

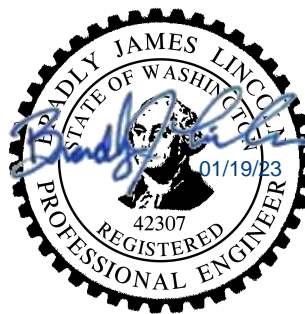
Kimley»»Horn

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Everett, WA 98201
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Ideal Industrial Park Traffic Impact Analysis

Jurisdiction: City of Marysville

January 2023



090222353

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1. DEVELOPMENT IDENTIFICATION

Kimley-Horn and Associates, Inc. has been retained to provide a traffic impact analysis for the proposed Ideal Industrial Park development. This report is intended to provide the City of Marysville, Snohomish County, and the Washington State Department of Transportation (WSDOT) with the necessary trip generation, trip distribution, and level of service information to facilitate their reviews of the development. The site is located along the east side of Smokey Point Boulevard, south of 152nd Street NE. A site vicinity map is included in Figure 1. The development is proposed to consist of a total of 74,519 square-feet (SF) of general warehousing across two buildings and 107,024 SF of high-cube warehousing. There is 2,540 SF of existing general light industrial and 3 single-family residential units on the site that will be removed and are creditable to the development.

Brad Lincoln, 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 ITE.

2. METHODOLOGY

The analysis contained in this report is based on the City of Marysville traffic impact analysis guidelines, which requires the analysis of intersections impacted with 25 or more PM peak-hour trips. The trip generation calculations are based on average trip generation rates published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition (2021)*. The trip distribution is based on the approved distributions provided by the City of Marysville for the *MIC South* area. The trip generation, trip distribution and scope of analysis was identified during the scoping process for the development.

3. TRIP GENERATION

The trip generation calculations for the Ideal Industrial Park development are based on data published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual, 11th Edition (2021)* for the following Land Use Codes:

- ITE Land Use Code 150, Warehousing
- ITE Land Use Code 155, High-Cube Fulfillment Center Warehouse
- ITE Land Use Code 110, General Light Industrial (removed)
- ITE Land Use Code 210, Single-Family Detached Housing (removed)

The average trip generation rates have been used for the trip generation calculations. The weekday trip generation calculations for the Ideal Industrial Park development are summarized in Table 1.

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IDEAL INDUSTRIAL PARK

CITY OF MARYSVILLE

LEGEND



DEVELOPMENT SITE



STUDY INTERSECTION

FIGURE 1
SITE VICINITY MAP

Table 2: Trip Generation Summary - Weekday

Land Use	Size	Average Daily Trips	AM Peak-Hour Trips			PM Peak-Hour Trips		
			Inbound	Outbound	Total	Inbound	Outbound	Total
Warehousing	74,519 SF	68.56	9.76	2.91	12.67	3.75	9.66	13.41
Warehouse High Cube	107,024 SF	193.71	13.00	3.05	16.05	6.68	10.44	17.12
General Light Industrial (removed)	-2,540 SF	-12.37	-1.17	-0.71	-1.88	-0.73	-0.92	-1.65
Single-Family Residential (removed)	-3 unit	-28.29	-0.53	-1.57	-2.10	-1.78	-1.04	-2.82
TOTAL NEW		221.61	21.06	3.68	24.74	7.92	18.14	26.06

