TRAFFIC IMPACT ANALYSIS

MILL CREEK PCID

JURISDICTION: CITY OF MILL CREEK

Prepared for:
Jackson | Main Architecture, P.S.
311 First Avenue South
Seattle, Washington 98104

Prepared by:
Kimley»Horn

September 2024
KH 090224127

Kimley»Horn

TRAFFIC IMPACT ANALYSIS

FOR

MILL CREEK PCID

Prepared for:
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Prepared by:
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1. DEVELOPMENT IDENTIFICATION

Kimley-Horn and Associates, Inc. (Kimley-Horn) has been retained to analyze the traffic impacts of the proposed Mill Creek PCID development (Development). This report is intended to provide the City of Mill Creek (City) with the necessary traffic generation, trip distribution, level of service analysis, and mitigation fee determination to facilitate their review of the Development. Matthew Palmer, responsible for this report and traffic analysis, is a licensed professional engineer (Civil) in the State of Washington.

The Development is proposed to construct up to 18,198 square feet (SF) of warehousing and 18,198 SF of general office space. The Development is located north of 173rd Street SE along the west side of Bothell Everett Highway (SR-527), on parcel 00602000000700. The parcel is currently undeveloped per *Snohomish County Online Property Information (SCOPI)***.** A site vicinity map is shown in **Figure 1**. The Development proposes to access the City street network through an access to SR-527. A site plan has been provided in **Appendix A**.

2. METHODOLOGY

2.1 General

Trip generation for the Development is based on national data contained in *Trip Generation Manual, 11th Edition (2021)* by the Institute of Transportation Engineers (ITE). The distribution of trips generated by the Development is based on previous analysis done in the site vicinity, surrounding land uses, and local draw areas.

2.2 Scoping of Analysis

The analysis has been performed for the 2024 existing, 2027 no-build, and 2027 build conditions to account for full build-out of the site. The level of service analysis has been performed at the following intersections during the PM peak-hour, based on previous analysis in the site vicinity:

1. SR-527 at 173rd Street SE – Minor Leg Stop Control
2. SR-527 at Site Access – Minor Leg Stop Control

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FIGURE 1: SITE VICINITY MAP

MILL CREEK PCID - MILL CREEK, WA (KH 090224127)

Congestion at intersections and along roadways is generally measured in terms of level of service (LOS). In accordance with *Highway Capacity Manual (HCM), 7th Edition* by the Transportation Research Board, road facilities and intersections are rated between LOS A and LOS F, with LOS A being free flow and LOS F being forced flow or over-capacity conditions. The LOS at signalized, roundabout, and all-way stop-controlled intersections is based on the average delay of all approaches. The LOS for two-way stop-controlled intersections is based on average delays for the critical stopped approach. Geometric characteristics and conflicting traffic movements are taken into consideration when determining LOS values. A summary of the intersection LOS criteria is included in **Table 1**.

Table 1: Level of Service Criteria

Level of Service[1]	Expected Delay	Intersection Control Delay (Seconds per Vehicle)	
		Unsignalized Intersections	Signalized Intersections
A	Little/No Delay	≤10	≤10
B	Short Delays	>10 and ≤15	>10 and ≤20
C	Average Delays	>15 and ≤25	>20 and ≤35
D	Long Delays	>25 and ≤35	>35 and ≤55
E	Very Long Delays	>35 and ≤50	>55 and ≤80
F	Extreme Delays[2]	>50	>80

City of Mill Creek Transportation Element 2050 identifies SR-527 as a Regionally Significant State Highway (RSSH). The intersection peak hour LOS guidelines for an RSSH are LOS E or better per the Puget Sound Regional Council. Mitigation measures or capacity projects should be implemented if LOS falls below LOS E. The LOS analysis for unsignalized and signalized intersections has been performed utilizing the *Synchro 12* software.

[1] **Source:** *Highway Capacity Manual, 7th Edition.*
LOS A: Free-flow traffic conditions, with minimal delay to stopped vehicles (no vehicle is delayed longer than one cycle at signalized intersection).
LOS B: Generally stable traffic flow conditions.
LOS C: Occasional back-ups may develop but delay to vehicles is short term and still tolerable.
LOS D: During short periods of the peak hour, delays to approaching vehicles may be substantial but are tolerable during times of less demand (i.e., vehicles delayed one cycle or less at signal).
LOS E: Intersections operate at or near capacity, with long queues developing on all approaches and long delays.
LOS F: Jammed conditions on all approaches with excessively long delays and vehicles unable to move at times.
[2] When demand volume exceeds the capacity of the lane, extreme delays will be encountered with queuing which may cause severe congestion affecting other traffic movements in the intersection.

3. TRIP GENERATION

Trip generation calculations for the Development are based on national statistics contained in the ITE *Trip Generation Manual, 11th Edition (2021)*. The Development is proposed to consist of up to 18,198 square feet (SF) of warehousing and 18,198 SF of general office space. The average trip generation rates for the following ITE Land Uses were utilized:

- Land Use Code 150, Warehousing – 18,198 SF
- Land Use Code 710, General Office – 18,198 SF

The daily, AM, and PM peak-hour trip generation for the Development is based on the average trip generation rates. The new trip generation calculations for the Development are summarized in **Table 2**.

Table 2: New Trip Generation Summary

Land Use	Size	Average Daily Trips (ADTs)	AM Peak-Hour Trips			PM Peak-Hour Trips		
			In	Out	Total	In	Out	Total
ITE LUC 150 Warehousing	18.198 K SF	31.12	2.38	0.71	3.09	0.92	2.36	3.28
ITE LUC 710 General Office	18.198 K SF	197.27	24.34	3.32	27.66	4.46	21.75	26.21
TOTAL		**228.39**	**26.72**	**4.03**	**30.75**	**5.38**	**24.11**	**29.49**

The Development is anticipated to generate approximately 228.39 new ADTs with approximately 30.75 new AM peak-hour trips and approximately 29.49 new PM peak-hour trips. The trip generation calculations are provided in **Appendix B**.

4. TRIP DISTRIBUTION

The trip distribution is based on distributions of approved developments in the site vicinity. The anticipated trip distribution is:

- 60% to and from the south along SR-527.
- 15% to and from the north along SR-527.
- 10% to and from the west along 164th Street SE.
- 5% to and from the east along 180th Street SE.
- 5% to and from the east along Mill Creek Road.
- 5% to and from local roadways along SR-527 north of 164h Street SE.

A detailed trip distribution for the AM and PM Peak-hour is displayed in **Figure 2**.

5. SNOHOMISH COUNTY INTERSECTIONS

The County requires detailed Development trip turning movement data at County key intersections impacted with three or more directional trips on an approach or departure. The Development will impact three (3) key intersections during both the AM and PM peak-hours. The AM peak-hour key intersection impacts are shown in tabular form in **Table 3** and the PM peak-hour key intersection impacts are shown in tabular form in **Table 4**.

The key intersection location and impacts are also shown in graphical form in **Figure 3** for the AM peak-hour and PM peak-hour.

Table 3: Key Intersection Volumes – AM Peak Hour

Intersection	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
#185: SR-527 at 180th St SE	0	0	0	0	0	2	0	17	0	0	3	0
#231: SR-527 at 164th St SE	0	0	2	1	0	0	0	1	0	0	5	0
#508: SR-527 at 196th St SE	0	0	0	0	0	0	0	17	0	0	3	0

Table 4: Key Intersection Volumes – PM Peak Hour

Intersection	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
#185: SR-527 at 180th St SE	0	0	0	0	0	0	0	3	0	1	15	0
#231: SR-527 at 164th St SE	0	0	1	0	0	0	2	5	1	0	1	0
#508: SR-527 at 196th St SE	0	0	0	0	0	0	0	3	0	0	15	0

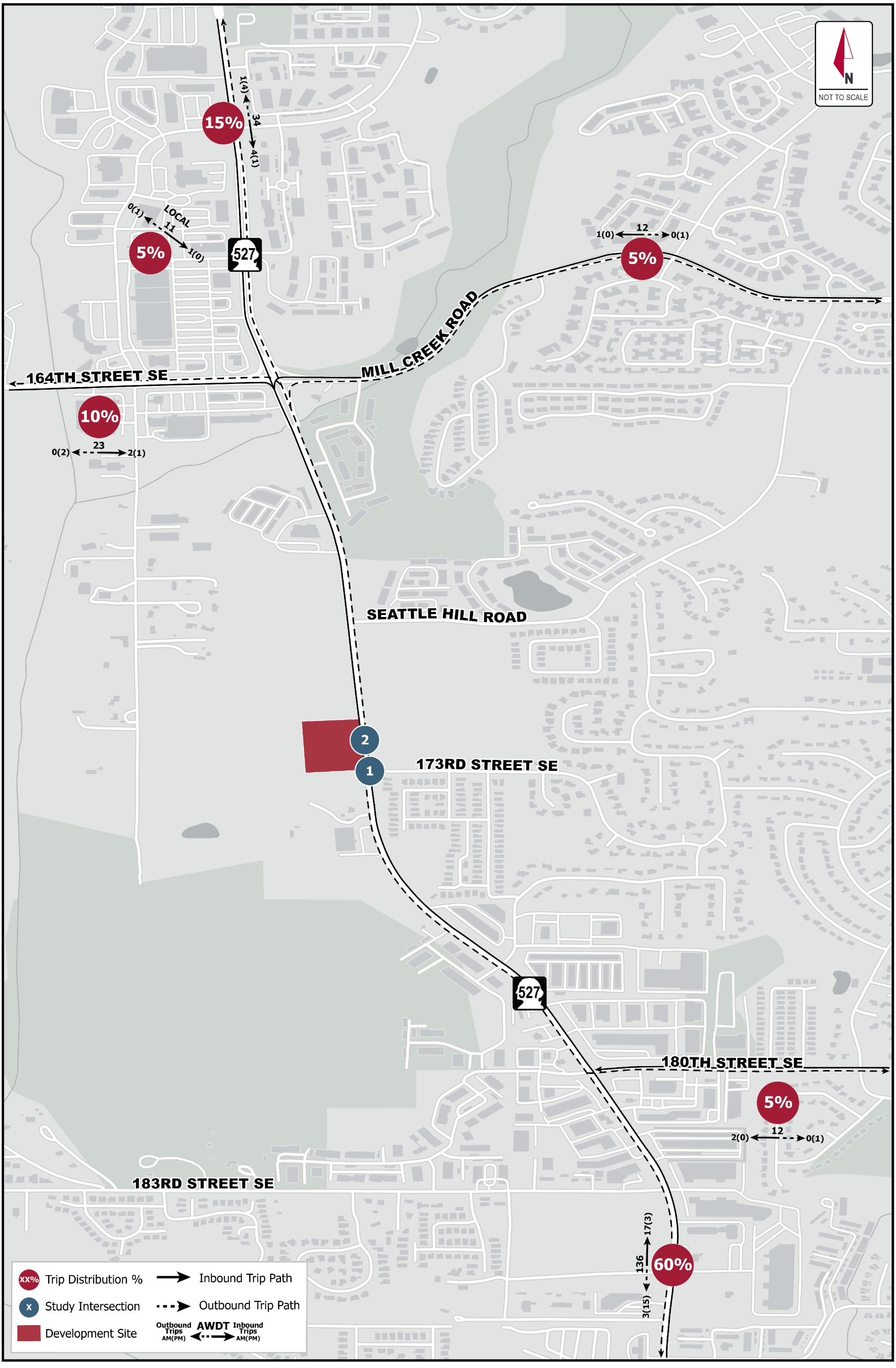

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FIGURE 2: DEVELOPMENT TRIP DISTRIBUTION

