		8		8
Permitted Phases					2				7			8
Actuated Green, G (s)	5.8	56.2			44.2		40.5	40.5	40.5	36.4		36.4
Effective Green, g (s)	7.7	59.0			46.3		42.1	42.1	42.1	37.9		37.9
Actuated g/C Ratio	0.05	0.39			0.31		0.28	0.28	0.28	0.25		0.25
Clearance Time (s)	5.9	5.8			6.1		5.6	5.6	5.6	5.5		5.5
Vehicle Extension (s)	2.0	2.0			2.0		2.0	2.0	2.0	2.0		2.0
Lane Grp Cap (vph)	91	1405			1093		963	522	438	451		404
v/s Ratio Prot	c0.03	0.11			c0.24		c0.24	0.21		0.02		c0.23
v/s Ratio Perm									0.05			
v/c Ratio	0.67	0.27			0.77		0.86	0.75	0.18	0.10		0.90
Uniform Delay, d1	69.9	30.9			46.9		51.2	49.1	40.8	42.9		54.1
Progression Factor	1.11	0.81			1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	13.1	0.4			5.1		7.8	5.1	0.1	0.0		21.1
Delay (s)	90.4	25.4			52.1		58.9	54.2	40.9	43.0		75.3
Level of Service	F	C			D		E	D	D	D		E
Approach Delay (s)		34.3			52.1			54.4			72.4	
Approach LOS		C			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	53.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.4%	ICU Level of Service	D
Analysis Period (min)	15		

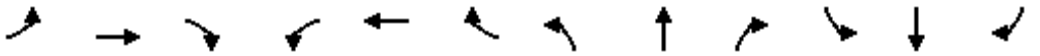
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	116	484	582	203	174	100
Future Volume (vph)	116	484	582	203	174	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.96		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1787	3574	3413		1787	1599
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1787	3574	3413		1787	1599
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	145	605	728	254	218	125
RTOR Reduction (vph)	0	0	17	0	0	103
Lane Group Flow (vph)	145	605	965	0	218	22
Confl. Peds. (#/hr)	2			2		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	1	6	2		4	
Permitted Phases						8
Actuated Green, G (s)	14.9	98.0	76.1		20.7	20.7
Effective Green, g (s)	16.8	99.2	78.4		22.8	22.8
Actuated g/C Ratio	0.13	0.76	0.60		0.18	0.18
Clearance Time (s)	5.9	5.2	6.3		6.1	6.1
Vehicle Extension (s)	2.0	2.0	2.0		2.0	2.0
Lane Grp Cap (vph)	230	2727	2058		313	280
v/s Ratio Prot	c0.08	0.17	c0.28		c0.12	
v/s Ratio Perm						0.01
v/c Ratio	0.63	0.22	0.47		0.70	0.08
Uniform Delay, d1	53.7	4.4	14.3		50.3	44.8
Progression Factor	1.00	1.00	1.05		1.00	1.00
Incremental Delay, d2	4.1	0.2	0.7		5.4	0.0
Delay (s)	57.7	4.6	15.8		55.7	44.9
Level of Service	E	A	B		E	D
Approach Delay (s)		14.9	15.8		51.8	
Approach LOS		B	B		D	

Intersection Summary			
HCM 2000 Control Delay	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.1
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

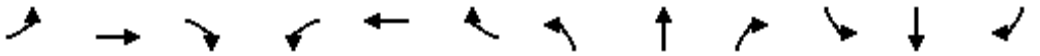
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	430	305	83	599	1	161	1	41	6	2	14
Future Volume (vph)	3	430	305	83	599	1	161	1	41	6	2	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	1.00		1.00	0.85		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3284		1805	1900		1736	1621		1543	1647	
Flt Permitted	0.31	1.00		0.27	1.00		0.55	1.00		0.73	1.00	
Satd. Flow (perm)	592	3284		509	1900		1011	1621		1179	1647	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	3	489	347	94	681	1	183	1	47	7	2	16
RTOR Reduction (vph)	0	61	0	0	0	0	0	38	0	0	15	0
Lane Group Flow (vph)	3	775	0	94	682	0	183	10	0	7	3	0
Confl. Peds. (#/hr)			2	2								
Heavy Vehicles (%)	0%	2%	2%	0%	0%	0%	4%	0%	0%	17%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	77.3	76.3		88.7	82.2		29.4	21.8		10.3	9.1	
Effective Green, g (s)	80.3	78.3		90.2	84.2		30.8	23.7		15.1	12.0	
Actuated g/C Ratio	0.62	0.60		0.69	0.65		0.24	0.18		0.12	0.09	
Clearance Time (s)	5.5	6.0		5.5	6.0		5.4	5.9		6.4	6.9	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	389	1977		436	1230		324	295		147	152	
v/s Ratio Prot	0.00	0.24		c0.01	c0.36		c0.07	0.01		0.00	0.00	
v/s Ratio Perm	0.00			0.14			c0.07			0.00		
v/c Ratio	0.01	0.39		0.22	0.55		0.56	0.03		0.05	0.02	
Uniform Delay, d1	10.8	13.5		7.7	12.6		42.4	43.7		51.0	53.7	
Progression Factor	1.02	1.10		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.6		0.1	1.8		1.3	0.0		0.0	0.0	
Delay (s)	10.9	15.3		7.8	14.4		43.7	43.7		51.1	53.7	
Level of Service	B	B		A	B		D	D		D	D	
Approach Delay (s)		15.3			13.6			43.7			53.0	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.3%	ICU Level of Service	B
Analysis Period (min)	15		

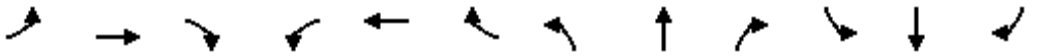
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	114	291	25	18	270	61	683	45	260	536	69
Future Volume (vph)	130	114	291	25	18	270	61	683	45	260	536	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	0.99	1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85	1.00	0.86		1.00	0.99		1.00	0.98	
Flt Protected		0.97	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1831	1600	1804	1598		1805	3537		1805	3465	
Flt Permitted		0.97	1.00	0.23	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1831	1600	439	1598		1805	3537		1805	3465	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	135	119	303	26	19	281	64	711	47	271	558	72
RTOR Reduction (vph)	0	0	228	0	244	0	0	3	0	0	6	0
Lane Group Flow (vph)	0	254	75	26	56	0	64	755	0	271	624	0
Confl. Peds. (#/hr)	1		1	1		1	2		2	2		2
Heavy Vehicles (%)	2%	0%	0%	0%	0%	1%	0%	1%	0%	0%	2%	3%
Turn Type	Split	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases	6	6	3		2		3	8		7	4	
Permitted Phases			6	2								
Actuated Green, G (s)		20.3	28.5	14.7	14.7		8.2	48.6		21.8	62.2	
Effective Green, g (s)		22.7	32.3	17.3	17.3		10.1	50.3		23.7	63.9	
Actuated g/C Ratio		0.17	0.25	0.13	0.13		0.08	0.39		0.18	0.49	
Clearance Time (s)		6.4	5.9	6.6	6.6		5.9	5.7		5.9	5.7	
Vehicle Extension (s)		1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lane Grp Cap (vph)		319	397	58	212		140	1368		329	1703	
v/s Ratio Prot		c0.14	0.01		0.04		0.04	c0.21		c0.15	0.18	
v/s Ratio Perm			0.03	c0.06								
v/c Ratio		0.80	0.19	0.45	0.27		0.46	0.55		0.82	0.37	
Uniform Delay, d1		51.4	38.5	52.0	50.6		57.3	31.1		51.1	20.5	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		12.1	0.1	2.0	0.2		0.9	1.6		14.6	0.6	
Delay (s)		63.5	38.6	54.0	50.9		58.2	32.7		65.7	21.1	
Level of Service		E	D	D	D		E	C		E	C	
Approach Delay (s)		50.0			51.1			34.7			34.5	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	39.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	254	149	87	181	164	39	96	421	165	161	429	257
Future Volume (vph)	254	149	87	181	164	39	96	421	165	161	429	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		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	1.00	
Frt	1.00	0.94		1.00	0.97		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1695		1805	1786		1805	3363		1770	3322	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1695		1805	1786		1805	3363		1770	3322	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	270	159	93	193	174	41	102	448	176	171	456	273
RTOR Reduction (vph)	0	24	0	0	9	0	0	44	0	0	92	0
Lane Group Flow (vph)	270	228	0	193	206	0	102	580	0	171	637	0
Confl. Peds. (#/hr)	3		3	3		3	2		3	3		2
Confl. Bikes (#/hr)			1			1			1			
Heavy Vehicles (%)	2%	6%	4%	0%	3%	3%	0%	2%	2%	2%	2%	1%
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	16.5	16.9		12.7	13.1		6.1	25.6		10.7	30.4	
Effective Green, g (s)	18.4	18.8		14.6	15.0		8.0	27.8		12.8	32.6	
Actuated g/C Ratio	0.20	0.21		0.16	0.17		0.09	0.31		0.14	0.36	
Clearance Time (s)	5.9	5.9		5.9	5.9		5.9	6.2		6.1	6.2	
Vehicle Extension (s)	2.5	2.5		2.5	2.5		2.5	2.5		2.5	2.5	
Lane Grp Cap (vph)	361	354		292	297		160	1038		251	1203	
v/s Ratio Prot	c0.15	c0.13		0.11	0.12		0.06	0.17		c0.10	c0.19	
v/s Ratio Perm												
v/c Ratio	0.75	0.64		0.66	0.69		0.64	0.56		0.68	0.53	
Uniform Delay, d1	33.6	32.5		35.4	35.3		39.6	26.0		36.7	22.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.8	3.5		5.0	6.3		7.1	2.2		6.8	1.7	
Delay (s)	41.4	36.1		40.4	41.6		46.7	28.2		43.5	24.3	
Level of Service	D	D		D	D		D	C		D	C	
Approach Delay (s)		38.9			41.0			30.8			27.9	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	33.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