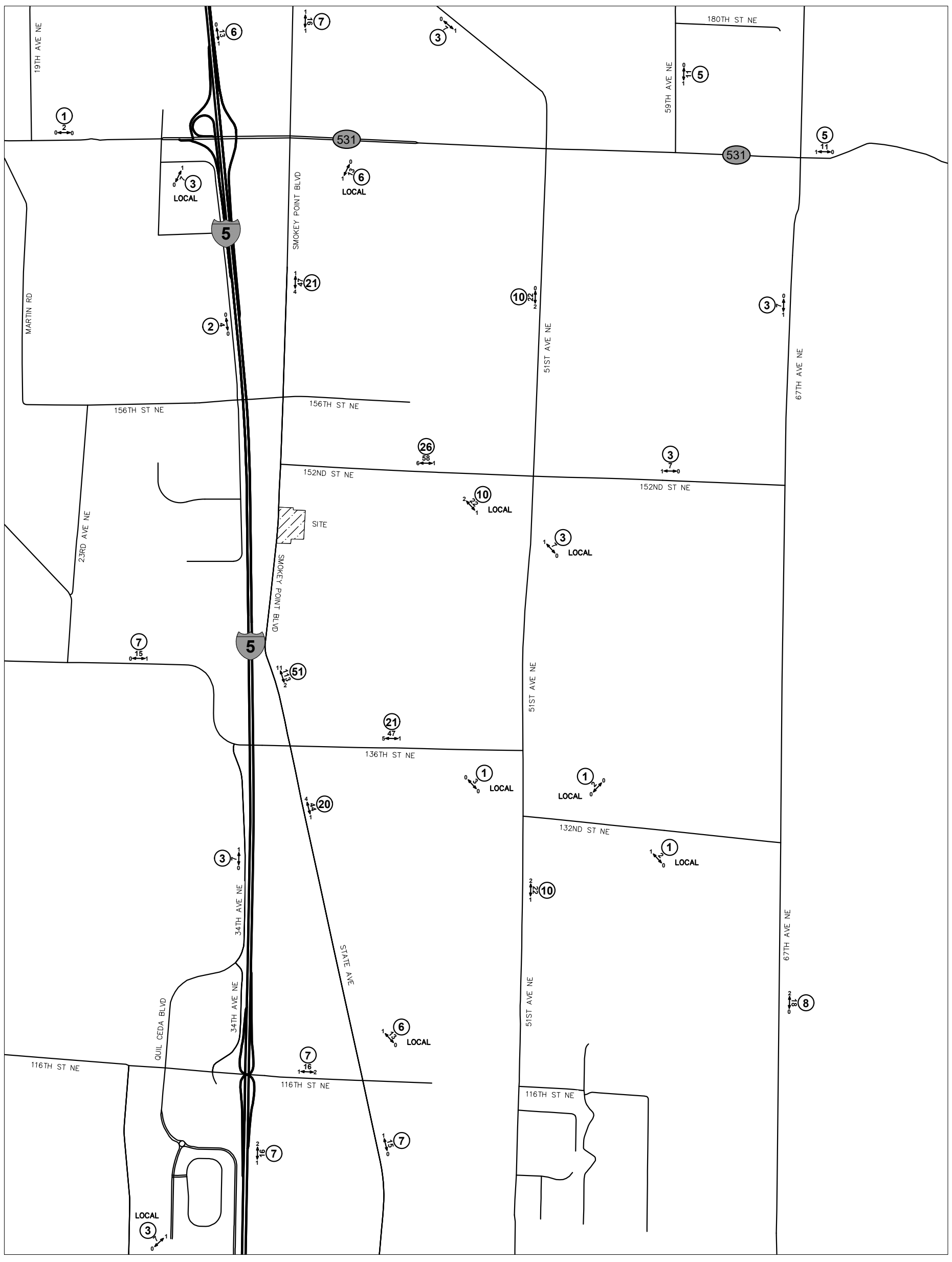
The Ideal Industrial Park development is anticipated to generate approximately 222 average daily trips with 25 AM peak-hour trips and 26 PM peak-hour trips. The trip generation calculations are included in the attachments.

4. TRIP DISTRIBUTION

The trip distribution for the Ideal Industrial Park development is based on distributions established by the City of Marysville, specifically the *MIC South* area. The trip distributions have been established for the opening year conditions. The biggest difference between the opening year and horizon year conditions is an interchange with Interstate-5 at 156th Street NE and future roadways east of Smokey Point Boulevard and north of 152nd Street NE.

The interlocal agreement between the City of Marysville and Snohomish County requires detailed development trip turning movement data at Snohomish County Key Intersections impacted with three or more directional trips on an approach or departure. The trips generated by the development will not impact any Key Intersections during the AM or PM peak-hours.

