1867 Alta Vista Drive

Transportation Impact Assessment

Step 1 Screening Report

Step 2 Scoping Report

Step 3 Strategy Report (Revision # 2)

Prepared for:

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October 2026

PN: 2025-050

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1 Screening

This study has been prepared according to the City of Ottawa's 2017 Transportation Impact Assessment (TIA) Guidelines, incorporating the 2023 Revision to Transportation Impact Assessment Guidelines. Accordingly, a Step 1 Screening Form has been prepared and is included as Appendix A, along with the Certification Form for the TIA study PM. As shown in the Screening Form, a TIA is required, and this study has been prepared to support an Official Plan Amendment and Zoning By-Law Amendment application.

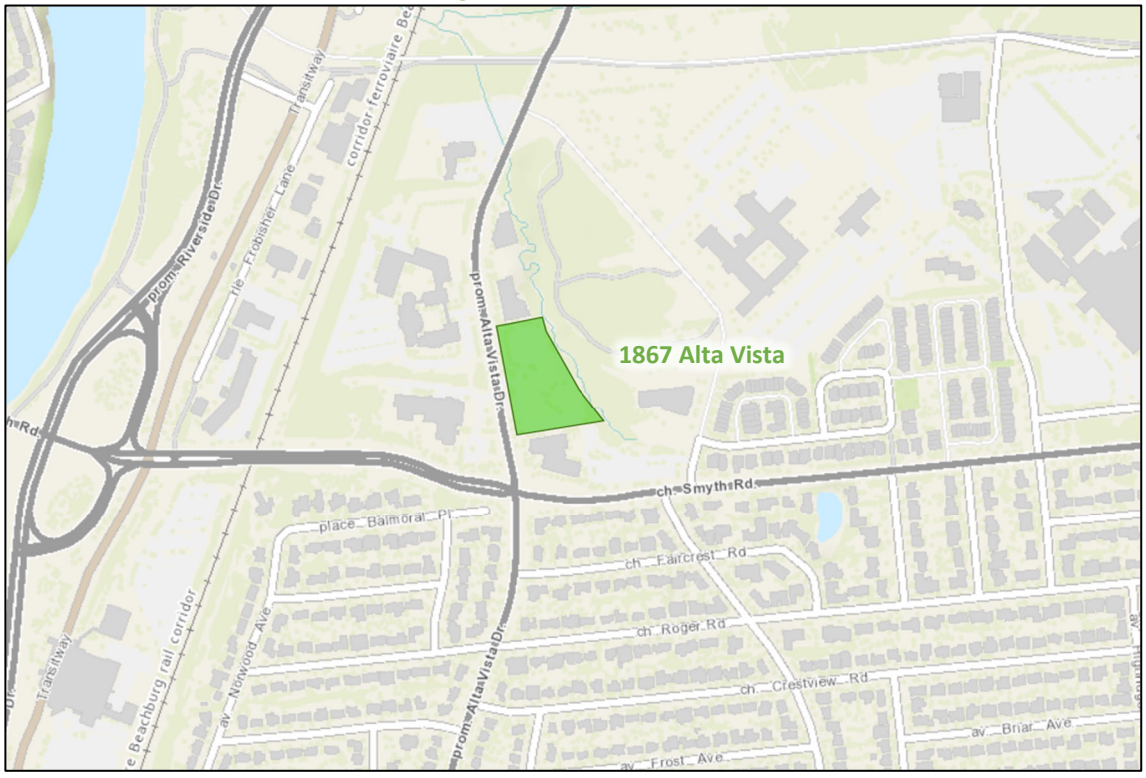
2 Existing and Planned Conditions

2.1 Proposed Development

The subject site, located at 1867 Alta Vista Drive, is currently zoned as Business Park Industrial Subzone 12 (IP12 F(1.5), IP12[2424] F(1.2)). The site is currently an at-grade parking lot and the proposed development concept is to remove the existing parking lot and to construct a nine-storey residential building comprising 379 residential dwellings with vehicle parking comprising 231 spaces. Site access is proposed via a two-way full-movement access on the north side of the site and a one-way inbound access to a drop-off loop central to the parcel. The development is anticipated to be built out in a single phase by 2028.

Figure 1 illustrates the study area context. Figure 2 illustrates the proposed concept plan.

Figure 1: Area Context Plan



Source: http://maps.ottawa.ca/geoOttawa/ Accessed: August 18, 2025



KEY MAP

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LEGAL DESCRIPTION

PLAN OF SURVEY OF

PART OF LOT 15
CONCESSION JUNCTION GORE
GEOGRAPHIC TOWNSHIP OF GLOUCESTER
CITY OF OTTAWA

Surveyed by Annis, O'Sullivan, Vollebekk Ltd.

PROJECT INFORMATION

Zoning By-law 2008-250 Consolidation — IP12 F (1.5) — SITE AREA 1.2 ha. — 12,140.3 sq. m. / 130,677 sq. ft

ZONING	REQUIRED	PROVIDED
DEVELOPABLE AREA		7,653.0m²
ZONE	R5B	R5B
BUILDING HEIGHT: GRADE ELEVATION 73.00	—	9 STOREY'S / 33.2m
ALLOWABLE PROJECTION - AMENITY LEVEL	—	1 STOREY / 4.0m
DENSITY: RESIDENTIAL USE: ___ units/hectare MIN.	—	316
DENSITY: RESIDENTIAL FSI	—	1.9
FRONT YARD SETBACK	3.0m	7.9m
INTERIOR YARD SETBACK:	1.5m	6.7m & 3.9m
REAR YARD SETBACK:	25% OF LOT DEPTH / MAX 7.5m	28.9m
MINIMUM LOT WIDTH	22.5m	144.28m
LANDSCAPED AREA	30%	38.9%
SET BACK FROM WATERCOURSES/BODIES	30m	30m
MINIMUM LOT AREA	675m²	12,140.3m²
AMENITY AREA - TOTAL 6.0m² PER UNIT (379 Units)	2,274.0m²	2,763.5m²
AMENITY AREA - 50% COMMUNAL PER UNIT	1,137.0m²	1,893.5m²
VEHICLE PARKING: RESIDENTIAL - 0.5 PER UNIT AFTER 12 UNITS PER BUILDING	184	201
VEHICLE PARKING: VISITOR - 0.2 PER UNIT, MAX. 60 PER BUILDING	60	30
BICYCLE PARKING - RESIDENTIAL - 0.5 PER UNIT	190	301
AISLE & DRIVEWAY MINIMUM / MAXIMUM WIDTH	3.0m / 6.7m	3.0m / 6.7m

SITE PLAN SYMBOLS:

- SOFT LANDSCAPE PLANTING
- 30.0m EMBANKMENT OFFSET
- PARKING LOT AREA TO BE REMEDIATED: NATURALIZATION AREA
- SEASONAL SNOW STORAGE
- PEDESTRIAN HARD SURFACE
- PROPOSED POPS: 10% OF DEVELOPABLE AREA
- BIKE RACK (0.6x1.8m BIKE PARKING SPACE)
- MAIN ENTRANCE DOOR
- SERVICE / EXIT DOOR
- VEHICULAR DIRECTION
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- PROPOSED TREE
- SIAMESE CONNECTION
- FIRE HYDRANT

DRAWING NOTES

1. PROPERTY LINE
2. BUILDING SETBACK LINES
3. ENTRY RAMP TO U/G GARAGE WITH TRENCH DRAIN
4. OUTLINE OF BUILDING ABOVE
5. OUTLINE OF PARKING GARAGE
6. LOADING AREA: 3.5m x 9.0m
7. EX. 1.5m WIDE CONCRETE SIDEWALK TO REMAIN
8. SOFT LANDSCAPING, SEE LANDSCAPE PLAN
9. BELOW GRADE CISTERN IN PARKING GARAGE
10. 1.5 X 3.0 CONCRETE PAD FOR GAS EQUIPMENT WITH BOLLARDS AS REQUIRED: LOCATION T.B.C.
11. SIAMESE CONNECTION
12. PROPOSED UTILITIES, SEE CIVIL
13. 6.0m WIDE FIRE TRUCK ROUTE
14. CONCRETE SIDEWALK, CONTINUOUS & DEPRESSED THROUGH DRIVEWAY, SEE CITY DETAIL SC 7.1
15. 150mm HT CONCRETE BARRIER CURB
16. EXISTING STREET LIGHT
17. FIRE HYDRANT: RELOCATE AS REQUIRED
18. HARD SURFACE WALK, SEE LANDSCAPE
19. EXISTING TREE TO BE REMOVED
20. EXISTING TREE TO REMAIN: PROTECT AS REQUIRED
21. NEW TREE: SEE LANDSCAPE
22. SURFACE MOUNTED BIKE RACK (0.6x1.8m) 2 PER RACK
23. LAY-BY WITH SHORT TERM PARALLEL PARKING SPACE
24. EXISTING BUS STOP WITH SHELTER / CONCRETE PAD
25. SUNKEN PRIVATE TERRACE
26. CONCRETE RETAINING WALL: SEE CIVIL
27. COMMUNAL AMENITY TERRACE
28. EXISTING ASPHALT PARKING LOT TO BE REMEDIATED
29. PROPOSED POPS AREA
30. EXISTING UTILITY BOX
31. FLUSH / MOUNTABLE CURB
32. BOLLARDS
33. 1.8m WIDE CONCRETE SIDEWALK: TO CITY STANDARDS
34. SIGNAGE: NO STOPPING, FIRE ROUTE, PRIVATE AREA...
35. HYDRO TRANSFORMER / SWITCHGEAR W/H PAD
36. PAINTED CROSSWALK WITH DEPRESSED CURBS
37. –

LOT COVERAGE

DEVELOPABLE LANDS =	7,653.0 sq. m.	63.0%
NON-DEVELOPABLE LANDS =	4,487.3 sq. m.	37.0%
TOTAL =	12,140.3 sq. m	100.0%

DEVELOPABLE AREA BRAKE DOWN

PODS =	765.3 sq. m.	10.0%
PAVED SURFACE =	756.0 sq. m.	9.9%
BUILDING FOOTPRINT=	3,182.8 sq. m.	41.6%
LANDSCAPE OPEN SPACE =	2,948.9 sq. m.	38.5%
TOTAL =	7,653.0 sq. m	100.0%

BUILDING STATISTICS

GROSS BUILDING - AREA

(CITY OF OTTAWA'S DEFINITION)

GROUND FLOOR		1,806.7 sq. m. / 19,447 sq. ft.
2nd FLOOR		2,884.3 sq. m. / 31,046 sq. ft.
3rd & 4th FLOOR	2 x 2,857.7 sq. m. / 2 x 30,760 sq. ft.	5,715.4 sq. m. / 61,520 sq. ft.
5th & 6th FLOOR	2 x 2,857.7 sq. m. / 2 x 30,760 sq. ft.	5,715.4 sq. m. / 61,520 sq. ft.
7th FLOOR		2,237.9 sq. m. / 24,089 sq. ft.
8th & 9th FLOOR	2 x 2,237.9 sq. m. / 2 x 24,089 sq. ft.	4,475.9 sq. m. / 48,178 sq. ft.
AMENITY / MECHANICAL LEVEL		0.0 sq. m. / 600 sq. ft.
TOTAL AREA		22,835.6 sq. m. / 245,800 sq. ft.

UNIT STATISTICS

STUDIO	19.55%	112
1 BEDROOM UNIT	24.64%	93
1 BEDROOM + DEN UNIT	10.29%	39
2 BEDROOM UNIT	23.22%	88
2 BEDROOM + DEN UNIT	5.54%	21
3 BEDROOM UNIT	6.86%	26
TOTAL	100.00%	379

CAR PARKING

AREA 'X' on SCHEDULE 1A

MINIMUM REQUIRED		
RESIDENCE	- 0.5 PER UNIT AFTER 12	184
VISITOR	- 0.2 PER UNIT AFTER 12	60
TOTAL		244

PROVIDED		
RESIDENCE	- 0.58 PER UNIT	201
VISITOR	- 0.08 PER UNIT	30
TOTAL		231

LOCATION	
EXTERIOR	5
P1 LEVEL GARAGE	113
P2 LEVEL GARAGE	113
TOTAL	231

PARKING SPACE SIZE	
STANDARD SPACE (2.60 x 5.20)	190
PARALLEL CAR SPACE (2.60 x 6.70)	5
SMALL CAR SPACE (2.40 x 4.60)	20
SMALL CAR SPACE (2.60 x 4.60)	14
BARRIER FREE SPACE TYPE A (3.40 x 5.20)	1
BARRIER FREE SPACE TYPE B (2.40 x 5.20)	1

BICYCLE PARKING

REQUIRED	0.5 PER UNIT	190

PROVIDED		
LONG TERM	0.75 PER UNIT	285
SHORT TERM	2 + 1 PER 20 UNITS	16
TOTAL		301
5% INCLUSIVE SPACES		15

LOCATION	
EXTERIOR	16
GROUND FLOOR	29
P1 LEVEL GARAGE	52
P2 LEVEL GARAGE	204
TOTAL	301

PROVIDED BICYCLE BRAKE DOWN

USE	TYPE	SIZE	TOTAL
LONG-TERM	HORIZONTAL	0.6 x 1.8 m	270
LONG-TERM	INCLUSIVE	1.0 x 2.75 m	15
SHORT-TERM	HORIZONTAL	0.6 x 1.8 m	16
SHORT-TERM	INCLUSIVE	1.0 x 2.75 m	0
TOTAL			301

AMENITY SPACE

EXTERIOR: COMMUNAL =	808.1 sq. m.
1st FL. INTERIOR: COMMUNAL =	158.2 sq. m.
2nd/6th FL. INTERIOR: COMMUNAL (6 x 5) =	30.0 sq. m.
PENTHOUSE AMENITY ROOM =	522.9 sq. m.
PENTHOUSE AMENITY TERRACE =	401.0 sq. m.
PRIVATE BALCONIES / TERRACE =	1,025.1 sq. m.
TOTAL =	2,945.3 sq. m.
TOTAL COMMUNAL =	1,920.2 sq. m.
REQUIRED - 6.0m² PER UNIT (379) =	2,274.0 sq. m.
REQUIRED COMMUNAL @ 50% =	1,137.0 sq. m.

WASTE REQUIREMENT

GARBAGE	- 0.11 PER UNIT	42 YARDS
RECYCLING GMP	- 0.018 PER UNIT	7 YARDS
RECYCLING FIBER	- 0.038 PER UNIT	15 YARDS
COMPOST	- 240L PER 50 UNITS	8
OVERSIZED GARBAGE AREA (SUGGESTED)		10m²

IT IS THE RESPONSIBILITY OF THE APPROPRIATE CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS ON SITE AND TO REPORT ALL ERRORS AND/OR OMISSIONS TO THE ARCHITECT.

ALL CONTRACTORS MUST COMPLY WITH ALL PERTINENT CODES AND BY-LAWS.

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NOTATION SYMBOLS:

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- (A) INDICATES ASSEMBLIE TYPE; REFER TO TYPICAL ASSEMBLIES SCHEDULE.
- (W) INDICATES WINDOW TYPE; REFER TO WINDOW ELEVATIONS AND DETAILS ON A900 SERIES.
- (000) INDICATES DOOR TYPE; REFER TO DOOR SCHEDULE AND DETAILS ON A900 SERIES.
- 00 — DETAIL NUMBER
- 00 / 0000 — TITLE / SHEET
- DETAIL REFERENCE PAGE
- DETAIL CROSS REFERENCE PAGE

No.	DESCRIPTION	DATE
	REVISIONS:	
8	ISSUES WITH GENERAL UPDATES	2026 09 04
7	ISSUES FOR SITE PLAN CONTROL APPLICATION	2026 07 14
6	ISSUES WITH GENERAL UPDATES	2026 06 18
5	REVISED AS PER CITY COMMENT LETTER 2	2026 05 15
4	ISSUES WITH GENERAL UPDATES (DRAFT)	2026 05 08
3	REVISED AS PER CITY COMMENT LETTER	2026 01 30
2	ISSUED FOR OPA & ZBLA APPLICATION	2025 12 17
1	ISSUED FOR OWNER / CONSULTANT REVIEW	2025 12 05

ARCHITECT SEAL: ONTARIO ASSOCIATION OF ARCHITECTS — REGISTERED LICENCE 6867 — SEAL DATE: STAMP DATE

NORTH ARROW:

CLIENT: TCU Development Corporation

ARCHITECT: rla/architecture — roderick lahey architect inc. — 56 beech street, ottawa, ontario K1S 3j6 — t.613.724.9932 f.613.724.1209 rlaarchitecture.ca

PROJECT TITLE: 1867 ALTA VISTA DRIVE — OTTAWA — ONTARIO

SHEET TITLE: SITE PLAN

DRAWN:	CHECKED:
R.V.	K.R.
SCALE: 1:250	SHEET No. SP-1
PROJECT No. 2516	

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DWG # _____

2.2 Existing Conditions

2.2.1 Area Road Network

Alta Vista Drive: Alta Vista Drive is a City of Ottawa major collector road with a two-lane urban cross section. Sidewalks and bike lanes are provided on both sides of the road. The posted speed limit is 50 km/h and the measured right of way is 30.5 metres. No right-of-way protection is designated for Alta Vista Drive within the Official Plan.

Smyth Road: Smyth Road is a City of Ottawa arterial road with a four-lane urban cross-section. West of Alta Vista Drive, sidewalks are provided on both sides of the road and east of Alta Vista Drive, a sidewalk is provided on the north side of the road and an asphalt pathway is provided on the south side of the road. The posted speed limit is 50 km/h, and the measured right-of-way is 42.5 metres west of Alta Vista Drive and the protected right-of-way from the Official Plan is 30 metres east of Alta Vista Drive. Smyth Road is designated as a truck route.

2.2.2 Existing Intersections

The existing study area intersection, within 400 metres of the development, is summarized below:

Smyth Road at Alta Vista Drive	The intersection of Smyth Road at Alta Vista Drive is a signalized intersection. The northbound and southbound approaches each consist of an auxiliary left-turn lane, a through lane, a bike lane, and a channelized right-turn lane. The eastbound and westbound approaches each consist of an auxiliary left-turn lane, two through lanes and an auxiliary channelized right-turn lane. No turn restrictions were noted.

2.2.3 Existing Driveways

Within 200 metres of the proposed site access, two driveways to office buildings are present on the west side of Alta Vista Drive, and four driveways to two office buildings are present on the east side of Alta Vista Drive. Figure 3 illustrates the existing driveways.

Figure 3: Existing Driveways



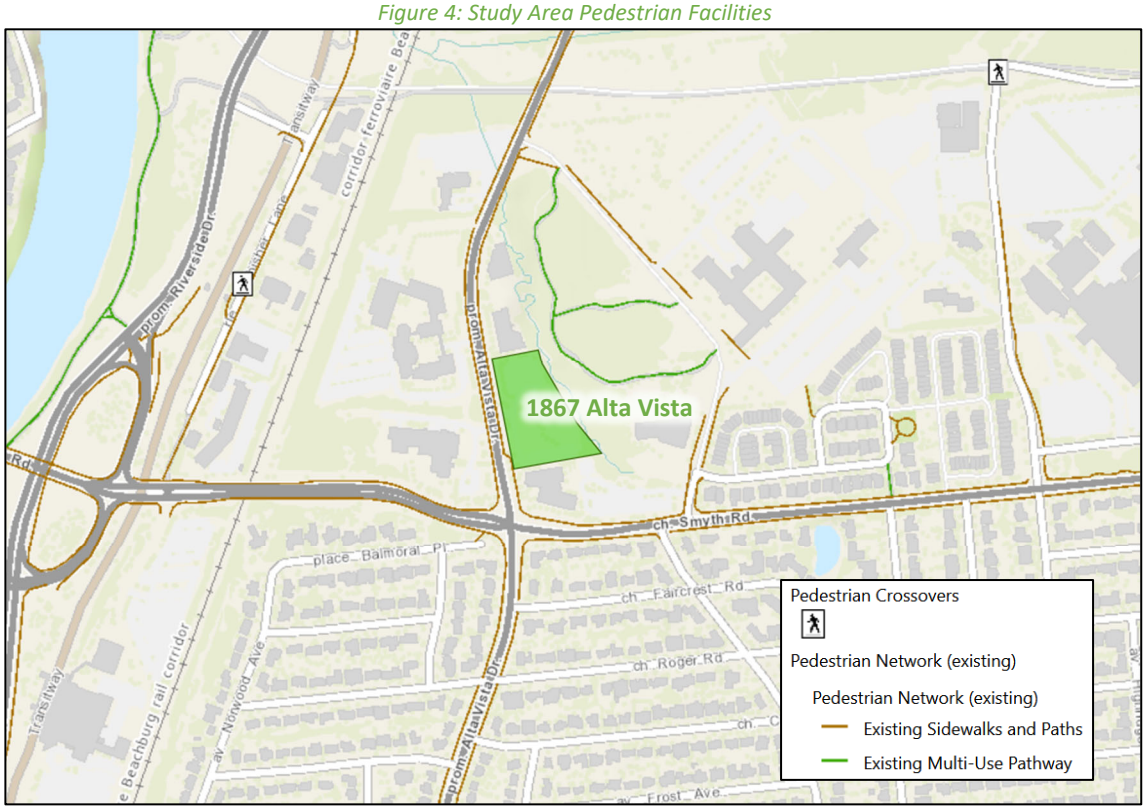
2.2.4 Cycling and Pedestrian Facilities

Figure 4 illustrates the pedestrian facilities in the study area and Figure 5 illustrates the cycling facilities.

Sidewalks are provided on both sides along Alta Vista Drive and portions of Smyth Road and Valor Drive. Sidewalks are provided on one side of portions of Symth Road and Valor Drive. Additionally, asphalt pathways are present on portions of Hospital Link Road and Smyth Road.

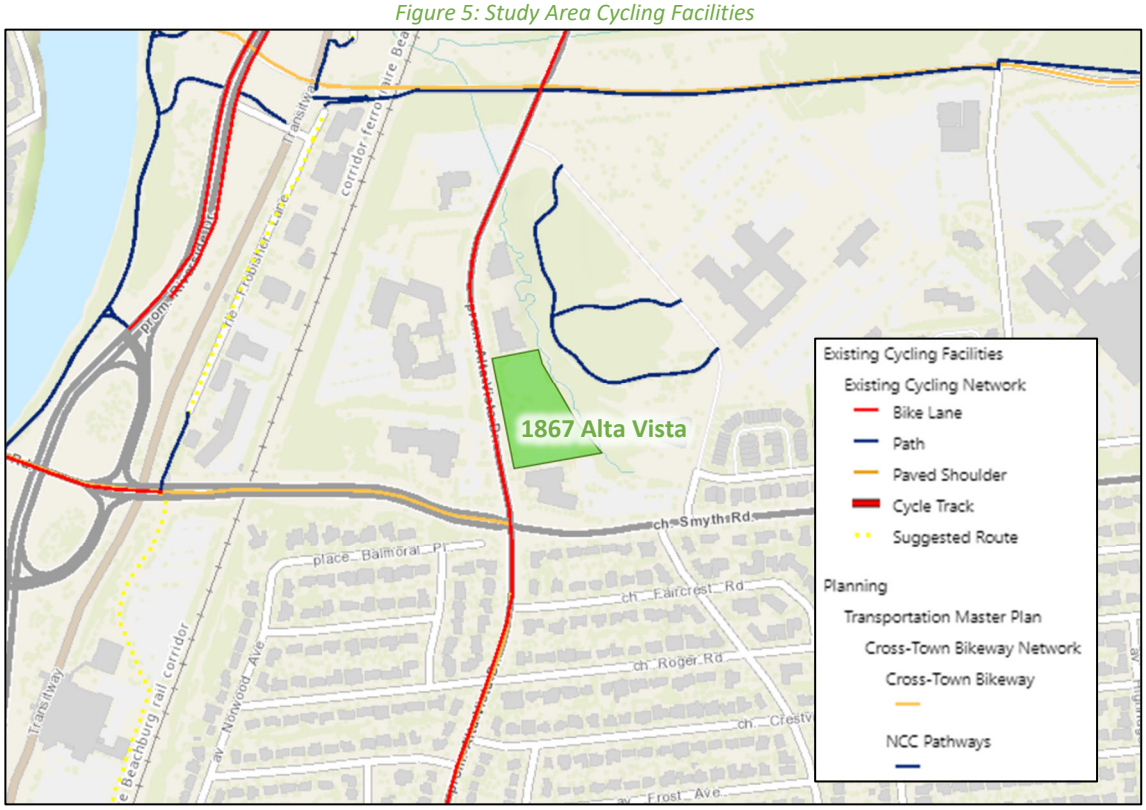
Bike lanes are provided on both sides of Alta Vista Drive and a cycling path is provided on the south side of Hospital Link Road east of Alta Vista Drive. Hospital Link Road, Alta Vista Drive south of Hospital Link Road, and Smyth Road west of Alta Vista Drive are cross-town bikeways.

Figure 4: Study Area Pedestrian Facilities



Source: http://maps.ottawa.ca/geoOttawa/ Accessed: August 18, 2025

Figure 5: Study Area Cycling Facilities



Source: http://maps.ottawa.ca/geoOttawa/ Accessed: August 18, 2025

Pedestrian and cyclist volumes included in study area intersection counts presented in Section 2.2.7, have been compiled and are illustrated in Figure 6 and Figure 7, respectively.

Figure 6: Existing Pedestrian Volumes

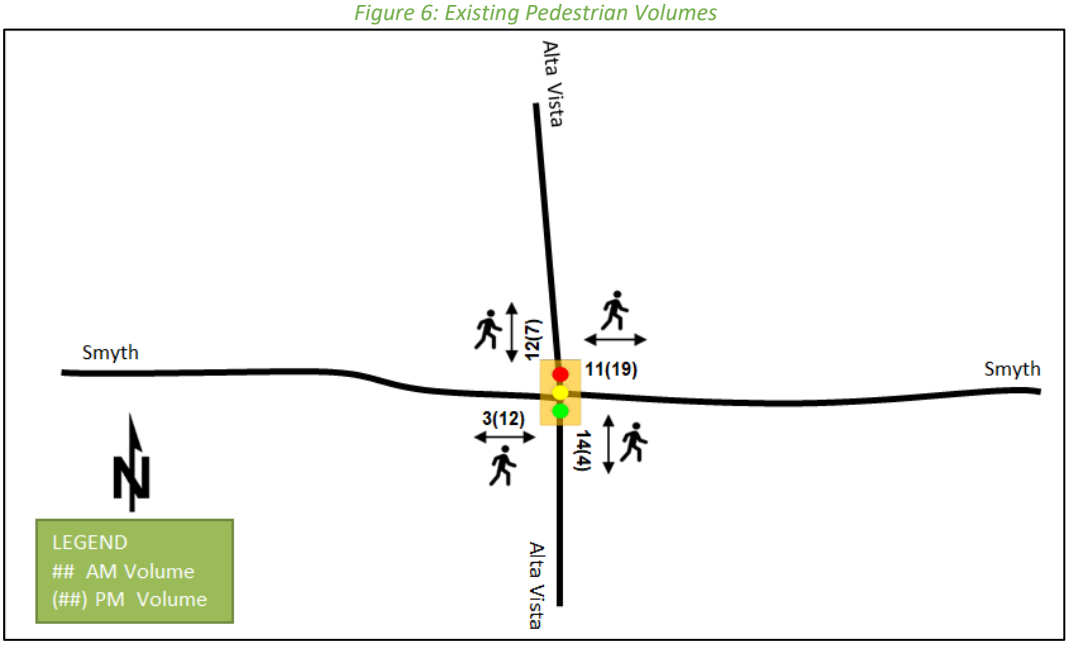
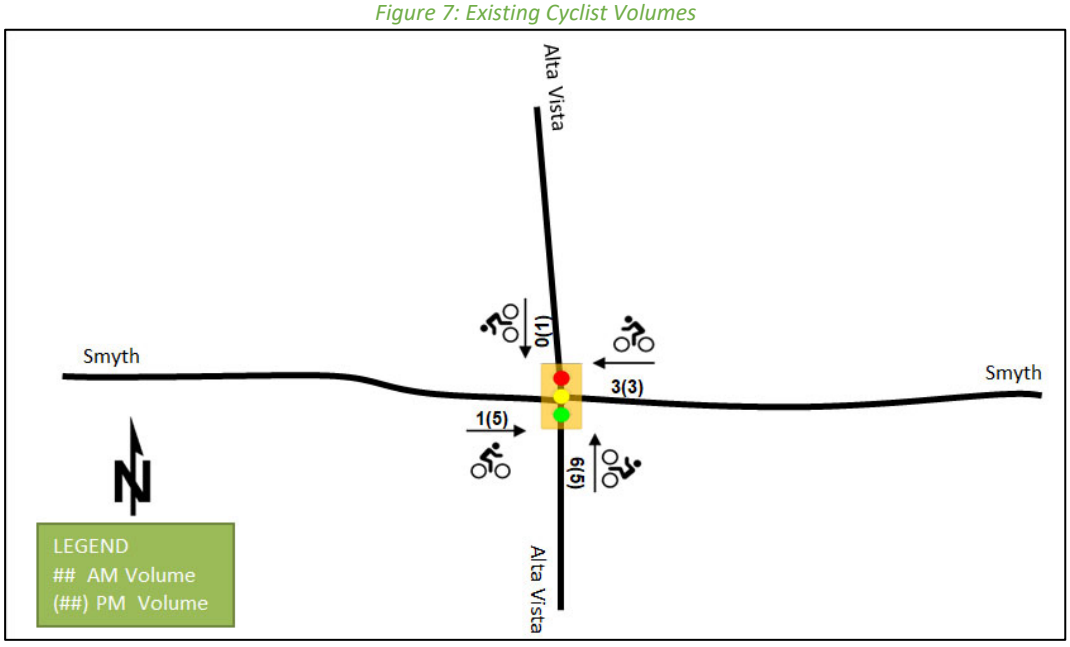


Figure 7: Existing Cyclist Volumes



2.2.5 Existing Transit

Figure 8 illustrates the transit system map in the study area and Figure 9 illustrates nearby transit stops. All transit information is from August 18, 2025, and is included for general information purposes and context to the surrounding area.