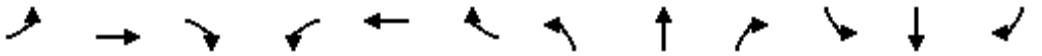
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	25	56	0	17	6	284	54	21	548	1
Future Vol, veh/h	1	0	25	56	0	17	6	284	54	21	548	1
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	7	0	0	6	0
Mvmt Flow	1	0	28	64	0	19	7	323	61	24	623	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1048	1071	624	1055	1041	355	624	0	0	386	0	0
Stage 1	671	671	-	369	369	-	-	-	-	-	-	-
Stage 2	377	400	-	686	672	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	208	223	489	205	232	693	967	-	-	1184	-	-
Stage 1	449	458	-	655	624	-	-	-	-	-	-	-
Stage 2	649	605	-	441	458	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	198	217	489	189	225	692	966	-	-	1184	-	-
Mov Cap-2 Maneuver	198	217	-	189	225	-	-	-	-	-	-	-
Stage 1	446	449	-	649	618	-	-	-	-	-	-	-
Stage 2	626	600	-	407	449	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.3	28	0.2	0.3
HCM LOS	B	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	966	-	-	463	189	692	1184	-	-
HCM Lane V/C Ratio	0.007	-	-	0.064	0.337	0.028	0.02	-	-
HCM Control Delay (s)	8.8	-	-	13.3	33.4	10.4	8.1	-	-
HCM Lane LOS	A	-	-	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	1.4	0.1	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	286	15	24	379	188	19	77	34	321	141	91
Future Volume (vph)	74	286	15	24	379	188	19	77	34	321	141	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	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	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1736	3440		1736	3273		1752	1845	1551	1736	1827	1534
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1736	3440		1736	3273		1752	1845	1551	1736	1827	1534
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	82	318	17	27	421	209	21	86	38	357	157	101
RTOR Reduction (vph)	0	4	0	0	69	0	0	0	28	0	0	47
Lane Group Flow (vph)	82	331	0	27	561	0	21	86	10	357	157	54
Confl. Peds. (#/hr)	1		4	4		1	4		2	2		4
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	3%	3%	3%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	8.8	21.9		3.0	16.1		1.8	15.0	18.0	19.8	32.7	41.5
Effective Green, g (s)	10.2	24.1		4.4	18.3		3.2	16.8	20.8	21.2	34.8	44.3
Actuated g/C Ratio	0.12	0.29		0.05	0.22		0.04	0.20	0.25	0.26	0.42	0.54
Clearance Time (s)	5.4	6.2		5.4	6.2		5.4	5.8	5.4	5.4	6.1	5.4
Vehicle Extension (s)	1.7	1.7		1.7	1.7		1.7	3.0	1.7	1.7	3.0	1.7
Lane Grp Cap (vph)	214	1004		92	726		67	375	391	446	770	823
v/s Ratio Prot	0.05	c0.10		0.02	c0.17		0.01	0.05	0.00	c0.21	c0.09	0.01
v/s Ratio Perm									0.00			0.03
v/c Ratio	0.38	0.33		0.29	0.77		0.31	0.23	0.02	0.80	0.20	0.07
Uniform Delay, d1	33.3	22.9		37.6	30.1		38.6	27.4	23.2	28.7	15.1	9.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.1		0.6	4.7		1.0	0.3	0.0	9.4	0.1	0.0
Delay (s)	33.7	22.9		38.2	34.8		39.6	27.8	23.2	38.1	15.2	9.2
Level of Service	C	C		D	C		D	C	C	D	B	A
Approach Delay (s)		25.1			35.0			28.3			27.5	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	82.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	641	590	44	0	0
Future Vol, veh/h	0	641	590	44	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	5	3	0	0	0
Mvmt Flow	0	782	720	54	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	360
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	642
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	642
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	64.4

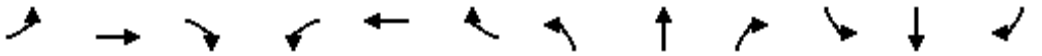
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	15	190	0	45	18	590	83	49	532	1
Future Vol, veh/h	2	0	15	190	0	45	18	590	83	49	532	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	14	0	0	0	6	2	0	0	1	0
Mvmt Flow	2	0	16	204	0	48	19	634	89	53	572	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1420	1440	573	1404	1396	679	573	0	0	724	0	0
Stage 1	678	678	-	718	718	-	-	-	-	-	-	-
Stage 2	742	762	-	686	678	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.34	7.1	6.5	6.2	4.16	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.426	3.5	4	3.3	2.254	-	-	2.2	-	-
Pot Cap-1 Maneuver	115	134	497	~ 118	142	455	980	-	-	888	-	-
Stage 1	445	455	-	423	436	-	-	-	-	-	-	-
Stage 2	411	416	-	441	455	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	97	124	497	~ 107	131	455	980	-	-	888	-	-
Mov Cap-2 Maneuver	97	124	-	~ 107	131	-	-	-	-	-	-	-
Stage 1	436	428	-	415	428	-	-	-	-	-	-	-
Stage 2	360	408	-	401	428	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.4	$ 414.4	0.2	0.8
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	980	-	-	335	107	455	888	-	-
HCM Lane V/C Ratio	0.02	-	-	0.055	1.909	0.106	0.059	-	-
HCM Control Delay (s)	8.7	-	-	16.4	$ 509.3	13.9	9.3	-	-
HCM Lane LOS	A	-	-	C	F	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	16.7	0.4	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	145	428	27	59	597	364	26	136	127	383	230	124
Future Volume (vph)	145	428	27	59	597	364	26	136	127	383	230	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	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	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.94		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	3542		1787	3342		1770	1863	1566	1787	1881	1567
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1787	3542		1787	3342		1770	1863	1566	1787	1881	1567
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	154	455	29	63	635	387	28	145	135	407	245	132
RTOR Reduction (vph)	0	4	0	0	83	0	0	0	102	0	0	66
Lane Group Flow (vph)	154	480	0	63	939	0	28	145	33	407	245	66
Confl. Peds. (#/hr)	1					1	12		4	4		12
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	12.0	36.9		7.6	32.5		2.7	16.4	24.0	26.7	40.1	52.1
Effective Green, g (s)	13.4	39.1		9.0	34.7		4.1	18.2	26.8	28.1	42.2	54.9
Actuated g/C Ratio	0.12	0.35		0.08	0.31		0.04	0.16	0.24	0.25	0.38	0.50
Clearance Time (s)	5.4	6.2		5.4	6.2		5.4	5.8	5.4	5.4	6.1	5.4
Vehicle Extension (s)	1.7	1.7		1.7	1.7		1.7	3.0	1.7	1.7	3.0	1.7
Lane Grp Cap (vph)	216	1254		145	1050		65	307	380	454	719	779
v/s Ratio Prot	c0.09	0.14		0.04	c0.28		0.02	c0.08	0.01	c0.23	0.13	0.01
v/s Ratio Perm									0.01			0.03
v/c Ratio	0.71	0.38		0.43	0.89		0.43	0.47	0.09	0.90	0.34	0.08
Uniform Delay, d1	46.7	26.6		48.3	36.1		52.0	41.8	32.3	39.7	24.2	14.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.9	0.1		0.8	9.7		1.7	1.1	0.0	19.4	0.3	0.0
Delay (s)	55.6	26.7		49.0	45.8		53.7	42.9	32.4	59.2	24.5	14.6
Level of Service	E	C		D	D		D	D	C	E	C	B
Approach Delay (s)		33.7			46.0			39.3			40.8	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	41.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	110.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	938	1021	87	0	0
Future Vol, veh/h	0	938	1021	87	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	3	1	0	0	0
Mvmt Flow	0	1009	1098	94	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	549
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	485
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	485
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