MILL CREEK PCID - MILL CREEK, WA (KH 090224127)

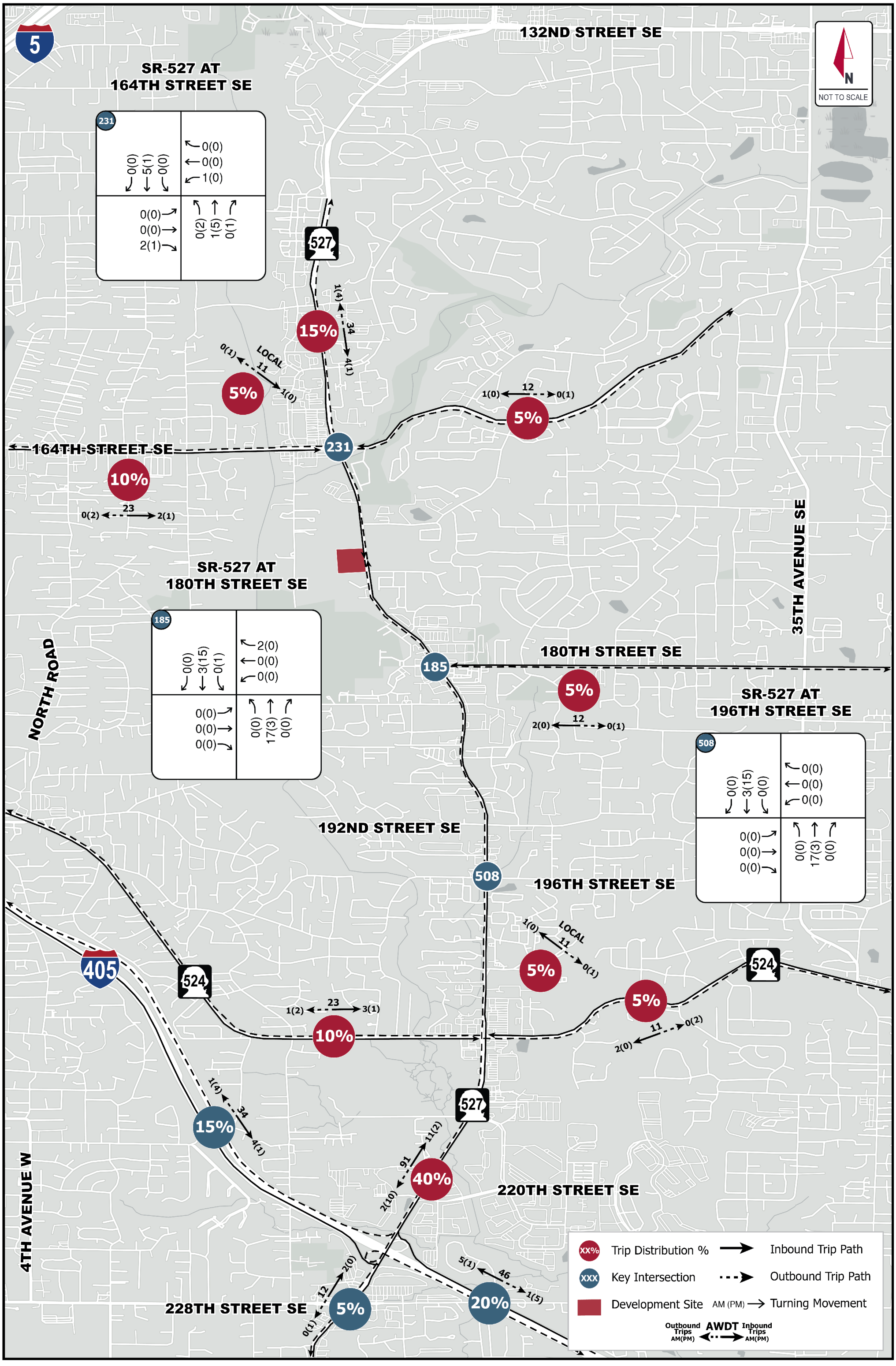

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FIGURE 3: SNOHOMISH COUNTY KEY INTERSECTION TURNING MOVEMENTS

MILL CREEK PCID - MILL CREEK, WA (KH 090224127)

6. INTERSECTION LEVEL OF SERVICE ANALYSIS

The following intersections have been identified as study intersections based on impacts of the Development and scoping discussions with City staff:

1. SR-527 at 173rd Street SE – Signal
2. SR-527 at Site Access – Minor Leg Stop Control

The intersections have been analyzed for the weekday AM and PM peak-hour.

6.1 Intersection Volumes

The existing AM and PM peak-hour turning movements at the study intersections were collected by the independent count firm Traffic Data Gathering (TDG) in September 2024. The 2024 existing turning movements at the study intersections are shown in **Figure 4**. The existing count data is included in **Appendix C**.

The future analysis has been performed for the year 2027, which represents a conservative 3-year build-out period. The Development is anticipated to be completed prior to 2027. The 2027 no-build turning movements have been calculated by applying a 1% annually compounding growth rate applied to the 2024 existing turning movements. The 2027 no-build turning movements at the study intersections are shown in **Figure 5**.

The 2027 build turning movements at the study intersections have been calculated by adding the trips generated by the Development to the 2027 no-build turning movements. The 2027 build turning movements are shown in **Figure 6**. The turning movement calculations are included in **Appendix D.**

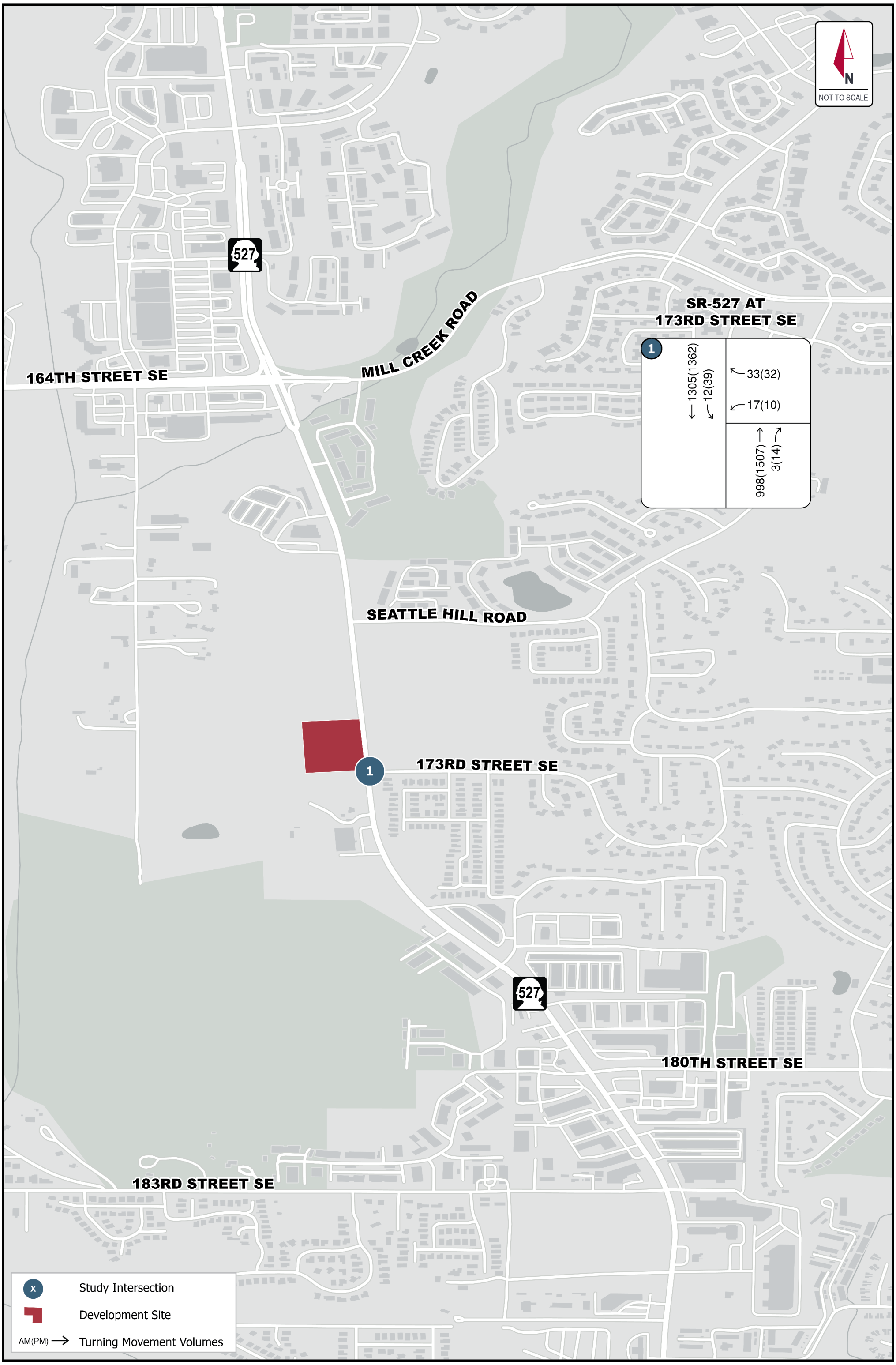

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FIGURE 4: 2024 EXISTING TURNING MOVEMENTS

MILL CREEK PCID - MILL CREEK, WA (KH 090224127)