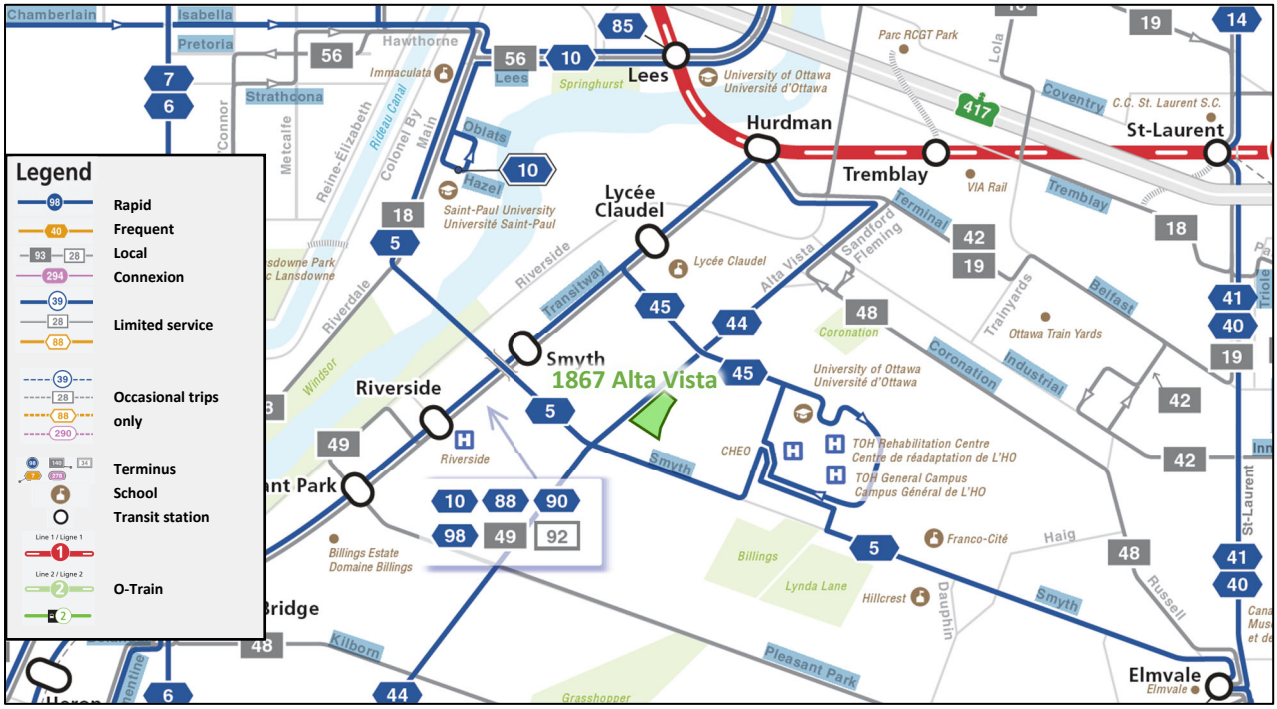
Within the study area, route #5 travels along Smyth Road, route #44 travels along Alta Vista Drive and route #45 travels along Hospital Link Road.

Stops within the study area are located at Smyth Road at Alta Vista Drive, Smyth Road at Valour Drive, Smyth Road at Fairbanks Avenue, Alta Vista Drive at Valour Drive, and Hospital Link Road at Alta Vista Drive.

The frequency of these routes within proximity of the proposed site based on August 18, 2025, service levels are:

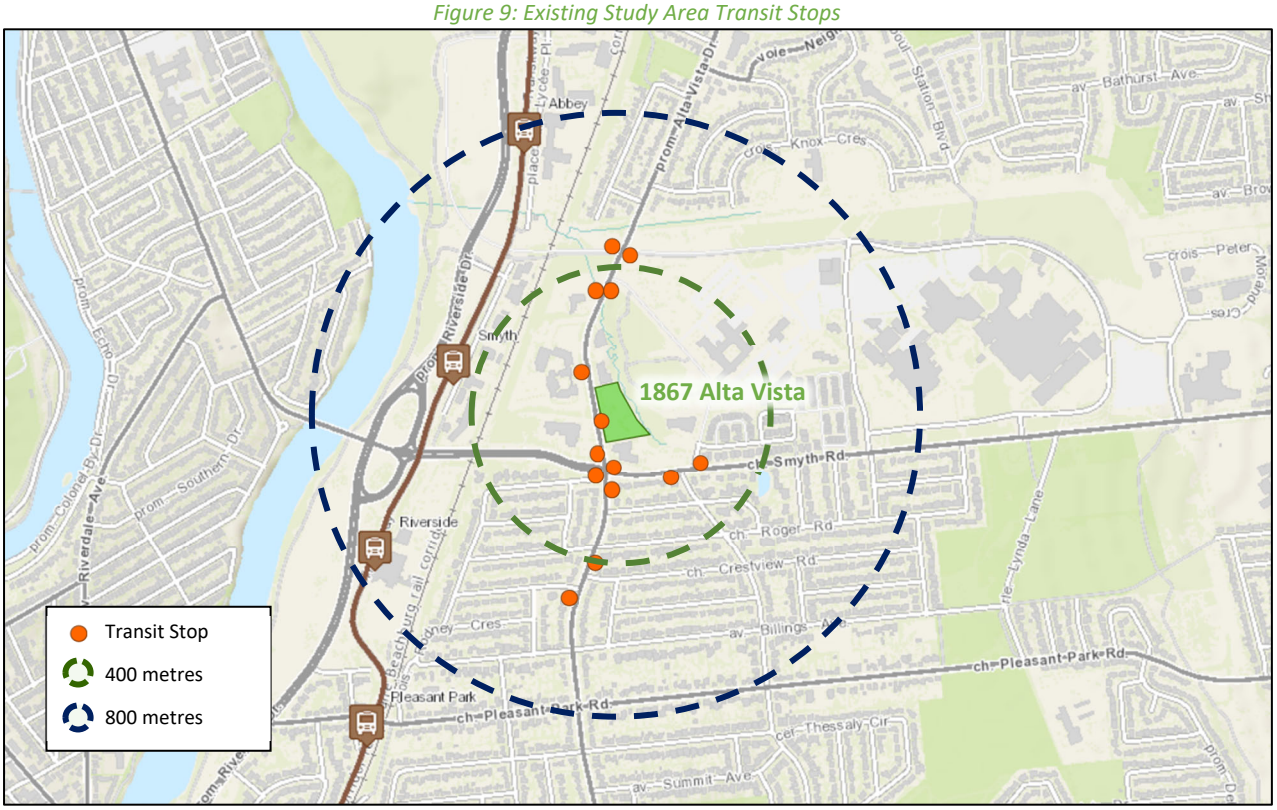
- Route #5 –Operates all day and 7 days a week, every 13-17 minutes during weekday peak periods, 15-30 minutes during weekday off-peak, and 30 minutes throughout the weekends
- Route #44 – Operates all day and 7 days a week, every 14-16 minutes or less on weekdays, and 15-30 minutes on weekends
- Route #45 – Quick station-to-station bus service, operates all day and 7 days a week, every 12-19 minutes or less on weekdays, and 30 minutes on weekends

Figure 8: Existing Study Area Transit Service



Source: http://www.octranspo.com/ Accessed: August 18, 2025

Figure 9: Existing Study Area Transit Stops



Source: http://www.octranspo.com/ Accessed: August 18, 2025

2.2.6 Existing Area Traffic Management Measures

Speed bumps are noted along the private section of Valour Drive, and no other existing area traffic management measures within the study area.

2.2.7 Existing Peak Hour Travel Demand

Existing turning movement counts were acquired from the City of Ottawa for the existing study area intersection. Table 1 summarizes the intersection count date.

Table 1: Intersection Count Date

Intersection	Count Date
Alta Vista Drive at Smyth Road	Wednesday, October 2, 2024

Figure 10 illustrates the existing traffic counts and Table 2 summarizes the existing intersection operations. The level of service for signalized intersections is based on volume to capacity ratio (v/c) calculations for individual lane movements and MMLOS Guidelines weighted v/c methodology for the overall intersection, per direction from Transportation Engineering Services, and average delay for unsignalized intersections. Detailed turning movement count data is included in Appendix B and the Synchro worksheets are provided in Appendix C.

Figure 10: Existing Traffic Counts

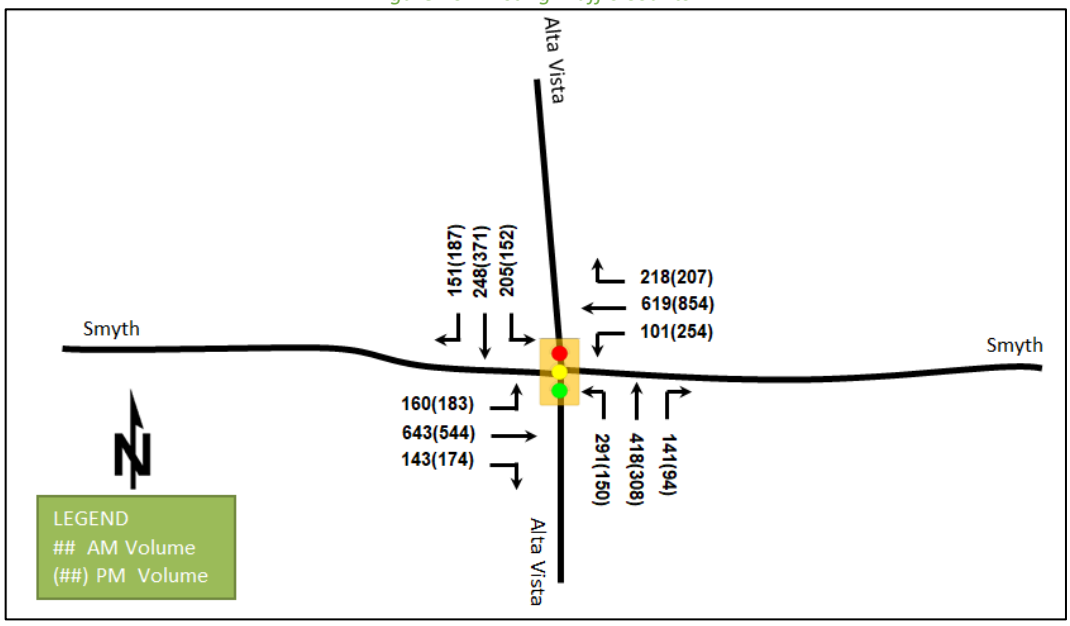


Table 2: Existing Intersection Operations

Intersection	Lane	AM Peak Hour				PM Peak Hour			
		LOS	V/C	Delay (s)	Q (95th)	LOS	V/C	Delay (s)	Q (95th)
Alta Vista Drive & Smyth Road *Signalized*	EBL	A	0.60	28.3	38.7	C	0.78	40.7	**#56.8**
	EBT	B	0.68	38.2	96.4	A	0.55	33.1	76.6
	EBR	A	0.29	8.3	18.5	A	0.34	10.8	26.1
	WBL	A	0.43	24.1	25.4	B	0.70	25.5	52.8
	WBT	C	0.71	41.0	96.0	C	0.76	36.1	122.4
	WBR	A	0.48	17.8	42.7	A	0.38	12.3	33.4
	NBL	D	0.82	43.2	**#87.4**	D	0.87	67.6	**#60.1**
	NBT	**F**	**1.02**	**89.0**	**#173.4**	E	0.91	73.1	**#129.8**
	NBR	A	0.32	9.6	19.5	A	0.25	4.2	7.5
	SBL	D	0.88	61.5	**#78.8**	B	0.68	40.2	**#43.9**
	SBT	B	0.62	44.0	82.9	E	1.00	88.6	**#156.0**
	SBR	A	0.35	10.8	22.2	A	0.46	16.9	34.8
	Overall	**D**	**0.81**	**41.4**	-	**D**	**0.83**	**40.9**	-

Notes: Saturation flow rate of 1800 veh/h/lane
Queue is measured in metres
Peak Hour Factor = 0.90
Delay = average vehicle delay in seconds
m = metered queue
# = volume for the 95th %ile cycle exceeds capacity

The intersection of Alta Vista Drive at Smyth Road is forecast to operate with peak direction movements on Alta Vista Drive at or over theoretical capacity, but with residual capacity for the overall intersection.

During the AM peak hour, the northbound through movement is over theoretical capacity with high delays and queues, and queueing is additionally noted on the northbound left and southbound left movements. The overall intersection has residual capacity during the AM peak hour, and to reduce the v/c of the northbound through movement to 1.00 or below, one second of split would need to be reallocated from the eastbound and westbound through phases to the northbound and southbound through phases.

During the PM peak hour, the northbound through movement is approaching theoretical capacity with extended queues, the southbound through movement is at theoretical capacity with high delays and extended queues, and

extended queueing may additionally be exhibited by the eastbound left, northbound left, and southbound left movements.

It is assumed that the City is prioritizing the operation of the arterial Smyth Road with the supplied timing plan. During both peak hours, split beyond one second can be reallocated from the eastbound through and westbound through phases to the northbound through and southbound through phases to better balance the operations along both corridors, to the extent that this effect is desirable. Notwithstanding desired operations, capacity issues can be mitigated during both peak hours through signal timing adjustments.

2.2.8 Collision Analysis

Collision data have been acquired from the City of Ottawa open data website (data.ottawa.ca) for five years prior to the commencement of this TIA for the surrounding study area road network. Table 3 summarizes the collision types and conditions in the study area, Figure 11 illustrates the area collisions, and Table 4 summarizes the total collisions for each of the locations analyzed. Collision data are included in Appendix D.

Table 3: Study Area Collision Summary, 2018-2022

		Number	%
Total Collisions		**57**	**100%**
Classification	**Fatality**	0	0%
	Non-Fatal Injury	12	21%
	Property Damage Only	45	79%
Initial Impact Type	**Approaching**	1	2%
	Angle	4	7%
	Rear end	21	37%
	Sideswipe	3	5%
	Turning Movement	26	46%
	SMV Other	2	4%
Road Surface Condition	**Dry**	38	67%
	Wet	8	14%
	Loose Snow	2	4%
	Slush	2	4%
	Packed Snow	3	5%
	Ice	4	7%
Pedestrian Involved		1	2%
Cyclists Involved		0	0%

Figure 11: Study Area Collision Records

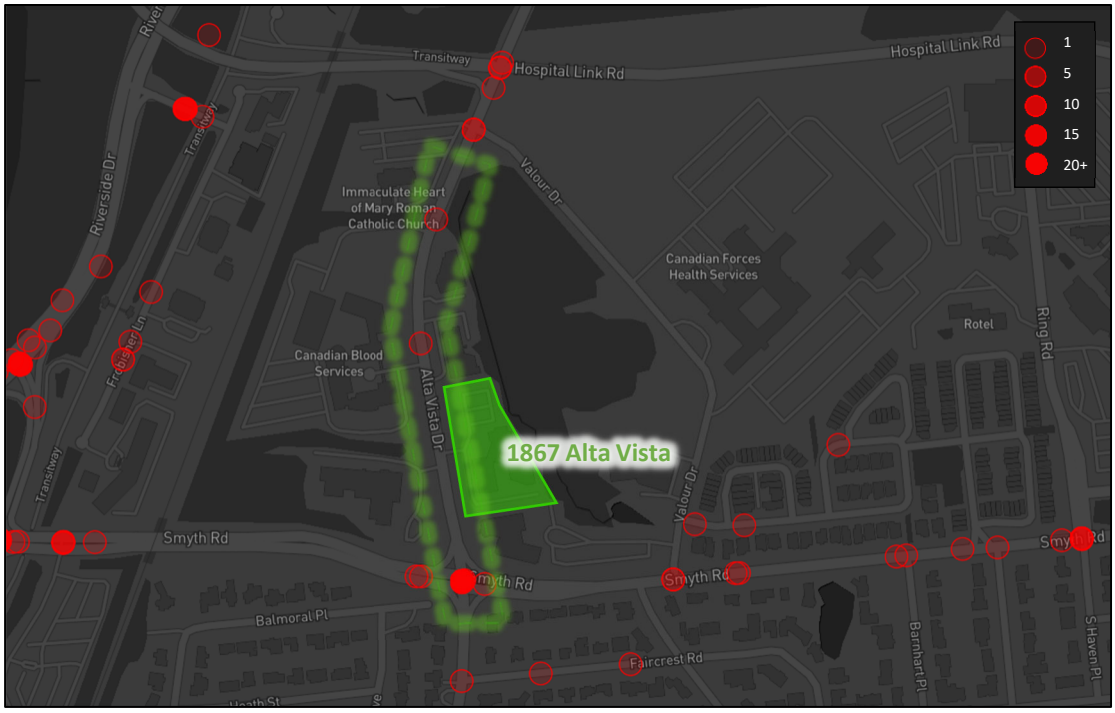


Table 4: Summary of Collision Locations, 2018-2022

	Number	%
Intersections / Segments	**57**	**100%**
Alta Vista Dr at Smyth Rd	54	95%
Alta Vista Dr between Smyth Rd & Valour Dr	3	5%

Within the study area, the intersection of Alta Vista Drive at Smyth Road is noted to have experienced more than an average of two collisions per year. Table 5 summarizes the collision types and conditions for this intersection.

Table 5: Alta Vista Drive at Smyth Road Collision Summary

		Number	%
Total Collisions		**54**	**100%**
Classification	**Fatality**	0	0%
	Non-Fatal Injury	11	20%
	Property Damage Only	43	80%
Initial Impact Type	**Angle**	4	7%
	Rear end	20	37%
	Sideswipe	3	6%
	Turning Movement	26	48%
	SMV Other	1	2%
Road Surface Condition	**Dry**	36	67%
	Wet	8	15%
	Loose Snow	2	4%
	Slush	2	4%
	Packed Snow	2	4%
	Ice	4	7%
Pedestrian Involved		1	2%
Cyclists Involved		0	0%

The Smyth Road at Alta Vista Drive intersection had a total of 54 collisions during the 2018-2022 time period, with 43 involving property damage only and the remaining 11 having non-fatal injuries. The collision types are most represented by turning movement with 26 collisions, followed by rear end with 20, angle with four, sideswipe with three, and SMV (other) with one. Reviewing the trends in the available detailed collision data and applying professional judgment to draw inferences from them, turning movement collisions are more associated with eastbound and westbound left-turning vehicles in conflict with the conflicting eastbound and westbound through movements than the corresponding movements on the northbound and southbound approaches. Given the congestion, drivers may be pushing gaps in the opposing through traffic, which may be conceptually supported by these collisions clustering around peak hours, and by the statistic that of 20 out of 26 of these collisions involved property damage only.

It is noted that Smyth Road has both horizontal and vertical curvature in the vicinity of the intersection. While the geometric elements of the intersection and roadway cannot feasibly be mitigated, the City may wish to consider whether fully protected eastbound and westbound left-turn phases are desirable to mitigate this observed collision type. It is recommended that the City monitor this intersection through its road safety programs or via review of future traffic studies to determine the persistence of this existing trend to help inform its desired mitigation options, if any, for these conditions based on the findings of future City review.

Rear end collisions are typically associated with congested conditions. Weather conditions are not considered to affect collisions at this location.

One pedestrian collision involving a non-fatal injury was recorded on Thursday, November 11, 2021 at 7:56 in the morning in clear, dry, daylight conditions where a southbound left-turning driver was in conflict with a pedestrian. It is expected that the pedestrian was on the east crossing and that the collision happened during the permitted left turn phase. Based on congestion on the northbound through movement during the AM peak hour, it is possible that this collision was a result of a driver pushing a gap in the oncoming traffic stream when a pedestrian was crossing. The crosswalk already includes ladder markings, and the skew of the intersection provides a clearer sightline to the pedestrian crossing from the southbound left turn than at a typical, orthogonal intersection. Ultimately, a single event could not denote a pattern, and thus no normative statements can be made from this collision. Therefore, given the crossing conditions are adequate, no mitigations are recommended. No further review is required for collisions at this intersection.

2.3 Planned Conditions

2.3.1 Changes to the Area Transportation Network

2.3.1.1 Transportation Master Plan (2025)

The recently approved Transportation Master Plan includes a Capital Infrastructure Plan identifying transportation investments to support the forecasted growth and strategic connectivity and livability targets for the City. It also identifies committed projects, and a subset of priority projects that are expected to be implemented by 2046 based on current affordability assumptions. Area projects anticipated to impact travel in the study area that are included within the Capital Infrastructure Plan are:

- Active Transportation Network
    - Pedestrian Projects with Prioritization
        - Billings Avenue Sidewalk
        - Dale Park Pathway
    - Cycling Projects with Prioritization
        - Smyth and Rideau River Eastern Pathway Connection
- Transit Network
    - Priority Network
        - Transit Priority Corridors along:
            - Alta Vista Drive
            - Smyth Road
            - Hospital Link Road
        - Transportation and Infrastructure Corridor along Riverside Drive
    - Needs-Based Network
        - (No additional projects within the study area)
- Road Network
    - Priority Network
        - (No projects within the study area)
    - Needs-Based Network
        - Alta Vista Transportation Corridor

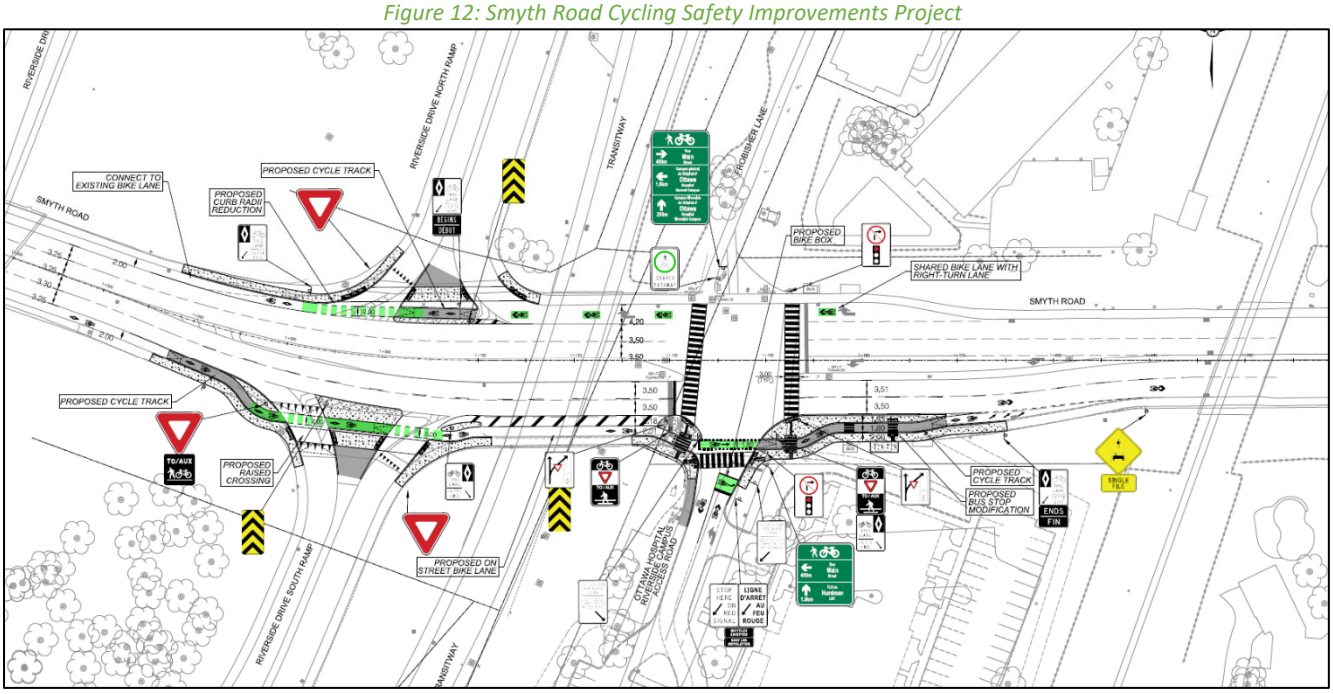
2.3.1.2 Smyth Road Cycling Safety Improvements

The Smyth Road Cycling Safety Improvements project is planned for implementation and proposes improvements southwest of the study area, including:

- Modifications to the Pleasant Park and Riverside Drive Intersection
- Modifications to the south end of Frobisher Lane (connection from on-road to off-road)
- Modifications to the south side of Pleasant Park Road at Rodney Crescent
- Modifications to improve connectivity on the west side of Rodney Crescent at the MUP connection
- Signalized Pedestrian Crossing (PXO) at Lynda Lane and Billings Avenue
- Pavement markings and signage to identify cycling route along Pleasant Park (Riverside Drive to Rodney Crescent), Rodney Crescent (Pleasant Park Road to Billings Avenue), Billings Avenue (Rodney Crescent to Lynda Lane), Lynda Lane Park MUP (Lynda Lane to Portage Avenue) and Portage Avenue (Lynda Lane Park MUP to Dauphin Road)

The proposed changes west of the study area are illustrated in Figure 12.

Figure 12: Smyth Road Cycling Safety Improvements Project



2.3.2 Other Study Area Developments

1919 Riverside Drive

The subject site is currently occupied by The Ottawa Hospital Riverside Campus' surface parking lots. The development concept proposes the replacement of these parking facilities with a continuing care facility comprising an eight-storey building with 256 long-term care beds and a 15-storey building with 270 retirement dwelling units, each structure connected by a town square building. The access configuration is noted to remove the existing link between its two signalized access intersections. The long-term care home is to be built-out in the first phase and the retirement home and town square connection to be built-out in the second phase, initially anticipated by 2026, although the first phase is presently still under construction. A total of 49 new AM and 68 new PM peak hour two-way vehicle trips are projected as a result of the proposed development.

Children's Hospital of Eastern Ontario (CHEO) Parking Garage

A parking garage will be constructed as a part of the Phase 1 1Door4Care (1D4C) hospital expansion located at 401 Smyth Road. The proposed parking garage is to be located on the northeast corner of the Ring Road (E-W) and Emergency Access Road Intersection which is currently occupied by a surface parking lot. The new parking garage is anticipated to replace existing surface parking lots and house 1,083 parking spaces in total. The existing demand for CHEO staff parking passes, and room within the new garage to accommodate them before the occupation of the new 1D4C building, was forecast to generate a total of 101 two-way new vehicle trips in both weekday AM and PM peak hours. The parking garage was built out in 2025.