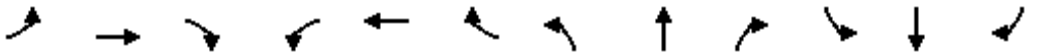
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	25	44	0	17	6	284	54	21	548	1
Future Vol, veh/h	1	0	25	44	0	17	6	284	54	21	548	1
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	7	0	0	6	0
Mvmt Flow	1	0	28	50	0	19	7	323	61	24	623	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1048	1071	624	1055	1041	355	624	0	0	386	0	0
Stage 1	671	671	-	369	369	-	-	-	-	-	-	-
Stage 2	377	400	-	686	672	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	208	223	489	205	232	693	967	-	-	1184	-	-
Stage 1	449	458	-	655	624	-	-	-	-	-	-	-
Stage 2	649	605	-	441	458	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	198	217	489	189	225	692	966	-	-	1184	-	-
Mov Cap-2 Maneuver	198	217	-	189	225	-	-	-	-	-	-	-
Stage 1	446	449	-	649	618	-	-	-	-	-	-	-
Stage 2	626	600	-	407	449	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.3	25.1	0.2	0.3
HCM LOS	B	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	966	-	-	463	189	692	1184	-	-
HCM Lane V/C Ratio	0.007	-	-	0.064	0.265	0.028	0.02	-	-
HCM Control Delay (s)	8.8	-	-	13.3	30.8	10.4	8.1	-	-
HCM Lane LOS	A	-	-	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	1	0.1	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	286	15	26	389	188	19	77	34	321	139	81
Future Volume (vph)	74	286	15	26	389	188	19	77	34	321	139	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	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	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1736	3440		1736	3277		1752	1845	1551	1736	1827	1533
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1736	3440		1736	3277		1752	1845	1551	1736	1827	1533
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	82	318	17	29	432	209	21	86	38	357	154	90
RTOR Reduction (vph)	0	4	0	0	65	0	0	0	28	0	0	43
Lane Group Flow (vph)	82	331	0	29	576	0	21	86	10	357	154	47
Confl. Peds. (#/hr)	1		4	4		1	4		2	2		4
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	3%	3%	3%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	5.6	19.3		2.9	16.6		1.8	15.4	18.3	20.1	33.4	39.0
Effective Green, g (s)	7.0	21.5		4.3	18.8		3.2	17.2	21.1	21.5	35.5	41.8
Actuated g/C Ratio	0.09	0.27		0.05	0.23		0.04	0.21	0.26	0.27	0.44	0.52
Clearance Time (s)	5.4	6.2		5.4	6.2		5.4	5.8	5.4	5.4	6.1	5.4
Vehicle Extension (s)	1.7	1.7		1.7	1.7		1.7	3.0	1.7	1.7	3.0	1.7
Lane Grp Cap (vph)	150	918		92	765		69	394	406	463	805	796
v/s Ratio Prot	c0.05	0.10		0.02	c0.18		0.01	0.05	0.00	c0.21	c0.08	0.01
v/s Ratio Perm									0.01			0.03
v/c Ratio	0.55	0.36		0.32	0.75		0.30	0.22	0.02	0.77	0.19	0.06
Uniform Delay, d1	35.2	23.9		36.7	28.7		37.6	26.1	22.1	27.2	13.7	9.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.2	0.1		0.7	3.7		0.9	0.3	0.0	7.1	0.1	0.0
Delay (s)	37.4	24.0		37.4	32.4		38.5	26.4	22.1	34.3	13.9	9.6
Level of Service	D	C		D	C		D	C	C	C	B	A
Approach Delay (s)		26.6			32.6			27.0			25.4	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	80.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	641	590	44	0	12
Future Vol, veh/h	0	641	590	44	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	5	3	0	0	0
Mvmt Flow	0	782	720	54	0	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	360
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	642
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	642
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	642
HCM Lane V/C Ratio	-	-	-	0.023
HCM Control Delay (s)	-	-	-	10.7
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	36.2

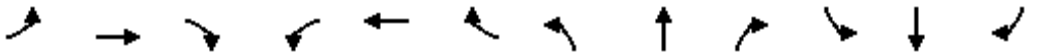
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	15	151	0	45	18	590	83	49	532	1
Future Vol, veh/h	2	0	15	151	0	45	18	590	83	49	532	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	14	0	0	0	6	2	0	0	1	0
Mvmt Flow	2	0	16	162	0	48	19	634	89	53	572	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1420	1440	573	1404	1396	679	573	0	0	724	0	0
Stage 1	678	678	-	718	718	-	-	-	-	-	-	-
Stage 2	742	762	-	686	678	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.34	7.1	6.5	6.2	4.16	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.426	3.5	4	3.3	2.254	-	-	2.2	-	-
Pot Cap-1 Maneuver	115	134	497	~ 118	142	455	980	-	-	888	-	-
Stage 1	445	455	-	423	436	-	-	-	-	-	-	-
Stage 2	411	416	-	441	455	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	97	124	497	~ 107	131	455	980	-	-	888	-	-
Mov Cap-2 Maneuver	97	124	-	~ 107	131	-	-	-	-	-	-	-
Stage 1	436	428	-	415	428	-	-	-	-	-	-	-
Stage 2	360	408	-	401	428	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.4	269.9	0.2	0.8
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	980	-	-	335	107	455	888	-	-
HCM Lane V/C Ratio	0.02	-	-	0.055	1.517	0.106	0.059	-	-
HCM Control Delay (s)	8.7	-	-	16.4	$ 346.2	13.9	9.3	-	-
HCM Lane LOS	A	-	-	C	F	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	12	0.4	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	145	428	27	70	625	364	26	136	127	383	219	96
Future Volume (vph)	145	428	27	70	625	364	26	136	127	383	219	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	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	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.94		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	3542		1787	3348		1770	1863	1566	1787	1881	1567
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1787	3542		1787	3348		1770	1863	1566	1787	1881	1567
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	154	455	29	74	665	387	28	145	135	407	233	102
RTOR Reduction (vph)	0	4	0	0	75	0	0	0	102	0	0	52
Lane Group Flow (vph)	154	480	0	74	977	0	28	145	33	407	233	50
Confl. Peds. (#/hr)	1					1	12		4	4		12
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	11.9	37.9		7.8	33.8		2.8	16.6	24.4	26.8	40.3	52.2
Effective Green, g (s)	13.3	40.1		9.2	36.0		4.2	18.4	27.2	28.2	42.4	55.0
Actuated g/C Ratio	0.12	0.36		0.08	0.32		0.04	0.16	0.24	0.25	0.38	0.49
Clearance Time (s)	5.4	6.2		5.4	6.2		5.4	5.8	5.4	5.4	6.1	5.4
Vehicle Extension (s)	1.7	1.7		1.7	1.7		1.7	3.0	1.7	1.7	3.0	1.7
Lane Grp Cap (vph)	212	1269		146	1077		66	306	380	450	712	770
v/s Ratio Prot	c0.09	0.14		0.04	c0.29		0.02	c0.08	0.01	c0.23	0.12	0.01
v/s Ratio Perm									0.01			0.02
v/c Ratio	0.73	0.38		0.51	0.91		0.42	0.47	0.09	0.90	0.33	0.07
Uniform Delay, d1	47.5	26.6		49.2	36.4		52.7	42.4	32.7	40.5	24.6	14.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.0	0.1		1.0	10.7		1.6	1.2	0.0	20.9	0.3	0.0
Delay (s)	57.6	26.7		50.2	47.1		54.3	43.5	32.8	61.4	24.9	15.0
Level of Service	E	C		D	D		D	D	C	E	C	B
Approach Delay (s)		34.2			47.3			39.8			43.6	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	42.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	111.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