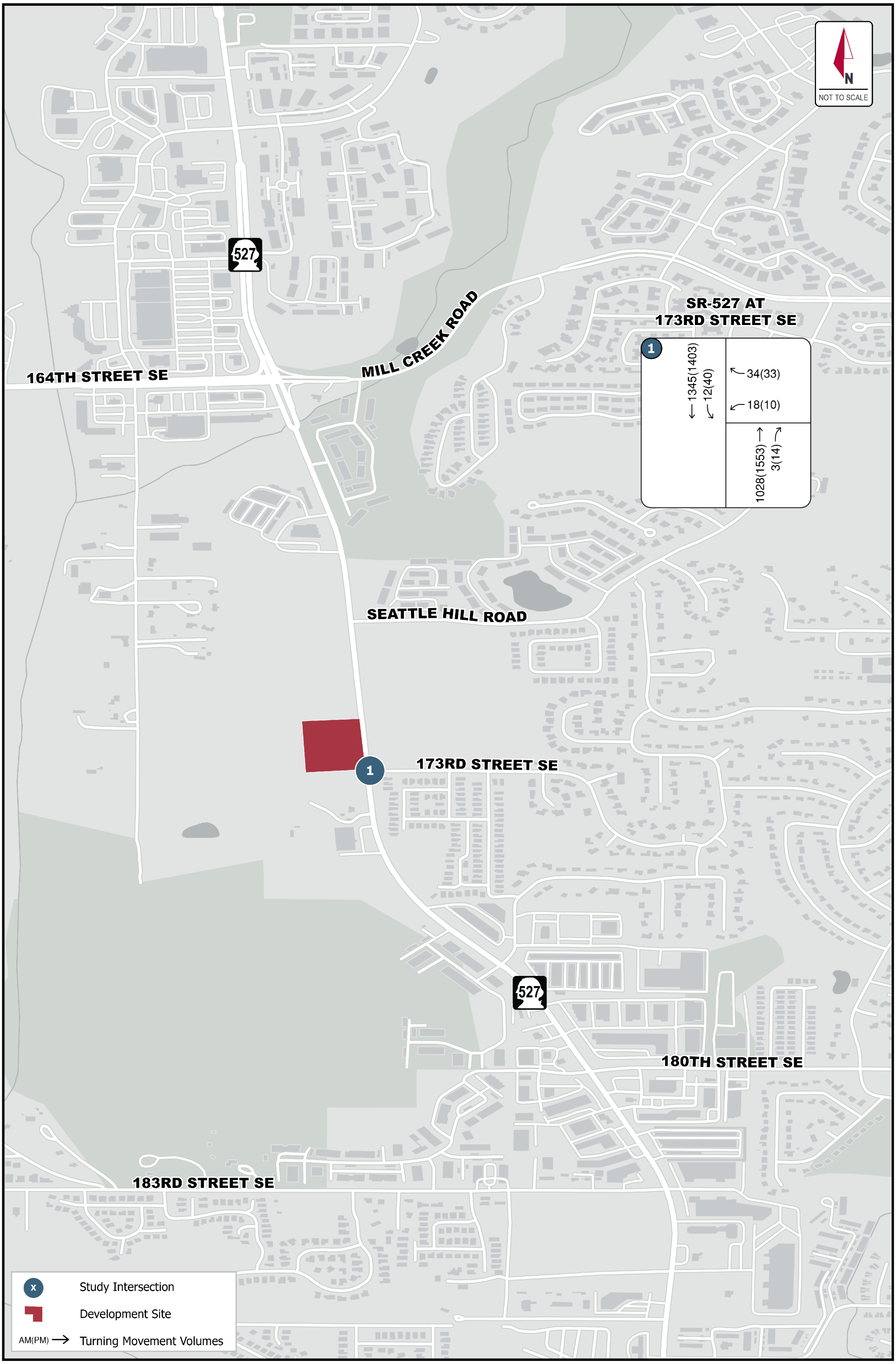

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FIGURE 5: 2027 NO-BUILD TURNING MOVEMENTS

MILL CREEK PCID - MILL CREEK, WA (KH 090224127)

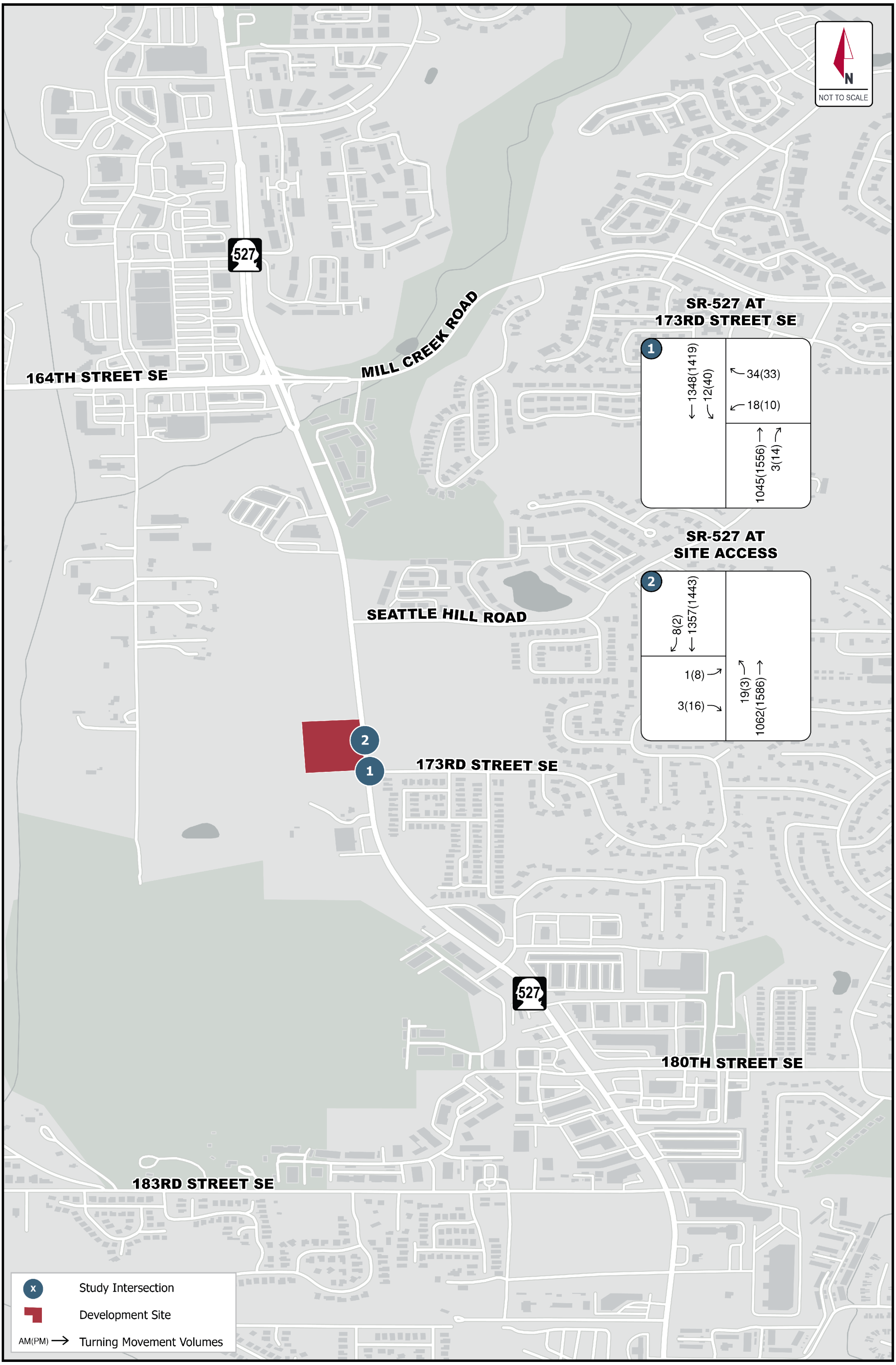

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FIGURE 6: 2027 BUILD TURNING MOVEMENTS

MILL CREEK PCID - MILL CREEK, WA (KH 090224127)

6.2 Level of Service Calculations

The level of service calculations have been performed utilizing the existing channelization, intersection control, peak-hour factors, and heavy vehicle factors from the 2024 turning movement counts. The 2024 existing, 2027 no-build, and 2027 build calculations are summarized for the AM and PM peak-hours in **Table 5**.

Table 5: Level of Service Summary

Intersections	Peak-Hour	2024 Existing Conditions		2027 Conditions			
				No-Build		Build	
		LOS	Delay	LOS	Delay	LOS	Delay
1. SR-527 at 173rd Street SE	AM	C	19.0 sec	C	19.9 sec	C	20.2 sec
	PM	C	23.7 sec	C	24.7 sec	C	24.8 sec
2. SR-527 at Site Access	AM					C	19.8 sec
	PM					D	25.8 sec

The analysis shows that the study intersection currently operates at LOS C during the AM and PM peak-hours. The study intersection and site access will continue to operate at LOS D or better during the no-build and build conditions. The intersection LOS calculations are provided in the **Appendix E**.

7. Safety Analysis

The latest five-year collision history from January 1, 2019, through December 31, 2023, was obtained from WSDOT at each of the study intersections and along SR-527 from Seattle Hill Road to 173rd Street SE. During this period, there were three reported collisions, none of which were related to intersections. Of these, two resulted in no apparent injuries and one involved a possible injury. The collisions showed no trend, featuring three different crash types: one involving a fixed object, one a same-direction sideswipe, and one a same-direction collision. The collision data is included in **Appendix F.**

8. Site Access

The Development is proposed to have a single access point. The site access will be located approximately 240 feet north of the existing intersection of SR-527 at 173rd Street SE. The posted speed limit on SR-527 is 45 miles per hour (mph) in the site vicinity. The sight distance at the access has been evaluated using WSDOT Design Manual M 22.01.22 Section 1340.03(3) which requires a sight distance of 360 feet. The available sight distance is anticipated to meet WSDOT guidelines.

9. TRAFFIC MITIGATION FEES

The City collects traffic mitigation fees based on the number of new units for the residential use and number of new PM peak-hour trips generated for the commercial use by a development. The City also has interlocal agreement with Snohomish County for traffic mitigation fees.

9.1 City of Mill Creek

The transportation impact fees have been calculated using the *City of Mill Creek Development Impact Mitigation Fee Program*, last updated in 2021. The current traffic mitigation fees are $3,900.00 per PM peak hour vehicle trip. The Development is anticipated to generate 29.49 PM peak-hour vehicle trips, which results in a total impact fee of $115,011.00.

9.2 Snohomish County

The City and Snohomish County (County) have an interlocal agreement that provides for the payment of traffic mitigation for impacts to County roadways by City developments. A City Development may choose to have its proportionate share impact mitigation calculated by the County and the City to fairly represent the average impacts of City Developments on the capacity of County roads. Traffic from City developments will impact Transportation Service Area (TSA)s D, E and F. The average proportionate percentage share calculated by the City and County of the net new average daily trips generated by a development impacting County roadways is 70% and is broken down as follows:

- 20% for TSA D, $624 per ADT
- 25% for TSA E, $585 per ADT
- 25% for TSA F, $624 per ADT