3 Study Area and Time Periods

3.1 Study Area

The study area will include the intersection of Alta Vista Drive at Smyth Road. The intersection of Alta Vista Drive at Hospital Link Road is greater than 400 metres from the site centroid and therefore will not be included within the study.

The boundary road will be Alta Vista Drive and TRANS Screenline SL54 is along Hospital Link Road north of the study area and will not be analyzed as part of this study.

3.2 Time Periods

As the proposed development is composed entirely of residential units, the AM and PM peak hours will be examined.

3.3 Horizon Years

The anticipated build-out year is 2028. As a result, the full build-out plus five years horizon year is 2033.

4 Development-Generated Travel Demand

4.1 Mode Shares

Examining the mode shares recommended in the TRANS Trip Generation Manual (2020) for the subject district, derived from the most recent National Capital Region Origin-Destination survey (OD Survey), the existing average district mode shares by land use for Alta Vista have been summarized in Table 6.

Table 6: TRANS Trip Generation Manual Recommended Mode Shares – Alta Vista

Travel Mode	Multi-Unit (High-Rise)	
	AM	PM
Auto Driver	38%	45%
Auto Passenger	12%	16%
Transit	41%	28%
Cycling	2%	2%
Walking	7%	9%
Total	**100%**	**100%**

4.2 Trip Generation

This TIA has been prepared using the vehicle and person trip rates for the residential dwellings using the TRANS Trip Generation Manual (2020). Table 7 summarizes the person trip rates for the proposed residential land use for each peak period.

Table 7: Trip Generation Person Trip Rates by Peak Period

Land Use	Land Use Code	Peak Period	Person Trip Rates
Multi-Unit High-Rise	221 & 222 (TRANS)	AM	0.80
		PM	0.90

Using the above person trip rates, the total person trip generation has been estimated. Table 8 summarizes the total person trip generation for the residential land use.

Table 8: Person Trip Generation by Peak Period

Land Use	Units	AM Peak Period			PM Peak Period		
		In	Out	Total	In	Out	Total
Multi-Unit High-Rise	379	94	209	303	198	143	341

Using the above mode share targets and the person trip rates, the person trips by mode have been projected. Trip generation by peak hour has been forecasted using the prescribed peak period conversion factors presented in the TRANS Trip Generation Manual (2020) for the residential development. Table 9 summarizes the residential trip generation by mode and peak hour.

Table 9: Trip Generation by Mode

Travel Mode		AM Peak Hour				PM Peak Hour			
		Mode Share	In	Out	Total	Mode Share	In	Out	Total
Multi-Unit (High-Rise)	Auto Driver	**38%**	17	39	55	**45%**	38	29	67
	Auto Passenger	**12%**	5	12	17	**16%**	13	11	24
	Transit	**41%**	20	48	68	**28%**	25	20	45
	Cycling	**2%**	1	2	3	**2%**	2	1	3
	Walking	**7%**	4	8	12	**9%**	9	7	16
	Total	**100%**	**47**	**109**	**155**	**100%**	**87**	**68**	**155**

As shown above, a total of 55 AM and 67 PM new peak hour two-way vehicle trips are projected as a result of the proposed development.

4.3 Trip Distribution

To understand the travel patterns of the subject development, the OD Survey has been reviewed to determine the travel for the residential development, and these patterns were applied based on the build-out of Alta Vista. Table 10 below summarizes the distributions.

Table 10: OD Survey Distribution – Alta Vista

To/From	% of Trips
North	20%
South	25%
East	25%
West	30%
Total	**100%**

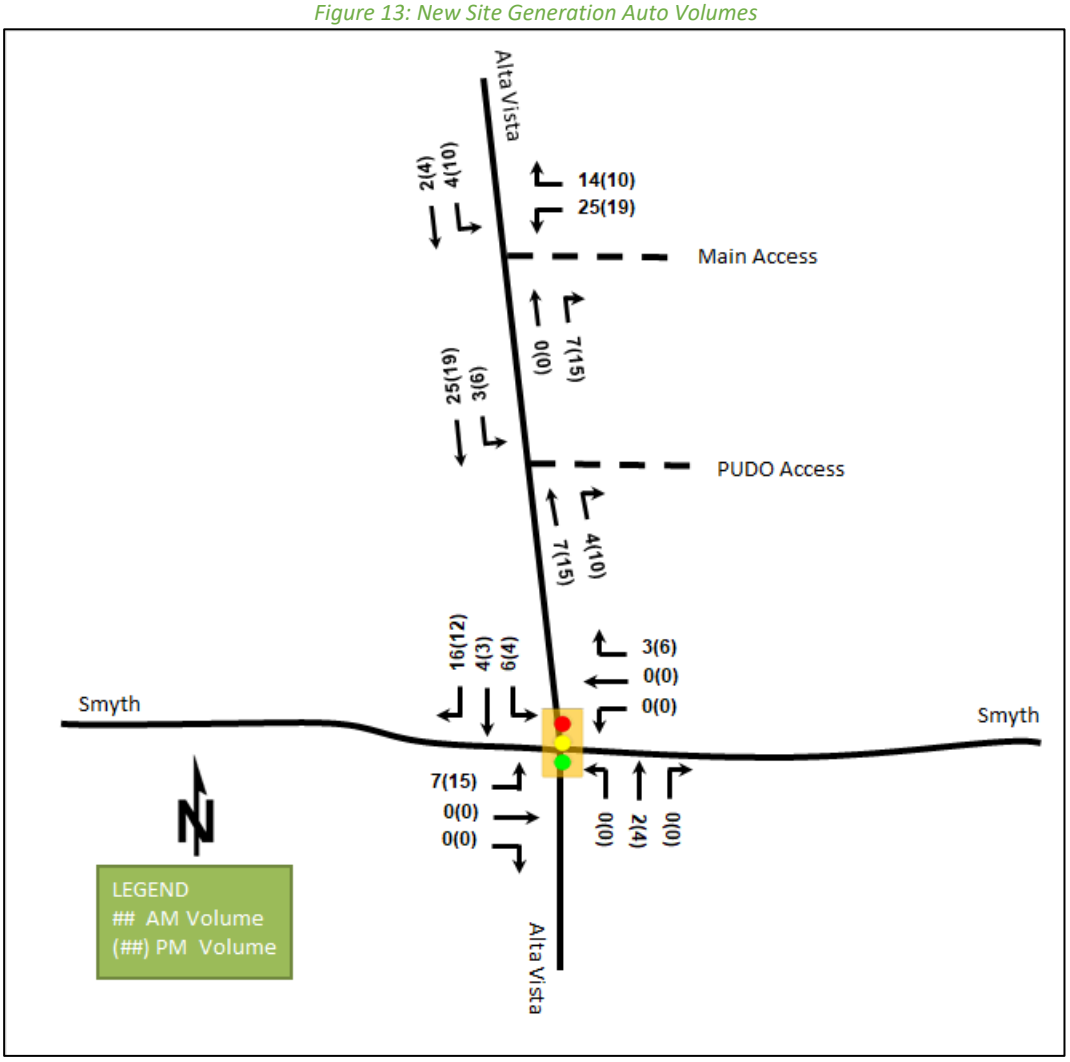
4.4 Trip Assignment

Using the distribution outlined above, turning movement splits, and access to major transportation infrastructure, the trips generated by the site have been assigned to the study area road network. Table 11 summarizes the proportional assignment to the study area roadways, and Figure 13 illustrates the new site generated volumes.

Table 11: Trip Assignment

To/From	Via
North	10% Alta Vista Dr (N), 10% Smyth Rd (W)
South	15% Smyth Rd (W), 10% Alta Vista Dr (S)
East	10% Alta Vista Dr (N), 15% Smyth Rd (E)
West	15% Smyth Rd (W), 15% Alta Vista Dr (N)
Total	**100%**

Figure 13: New Site Generation Auto Volumes



5 Exemption Review

Table 12 summarizes the exemptions for this TIA.

Table 12: Exemption Review

Module	Element	Explanation	Exempt/Required
Site Design and TDM			
Development Design	4.1.2 Circulation and Access	Only required for site plan and zoning by-law applications	Required
	4.1.3 New Street Networks	Only required for plans of subdivision	Exempt
Parking	4.2.1 Parking Supply	Only required for site plan and zoning by-law applications	Required
Boundary Street Design		All applications	Required
Transportation Demand Management	All Elements	Only required when the development generates more than 60 person-trips	Required
Network Impact			

Module	Element	Explanation	Exempt/Required
Background Network Travel Demand	All Elements	Only required when one or more other Network Impact Modules are triggered when the development generates more than 75 auto or transit trips	Exempt
Demand Rationalization		Only required when one or more other Network Impact Modules when the development generates more than 75 auto trips	Exempt
Neighbourhood Traffic Calming	4.6.1 Adjacent Neighbourhoods	If the development meets all of the following criteria along the route(s) site generated traffic is expected to utilize between an arterial road and the site's access: 1. Access to Collector or Local; 2. "Significant sensitive land use presence" exists, where there is at least two of the following adjacent to the subject street segment: • School (within 250m walking distance); • Park; • Retirement / Older Adult Facility (i.e. long-term care and retirement homes); • Licenced Child Care Centre; • Community Centre; or • 50%, or greater, of adjacent property along the route(s) is occupied by residential lands and a minimum of 10 occupied residential units are present on the route. 3. Application is for Zoning By-Law Amendment or Draft Plan of Subdivision; 4. At least 75 site-generated auto trips; 5. Site Trip Infiltration is expected. Site traffic will increase peak hour vehicle volumes along the route by 50% or more.	Exempt
Transit	4.7.1 Transit Route Capacity	Only required when the development generates more than 75 transit trips	Exempt
	4.7.2 Transit Priority Requirements	Only required when the development generates more than 75 auto trips	Exempt
Network Concept		Only required when proposed development generates more than 200 person-trips during the peak hour in excess of equivalent volume permitted by established zoning	Exempt
Intersection Design	4.4.1-2/4.9.1 Intersection Control	Only required when the development generates more than 75 auto trips	Exempt
	4.4.3/4.9.2 Intersection Design	Only required when the development generates more than 75 auto trips	Exempt – Access Intersection Design Required

6 Development Design

6.1 Design for Sustainable Modes

The proposed development is a residential building with vehicle below grade and within a layby on the south side of a drop-off loop. Bicycle parking located in a secure room on the first floor, on the second underground parking level with elevator access for cyclists' ease of use, and within surface racks external to the building. Hard surface connections are provided between the building entrances and the pedestrian facilities and bus stop along the frontage and between the northern stairway exit and the sidewalk on Alta Vista Drive.

The infrastructure TDM Checklist is provided in Appendix E. Bus stops serving the local area routes at the intersection of Alta Vista Drive at Smyth Road are within a 400-metre walk of the site entrances, and Smyth Station is within a 950-metre walk of the main site entrance. No changes to the existing bus stop along the frontage are proposed beyond a minor modification to the sidewalk location through the right-of-way south of the southern site access, leaving a 15-metre hard landing for the remaining bus stop.

6.2 Circulation and Access

Vehicular access is provided via a two-way driveway on the north side of the site, which provides access to the ramp to the parking levels, and a one-way (inbound) access to the south, which provides access to a drop-off loop which outlets onto the two-way aisle. Signage supporting the one-way operation of the drop-off loop is proposed as a one-way sign affixed to the building façade adjacent the moving room overhead door and a do not enter sign opposite the one-way sign within the soft landscaping south of the pedestrian crossing along the two-way aisle and facing the two-way aisle.

The one-way drive aisle is 3.8-metres -wide, and short-term stopping spaces are provided within a 2.6-metre-wide layby on the west side of the one-way loop. The 6.0-metre-wide inbound only access' throat is to be designated a fire lane, with the firetruck entering in a forward manner and reversing out. Para Transpo is proposed to access the drop-off-loop with side boarding proposed in the fire lane and rear boarding proposed within the short-term parking spaces. Move-ins and move-outs will be accommodated on site with a moving room at the north of the building. Garbage collection will take place on-site in a 4.0-metre by 13.0-metre space in front of the building adjacent the moving room. Turning templates are provided in Appendix F.

7 Parking

7.1 Parking Supply

The site provides 285 internal bicycle parking spaces and 16 exterior bicycle parking spaces. A total of 231 vehicle parking spaces are provided, including 201 spaces for residents and 25 spaces for visitors, across two parking levels below grade. The site also provides 5 short-term parking spaces for the use of visitors on the west side of the drive aisle.

From the Zoning By-Law, as the site is within Area B on Schedule 1A, the minimum vehicle parking provision is 190 spaces for residents and 60 spaces for visitors, for a total of 250 vehicle spaces. The minimum Zoning By-Law bicycle parking provision is 190 bicycle spaces.

The site bicycle parking provision and minimum resident parking provision meet the minimum quantities from the Zoning By-Law. The visitor parking is 30 spaces below the minimum quantity from the Zoning By-Law. While this is nominally half of the required value, it is noted that this would be the quantity were the site located in Area X, Y, or Z on Zoning Schedule 1A. This target is supported by the proximity to rapid transit, being a 950 metre walk

from the entrance to Smyth Station. Therefore, a visitor vehicle parking rate of 30 spaces is recommended to be approved.

8 Boundary Street Design

Table 13 summarizes the MMLOS analysis for the boundary street of Alta Vista Drive. The existing and future conditions for the street will be the same and are considered in one row. The boundary street analysis is based on the policy area of within 600 m of a rapid transit station. The MMLOS worksheets has been provided in Appendix G.

Table 13: Boundary Street MMLOS Analysis

Segment	Pedestrian LOS		Bicycle LOS		Transit LOS		Public Realm LOS	
	PLOS	Target	BLOS	Target	TLOS	Target	PRLOS	Target
Alta Vista Drive	**C**	A	**C**	A	B	C	B	B

Alta Vista Drive does not meet the pedestrian and cycling MMLOS targets.

Pedestrian LOS is limited by the primarily by the vehicle volumes on the curb lane, however the posted speed limit of 50 km/h, and the distances between crossings on Alta Vista Drive further reduce scores beyond the base conditions of sidewalk width and separation from the vehicle lane otherwise being considered adequate.

Bicycle LOS is limited by the on-road facility, and to meet targets, a cycletrack would be required.

No changes to the public right-of-way along the site frontage are recommended. The existing sidewalk is appropriate to be retained given it meets City width requirements and cannot meet targets given other configurations, especially in the presence of mature trees within the boulevard. The bicycle lane is appropriate to be retained along the frontage, continuous with the facility north and south of the site.

9 Transportation Demand Management

9.1 Context for TDM

The mode shares used within the TIA represent the typical district mode shares. Overall, the modal shares are likely to be achieved and TDM measures should be provided to support transit uptake given the proximity to Symth Station.

The total bedroom count within the development is 540, across 112 bachelors, 132 one-bedroom units, 109 two-bedroom units, and 26 three-bedroom units. No age restrictions are noted for site users.

9.2 Need and Opportunity

The subject site has been assumed to rely predominantly on auto and transit travel, and those assumptions have been carried through the analysis. Given the low auto trip generation, negligible impacts are anticipated from a failure to meet target mode shares.

9.3 TDM Program

The “suite of post occupancy TDM measures” has been summarized in the TDM checklists for the residential land uses. The checklists are provided in Appendix E. The key TDM measures recommended include:

- Display local area maps with walking and cycling routes, and transit route information and schedules at major entrances
- Provide a multimodal travel option information package to new residents

- Inclusion of a 1-month Presto card for first time new townhome purchase and apartment rental, with a set time frame for this offer (e.g. 6-months) from the initial opening of the site
- Unbundle parking cost from purchase or rental costs

10 Intersection Design

10.1 Access Intersection Control

The southern site access is inbound only and the northern site access is proposed as having minor stop control on the access approach.

10.2 Intersection Design

The site is proposed as having two access onto Alta Vista Drive, the northern site access being two-way and permitting full movements, and a southern site access being one-way permitting all inbound movements. It is noted that during the PM peak hour, queueing on the southbound approach for the 95th percentile cycle may extend past the proposed southern access. This condition is typical of congested corridors, where the northbound right movement inbound to the site is not anticipated to be impacted, and the southbound left-movement inbound to the site may experience delays along with the remainder of the corridor in reaching the site access. Given no outbound movement is proposed at this access, no left-turns will cross a queue, and no material difference is noted for the proposed site access location along Alta Vista Drive as the other accesses.

Relevant design criteria for the proposed accesses are detailed below and discussed in relation to relevant by-laws and design guidance.

10.2.1 Private Approach By-Law Provisions

10.2.1.1 Number of Private Approaches

The site is to be accessed by one two-way access and one one-way access. Given the site frontage is approximately 143 metres, the site is permitted one (1) two-way private approach in addition to either a second two-way private approach, or two (2) one-way private approaches. Therefore, the site is in compliance with this provision and could provide one additional one-way private approach. As such, the site is considered to be limiting access onto Alta Vista, which is a Crosstown Bikeway.

10.2.1.2 Location and Spacing of Private Approaches

The accesses are spaced approximately 63 metres apart, and the southern access is approximately 110 metres from the nearest intersecting street, Smyth Road. The northern access is approximately eight metres from the northern property line, and the southern access is approximately 60 metres from the south property line.

Given Alta Vista Drive is a major collector road and the site is proposed as including 216 parking spaces, the site accesses are required to be spaced 45 metres apart and 45 metres from the nearest intersecting street. Additionally, private approaches are required to be 3.0 metres from the adjacent property line. Therefore, the site is in compliance with these provisions from the Private Approach By-Law.

10.2.1.3 Width of Private Approaches

The northern private approach is 7.5-metres-wide, and the curb radii are 6.0 metres. The southern private approach is 6.0-metres-wide to permit a fire lane, and the radii are 4.0 metres on the north side and 5.0 metres on the south side.

The resulting widths of the northern access are 9.0 metres at the street (right-of-way) line and 19.5 metres at the curb line, and of the southern access are 7.3 metres at the street (right-of-way) line and 14.3 metres at the curb line.

The Private Approach By-Law states that no two-way access shall exceed 9.0 metres at the street line and at the curb line, and that no one-way access shall exceed 7.5 metres at the street line and at the curb line. The application at the curb line is not consistent with typical applications of the minimum aisle widths combined with curb radii permitting garbage truck access and considering the application of SC 7.1. The accesses are in compliance with these maximum widths at the street line however, and these access width and radius values are recommended to be approved for zoning. Subsequent design review will be undertaken to support the forthcoming site plan application.

10.2.2 TAC Suggested Design Criteria

10.2.2.1 Access Corner Clearance

The southern access is approximately 125 metres from the Symth Road roadway.

Per the Geometric Design Guide for Canadian Roads (TAC, 2017), the suggested minimum corner clearance on the undivided departure of Alta Vista Drive's intersection with Smyth Road is 55 metres, given the collector road designation of Alta Vista Drive. Therefore, the proposed offset meets this suggested minimum value.

10.2.2.2 Access Throat Length

At the main site access, the site provides approximately 6.0 metres of clear throat from the point of tangency of the curb return to the first point of conflict on-site of the intersecting one-way drive aisle. Beyond this point, the next point of conflict along the access is the garage ramp is a further 20.7 metres into the site. Additionally of note, an additional 4.4 metres of space is provided between the back of the sidewalk along Alta Vista Drive and the point of tangency of the curb return.

According to the TAC manual, the suggested minimum clear throat for accesses onto collector roads to apartment complexes of over 200 units is 25 metres.

It is noted that the first point of conflict is the aisle's intersection with the one-way drop-off loop outlet. This conflict is proposed as being controlled with priority given to the two-way garage access aisle. Therefore, this nominal point of conflict is not anticipated to be associated with blockages of the aisle, and thus, the available throat would exceed this suggested minimum value. However, in the case that a blockage were to occur, space for one vehicle in the access throat would be available. Based on having multiple accesses permitting inbound movements, the averaged arrival rate based on the forecasted peak hour vehicle volumes of one vehicle every three to six minutes. Given this arrival rate and the rarity of the blockage of the free flow aisle from the outlet of the drop-off loop, this throat is considered adequate and is recommended to be approved.

At the one-way drop-off loop access, the site provides approximately 15.0 metres of clear throat from the point of tangency of the curb return to the first point of conflict on-site of the first parking space within the layby, with an additional 2.5 metres provided between the back of the sidewalk and the point of tangency of the curb return. Based on the multiple accesses, and the averaged arrival rate based on the forecasted peak hour vehicle volumes of one vehicle every four-and-a-half to ten minutes, this throat length, permitting two vehicles to queue off the roadway is considered adequate and this condition is recommended to be approved.

10.2.3 Recommended Design Elements

The site accesses are proposed are recommended to conform to City Standard SC7.1 with a continuous sidewalk through the access with depressed curb radii tying into the roadway curbs on tangent.

11 Summary of Improvements Indicated and Modifications Options

The following summarizes the analysis and results presented in this TIA report:

Proposed Site and Screening

- The proposed site includes a nine-storey residential building comprising 379 dwelling units
- Site access is proposed via a two-way full-movement access on the north side of the site and a one-way inbound access to a drop-off loop central to the parcel
- The development is anticipated to be completed as a single phase by 2028

TIA Screening and Exemptions

- The TIA Screening form indicated a full TIA was required due to trip generation, location, and safety triggers
- The exemption review for the TIA indicated that the following modules and elements were not required: new street networks, background network travel demand, demand rationalization, neighbourhood traffic calming review, transit review, network concept review, network intersection control review or network intersection design review

Existing Conditions

- Smyth Road is an arterial road, and Alta Vista Drive is a collector road in the study area
- Sidewalks/MUPS are generally provided on both sides of the study area roadways, and on-street bike lanes on both sides of the roadway on Alta Vista Drive
- The high volumes roadways have produced a high number of collisions at the study area intersections, primarily at the Alta Vista Dr at Smyth Rd intersection where the collisions are predominantly rear end collisions which may be influenced by congestion and turning movement which may be influenced by congestion on the eastbound and westbound approaches coupled with intersection geometry, where it is recommended the City evaluate whether fully protected left turns would be beneficial on these approaches
- Capacity issues are noted on the northbound through movement during AM peak hour, however these can be mitigated through signal timing adjustments

Planned Conditions

- Alta Vista Drive, Smyth Road, and Hospital Link Road are transit priority corridors in the TMP priority transit network.
- Planned active transportation improvements in the area include pedestrian and cycling projects with prioritization in the surrounding neighbourhoods, along with the Smyth Road Cycling Safety Improvements project

Development Generated Travel Demand

- The proposed development is forecasted produce 155 two-way people trips during the AM peak hour and 155 two-way people trips during the PM peak hour
- Of the forecasted people trips, 55 two-way trips will be vehicle trips during the AM peak-hour and 67 two-way trips will be vehicle trips during the PM peak hour based on a 38%-45% auto modal share target
- Of the forecasted trips, 20% are anticipated to travel north, 30 % to the west, and 25% to both the east and south

Development Design

- The auto parking areas are to be located in parking levels below grade, and within a layby on the south side of a drop-off loop
- Bicycle parking located in a secure room on the first floor, on the second underground parking level with elevator access for cyclists' ease of use, and within surface racks external to the building
- Pedestrian connections will be made from the building entrances to the sidewalk on Alta Vista Drive providing access to the wider pedestrian network and the bus stop along the site frontage
- The two-way driveway on the north side of the site provides access to the ramp to the parking levels, and the one-way (inbound) access to the south provides access to a drop-off loop which outlets onto the two-way aisle
- A fire route is to be designated on the throat of the inbound only access, and garbage collection and the moving vehicles will be accommodated on-site, and Para Transpo is proposed to access the drop-off-loop with side boarding proposed in the fire lane and rear boarding proposed within the short-term parking spaces

Parking

- The site will have 231 vehicle parking spaces along with 301 bicycle parking spaces
- Bicycle parking and resident vehicle parking meeting Zoning By-law minimums
- The visitor vehicle parking is 30 below Zoning By-Law minimums for the given location within the City, however a reduction to the required value of 30 spaces in nearby areas of the City is supported by the proximity to rapid transit and no area impacts are anticipated from this theoretical deficit

Boundary Street Design

- The boundary streets will not meet pedestrian MMLOS targets, due to vehicle volumes on the curb lane and distances between crossings along Alta Vista Drive and auto volumes and/or posted speed limits
- The boundary streets will not meet bicycle MMLOS targets, due to the cycling facility being located on-road
- Due to the issues limiting the ability to meet the MMLOS targets, the consistency with the continuous facilities along Alta Vista Drive, and the presence of mature street trees, no improvements to the public right-of-way along the site frontage are recommended as part of this study

TDM

- Supportive TDM measures to be included within the proposed development should include:
  - Display local area maps with walking and cycling routes, and transit route information and schedules at major entrances
  - Provide a multimodal travel option information package to new residents
  - Inclusion of a 1-month Presto card for first time new townhome purchase and apartment rental, with a set time frame for this offer (e.g. 6-months) from the initial opening of the site
  - Unbundle parking cost from purchase or rental costs

Intersection Design

- The site accesses generally meet the Private Approach By-Law provisions, limiting the access onto the Alta Vista Crosstown Bikeway, and generally meets the suggested minimum design values from TAC

- The throat lengths are considered to be adequate given the expected traffic as well as the priority of the drive aisle at the main access, and based on the expected traffic at the one-way access
- The site accesses are proposed are recommended to conform to City Standard SC7.1 with a continuous sidewalk through the access with depressed curb radii tying into the roadway curbs on tangent

12 Conclusion

It is recommended that, from a transportation perspective, the proposed development applications proceed.

Prepared By:

John Kingsley, BEng
Transportation Engineering-Intern

Reviewed By:



Christopher Gordon, P.Eng.
Senior Transportation Engineer

Appendix A

TIA Screening Form and PM Certification Form

6 Plaza Court
Ottawa, ON K2H 7W1

City of Ottawa 2023 Revisions to 2017 TIA Guidelines
Step 1 - Screening Form

Date: 26-Aug-25
Project Number: 2025-050
Project Reference: 1867 Alta Vista

1.1 Description of Proposed Development	
Municipal Address	1867 Alta Vista Drive
Description of Location	1.21 ha parcel on east side of Alta Vista Dr, approximately 50 m north of Smyth Rd
Land Use Classification	Business Park Industrial
Development Size	Two mid-rise buildings comprising 383 Dwelling Units
Accesses	One full-moves access on Alta Vista Dr
Phase of Development	Single
Buildout Year	2028
TIA Requirement	Full TIA Required

1.2 Trip Generation Trigger		
Land Use Type	Multi-Family (High-Rise)	
Development Size	383	Units
Trip Generation Trigger	Yes	

1.3 Location Triggers	
Does the development propose a new driveway to a boundary street that is designated as part of the Transit Priority Network, Rapid Transit network or Cross-Town Bikeways?	Yes
Is the development in a Hub, a Protected Major Transit Station Area (PMTSA), or a Design Priority Area (DPA)?	No
Location Trigger	Yes

1.4. Safety Triggers	
Are posted speed limits on a boundary street 80 km/hr or greater?	No
Are there any horizontal/vertical curvatures on a boundary street limits sight lines at a proposed driveway?	No
Is the proposed driveway within the area of influence of an adjacent traffic signal or roundabout (i.e. within 300 m of intersection in rural conditions, or within 150 m of intersection in urban/ suburban conditions)?	Yes
Is the proposed driveway within auxiliary lanes of an intersection?	Yes
Does the proposed driveway make use of an existing median break that serves an existing site?	No
Is there is a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development?	No
Does the development include a drive-thru facility?	No
Safety Trigger	Yes

Certification Form for TIA Study PM

TIA Plan Reports

On April 14, 2022, the Province's Bill 109 received Royal Assent providing legislative direction to implement the More Homes for Everyone Act, 2022 aiming to increase the supply of a range of housing options to make housing more affordable. Revisions have been made to the TIA guidelines to comply with Bill 109 and streamline the process for applicants and staff.

Individuals submitting TIA reports will be responsible for all aspects of development-related transportation assessment and reporting, and undertaking such work, in accordance and compliance with the City of Ottawa's Official Plan, the Transportation Master Plan and the Transportation Impact Assessment (2017) Guidelines.

By submitting the attached TIA report (and any associated documents) and signing this document, the individual acknowledges that they meet the four criteria listed below.

