

MEMORANDUM

To: Jesse Hannahs, PE, City of Marysville

Jesse Birchman, PE, PTOE, City of Marysville

From: Brad Lincoln, PE

Joseph Miller

Kimley-Horn and Associates, Inc.

Date: July 3, 2024

Kimley-Horn Project No. KH 090223024

Subject: M51 Industrial – Comment Response – PA 23014



Kimley-Horn and Associates, Inc. (Kimley-Horn) has been retained to provide a comment response memorandum for the proposed M51 Industrial Development (Development). This response memo addresses comments provided by City of Marysville (City) staff on May 24, 2024. The comments regarding safety and collision analysis have been addressed in this memorandum.

1. Collision Data at Study Intersections

The latest five-year collision history from January 1, 2019, through December 31, 2023, was obtained from WSDOT at each of the study intersections. The five-year collision rate has been calculated using PM peak-hour volumes and a K-factor of 10 for conversion to average daily traffic. There was a total of 45 collisions reported over the 5-year period. The collision data is summarized in **Table 1**.

Table 1: Five-Year Collision Data Summary

Intersection		Rear- End	Entering at Angle	Opp. Dir.	Sideswipe	Same Dir.	Fixed Object/ Other	Total Collisions	Collisions Per Year
1.	Smokey Point Blvd at 156 th St NE	5	3	4	0	1	1	14	2.8
2.	51 st Ave NE at 152 nd St NE	6	12	1	0	0	5	24	4.8
3.	51 st Ave NE at 160 th St NE	1	0	0	0	0	1	2	0.4
4.	4. 51 st Ave NE at Site Access (S)	0	0	1	3	0	1	5	1.0
5.	5. 51 st Ave NE at Site Access (N)	0	0	0	0	0	0	0	0.0

The collisions per million entering vehicles (MEV) is the standard rate for intersections. The five-year collision rates are summarized in **Table 2**.



Table 2: Five-Year Collision Rate Calculation

	Intersection	PM Peak-Hour Intersection Vol.	K-Factor	Total Collisions	Collision Rate ¹	
1.	Smokey Point Blvd at 156 th St NE	1,888	10	14	0.41	
2.	51st Ave NE at 152nd St NE	1,238	10	24	1.06	
3.	51st Ave NE at 160th St NE	538	10	2	0.20	
4.	4. 51st Ave NE at Site Access (S)	537	10	5	0.51	
5.	5. 51st Ave NE at Site Access (N)	537	10	0	0.00	