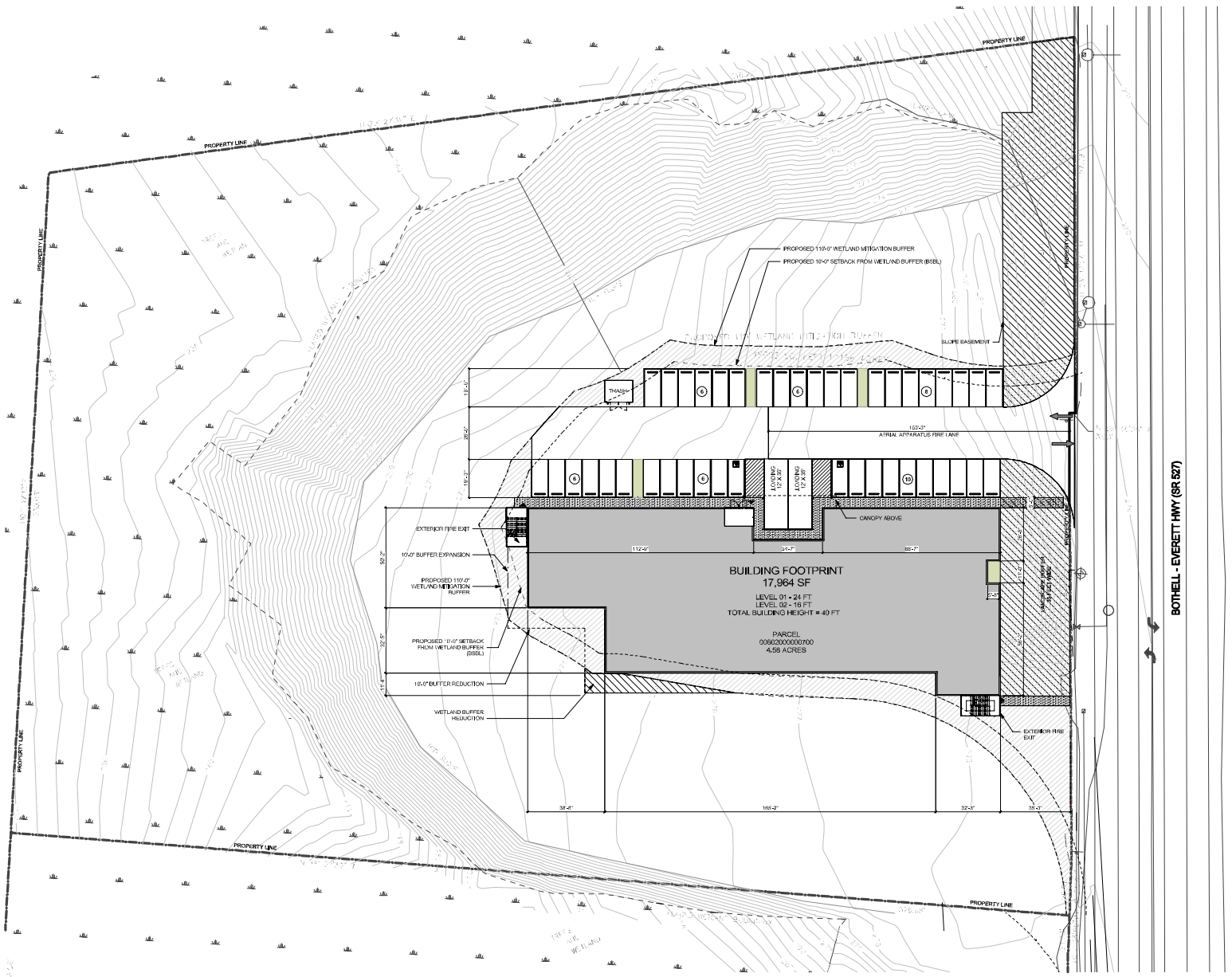
The Development is anticipated to generate approximately 228.39 new ADTs which results in a total proportionate share mitigation fee of $97,533.95.

10. CONCLUSIONS

The Development is proposed to construct up to 18,198 square feet (SF) of warehousing and 18,198 SF of general office space. The Development is located north of 173rd Street SE along the west side of Bothell Everett Highway (SR-527), on parcel 00602000000700. The Development is anticipated to generate approximately 228.39 new ADTs with approximately 30.75 new AM peak-hour trips and approximately 29.49 new PM peak-hour trips. The analysis shows that the study intersection currently operates at LOS C during the AM and PM peak-hours. The study intersection and site access will continue to operate at LOS D or better during the no-build and build conditions. The proposed access locations will be designed and constructed to ensure safe sight distance. The Development is anticipated to have City traffic mitigation fees of $115,011.00 and County traffic mitigation fees of $97,533.95.

APPENDIX A

SITE PLAN



SITE PLAN
1" = 20'-0"

SHEET NOTES:

A. LIMITS OF WORK ARE DEFINED WITHIN THE PROPERTY LINES AND ADJACENT RIGHT OF WAYS.
B. SITE CONTROLS ARE EXISTING PROPERTY CORNERS AS IDENTIFIED BY PROPERTY SURVEY.
C. REFER TO LANDSCAPE DRAWINGS FOR ADDITIONAL INFORMATION ON ALL LANDSCAPE FEATURES AND ELEMENTS.
D. REFER TO CIVIL DRAWINGS FOR SITE GRADING AND UTILITY LOCATIONS.
E. EXPANSION JOINTS ARE SHOWN ON SITE PLANS, ALL OTHER LINES WITHIN CONCRETE PAVING AREAS ARE TO BE CONTROL JOINTS UNLESS OTHERWISE NOTED. REFER TO CIVIL DRAWINGS.
F. SIDEWALKS TO MAINTAIN A SLOPE NO GREATER THAN 1:20 IN THE PRIMARY DIRECTION OF TRAVEL AND A SLOPE NO GREATER THAN 1:50 PERPENDICULAR TO THE PRIMARY DIRECTION OF TRAVEL REFER TO CIVIL DRAWINGS.
G. CURB TO BE MEDIUM BROOM FINISH, PARALLEL TO GUTTER LINE, UNLESS OTHERWISE NOTED.
H. GRIDLINES CORRESPOND WITH BUILDING FLOOR PLAN GRIDLINES.
I. REFER TO ELECTRICAL DRAWINGS FOR SITE LIGHTING.
J. ARCHITECT SITE PLAN IS SHOWN FOR REFERENCE ONLY. REFER TO CIVIL AND LANDSCAPE DRAWINGS FOR PARAMETERS OF SITE INCLUDING ROADWORK, LANDSCAPING AND CONTEXTUAL SITE INFORMATION.
K. REFER TO CIVIL FOR FINISH FLOOR ELEVATIONS (FFE) - THESE CORRESPOND TO ARCHITECTURAL 0'-0"
L. ALL EXTERIOR CONCRETE STAIRS SHALL RECEIVE EMBEDDED NOSING AS SYNOPTIC, SURFACE MOUNTED NOSING WITH MECHAN CAL FASTENERS ARE NOT ACCEPTABLE

SITE INFORMATION:

TAX PARCEL NUMBER: 00602000000700

LEGAL DESCRIPTION:

TRACT 7, TWIN VALLEY GARDEN TRACTS, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 10 OF PLATS, PAGE 21, RECORDS OF SNOHOMISH COUNTY, WASHINGTON.

EXCEPT THAT PORTION CONVEYED TO THE STATE OF WASHINGTON BY DEED RECORDED UNDER AUDITOR'S FILE NO. 9205220338, RECORDS OF SNOHOMISH COUNTY, WASHINGTON.

ZONING SUMMARY:

ZONING CODE FOR BP - BUSINESS PARK (MCMC 17.20)

MIN./MAX LOT COVERAGE: NONE

SETBACKS: FRONT, SIDE AND REAR YARD: NONE

BUFFER: 50 FEET FROM A ROADWAY

MAX. HEIGHT: 50 FEET

FAR: NONE

LANDSCAPE: NONE, MIN. 20 FT DEPTH OF LANDSCAPE IF ABUTTING RESIDENTIAL OR COMMERCIAL ZONE.

PARKING COUNT:

PER CITY OF MILL CREEK MUNICIPAL CODE, 17.27.030.D

WAREHOUSE (LEVEL 1) = 18,198 SF

OFFICE (LEVEL 2) = 17,497 SF

PARKING REQUIRED FOR OFFICE

WITHOUT PROVIDING ON-SITE CUSTOMER SERVICE – 1 SPACE/800SF = 1/ /26,800 = 22,1o OR 23 STALLS

PARKING REQUIRED FOR WAREHOUSE

1 SPACE PER EMPLOYEE: 18,198 SF STORAGE WAREHOUSE@1/EMPLOYEE = 17 EMPLOYEES ALLOWED.

TOTAL REQUIRED PARKING STALLS = 17 + 23 = 40

TOTAL PROVIDED PARKING STALLS = 42

BICYCLE PARKING REQUIREMENT
PER CITY OF MILL CREEK MUNICIPAL CODE, 17.27.030

- ENCOURAGED IN ALL DEVELOPMENTS.
- BICYCLE PARKING SHALL BE A BIKE RACK OR LOCKER-TYPE PARKING FACILITIES UNLESS OTHERWISE SPECIFIED.
- BICYCLE FACILITIES FOR PATRONS, WHEN REQUIRED, SHALL BE LOCATED WITHIN 100 FEET OF THE BUILDING ENTRANCE AND SHALL BE DESIGNED TO ALLOW EITHER A BICYCLE FRAME OR WHEELS TO BE LOCKED TO A STRUCTURE ATTACHED TO THE PAVEMENT.
- ALL BICYCLE PARKING AND STORAGE SHALL BE LOCATED IN SAFE, VISIBLE AREAS THAT DO NOT IMPEDE PEDESTRIAN OR VEHICLE TRAFFIC FLOW AND SHALL BE WELL LIT FOR NIGHTTIME USE.

OCCUPANCY AND EGRESS SUMMARY:

PER CITY OF 2021 WASHINGTON STATE BUILDING CODE, TABLE 1004.5

MAXIMUM FLOOR AREA PER OCCUPANT:

WAREHOUSE : 500 SF (GROSS)
OFFICE= 150 SF (GROSS)

OCCUPANT LOAD:

WAREHOUSE: 18,101 SF / 500 = 36.2 OCC.
OFFICE: 17,648 SF / 150 = 117.6 OCC.

TOTAL BUILDING OCCUPANT LOAD = 154

MINIMUM NUMBER OF EXITS REQUIRED (PER WSC 1006.3) = 2

NUMBER OF EXITS PROVIDED AT EACH LEVEL = 2

JACKSON | MAIN
ARCHITECTURE
311 FIRST AVENUE SOUTH
SEATTLE, WA 98104
T 206.324.4800
WWW.JACKSONMAIN.COM

PROGRESS SET
NOT FOR CONSTRUCTION

NITIN GOYAL
18632 29TH AVE SE, BOTHELL WA 98012

MILL CREEK PCID
17200 BOTHELL EVERETT HWY
MILL CREEK, WA 98012

DATE	NO.	DESCRIPTION

PROJECT NO.: 23159
PROJECT MGR.: IDH
DRAWN BY: AKV
CHECKED BY: -

SITE PLAN

A1.00

APPENDIX B

TRIP GENERATION CALCULATIONS

Mill Creek PCID
KH 090224127

Trip Generation for: **Weekday**
(a.k.a.): **Average Weekday Daily Trips (AWDT)**

									NET EXTERNAL TRIPS BY TYPE											
									IN BOTH DIRECTIONS						DIRECTIONAL ASSIGNMENTS					
			Gross Trips				Internal Crossover		TOTAL	PASS-BY		DIVERTED LINK		NEW	PASS-BY		DIVERTED LINK		NEW	
LAND USES	VARIABLE	ITE LU code	Trip Rate	% IN	% OUT	In+Out (Total)	% of Gross Trips	Trips In+Out (Total)	In+Out (Total)	% of Ext. Trips	In+Out (Total)	% of Ext. Trips	In+Out (Total)	In+Out (Total)	In	Out	In	Out	In	Out
Warehousing	18.198 K SF	150	1.71	50%	50%	31	0%	0	31	0%	0	0%	0	31.12	0	0	0	0	15.56	15.56
General Office	18.198 K SF	710	10.84	50%	50%	197	0%	0	197	0%	0	0%	0	197.27	0	0	0	0	98.64	98.63
Total						228		0	228		0		0	228.39	0	0	0	0	114.20	114.19

Mill Creek PCID
KH 090224127

Trip Generation for: **Weekday, Peak Hour of Adjacent Street Traffic, One Hour between 7 and 9 AM**
(a.k.a.): **Weekday AM Peak Hour**