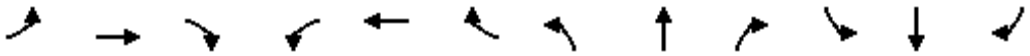
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	938	1021	87	0	39
Future Vol, veh/h	0	938	1021	87	0	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	3	1	0	0	0
Mvmt Flow	0	1009	1098	94	0	42

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	549
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	485
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	485
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

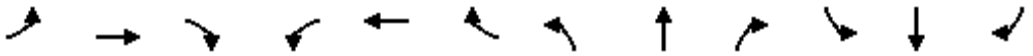
Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.1
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	485
HCM Lane V/C Ratio	-	-	-	0.086
HCM Control Delay (s)	-	-	-	13.1
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	25	56	0	17	6	284	98	21	548	1
Future Volume (vph)	1	0	25	56	0	17	6	284	98	21	548	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		0.98		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.87		1.00	0.85		1.00	0.96		1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1616		1803	1615		1805	1727		1804	1792	
Flt Permitted		0.99		0.87	1.00		0.34	1.00		0.49	1.00	
Satd. Flow (perm)		1598		1650	1615		655	1727		922	1792	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1	0	28	64	0	19	7	323	111	24	623	1
RTOR Reduction (vph)	0	26	0	0	17	0	0	15	0	0	0	0
Lane Group Flow (vph)	0	3	0	64	2	0	7	419	0	24	624	0
Confl. Peds. (#/hr)			1	1					2	2		
Confl. Bikes (#/hr)												4
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	7%	0%	0%	6%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		5.1		5.1	5.1		27.5	26.9		27.5	26.9	
Effective Green, g (s)		4.6		4.6	4.6		26.5	26.4		26.5	26.4	
Actuated g/C Ratio		0.10		0.10	0.10		0.59	0.59		0.59	0.59	
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.5		2.5	2.5		2.5	2.5		2.5	2.5	
Lane Grp Cap (vph)		164		170	166		391	1022		549	1060	
v/s Ratio Prot					0.00		0.00	0.24		c0.00	c0.35	
v/s Ratio Perm		0.00		c0.04			0.01			0.03		
v/c Ratio		0.02		0.38	0.01		0.02	0.41		0.04	0.59	
Uniform Delay, d1		18.0		18.7	18.0		4.0	4.9		4.1	5.7	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0		1.0	0.0		0.0	0.2		0.0	0.7	
Delay (s)		18.0		19.7	18.0		4.0	5.1		4.1	6.4	
Level of Service		B		B	B		A	A		A	A	
Approach Delay (s)		18.0			19.3			5.1			6.3	
Approach LOS		B			B			A			A	

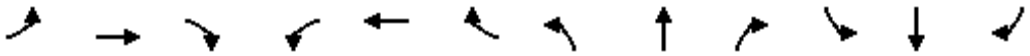
Intersection Summary			
HCM 2000 Control Delay	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	44.6	Sum of lost time (s)	13.5
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	15	190	0	45	18	590	170	49	532	1
Future Volume (vph)	2	0	15	190	0	45	18	590	170	49	532	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.88		1.00	0.85		1.00	0.97		1.00	1.00	
Flt Protected		0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1479		1805	1615		1703	1808		1805	1881	
Flt Permitted		0.98		0.75	1.00		0.35	1.00		0.16	1.00	
Satd. Flow (perm)		1459		1417	1615		636	1808		304	1881	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	2	0	16	204	0	48	19	634	183	53	572	1
RTOR Reduction (vph)	0	14	0	0	38	0	0	11	0	0	0	0
Lane Group Flow (vph)	0	4	0	204	10	0	19	806	0	53	573	0
Confl. Bikes (#/hr)												4
Heavy Vehicles (%)	0%	0%	14%	0%	0%	0%	6%	2%	0%	0%	1%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		2			6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		13.4		13.4	13.4		38.0	36.2		40.2	37.3	
Effective Green, g (s)		13.4		13.4	13.4		38.0	36.2		40.2	37.3	
Actuated g/C Ratio		0.21		0.21	0.21		0.59	0.56		0.62	0.58	
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.5		2.5	2.5		2.5	2.5		2.5	2.5	
Lane Grp Cap (vph)		303		294	335		404	1014		256	1087	
v/s Ratio Prot					0.01		0.00	c0.45		c0.01	0.30	
v/s Ratio Perm		0.00		c0.14			0.03			0.12		
v/c Ratio		0.01		0.69	0.03		0.05	0.79		0.21	0.53	
Uniform Delay, d1		20.3		23.7	20.4		6.0	11.2		8.3	8.3	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0		6.4	0.0		0.0	4.2		0.3	0.4	
Delay (s)		20.3		30.0	20.4		6.0	15.4		8.6	8.6	
Level of Service		C		C	C		A	B		A	A	
Approach Delay (s)		20.3			28.2			15.2			8.6	
Approach LOS		C			C			B			A	

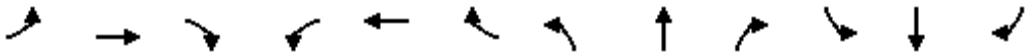
Intersection Summary			
HCM 2000 Control Delay	14.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	64.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	25	56	0	17	6	284	54	21	548	1
Future Volume (vph)	1	0	25	56	0	17	6	284	54	21	548	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		0.98		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.87		1.00	0.85		1.00	0.98		1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1616		1803	1615		1805	1745		1804	1792	
Flt Permitted		0.99		0.87	1.00		0.34	1.00		0.53	1.00	
Satd. Flow (perm)		1598		1650	1615		655	1745		998	1792	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1	0	28	64	0	19	7	323	61	24	623	1
RTOR Reduction (vph)	0	26	0	0	17	0	0	8	0	0	0	0
Lane Group Flow (vph)	0	3	0	64	2	0	7	376	0	24	624	0
Confl. Peds. (#/hr)			1	1					2	2		
Confl. Bikes (#/hr)												4
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	7%	0%	0%	6%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		5.1		5.1	5.1		27.5	26.9		27.5	26.9	
Effective Green, g (s)		4.6		4.6	4.6		26.5	26.4		26.5	26.4	
Actuated g/C Ratio		0.10		0.10	0.10		0.59	0.59		0.59	0.59	
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.5		2.5	2.5		2.5	2.5		2.5	2.5	
Lane Grp Cap (vph)		164		170	166		391	1032		594	1060	
v/s Ratio Prot					0.00		0.00	0.22		c0.00	c0.35	
v/s Ratio Perm		0.00		c0.04			0.01			0.02		
v/c Ratio		0.02		0.38	0.01		0.02	0.36		0.04	0.59	
Uniform Delay, d1		18.0		18.7	18.0		4.0	4.7		3.8	5.7	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0		1.0	0.0		0.0	0.2		0.0	0.7	
Delay (s)		18.0		19.7	18.0		4.0	4.9		3.9	6.4	
Level of Service		B		B	B		A	A		A	A	
Approach Delay (s)		18.0			19.3			4.9			6.3	
Approach LOS		B			B			A			A	