CERTIFICATION

- ☑ I have reviewed and have a sound understanding of the objectives, needs and requirements of the City of Ottawa's Official Plan, Transportation Master Plan and the Transportation Impact Assessment (2017) Guidelines; (Update effective July 2023)
- ☑ I have a sound knowledge of industry standard practice with respect to the preparation of transportation impact assessment reports, including multi modal level of service review;
- ☑ I have substantial experience (more than 5 years) in undertaking and delivering transportation impact studies (analysis, reporting and geometric design) with strong background knowledge in transportation planning, engineering or traffic operations; and
- ☑ I am either a licensed or registered[1] professional in good standing, whose field of expertise
  - ☑ is either transportation engineering
  - ☐ or transportation planning.

[1] License of registration body that oversees the profession is required to have a code of conduct and ethics guidelines that will ensure appropriate conduct and representation for transportation planning and/or transportation engineering works.

City Of Ottawa
Planning, Real Estate and Economic Development
110 Laurier Avenue West, 4th fl.
Ottawa, ON
K1P 1J1
Tel. : 613-580-2424
Fax: 613-560-6006

Revision Date: June 2023

Dated at Ottawa (City) this 17 day of August , 20 23 .

Name : Andrew Harte

Professional title: Senior Transportation Engineer / Vice-President Ottawa

Signature of individual certifier that s/he/they meet the above criteria

Office Contact Information (Please Print)
Address: 6 Plaza Court
City / Postal Code: Ottawa, K2H 7W1
Telephone / Extension: 613-697-3797
Email Address: andrew.harte@cghtransportation.com

Stamp



Revision Date: June 2023

Appendix B

Turning Movement Counts

CGH TRANSPORTATION

Transportation Services - Traffic Services

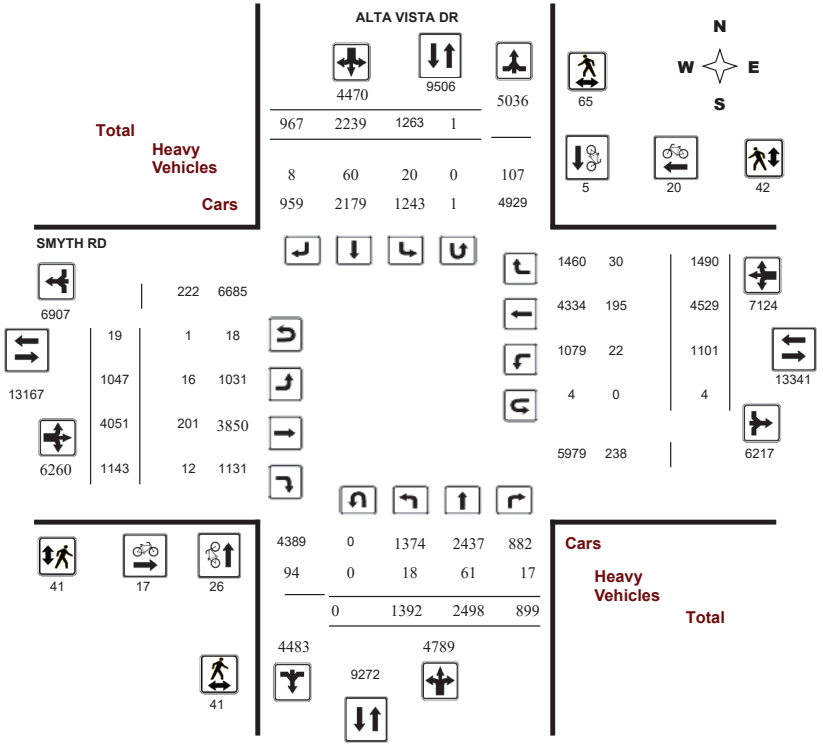
Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

Full Study Diagram



Transportation Services - Traffic Services

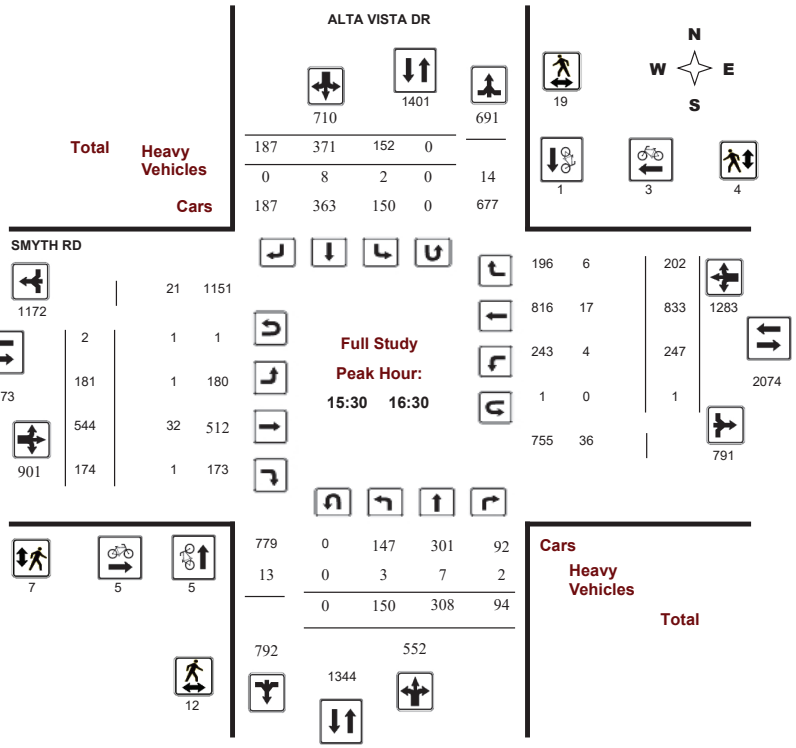
Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

Full Study Peak Hour Diagram



Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

Full Study Summary (8 HR Standard)

Survey Date: Wednesday, October 02, 2024

Total Observed U-Turns

Northbound: 0 Southbound: 1

Eastbound: 19 Westbound: 4

AADT Factor

.90

	ALTA VISTA DR								SMYTH RD									
	Northbound				Southbound				Eastbound				Westbound					
Period	LT	ST	RT	NB TOT	LT	ST	RT	SB TOT	STR TOT	LT	ST	RT	EB TOT	LT	ST	RT	WB TOT	STR TOT	Grand Total
07:00 08:00	232	258	162	**652**	154	154	79	**387**	**1039**	90	677	61	**828**	77	612	146	**835**	**1663**	**2702**
08:00 09:00	262	423	147	**832**	211	269	148	**628**	**1460**	179	591	141	**911**	101	586	231	**918**	**1829**	**3289**
09:00 10:00	195	347	111	**653**	158	217	94	**469**	**1122**	126	541	106	**773**	114	473	173	**760**	**1533**	**2655**
11:30 12:30	149	237	90	**476**	130	270	78	**478**	**954**	98	415	135	**648**	109	437	187	**733**	**1381**	**2335**
12:30 13:30	107	286	112	**505**	162	265	108	**535**	**1040**	97	412	155	**664**	108	389	165	**662**	**1326**	**2366**
15:00 16:00	131	324	121	**576**	155	370	179	**704**	**1280**	143	462	168	**773**	242	785	216	**1243**	**2016**	**3296**
16:00 17:00	146	352	75	**573**	148	355	160	**663**	**1236**	202	582	206	**990**	198	720	211	**1129**	**2119**	**3355**
17:00 18:00	170	271	81	**522**	145	339	121	**605**	**1127**	112	371	171	**654**	152	527	161	**840**	**1494**	**2621**
Sub Total	1392	2498	899	**4789**	1263	2239	967	**4469**	**9258**	1047	4051	1143	**6241**	1101	4529	1490	**7120**	**13361**	**22619**
U Turns				**0**				**1**	**1**				**19**				**4**	**23**	**24**
Total	1392	2498	899	**4789**	1263	2239	967	**4470**	**9259**	1047	4051	1143	**6260**	1101	4529	1490	**7124**	**13384**	**22643**
EQ 12Hr	1935	3472	1250	**6657**	1756	3112	1344	**6213**	**12870**	1455	5631	1589	**8701**	1530	6295	2071	**9902**	**18604**	**31474**
Note: These values are calculated by multiplying the totals by the appropriate expansion factor.														**1.39**					
AVG 12Hr	1742	3125	1125	**5991**	1580	3669	1585	**5592**	**11583**	1310	5068	1430	**7831**	1377	5666	1864	**8912**	**16744**	**28327**
Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor.														**.90**					
AVG 24Hr	2282	4094	1474	**7848**	2070	4806	2076	**7326**	**15174**	1716	6639	1873	**10259**	1804	7422	2442	**11675**	**21935**	**37108**
Note: These volumes are calculated by multiplying the Average Daily 12 hr. totals by 12 to 24 expansion factor.														**1.31**					

Note: U-Turns provided for approach totals. Refer to 'U-Turn' Report for specific breakdown.

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

Full Study 15 Minute Increments

		ALTA VISTA DR									SMYTH RD									
		Northbound				Southbound					Eastbound				Westbound					
Time Period		LT	ST	RT	N TOT	LT	ST	RT	S TOT	STR TOT	LT	ST	RT	E TOT	LT	ST	RT	W TOT	STR TOT	Grand Total
07:00	07:15	36	39	38	113	33	31	16	80	314	14	163	12	189	8	108	17	133	314	515
07:15	07:30	47	49	43	139	35	28	18	81	386	27	171	10	209	22	156	30	208	386	637
07:30	07:45	66	70	30	166	32	50	12	94	482	23	144	16	183	16	193	47	256	482	699
17:45	18:00	47	62	22	131	33	105	25	163	601	32	75	43	150	36	127	29	192	601	636
07:45	08:00	83	100	51	234	54	45	33	132	643	26	199	23	248	31	155	52	238	643	852
08:00	08:15	88	107	25	220	44	60	33	137	661	37	130	32	200	21	142	47	210	661	767
08:15	08:30	70	104	39	213	51	60	40	151	682	44	159	43	246	23	159	44	226	682	836
08:30	08:45	50	107	26	183	56	83	45	184	748	49	139	41	229	26	163	75	264	748	860
08:45	09:00	54	105	57	216	60	66	30	156	713	49	163	25	239	31	122	65	218	713	829
09:00	09:15	52	106	33	191	44	56	35	135	655	51	164	22	237	31	120	63	215	655	778
09:15	09:30	51	105	25	181	46	63	26	135	630	29	122	34	186	29	125	54	208	630	710
09:30	09:45	55	72	32	159	28	41	17	86	464	28	137	21	187	28	107	29	164	464	596
09:45	10:00	37	64	21	122	40	57	16	113	456	18	118	29	166	26	121	27	174	456	575
11:30	11:45	35	63	20	118	20	64	18	102	489	28	100	33	162	35	97	46	178	489	560
11:45	12:00	34	63	30	127	44	61	23	128	506	21	106	31	158	29	109	46	184	506	597
12:00	12:15	41	53	15	109	40	76	21	137	509	25	90	38	153	16	92	55	163	509	562
12:15	12:30	39	58	25	122	26	69	16	112	488	24	119	33	177	29	139	40	208	488	619
12:30	12:45	37	84	26	147	56	70	30	156	581	22	104	34	161	25	106	43	174	581	638
12:45	13:00	18	58	36	112	34	72	28	134	516	28	122	44	196	23	105	45	173	516	615
13:15	13:30	28	69	29	126	31	66	20	117	508	24	114	39	179	32	93	35	160	508	582
15:00	15:15	37	87	28	152	38	69	48	155	656	32	109	46	187	52	207	63	322	656	816
15:15	15:30	30	91	40	161	39	106	42	187	753	34	116	45	195	60	161	69	292	753	835
15:30	15:45	33	81	32	146	39	98	44	181	684	32	106	43	181	67	227	36	330	684	838
15:45	16:00	31	65	21	117	39	97	45	181	650	45	131	34	210	63	190	48	302	650	810
16:00	16:15	38	83	22	143	33	85	52	170	700	53	128	55	238	67	222	44	333	700	884
16:15	16:30	48	79	19	146	41	91	46	178	711	51	179	42	272	50	194	74	318	711	914
16:30	16:45	37	104	21	162	40	85	36	161	705	60	124	49	234	46	154	38	238	705	795
16:45	17:00	23	86	13	122	34	94	26	154	644	38	151	60	249	35	150	55	240	644	765
17:00	17:15	39	73	22	134	40	98	38	176	624	29	117	33	179	36	159	45	240	624	729
17:15	17:30	44	74	20	138	42	68	32	142	585	25	92	46	164	42	136	50	228	585	672
17:30	17:45	40	62	17	119	30	68	26	124	523	26	87	49	162	38	105	37	180	523	585
13:00	13:15	24	75	21	120	41	57	30	128	511	23	72	38	134	28	85	42	155	511	537
Total:		1392	2498	899	4789	1263	2239	967	4470	18778	1047	4051	1143	6260	1101	4529	1490	7124	18778	22,643

Note: U-Turns are included in Totals.

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

Full Study Cyclist Volume

Time Period		ALTA VISTA DR Northbound	ALTA VISTA DR Southbound	ALTA VISTA DR Street Total	SMYTH RD Eastbound	SMYTH RD Westbound	SMYTH RD Street Total	Grand Total
07:00	07:15	1	0	1	2	0	2	3
07:15	07:30	1	0	1	1	0	1	2
07:30	07:45	2	0	2	0	1	1	3
17:45	18:00	0	1	1	0	3	3	4
07:45	08:00	0	0	0	1	1	2	2
08:00	08:15	5	0	5	0	1	1	6
08:15	08:30	0	0	0	0	1	1	1
08:30	08:45	1	0	1	0	0	0	1
08:45	09:00	0	0	0	0	0	0	0
09:00	09:15	1	0	1	0	0	0	1
09:15	09:30	3	0	3	0	2	2	5
09:30	09:45	1	0	1	1	0	1	2
09:45	10:00	0	1	1	0	0	0	1
11:30	11:45	0	0	0	0	0	0	0
11:45	12:00	0	0	0	0	0	0	0
12:00	12:15	0	0	0	1	0	1	1
12:15	12:30	1	0	1	0	1	1	2
12:30	12:45	1	0	1	0	1	1	2
12:45	13:00	0	0	0	0	0	0	0
13:15	13:30	0	0	0	2	0	2	2
15:00	15:15	0	0	0	0	0	0	0
15:15	15:30	0	0	0	0	0	0	0
15:30	15:45	0	0	0	1	0	1	1
15:45	16:00	1	0	1	2	0	2	3
16:00	16:15	3	0	3	1	2	3	6
16:15	16:30	1	1	2	1	1	2	4
16:30	16:45	0	0	0	0	2	2	2
16:45	17:00	1	1	2	0	0	0	2
17:00	17:15	0	1	1	2	2	4	5
17:15	17:30	1	0	1	0	0	0	1
17:30	17:45	1	0	1	0	2	2	3
13:00	13:15	1	0	1	2	0	2	3
Total		26	5	**31**	17	20	37	68

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

Full Study Pedestrian Volume

Time Period		ALTA VISTA DR NB Approach (E or W Crossing)	ALTA VISTA DR SB Approach (E or W Crossing)	ALTA VISTA DR Total	SMYTH RD EB Approach (N or S Crossing)	SMYTH RD WB Approach (N or S Crossing)	SMYTH RD Total	Grand Total
07:00	07:15	1	2	**3**	1	3	**4**	**7**
07:15	07:30	4	1	**5**	1	0	**1**	**6**
07:30	07:45	0	4	**4**	1	0	**1**	**5**
17:45	18:00	2	0	**2**	0	0	**0**	**2**
07:45	08:00	0	2	**2**	1	2	**3**	**5**
08:00	08:15	0	1	**1**	5	10	**15**	**16**
08:15	08:30	0	4	**4**	3	0	**3**	**7**
08:30	08:45	3	4	**7**	3	2	**5**	**12**
08:45	09:00	0	1	**1**	1	0	**1**	**2**
09:00	09:15	2	0	**2**	0	4	**4**	**6**
09:15	09:30	1	0	**1**	0	1	**1**	**2**
09:30	09:45	0	0	**0**	2	1	**3**	**3**
09:45	10:00	1	0	**1**	0	0	**0**	**1**
11:30	11:45	2	0	**2**	1	1	**2**	**4**
11:45	12:00	0	1	**1**	0	0	**0**	**1**
12:00	12:15	0	2	**2**	3	2	**5**	**7**
12:15	12:30	1	3	**4**	1	1	**2**	**6**
12:30	12:45	2	0	**2**	0	1	**1**	**3**
12:45	13:00	3	0	**3**	2	2	**4**	**7**
13:15	13:30	1	2	**3**	1	1	**2**	**5**
15:00	15:15	1	3	**4**	0	3	**3**	**7**
15:15	15:30	2	0	**2**	0	0	**0**	**2**
15:30	15:45	3	1	**4**	0	0	**0**	**4**
15:45	16:00	5	8	**13**	2	3	**5**	**18**
16:00	16:15	2	3	**5**	2	0	**2**	**7**
16:15	16:30	2	7	**9**	3	1	**4**	**13**
16:30	16:45	0	2	**2**	4	0	**4**	**6**
16:45	17:00	1	3	**4**	3	0	**3**	**7**
17:00	17:15	0	6	**6**	0	2	**2**	**8**
17:15	17:30	0	3	**3**	1	1	**2**	**5**
17:30	17:45	1	1	**2**	0	1	**1**	**3**
13:00	13:15	1	1	**2**	0	0	**0**	**2**
Total		41	65	**106**	41	42	**83**	**189**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

Full Study Heavy Vehicles

		ALTA VISTA DR									SMYTH RD									
		Northbound				Southbound					Eastbound				Westbound					
Time Period		LT	ST	RT	N TOT	LT	ST	RT	S TOT	STR TOT	LT	ST	RT	E TOT	LT	ST	RT	W TOT	STR TOT	Grand Total
07:00	07:15	0	3	1	**5**	0	1	0	**4**	**9**	0	10	0	**22**	0	12	0	**23**	**45**	**27**
07:15	07:30	0	1	0	**4**	1	1	0	**4**	**8**	0	8	0	**19**	2	11	1	**23**	**42**	**25**
07:30	07:45	0	2	0	**4**	0	2	0	**5**	**9**	0	3	0	**8**	0	5	1	**9**	**17**	**13**
17:45	18:00	0	0	0	**2**	0	2	0	**2**	**4**	0	0	0	**2**	0	2	0	**2**	**4**	**4**
07:45	08:00	0	0	0	**1**	1	1	0	**4**	**5**	0	5	0	**9**	0	4	2	**12**	**21**	**13**
08:00	08:15	3	1	0	**9**	1	3	2	**7**	**16**	0	5	1	**14**	1	3	0	**10**	**24**	**20**
08:15	08:30	1	1	1	**5**	0	2	1	**6**	**11**	2	3	0	**14**	0	7	0	**11**	**25**	**18**
08:30	08:45	1	2	0	**6**	1	2	1	**6**	**12**	0	6	1	**32**	0	23	0	**30**	**62**	**37**
08:45	09:00	1	2	5	**11**	0	2	0	**7**	**18**	1	8	0	**18**	1	8	2	**24**	**42**	**30**
09:00	09:15	1	5	3	**13**	2	2	0	**17**	**30**	3	8	1	**15**	1	2	5	**21**	**36**	**33**
09:15	09:30	1	6	0	**12**	1	2	0	**10**	**22**	0	4	1	**10**	2	4	1	**12**	**22**	**22**
09:30	09:45	2	1	0	**7**	1	3	0	**5**	**12**	0	6	1	**13**	0	4	0	**11**	**24**	**18**
09:45	10:00	0	3	0	**7**	2	3	0	**9**	**16**	0	7	0	**19**	1	12	1	**23**	**42**	**29**
11:30	11:45	0	3	0	**7**	0	1	0	**7**	**14**	1	5	2	**13**	1	5	2	**13**	**26**	**20**
11:45	12:00	0	1	1	**4**	0	1	0	**3**	**7**	0	7	1	**18**	0	10	1	**19**	**37**	**22**
12:00	12:15	1	1	0	**6**	1	3	0	**5**	**11**	0	4	0	**10**	1	5	0	**11**	**21**	**16**
12:15	12:30	1	3	0	**5**	0	1	0	**5**	**10**	1	9	0	**16**	0	5	0	**14**	**30**	**20**
12:30	12:45	0	2	0	**7**	0	3	1	**6**	**13**	0	5	0	**14**	2	8	0	**15**	**29**	**21**
12:45	13:00	0	2	1	**6**	1	3	0	**6**	**12**	0	11	0	**18**	0	7	0	**20**	**38**	**25**
13:15	13:30	0	3	0	**6**	1	2	0	**7**	**13**	1	4	1	**13**	0	7	0	**12**	**25**	**19**
15:00	15:15	1	1	1	**4**	0	1	2	**7**	**11**	1	8	0	**18**	0	6	2	**17**	**35**	**23**
15:15	15:30	0	2	1	**8**	1	2	0	**9**	**17**	1	11	1	**15**	2	2	3	**20**	**35**	**26**
15:30	15:45	0	3	1	**7**	1	2	0	**7**	**14**	0	10	1	**15**	0	4	1	**17**	**32**	**23**
15:45	16:00	0	0	1	**7**	0	3	0	**3**	**10**	0	9	0	**15**	3	6	0	**19**	**34**	**22**
16:00	16:15	1	2	0	**5**	0	2	0	**7**	**12**	0	3	0	**8**	0	2	3	**8**	**16**	**14**
16:15	16:30	2	2	0	**6**	1	1	0	**7**	**13**	1	10	0	**18**	1	5	2	**19**	**37**	**25**
16:30	16:45	0	0	1	**4**	0	1	0	**3**	**7**	1	8	0	**14**	2	5	1	**17**	**31**	**19**
16:45	17:00	0	3	0	**4**	0	1	0	**4**	**8**	0	7	0	**11**	0	4	0	**11**	**22**	**15**
17:00	17:15	2	0	0	**4**	1	2	0	**4**	**8**	1	7	0	**13**	0	3	0	**11**	**24**	**16**
17:15	17:30	0	1	0	**2**	2	1	0	**5**	**7**	1	5	0	**8**	0	2	0	**9**	**17**	**12**
17:30	17:45	0	2	0	**7**	0	4	0	**7**	**14**	0	1	0	**6**	1	5	1	**8**	**14**	**14**
13:00	13:15	0	3	0	**5**	1	0	1	**7**	**12**	1	4	1	**14**	1	7	1	**14**	**28**	**20**
Total:	None	18	61	17	**190**	20	60	8	**195**	**385**	16	201	12	**452**	22	195	30	**485**	**937**	**661**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

Full Study 15 Minute U-Turn Total

		ALTA VISTA DR		SMYTH RD		
Time Period		Northbound U-Turn Total	Southbound U-Turn Total	Eastbound U-Turn Total	Westbound U-Turn Total	Total
07:00	07:15	0	0	0	0	0
07:15	07:30	0	0	1	0	1
07:30	07:45	0	0	0	0	0
17:45	18:00	0	0	0	0	0
07:45	08:00	0	0	0	0	0
08:00	08:15	0	0	1	0	1
08:15	08:30	0	0	0	0	0
08:30	08:45	0	0	0	0	0
08:45	09:00	0	0	2	0	2
09:00	09:15	0	0	0	1	1
09:15	09:30	0	0	1	0	1
09:30	09:45	0	0	1	0	1
09:45	10:00	0	0	1	0	1
11:30	11:45	0	0	1	0	1
11:45	12:00	0	0	0	0	0
12:00	12:15	0	0	0	0	0
12:15	12:30	0	1	1	0	2
12:30	12:45	0	0	1	0	1
12:45	13:00	0	0	2	0	2
13:15	13:30	0	0	2	0	2
15:00	15:15	0	0	0	0	0
15:15	15:30	0	0	0	2	2
15:30	15:45	0	0	0	0	0
15:45	16:00	0	0	0	1	1
16:00	16:15	0	0	2	0	2
16:15	16:30	0	0	0	0	0
16:30	16:45	0	0	1	0	1
16:45	17:00	0	0	0	0	0
17:00	17:15	0	0	0	0	0
17:15	17:30	0	0	1	0	1
17:30	17:45	0	0	0	0	0
13:00	13:15	0	0	1	0	1
Total		0	1	19	4	24

Transportation Services - Traffic Services

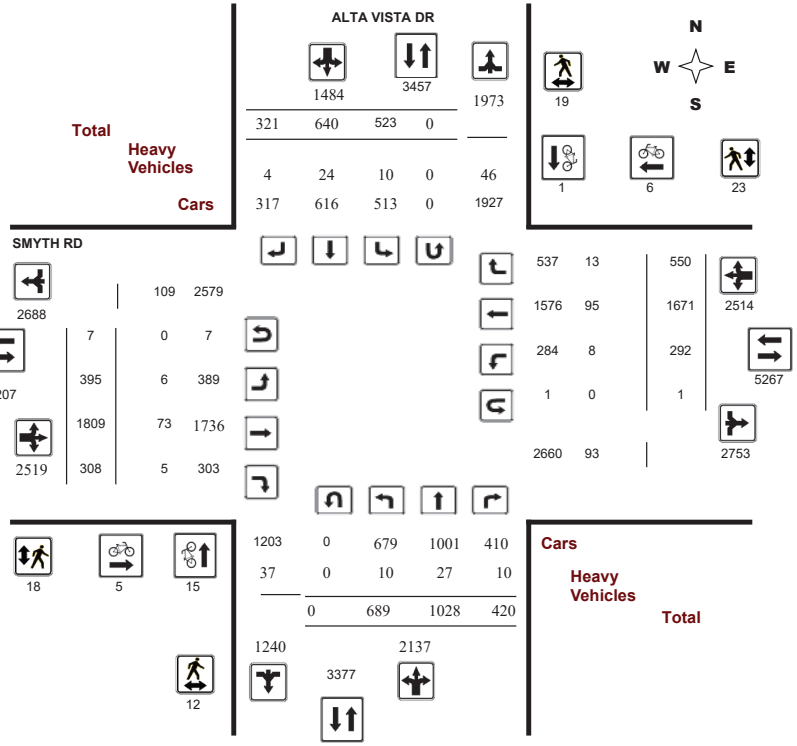
Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

AM Period Diagram



Transportation Services - Traffic Services

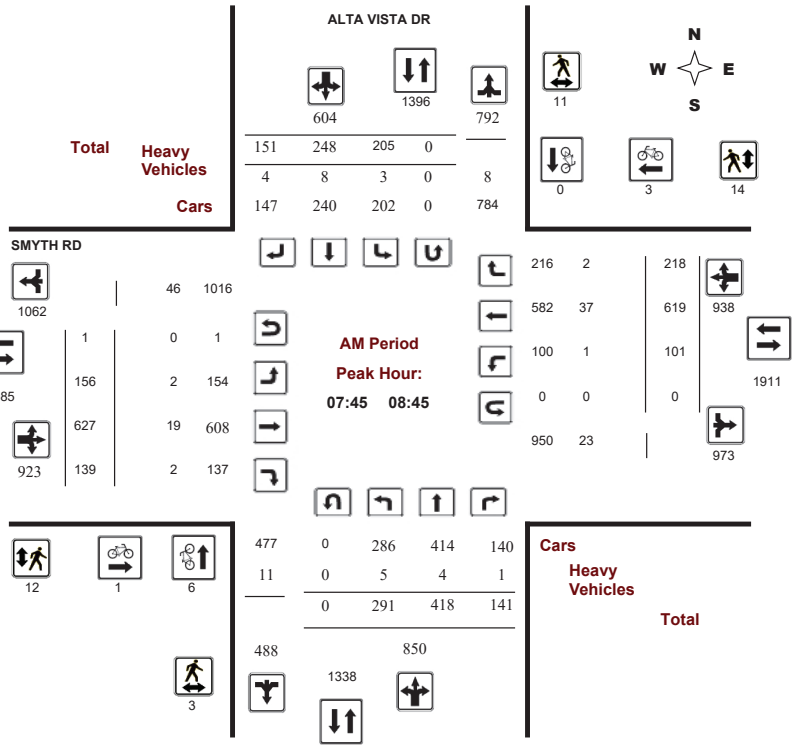
Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

AM Period Peak Hour Diagram



Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

AM Period Summary (8 HR Standard)

Survey Date: Wednesday, October 02, 2024

Total Observed U-Turns

Northbound: 0 Southbound: 0

Eastbound: 7 Westbound: 1

AADT Factor .90

	ALTA VISTA DR								SMYTH RD									
	Northbound				Southbound				Eastbound				Westbound					
Period	LT	ST	RT	NB TOT	LT	ST	RT	SB TOT	STR TOT	LT	ST	RT	EB TOT	LT	ST	RT	WB TOT	STR TOT	Grand Total
07:00 08:00	232	258	162	**652**	154	154	79	**387**	**1039**	90	677	61	**828**	77	612	146	**835**	**1663**	**2702**
08:00 09:00	262	423	147	**832**	211	269	148	**628**	**1460**	179	591	141	**911**	101	586	231	**918**	**1829**	**3289**
09:00 10:00	195	347	111	**653**	158	217	94	**469**	**1122**	126	541	106	**773**	114	473	173	**760**	**1533**	**2655**
Sub Total	689	1028	420	**2137**	523	640	321	**1484**	**3621**	395	1809	308	**2512**	292	1671	550	**2513**	**5025**	**8646**
U Turns				**0**				**0**	**0**				**7**				**1**	**8**	**8**
Total	689	1028	420	**2137**	523	640	321	**1484**	**3621**	395	1809	308	**2519**	292	1671	550	**2514**	**5033**	**8654**
EQ 12Hr	958	1429	584	**2970**	727	890	446	**2063**	**5033**	549	2515	428	**3501**	406	2323	764	**3494**	**6996**	**12029**
Note: These values are calculated by multiplying the totals by the appropriate expansion factor.													**1.39**						
AVG 12Hr	862	1286	526	**2673**	654	1049	526	**1857**	**4530**	494	2264	385	**3151**	365	2091	688	**3145**	**6296**	**10826**
Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor.													**.90**						
AVG 24Hr	1129	1685	689	**3502**	857	1374	689	**2433**	**5934**	647	2966	504	**4128**	478	2739	901	**4120**	**8248**	**14182**
Note: These volumes are calculated by multiplying the Average Daily 12 hr. totals by 12 to 24 expansion factor.													**1.31**						

Note: U-Turns provided for approach totals. Refer to 'U-Turn' Report for specific breakdown.

