



TRAFFIC IMPACT ANALYSIS



Received by Email

4/11/2023

THIRD AND PARK

JURISDICTION: CITY OF MUKILTEO, WA
LOCATION: THIRD STREET, WEST OF PARK AVENUE

Prepared for:
Dykeman Architecture + Design
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Everett, WA 98201

Prepared by:
Kimley»»Horn

March 2023
KH #090223038
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FOR

THIRD AND PARK

Prepared for:

Dykeman Architecture + Design

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1. DEVELOPMENT IDENTIFICATION

Kimley-Horn and Associates, Inc. has been retained to analyze the traffic impacts of the proposed Third and Park development.

The Third and Park development is proposed to consist of a 14-unit multifamily (low-rise) complex with two commercial spaces having a total floor area of 1,700 square feet (SF). The site is located in the City of Mukilteo and is currently listed as undeveloped per the *Snohomish County Online Property Information (SCOPI)* web map. The development is located in the City of Mukilteo within Snohomish County Transportation Service Area (TSA) D. The development is proposed to have one access drive connecting to the alley running between Third Street and Second Street. A site vicinity map is included in **Figure 1**. A site plan has been provided in Error! Reference source not found..

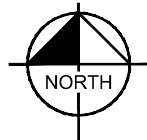
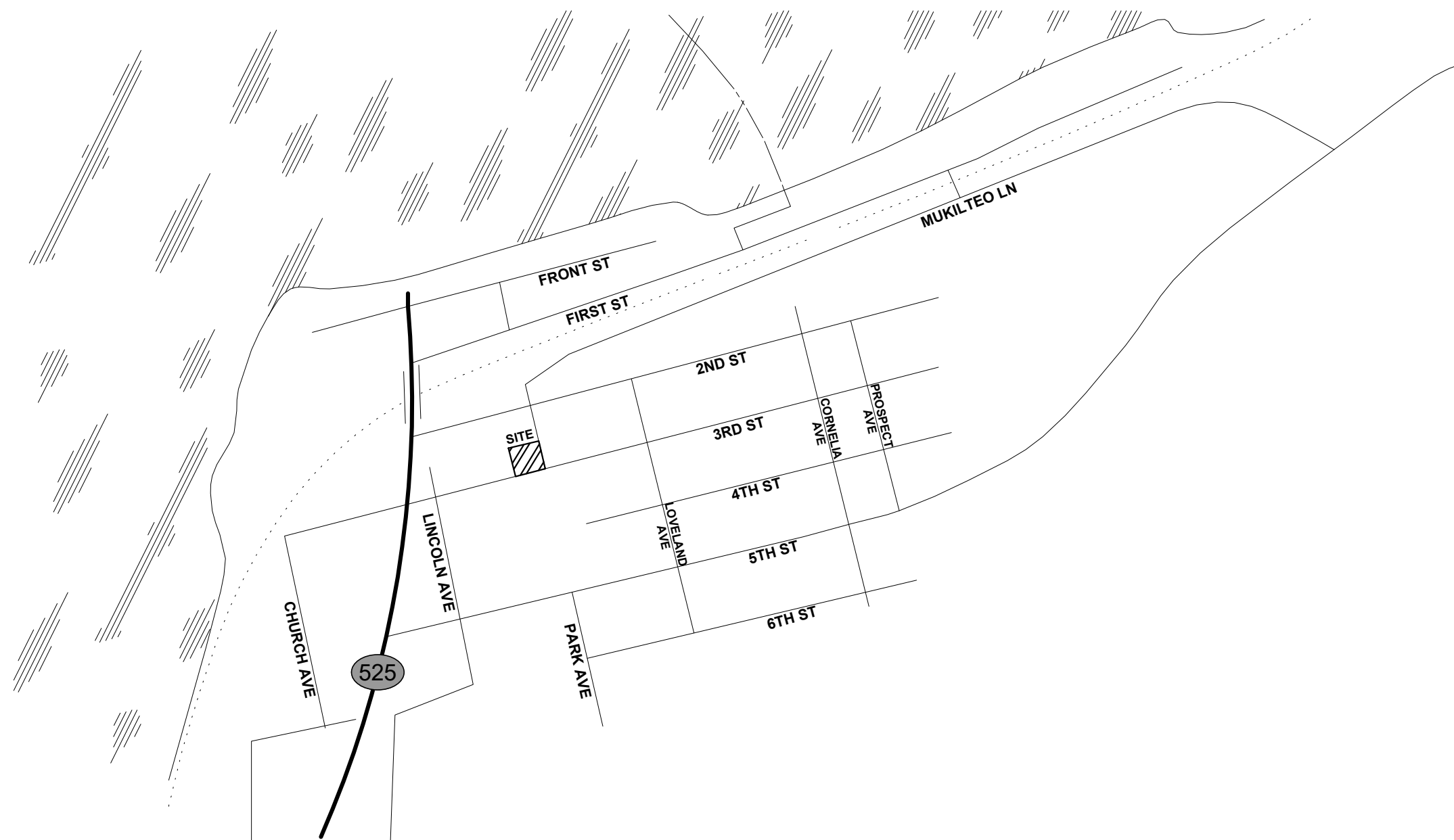
Matthew Palmer, responsible for this report and traffic analysis, is a licensed professional engineer (Civil) in the State of Washington and member of the Washington State section of Institute of Transportation Engineers (ITE).