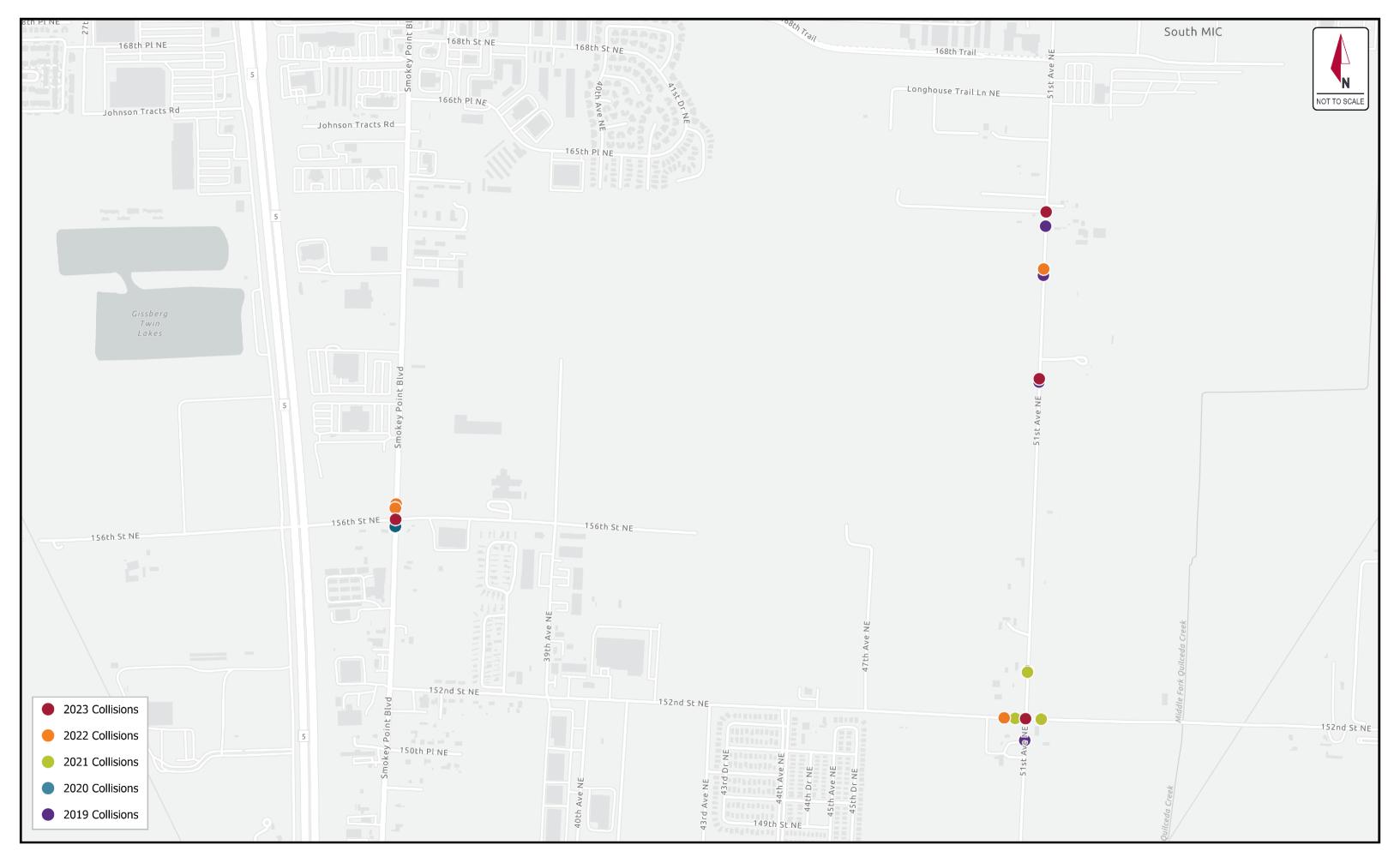
The study intersection of 51st Avenue NE at 152nd Street NE has a collision rate greater than 1.0 per MEV, but fewer than 5 collisions per year. The most prominent type of collision at this location are Entering at Angle collisions where 6 of these 12 collisions involved not granting proper right-of-way to the appropriate vehicle. It is important to note that there were not any fatal or serious injury collisions reported. The intersection of 51st Avenue NE at 152nd Street NE is planned for improvements and the Development will be conditioned to help with those improvements. The collision data has been provided in the Appendix A.

¹ The collision rate is based on collisions per million entering vehicles (MEVs)