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

AM Period 15 Minute Increments

		ALTA VISTA DR									SMYTH RD									
		Northbound				Southbound					Eastbound				Westbound					
Time Period		LT	ST	RT	N TOT	LT	ST	RT	S TOT	STR TOT	LT	ST	RT	E TOT	LT	ST	RT	W TOT	STR TOT	Grand Total
07:00	07:15	36	39	38	113	33	31	16	80	314	14	163	12	189	8	108	17	133	314	515
07:15	07:30	47	49	43	139	35	28	18	81	386	27	171	10	209	22	156	30	208	386	637
07:30	07:45	66	70	30	166	32	50	12	94	482	23	144	16	183	16	193	47	256	482	699
09:45	10:00	37	64	21	122	40	57	16	113	456	18	118	29	166	26	121	27	174	456	575
07:45	08:00	83	100	51	234	54	45	33	132	643	26	199	23	248	31	155	52	238	643	852
08:00	08:15	88	107	25	220	44	60	33	137	661	37	130	32	200	21	142	47	210	661	767
08:15	08:30	70	104	39	213	51	60	40	151	682	44	159	43	246	23	159	44	226	682	836
08:30	08:45	50	107	26	183	56	83	45	184	748	49	139	41	229	26	163	75	264	748	860
08:45	09:00	54	105	57	216	60	66	30	156	713	49	163	25	239	31	122	65	218	713	829
09:00	09:15	52	106	33	191	44	56	35	135	655	51	164	22	237	31	120	63	215	655	778
09:15	09:30	51	105	25	181	46	63	26	135	630	29	122	34	186	29	125	54	208	630	710
09:30	09:45	55	72	32	159	28	41	17	86	464	28	137	21	187	28	107	29	164	464	596
Total:		689	1028	420	2137	523	640	321	1484	6834	395	1809	308	2519	292	1671	550	2514	6834	8,654

Note: U-Turns are included in Totals.

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

AM Period Cyclist Volume

Time Period		ALTA VISTA DR Northbound	ALTA VISTA DR Southbound	ALTA VISTA DR Street Total	SMYTH RD Eastbound	SMYTH RD Westbound	SMYTH RD Street Total	Grand Total
07:00	07:15	1	0	1	2	0	2	3
07:15	07:30	1	0	1	1	0	1	2
07:30	07:45	2	0	2	0	1	1	3
09:45	10:00	0	1	1	0	0	0	1
07:45	08:00	0	0	0	1	1	2	2
08:00	08:15	5	0	5	0	1	1	6
08:15	08:30	0	0	0	0	1	1	1
08:30	08:45	1	0	1	0	0	0	1
08:45	09:00	0	0	0	0	0	0	0
09:00	09:15	1	0	1	0	0	0	1
09:15	09:30	3	0	3	0	2	2	5
09:30	09:45	1	0	1	1	0	1	2
Total		15	1	**16**	5	6	11	27

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

AM Period Pedestrian Volume

Time Period		ALTA VISTA DR NB Approach (E or W Crossing)	ALTA VISTA DR SB Approach (E or W Crossing)	ALTA VISTA DR Total	SMYTH RD EB Approach (N or S Crossing)	SMYTH RD WB Approach (N or S Crossing)	SMYTH RD Total	Grand Total
07:00	07:15	1	2	**3**	1	3	**4**	**7**
07:15	07:30	4	1	**5**	1	0	**1**	**6**
07:30	07:45	0	4	**4**	1	0	**1**	**5**
09:45	10:00	1	0	**1**	0	0	**0**	**1**
07:45	08:00	0	2	**2**	1	2	**3**	**5**
08:00	08:15	0	1	**1**	5	10	**15**	**16**
08:15	08:30	0	4	**4**	3	0	**3**	**7**
08:30	08:45	3	4	**7**	3	2	**5**	**12**
08:45	09:00	0	1	**1**	1	0	**1**	**2**
09:00	09:15	2	0	**2**	0	4	**4**	**6**
09:15	09:30	1	0	**1**	0	1	**1**	**2**
09:30	09:45	0	0	**0**	2	1	**3**	**3**
Total	.....	12	19	**31**	18	23	**41**	**72**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

AM Period Heavy Vehicles

		ALTA VISTA DR									SMYTH RD									
		Northbound				Southbound					Eastbound				Westbound					
Time Period		LT	ST	RT	N TOT	LT	ST	RT	S TOT	STR TOT	LT	ST	RT	E TOT	LT	ST	RT	W TOT	STR TOT	Grand Total
07:00	07:15	0	3	1	**5**	0	1	0	**4**	**9**	0	10	0	**22**	0	12	0	**23**	**45**	**27**
07:15	07:30	0	1	0	**4**	1	1	0	**4**	**8**	0	8	0	**19**	2	11	1	**23**	**42**	**25**
07:30	07:45	0	2	0	**4**	0	2	0	**5**	**9**	0	3	0	**8**	0	5	1	**9**	**17**	**13**
09:45	10:00	0	3	0	**7**	2	3	0	**9**	**16**	0	7	0	**19**	1	12	1	**23**	**42**	**29**
07:45	08:00	0	0	0	**1**	1	1	0	**4**	**5**	0	5	0	**9**	0	4	2	**12**	**21**	**13**
08:00	08:15	3	1	0	**9**	1	3	2	**7**	**16**	0	5	1	**14**	1	3	0	**10**	**24**	**20**
08:15	08:30	1	1	1	**5**	0	2	1	**6**	**11**	2	3	0	**14**	0	7	0	**11**	**25**	**18**
08:30	08:45	1	2	0	**6**	1	2	1	**6**	**12**	0	6	1	**32**	0	23	0	**30**	**62**	**37**
08:45	09:00	1	2	5	**11**	0	2	0	**7**	**18**	1	8	0	**18**	1	8	2	**24**	**42**	**30**
09:00	09:15	1	5	3	**13**	2	2	0	**17**	**30**	3	8	1	**15**	1	2	5	**21**	**36**	**33**
09:15	09:30	1	6	0	**12**	1	2	0	**10**	**22**	0	4	1	**10**	2	4	1	**12**	**22**	**22**
09:30	09:45	2	1	0	**7**	1	3	0	**5**	**12**	0	6	1	**13**	0	4	0	**11**	**24**	**18**
Total:	None	10	27	10	**84**	10	24	4	**84**	**168**	6	73	5	**193**	8	95	13	**209**	**402**	**285**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

AM Period 15 Minute U-Turn Total

		ALTA VISTA DR		SMYTH RD		
Time Period		Northbound U-Turn Total	Southbound U-Turn Total	Eastbound U-Turn Total	Westbound U-Turn Total	Total
07:00	07:15	0	0	0	0	0
07:15	07:30	0	0	1	0	1
07:30	07:45	0	0	0	0	0
09:45	10:00	0	0	1	0	1
07:45	08:00	0	0	0	0	0
08:00	08:15	0	0	1	0	1
08:15	08:30	0	0	0	0	0
08:30	08:45	0	0	0	0	0
08:45	09:00	0	0	2	0	2
09:00	09:15	0	0	0	1	1
09:15	09:30	0	0	1	0	1
09:30	09:45	0	0	1	0	1
Total		0	0	7	1	8

Transportation Services - Traffic Services

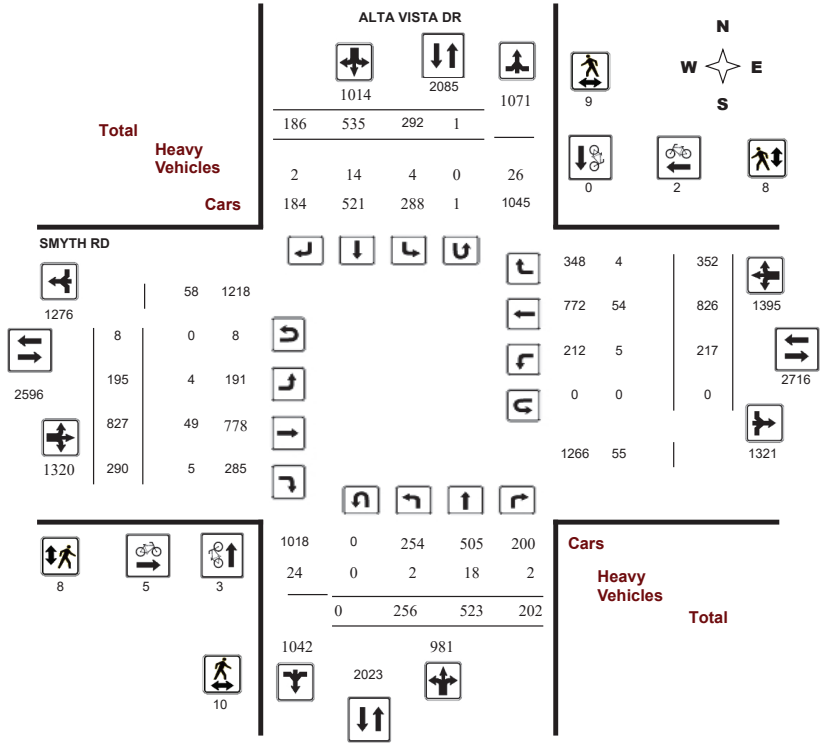
Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

MD Period Diagram



Transportation Services - Traffic Services

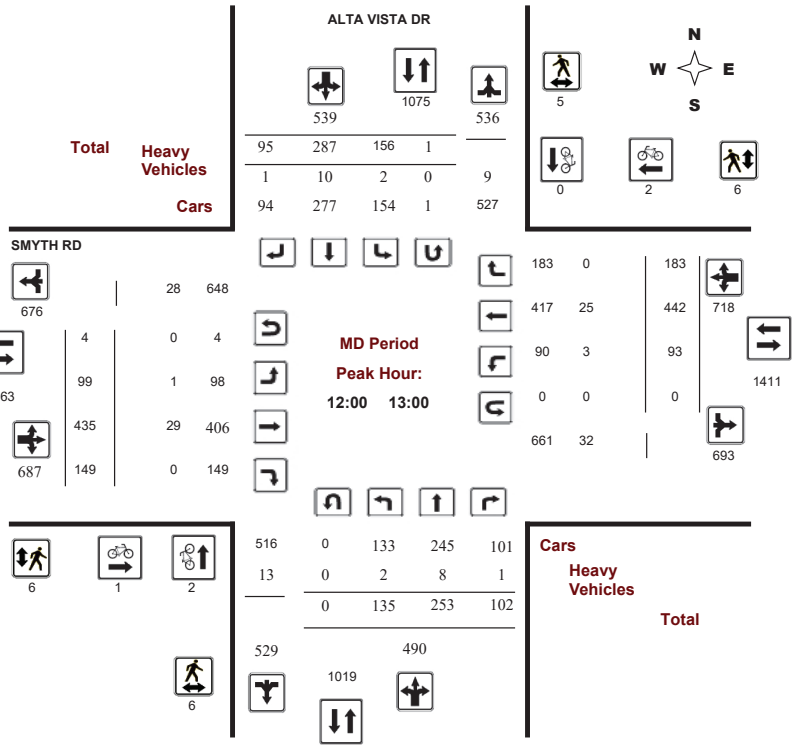
Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

MD Period Peak Hour Diagram



Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

MD Period Summary (8 HR Standard)

Survey Date: Wednesday, October 02, 2024

Total Observed U-Turns

Northbound: 0 Southbound: 1

Eastbound: 8 Westbound: 0

AADT Factor .90

	ALTA VISTA DR								SMYTH RD									
	Northbound				Southbound				Eastbound				Westbound					
Period	LT	ST	RT	NB TOT	LT	ST	RT	SB TOT	STR TOT	LT	ST	RT	EB TOT	LT	ST	RT	WB TOT	STR TOT	Grand Total
11:30 12:30	149	237	90	**476**	130	270	78	**478**	**954**	98	415	135	**648**	109	437	187	**733**	**1381**	**2335**
12:30 13:30	107	286	112	**505**	162	265	108	**535**	**1040**	97	412	155	**664**	108	389	165	**662**	**1326**	**2366**
Sub Total	256	523	202	**981**	292	535	186	**1013**	**1994**	195	827	290	**1312**	217	826	352	**1395**	**2707**	**4701**
U Turns				**0**				**1**	**1**				**8**				**0**	**8**	**9**
Total	256	523	202	**981**	292	535	186	**1014**	**1995**	195	827	290	**1320**	217	826	352	**1395**	**2715**	**4710**
EQ 12Hr	356	727	281	**1364**	406	744	259	**1409**	**2773**	271	1150	403	**1835**	302	1148	489	**1939**	**3774**	**6547**
Note: These values are calculated by multiplying the totals by the appropriate expansion factor.														**1.39**					
AVG 12Hr	320	654	253	**1228**	365	877	305	**1268**	**2496**	244	1035	363	**1652**	272	1033	440	**1745**	**3397**	**5892**
Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor.														**.90**					
AVG 24Hr	419	857	331	**1609**	478	1149	400	**1661**	**3270**	320	1356	476	**2164**	356	1353	576	**2286**	**4450**	**7719**
Note: These volumes are calculated by multiplying the Average Daily 12 hr. totals by 12 to 24 expansion factor.														**1.31**					

Note: U-Turns provided for approach totals. Refer to 'U-Turn' Report for specific breakdown.

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

MD Period 15 Minute Increments

		ALTA VISTA DR								SMYTH RD									
		Northbound				Southbound				Eastbound				Westbound					
Time Period		LT	ST	RT	N TOT	LT	ST	RT	S TOT	STR TOT	LT	ST	RT	E TOT	LT	ST	RT	W TOT	STR TOT	Grand Total
11:30	11:45	35	63	20	118	20	64	18	102	489	28	100	33	162	35	97	46	178	489	560
11:45	12:00	34	63	30	127	44	61	23	128	506	21	106	31	158	29	109	46	184	506	597
12:00	12:15	41	53	15	109	40	76	21	137	509	25	90	38	153	16	92	55	163	509	562
13:15	13:30	28	69	29	126	31	66	20	117	508	24	114	39	179	32	93	35	160	508	582
12:15	12:30	39	58	25	122	26	69	16	112	488	24	119	33	177	29	139	40	208	488	619
12:30	12:45	37	84	26	147	56	70	30	156	581	22	104	34	161	25	106	43	174	581	638
12:45	13:00	18	58	36	112	34	72	28	134	516	28	122	44	196	23	105	45	173	516	615
13:00	13:15	24	75	21	120	41	57	30	128	511	23	72	38	134	28	85	42	155	511	537
Total:		256	523	202	981	292	535	186	1014	4108	195	827	290	1320	217	826	352	1395	4108	4,710

Note: U-Turns are included in Totals.

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

MD Period Cyclist Volume

Time Period		ALTA VISTA DR Northbound	ALTA VISTA DR Southbound	ALTA VISTA DR Street Total	SMYTH RD Eastbound	SMYTH RD Westbound	SMYTH RD Street Total	Grand Total
11:30	11:45	0	0	0	0	0	0	0
11:45	12:00	0	0	0	0	0	0	0
12:00	12:15	0	0	0	1	0	1	1
13:15	13:30	0	0	0	2	0	2	2
12:15	12:30	1	0	1	0	1	1	2
12:30	12:45	1	0	1	0	1	1	2
12:45	13:00	0	0	0	0	0	0	0
13:00	13:15	1	0	1	2	0	2	3
Total		3	0	**3**	5	2	7	10

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

MD Period Pedestrian Volume

Time Period		ALTA VISTA DR NB Approach (E or W Crossing)	ALTA VISTA DR SB Approach (E or W Crossing)	ALTA VISTA DR Total	SMYTH RD EB Approach (N or S Crossing)	SMYTH RD WB Approach (N or S Crossing)	SMYTH RD Total	Grand Total
11:30	11:45	2	0	**2**	1	1	**2**	**4**
11:45	12:00	0	1	**1**	0	0	**0**	**1**
12:00	12:15	0	2	**2**	3	2	**5**	**7**
13:15	13:30	1	2	**3**	1	1	**2**	**5**
12:15	12:30	1	3	**4**	1	1	**2**	**6**
12:30	12:45	2	0	**2**	0	1	**1**	**3**
12:45	13:00	3	0	**3**	2	2	**4**	**7**
13:00	13:15	1	1	**2**	0	0	**0**	**2**
Total	.....	10	9	**19**	8	8	**16**	**35**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

MD Period Heavy Vehicles

ALTA VISTA DR **SMYTH RD**

Time Period		Northbound				Southbound					Eastbound					Westbound					
		LT	ST	RT	N TOT	LT	ST	RT	S TOT	STR TOT	LT	ST	RT	E TOT	LT	ST	RT	W TOT	STR TOT	Grand Total
11:30	11:45	0	3	0	**7**	0	1	0	**7**	**14**	1	5	2	**13**	1	5	2	**13**	**26**	**20**
11:45	12:00	0	1	1	**4**	0	1	0	**3**	**7**	0	7	1	**18**	0	10	1	**19**	**37**	**22**
12:00	12:15	1	1	0	**6**	1	3	0	**5**	**11**	0	4	0	**10**	1	5	0	**11**	**21**	**16**
13:15	13:30	0	3	0	**6**	1	2	0	**7**	**13**	1	4	1	**13**	0	7	0	**12**	**25**	**19**
12:15	12:30	1	3	0	**5**	0	1	0	**5**	**10**	1	9	0	**16**	0	5	0	**14**	**30**	**20**
12:30	12:45	0	2	0	**7**	0	3	1	**6**	**13**	0	5	0	**14**	2	8	0	**15**	**29**	**21**
12:45	13:00	0	2	1	**6**	1	3	0	**6**	**12**	0	11	0	**18**	0	7	0	**20**	**38**	**25**
13:00	13:15	0	3	0	**5**	1	0	1	**7**	**12**	1	4	1	**14**	1	7	1	**14**	**28**	**20**
Total:	None	2	18	2	**46**	4	14	2	**46**	**92**	4	49	5	**116**	5	54	4	**118**	**234**	**163**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

MD Period 15 Minute U-Turn Total

ALTA VISTA DR **SMYTH RD**

Time Period		Northbound U-Turn Total	Southbound U-Turn Total	Eastbound U-Turn Total	Westbound U-Turn Total	Total
11:30	11:45	0	0	1	0	1
11:45	12:00	0	0	0	0	0
12:00	12:15	0	0	0	0	0
13:15	13:30	0	0	2	0	2
12:15	12:30	0	1	1	0	2
12:30	12:45	0	0	1	0	1
12:45	13:00	0	0	2	0	2
13:00	13:15	0	0	1	0	1
Total		0	1	8	0	9

Transportation Services - Traffic Services

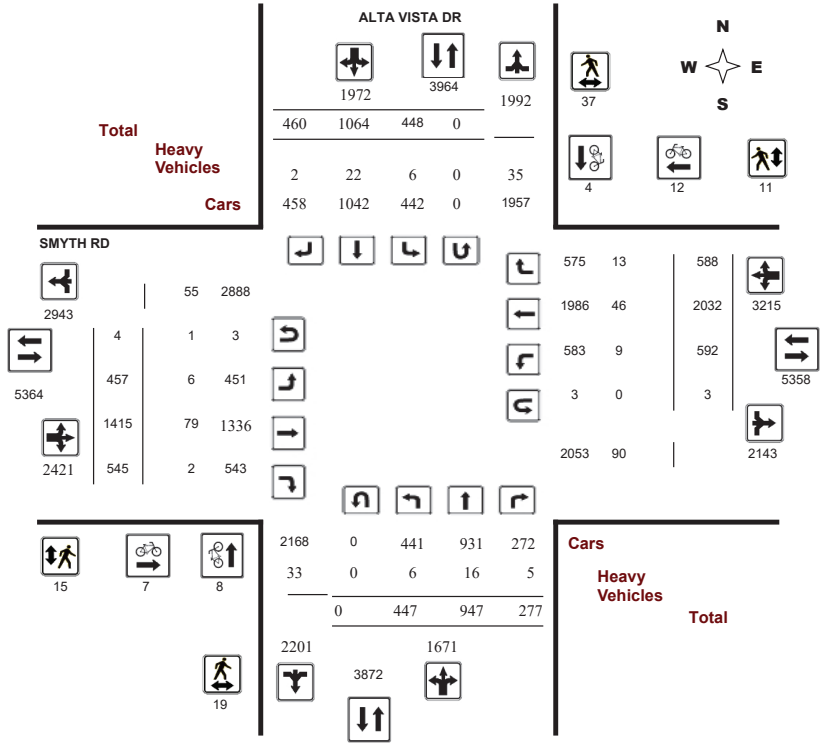
Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

PM Period Diagram



Transportation Services - Traffic Services

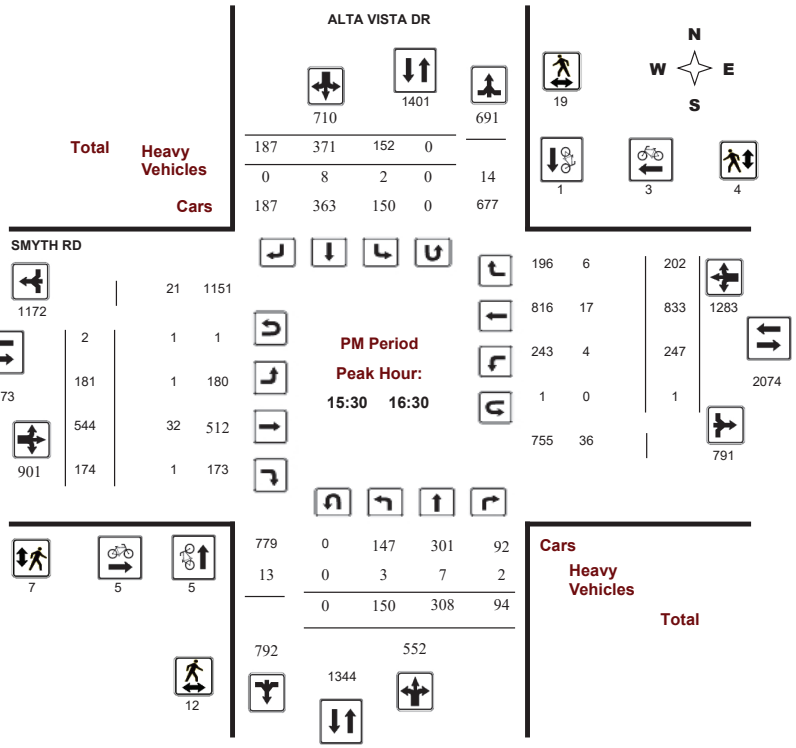
Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

PM Period Peak Hour Diagram



Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

PM Period Summary (8 HR Standard)

Survey Date: Wednesday, October 02, 2024

Total Observed U-Turns

Northbound: 0 Southbound: 0

Eastbound: 4 Westbound: 3

AADT Factor .90

	ALTA VISTA DR								SMYTH RD									
	Northbound				Southbound				Eastbound				Westbound					
Period	LT	ST	RT	NB TOT	LT	ST	RT	SB TOT	STR TOT	LT	ST	RT	EB TOT	LT	ST	RT	WB TOT	STR TOT	Grand Total
15:00 16:00	131	324	121	**576**	155	370	179	**704**	**1280**	143	462	168	**773**	242	785	216	**1243**	**2016**	**3296**
16:00 17:00	146	352	75	**573**	148	355	160	**663**	**1236**	202	582	206	**990**	198	720	211	**1129**	**2119**	**3355**
17:00 18:00	170	271	81	**522**	145	339	121	**605**	**1127**	112	371	171	**654**	152	527	161	**840**	**1494**	**2621**
Sub Total	447	947	277	**1671**	448	1064	460	**1972**	**3643**	457	1415	545	**2417**	592	2032	588	**3212**	**5629**	**9272**
U Turns				**0**				**0**	**0**				**4**				**3**	**7**	**7**
Total	447	947	277	**1671**	448	1064	460	**1972**	**3643**	457	1415	545	**2421**	592	2032	588	**3215**	**5636**	**9279**
EQ 12Hr	621	1316	385	**2323**	623	1479	639	**2741**	**5064**	635	1967	758	**3365**	823	2824	817	**4469**	**7834**	**12898**
Note: These values are calculated by multiplying the totals by the appropriate expansion factor.														**1.39**					
AVG 12Hr	559	1184	346	**2091**	561	1744	754	**2467**	**4558**	572	1770	682	**3028**	741	2542	735	**4022**	**7051**	**11608**
Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor.														**.90**					
AVG 24Hr	732	1551	453	**2739**	735	2285	988	**3232**	**5971**	749	2319	893	**3967**	971	3330	963	**5269**	**9237**	**15206**
Note: These volumes are calculated by multiplying the Average Daily 12 hr. totals by 12 to 24 expansion factor.														**1.31**					

Note: U-Turns provided for approach totals. Refer to 'U-Turn' Report for specific breakdown.

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

PM Period 15 Minute Increments

		ALTA VISTA DR									SMYTH RD									
		Northbound				Southbound					Eastbound				Westbound					
Time Period		LT	ST	RT	N TOT	LT	ST	RT	S TOT	STR TOT	LT	ST	RT	E TOT	LT	ST	RT	W TOT	STR TOT	Grand Total
15:00	15:15	37	87	28	152	38	69	48	155	656	32	109	46	187	52	207	63	322	656	816
15:15	15:30	30	91	40	161	39	106	42	187	753	34	116	45	195	60	161	69	292	753	835
15:30	15:45	33	81	32	146	39	98	44	181	684	32	106	43	181	67	227	36	330	684	838
17:45	18:00	47	62	22	131	33	105	25	163	601	32	75	43	150	36	127	29	192	601	636
15:45	16:00	31	65	21	117	39	97	45	181	650	45	131	34	210	63	190	48	302	650	810
16:00	16:15	38	83	22	143	33	85	52	170	700	53	128	55	238	67	222	44	333	700	884
16:15	16:30	48	79	19	146	41	91	46	178	711	51	179	42	272	50	194	74	318	711	914
16:30	16:45	37	104	21	162	40	85	36	161	705	60	124	49	234	46	154	38	238	705	795
16:45	17:00	23	86	13	122	34	94	26	154	644	38	151	60	249	35	150	55	240	644	765
17:00	17:15	39	73	22	134	40	98	38	176	624	29	117	33	179	36	159	45	240	624	729
17:15	17:30	44	74	20	138	42	68	32	142	585	25	92	46	164	42	136	50	228	585	672
17:30	17:45	40	62	17	119	30	68	26	124	523	26	87	49	162	38	105	37	180	523	585
Total:		447	947	277	1671	448	1064	460	1972	7836	457	1415	545	2421	592	2032	588	3215	7836	9,279

Note: U-Turns are included in Totals.

