Environmental Noise Feasibility Study

12101 Creditview Road

Proposed Residential Subdivision

Town of Caledon

June 18, 2025 Project: 1240461

Prepared for

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EXECUTIVE SUMMARY

Valcoustics Canada Ltd. (VCL) was retained to prepare an Environmental Noise Feasibility Study for the proposed residential subdivision in support of the Draft Plan of Subdivision application submission to the Town of Caledon.

The proposed development will consist of blocks of detached dwellings (Blocks 1-18), street townhouses or detached dwellings (Blocks 19-23), street townhouses (Blocks 24-29), dual-frontage townhouses (Blocks 30 and 31), rear lane detached dwellings (Blocks 32-47), rear lane townhouses or detached dwellings (Blocks 48 and 49), and rear-lane townhouses (Blocks 50-60). The development also includes two mixed-use blocks (Blocks 61 and 62), a public elementary school block (Block 63), a neighbourhood park (Block 64), and a stormwater management pond (Block 69). Blocks 73-83 will be residential reserve blocks, which will be combined with lots/blocks on neighbouring land parcels to form complete residential lots/blocks.

It is noted that Detail 'A' on the Draft Plan of Subdivision includes an option for Blocks 13-16 to become back-to-back townhouses instead of detached dwelling blocks, and Blocks 40 and 41 to become dual frontage townhouses instead of detached dwelling blocks.

The transportation noise source with the potential for impact at the subject site is road traffic on Mayfield Road, Creditview Road, and the new internal collector roadways in the development (Welsh Avenue, Blackhorse Drive, Tim Manley Avenue, and Speersville Drive).

To meet the noise guideline limits for transportation noise sources:

- The provision for adding air conditioning is required at:
 - ➤ The first row of dwellings adjacent to Creditview Road, Welsh Avenue, Blackhorse Drive, Tim Manley Avenue, and Speersville Drive;
 - The southernmost blocks of detached and townhouse dwellings (closest to Mayfield Road); and
 - The southernmost dwelling in the second row from Creditview Road.
- Sound barriers 1.8 m high in height are required at:

- > Dwellings with rear yards siding onto internal collector roadways Blackhorse Drive and Tim Manley Avenue; and
- The southernmost dwellings with rear yards closest to Mayfield Road.
- Refer to Figure 2 for exact locations.
- Exterior wall and window construction meeting the minimum non-acoustical requirements of the Ontario Building Code (OBC) will be sufficient to meet the indoor noise criteria at all dwellings.

The noise mitigation requirements are summarized on Figure 2 and Table 3.

Plans showing the layouts for the mixed-use blocks and the future school block have not yet been prepared. The noise control requirements at these blocks should be determined once the site layout has been finalized. This should be done as part of the Site Plan Approval (SPA) applications for these blocks.

1.0 INTRODUCTION

Valcoustics Canada Ltd. (VCL) has been retained to prepare an Environmental Noise Feasibility Study for the proposed residential subdivision in support of the Draft Plan of Subdivision application submission to the Town of Caledon.

The sound levels from the environmental noise sources have been predicted on site and compared to the applicable MECP, Region of Peel and Town of Caledon noise guideline limits. Where sound level excesses above these guideline limits occur, noise mitigation measures have been recommended.

1.1 THE SITE AND SURROUNDING AREA

The subject site is located within the Alloa Secondary Plan area in the Town of Caledon. The site is generally rectangular shaped, with a projection south to Mayfield Road at the southeast corner. The site is bounded by:

- Future residential, school, natural heritage system and mixed-use development blocks (part
 of the Alloa Secondary Plan) to the north and east;
- Future residential and mixed-use development blocks (part of the Alloa Secondary Plan), with Mayfield Road beyond, to the south. The southeast corner of the site also projects south such that it is adjacent to Mayfield Road; and
- Creditview Road, with future natural heritage system blocks, residential development blocks and commercial development blocks to the west (part of the Alloa Secondary Plan).