									NET EXTERNAL TRIPS BY TYPE											
									IN BOTH DIRECTIONS						DIRECTIONAL ASSIGNMENTS					
			Gross Trips				Internal Crossover		TOTAL	PASS-BY		DIVERTED LINK		NEW	PASS-BY		DIVERTED LINK		NEW	
LAND USES	VARIABLE	ITE LU code	Trip Rate	% IN	% OUT	In+Out (Total)	% of Gross Trips	Trips In+Out (Total)	In+Out (Total)	% of Ext. Trips	In+Out (Total)	% of Ext. Trips	In+Out (Total)	In+Out (Total)	In	Out	In	Out	In	Out
Warehousing	18.198 K SF	150	0.17	77%	23%	3	0%	0.00	3	0%	0	0%	0.00	3.09	0	0	0	0	2.38	0.71
General Office	18.198 K SF	710	1.52	88%	12%	28	0%	0.00	28	0%	0	0%	0.00	27.66	0	0	0	0	24.34	3.32
Total						31		0.00	31		0		0.00	30.75	0	0	0	0	26.72	4.03

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Trip Generation for: **Weekday, Peak Hour of Adjacent Street Traffic, One Hour between 4 and 6 PM**
(a.k.a.): **Weekday PM Peak Hour**

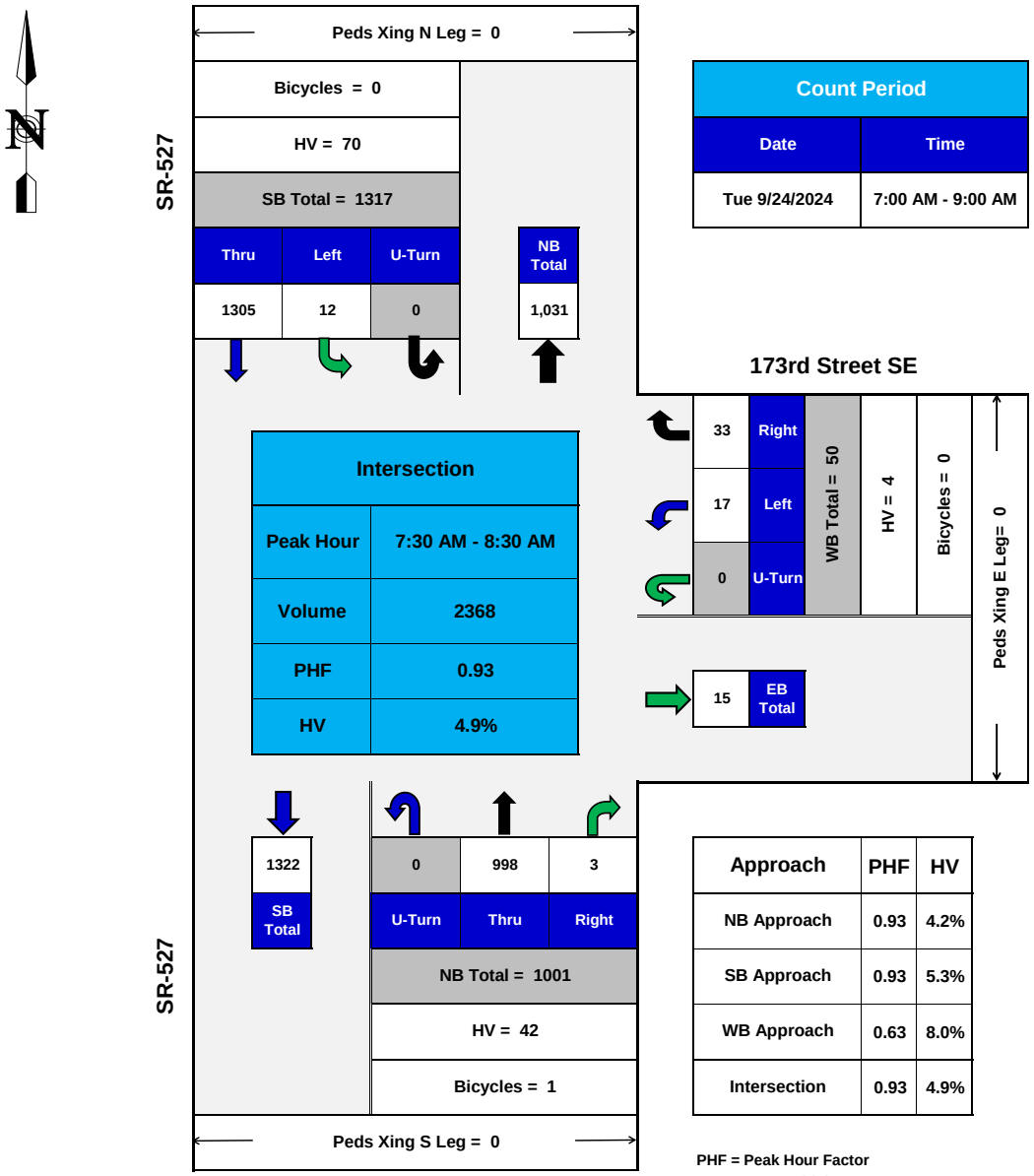
									NET EXTERNAL TRIPS BY TYPE											
									IN BOTH DIRECTIONS						DIRECTIONAL ASSIGNMENTS					
			Gross Trips				Internal Crossover		TOTAL	PASS-BY		DIVERTED LINK		NEW	PASS-BY		DIVERTED LINK		NEW	
LAND USES	VARIABLE	ITE LU code	Trip Rate	% IN	% OUT	In+Out (Total)	% of Gross Trips	Trips In+Out (Total)	In+Out (Total)	% of Ext. Trips	In+Out (Total)	% of Ext. Trips	In+Out (Total)	In+Out (Total)	In	Out	In	Out	In	Out
Warehousing	18.198 K SF	150	0.18	28%	72%	3	0%	0.00	3	0%	0	0%	0.00	3.28	0	0	0	0	0.92	2.36
General Office	18.198 K SF	710	1.44	17%	83%	26	0%	0.00	26	0%	0	0%	0.00	26.21	0	0	0	0	4.46	21.75
Total						29		0.00	29		0		0.00	29.49	0	0	0	0	5.38	24.11

APPENDIX C

EXISTING COUNT DATA

SR-527 @ 173rd Street SE

Mill Creek, WA



Approach	PHF	HV
NB Approach	0.93	4.2%
SB Approach	0.93	5.3%
WB Approach	0.63	8.0%
Intersection	0.93	4.9%

PHF = Peak Hour Factor
HV = Heavy Vehicles

TURNING MOVEMENTS DIAGRAM

PEAK HOUR SUMMARY

TRAFFIC DATA GATHERING

TRAFFIC DATA GATHERING

INTERSECTION TURNING MOVEMENTS REDUCTION SHEET

LOCATION: SR-527 @ 173rd Street SE
Mill Creek, WA

DATE OF COUNT: Tue. 9/24/2024
START OF COUNT: 7:00 AM
TIME OF COUNT: 7:00 AM - 9:00 AM

COUNTED BY: TDG
DATE OF REDUCTION: 9/30/2024
DURATION OF COUNT (Hrs): 2

TIME INTERVAL ENDING AT	FROM NORTH ON (Southbound) SR-527							FROM SOUTH ON (Northbound) SR-527							FROM EAST ON (Westbound) 173rd Street SE							FROM WEST ON (Eastbound)							INTERVAL TOTALS
	Peds	Bicycle	HV	U-Turn	Left	Thru	Right	Peds	Bicycle	HV	U-Turn	Left	Thru	Right	Peds	Bicycle	HV	U-Turn	Left	Thru	Right	Peds	Bicycle	HV	U-Turn	Left	Thru	Right	
07:15 AM	0	0	11	0	4	359	0	0	1	14	0	0	214	1	0	0	1	0	2	0	12	0	0	0	0	0	0	0	592
07:30 AM	0	0	14	0	4	348	0	0	0	9	0	0	230	0	0	0	0	0	3	0	9	0	0	0	0	0	0	0	594
07:45 AM	0	0	12	0	4	332	0	0	1	10	0	0	239	1	0	0	1	0	3	0	5	0	0	0	0	0	0	0	584
08:00 AM	0	0	10	0	4	317	0	0	0	15	0	0	237	0	0	0	2	0	3	0	17	0	0	0	0	0	0	0	578
08:15 AM	0	0	25	0	1	306	0	0	0	10	0	0	255	0	0	0	1	0	2	0	8	0	0	0	0	0	0	0	572
08:30 AM	0	0	23	0	3	350	0	0	0	7	0	0	267	2	0	0	0	0	9	0	3	0	0	0	0	0	0	0	634
08:45 AM	0	0	11	1	3	321	0	0	0	11	0	0	241	4	0	0	1	0	2	0	3	0	0	0	0	0	0	0	575
09:00 AM	0	0	14	0	3	300	0	0	0	15	0	0	270	1	0	0	0	0	1	0	8	0	0	0	0	0	0	0	583
PEAK HOUR TOTALS	**0**	**0**	**70**	**0**	**12**	**1305**	**0**	**0**	**1**	**42**	**0**	**0**	**998**	**3**	**0**	**0**	**4**	**0**	**17**	**0**	**33**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**INTERSECTION**
ALL MOVEMENTS				**1317**							**1001**							**50**							**0**				**2368**
% HV			**5.3%**							**4.2%**							**8.0%**							**#N/A**				**4.9%**
PEAK HOUR FACTOR				**0.93**							**0.93**							**0.63**							**#N/A**				**0.93**