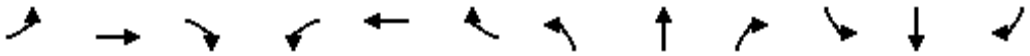
Intersection Summary			
HCM 2000 Control Delay	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	44.6	Sum of lost time (s)	13.5
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	15	190	0	45	18	590	83	49	532	1
Future Volume (vph)	2	0	15	190	0	45	18	590	83	49	532	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.88		1.00	0.85		1.00	0.98		1.00	1.00	
Flt Protected		0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1479		1805	1615		1703	1833		1805	1881	
Flt Permitted		0.98		0.75	1.00		0.37	1.00		0.20	1.00	
Satd. Flow (perm)		1458		1417	1615		665	1833		384	1881	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	2	0	16	204	0	48	19	634	89	53	572	1
RTOR Reduction (vph)	0	14	0	0	38	0	0	6	0	0	0	0
Lane Group Flow (vph)	0	4	0	204	10	0	19	717	0	53	573	0
Confl. Bikes (#/hr)												4
Heavy Vehicles (%)	0%	0%	14%	0%	0%	0%	6%	2%	0%	0%	1%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		2			6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		12.5		12.5	12.5		33.1	32.3		37.5	34.5	
Effective Green, g (s)		12.5		12.5	12.5		33.1	32.3		37.5	34.5	
Actuated g/C Ratio		0.21		0.21	0.21		0.55	0.54		0.63	0.58	
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.5		2.5	2.5		2.5	2.5		2.5	2.5	
Lane Grp Cap (vph)		304		296	337		381	990		312	1085	
v/s Ratio Prot					0.01		0.00	c0.39		c0.01	0.30	
v/s Ratio Perm		0.00		c0.14			0.03			0.10		
v/c Ratio		0.01		0.69	0.03		0.05	0.72		0.17	0.53	
Uniform Delay, d1		18.8		21.9	18.8		6.3	10.4		6.8	7.7	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0		6.0	0.0		0.0	2.5		0.2	0.4	
Delay (s)		18.8		27.9	18.8		6.3	12.9		7.0	8.1	
Level of Service		B		C	B		A	B		A	A	
Approach Delay (s)		18.8			26.1			12.7			8.0	
Approach LOS		B			C			B			A	

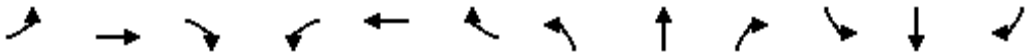
Intersection Summary			
HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	59.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	25	44	0	17	6	284	54	21	548	1
Future Volume (vph)	1	0	25	44	0	17	6	284	54	21	548	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		0.98		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.87		1.00	0.85		1.00	0.98		1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1616		1803	1615		1805	1745		1804	1792	
Flt Permitted		0.99		0.87	1.00		0.34	1.00		0.53	1.00	
Satd. Flow (perm)		1598		1650	1615		655	1745		998	1792	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1	0	28	50	0	19	7	323	61	24	623	1
RTOR Reduction (vph)	0	26	0	0	17	0	0	8	0	0	0	0
Lane Group Flow (vph)	0	3	0	50	2	0	7	376	0	24	624	0
Confl. Peds. (#/hr)			1	1					2	2		
Confl. Bikes (#/hr)												4
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	7%	0%	0%	6%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		5.1		5.1	5.1		27.6	27.0		27.6	27.0	
Effective Green, g (s)		4.6		4.6	4.6		26.6	26.5		26.6	26.5	
Actuated g/C Ratio		0.10		0.10	0.10		0.60	0.59		0.60	0.59	
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.5		2.5	2.5		2.5	2.5		2.5	2.5	
Lane Grp Cap (vph)		164		169	166		392	1034		595	1062	
v/s Ratio Prot					0.00		0.00	0.22		c0.00	c0.35	
v/s Ratio Perm		0.00		c0.03			0.01			0.02		
v/c Ratio		0.02		0.30	0.01		0.02	0.36		0.04	0.59	
Uniform Delay, d1		18.0		18.6	18.0		4.0	4.7		3.8	5.7	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0		0.7	0.0		0.0	0.2		0.0	0.7	
Delay (s)		18.1		19.3	18.0		4.0	4.9		3.9	6.4	
Level of Service		B		B	B		A	A		A	A	
Approach Delay (s)		18.1			18.9			4.9			6.3	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	6.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	44.7	Sum of lost time (s)	13.5
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	15	151	0	45	18	590	83	49	532	1
Future Volume (vph)	2	0	15	151	0	45	18	590	83	49	532	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.88		1.00	0.85		1.00	0.98		1.00	1.00	
Flt Protected		0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1479		1805	1615		1703	1833		1805	1881	
Flt Permitted		0.98		0.75	1.00		0.38	1.00		0.21	1.00	
Satd. Flow (perm)		1455		1417	1615		679	1833		396	1881	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	2	0	16	162	0	48	19	634	89	53	572	1
RTOR Reduction (vph)	0	15	0	0	39	0	0	6	0	0	0	0
Lane Group Flow (vph)	0	3	0	162	9	0	19	717	0	53	573	0
Confl. Bikes (#/hr)												4
Heavy Vehicles (%)	0%	0%	14%	0%	0%	0%	6%	2%	0%	0%	1%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		2			6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		10.9		10.9	10.9		32.0	31.2		36.4	33.4	
Effective Green, g (s)		10.9		10.9	10.9		32.0	31.2		36.4	33.4	
Actuated g/C Ratio		0.19		0.19	0.19		0.56	0.55		0.64	0.58	
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.5		2.5	2.5		2.5	2.5		2.5	2.5	
Lane Grp Cap (vph)		277		270	308		394	1001		326	1100	
v/s Ratio Prot					0.01		0.00	c0.39		c0.01	0.30	
v/s Ratio Perm		0.00		c0.11			0.03			0.10		
v/c Ratio		0.01		0.60	0.03		0.05	0.72		0.16	0.52	
Uniform Delay, d1		18.7		21.1	18.8		5.8	9.7		6.2	7.1	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0		3.0	0.0		0.0	2.3		0.2	0.3	
Delay (s)		18.7		24.1	18.8		5.8	12.0		6.3	7.4	
Level of Service		B		C	B		A	B		A	A	
Approach Delay (s)		18.7			22.9			11.8			7.3	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	57.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

APPENDIX M

SIMTRAFFIC 95TH PERCENTILE QUEUING CALCULATIONS

Intersection: 9: NE 10th Avenue & NE 141st Street/Site Access

Movement	EB	WB	NB
Directions Served	LTR	L	L
Maximum Queue (ft)	31	31	35
Average Queue (ft)	18	4	2
95th Queue (ft)	42	20	16
Link Distance (ft)	579	589	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			100
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: NE 10th Avenue & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	L	T	R
Maximum Queue (ft)	113	117	192	52	163	221	65	93	250	209	62
Average Queue (ft)	35	42	65	14	75	111	15	38	126	43	20
95th Queue (ft)	82	104	150	39	136	183	45	74	206	115	49
Link Distance (ft)		937	937		418	418		683		449	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	250			250			370		200		140
Storage Blk Time (%)									1	0	
Queuing Penalty (veh)									2	0	

Intersection: 12: NE 139th Street & RIRO

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: 13: I-5 SB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB
Directions Served	T	T	R	L	L
Maximum Queue (ft)	113	89	109	111	123
Average Queue (ft)	41	23	44	45	66
95th Queue (ft)	93	66	92	89	105
Link Distance (ft)	895	895			221
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			200	150	
Storage Blk Time (%)				0	0
Queuing Penalty (veh)				0	0