The site is currently occupied by agricultural land and associated single-family dwellings that will be demolished as part of the development.

Figure 1 shows a key plan.

This report was prepared using the Draft Plan of Subdivision, prepared by Glen Schnarr and Associates, dated May 13, 2025. The Draft Plan of Subdivision is included as Figure 2.

1.2 THE PROPOSED DEVELOPMENT

The proposed development will consist of blocks of detached dwellings (Blocks 1-18), street townhouses or detached dwellings (Blocks 19-23), street townhouses (Blocks 24-29), dual-frontage townhouses (Blocks 30 and 31), rear lane detached dwellings (Blocks 32-47), rear lane townhouses or detached dwellings (Blocks 48 and 49), and rear-lane townhouses (Blocks 50-60). The development also includes two mixed-use blocks (Blocks 61 and 62), a public elementary school block (Block 63), a neighbourhood park (Block 64), and a stormwater management pond (Block 69). The site includes 10 residential reserve blocks (Blocks 73-83), which will be combined with lots/blocks on neighbouring land parcels to form complete residential lots/blocks.

It is noted that Detail 'A' on the Draft Plan of Subdivision includes an option for Blocks 13-16 to become back-to-back townhouses instead of detached dwelling blocks, and Blocks 40 and 41 to become dual-frontage townhouses instead of detached dwelling blocks.

It is understood that all townhouse blocks and detached dwellings will be up to three storeys in height.

The street townhouses, detached dwellings, and detached rear-lane dwellings will be provided with grade-level rear yard outdoor amenity space. The rear lane townhouses, dual-frontage townhouses and back-to-back townhouses will be provided with small (less than 4 m in depth) private balconies or terraces.

2.0 NOISE SOURCES

2.1 TRANSPORTATION SOURCES

There are road noise sources in the area that could impact the proposed residential development. There are no rail lines in the vicinity of the site. The site lies outside airport noise influence areas (i.e., areas at NEF/NEP 25 or higher). Thus, rail and aircraft noise were not considered further in this study.

2.1.1 Road Traffic

The roadways with the potential to impact the site are Mayfield Road, Creditview Road, and the internal collector roadways (Welsh Avenue, Blackhorse Drive, Tim Manley Avenue, and Speersville Drive). Other roadways are either far enough removed from the site or are anticipated to have low traffic volumes and are not expected to create a significant noise impact on the site.

The road traffic data is discussed below and summarized in Table 1. Road traffic correspondence is included as Appendix A.

Mayfield Road

Ultimate traffic data for Mayfield Road, including AADT, day/night split, posted speed limit, and truck percentages, was obtained from the Region of Peel.

Year 2041 turning movement counts (TMC) data for Mayfield Road was also provided in the Traffic Impact Study (TIS) for the Alloa Tertiary Plan Area (Reference 7), prepared by C.F. Crozier & Associates Inc. The TMC showed AM and PM peak volumes. The 24-hour traffic volumes were

calculated by multiplying the higher of either the AM or PM peak hour volume by 10. The data was projected to year 2045 using a 1.5% growth rate per year, the highest growth rate indicated for Mayfield Road in the TIS.

Since the ultimate traffic volumes provided by the Region were greater than the calculated 2045 data using the TIS data, the ultimate traffic data for Mayfield Road was used in this study.

Creditview Road

The future (year 2041) traffic volumes for Creditview Road were also obtained from the TIS for the Alloa Tertiary Plan area. The 24-hour traffic volumes were calculated from the peak hour TMC by multiplying the higher of the AM or PM peak hour volume by 10. The year 2041 volume was projected to the year 2045, using a growth rate of 2% compounded annually. This growth rate is consistent with the rate used in the TIS for Creditview Road.

Truck percentages were not included in the future traffic data. Truck percentages for Creditview Road were therefore calculated using the year 2024 TMC data provided in the TIS. The 2024 TMC data included in the TIS indicated that the truck volume was approximately 5% of the total vehicle volume on the existing roadways in the vicinity of the subject site, including Creditview Road. Current truck volumes mostly consist of buses (medium trucks). However, to be conservative, the future medium and heavy truck percentages were assumed to be 60% and 40% of the total truck volume, respectively, for the purposes of this study.