HV = Heavy Vehicle
PHF = Peak Hour Factor

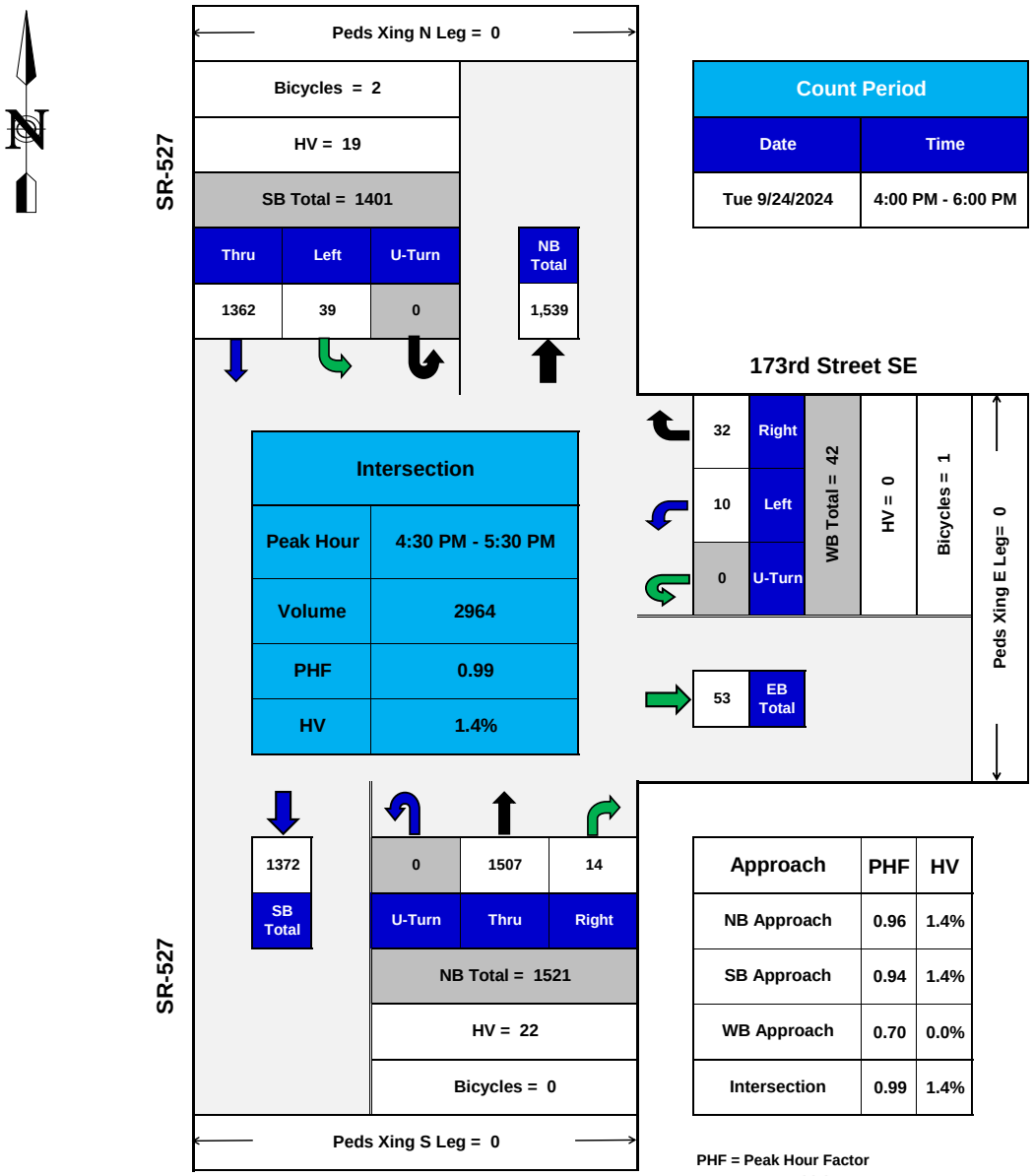
7:00 AM - 9:00 AM PEAK HOUR: 7:30 AM - 8:30 AM

ROLLING HOUR COUNT

TIME INTERVAL	FROM NORTH ON (Southbound) SR-527							FROM SOUTH ON (Northbound) SR-527							FROM EAST ON (Westbound) 173rd Street SE							FROM WEST ON (Eastbound)							INTERVAL TOTALS
	Peds	Bicycle	HV	U-Turn	Left	Thru	Right	Peds	Bicycle	HV	U-Turn	Left	Thru	Right	Peds	Bicycle	HV	U-Turn	Left	Thru	Right	Peds	Bicycle	HV	U-Turn	Left	Thru	Right	
7:00 AM - 8:00 AM	0	0	47	0	16	1356	0	0	2	48	0	0	920	2	0	0	4	0	11	0	43	0	0	0	0	0	0	0	2348
7:15 AM - 8:15 AM	0	0	61	0	13	1303	0	0	1	44	0	0	961	1	0	0	4	0	11	0	39	0	0	0	0	0	0	0	2328
7:30 AM - 8:30 AM	0	0	70	0	12	1305	0	0	1	42	0	0	998	3	0	0	4	0	17	0	33	0	0	0	0	0	0	0	2368
7:45 AM - 8:45 AM	0	0	69	1	11	1294	0	0	0	43	0	0	1000	6	0	0	4	0	16	0	31	0	0	0	0	0	0	0	2359
8:00 AM - 9:00 AM	0	0	73	1	10	1277	0	0	0	43	0	0	1033	7	0	0	2	0	14	0	22	0	0	0	0	0	0	0	2364
7:00 AM - 9:00 AM Total:	0	0	120	1	26	2633	0	0	2	91	0	0	1953	9	0	0	6	0	25	0	65	0	0	0	0	0	0	0	4712

SR-527 @ 173rd Street SE

Mill Creek, WA



Count Period	
Date	Time
Tue 9/24/2024	4:00 PM - 6:00 PM

Approach	PHF	HV
NB Approach	0.96	1.4%
SB Approach	0.94	1.4%
WB Approach	0.70	0.0%
Intersection	0.99	1.4%

PHF = Peak Hour Factor
HV = Heavy Vehicles

TURNING MOVEMENTS DIAGRAM

PEAK HOUR SUMMARY

TRAFFIC DATA GATHERING

TRAFFIC DATA GATHERING

INTERSECTION TURNING MOVEMENTS REDUCTION SHEET

LOCATION: SR-527 @ 173rd Street SE
Mill Creek, WA

DATE OF COUNT: Tue. 9/24/2024
START OF COUNT: 4:00 PM
TIME OF COUNT: 4:00 PM - 6:00 PM

COUNTED BY: TDG
DATE OF REDUCTION: 9/30/2024
DURATION OF COUNT (Hrs): 2

TIME INTERVAL ENDING AT	FROM NORTH ON (Southbound) SR-527							FROM SOUTH ON (Northbound) SR-527							FROM EAST ON (Westbound) 173rd Street SE							FROM WEST ON (Eastbound)							INTERVAL TOTALS
	Peds	Bicycle	HV	U-Turn	Left	Thru	Right	Peds	Bicycle	HV	U-Turn	Left	Thru	Right	Peds	Bicycle	HV	U-Turn	Left	Thru	Right	Peds	Bicycle	HV	U-Turn	Left	Thru	Right	
04:15 PM	0	0	10	0	6	309	0	0	1	6	0	0	366	4	0	0	0	0	3	0	4	0	0	0	0	0	0	0	692
04:30 PM	0	1	8	0	11	347	0	0	0	9	0	0	333	3	1	0	0	0	2	0	0	0	0	0	0	0	0	0	696
04:45 PM	0	1	8	0	10	327	0	0	0	8	0	0	390	5	0	0	0	0	5	0	10	0	0	0	0	0	0	0	747
05:00 PM	0	0	3	0	6	327	0	0	0	5	0	0	370	4	0	0	0	0	3	0	6	0	0	0	0	0	0	0	716
05:15 PM	0	0	4	0	11	347	0	0	0	4	0	0	383	2	0	0	0	0	0	0	7	0	0	0	0	0	0	0	750
05:30 PM	0	1	4	0	12	361	0	0	0	5	0	0	364	3	0	1	0	0	2	0	9	0	0	0	0	0	0	0	751
05:45 PM	0	0	5	0	7	335	0	0	0	3	0	0	360	4	0	0	0	0	2	0	4	0	0	0	0	0	0	0	712
06:00 PM	0	1	5	0	12	317	0	0	0	8	0	0	252	5	0	0	0	0	2	0	6	0	0	0	0	0	0	0	594
PEAK HOUR TOTALS	**0**	**2**	**19**	**0**	**39**	**1362**	**0**	**0**	**0**	**22**	**0**	**0**	**1507**	**14**	**0**	**1**	**0**	**0**	**10**	**0**	**32**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**INTERSECTION**
ALL MOVEMENTS				**1401**							**1521**							**42**							**0**				**2964**
% HV			**1.4%**							**1.4%**							**0.0%**							**#N/A**				**1.4%**
PEAK HOUR FACTOR				**0.94**							**0.96**							**0.70**							**#N/A**				**0.99**

HV = Heavy Vehicle
PHF = Peak Hour Factor

4:00 PM - 6:00 PM PEAK HOUR: 4:30 PM - 5:30 PM

ROLLING HOUR COUNT

TIME INTERVAL	FROM NORTH ON (Southbound) SR-527							FROM SOUTH ON (Northbound) SR-527							FROM EAST ON (Westbound) 173rd Street SE							FROM WEST ON (Eastbound)							INTERVAL TOTALS
	Peds	Bicycle	HV	U-Turn	Left	Thru	Right	Peds	Bicycle	HV	U-Turn	Left	Thru	Right	Peds	Bicycle	HV	U-Turn	Left	Thru	Right	Peds	Bicycle	HV	U-Turn	Left	Thru	Right	
4:00 PM - 5:00 PM	0	2	29	0	33	1310	0	0	1	28	0	0	1459	16	1	0	0	0	13	0	20	0	0	0	0	0	0	0	2851
4:15 PM - 5:15 PM	0	2	23	0	38	1348	0	0	0	26	0	0	1476	14	1	0	0	0	10	0	23	0	0	0	0	0	0	0	2909
4:30 PM - 5:30 PM	0	2	19	0	39	1362	0	0	0	22	0	0	1507	14	0	1	0	0	10	0	32	0	0	0	0	0	0	0	2964
4:45 PM - 5:45 PM	0	1	16	0	36	1370	0	0	0	17	0	0	1477	13	0	1	0	0	7	0	26	0	0	0	0	0	0	0	2929
5:00 PM - 6:00 PM	0	2	18	0	42	1360	0	0	0	20	0	0	1359	14	0	1	0	0	6	0	26	0	0	0	0	0	0	0	2807
4:00 PM - 6:00 PM Total:	0	4	47	0	75	2670	0	0	1	48	0	0	2818	30	1	1	0	0	19	0	46	0	0	0	0	0	0	0	5658

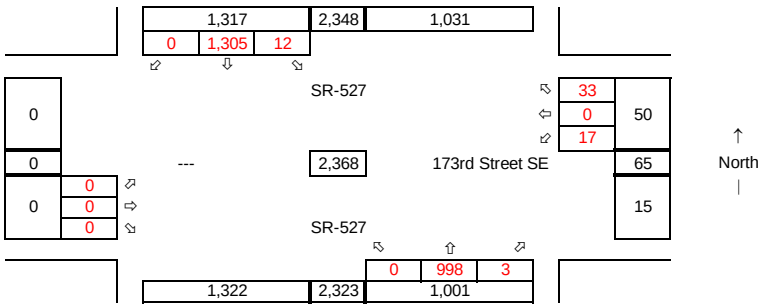
APPENDIX D

TURNING MOVEMENT CALCULATIONS

Synchro ID: 1
Existing
Average Weekday
AM Peak-Hour

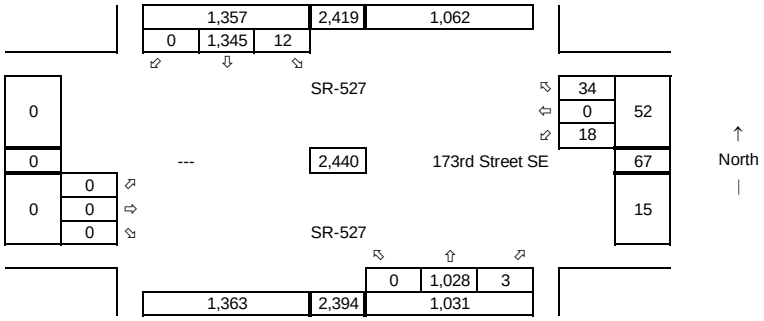
Year: **9/24/2024**

Data Source: **TDG**

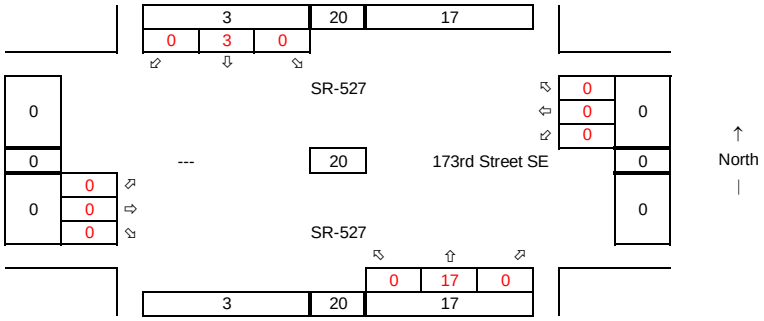


Future without Development
Average Weekday
AM Peak-Hour

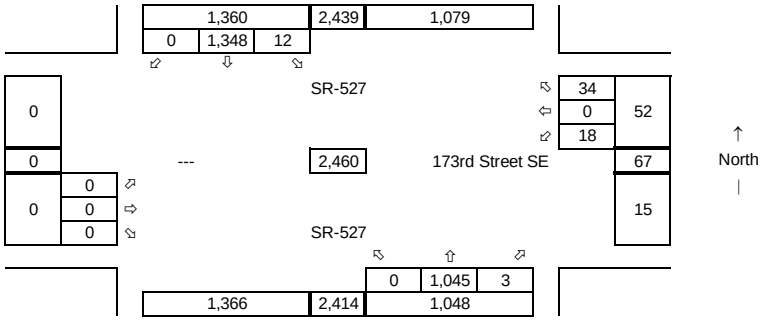
Year: 2027
Growth Rate = 1.0%
Years of Growth = 3
Total Growth = 1.0303