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

PM Period Cyclist Volume

Time Period		ALTA VISTA DR Northbound	ALTA VISTA DR Southbound	ALTA VISTA DR Street Total	SMYTH RD Eastbound	SMYTH RD Westbound	SMYTH RD Street Total	Grand Total
15:00	15:15	0	0	0	0	0	0	0
15:15	15:30	0	0	0	0	0	0	0
15:30	15:45	0	0	0	1	0	1	1
17:45	18:00	0	1	1	0	3	3	4
15:45	16:00	1	0	1	2	0	2	3
16:00	16:15	3	0	3	1	2	3	6
16:15	16:30	1	1	2	1	1	2	4
16:30	16:45	0	0	0	0	2	2	2
16:45	17:00	1	1	2	0	0	0	2
17:00	17:15	0	1	1	2	2	4	5
17:15	17:30	1	0	1	0	0	0	1
17:30	17:45	1	0	1	0	2	2	3
Total		8	4	**12**	7	12	19	31

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

PM Period Pedestrian Volume

Time Period		ALTA VISTA DR NB Approach (E or W Crossing)	ALTA VISTA DR SB Approach (E or W Crossing)	ALTA VISTA DR Total	SMYTH RD EB Approach (N or S Crossing)	SMYTH RD WB Approach (N or S Crossing)	SMYTH RD Total	Grand Total
15:00	15:15	1	3	**4**	0	3	**3**	**7**
15:15	15:30	2	0	**2**	0	0	**0**	**2**
15:30	15:45	3	1	**4**	0	0	**0**	**4**
17:45	18:00	2	0	**2**	0	0	**0**	**2**
15:45	16:00	5	8	**13**	2	3	**5**	**18**
16:00	16:15	2	3	**5**	2	0	**2**	**7**
16:15	16:30	2	7	**9**	3	1	**4**	**13**
16:30	16:45	0	2	**2**	4	0	**4**	**6**
16:45	17:00	1	3	**4**	3	0	**3**	**7**
17:00	17:15	0	6	**6**	0	2	**2**	**8**
17:15	17:30	0	3	**3**	1	1	**2**	**5**
17:30	17:45	1	1	**2**	0	1	**1**	**3**
Total	.....	19	37	**56**	15	11	**26**	**82**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

PM Period Heavy Vehicles

ALTA VISTA DR **SMYTH RD**

Time Period		Northbound				Southbound					Eastbound				Westbound					Grand Total
		LT	ST	RT	N TOT	LT	ST	RT	S TOT	STR TOT	LT	ST	RT	E TOT	LT	ST	RT	W TOT	STR TOT	
15:00	15:15	1	1	1	**4**	0	1	2	**7**	**11**	1	8	0	**18**	0	6	2	**17**	**35**	**23**
15:15	15:30	0	2	1	**8**	1	2	0	**9**	**17**	1	11	1	**15**	2	2	3	**20**	**35**	**26**
15:30	15:45	0	3	1	**7**	1	2	0	**7**	**14**	0	10	1	**15**	0	4	1	**17**	**32**	**23**
17:45	18:00	0	0	0	**2**	0	2	0	**2**	**4**	0	0	0	**2**	0	2	0	**2**	**4**	**4**
15:45	16:00	0	0	1	**7**	0	3	0	**3**	**10**	0	9	0	**15**	3	6	0	**19**	**34**	**22**
16:00	16:15	1	2	0	**5**	0	2	0	**7**	**12**	0	3	0	**8**	0	2	3	**8**	**16**	**14**
16:15	16:30	2	2	0	**6**	1	1	0	**7**	**13**	1	10	0	**18**	1	5	2	**19**	**37**	**25**
16:30	16:45	0	0	1	**4**	0	1	0	**3**	**7**	1	8	0	**14**	2	5	1	**17**	**31**	**19**
16:45	17:00	0	3	0	**4**	0	1	0	**4**	**8**	0	7	0	**11**	0	4	0	**11**	**22**	**15**
17:00	17:15	2	0	0	**4**	1	2	0	**4**	**8**	1	7	0	**13**	0	3	0	**11**	**24**	**16**
17:15	17:30	0	1	0	**2**	2	1	0	**5**	**7**	1	5	0	**8**	0	2	0	**9**	**17**	**12**
17:30	17:45	0	2	0	**7**	0	4	0	**7**	**14**	0	1	0	**6**	1	5	1	**8**	**14**	**14**
Total:	None	6	16	5	**60**	6	22	2	**65**	**125**	6	79	2	**143**	9	46	13	**158**	**301**	**213**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ALTA VISTA DR @ SMYTH RD

Survey Date: Wednesday, October 02, 2024 **WO No:** 42262

Start Time: 07:00 **Device:** Miovision

PM Period 15 Minute U-Turn Total

ALTA VISTA DR **SMYTH RD**

Time Period		Northbound U-Turn Total	Southbound U-Turn Total	Eastbound U-Turn Total	Westbound U-Turn Total	Total
15:00	15:15	0	0	0	0	0
15:15	15:30	0	0	0	2	2
15:30	15:45	0	0	0	0	0
17:45	18:00	0	0	0	0	0
15:45	16:00	0	0	0	1	1
16:00	16:15	0	0	2	0	2
16:15	16:30	0	0	0	0	0
16:30	16:45	0	0	1	0	1
16:45	17:00	0	0	0	0	0
17:00	17:15	0	0	0	0	0
17:15	17:30	0	0	1	0	1
17:30	17:45	0	0	0	0	0
Total		0	0	4	3	7

Appendix C

Synchro Intersection Worksheets – Existing Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	643	143	101	619	218	291	418	141	205	248	151
Future Volume (vph)	160	643	143	101	619	218	291	418	141	205	248	151
Satd. Flow (prot)	1658	3264	1463	1610	3264	1463	1658	1684	1477	1658	1661	1471
Flt Permitted	0.209			0.245			0.412			0.132		
Satd. Flow (perm)	362	3264	1419	414	3264	1380	712	1684	1422	230	1661	1428
Satd. Flow (RTOR)			139			139			137			137
Lane Group Flow (vph)	178	714	159	112	688	242	323	464	157	228	276	168
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	11.0	24.8	24.8	11.0	24.8	24.8	11.1	29.1	29.1	11.1	29.1	29.1
Total Split (s)	20.0	41.0	41.0	17.0	38.0	38.0	20.0	37.0	37.0	20.0	37.0	37.0
Total Split (%)	17.4%	35.7%	35.7%	14.8%	33.0%	33.0%	17.4%	32.2%	32.2%	17.4%	32.2%	32.2%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
All-Red Time (s)	2.2	2.5	2.5	2.2	2.5	2.5	2.8	2.8	2.8	2.8	2.8	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.8	5.8	5.5	5.8	5.8	6.1	6.1	6.1	6.1	6.1	6.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	49.6	36.9	36.9	44.4	34.3	34.3	45.1	31.2	31.2	44.5	30.9	30.9
Actuated g/C Ratio	0.43	0.32	0.32	0.39	0.30	0.30	0.39	0.27	0.27	0.39	0.27	0.27
v/c Ratio	0.60	0.68	0.29	0.43	0.71	0.48	0.82	1.02	0.32	0.88	0.62	0.35
Control Delay	28.3	38.2	8.3	24.1	41.0	17.8	43.2	89.0	9.6	61.5	44.0	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.3	38.2	8.3	24.1	41.0	17.8	43.2	89.0	9.6	61.5	44.0	10.8
LOS	C	D	A	C	D	B	D	F	A	E	D	B
Approach Delay		32.0			33.8			60.1			41.6	
Approach LOS		C			C			E			D	
Queue Length 50th (m)	23.8	73.5	3.1	14.4	72.9	17.7	49.3	~111.5	3.3	35.4	54.6	5.2
Queue Length 95th (m)	38.7	96.4	18.5	25.4	96.0	42.7	#87.4	#173.4	19.5	#78.8	82.9	22.2
Internal Link Dist (m)		141.5			873.5			174.7			326.9	
Turn Bay Length (m)	20.0		5.0	30.0		15.0	30.0		10.0	30.0		20.0
Base Capacity (vph)	324	1048	549	285	973	509	393	456	485	262	446	483
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.68	0.29	0.39	0.71	0.48	0.82	1.02	0.32	0.87	0.62	0.35

Intersection Summary

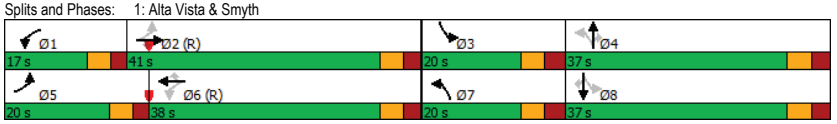
Cycle Length: 115
Actuated Cycle Length: 115
Offset: 2 (2%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 41.4	Intersection LOS: D
Intersection Capacity Utilization 82.2%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Alta Vista & Smyth



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	183	544	174	254	854	207	150	308	94	152	371	187
Future Volume (vph)	183	544	174	254	854	207	150	308	94	152	371	187
Satd. Flow (prot)	1658	3202	1477	1658	3296	1477	1658	1701	1463	1642	1701	1477
Flt Permitted	0.166			0.285			0.167			0.209		
Satd. Flow (perm)	287	3202	1387	493	3296	1360	290	1701	1429	360	1701	1443
Satd. Flow (RTOR)			139			139			137			137
Lane Group Flow (vph)	203	604	193	282	949	230	167	342	104	169	412	208
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	11.0	24.8	24.8	11.0	24.8	24.8	11.1	29.1	29.1	11.1	29.1	29.1
Total Split (s)	17.0	44.0	44.0	22.0	49.0	49.0	15.0	31.0	31.0	18.0	34.0	34.0
Total Split (%)	14.8%	38.3%	38.3%	19.1%	42.6%	42.6%	13.0%	27.0%	27.0%	15.7%	29.6%	29.6%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
All-Red Time (s)	2.2	2.5	2.5	2.2	2.5	2.5	2.8	2.8	2.8	2.8	2.8	2.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.8	5.8	5.5	5.8	5.8	6.1	6.1	6.1	6.1	6.1	6.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	51.1	39.6	39.6	58.9	43.5	43.5	34.3	25.4	25.4	39.3	27.9	27.9
Actuated g/C Ratio	0.44	0.34	0.34	0.51	0.38	0.38	0.30	0.22	0.22	0.34	0.24	0.24
v/c Ratio	0.78	0.55	0.34	0.70	0.76	0.38	0.87	0.91	0.25	0.68	1.00	0.46
Control Delay	40.7	33.1	10.8	25.5	36.1	12.3	67.6	73.1	4.2	40.2	88.6	16.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.7	33.1	10.8	25.5	36.1	12.3	67.6	73.1	4.2	40.2	88.6	16.9
LOS	D	C	B	C	D	B	E	E	A	D	F	B
Approach Delay		30.3			30.3			59.9			59.3	
Approach LOS		C			C			E			E	
Queue Length 50th (m)	23.7	58.5	8.4	34.8	97.4	13.6	25.9	76.0	0.0	26.3	93.1	12.8
Queue Length 95th (m)	#56.8	76.6	26.1	52.8	122.4	33.4	#60.1	#129.8	7.5	#43.9	#156.0	34.8
Internal Link Dist (m)		141.5			873.5			174.7			326.9	
Turn Bay Length (m)	20.0		5.0	30.0		15.0	30.0		10.0	30.0		20.0
Base Capacity (vph)	265	1103	569	424	1248	601	192	376	422	257	412	453
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.55	0.34	0.67	0.76	0.38	0.87	0.91	0.25	0.66	1.00	0.46

Intersection Summary
Cycle Length: 115
Actuated Cycle Length: 115
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00
Intersection Signal Delay: 40.9 — Intersection LOS: D
Intersection Capacity Utilization 84.6% — ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Alta Vista & Smyth



Appendix D

Collision Data

CGH TRANSPORTATION

Accident Date	Accident Year	Accident Time	Location	Environment Condition	Light	Traffic Control	Traffic Control Condition	Classification Of Accident	Initial Impact Type	Road Surface Condition	# Vehicles	# Motorcycles	# Bicycles	# Pedestrians
2018-01-16	2018	14:00	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	02 - Wet	2	0	0	0
2018-02-10	2018	22:38	ALTA VISTA DR @ SMYTH RD (0011353)	03 - Snow	07 - Dark	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	04 - Slush	2	0	0	0
2018-02-25	2018	9:45	ALTA VISTA DR @ SMYTH RD (0011353)	04 - Freezing Rain	01 - Daylight	01 - Traffic signal	0	02 - Non-fatal injury	03 - Rear end	06 - Ice	2	0	0	0
2018-03-08	2018	18:53	ALTA VISTA DR @ SMYTH RD (0011353)	03 - Snow	05 - Dusk	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	06 - Ice	2	0	0	0
2018-03-29	2018	14:33	ALTA VISTA DR @ SMYTH RD (0011353)	02 - Rain	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	04 - Sideswipe	02 - Wet	2	0	0	0
2018-05-26	2018	11:13	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	02 - Wet	2	0	0	0
2018-05-30	2018	13:00	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	01 - Dry	2	0	0	0
2018-06-26	2018	8:50	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	01 - Dry	2	0	0	0
2018-07-12	2018	22:16	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	07 - Dark	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	01 - Dry	2	0	0	0
2018-07-17	2018	12:11	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	04 - Sideswipe	01 - Dry	2	0	0	0
2018-09-03	2018	21:01	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	07 - Dark	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	01 - Dry	2	0	0	0
2018-09-17	2018	17:30	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	02 - Non-fatal injury	05 - Turning movement	01 - Dry	2	0	0	0
2018-09-19	2018	12:30	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	01 - Dry	2	0	0	0
2018-11-17	2018	17:13	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	05 - Dusk	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	02 - Wet	2	0	0	0
2018-11-26	2018	17:20	ALTA VISTA DR @ SMYTH RD (0011353)	02 - Rain	07 - Dark	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	02 - Wet	2	0	0	0
2018-12-06	2018	10:15	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	04 - Sideswipe	02 - Wet	2	0	0	0
2019-04-09	2019	6:48	ALTA VISTA DR @ SMYTH RD (0011353)	03 - Snow	03 - Dawn	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	06 - Ice	2	0	0	0
2019-04-16	2019	7:43	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	01 - Dry	2	0	0	0
2019-04-24	2019	19:05	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	01 - Dry	2	0	0	0
2019-05-04	2019	23:06	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	07 - Dark	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	01 - Dry	2	0	0	0
2019-05-07	2019	19:25	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	01 - Dry	2	0	0	0
2019-07-09	2019	9:30	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	01 - Dry	2	0	0	0
2019-07-11	2019	19:50	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	01 - Dry	2	0	0	0
2019-07-17	2019	17:10	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	01 - Dry	2	0	0	0
2019-08-01	2019	16:58	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	01 - Dry	2	0	0	0
2019-08-05	2019	16:25	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	01 - Dry	2	0	0	0
2019-08-13	2019	19:33	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	01 - Dry	2	0	0	0
2019-08-28	2019	16:30	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	01 - Dry	2	0	0	0
2019-09-27	2019	7:38	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	01 - Dry	2	0	0	0
2019-09-30	2019	23:09	ALTA VISTA DR @ SMYTH RD (0011353)	02 - Rain	07 - Dark	01 - Traffic signal	0	02 - Non-fatal injury	05 - Turning movement	02 - Wet	2	0	0	0
2019-10-09	2019	19:03	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	05 - Dusk	01 - Traffic signal	0	02 - Non-fatal injury	05 - Turning movement	01 - Dry	2	0	0	0
2019-10-22	2019	17:00	ALTA VISTA DR @ SMYTH RD (0011353)	02 - Rain	01 - Daylight	01 - Traffic signal	0	02 - Non-fatal injury	05 - Turning movement	02 - Wet	2	0	0	0
2019-10-25	2019	13:40	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	02 - Non-fatal injury	05 - Turning movement	01 - Dry	2	0	0	0
2019-11-25	2019	17:03	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	07 - Dark	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	01 - Dry	2	0	0	0
2019-11-29	2019	8:38	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	02 - Non-fatal injury	02 - Angle	01 - Dry	3	0	0	0
2019-11-30	2019	12:00	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	01 - Dry	2	0	0	0
2020-01-19	2020	21:01	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	07 - Dark	01 - Traffic signal	0	02 - Non-fatal injury	02 - Angle	03 - Loose snow	2	0	0	0
2020-03-27	2020	14:30	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	01 - Dry	2	0	0	0
2020-06-17	2020	12:26	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	02 - Angle	01 - Dry	2	0	0	0
2020-08-07	2020	15:01	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	01 - Dry	2	0	0	0
2021-02-16	2021	15:57	ALTA VISTA DR @ SMYTH RD (0011353)	03 - Snow	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	03 - Loose snow	2	0	0	0
2021-07-26	2021	21:00	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	05 - Dusk	01 - Traffic signal	0	03 - P.D. only	02 - Angle	01 - Dry	2	0	0	0
2021-09-16	2021	11:30	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	01 - Dry	2	0	0	0
2021-10-10	2021	16:25	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	01 - Dry	2	0	0	0
2021-11-10	2021	8:15	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	01 - Dry	2	0	0	0
2021-11-11	2021	7:56	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	02 - Non-fatal injury	07 - SMV other	01 - Dry	1	0	0	1
2021-11-23	2021	21:00	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	07 - Dark	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	01 - Dry	2	0	0	0
2021-12-02	2021	6:40	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	07 - Dark	01 - Traffic signal	0	02 - Non-fatal injury	03 - Rear end	01 - Dry	2	0	0	0
2021-12-10	2021	8:06	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	02 - Non-fatal injury	05 - Turning movement	04 - Slush	2	0	0	0
2022-01-19	2022	7:35	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	03 - Dawn	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	05 - Packed snow	2	0	0	0
2022-01-31	2022	15:36	ALTA VISTA DR @ SMYTH RD (0011353)	03 - Snow	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	05 - Packed snow	2	0	0	0
2022-02-17	2022	19:00	ALTA VISTA DR @ SMYTH RD (0011353)	03 - Snow	07 - Dark	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	06 - Ice	2	0	0	0
2022-05-09	2022	19:21	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	05 - Turning movement	01 - Dry	2	0	0	0
2022-06-08	2022	18:11	ALTA VISTA DR @ SMYTH RD (0011353)	01 - Clear	01 - Daylight	01 - Traffic signal	0	03 - P.D. only	03 - Rear end	01 - Dry	2	0	0	0
2018-01-13	2018	12:30	ALTA VISTA DR btwn SMYTH RD & VALOUR DR (__4000NL)	05 - Drifting Snow	01 - Daylight	10 - No control	0	03 - P.D. only	07 - SMV other	05 - Packed snow	1	0	0	0
2019-10-11	2019	12:20	ALTA VISTA DR btwn SMYTH RD & VALOUR DR (__4000NL)	01 - Clear	01 - Daylight	10 - No control	0	03 - P.D. only	03 - Rear end	01 - Dry	2	0	0	0
2022-04-27	2022	15:18	ALTA VISTA DR btwn SMYTH RD & VALOUR DR (__4000NL)	01 - Clear	01 - Daylight	10 - No control	0	02 - Non-fatal injury	01 - Approaching	01 - Dry	2	0	0	0

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: ALTA VISTA DR @ SMYTH RD

Traffic Control: Traffic signal

Total Collisions: 46

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Apr-09, Tue,06:48	Snow	Rear end	P.D. only	Ice	East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Apr-16, Tue,07:43	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Apr-24, Wed,19:05	Clear	Rear end	P.D. only	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Turning right	Automobile, station wagon	Other motor vehicle	
2019-May-04, Sat,23:06	Clear	Turning movement	P.D. only	Dry	North	Turning left	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-May-07, Tue,19:25	Clear	Rear end	P.D. only	Dry	South	Turning right	Automobile, station wagon	Other motor vehicle	0
					South	Turning right	Automobile, station wagon	Other motor vehicle	
2019-Jul-09, Tue,09:30	Clear	Rear end	P.D. only	Dry	South	Going ahead	Pick-up truck	Other motor vehicle	0
					South	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Jul-11, Thu,19:50	Clear	Rear end	P.D. only	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Turning right	Unknown	Other motor vehicle	
2019-Jul-17, Wed,17:10	Clear	Turning movement	P.D. only	Dry	East	Turning left	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Aug-01, Thu,16:58	Clear	Turning movement	P.D. only	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Aug-05, Mon,16:25	Clear	Rear end	P.D. only	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Turning right	Passenger van	Other motor vehicle	
2019-Aug-13, Tue,19:33	Clear	Rear end	P.D. only	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Turning right	Automobile, station wagon	Other motor vehicle	
2019-Aug-28, Wed,16:30	Clear	Rear end	P.D. only	Dry	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: ALTA VISTA DR @ SMYTH RD

Traffic Control: Traffic signal

Total Collisions: 46

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Sep-27, Fri,07:38	Clear	Turning movement	P.D. only	Dry	West	Turning left	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Sep-30, Mon,23:09	Rain	Turning movement	Non-fatal injury	Wet	West	Turning left	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Oct-09, Wed,19:03	Clear	Turning movement	Non-fatal injury	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Oct-22, Tue,17:00	Rain	Turning movement	Non-fatal injury	Wet	West	Turning left	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Oct-25, Fri,13:40	Clear	Turning movement	Non-fatal injury	Dry	West	Turning left	Delivery van	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Nov-25, Mon,17:03	Clear	Turning movement	P.D. only	Dry	East	Turning left	Passenger van	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Nov-29, Fri,08:38	Clear	Angle	Non-fatal injury	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Turning left	Automobile, station wagon	Other motor vehicle	
					South	Turning left	Automobile, station wagon	Other motor vehicle	
2019-Nov-30, Sat,12:00	Clear	Rear end	P.D. only	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Unknown	Other motor vehicle	
2020-Jan-19, Sun,21:01	Clear	Angle	Non-fatal injury	Loose snow	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Mar-27, Fri,14:30	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Pick-up truck	Other motor vehicle	
2020-Jun-17, Wed,12:26	Clear	Angle	P.D. only	Dry	North	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Ambulance	Other motor vehicle	

From: January 1, 2019 **To:** December 31, 2024

Location: ALTA VISTA DR @ SMYTH RD

Traffic Control: Traffic signal **Total Collisions:** 46

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2020-Aug-07, Fri,15:01	Clear	Rear end	P.D. only	Dry	West	Going ahead	Pick-up truck	Other motor vehicle	0
					West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2021-Feb-16, Tue,15:57	Snow	Turning movement	P.D. only	Loose snow	West	Turning left	Passenger van	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Jul-26, Mon,21:00	Clear	Angle	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Sep-16, Thu,11:30	Clear	Turning movement	P.D. only	Dry	North	Turning left	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Oct-10, Sun,16:25	Clear	Rear end	P.D. only	Dry	South	Going ahead	Unknown	Other motor vehicle	0
					South	Stopped	Pick-up truck	Other motor vehicle	
2021-Nov-10, Wed,08:15	Clear	Rear end	P.D. only	Dry	North	Turning right	Pick-up truck	Other motor vehicle	0
					North	Turning right	Pick-up truck	Other motor vehicle	
2021-Nov-11, Thu,07:56	Clear	SMV other	Non-fatal injury	Dry	South	Turning left	Unknown	Pedestrian	1
2021-Nov-23, Tue,21:00	Clear	Rear end	P.D. only	Dry	East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2021-Dec-02, Thu,06:40	Clear	Rear end	Non-fatal injury	Dry	East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2021-Dec-10, Fri,08:06	Clear	Turning movement	Non-fatal injury	Slush	West	Turning left	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Jan-19, Wed,07:35	Clear	Turning movement	P.D. only	Packed snow	East	Turning left	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Pick-up truck	Other motor vehicle	
2022-Jan-31, Mon,15:36	Snow	Turning movement	P.D. only	Packed snow	East	Turning left	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services
Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: ALTA VISTA DR @ SMYTH RD

Traffic Control: Traffic signal **Total Collisions:** 46

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2022-Feb-17, Thu,19:00	Snow	Rear end	P.D. only	Ice	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Pick-up truck	Other motor vehicle	
2022-May-09, Mon,19:21	Clear	Turning movement	P.D. only	Dry	North	Turning left	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-May-23, Mon,09:52	Clear	Angle	Non-fatal injury	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Turning left	Automobile, station wagon	Other motor vehicle	
2022-Jun-08, Wed,18:11	Clear	Rear end	P.D. only	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Turning right	Automobile, station wagon	Other motor vehicle	
2022-Dec-20, Tue,16:10	Clear	Turning movement	P.D. only	Dry	East	Stopped	Automobile, station wagon	Other motor vehicle	0
					East	Turning right	Automobile, station wagon	Other motor vehicle	
2024-Feb-29, Thu,10:25	Clear	Turning movement	P.D. only	Dry	West	Going ahead	Delivery van	Other motor vehicle	0
					East	Turning left	Automobile, station wagon	Other motor vehicle	
2024-May-15, Wed,22:00	Clear	Turning movement	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Turning left	Automobile, station wagon	Other motor vehicle	
2024-Jun-04, Tue,09:00	Clear	Rear end	P.D. only	Dry	North	Stopped	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-Jul-04, Thu,06:40	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2024-Jul-26, Fri,17:30	Clear	Rear end	P.D. only	Dry	North	Going ahead	Pick-up truck	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2024-Sep-02, Mon,11:56	Clear	Angle	Non-fatal injury	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	

Appendix E

TDM Checklists

TDM Measures Checklist:
Residential Developments (multi-family, condominium or subdivision)

Legend

BASIC — The measure is generally feasible and effective, and in most cases would benefit the development and its users

BETTER — The measure could maximize support for users of sustainable modes, and optimize development performance

★ — The measure is one of the most dependably effective tools to encourage the use of sustainable modes

		TDM measures: *Residential developments*	Check if proposed & add descriptions
	1.	**TDM PROGRAM MANAGEMENT**	
	1.1	**Program coordinator**	
BASIC ★	1.1.1	Designate an internal coordinator, or contract with an external coordinator	☐
	1.2	**Travel surveys**	
BETTER	1.2.1	Conduct periodic surveys to identify travel-related behaviours, attitudes, challenges and solutions, and to track progress	☐
	2.	**WALKING AND CYCLING**	
	2.1	**Information on walking/cycling routes & destinations**	
BASIC	2.1.1	Display local area maps with walking/cycling access routes and key destinations at major entrances *(multi-family, condominium)*	☑
	2.2	**Bicycle skills training**	
BETTER	2.2.1	Offer on-site cycling courses for residents, or subsidize off-site courses	☐

		TDM measures: *Residential developments*	Check if proposed & add descriptions
	3.	**TRANSIT**	
	3.1	**Transit information**	
BASIC	3.1.1	Display relevant transit schedules and route maps at entrances *(multi-family, condominium)*	☑
BETTER	3.1.2	Provide real-time arrival information display at entrances *(multi-family, condominium)*	☐
	3.2	**Transit fare incentives**	
BASIC ★	3.2.1	Offer PRESTO cards preloaded with one monthly transit pass on residence purchase/move-in, to encourage residents to use transit	☑
BETTER	3.2.2	Offer at least one year of free monthly transit passes on residence purchase/move-in	☐
	3.3	**Enhanced public transit service**	
BETTER ★	3.3.1	Contract with OC Transpo to provide early transit services until regular services are warranted by occupancy levels *(subdivision)*	☐
	3.4	**Private transit service**	
BETTER	3.4.1	Provide shuttle service for seniors homes or lifestyle communities (e.g. scheduled mall or supermarket runs)	☐
	4.	**CARSHARING & BIKESHARING**	
	4.1	**Bikeshare stations & memberships**	
BETTER	4.1.1	Contract with provider to install on-site bikeshare station *(multi-family)*	☐
BETTER	4.1.2	Provide residents with bikeshare memberships, either free or subsidized *(multi-family)*	☐
	4.2	**Carshare vehicles & memberships**	
BETTER	4.2.1	Contract with provider to install on-site carshare vehicles and promote their use by residents	☐
BETTER	4.2.2	Provide residents with carshare memberships, either free or subsidized	☐
	5.	**PARKING**	
	5.1	**Priced parking**	
BASIC ★	5.1.1	Unbundle parking cost from purchase price *(condominium)*	☑
BASIC ★	5.1.2	Unbundle parking cost from monthly rent *(multi-family)*	☑