2. METHODOLOGY

2.1 General

Trip generation calculations for the Third and Park development have been performed according to data contained in the ITE *Trip Generation Manual, 11th Edition (2021)*. The distribution of trips generated by the site is based on a previously approved trip distribution.

The City of Mukilteo requires arterial-arterial intersections impacted with 10 or more PM peak-hour trips to be analyzed. Additionally, the City of Mukilteo has interlocal agreements with Snohomish County and WSDOT for the purposes of traffic mitigation fees and impacts.



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THIRD AND PARK

LEGEND



DEVELOPMENT SITE

CITY OF MUKILTEO

FIGURE 1
VICINITY MAP

2.2 Trip Generation

Trip generation calculations for the Third and Park development are based on national statistics contained in the ITE *Trip Generation Manual, 11th Edition (2021)*. The average trip generation rates for ITE Land Use Code 220, Multifamily Housing (Low-Rise), and ITE Land Use Code 822, Shopping Center (<40k), were used for the trip generation calculations. A pass-by rate was utilized for the Shopping Center (<40k) use. The pass-by rate accounts for existing vehicles on the roadway that will use the site. A pass-by rate of 40% for the Shopping Center (<40k) has been utilized. The trip generation calculations are summarized in **Table 1**.

Table 1: Trip Generation Summary

Land Use	Size	Average Daily Trips	AM Peak-Hour Trips			PM Peak-Hour Trips		
			Inbound	Outbound	Total	Inbound	Outbound	Total
ITE LUC 220, Multifamily Housing (Low-Rise)	14 Units	94.36	1.34	4.26	5.60	4.50	2.64	7.14
ITE LUC 822, Shopping Center (<40k)	1,700 SF	55.57	1.21	0.80	2.01	3.60	3.60	7.20
TOTAL		149.93	2.55	5.06	7.61	8.10	6.24	14.34

The Third and Park development is anticipated to generate approximately 150 new average daily trips (ADT) with 8 new AM peak-hour trips and 14 new PM peak-hour trips after pass-by reduction rates have been applied. The trip generation calculations are provided in Error! Reference source not found..