APPENDIX A

COLLISION DATA



REPORT NUMBER	DATE TIME	PRIMARY ROADWAY	CROSS STREET	SEVERITY	# VEHICLES	# PEDS	# BIKES	COLLISION TYPE	VEHICLE 1 MANEUVER	VEHICLE 2 MANEUVER
EC43162	2022-05-04 19:30	SMOKEY POINT BLVD	156TH ST NE	No Apparent Injury	2	0		0 From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped for Traffic
EC65406	2022-07-18 6:47	SMOKEY POINT BLVD	156TH ST NE	No Apparent Injury	2	0		0 From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign
EA50889	2020-07-28 18:51	156TH ST NE	SMOKEY POINT BLVD	No Apparent Injury	2	0		0 From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign
E924187	2019-05-22 16:12	156TH ST NE	SMOKEY POINT BLVD	No Apparent Injury	2	0		0 From same direction - both going straight - one stopped - rear-end	Starting in Traffic Lane	Stopped for Traffic
EB85678	2021-11-04 10:30	SMOKEY POINT BLVD	156TH ST NE	No Apparent Injury	2	0		0 From same direction - both going straight - both moving - rear-end	Going Straight Ahead	Starting in Traffic Lane
EA81269	2020-11-15 12:07	156TH ST NE	SMOKEY POINT BLVD	No Apparent Injury	2	0		0 Entering at angle	Making Right Turn	Going Straight Ahead
EC23111	2022-02-23 20:20	156TH ST NE	SMOKEY POINT BLVD	No Apparent Injury	2	0		0 Entering at angle	Making Right Turn	Going Straight Ahead
EB91556	2021-11-19 6:54	SMOKEY POINT BLVD	156TH ST NE	No Apparent Injury	2	0		0 Entering at angle	Making Left Turn	Going Straight Ahead
EC95761	2022-10-22 15:07	SMOKEY POINT BLVD	156TH ST NE	Possible Injury	2	0		0 From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead
EB80300	2021-10-20 14:26	SMOKEY POINT BLVD	156TH ST NE	No Apparent Injury	2	0		0 From opposite direction - one left turn - one straight	Going Straight Ahead	Making Left Turn
EA61464	2020-09-02 17:02	SMOKEY POINT BLVD	156TH ST NE	Suspected Minor Injury	2	0		0 From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead
EB78751	2021-10-16 13:00	SMOKEY POINT BLVD	156TH ST NE	Possible Injury	2	0		0 From opposite direction - one stopped - head-on	Going Straight Ahead	Stopped at Signal or Stop Sign
EC54157	2022-06-07 11:54	156TH ST NE	SMOKEY POINT BLVD	No Apparent Injury	2	0		0 From same direction - all others	Backing	Stopped for Traffic
EE00118	2023-09-14 20:30	SMOKEY POINT BLVD	156TH ST NE	Suspected Minor Injury	1	0		0 Vehicle overturned	Going Straight Ahead	N/A
EC66532	2022-07-20 17:21	152ND ST NE	51ST AVE NE	No Apparent Injury	2	0		0 From same direction - both going straight - both moving - rear-end	Going Straight Ahead	Slowing
EA48989	2020-07-21 17:25	152ND ST NE	51ST AVE NE	No Apparent Injury	2	0		0 From same direction - both going straight - one stopped - rear-end	Slowing	Stopped at Signal or Stop Sign
E891179	2019-02-08 10:41	152ND ST NE	51ST AVE NE	No Apparent Injury	2	0		0 From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign
EA95542	2021-01-03 19:33	51ST AVE NE	152ND ST NE	Suspected Minor Injury	2	0		0 From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign
EB91875	2021-11-20 11:36	51ST AVE NE	152ND ST NE	No Apparent Injury	2	0		0 From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign
EA36207	2020-05-15 14:48	51ST AVE NE	152ND ST NE	No Apparent Injury	2	0		0 From same direction - both going straight - one stopped - rear-end	Starting in Traffic Lane	Stopped at Signal or Stop Sign