The day/night split for Creditview Road was assumed to be 90%/10%, as is typical for well travelled roadways. The speed limit on Creditview Road is 60 km/h.

Internal Roadways

The future internal collector roadways with the potential for impact at the subject site shown on the TIS correspond to the following streets in the Draft Plan of Subdivision:

- Street A of the TIS corresponds to Welsh Avenue on the Draft Plan;
- Street B of the TIS corresponds to Tim Manley Avenue on the Draft Plan;
- Street E of the TIS corresponds Speersville Drive of the Draft Plan; and
- Street F of the TIS corresponds Blackhorse Drive of the Draft Plan.

This report references the internal roadway names on the Draft Plan of Subdivision.

Future (year 2041) traffic volumes for these future internal roadways were provided in the TIS in the form of peak hour TMC data. The 24-hour traffic volumes were calculated by multiplying the higher of either the AM or PM peak hour volume by 10.

The TIS indicated that any traffic growth on these roadways would be attributable to the planned buildout of the Alloa Secondary Plan area, which was already captured in the calculations. The TIS therefore did not apply any growth rate to the collector roads in the study. Thus, to be consistent with the TIS, the year 2041 traffic volumes were also applied to the year 2045 condition.

Although current truck percentages are not available for the future internal roadways, some of these roadways will be continuations or connections to existing roads on the south side of Mayfield

Road or east side of Chinguacousy Road, outside of the Secondary Plan Area (that is, Creditview Road continues south of Mayfield Road; Speersville Drive connects to Brisdale Avenue, and Blackhorse Drive to Thornbush Avenue, south of Mayfield Road; Tim Manley Avenue continues east of Chinguacousy Road). Thus, the existing truck percentages on the existing roadways were used to estimate the future truck percentages on the internal roadways in the development.

The 2024 TMC data included in the TIS indicated that the truck volume was approximately 5% of the total vehicle volume on the existing roadways in the vicinity of the subject site. It is noted that the TMC for Tim Manley Avenue indicated truck volumes as high as 25%. It is noted that much of the traffic along this route is driven by construction vehicles attending the residential subdivision under construction east of Chiguacousy Road and is expected to decrease in the future. All internal roadways were therefore assumed to have a future total truck percentage of 5%. It is noted that the current truck volumes mostly consist of buses (medium trucks). However, to be conservative, the future medium and heavy truck percentages on the internal roadways were assumed to be 60% and 40% of the total truck volume, respectively.

The day/night splits for all internal collector roadways were assumed to be 90%/10%, as is typical for well travelled roadways. The traffic consultant indicated that the speed limits on the future internal collector roadways are expected to be 50 km/h, except for Tim Manley Avenue, which is expected to have a speed limit of 60 km/h.

TABLE 1 ROAD TRAFFIC DATA

		24-Hour	% Tr	ucks	Speed	Day/Night
Roadway	Year	Traffic Volume ⁽³⁾	Medium	Heavy	Limit (kph) ⁽⁴⁾	Split (%)
Mayfield Road ⁽¹⁾	Ultimate	48 600	Day: 2.6 Night: 1.5	Day: 2.5 Night: 1.8	80	85/15
Creditview Road ⁽²⁾	2041	7 080 (7 664)	3	2	60	90/10
Welsh Avenue ⁽²⁾	2045	2 590	3	2	50	90/10
Blackhorse Drive(2)	2045	4 170	3	2	50	90/10
Tim Manley Avenue ⁽²⁾	2045	4 540	3	2	60	90/10
Speersville Drive ⁽²⁾	2045	3 400	3	2	50	90/10

Notes:

- (1) Ultimate traffic data was obtained from the Region of Peel, and included AADT, truck percentages, day/night split, and posted speed limit.
- (2) The year 2045 24-hour traffic volume was calculated from the 2041 peak hour TMCs provided by C.F. Crozier & Associates Inc. The peak hour volumes were converted to 24-hour volumes by multiplying the higher of the am or pm peak hour volume by 10. Truck percentages were calculated from the existing (year 2024) turning movement counts. Speed limits were provided by C.F. Crozier & Associates Inc. The day/night splits were assumed.
- (3) Where traffic data has been projected to year 2045, the projected 24-hour volumes have been indicated in brackets.
- (4) Vehicle speeds 10 kph higher than the indicated speed limit were used in the analysis, per Town of Caledon guidelines.