3. TRIP DISTRIBUTION

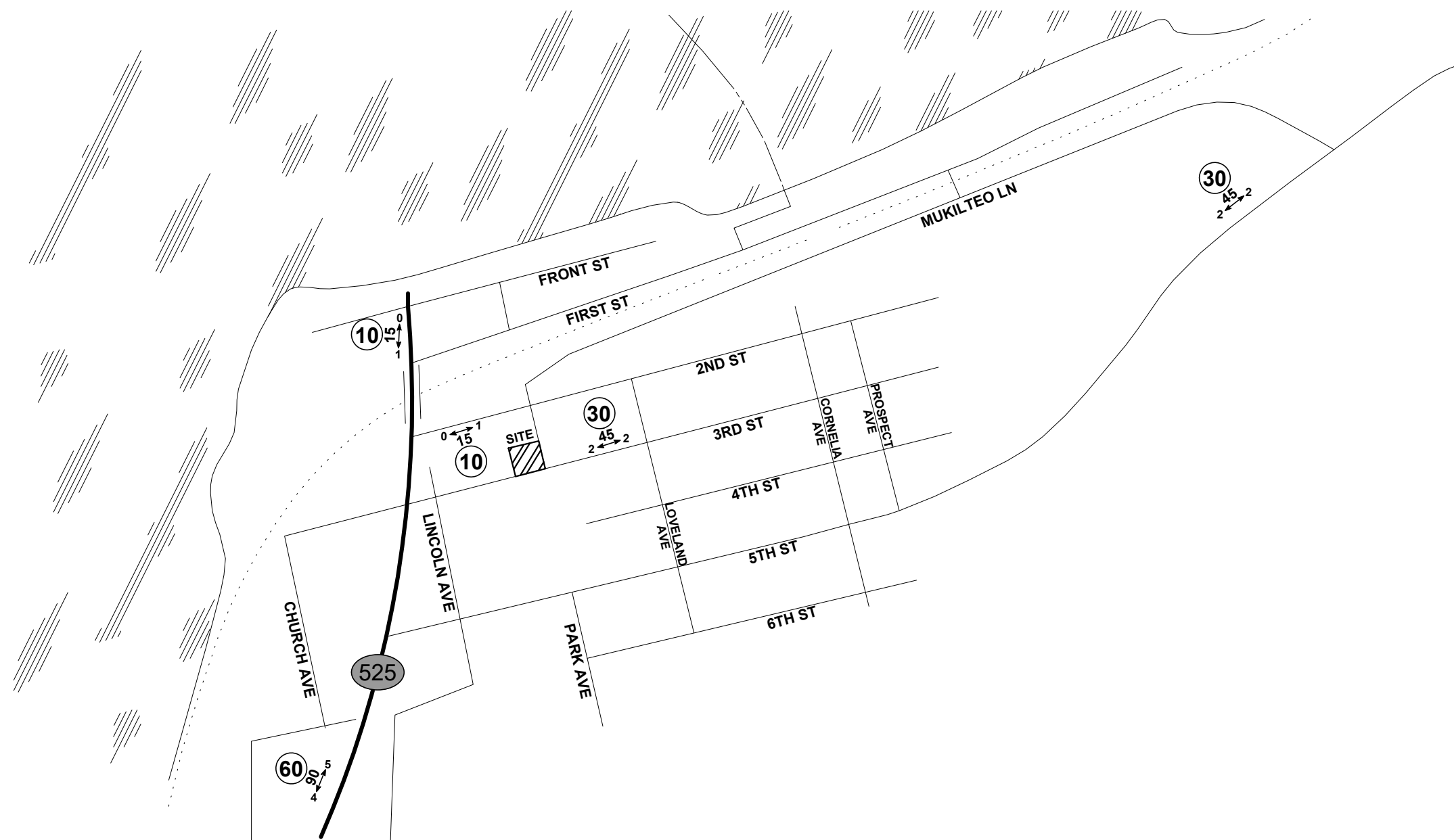
The Third and Park development will have access to the alley between Third Street and Second Street.

- It is estimated that 60% of the site traffic will travel to and from the south along Mukilteo Speedway (SR-525)
- An additional 30% will travel to and from the east on Fifth Street
- The remaining 10% of the site traffic will travel to and from the north along First Street to Second Street

The anticipated trips by the development during PM peak-hours are shown in Error! Reference source not found..

The Transportation Concurrency Evaluation and Determination of Transportation Impact Fees worksheet describes an “impacted transportation facility” as “any transportation facility which is impacted by ten or more peak hour project trips in one direction.” There are no intersections that will be impacted by 10 PM peak-hour trips generated by the Third and Park development. Intersection analysis should therefore not be required for the Third and Park development.

The City and County have an interlocal agreement that requires any Snohomish County Key Intersections impacted with three or more directional peak-hour trips to be identified. An impact of three directional PM peak-hour trips equates to approximately 37% of the trips generated by the Third and Park development. The nearest County Key Intersection is along Airport Road south of Boeing Freeway (SR-526). It is anticipated that less than 20% of the trips generated by the development will travel to and from the south along Airport Road south of Boeing Freeway (SR-526). County Key Intersections and roadways are therefore not anticipated to be impacted with three or more directional peak-hour trips.