Intersection: 14: I-5 NB Off-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	T	T	T	T	L	R
Maximum Queue (ft)	98	96	103	111	118	112	408	147
Average Queue (ft)	43	42	36	25	28	34	216	46
95th Queue (ft)	90	91	86	70	75	79	338	105
Link Distance (ft)	223	223	223		231	231	907	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				70				350
Storage Blk Time (%)				1	1		1	
Queuing Penalty (veh)				2	3		2	

Intersection: 15: Dummy/I-5 NB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB
Directions Served	L	T	T	TR
Maximum Queue (ft)	111	81	22	5
Average Queue (ft)	42	7	0	0
95th Queue (ft)	90	45	5	2
Link Distance (ft)	231	231	231	300
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: NE 10th Avenue & NE 141st Street/Site Access

Movement	EB	NB
Directions Served	LTR	L
Maximum Queue (ft)	50	30
Average Queue (ft)	15	7
95th Queue (ft)	45	27
Link Distance (ft)	579	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: NE 10th Avenue & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	L	T	R
Maximum Queue (ft)	161	206	212	98	299	368	54	113	227	168	54
Average Queue (ft)	57	85	89	40	163	217	17	53	136	69	24
95th Queue (ft)	122	174	186	82	271	339	44	97	206	126	54
Link Distance (ft)		943	943		418	418		683		449	
Upstream Blk Time (%)					0	0					
Queuing Penalty (veh)					0	0					
Storage Bay Dist (ft)	250			250			370		200		140
Storage Blk Time (%)		0			1				1	1	
Queuing Penalty (veh)		0			1				3	2	

Intersection: 12: NE 139th Street & RIRO

Movement	WB
Directions Served	T
Maximum Queue (ft)	21
Average Queue (ft)	1
95th Queue (ft)	12
Link Distance (ft)	895
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: I-5 SB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB
Directions Served	T	T	R	L	L	T
Maximum Queue (ft)	190	96	130	193	225	8
Average Queue (ft)	75	30	46	92	113	0
95th Queue (ft)	154	76	91	163	180	6
Link Distance (ft)	895	895			221	221
Upstream Blk Time (%)					0	
Queuing Penalty (veh)					1	
Storage Bay Dist (ft)			200	150		
Storage Blk Time (%)				1	3	
Queuing Penalty (veh)				2	5	

Intersection: 14: I-5 NB Off-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	T	T	T	T	L	R
Maximum Queue (ft)	168	153	131	163	233	220	760	425
Average Queue (ft)	67	66	48	72	95	100	416	186
95th Queue (ft)	144	141	109	153	192	188	674	451
Link Distance (ft)	223	223	223		231	231	907	
Upstream Blk Time (%)					1	0	1	
Queuing Penalty (veh)					3	1	0	
Storage Bay Dist (ft)				70				350
Storage Blk Time (%)				10	13		17	
Queuing Penalty (veh)				27	38		56	

Intersection: 15: Dummy/I-5 NB On-Ramp & NE 139th Street

Movement	EB	EB	WB	WB
Directions Served	L	T	T	TR
Maximum Queue (ft)	186	203	70	42
Average Queue (ft)	77	22	4	3
95th Queue (ft)	143	112	37	32
Link Distance (ft)	231	231	300	300
Upstream Blk Time (%)	0	0		
Queuing Penalty (veh)	0	1		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: NE 10th Avenue & NE 141st Street/Site Access

Movement	EB	WB	NB
Directions Served	LTR	L	L
Maximum Queue (ft)	31	31	35
Average Queue (ft)	18	4	2
95th Queue (ft)	42	20	16
Link Distance (ft)	579	589	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			100
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: NE 10th Avenue & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	L	T	R
Maximum Queue (ft)	122	149	200	76	200	252	49	97	247	175	88
Average Queue (ft)	37	52	75	18	88	121	12	39	127	47	26
95th Queue (ft)	90	131	170	50	161	205	36	77	207	113	64
Link Distance (ft)		937	937		418	418		683		449	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	250			250			370		200		140
Storage Blk Time (%)					0				1		
Queuing Penalty (veh)					0				3		

Intersection: 12: NE 139th Street & RIRO

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: 13: I-5 SB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB
Directions Served	T	T	R	L	L
Maximum Queue (ft)	130	82	144	135	162
Average Queue (ft)	50	29	50	61	79
95th Queue (ft)	99	70	107	110	129
Link Distance (ft)	895	895			221
Upstream Blk Time (%)					0
Queuing Penalty (veh)					0
Storage Bay Dist (ft)			200	150	
Storage Blk Time (%)			0	0	0
Queuing Penalty (veh)			0	0	0

Intersection: 14: I-5 NB Off-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	T	T	T	T	L	R
Maximum Queue (ft)	106	112	108	108	128	124	377	261
Average Queue (ft)	41	45	33	26	26	33	220	79
95th Queue (ft)	89	92	84	77	80	86	339	172
Link Distance (ft)	223	223	223		231	231	907	
Upstream Blk Time (%)					0			
Queuing Penalty (veh)					0			
Storage Bay Dist (ft)				70				350
Storage Blk Time (%)				1	1		1	
Queuing Penalty (veh)				2	3		4	

Intersection: 15: Dummy/I-5 NB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB
Directions Served	L	T	T	TR
Maximum Queue (ft)	120	100	23	2
Average Queue (ft)	41	5	1	0
95th Queue (ft)	89	42	15	1
Link Distance (ft)	231	231	231	300
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: NE 10th Avenue & NE 141st Street/Site Access

Movement	EB	NB	SB
Directions Served	LTR	L	TR
Maximum Queue (ft)	61	43	6
Average Queue (ft)	15	9	0
95th Queue (ft)	44	33	4
Link Distance (ft)	579		2049
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		100	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: NE 10th Avenue & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	L	T	R
Maximum Queue (ft)	147	223	237	98	382	426	57	125	272	285	90
Average Queue (ft)	66	94	110	38	202	260	17	58	164	82	26
95th Queue (ft)	128	188	216	79	334	401	43	111	255	184	63
Link Distance (ft)		943	943		418	418		683		449	
Upstream Blk Time (%)					0	1				0	
Queuing Penalty (veh)					0	4				0	
Storage Bay Dist (ft)	250			250			370		200		140
Storage Blk Time (%)		0			5				4	1	
Queuing Penalty (veh)		0			3				11	2	

Intersection: 12: NE 139th Street & RIRO

Movement	WB	WB
Directions Served	T	T
Maximum Queue (ft)	10	60
Average Queue (ft)	0	4
95th Queue (ft)	8	32
Link Distance (ft)	895	895
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Intersection: 13: I-5 SB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB	B38
Directions Served	T	T	R	L	L	T
Maximum Queue (ft)	274	165	155	200	281	49
Average Queue (ft)	100	48	59	129	153	3
95th Queue (ft)	196	116	126	211	254	26
Link Distance (ft)	895	895			221	223
Upstream Blk Time (%)					2	
Queuing Penalty (veh)					11	
Storage Bay Dist (ft)			200	150		
Storage Blk Time (%)		0	0	6	10	
Queuing Penalty (veh)		0	0	14	23	

Intersection: 14: I-5 NB Off-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	T	T	T	T	L	R
Maximum Queue (ft)	208	195	166	170	252	236	913	425
Average Queue (ft)	79	85	59	94	121	116	500	251
95th Queue (ft)	171	172	137	184	244	222	820	522
Link Distance (ft)	223	223	223		231	231	907	
Upstream Blk Time (%)	0	0	0		2	1	2	
Queuing Penalty (veh)	0	0	0		8	3	0	
Storage Bay Dist (ft)				70				350
Storage Blk Time (%)				13	15		24	
Queuing Penalty (veh)				43	50		92	