2.2 STATIONARY SOURCES

Commercial Block

The Alloa Secondary Plan includes a commercial block at the northwest corner of the intersection of Creditview Road and Mayfield Road. The proposed commercial development for this block is currently in the Site Plan Approval (SPA) process. The commercial development will consist of retail uses (10 commercial/retail buildings including a drive-thru restaurant) and a gas bar.

The noise sources associated with this commercial block, with the potential for impact at the subject site, are the rooftop mechanical units, activities at the drive-thru, vehicle movements on site, and activities at the loading areas.

The proponent of the commercial block is currently working to address the noise impact onto the proposed noise sensitive uses on the adjacent sites within the secondary plan. This includes proposed residential uses at a closer setback distance than the subject site. The objective is to include noise mitigation measures at the commercial block to ensure the applicable noise guideline limits are met at the neighbouring parcels, including the subject site.

These noise mitigation measures have not yet been finalized, as they will, in part, be dependent on the final design of the closest residential dwellings to the commercial development. The potential noise mitigation measures at the commercial block include rooftop acoustical screens, rooftop parapet sound barriers, loading enclosures, sound barrier at the drive-thru, etc., wherever feasible.

Since the objective is to include noise mitigation measures at the commercial block, noise from the commercial block has not been considered further in this assessment.

Future Mixed-Use Blocks

There are future mixed-use blocks along Mayfield Road, including at the south end of the subject site. There is also a school block at the centre of the subject site. These blocks must be designed to meet the applicable noise guideline limits at the neighbouring residential dwellings, including dwellings within the subject site. As such, these blocks have not been considered further in this study.

3.0 ENVIRONMENTAL NOISE GUIDELINES

3.1 TRANSPORTATION SOURCES

3.1.1 MECP Publication NPC-300

The applicable noise guidelines for new residential development are those in MECP Publication NPC-300, "Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning".

The environmental noise guidelines of the MECP (Publication NPC-300) are discussed briefly below and summarized in Appendix C.

3.1.1.1 Architectural Elements

In the daytime (0700 to 2300), the indoor criterion for road noise is $L_{eq\ Day}^{(1)}$ of 45 dBA for sensitive spaces such as living/dining rooms, dens and bedrooms. At night, the indoor criterion for road noise is $L_{eq\ Night}^{(2)}$ of 45 dBA for sensitive spaces such as living/dining rooms and dens and 40 dBA for bedrooms.

The architectural design of the building envelope (walls, windows, etc.) must provide adequate sound isolation to achieve the above indoor sound level limits applying the outdoor sound level predicted at the facades.

3.1.1.2 Ventilation

When the daytime sound level ($L_{eq\;Day}$) at the exterior face of a noise sensitive window is greater than 65 dBA, means must be provided so that windows can be kept closed for noise control purposes and central air conditioning is required. For daytime sound levels between 56 dBA and 65 dBA inclusive, there need only be the provision for adding air conditioning. A warning clause advising the occupant of the potential interference with some activities is also required. At nighttime, air conditioning is required when the sound level exceeds 60 dBA ($L_{eq\;Night}$) at a noise sensitive window (provision for adding air conditioning is required when the sound level is greater than 50 dBA).