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THIRD AND PARK

LEGEND

AWDT NEW DAILY TRAFFIC
PM ↔ PEAK NEW PEAK-HOUR TRIPS



TRIP DISTRIBUTION %

CITY OF MUKILTEO

FIGURE 2
DEVELOPMENT TRIP
DISTRIBUTION
PM PEAK-HOUR

4. COLLISION HISTORY

Collision analysis was performed along the site frontage and the proposed site access. Collision data was obtained from WSDOT for the period from January 1, 2017, through December 31, 2021. There were no collisions reported along the frontage or site access during this period. The collision map is provided in **Appendix C**.

5. TRAFFIC MITIGATION FEES

The *Washington Growth Management Act and Revised Code of Washington 82.02.050(2)* authorize local jurisdictions to establish proportionate share transportation impact fees in order to fund capital facilities, such as roads and intersections. *Mukilteo Municipal Code (MMC) 3.107* applies that authority to developments in order to fund road improvements that would accommodate development. The City also has interlocal agreements with the County and WSDOT for transportation impact fees. These transportation impact fees are based on the area wide traffic mitigation fee or actual impacts to improvement projects.

5.1 City of Mukilteo

The City states transportation impact fees are \$1,875 per PM peak-hour trip. The Third and Park development is anticipated to generate 14.34 new PM peak-hour trips and the City transportation impact fees will therefore be \$26,887.50. The City Transportation Concurrency Evaluation and Determination of Transportation Impact Fees worksheet has been provided in **Appendix D**.

5.2 Snohomish County

The County intersections and roadways are not anticipated to be impacted with 3 or more directional peak-hour trips generated by the Third and Park development. The County transportation impact fees should therefore not be required for the Third and Park development based on Section 3 of the *Snohomish County Traffic Worksheet and Traffic Study Requirements For Development in the City of Mukilteo*.

5.3 Washington State Department of Transportation

The WSDOT mitigation fees are based on impacts to the intersection of SR-525 at 88th Street SW, as identified in the City Transportation Concurrency Evaluation and Determination of Transportation Impact Fees worksheet. This project is currently completed. Additionally, it is anticipated that less than 20% of the trips generated by the Third and Park development will impact this intersection. This equates to less than three PM peak-hour trips. The WSDOT transportation impact fees should therefore not be required for the Third and Park development.

6. CONCLUSIONS

The Third and Park development is proposing to construct a 14-unit multifamily (low-rise) complex with two commercial spaces equal to 1,700 total SF of retail space. The development will generate approximately 150 new average daily trips with approximately 8 new AM peak-hour trips and approximately 14 new PM peak-hour trips. The Third and Park development is anticipated to result in less than three directional PM peak-hour trips to Snohomish County or WSDOT intersections or roadways. Snohomish County and WSDOT transportation impact fees should therefore not be required for the Third and Park development. The development should only have to pay standard traffic mitigation fees to the City of Mukilteo, which will total \$26,887.50.

APPENDIX A
SITE PLAN

APPENDIX B

TRIP GENERATION CALCULATIONS

Third and Park
KH #090223038

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	
LAND USES	VARIABLE	ITE LU code	Trip Rate	% IN	% OUT	In+Out (Total)	% of Gross Trips	% of Trips	In+Out (Total)	In+Out (Total)	% of Ext. Trips	In+Out (Total)	% of Ext. Trips	In+Out (Total)	In	Out	In	Out
Multifamily Housing (Low-Rise)	14 units	220	6.74	50%	50%	94.36	0%	0.00	0.00	94.36	0%	0.00	0%	94.36	0.00	0.00	47.18	47.18
Shopping Center (<40k)	1,700 K SF	822	54.45	50%	50%	92.57	0%	0.00	0.00	92.57	40%	37.00	0%	55.57	19.00	18.00	27.79	27.78
Totals						186.93		0.00	0.00	186.93		37.00		149.93	19.00	18.00	74.97	74.96