Intersection: 15: Dummy/I-5 NB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB
Directions Served	L	T	T	T	TR
Maximum Queue (ft)	207	231	112	70	82
Average Queue (ft)	96	50	7	8	6
95th Queue (ft)	178	178	58	44	50
Link Distance (ft)	231	231	231	300	300
Upstream Blk Time (%)	0	1	0		
Queuing Penalty (veh)	1	2	0		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: NE 10th Avenue & NE 141st Street/Site Access

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	TR	L	TR	L	TR
Maximum Queue (ft)	48	74	36	34	34	39	6
Average Queue (ft)	18	33	13	3	1	9	0
95th Queue (ft)	44	64	38	19	21	31	4
Link Distance (ft)	579	589	589		449		2049
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)				100		75	
Storage Blk Time (%)					0		
Queuing Penalty (veh)					0		

Intersection: 11: NE 10th Avenue & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	L	T	R
Maximum Queue (ft)	137	152	206	68	230	272	37	102	221	195	64
Average Queue (ft)	53	47	77	17	91	133	11	40	129	57	26
95th Queue (ft)	115	118	170	50	176	220	34	84	207	121	54
Link Distance (ft)		937	937		418	418		683		449	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	250			250			370		200		140
Storage Blk Time (%)					0				1	0	
Queuing Penalty (veh)					0				3	0	

Intersection: 12: NE 139th Street & RIRO

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: 13: I-5 SB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB
Directions Served	T	T	R	L	L
Maximum Queue (ft)	114	99	153	127	145
Average Queue (ft)	48	32	52	61	78
95th Queue (ft)	97	78	114	109	121
Link Distance (ft)	895	895			221
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			200	150	
Storage Blk Time (%)			0	0	0
Queuing Penalty (veh)			0	0	0

Intersection: 14: I-5 NB Off-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	T	T	T	T	L	R
Maximum Queue (ft)	120	104	106	124	122	148	436	381
Average Queue (ft)	45	40	35	31	31	39	246	84
95th Queue (ft)	96	88	88	86	84	91	373	196
Link Distance (ft)	223	223	223		231	231	907	
Upstream Blk Time (%)					0	0		
Queuing Penalty (veh)					0	0		
Storage Bay Dist (ft)				70				350
Storage Blk Time (%)				2	2		2	
Queuing Penalty (veh)				4	5		7	

Intersection: 15: Dummy/I-5 NB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB
Directions Served	L	T	T	T	TR
Maximum Queue (ft)	95	108	39	5	55
Average Queue (ft)	43	9	3	0	2
95th Queue (ft)	85	59	39	1	35
Link Distance (ft)	231	231	231	300	300
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: NE 10th Avenue & NE 141st Street/Site Access

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	TR	L	TR	L	TR
Maximum Queue (ft)	75	477	164	48	17	68	6
Average Queue (ft)	16	234	47	6	1	23	0
95th Queue (ft)	51	529	225	29	7	55	0
Link Distance (ft)	579	589	589		449		2049
Upstream Blk Time (%)		6	2				
Queuing Penalty (veh)		0	0				
Storage Bay Dist (ft)				100		75	
Storage Blk Time (%)						0	
Queuing Penalty (veh)						1	

Intersection: 11: NE 10th Avenue & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	R	L	T	R
Maximum Queue (ft)	192	244	261	221	410	442	62	165	26	279	397	141
Average Queue (ft)	94	102	111	47	255	330	20	82	2	207	140	34
95th Queue (ft)	169	211	229	141	393	463	50	143	24	294	310	86
Link Distance (ft)		943	943		418	418		683			449	
Upstream Blk Time (%)				0	1	4					0	
Queuing Penalty (veh)				0	3	21					0	
Storage Bay Dist (ft)	250			250			370		200	200		140
Storage Blk Time (%)	0	0			9			0		14	2	
Queuing Penalty (veh)	0	0			6			0		51	9	

Intersection: 12: NE 139th Street & RIRO

Movement	WB	WB
Directions Served	T	T
Maximum Queue (ft)	164	208
Average Queue (ft)	9	20
95th Queue (ft)	79	108
Link Distance (ft)	895	895
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		2
Queuing Penalty (veh)		0

Intersection: 13: I-5 SB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB	B38
Directions Served	T	T	R	L	L	T
Maximum Queue (ft)	246	184	212	200	276	43
Average Queue (ft)	91	47	65	134	156	3
95th Queue (ft)	184	120	140	212	247	28
Link Distance (ft)	895	895			221	223
Upstream Blk Time (%)					2	
Queuing Penalty (veh)					10	
Storage Bay Dist (ft)			200	150		
Storage Blk Time (%)		0	0	6	10	
Queuing Penalty (veh)		0	1	13	23	

Intersection: 14: I-5 NB Off-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	T	T	T	T	L	R
Maximum Queue (ft)	219	206	164	170	252	251	941	425
Average Queue (ft)	91	89	68	96	129	128	584	299
95th Queue (ft)	177	172	142	189	251	241	975	552
Link Distance (ft)	223	223	223		231	231	907	
Upstream Blk Time (%)	0	0	0		2	2	7	
Queuing Penalty (veh)	0	0	0		13	9	0	
Storage Bay Dist (ft)				70				350
Storage Blk Time (%)				15	18		31	0
Queuing Penalty (veh)				54	62		119	0

Intersection: 15: Dummy/I-5 NB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB
Directions Served	L	T	T	T	TR
Maximum Queue (ft)	231	241	165	157	182
Average Queue (ft)	112	61	11	14	12
95th Queue (ft)	203	197	78	82	85
Link Distance (ft)	231	231	231	300	300
Upstream Blk Time (%)	0	1	0	0	0
Queuing Penalty (veh)	2	2	0	1	1
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: NE 10th Avenue & NE 141st Street/Site Access

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	L	TR	L	L
Maximum Queue (ft)	47	79	35	30	31
Average Queue (ft)	17	34	14	3	6
95th Queue (ft)	44	62	39	17	25
Link Distance (ft)	579	589	589		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				100	75
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 11: NE 10th Avenue & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	L	T	R
Maximum Queue (ft)	148	172	187	51	178	242	58	89	238	182	66
Average Queue (ft)	47	56	79	17	90	126	14	40	139	47	26
95th Queue (ft)	107	133	163	45	155	208	42	81	219	115	57
Link Distance (ft)		937	937		418	418		683		449	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	250			250			370		200		140
Storage Blk Time (%)									2	0	
Queuing Penalty (veh)									4	1	

Intersection: 12: NE 139th Street & RIRO

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: 13: I-5 SB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB
Directions Served	T	T	R	L	L
Maximum Queue (ft)	111	86	133	144	155
Average Queue (ft)	48	27	51	61	80
95th Queue (ft)	96	69	106	114	133
Link Distance (ft)	895	895			221
Upstream Blk Time (%)					0
Queuing Penalty (veh)					0
Storage Bay Dist (ft)			200	150	
Storage Blk Time (%)				0	0
Queuing Penalty (veh)				0	0

Intersection: 14: I-5 NB Off-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	T	T	T	T	L	R
Maximum Queue (ft)	111	112	101	132	129	137	469	364
Average Queue (ft)	49	47	40	32	32	43	237	84
95th Queue (ft)	100	97	88	94	89	97	384	199
Link Distance (ft)	223	223	223		231	231	907	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				70				350
Storage Blk Time (%)				3	1		2	
Queuing Penalty (veh)				6	2		7	

Intersection: 15: Dummy/I-5 NB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB
Directions Served	L	T	T	T	TR
Maximum Queue (ft)	102	98	6	2	1
Average Queue (ft)	44	10	0	0	0
95th Queue (ft)	91	62	4	1	1
Link Distance (ft)	231	231	231	300	300
Upstream Blk Time (%)		0			
Queuing Penalty (veh)		0			
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: NE 10th Avenue & NE 141st Street/Site Access