3.1.1.3 Outdoors

For OLA's, the guideline objective is 55 dBA $L_{eq\ Day}$, with an excess not exceeding 5 dBA considered acceptable if it is not feasible to achieve the 55 dBA objective for technical, economic or administrative reasons, provided warning clauses are registered on title. Note, a balcony or elevated terrace is not considered an OLA unless it is:

- the only OLA for the occupant;
- at least 4 m in depth; and
- unenclosed

3.1.2 Region of Peel

The Region of Peel's noise guidelines are described in the "General Guidelines for the Preparation of Acoustical Reports in the Region of Peel" document (Reference 5). The Region of Peel noise guidelines are essentially the same as the MECP noise guidelines for transportation noise sources except that the nighttime sound level for triggering the air conditioning requirement is 1 dBA more stringent (i.e., less) than the sound level specified by the MECP; i.e., mandatory air conditioning for nighttime sound levels of 60 dBA or greater, and the provision for adding air conditioning for sound levels between 51 to 59 dBA inclusive.

The Peel guidelines also indicate a maximum desirable sound barrier height of 4.0 m (relative to the roadway centreline) with a maximum acoustic fence height of 2.4 m, although a height of no

- (1) $L_{eq, Day}$ 16-hour energy equivalent sound level (0700-2300 hours).
- (2) L_{eq, Night} 8-hour energy equivalent sound level (0700-2300 hours).

more than 2.0 m is preferred. To make up any additional height beyond that of the fence, a berm is to be used.

3.1.3 Town of Caledon

The Town of Caledon noise guidelines are described in the "Development Standards Manual" document (Reference 6). The Town of Caledon's general policy is not to accept any excess above the 55 dBA objective for OLA's. However, an excess may be acceptable if unreasonably high sound barriers are needed to meet the 55 dBA objective.

The Town's maximum acoustic fence height is 2.4 m. Higher barriers can be provided by using a combination of an acoustic fence and a berm. The maximum permitted sound barrier height according to the Town's Development Standards is 4.8 m (2.4 m fence atop a 2.4 m berm).

Road traffic noise levels are to be calculated using a minimum 20-year traffic forecast and a speed of 10 kph over the posted speed limit.

4.0 NOISE IMPACT ASSESSMENT – TRANSPORTATION NOISE

4.1 METHOD

Using the road traffic data in Table 1, the $L_{\text{eq}\ \text{Day}}$ and $L_{\text{eq}\ \text{Night}}$ were determined using STAMSON V5.04 – ORNAMENT, the computerized road traffic noise prediction models of the MECP.

As previously noted, all dwellings are expected to be up to 3 storeys in height. To be conservative, the daytime and nighttime sound levels at all building facades were assessed at a height of 7.5 m above grade, representing a 3rd-storey plane of window (the worst-case location).

The daytime OLA sound levels at the rear yard outdoor amenity areas were assessed at a height of 1.5 m above grade, 3 m from the midpoint of the associated rear dwelling facade.

See Figure 2 for the assessment receptor locations.

Inherent screening of each building face due to its orientation to the noise source as well as screening provided by the subject development itself was taken into account. To be conservative, screening from the mixed-use blocks within the subject site, as well as screening from the surrounding future developments was not included. The stormwater management pond was modelled as a reflective surface.

4.2 RESULTS

The highest unmitigated daytime/nighttime sound levels of 63/57 dBA are predicted to occur at the west façade of the dwelling adjacent to Creditview Road, with exposure to Mayfield Road (Block 55, represented by R6 on Figure 2).

The highest unmitigated daytime OLA sound level of 58 dBA is predicted to occur at the southernmost dwelling adjacent to Tim Manley Avenue, with exposure to Creditview Road (Block 19, represented by R16 on Figure 2).

Table 2 summarizes the unmitigated daytime and nighttime sound level predictions.

Appendix C contains a sample sound level calculation.