Total Development Trips
Average Weekday
AM Peak-Hour



Future with Development
Average Weekday
AM Peak-Hour



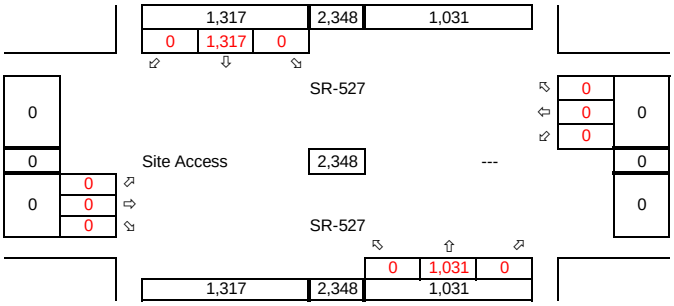
Synchro ID: 2

Existing
Average Weekday
AM Peak-Hour

Year: **9/24/2024**

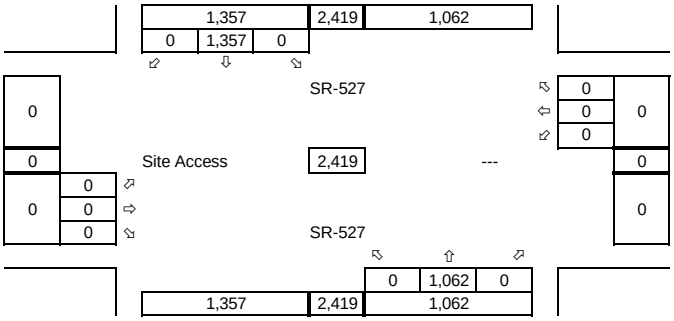
Data Source: **TDG**

Extrapolated from SR-527 at
173rd Street SE

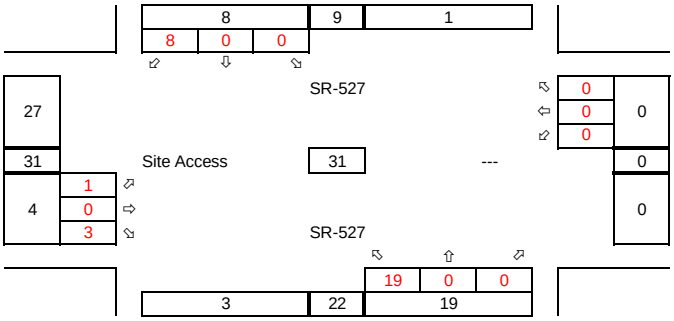


Future without Development
Average Weekday
AM Peak-Hour

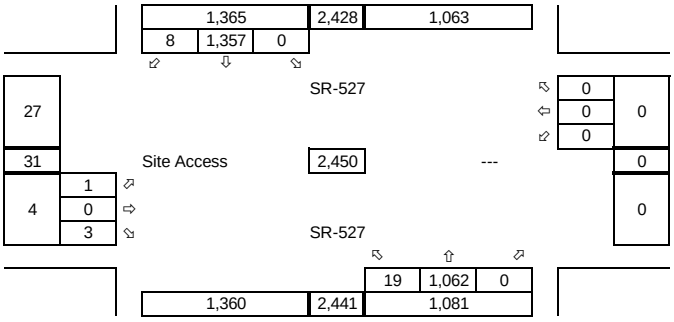
Year: 2027
Growth Rate = 1.0%
Years of Growth = 3
Total Growth = 1.0303



Total Development Trips
Average Weekday
AM Peak-Hour



Future with Development
Average Weekday
AM Peak-Hour

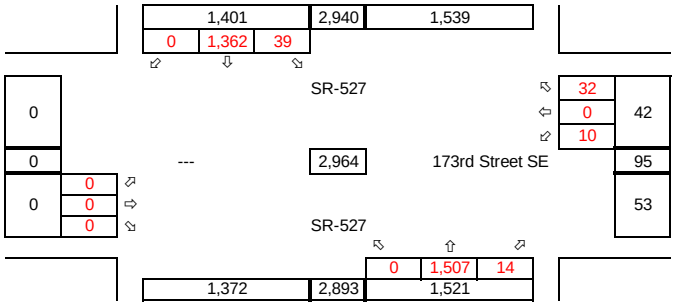


Synchro ID: 1

Existing
Average Weekday
PM Peak-Hour

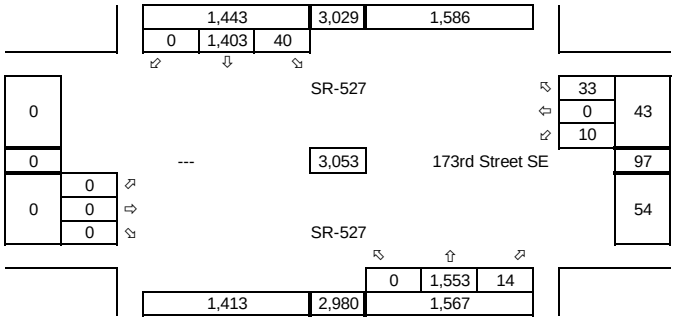
Year: **9/24/2024**

Data Source: **TDG**

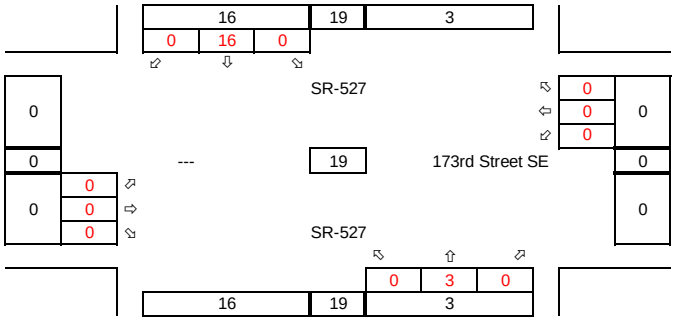


Future without Development
Average Weekday
PM Peak-Hour

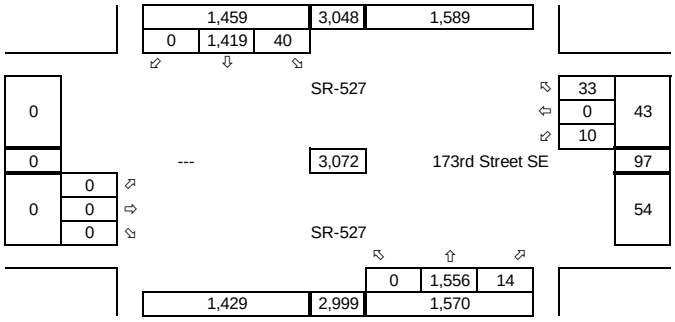
Year: 2027
Growth Rate = 1.0%
Years of Growth = 3
Total Growth = 1.0303



Total Development Trips
Average Weekday
PM Peak-Hour



Future with Development
Average Weekday
PM Peak-Hour

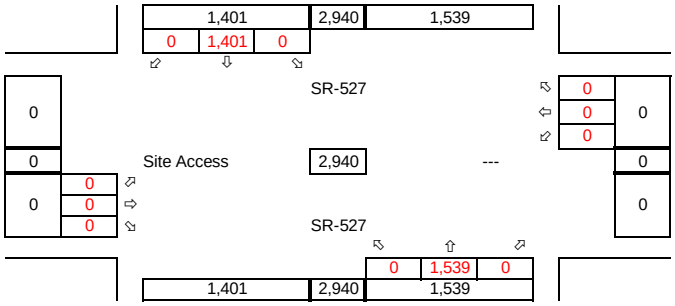


Synchro ID: 2
Existing
Average Weekday
PM Peak-Hour

Year: **9/24/2024**

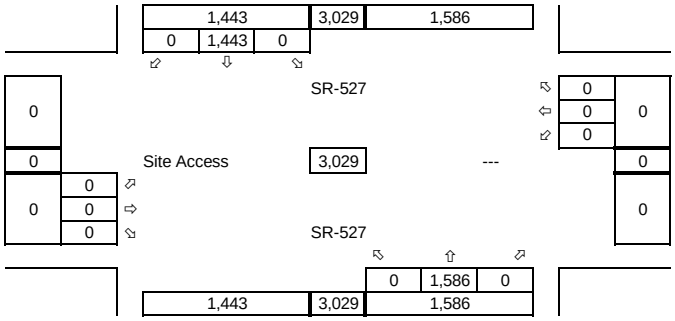
Data Source: **TDG**

Extrapolated from SR-527 at
173rd Street SE

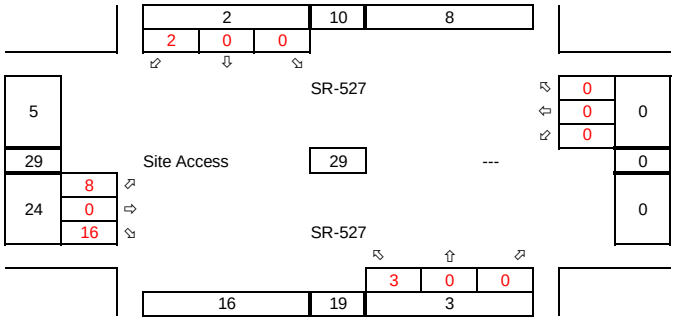


Future without Development
Average Weekday
PM Peak-Hour

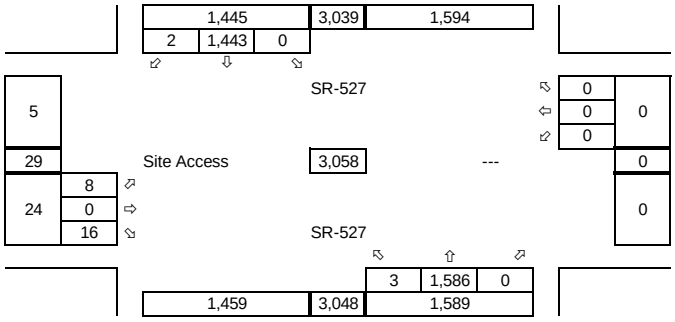
Year: 2027
Growth Rate = 1.0%
Years of Growth = 3
Total Growth = 1.0303