			TDM measures: *Residential developments*	Check if proposed & add descriptions
		6.	**TDM MARKETING & COMMUNICATIONS**	
		6.1	**Multimodal travel information**	
BASIC	★	6.1.1	Provide a multimodal travel option information package to new residents	☑
		6.2	**Personalized trip planning**	
BETTER	★	6.2.1	Offer personalized trip planning to new residents	☐

TDM-Supportive Development Design and Infrastructure Checklist:
Residential Developments (multi-family or condominium)

Legend

REQUIRED	The Official Plan or Zoning By-law provides related guidance that must be followed
BASIC	The measure is generally feasible and effective, and in most cases would benefit the development and its users
BETTER	The measure could maximize support for users of sustainable modes, and optimize development performance

		TDM-supportive design & infrastructure measures: *Residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
	1.	**WALKING & CYCLING: ROUTES**	
	1.1	**Building location & access points**	
BASIC	1.1.1	Locate building close to the street, and do not locate parking areas between the street and building entrances	☐
BASIC	1.1.2	Locate building entrances in order to minimize walking distances to sidewalks and transit stops/stations	☑
BASIC	1.1.3	Locate building doors and windows to ensure visibility of pedestrians from the building, for their security and comfort	☑
	1.2	**Facilities for walking & cycling**	
REQUIRED	1.2.1	Provide convenient, direct access to stations or major stops along rapid transit routes within 600 metres; minimize walking distances from buildings to rapid transit; provide pedestrian-friendly, weather-protected (where possible) environment between rapid transit accesses and building entrances; ensure quality linkages from sidewalks through building entrances to integrated stops/stations *(see Official Plan policy 4.3.3)*	☑
REQUIRED	1.2.2	Provide safe, direct and attractive pedestrian access from public sidewalks to building entrances through such measures as: reducing distances between public sidewalks and major building entrances; providing walkways from public streets to major building entrances; within a site, providing walkways along the front of adjoining buildings, between adjacent buildings, and connecting areas where people may congregate, such as courtyards and transit stops; and providing weather protection through canopies, colonnades, and other design elements wherever possible *(see Official Plan policy 4.3.12)*	☑

		TDM-supportive design & infrastructure measures: *Residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
REQUIRED	1.2.3	Provide sidewalks of smooth, well-drained walking surfaces of contrasting materials or treatments to differentiate pedestrian areas from vehicle areas, and provide marked pedestrian crosswalks at intersection sidewalks *(see Official Plan policy 4.3.10)*	☑
REQUIRED	1.2.4	Make sidewalks and open space areas easily accessible through features such as gradual grade transition, depressed curbs at street corners and convenient access to extra-wide parking spaces and ramps *(see Official Plan policy 4.3.10)*	☑
REQUIRED	1.2.5	Include adequately spaced inter-block/street cycling and pedestrian connections to facilitate travel by active transportation. Provide links to the existing or planned network of public sidewalks, multi-use pathways and on-road cycle routes. Where public sidewalks and multi-use pathways intersect with roads, consider providing traffic control devices to give priority to cyclists and pedestrians *(see Official Plan policy 4.3.11)*	☐
BASIC	1.2.6	Provide safe, direct and attractive walking routes from building entrances to nearby transit stops	☑
BASIC	1.2.7	Ensure that walking routes to transit stops are secure, visible, lighted, shaded and wind-protected wherever possible	☐
BASIC	1.2.8	Design roads used for access or circulation by cyclists using a target operating speed of no more than 30 km/h, or provide a separated cycling facility	☑
	1.3	**Amenities for walking & cycling**	
BASIC	1.3.1	Provide lighting, landscaping and benches along walking and cycling routes between building entrances and streets, sidewalks and trails	☐
BASIC	1.3.2	Provide wayfinding signage for site access (where required, e.g. when multiple buildings or entrances exist) and egress (where warranted, such as when directions to reach transit stops/stations, trails or other common destinations are not obvious)	☐

		TDM-supportive design & infrastructure measures: *Residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
	2.	**WALKING & CYCLING: END-OF-TRIP FACILITIES**	
	2.1	**Bicycle parking**	
REQUIRED	2.1.1	Provide bicycle parking in highly visible and lighted areas, sheltered from the weather wherever possible *(see Official Plan policy 4.3.6)*	☑
REQUIRED	2.1.2	Provide the number of bicycle parking spaces specified for various land uses in different parts of Ottawa; provide convenient access to main entrances or well-used areas *(see Zoning By-law Section 111)*	☑
REQUIRED	2.1.3	Ensure that bicycle parking spaces and access aisles meet minimum dimensions; that no more than 50% of spaces are vertical spaces; and that parking racks are securely anchored *(see Zoning By-law Section 111)*	☑
BASIC	2.1.4	Provide bicycle parking spaces equivalent to the expected number of resident-owned bicycles, plus the expected peak number of visitor cyclists	☑
	2.2	**Secure bicycle parking**	
REQUIRED	2.2.1	Where more than 50 bicycle parking spaces are provided for a single residential building, locate at least 25% of spaces within a building/structure, a secure area (e.g. supervised parking lot or enclosure) or bicycle lockers *(see Zoning By-law Section 111)*	☑
BETTER	2.2.2	Provide secure bicycle parking spaces equivalent to at least the number of units at condominiums or multi-family residential developments	☐
	2.3	**Bicycle repair station**	
BETTER	2.3.1	Provide a permanent bike repair station, with commonly used tools and an air pump, adjacent to the main bicycle parking area (or secure bicycle parking area, if provided)	☐
	3.	**TRANSIT**	
	3.1	**Customer amenities**	
BASIC	3.1.1	Provide shelters, lighting and benches at any on-site transit stops	☐
BASIC	3.1.2	Where the site abuts an off-site transit stop and insufficient space exists for a transit shelter in the public right-of-way, protect land for a shelter and/or install a shelter	☐
BETTER	3.1.3	Provide a secure and comfortable interior waiting area by integrating any on-site transit stops into the building	☐

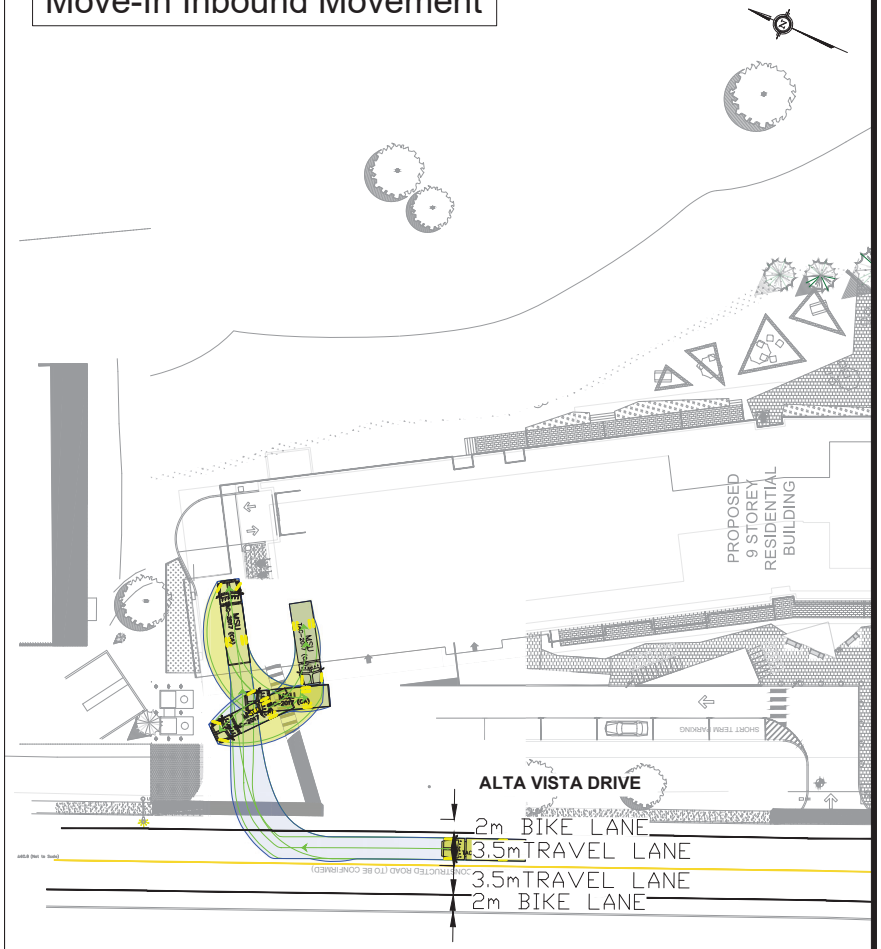
		TDM-supportive design & infrastructure measures: *Residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
	4.	**RIDESHARING**	
	4.1	**Pick-up & drop-off facilities**	
BASIC	4.1.1	Provide a designated area for carpool drivers (plus taxis and ride-hailing services) to drop off or pick up passengers without using fire lanes or other no-stopping zones	☑
	5.	**CARSHARING & BIKESHARING**	
	5.1	**Carshare parking spaces**	
BETTER	5.1.1	Provide up to three carshare parking spaces in an R3, R4 or R5 Zone for specified residential uses *(see Zoning By-law Section 94)*	☐
	5.2	**Bikeshare station location**	
BETTER	5.2.1	Provide a designated bikeshare station area near a major building entrance, preferably lighted and sheltered with a direct walkway connection	☐
	6.	**PARKING**	
	6.1	**Number of parking spaces**	
REQUIRED	6.1.1	Do not provide more parking than permitted by zoning, nor less than required by zoning, unless a variance is being applied for	☐
BASIC	6.1.2	Provide parking for long-term and short-term users that is consistent with mode share targets, considering the potential for visitors to use off-site public parking	☐
BASIC	6.1.3	Where a site features more than one use, provide shared parking and reduce the cumulative number of parking spaces accordingly *(see Zoning By-law Section 104)*	☐
BETTER	6.1.4	Reduce the minimum number of parking spaces required by zoning by one space for each 13 square metres of gross floor area provided as shower rooms, change rooms, locker rooms and other facilities for cyclists in conjunction with bicycle parking *(see Zoning By-law Section 111)*	☐
	6.2	**Separate long-term & short-term parking areas**	
BETTER	6.2.1	Provide separate areas for short-term and long-term parking (using signage or physical barriers) to permit access controls and simplify enforcement (i.e. to discourage residents from parking in visitor spaces, and vice versa)	☐

Appendix F

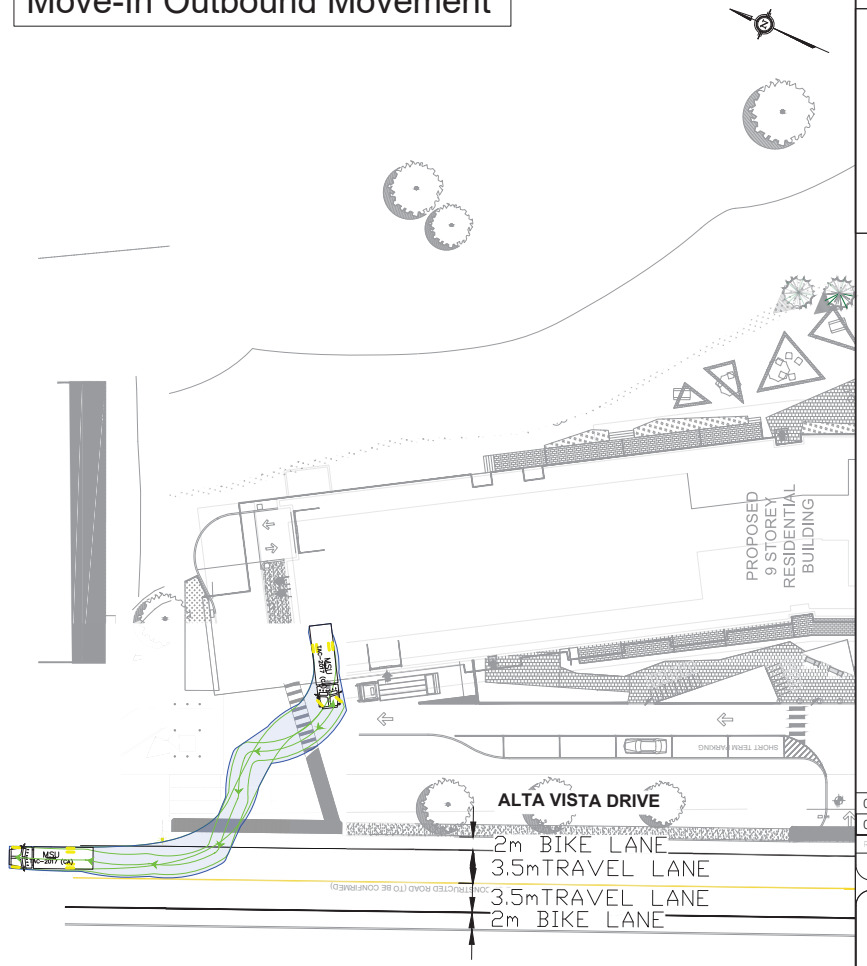
Turning Templates

CGH TRANSPORTATION

Move-In Inbound Movement

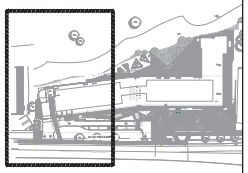


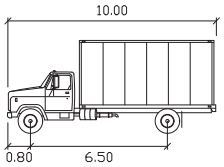
Move-In Outbound Movement



Notes:

Key Plan:





MSU

	meters
Width	: 2.60
Track	: 2.60
Lock to Lock Time	6.0
Steering Angle	: 40.2

REV	DESCRIPTION:	BY	DATE:
03	Issued for Review:	CH	2026-10-07
02	Issued for Review:	YP	2026-06-18

STATUS:

CGH Transportation
6 Plaza Court
Ottawa, ON
K2G 3Z1
(343) 999-9117

CLIENT: SOUL ALTA VISTA GP INC.

ARCHITECT:

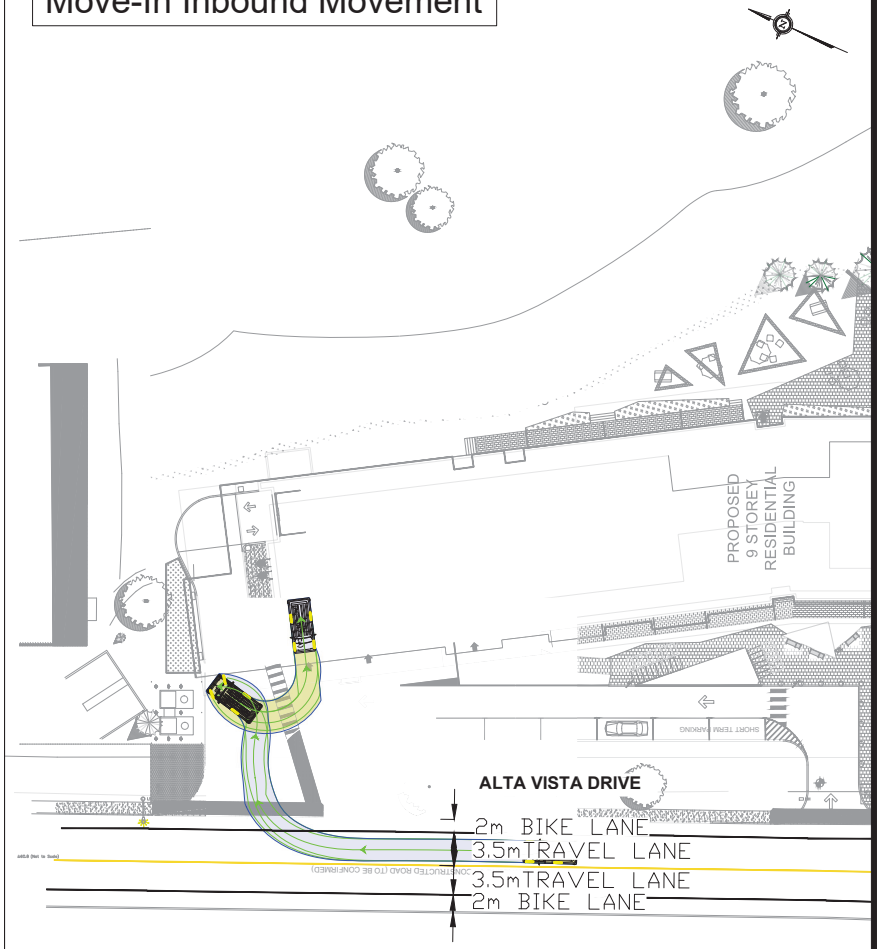
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TITLE: Turning Movements (1)

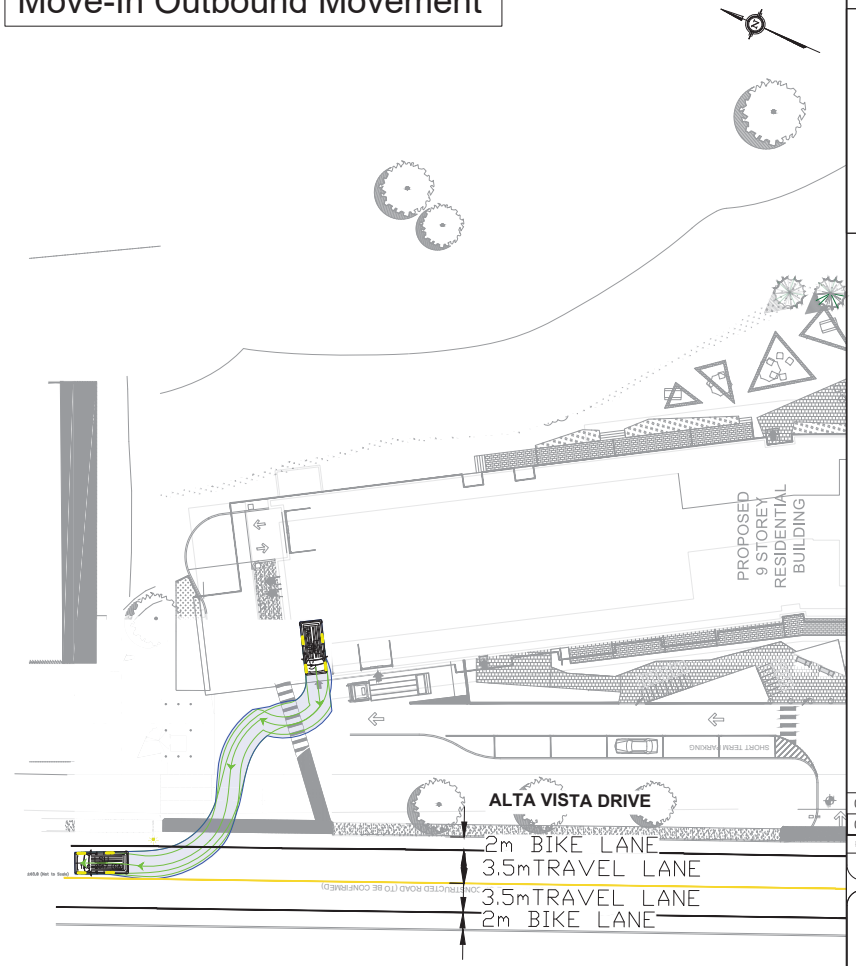
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NTS	2026-10-07	CH	JK

PROJECT NO:	DRAWING NO:	REVISION:
2025-050	001	03

Move-In Inbound Movement

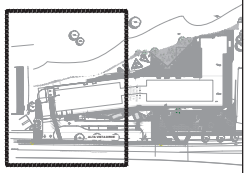


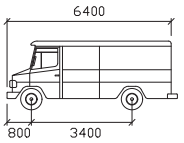
Move-In Outbound Movement



Notes:

Key Plan:





LSU

	mm
Width	: 2600
Track	: 2600
Lock to Lock Time	: 6.0
Steering Angle	: 40.3

REV	DESCRIPTION:	BY	DATE:
03	Issued for Review:	CH	2026-10-07
02	Issued for Review:	YP	2026-06-18

STATUS:

CGH Transportation
6 Plaza Court
Ottawa, ON
K2G 3Z1
(343) 999-9117

CLIENT: SOUL ALTA VISTA GP INC.

ARCHITECT:

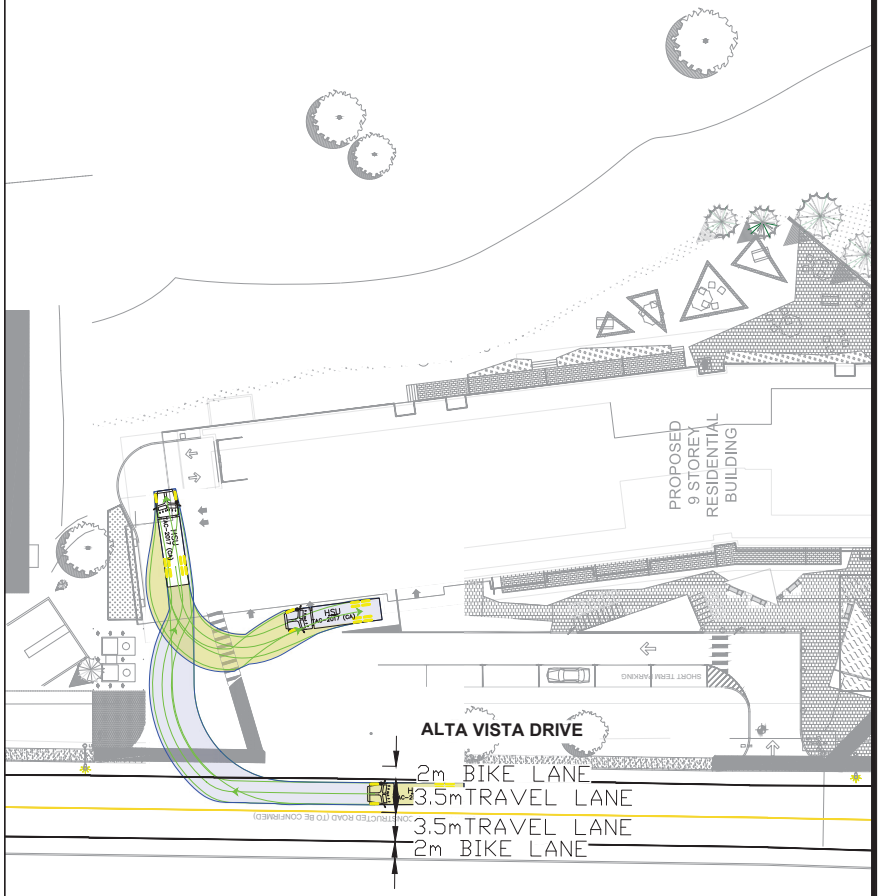
SITE: 1867 ALTA VISTA

TITLE: Turning Movements (2)

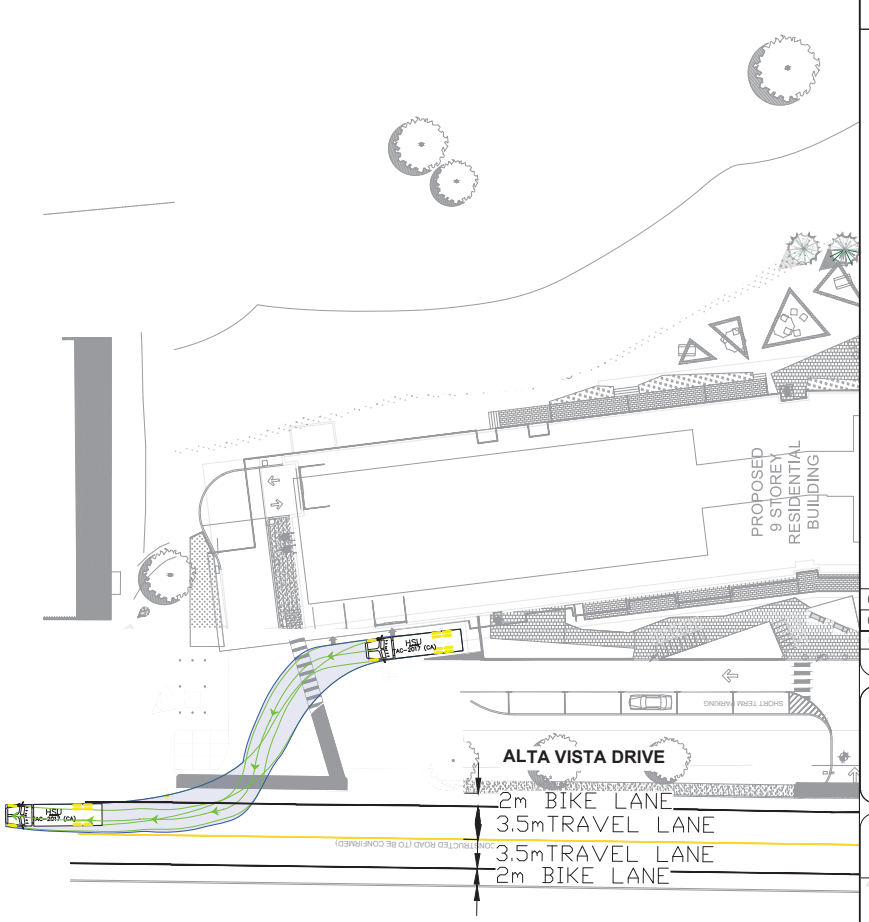
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PROJECT NO:	DRAWING NO:	REVISION:
2025-050	002	03

Garbage Collection Inbound Movement

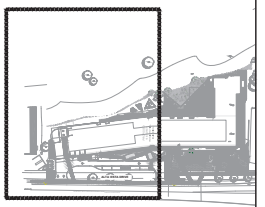


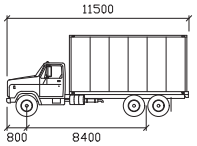
Garbage Collection Outbound Movement



Notes:

Key Plan:





HSU

mm

Width	: 2600
Track	: 2600
Lock to Lock Time	6.0
Steering Angle	: 40.0

REV.	DESCRIPTION:	BY:	DATE:
03	Issued for Review:	CH	2026-10-07
02	Issued for Review:	YP	2026-06-18

STATUS:

CGH Transportation
6 Plaza Court
Ottawa, ON
K2G 3Z1
(343) 999-9117

CLIENT: SOUL ALTA VISTA GP INC.