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IDEAL INDUSTRIAL PARK

CITY OF MARYSVILLE

LEGEND

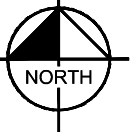
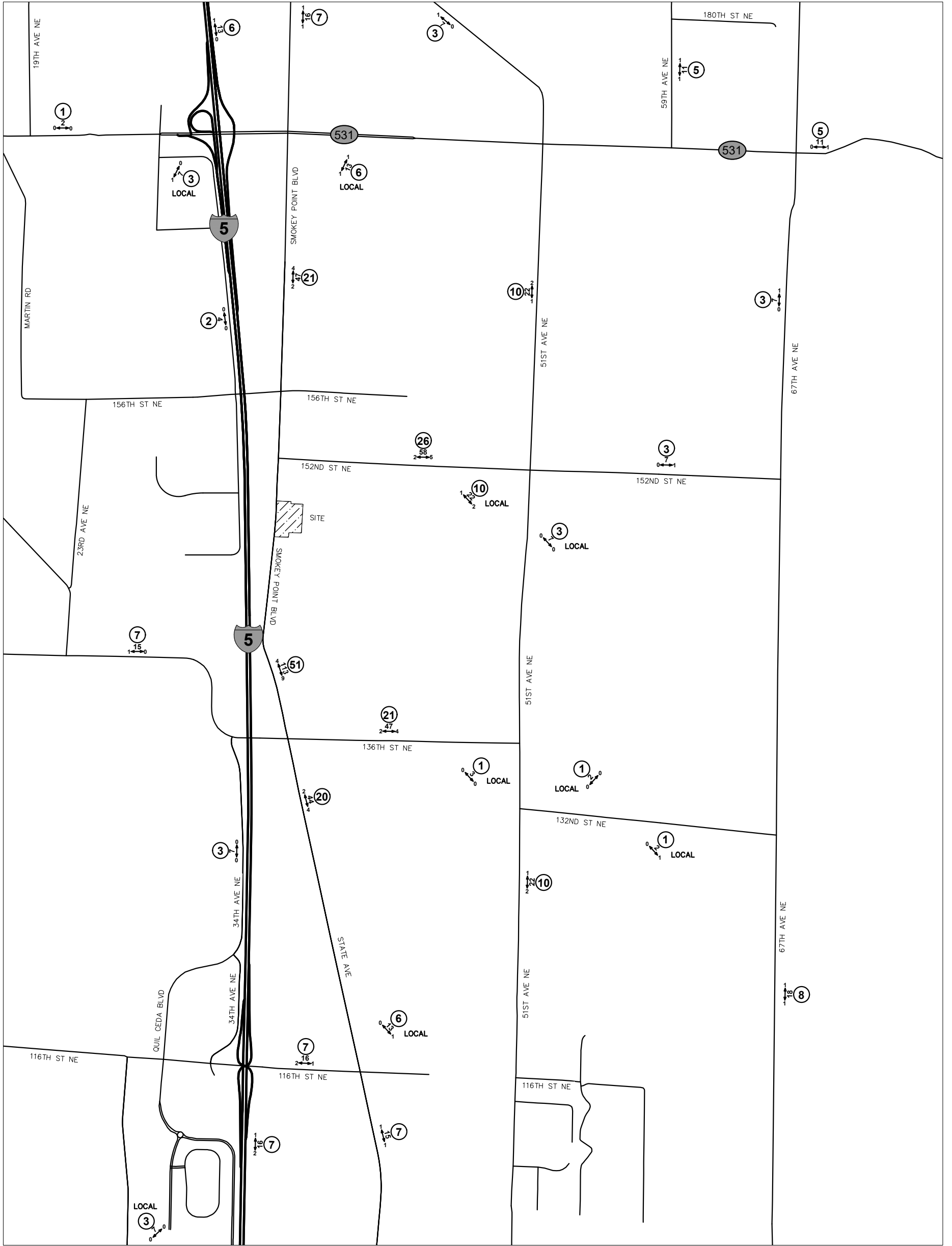
AWDT
 AM ← PEAK

XX

NEW DAILY TRAFFIC
 NEW AM PEAK-HOUR TRIPS
 TRIP DISTRIBUTION %

FIGURE 2
 TRIP DISTRIBUTION
 AM PEAK-HOUR

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IDEAL INDUSTRIAL PARK

CITY OF MARYSVILLE

LEGEND

AWDT
PM ← PEAK

(XX)

NEW DAILY TRAFFIC
NEW PM PEAK-HOUR TRIPS
TRIP DISTRIBUTION %

FIGURE 3
TRIP DISTRIBUTION
PM PEAK-HOUR

5. ACCESS ANALYSIS

The Ideal Industrial Park development has approximately 855 feet of frontage along Smokey Point Boulevard and 245 feet of frontage along 150th Place NE. The development is proposed to have two accesses to Smokey Point Boulevard and one access to 150th Place NE. Both accesses to Smokey Point Boulevard are proposed to align with driveways along the west side. The access to 150th Place NE is located approximately 200 feet, edge to edge, from Smokey Point Boulevard and will generally align with single-family driveways on the north side of the road. There is already curb, gutter, sidewalk, and illumination along Smokey Point Boulevard. Frontage improvements should therefore only be required along 150th Place NE. The multiple accesses will mean that there are not any accesses or intersections that are anticipated to be impacted by 25 or more PM peak-hour trips.

6. TRAFFIC MITIGATION FEES

The City of Marysville has an interlocal agreement with Snohomish County that provides for the payment of traffic mitigation fees to Snohomish County for City of Marysville developments. The City of Marysville also has an understanding with WSDOT for the payment of traffic mitigation fees.

6.1 City of Marysville

The City of Marysville traffic mitigation fees have been calculated using the commercial rate of \$2,220 per PM peak-hour trip. The Ideal Industrial Park development is proposed to generate 26.06 PM peak-hour trips. These trips will result in traffic mitigation fees of \$57,853.20.