TABLE 2 PREDICTED UNMITIGATED SOUND LEVELS OUTDOORS

Location ⁽¹⁾	Source	Distance (m) ⁽²⁾	L _{eq Day} (dBA)	Leq Night (dBA)
	Mayfield Road (Eastbound)	120	59	53
R1	Mayfield Road (Westbound)	136	58	53
Block 42 Southernmost Dwelling	Creditview Road	605	38	31
South Facade	Speersville Drive	63	47	41
	TOTAL	-	62	56
	Mayfield Road (Eastbound)	120	55	50
R2 Block 42	Mayfield Road (Westbound)	136	55	49
Southernmost Dwelling West Facade	Creditview Road	605	39	32
West racade	TOTAL	-	58	53
	Mayfield Road (Eastbound)	115	56	51
R3 Block 60	Mayfield Road (Westbound)	131	55	50
Southernmost Dwelling East Facade	Speersville Drive	15	60	53
Last rasade	TOTAL	-	62	56
	Mayfield Road (Eastbound)	373	51	46
R4 Block 36	Mayfield Road (Westbound)	389	51	45
Southernmost Dwelling South Facade	Creditview Road	53	53	46
	TOTAL	-	56	51
R5	Welsh Avenue	15	59	52
Block 57 Easternmost Dwelling	Blackhorse Drive	18	56	50
North Facade	TOTAL	-	61	54
	Mayfield Road (Eastbound)	375	49	43
R6 Block 55	Mayfield Road (Westbound)	391	48	43
Southernmost Dwelling West Facade	Creditview Road	19	63	56
West Fusado	TOTAL	-	63	57
R7	Creditview Road	59	48	41
Block 33 Westernmost Dwelling	Tim Manley Avenue	50	44	37
West Facade	TOTAL	-	49	43
R8	Creditview Road	39	58	51
Block 53 Northwestern Dwelling	Tim Manley Avenue	19	60	54
West Facade	TOTAL	-	62	56
R9	Creditview Road	125	49	43
Block 19 Southernmost Dwelling	Tim Manley Avenue	20	58	51
South Facade	TOTAL	-	58	52

.../cont'd

TABLE 2 PREDICTED UNMITIGATED SOUND LEVELS OUTDOORS (continued)

Location ⁽¹⁾	Source	Distance (m) ⁽²⁾	L _{eq Day} (dBA)	Leq Night (dBA)
R10 Block 47	Blackhorse Drive	33	51	44
2 nd Dwelling from	Tim Manley Avenue	50	47	40
Blackhorse Drive North Facade	TOTAL	-	52	46
R11	Blackhorse Drive	20	59	52
Block 51 Westernmost Dwelling	Tim Manley Avenue	18	58	52
West Facade	TOTAL	-	61	55
R12	Tim Manley Avenue	66	42	35
Block 46 Easternmost Dwelling	Speersville Drive	32	50	45
South Facade	TOTAL	-	51	45
R13	Tim Manley Avenue	49	49	-
Block 46 Easternmost Dwelling	Speersville Drive	25	54	-
OLA	TOTAL	-	55	-
R14	Welsh Avenue	24	52	46
Block 59 Northeastern Dwelling	Speersville Drive	14	60	54
East Facade	TOTAL	-	61	54
	Mayfield Road (Eastbound)	309	49	44
R15	Mayfield Road (Westbound)	325	49	44
Block 43 Southernmost Dwelling	Creditview Road	605	38	31
South Facade	Speersville Drive	63	42	36
	TOTAL	-	53	47
R16 Block 19	Creditview Road	121	48	-
1 st Dwelling from Tim	Tim Manley Avenue	25	57	-
Manley Avenue OLA	TOTAL	-	58	-
R17 Block 4 Easternmost Dwelling OLA	Blackhorse Drive	22	56	-
R18 Block 17	Welsh Avenue	169	42	35
Southwesternmost	Blackhorse Drive	175	44	37
Dwelling South Facade	TOTAL	-	46	39
R19 Block 17	Welsh Avenue	168	40	-
Southwesternmost	Blackhorse Drive	173	40	-
Dwelling OLA	TOTAL	-	44	-
R20 Block 18 Southernmost Dwelling OLA	Welsh Avenue	23	53	-

.../cont'd

TABLE 2 PREDICTED UNMITIGATED SOUND LEVELS OUTDOORS (continued)