ARCHITECT:

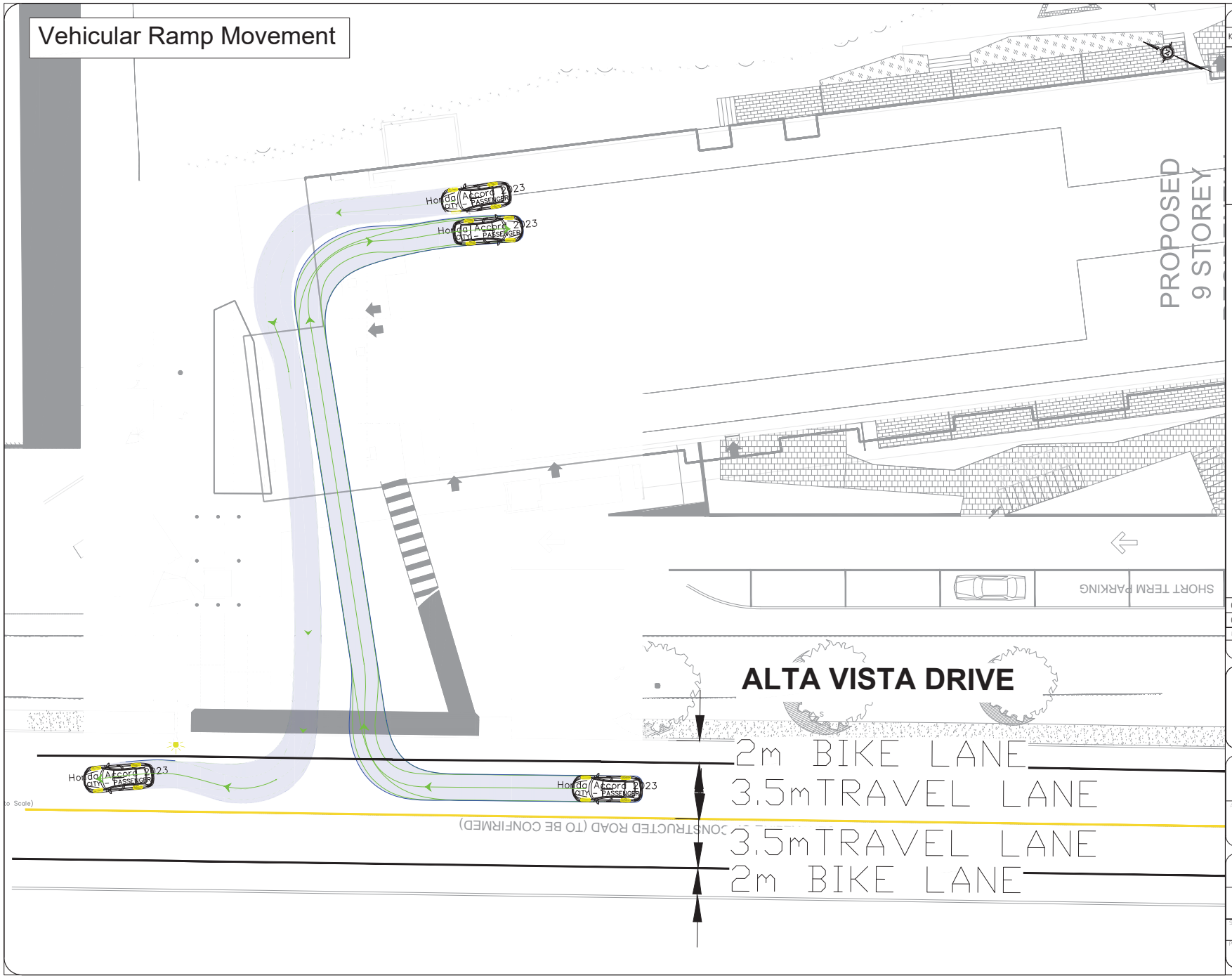
SITE: 1867 ALTA VISTA

TITLE: Turning Movements (3)

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
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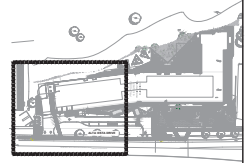
PROJECT NO:	DRAWING NO:	REVISION:
2025-050	003	03

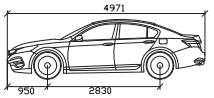
Vehicular Ramp Movement



Notes:

Key Plan:





Honda Accord 2023

	mm
Width	: 1862
Track	: 1826
Lock to Lock Time	: 6.0
Steering Angle	34.0

REV.	DESCRIPTION:	BY:	DATE:
03	Issued for Review:	CH	2026-10-07
02	Issued for Review:	YP	2026-06-18

STATUS:

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(343) 999-9117

CLIENT: SOUL ALTA VISTA GP INC.

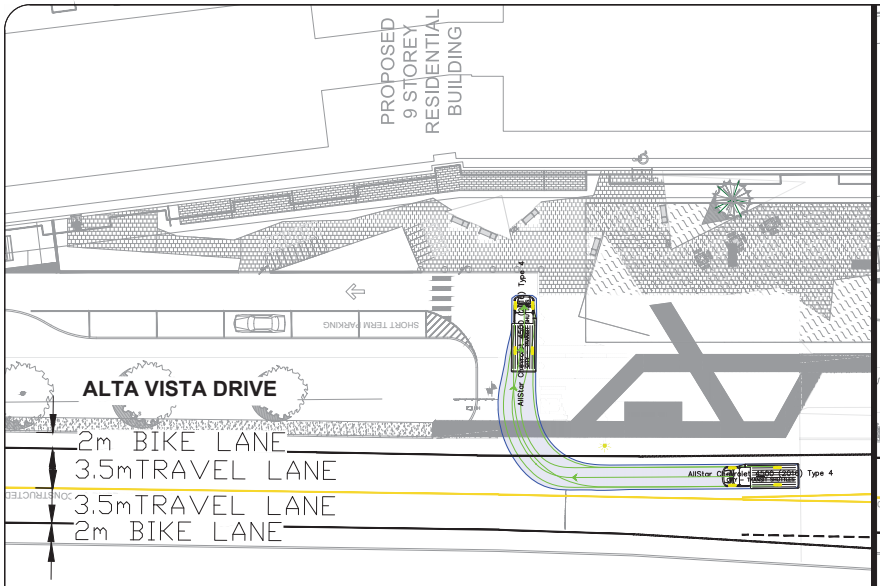
ARCHITECT:

SITE: 1867 ALTA VISTA

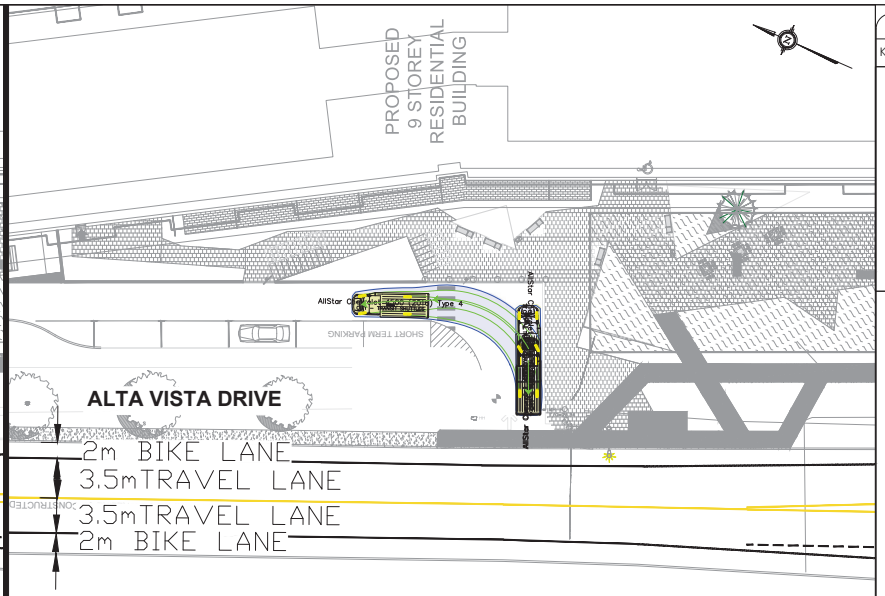
TITLE: Turning Movements (4)

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
NTS	2026-10-07	CH	JK

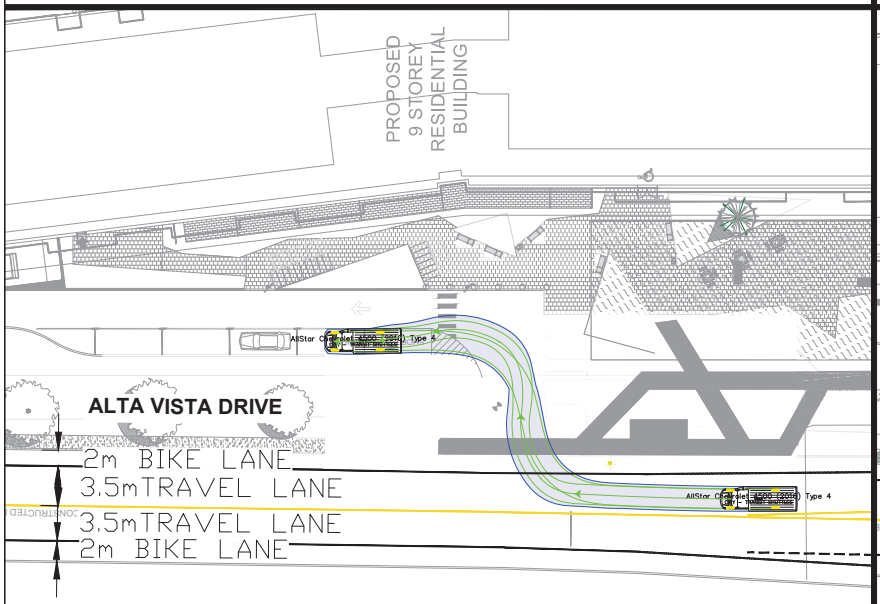
PROJECT NO:	DRAWING NO:	REVISION:
2025-050	004	03



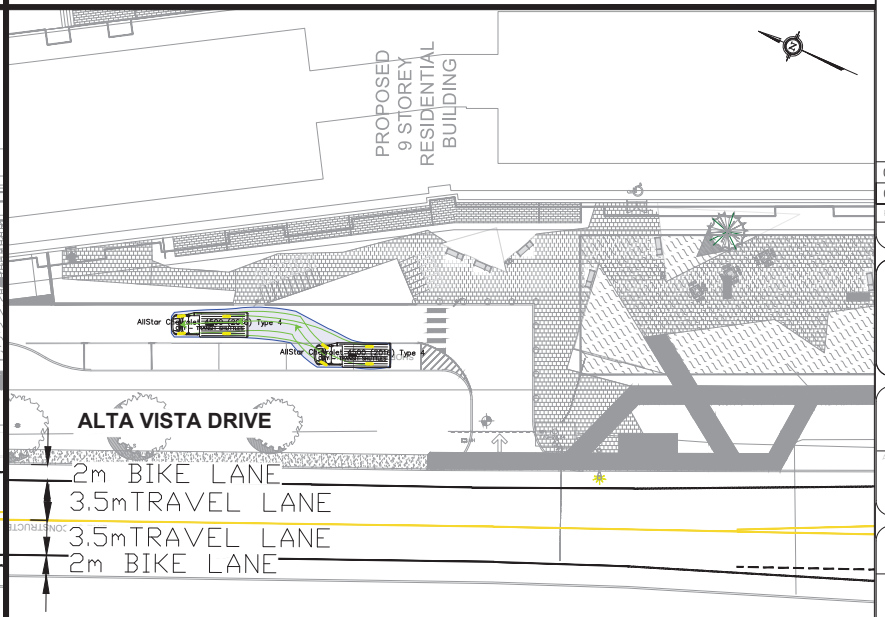
Para Transpo Inbound Movement - Side Boarding



Para Transpo Outbound Movement - Side Boarding



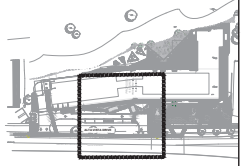
Para Transpo Inbound Movement - Rear Boarding

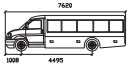


Para Transpo Outbound Movement - Rear Boarding

Notes:

Key Plan:





AllStar Chevrolet 4500 (2016) Type 4

	mm
Width	2438
Track	1957
Lock to Lock Time	6.0
Steering Angle	34.2

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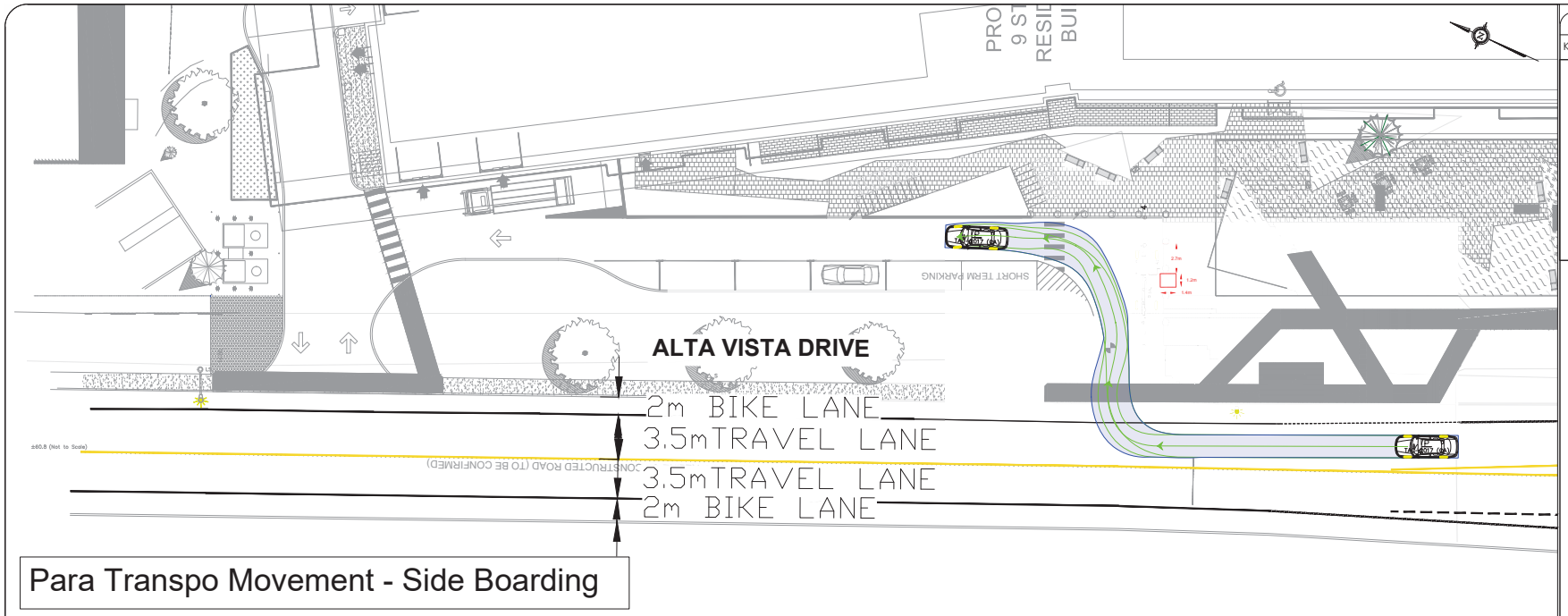
ARCHITECT:

SITE: 1867 ALTA VISTA

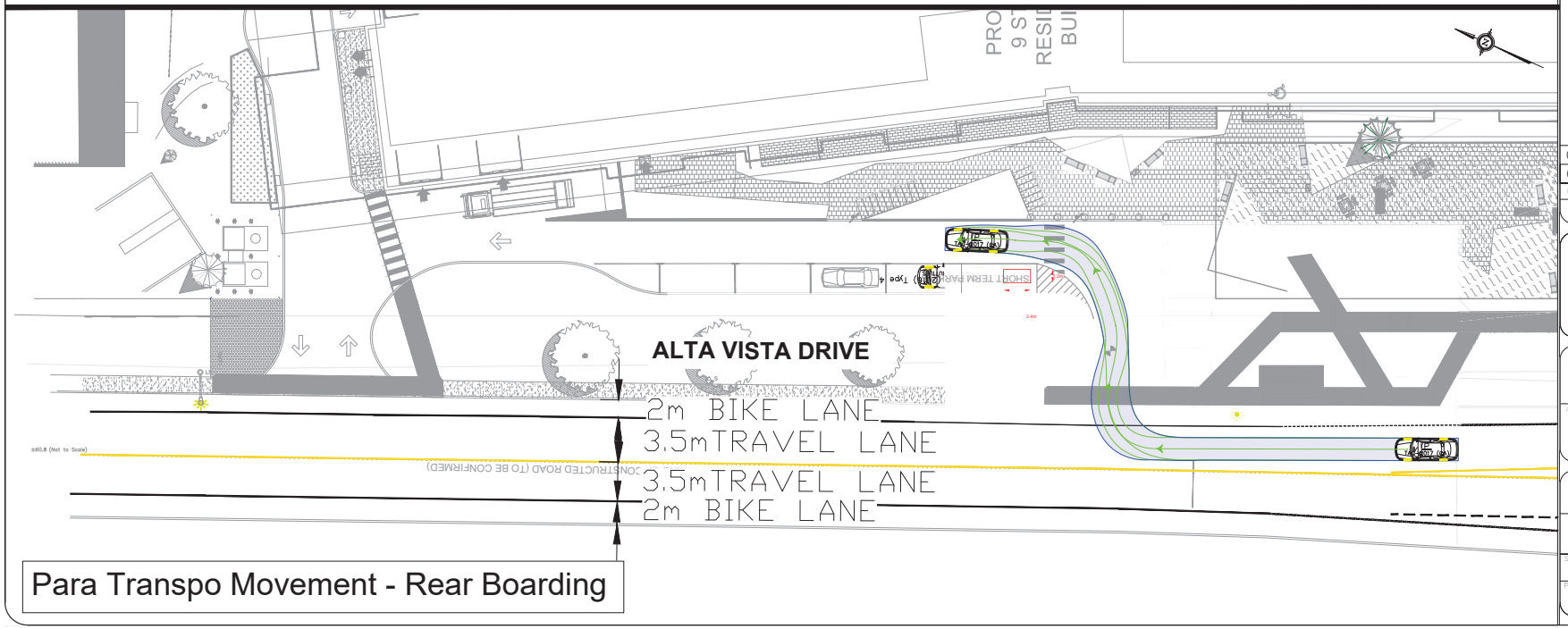
TITLE: Turning Movements (5)

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
NTS	2026-10-07	CH	JK

PROJECT NO:	DRAWING NO:	REVISION:
2025-050	005	03



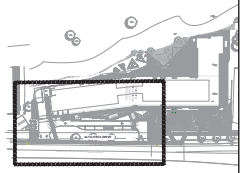
Para Transpo Movement - Side Boarding

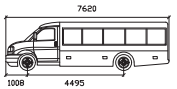


Para Transpo Movement - Rear Boarding

Notes:

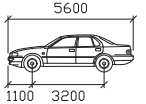
Key Plan:





AllStar Chevrolet
4500 (2016) Type 4

	mm
Width	: 2438
Track	: 1957
Lock to Lock Time	: 6.0
Steering Angle	: 34.2



P

	mm
Width	: 2000
Track	: 2000
Lock to Lock Time	6.0
Steering Angle	: 35.9

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CLIENT: SOUL ALTA VISTA GP INC.

ARCHITECT:

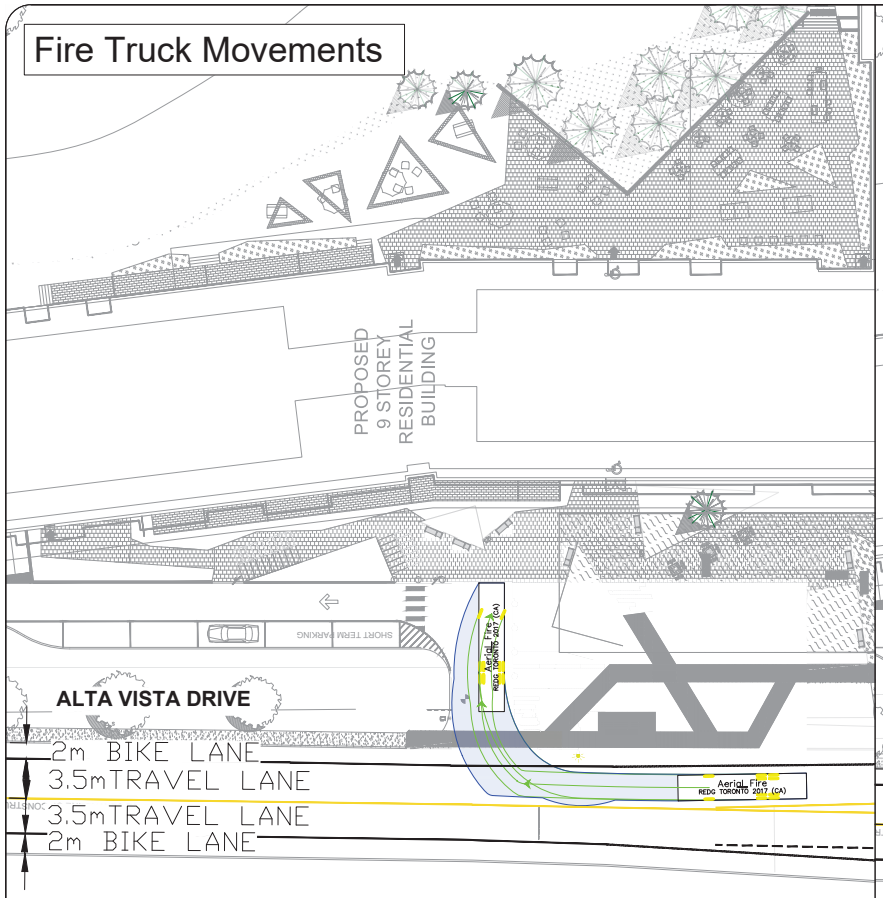
SITE: 1867 ALTA VISTA

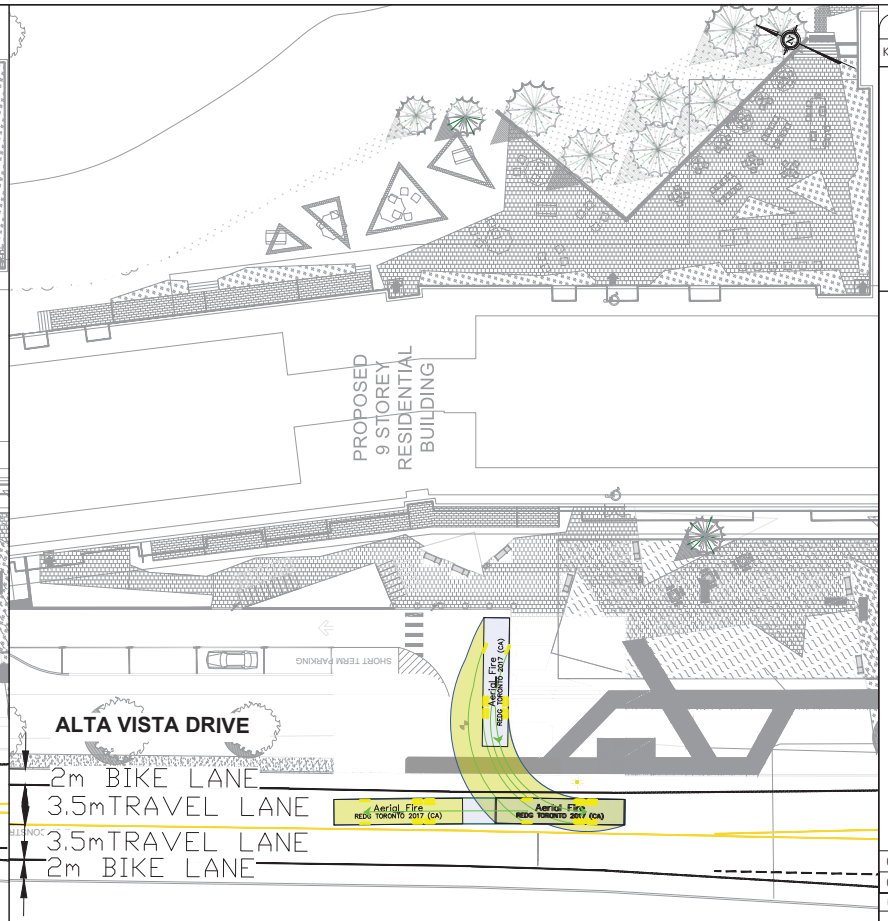
TITLE: Turning Movements (6)

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
NTS	2026-10-07	CH	JK

PROJECT NO:	DRAWING NO:	REVISION:
2025-050	006	03

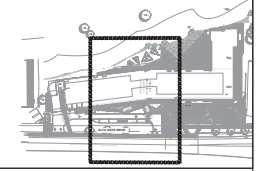
Fire Truck Movements

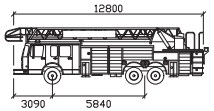




Notes:

Key Plan:





Aerial Fire

	mm
Width	: 2540
Track	: 2540
Lock to Lock Time	: 6.0
Steering Angle	: 37.0

REV.	DESCRIPTION:	BY:	DATE:
03	Issued for Review:	CH	2026-10-07
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STATUS:

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CLIENT: SOUL ALTA VISTA GP INC.

ARCHITECT:

SITE: 1867 ALTA VISTA

TITLE: Turning Movements (7)

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
NTS	2026-10-07	CH	JK

PROJECT NO:	DRAWING NO:	REVISION:
2025-050	007	03

Appendix G

MMLOS Analysis

CGH TRANSPORTATION

Multi-Modal Level of Service - Segments Form

Project: 1867 Alta Vista
Consultant: CGH Transportation
Date: Dec 16, 2025
Scenario: Ex/Fut

	Segment Name	**Alta Vista Drive**			
	OP Transect / Policy Area	**Within 600m of a rapid transit station**			
	Segment Component	**Majority (>50%)**		**Critical**	
	Side of Street	**W or N**	**E or S**	**W or N**	**E or S**
Pedestrian	**PLOS Inputs**				
	Posted Speed (km/h)	50 km/h		50 km/h	
	Two-Way ADT	15,578		15,578	
	Pedestrian Facility	Sidewalk	Sidewalk	Sidewalk	Sidewalk
	Does the facility meet the TMP Sidewalk or MUP Policy? If not, for MUPs, does the location have a low volume of peak daily users AND are pedestrian volumes likely less than 20% of total users?	Yes	Yes	Yes	Yes
	Facility Width (m)	1.80m	1.80m	1.80m	1.80m
	Offset from Motor Vehicle Travel Lanes (m)	≥ 3.0m	1.5-2.99m	1.5-2.99m	1.5-2.99m
	Presence of Adjacent Parking?	No	-	-	-
	General Purpose Curb Lane ADT	-	> 3000	> 3000	> 3000
	Max. Distance between Controlled Crossings (m)	> 400m	> 400m	> 400m	> 400m
	Score	**3.75**	**3.00**	**3.00**	**3.00**
	PLOS	**B**	**C**	**C**	**C**
	Target PLOS	**A**			
Bicycle	**BLOS Inputs**				
	Cycling Route Classification	**Cross-Town Bikeway**			
	Cycling Facility	Painted or Physically Separated Bike Lanes	Painted or Physically Separated Bike Lanes	Painted or Physically Separated Bike Lanes	Painted or Physically Separated Bike Lanes
	Is the minimum level of separation provided according to OTM Book 18 Pre-Selection Nomograph - Rural Context (Figure 5.6)? (for paved shoulders)	-	-	-	-
	Facility Operation	Unidirectional	Unidirectional	Unidirectional	Unidirectional
	Pedestrian/Cyclist Volume	-	-	-	-
	Facility Width	2.0-2.5m	2.0-2.5m	2.0-2.5m	2.0-2.5m
	Boulevard/Buffer Width (excluding curb)	Advisory bike lane	Advisory bike lane	Advisory bike lane	Advisory bike lane
	Unsignalized Roadway Crossing Type (where cyclists are required to yield)	None	None	None	None
	Number of Travel Lanes at Crossing	-	-	-	-
	Crossing includes Median Refuge (≥ 2.7m)	-	-	-	-
	Cross-street Posted Speed (km/h)	-	-	-	-
	Cycling Path Blockages (e.g. bus stops and/or loading zones)	Rare	Rare	Frequent, Short Duration	Frequent, Short Duration
	Score	**2.88**	**2.88**	**2.58**	**2.58**
	BLOS	**C**	**C**	**C**	**C**
	Target BLOS	**A**			
Transit	**TLOS Inputs**				
	Transit Facility	**TP - Isolated Measures**			
	Facility Type	Mixed Traffic	Mixed Traffic		
	Expected Transit Running Time	Unimpeded	Unimpeded		
	Transit Travel Speed (if available)	Enter Speed (if available)	Enter Speed (if available)		
	TLOS	**B**	**B**		
	Target TLOS	**C**			
Public Realm	**PRLOS Inputs**				
	Context	Other Streets	Other Streets		
	Inner Boulevard Width	2.0-3.99m	≤ 0.6m		
	Middle Boulevard Width	≤ 0.5m	≤ 0.5m		
	Outer Boulevard (Frontage) Width	≥ 3.0m	≥ 3.0m		
	Transit Route on Segment?	Yes	Yes		
	Bus Stop Elements	Curbside landing zone with shelter behind sidewalk	Curbside landing zone with shelter behind sidewalk		
	Number of Midblock Traffic Lanes (both travel directions)	≤ 2			
	Score	**21.00**	**21.00**		
	PRLOS	**B**	**B**		
		B			