6.2 Snohomish County

The City of Marysville and Snohomish County have an interlocal agreement that provides for the payment of traffic mitigation for impacts to Snohomish County roadways by City of Marysville developments. Traffic mitigation fees are based on predetermined area impacts or impacts to actual improvement projects. The trip distribution shows that there are not any Snohomish County improvement projects that will be impacted by 3 directional PM peak-hour trips. Payment of Snohomish County traffic mitigation fees should therefore not be a condition for the Ideal Industrial Park development.

6.3 Washington State Department of Transportation

There are two major WSDOT improvements in the site vicinity that are impacted by trips generated by the Ideal Industrial Park development. These improvements are the 172nd Street NE/SR-531 corridor improvements and the 156th Street NE interchange with Interstate-5. Both of these improvements are identified as funded as part of the Connecting Washington legislation. Payment of WSDOT traffic mitigation fees should therefore not be a condition of the Ideal Industrial Park development.

7. CONCLUSIONS

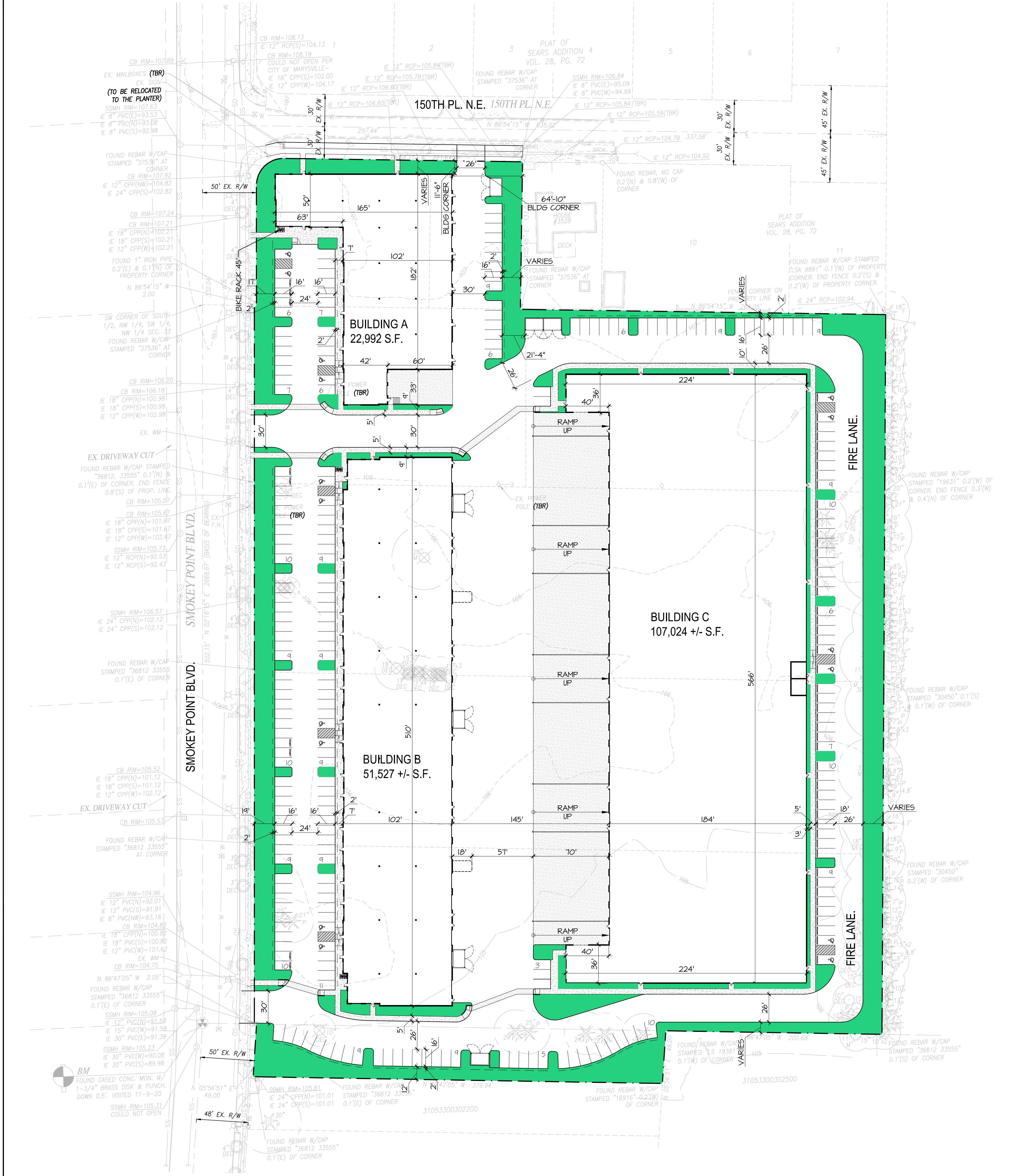
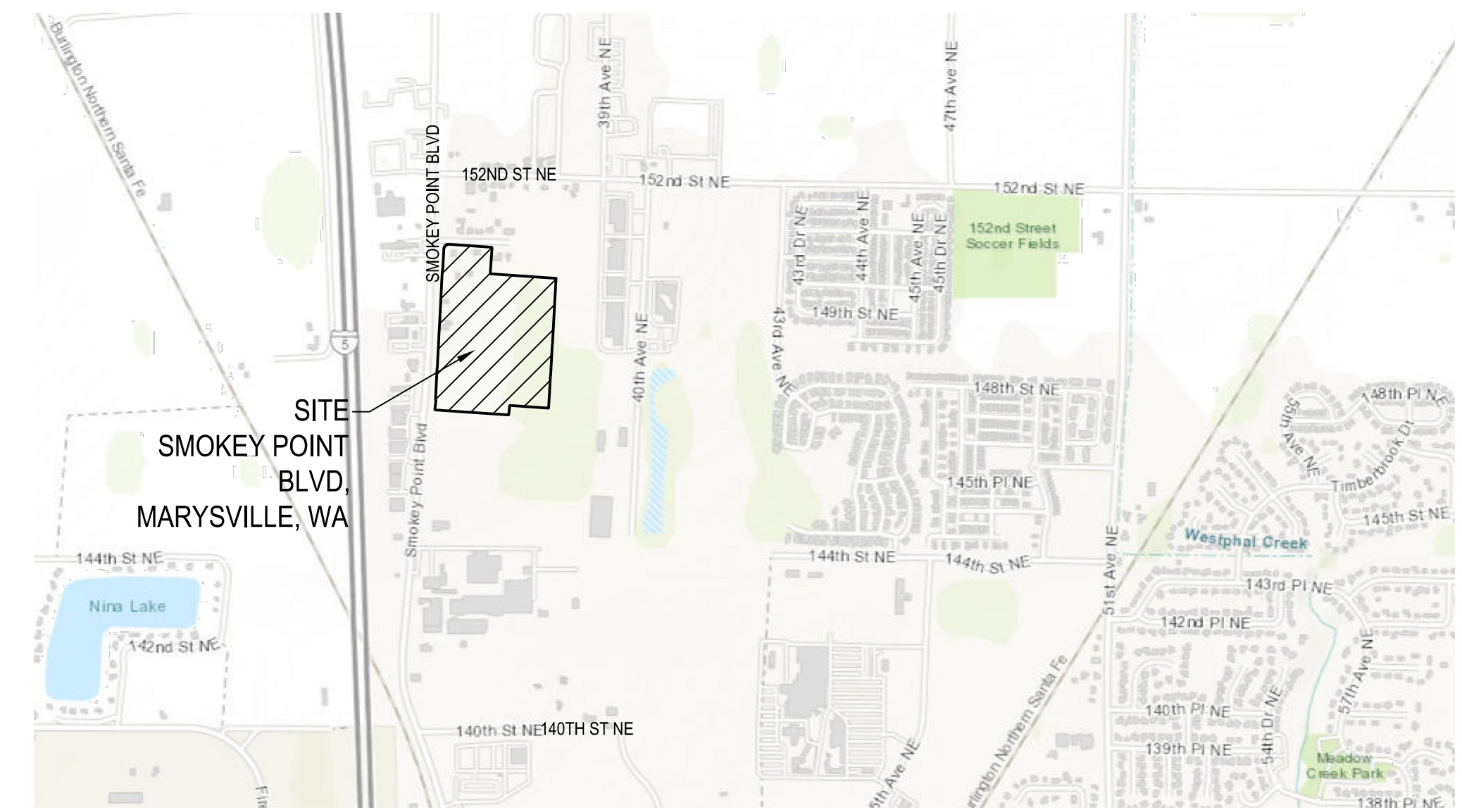
The Ideal Industrial Park development is proposed to consist of a total of 74,519 SF of warehousing and 107,024 SF of high-cube warehouse spread across multiple buildings. There is 2,540 SF of existing general light industrial and 3 single-family residential units on the site that will be removed and are creditable to the development. The development is anticipated to generate approximately 222 average weekday daily trips with 25 AM peak-hour trips and 26 PM peak-hour trips. There are proposed to be two accesses to Smokey Point Boulevard and one access to 150th Place NE. The multiple accesses will mean that none of the accesses or off-site intersections will be impacted by 25 PM peak-hour trips. The total traffic mitigation fees for the development should be \$57,853.20 for the City of Marysville. Snohomish County and WSDOT fees should not be a condition of the Ideal Industrial Park development.