Movement	EB	WB	WB	NB	NB	SB
Directions Served	LTR	L	TR	L	TR	L
Maximum Queue (ft)	56	372	52	38	13	52
Average Queue (ft)	14	161	24	9	0	22
95th Queue (ft)	44	345	49	32	7	49
Link Distance (ft)	579	589	589		449	
Upstream Blk Time (%)		0				
Queuing Penalty (veh)		0				
Storage Bay Dist (ft)				100		75
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 11: NE 10th Avenue & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	L	T	R
Maximum Queue (ft)	206	235	266	230	418	438	70	155	278	350	119
Average Queue (ft)	104	107	118	45	237	295	20	86	200	126	36
95th Queue (ft)	185	219	236	127	376	430	52	143	283	263	91
Link Distance (ft)		943	943		418	418		683		449	
Upstream Blk Time (%)					0	1					
Queuing Penalty (veh)					1	7					
Storage Bay Dist (ft)	250			250			370		200		140
Storage Blk Time (%)	0	1			9				11	2	
Queuing Penalty (veh)	0	1			5				39	11	

Intersection: 12: NE 139th Street & RIRO

Movement	WB	WB	WB
Directions Served	T	T	R
Maximum Queue (ft)	64	126	30
Average Queue (ft)	3	9	1
95th Queue (ft)	30	60	22
Link Distance (ft)	895	895	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			100
Storage Blk Time (%)		1	
Queuing Penalty (veh)		0	

Intersection: 13: I-5 SB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB	B38
Directions Served	T	T	R	L	L	T
Maximum Queue (ft)	244	173	168	199	278	56
Average Queue (ft)	111	50	64	141	164	3
95th Queue (ft)	207	121	135	217	259	29
Link Distance (ft)	895	895			221	223
Upstream Blk Time (%)					3	
Queuing Penalty (veh)					15	
Storage Bay Dist (ft)			200	150		
Storage Blk Time (%)		0	0	7	13	
Queuing Penalty (veh)		0	1	16	31	

Intersection: 14: I-5 NB Off-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	T	T	T	T	L	R
Maximum Queue (ft)	222	206	193	170	255	252	933	425
Average Queue (ft)	94	97	77	101	136	136	532	270
95th Queue (ft)	180	179	154	193	261	250	866	546
Link Distance (ft)	223	223	223		231	231	907	
Upstream Blk Time (%)	0	0	0		3	2	3	
Queuing Penalty (veh)	0	0	0		13	8	0	
Storage Bay Dist (ft)				70				350
Storage Blk Time (%)				14	18		27	0
Queuing Penalty (veh)				50	64		104	0

Intersection: 15: Dummy/I-5 NB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB
Directions Served	L	T	T	T	TR
Maximum Queue (ft)	225	258	166	193	222
Average Queue (ft)	114	82	15	19	17
95th Queue (ft)	207	230	101	96	100
Link Distance (ft)	231	231	231	300	300
Upstream Blk Time (%)	1	2	0		
Queuing Penalty (veh)	4	6	0		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: NE 10th Avenue & NE 141st Street/Site Access

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	L	TR	L	L
Maximum Queue (ft)	45	60	31	30	35
Average Queue (ft)	17	28	12	3	6
95th Queue (ft)	45	53	36	18	25
Link Distance (ft)	579	589	589		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				100	75
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 11: NE 10th Avenue & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	L	T	R
Maximum Queue (ft)	134	153	195	69	203	222	41	92	260	234	85
Average Queue (ft)	50	49	73	21	88	124	11	36	140	57	24
95th Queue (ft)	105	127	165	52	163	202	34	73	226	143	61
Link Distance (ft)		937	937		418	418		683		449	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	250			250			370		200		140
Storage Blk Time (%)					0				2	0	
Queuing Penalty (veh)					0				4	1	

Intersection: 12: NE 139th Street & RIRO

Movement	SB
Directions Served	R
Maximum Queue (ft)	35
Average Queue (ft)	8
95th Queue (ft)	27
Link Distance (ft)	329
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: I-5 SB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB
Directions Served	T	T	R	L	L
Maximum Queue (ft)	179	96	152	120	139
Average Queue (ft)	58	30	54	59	79
95th Queue (ft)	129	73	117	104	119
Link Distance (ft)	895	895			221
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			200	150	
Storage Blk Time (%)			0	0	0
Queuing Penalty (veh)			0	0	0

Intersection: 14: I-5 NB Off-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	T	T	T	T	L	R
Maximum Queue (ft)	121	113	105	98	115	128	435	256
Average Queue (ft)	51	48	41	28	31	41	233	82
95th Queue (ft)	104	98	90	81	83	93	375	188
Link Distance (ft)	223	223	223		231	231	907	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				70				350
Storage Blk Time (%)				1	1		1	
Queuing Penalty (veh)				3	3		5	

Intersection: 15: Dummy/I-5 NB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB
Directions Served	L	T	T	T	TR
Maximum Queue (ft)	123	90	18	5	1
Average Queue (ft)	45	7	1	0	0
95th Queue (ft)	93	45	13	3	1
Link Distance (ft)	231	231	231	300	300
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: NE 10th Avenue & NE 141st Street/Site Access

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	TR	L	TR	L	TR
Maximum Queue (ft)	57	212	58	38	16	54	19
Average Queue (ft)	15	97	27	7	0	20	1
95th Queue (ft)	45	186	53	30	5	47	16
Link Distance (ft)	579	589	589		449		2049
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)				100		75	
Storage Blk Time (%)						0	0
Queuing Penalty (veh)						0	0

Intersection: 11: NE 10th Avenue & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	L	T	R
Maximum Queue (ft)	220	244	277	177	405	434	54	179	278	347	136
Average Queue (ft)	100	100	115	58	246	302	17	81	202	125	30
95th Queue (ft)	188	201	227	127	383	426	43	140	286	270	77
Link Distance (ft)		943	943		418	418		683		449	
Upstream Blk Time (%)				0	0	1				0	
Queuing Penalty (veh)				0	1	8				1	
Storage Bay Dist (ft)	250			250			370		200		140
Storage Blk Time (%)	0	0			9			0	12	2	
Queuing Penalty (veh)	1	0			6			0	38	9	

Intersection: 12: NE 139th Street & RIRO

Movement	WB	WB	WB	SB
Directions Served	T	T	R	R
Maximum Queue (ft)	12	102	30	53
Average Queue (ft)	0	6	1	20
95th Queue (ft)	7	48	22	41
Link Distance (ft)	895	895		329
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			100	
Storage Blk Time (%)		0		
Queuing Penalty (veh)		0		

Intersection: 13: I-5 SB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB	B38
Directions Served	T	T	R	L	L	T
Maximum Queue (ft)	245	158	188	199	276	74
Average Queue (ft)	98	50	68	142	164	3
95th Queue (ft)	199	113	151	220	259	38
Link Distance (ft)	895	895			221	223
Upstream Blk Time (%)					2	
Queuing Penalty (veh)					12	
Storage Bay Dist (ft)			200	150		
Storage Blk Time (%)		0	0	7	14	
Queuing Penalty (veh)		0	0	16	31	

Intersection: 14: I-5 NB Off-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	T	T	T	T	L	R
Maximum Queue (ft)	186	188	165	170	255	259	926	425
Average Queue (ft)	88	90	71	102	140	137	569	266
95th Queue (ft)	176	171	144	194	266	253	955	545
Link Distance (ft)	223	223	223		231	231	907	
Upstream Blk Time (%)		0	0		3	2	7	
Queuing Penalty (veh)		0	0		14	10	0	
Storage Bay Dist (ft)				70				350
Storage Blk Time (%)				15	18		29	
Queuing Penalty (veh)				54	63		111	

Intersection: 15: Dummy/I-5 NB On-Ramp & NE 139th Street

Movement	EB	EB	EB	WB	WB
Directions Served	L	T	T	T	TR
Maximum Queue (ft)	228	259	196	150	187
Average Queue (ft)	114	76	16	18	14
95th Queue (ft)	192	218	98	85	82
Link Distance (ft)	231	231	231	300	300
Upstream Blk Time (%)	0	1	0		
Queuing Penalty (veh)	1	3	0		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					