Location ⁽¹⁾	Source	Distance (m) ⁽²⁾	L _{eq Day} (dBA)	Leq Night (dBA)
R21 Block 12 Southernmost Dwelling OLA	Tim Manley Avenue	25	57	-
R22 Block 12 2 nd Dwelling from Tim Maley Avenue OLA	Tim Manley Avenue	40	53	-
R23 Block 1 Easternmost Dwelling OLA	Blackhorse Drive	23	56	-
R24	Mayfield Road (Eastbound)	124	55	-
Block 42 Southernmost Dwelling	Mayfield Road (Westbound)	140	54	-
OLA	TOTAL	-	57	-

Notes:

- (1) See Figure 2.
- (2) Distance indicated is from the centreline of the roadway to the facade or OLA.

4.3 NOISE ABATEMENT REQUIREMENTS: TRANSPORTATION NOISE

The noise control measures can generally be classified into two categories which are interrelated, but which can be treated separately for the most part:

- a) The sound isolation performance of architectural elements to achieve the indoor noise guideline sound levels for transportation sources; and
- b) design features to attenuate the sound levels in the OLA's.

Noise abatement requirements/recommendations are summarized in Table 3 and in the notes to Table 3.

4.3.1 Indoors

4.3.1.1 Architectural Requirements

Based on the highest predicted day and nighttime sound levels of 63/57 dBA, exterior wall and window construction meeting the minimum non-acoustical requirements of the OBC will be sufficient to meet the indoor noise criteria at all dwellings.

4.3.1.2 Ventilation Requirements

The provision for adding air conditioning is required at:

- The first row of dwellings adjacent to Creditview Road, Welsh Avenue, Blackhorse Drive, Tim Manley Avenue, and Speersville Drive;
- The southernmost blocks of detached and townhouse dwellings (closest to Mayfield Road);
 and.
- The southernmost dwelling in the second row from Creditview Road.

Refer to Figure 2 and Table 3 for exact locations.

For detached dwellings and townhouse blocks, the provision for adding air conditioning typically takes the form of a ducted ventilation system suitably sized to permit the addition of central air conditioning by the occupant.

4.3.2 Outdoors

The unmitigated daytime OLA sound levels are predicted to exceed 55 dBA at the rear yards of dwellings adjacent to some internal collector roadways, and the southernmost dwellings with exposure to Mayfield Road. Thus, sound barriers have been investigated.

To meet the 55 dBA design objective of the MECP, 1.8 m high sound barriers are required at:

- Dwellings with rear yards siding onto Blackhorse Drive and Tim Manley Avenue; and
- The southernmost dwellings with rear yards closest to Mayfield Road.

The unmitigated daytime OLA sound levels at all other locations are predicted to be 55 dBA or lower.

Refer to Figure 2 and Table 3 for exact locations.

4.3.2.1 Notes about the sound barrier requirements

- It is expected that that the rear lane, dual frontage and back-to-back townhouse units will not
 have grade-level rear yard outdoor amenity areas. These units will have balconies and private
 terraces that are less than 4 m in depth and would therefore not be considered OLAs under
 the MECP noise guidelines. Thus, sound barriers are not required for noise control purposes
 at these locations.
- Sound barriers must be of solid construction with no gaps, cracks or holes (except for small, localized openings required for water drainage) and must have a minimum surface weight of 20kg/m². A variety of materials are available, including concrete, masonry, glass, wood, specialty composite materials or a combination of the above.
- The sound barrier requirements were determined using flat topography. The sound barrier requirements will need be confirmed once a grading plan is available.

4.4 WARNING CLAUSES

Warning clauses are a tool to inform prospective owners/occupants of potential annoyance due to existing noise sources. Where the guideline sound level limits are exceeded, appropriate warning clauses should be registered on title or included in the development agreement that is registered on title. The warning clauses should also be included in agreements of Offers of Purchase and Sale and lease/rental agreements to make future occupants aware of the potential noise situation.