Site Plan

SITE PLAN NOTES

ZONING	LI - LIGHT INDUSTRIAL
SITE AREA	442, 418 S.F.
SITE DEDICATION	1, 020 S.F.
NEW SITE AREA	441, 348 S.F.
MINIMUM PERVIOUS AREA	66,210 S.F. (15%)
PERVIOUS AREA PROVIDED	66, 807 S.F. (15.14%)
SITE COVERAGE	374, 541 S.F. (84.86%)
BUILDING AREA	
BUILDING A	22, 492 S.F.
BUILDING B	51, 527 S.F.
BUILDING C	107, 024 S.F.
TOTAL BLDG AREA	181, 543 S.F.
REQUIRED PARKING	
OFFICE	1 PER 400 S.F. GROSS FLOOR AREA
MANUFACTURING / INDUSTRIAL	1 PER 150 S.F. GROSS FLOOR AREA PLUS OFFICE SPACE REQUIREMENTS
WAREHOUSE / STORAGE	1 PER 2,000 S.F. GROSS FLOOR AREA PLUS OFFICE SPACE REQUIREMENTS
BUILDING A	
OFFICE	22,492 S.F. (14% OFFICE, 86% MANUFACTURING/INDUSTRIAL)
MANUFACTURING / INDUSTRIAL	3, 218 / 400 - 8 STALLS
	14,774 / 750 - 27 STALLS
CARPOOL PARKING REQUIRED	35 REQUIRED STALLS - 43 PROVIDED
BICYCLE PARKING REQUIRED	43 x .05 = 3 STALLS PER 22C.130.030 (3) (a)
	38 x .05 = 2 REQUIRED PER 22C.130.060
BUILDING B	
OFFICE	51, 527 S.F. (15% OFFICE, 85% MANUFACTURING/INDUSTRIAL)
MANUFACTURING / INDUSTRIAL	7, 700 / 400 - 20 STALLS
	43, 827 / 750 - 54 STALLS
CARPOOL PARKING REQUIRED	74 REQUIRED STALLS - 111 PROVIDED
BICYCLE PARKING REQUIRED	111 x .05 = 6 STALLS PER 22C.130.030 (3) (a)
	74 x .05 = 4 REQUIRED PER 22C.130.060
BUILDING C	
OFFICE	107, 024 S.F. (10% OFFICE, 90% MANUFACTURING/INDUSTRIAL)
MANUFACTURING / INDUSTRIAL	10, 700 / 400 - 27 STALLS
	46, 324 / 2000 - 44 STALLS
CARPOOL PARKING REQUIRED	76 REQUIRED STALLS - 94 PROVIDED
BICYCLE PARKING REQUIRED	94 x .05 = 5 STALLS PER 22C.130.030 (3) (a)
	76 x .05 = 4 REQUIRED PER 22C.130.060
TOTAL REQUIRED PARKING	190 STALLS
TOTAL PROVIDED PARKING	244 STALLS

VICINITY MAP



SITE PLAN

SCALE: 1" = 50'-0"

PROPOSED BUILDING FOR
IDEAL INDUSTRIAL PARK
SMOKEY POINT BLVD, MARYSVILLE, WA

LANCE MUELLER & ASSOCIATES
ARCHITECTS
130 LAKESIDE • SUITE 250 • SEATTLE, WA 98122 • (206) 325-2553

SHEET: **A1.0**

JOB NO.	DRAWN	CHECKED	DATE	REVISION
22-043	OKEN K.	L.M.	MM/DD/YY	

DATE: 05/20/22

Trip Generation Calculations

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

LAND USES	VARIABLE	ITE LU code	Gross Trips				NET EXTERNAL TRIPS BY TYPE												
			Trip Rate	% IN	% OUT	In+Out (Total)	IN BOTH DIRECTIONS			DIRECTIONAL ASSIGNMENTS									
							TOTAL	PASS-BY % of Ext. Trips	In+Out (Total)	DIVERTED LINK % of Ext. Trips	In+Out (Total)	PASS-BY In	Out	DIVERTED LINK In	Out	NEW In	Out		
Warehousing	74.519 KSF	150	0.92	50%	50%	68.56	0%	0	0	68.56	0	0	0	0	0	0	0	34.28	34.28
Warehouse High Cube	107.024 KSF	155	1.81	50%	50%	193.71	0%	0	0	193.71	0	0	0	0	0	0	0	96.86	96.85
General Light Industrial (Remove)	-2.540 KSF	110	4.87	50%	50%	-12.37	0%	0	0	-12.37	0	0	0	0	0	0	0	-6.19	-6.18
Single-Family Detached Housing (Remove)	-3 Units	210	9.43	50%	50%	-28.29	0%	0	0	-28.29	0	0	0	0	0	0	0	-14.15	-14.14
Total						221.61		0.00	0.00	221.61		0.00	0.00	0.00	0.00	0.00	0.00	110.80	110.81