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

LAND USES		NET EXTERNAL TRIPS BY TYPE										
		IN BOTH DIRECTIONS					DIRECTIONAL ASSIGNMENTS					
		TOTAL	PASS-BY		DIVERTED LINK		NEW		PASS-BY		DIVERTED LINK	
	ITE LU code	In+Out (Total)	% IN	% OUT	In+Out (Total)	% of Gross Trips	% of Ext. Trips	In+Out (Total)	In	Out	In	Out
Multifamily Housing (Low-Rise)	220	5.60	24%	76%	0.00	0%	0%	5.60	0.00	0.00	0.00	0.00
Shopping Center (<40k)	822	4.01	60%	40%	0.00	0%	0%	2.01	1.00	1.00	0.00	0.00
Totals		9.61			0.00			7.61	1.00	1.00	0.00	0.00

Third and Park
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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

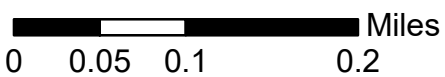
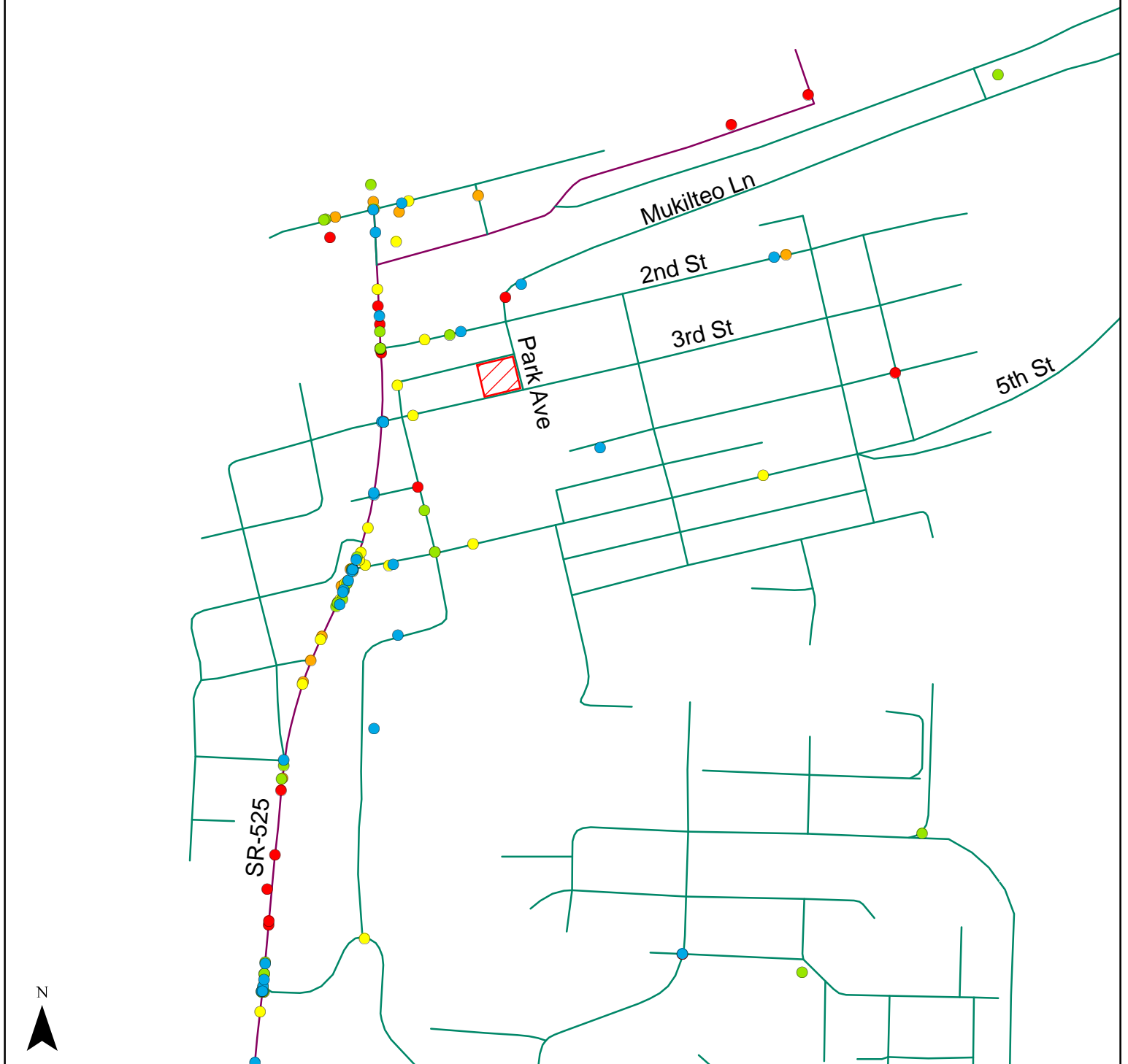
LAND USES		NET EXTERNAL TRIPS BY TYPE										
		IN BOTH DIRECTIONS					DIRECTIONAL ASSIGNMENTS					
		TOTAL	PASS-BY		DIVERTED LINK		NEW		PASS-BY		DIVERTED LINK	
	ITE LU code	In+Out (Total)	% IN	% OUT	In+Out (Total)	% of Gross Trips	% of Ext. Trips	In+Out (Total)	In	Out	In	Out
Multifamily Housing (Low-Rise)	220	7.14	63%	37%	7.14	0%	0%	7.14	0.00	0.00	0.00	0.00
Shopping Center (<40k)	822	11.20	50%	50%	11.20	0%	40%	7.20	2.00	2.00	0.00	3.60
Totals		18.34			18.34			14.34	2.00	2.00	0.00	6.24