Total Development Trips
Average Weekday
PM Peak-Hour



Future with Development
Average Weekday
PM Peak-Hour



APPENDIX E

LEVEL OF SERVICE ANALYSIS

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	33	998	3	12	1305
Future Vol, veh/h	17	33	998	3	12	1305
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	18	35	1073	3	13	1403

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1802	538	0	0	1076	0
Stage 1	1075	-	-	-	-	-
Stage 2	727	-	-	-	-	-
Critical Hdwy	6.9	7	-	-	4.2	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.35	-	-	2.25	-
Pot Cap-1 Maneuver	69	480	-	-	626	-
Stage 1	283	-	-	-	-	-
Stage 2	431	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	67	480	-	-	626	-
Mov Cap-2 Maneuver	184	-	-	-	-	-
Stage 1	283	-	-	-	-	-
Stage 2	422	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	19.04	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	310	626	-
HCM Lane V/C Ratio	-	-	0.173	0.021	-
HCM Control Delay (s/veh)	-	-	19	10.9	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	32	1507	14	39	1362
Future Vol, veh/h	10	32	1507	14	39	1362
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	32	1522	14	39	1376

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2296	768	0	0	1536	0
Stage 1	1529	-	-	-	-	-
Stage 2	767	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	33	344	-	-	429	-
Stage 1	165	-	-	-	-	-
Stage 2	419	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	30	344	-	-	429	-
Mov Cap-2 Maneuver	116	-	-	-	-	-
Stage 1	165	-	-	-	-	-
Stage 2	381	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	23.7	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	235	429	-
HCM Lane V/C Ratio	-	-	0.181	0.092	-
HCM Control Delay (s/veh)	-	-	23.7	14.2	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.6	0.3	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	34	1028	3	12	1345
Future Vol, veh/h	18	34	1028	3	12	1345
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	19	37	1105	3	13	1446

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1856	554	0	0	1109	0
Stage 1	1107	-	-	-	-	-
Stage 2	749	-	-	-	-	-
Critical Hdwy	6.9	7	-	-	4.2	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.35	-	-	2.25	-
Pot Cap-1 Maneuver	63	468	-	-	608	-
Stage 1	272	-	-	-	-	-
Stage 2	420	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	62	468	-	-	608	-
Mov Cap-2 Maneuver	176	-	-	-	-	-
Stage 1	272	-	-	-	-	-
Stage 2	411	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	19.89	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	297	608	-
HCM Lane V/C Ratio	-	-	0.188	0.021	-
HCM Control Delay (s/veh)	-	-	19.9	11	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.7	0.1	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	33	1553	14	40	1403
Future Vol, veh/h	10	33	1553	14	40	1403
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	33	1569	14	40	1417

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2365	791	0	0	1583	0
Stage 1	1576	-	-	-	-	-
Stage 2	789	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	29	332	-	-	411	-
Stage 1	156	-	-	-	-	-
Stage 2	408	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	26	332	-	-	411	-
Mov Cap-2 Maneuver	110	-	-	-	-	-
Stage 1	156	-	-	-	-	-
Stage 2	368	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	24.71	0	0.41
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	226	411	-
HCM Lane V/C Ratio	-	-	0.192	0.098	-
HCM Control Delay (s/veh)	-	-	24.7	14.7	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.7	0.3	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	34	1045	3	12	1348
Future Vol, veh/h	18	34	1045	3	12	1348
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	75	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	19	37	1124	3	13	1449

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1876	563	0	0	1127	0
Stage 1	1125	-	-	-	-	-
Stage 2	751	-	-	-	-	-
Critical Hdwy	6.9	7	-	-	4.2	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.35	-	-	2.25	-
Pot Cap-1 Maneuver	61	462	-	-	599	-
Stage 1	265	-	-	-	-	-
Stage 2	419	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	60	462	-	-	599	-
Mov Cap-2 Maneuver	173	-	-	-	-	-
Stage 1	265	-	-	-	-	-
Stage 2	410	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	20.1	9	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	293	599	-
HCM Lane V/C Ratio	-	-	0.191	0.022	-
HCM Control Delay (s/veh)	-	-	20.2	11.1	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.7	0.1	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	19	1062	1357	8
Future Vol, veh/h	1	3	19	1062	1357	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	21	1154	1475	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2098	742	1484	0	-	0
Stage 1	1479	-	-	-	-	-
Stage 2	618	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	45	358	449	-	-	-
Stage 1	176	-	-	-	-	-
Stage 2	500	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	43	358	449	-	-	-
Mov Cap-2 Maneuver	128	-	-	-	-	-
Stage 1	167	-	-	-	-	-
Stage 2	500	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	19.8	0.24	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	449	-	248	-	-
HCM Lane V/C Ratio	0.046	-	0.018	-	-
HCM Control Delay (s/veh)	13.4	-	19.8	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	33	1556	14	40	1419
Future Vol, veh/h	10	33	1556	14	40	1419
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	75	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	33	1572	14	40	1433

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2376	793	0	0	1586	0
Stage 1	1579	-	-	-	-	-
Stage 2	797	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	29	331	-	-	410	-
Stage 1	155	-	-	-	-	-
Stage 2	404	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	26	331	-	-	410	-
Mov Cap-2 Maneuver	109	-	-	-	-	-
Stage 1	155	-	-	-	-	-
Stage 2	364	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	24.8	1	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	225	410	-
HCM Lane V/C Ratio	-	-	0.193	0.098	-
HCM Control Delay (s/veh)	-	-	24.8	14.7	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.7	0.3	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	16	3	1586	1443	2
Future Vol, veh/h	8	16	3	1586	1443	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	17	3	1724	1568	2

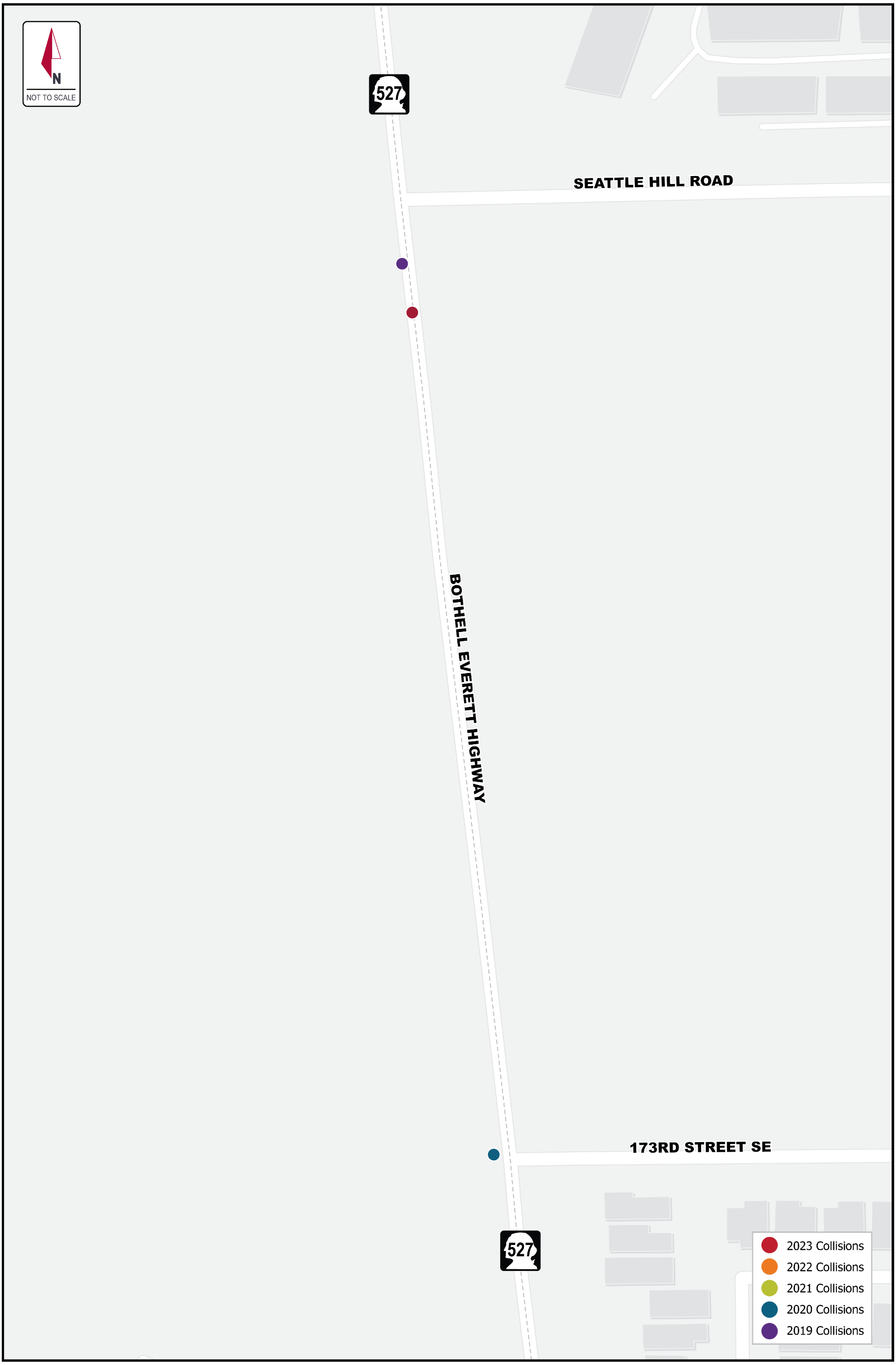
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2438	785	1571	0	-	0
Stage 1	1570	-	-	-	-	-
Stage 2	868	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	26	335	416	-	-	-
Stage 1	157	-	-	-	-	-
Stage 2	371	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	26	335	416	-	-	-
Mov Cap-2 Maneuver	110	-	-	-	-	-
Stage 1	156	-	-	-	-	-
Stage 2	371	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	25.81	0.03	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	416	-	199	-	-
HCM Lane V/C Ratio	0.008	-	0.131	-	-
HCM Control Delay (s/veh)	13.7	-	25.8	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

APPENDIX F

COLLISION DATA



Kimley»Horn

2019 - 2023 COLLISION HISTORY

MILL CREEK PCID - CITY OF MILL CREEK, WA (KH 090224127)

Collision Data Table

Mill Creek PCID - Mill Creek, WA

REPORT NUMBER	DATE	TIME	PRIMARY ROADWAY	CROSS STREET	SEVERITY	# VEHICLES	# PEDS	# BIKES	COLLISION TYPE	VEHICLE 1 MANEUVER	VEHICLE 2 MANEUVER
E881817	2019-01-11	12:46	527	N/A	No Apparent Injury	2	0	0	From same direction - all others	Making U-Turn	Going Straight Ahead
EA02805	2020-01-13	3:15	527	173RD ST SE	No Apparent Injury	1	0	0	Retaining Wall (concrete, rock, brick, etc.)	Going Straight Ahead	N/A
ED95727	2023-09-04	10:09	527	N/A	Possible Injury	2	0	0	From same direction - both going straight - both moving - sideswipe	Changing Lanes	Going Straight Ahead