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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	ITE LU code	VARIABLE	Gross Trips				NET EXTERNAL TRIPS BY TYPE										
			Trip Rate	% IN	% OUT	In+Out (Total)	IN BOTH DIRECTIONS				DIRECTIONAL ASSIGNMENTS						
							TOTAL	PASS-BY	DIVERTED LINK	NEW	PASS-BY	DIVERTED LINK	NEW				
				% IN	% OUT	In+Out (Total)	% of Ext. Trips	In+Out (Total)	% of Ext. Trips	% of Ext. Trips	In+Out (Total)	In	Out	In	Out	In	Out
Warehousing	150	74.519 KSF	0.17	77%	23%	12.67	0%	0	0%	0	0	0	0	0	0	9.76	2.91
Warehouse High Cube	155	107.024 KSF	0.15	81%	19%	16.05	0%	0	0%	0	16.05	0	0	0	0	13.00	3.05
General Light Industrial (Remove)	110	-2.540 KSF	0.74	62%	38%	-1.88	0%	0	0%	0	-1.88	0	0	0	0	-1.17	-0.71
Single-Family Detached Housing (Remove)	210	-3 Units	0.70	25%	75%	-2.10	0%	0	0%	0	-2.10	0	0	0	0	-0.53	-1.57
Total						24.74		0		0	24.74	0	0	0	21.06	3.68	

Ideal Industrial Park
090222353

**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	ITE LU code	VARIABLE	Gross Trips				NET EXTERNAL TRIPS BY TYPE										
			Trip Rate	% IN	% OUT	In+Out (Total)	IN BOTH DIRECTIONS		DIRECTIONAL ASSIGNMENTS								
							TOTAL	NEW	PASS-BY	DIVERTED LINK	PASS-BY	DIVERTED LINK	NEW				
					In+Out (Total)	% of Ext. Trips	In+Out (Total)	% of Ext. Trips	In	Out	In	Out	In	Out			
Warehousing	150	74.519 KSF	0.18	28%	72%	13.41	0%	0	0%	0	0	0	0	0	0	3.75	9.66
Warehouse High Cube	155	107.024 KSF	0.16	39%	61%	17.12	0%	0	0%	0	0	0	0	0	0	6.68	10.44
General Light Industrial (Remove)	110	-2.540 KSF	0.65	44%	56%	-1.65	0%	0	0%	0	0	0	0	0	0	-0.73	-0.92
Single-Family Detached Housing (Remove)	210	-3 Units	0.94	63%	37%	-2.82	0%	0	0%	0	0	0	0	0	0	-1.78	-1.04
Total						26.06		0		0	0	0	0	0	0	7.92	18.14

WSDOT Exhibit C List

LIST OF PROGRAMMED
WSDOT PROJECTS IN
SNOHOMISH COUNTY
AS OF Nov. 2008

County ID#	TSA	SR	MP1	MP2	Title/Description	Design/Construction year	Total Cost (M)	TOTAL CAPACITY (ADT)	PRESENT VOLUME	RESERVE CAPACITY (ADT)	TRUE CONTRIBUTION PER ADT	50% TRIP END DEDUCTION	TAX DEDUCTION	Proportionate Share Per Development Generated ADT
DOT-11	D	5	186.42	186.42	128th ST SW Interchange - Construct Loop Ramps / HOV Bypass	2014	\$13.30	99,000	65,000	34,000	\$391.18	\$195.15	\$40.98	\$154.17
DOT-01	A	5	205.85	205.85	172nd Street NE (SR 531) interchange improvements, SB loop ramp, bridge widening	2009	\$41.00	90,000	34,900	55,100	\$744.10	\$372.05	\$63.25	\$308.80
DOT-30	E	9	1.66	4.04	212th Street SE to 176th Street SE, widen to 5 lanes	2011	\$80.80	54,000	21,000	33,000	2,448.48	\$1,224.24	\$183.64	\$1,040.60
DOT-56	B	9	16.48	17.49	Lundeen Parkway to SR-92, Widen to 4 lanes & RT-LT lanes	2009	\$38.90	54,000	24,000	30,000	\$1,296.67	\$648.34	\$123.18	\$525.16
DOT-37	B	9	17.96	17.96	SR-9 at 60th Street NE, add LT & RT lanes at Tee intersection	2011	\$2.95	54,000	36,000	18,000	\$163.89	\$81.95	\$13.91	\$67.94
DOT-22	A	9	18.88	19.46	SR 9/SR 528 intersection improvements, Signal & Channelization	2010	\$17.13	54,000	36,000	18,000	\$951.67	\$475.83	\$80.89	\$394.94
DOT-57	A	9	20.51	20.59	SR-9/84th Street NE intersection improvements, LT & RT lanes	2011	\$17.13	54,000	12,000	42,000	\$407.88	\$203.93	\$55.06	\$148.87
DOT-58	A	9	26.00	26.09	SR-9/SR-531/172nd St. NE intersection improvement, Roundabout	2011	\$15.60	54,000	11,000	43,000	\$362.80	\$181.40	\$45.87	\$135.53
DOT-33	B	92	1.46	1.46	SR-92 at 113th Avenue NE, Roundabout	2009	\$2.36	54,000	19,600	34,000	\$68.60	\$34.30	\$6.52	\$27.78
DOT-31	B	92	1.73	1.73	SR-92 at Callow/Grade Road, turn lanes to SR-92	2009	\$1.90	54,000	19,600	34,400	\$55.24	\$27.62	\$5.25	\$22.37
DOT-46	C	203	22.36	22.38	SR-203 at North High Rock/Tualco Roads, Re-align cross street for I/S and add LT & RT lanes on SR-203	2009	\$3.34	18,000	13,000	5,000	\$688.00	\$344.00	\$73.48	\$270.52
DOT-36	C	203	23.01	23.01	Ben Howard Rd channelization, LT lanes on SR-203	2009	\$1.07	54,000	13,000	41,000	\$26.10	\$13.05	\$2.87	\$10.18
DOT-16	E	522	13.82	16.61	Paradise Lake Road I/C, Stage 3, new interchange	2010	\$27.95	81,000	48,000	33,000	\$847.03	\$423.52	\$63.53	\$359.99
DOT-17	E	522	16.80	20.41	Paradise Lake Road to Snohomish River, Bridge, Stage 2, widen to 4 lanes	2009	\$33.48	80,000	21,900	58,100	\$576.25	\$288.13	\$43.22	\$244.91
DOT-28	C	522	20.50	24.68	Snohomish River Bridge to SR 2, widen to 4 lanes	2010	\$171.98	80,000	20,000	60,000	\$2,866.33	\$1,433.17	\$315.30	\$1,117.87