APPENDIX C

COLLISION HISTORY

Legend

- Collisions 2017
- Collisions 2018
- Collisions 2019
- Collisions 2020
- Collisions 2021
- LAPR_Lines
- sr24kLines_20201231



APPENDIX D

CONCURRENCY EVALUATION

Transportation Concurrency Evaluation and Determination of Transportation Impact Fees

Date of Complete App _____
 Project Third and Park
 Address Third Street and Park Avenue

1. Exemptions (Deemed Concurrent, MCC 17.15 020)

	Yes	No	N/A
A. PM peak hour trips same or less than current	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B. 10.0 or less new PM Peak hour trips	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. Additions to a Single Family Residence	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D. TI with no change of use or increase in services	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E. Replacement Structures	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
F. Re-roofing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
G. Demolitions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
H. Subject to Master Plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2. If project meets any of the above, then deemed concurrent.

Exempt ☐ Yes ☒ No

*** If Yes, Stop Here, if No, respond to the following;**

3. A. If more than 10 new PM Peak Hour Trips: For transportation concurrency evaluation, the applicant shall provide a traffic study prepared by a traffic engineer, which shall compare the calculated level of service to the adopted level of service standard for each impacted transportation facility. The traffic study shall, at a minimum, provide the following information:

- i. Anticipated trip distribution;
- ii. The current calculated level of service of all impacted transportation facilities;
- iii. The future calculated level of service of all impacted transportation facilities incorporating traffic volumes from the proposed development;
- iv. Any proposed mitigation (including calculation of impact fees); and
- v. The future calculated level of service of all impacted transportation facilities with the incorporation of proposed development traffic volumes and any proposed mitigation.

Definition:

“Impacted transportation facility” includes any transportation facility which is impacted by ten or more peak hour project trips in one direction.

B. LOS Determination

Location	Type Segment or Intersection	Current LOS	LOS With Development
No transportation facilities			
impacted by ten or more			
peak hour project trips			
in one direction.			

Add additional sheet if necessary. Show all “impacted transportation facilities.”

4. Does any location have a LOS with development of less than:

LOS E Principal/Minor Arterial Road Segments and Intersections

LOS D Collector Arterials/Local Road Segments

(See attached map)

☐ Yes Then development not concurrent.
Permit not to be issued without mitigation and approval of Public Works Director.

☐ No Then development is concurrent and code requirements are met.

5. Calculated ADT 149.93 Calculated Peak PM Trips 14.34

*Intersection of 88th Street SW and Hwy 525 a) Peak PM Trips N/A
b) ADT N/A

6. Determination of Transportation Impact Fee from Traffic Study

14.34 X \$1875.00 = \$26,887.50
New PM Peak Hour Trips Fee per PM PHT

*If 5. (a) is 10 or greater, WSDOT fees apply based on 5. (b)

Project already completed X \$205.00 = 0
ADT @ 88th St SW/Hwy 525 Fee per ADT
TOTAL FEE = 0

Engineer Stamp
(required for all non-exempt projects)



Or

Initials

C. ☐ Fee Exempt per MMC 17.15.020

Date

TREASURERS RECIEPT # _____

D - 3

Map 9: Functional Class of Street Network