ED28133	2023-01-24 22:23	152ND ST NE	51ST AVE NE	No Apparent Injury	2	0		0 Entering at angle	Going Straight Ahead	Going Straight Ahead
EC20564	2022-02-14 18:10	152ND ST NE	51ST AVE NE	Possible Injury	2	0		0 Entering at angle	Starting in Traffic Lane	Starting in Traffic Lane
EB47035	2021-07-01 11:17	152ND ST NE	51ST AVE NE	No Apparent Injury	2	0		0 Entering at angle	Making Left Turn	Stopped at Signal or Stop Sign
ED10453	2022-12-03 14:22	51ST AVE NE	152ND ST NE	No Apparent Injury	2	0		0 Entering at angle	Making Left Turn	Going Straight Ahead
ED04274	2022-11-04 8:05	51ST AVE NE	152ND ST NE	No Apparent Injury	2	0		0 Entering at angle	Starting in Traffic Lane	Starting in Traffic Lane
ED20343	2022-12-16 17:15	51ST AVE NE	152ND ST NE	No Apparent Injury	2	0		0 Entering at angle	Starting in Traffic Lane	Starting in Traffic Lane
EA02102	2020-01-13 7:03	51ST AVE NE	152ND ST NE	No Apparent Injury	2	0		0 Entering at angle	Going Straight Ahead	Going Straight Ahead
EB17315	2021-03-28 12:32	51ST AVE NE	152ND ST NE	No Apparent Injury	2	0		0 Entering at angle	Going Straight Ahead	Going Straight Ahead
EB80660	2021-10-22 6:12	51ST AVE NE	152ND ST NE	Possible Injury	2	0		0 Entering at angle	Going Straight Ahead	Going Straight Ahead
EB88118	2021-11-10 19:19	51ST AVE NE	152ND ST NE	Possible Injury	2	0		0 Entering at angle	Going Straight Ahead	Going Straight Ahead
E974110	2019-10-22 20:16	51ST AVE NE	152ND ST NE	No Apparent Injury	2	0		0 Entering at angle	Going Straight Ahead	Going Straight Ahead
E988120	2019-11-30 19:02	152ND ST NE	51ST AVE NE	No Apparent Injury	2	0		0 Entering at angle	Going Straight Ahead	Going Straight Ahead
EB41545	2021-06-17 7:38	152ND ST NE	51ST AVE NE	No Apparent Injury	2	0		0 From opposite direction - both moving - head-on	Going Straight Ahead	Going Straight Ahead
EB74395	2021-10-04 20:46	152ND ST NE	51ST AVE NE	No Apparent Injury	1	0		0 Utility Pole	Going Straight Ahead	N/A
EB05724	2021-02-12 23:19	51ST AVE NE	152ND ST NE	No Apparent Injury	1	0		0 Utility Pole	Going Straight Ahead	N/A
E915746	2019-04-20 8:17	152ND ST NE	51ST AVE NE	Unknown	1	0		0 Roadway Ditch	Making Left Turn	N/A
E990163	2019-12-06 5:29	51ST AVE NE	152ND ST NE	Suspected Minor Injury	1	0		0 Roadway Ditch	Going Straight Ahead	N/A
E975534	2019-10-27 8:00	51ST AVE NE	152ND ST NE	Unknown	1	0		0 Roadway Ditch	Going Straight Ahead	N/A
ED90624	2023-07-22 18:04	51ST AVE NE	160TH ST NE	Possible Injury	2	0		0 From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped for Traffic
E887140	2019-01-27 18:10	51ST AVE NE	160TH ST NE	Possible Injury	1	0		0 Roadway Ditch	Going Straight Ahead	N/A
EE28193	2023-12-07 18:00	51ST AVE NE	RV PARK	No Apparent Injury	2	0		0 From same direction - both going straight - both moving - sideswipe	Overtaking and Passing	Stopped for Traffic
E913683	2019-04-23 16:11	51ST AVE NE	RV PARK	No Apparent Injury	2	0		0 From opposite direction - both going straight - sideswipe	Going Straight Ahead	Going Straight Ahead
EC60084	2022-06-25 9:40	51ST AVE NE	RV PARK	Suspected Minor Injury	2	0		From opposite direction - both going straight - sideswipe	Going Straight Ahead	Going Straight Ahead
E889748	2019-02-05 6:00	51ST AVE NE	RV PARK	Possible Injury	2	0		0 From opposite direction - both moving - head-on	Going Straight Ahead	Going Straight Ahead
E889938	2019-02-05 10:17	51ST AVE NE	RV PARK	No Apparent Injury	1	0		0 Roadway Ditch	Going Straight Ahead	N/A