LIST OF PROGRAMMED
WSDOT PROJECTS IN
SNOHOMISH COUNTY
AS OF Nov. 2008

County ID#	TSA SR	MP1	MP2	Title/Description	Design/Construction year	Total Cost (M)	TOTAL CAPACITY (ADT)	PRESENT VOLUME	RESERVE CAPACITY (ADT)	TRUE CONTRIBUTION PER ADT	50% TRIP END DEDUCTION	TAX DEDUCTION	Proportionate Share Per Development Generated ADT
DOT-19	F 524	5.87	9.50	24th Avenue SE to I-405, widen to 5 Lanes	2012	\$33.34	54,000	15,300	38,700	\$861.50	\$430.75	\$77.54	\$353.21
DOT-20	F 524	5.87	9.50	I-405 to Royal Ann Road, widen to 5 Lanes	2011	\$71.06	54,000	15,300	38,700	\$1,836.18	\$918.09	\$165.26	\$752.83
DOT-60	E 524	6.79	6.79	Larch Way intersection, LT lanes, signal	2009	\$2.59	54,000	15,300	38,700	\$66.93	\$33.47	\$5.02	\$28.45
DOT-59	D 525	6.25	6.25	SR-525/68th St. SW intersection improvements, NBRT, NBLT & SBLT	2011	\$3.70	25,700	17,000	8,700	\$425.29	\$212.64	\$89.31	\$123.33
DOT-49	A 530	17.30	17.30	SR-530 at Old 99, Roundabout	2011	\$8.00	18,000	10,000	8,000	\$1,000.00	\$500.00	\$85.00	\$415.00
DOT-62	A 530	19.71	19.71	211th Place NE, Intersection Roundabout	2011	\$6.10	24,000	15,000	9,000	\$677.78	\$338.89	\$57.61	\$281.28
DOT-52	A 531	1.95	2.25	SR-531/Jct. Freestad Road Intersection, LT lanes	2011	\$1.55	18,000	7,900	10,100	\$140.14	\$70.07	\$11.92	\$58.15
DOT-05	A 531	7.00	8.59	43rd Ave. NE to 67th Ave. NE, NE, Widen to 5 lanes (Arlington)	2014	\$20.78	54,000	11,000	43,000	\$483.14	\$241.57	\$41.07	\$200.50
				270th St. NW Vic. To 72nd Ave. NW, EB Climbing Lane, intersection improvements & signal.	2009	\$19.00	54,000	16,000	38,000	500	\$250.00	\$28.75	\$221.25
DOT-53	A 532	5.25	5.90	64th Ave. NW to 12th Ave. NW, Climbing lane & LT Lanes	2010	\$22.40	54,000	17,000	37,000	\$605.41	\$302.70	\$33.75	\$268.95
				TAX DEDUCTIONS									
				TSA A = 17%									
				TSA B = 19%									
				TSA C = 22%									
				TSA D = 21%									
				TSA E = 15%									
				TSA F = 18%									