Table 3 and the notes to Table 3 summarize the warning clauses for the site.

TABLE 3 MINIMUM NOISE ABATEMENT MEASURES

Location ⁽¹⁾	Air Conditioning ⁽²⁾	Exterior Wall	Exterior Window	Sound Barrier ⁽¹⁾⁽³⁾	Warning Clauses ⁽⁴⁾
First row of dwellings adjacent to Creditview Road	Provision for adding	•	acoustical ements	Not required	A + B (+ D for dwellings south of Welsh Avenue)
First row of dwellings adjacent to Welsh Avenue	Provision for adding	•	acoustical ements	Not required	A + B (+ C where across from the elementary school block)
First row of dwellings adjacent to Blackhorse Drive	Provision for adding	•	acoustical ements	1.8 m high at rear yards adjacent to the roadways	A + B (+ C where across from the elementary school block)
First row of dwellings adjacent to Tim Manley Avenue	Provision for adding		acoustical ements	1.8 m high at rear yards adjacent to the roadways	A + B
First row of dwellings adjacent to Speersville Drive	Provision for adding		acoustical ements	Not required	A + B
Southernmost block of rear-lane detached dwellings	Provision for adding		acoustical ements	1.8 m high at the southernmost unit/lot	A + B
Southernmost dwelling in the second row from Creditview Road	Provision for adding	No special require	acoustical ments.	Not required	A + B
All other dwellings adjacent to the public elementary school block	No sp	ecial acoustica	l requiremer	nts	С
All other blocks/lots		No specia	l acoustical	requirements	

Notes to Table 3 on the following page.

Notes to Table 3

- (1) See Figure 2.
- (2) Where methods must be provided to allow windows to remain closed for noise control purposes, a commonly used technique is that of air conditioning.
- (3) Sound barriers must be of solid construction with no gaps cracks or holes, and must have a minimum surface density of 20 kg/m².
- (4) Standard example warning clauses to be registered on title and be included in Offers of Purchase and Sale for designated lots:
 - A. "Purchases/tenants are advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing road traffic may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment, Conservation and Parks."
 - B. "This dwelling unit has been designed with the provision for adding central air conditioning at the occupant's discretion. Installation of central air conditioning by the occupant in low and medium density developments will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment, Conservation and Parks."
 - C. "Purchasers / occupants are advised that due to the proximity of the elementary school, noise from this facility may, at times, be audible".
 - D. "Purchasers / occupants are advised that due to the proximity of the commercial facility, noise from this facility may, at times, be audible".
- (5) All exterior doors shall be fully weather-stripped.

5.0 FUTURE DEVELOPMENT BLOCKS

Building plans for the mixed-use blocks and school block are currently not available. Specific mitigation measures have therefore not been established.

It is expected that the dwellings in the mixed-use block adjacent to Mayfield Road would require mandatory air conditioning due to the proximity to Mayfield Road, and that the dwellings in the mixed-use block adjacent to Creditview may require mandatory air conditioning or the provision for adding air conditioning, depending on the final building height and setback distance relative to the roadway. Upgraded facade construction and/or upgraded exterior windows may also be expected for the dwellings closest to Mayfield Road.

It is anticipated that all balconies and terraces in these blocks will be less than 4 m in depth and would therefore would not qualify as OLA's under the MECP guidelines. Thus, sound barriers would not be required. If larger balconies or terraces are included in the site design, the sound barrier requirements should be reviewed.

The mixed-use blocks and school block would need to be designed so that any sound emissions from these blocks comply with the stationary source sound level limits in Publication NPC-300, with consideration to the surrounding residential uses including those that are part of this proposed development.

Detailed noise studies of these blocks should be done as part of the Site Plan Approval (SPA) process for the mixed-use and school blocks.

6.0 CONCLUSIONS

With the incorporation of the recommended noise mitigation measures, the applicable Town of Caledon, Peel Region and MECP noise guidelines can be met and a suitable acoustical environment provided for the occupants.

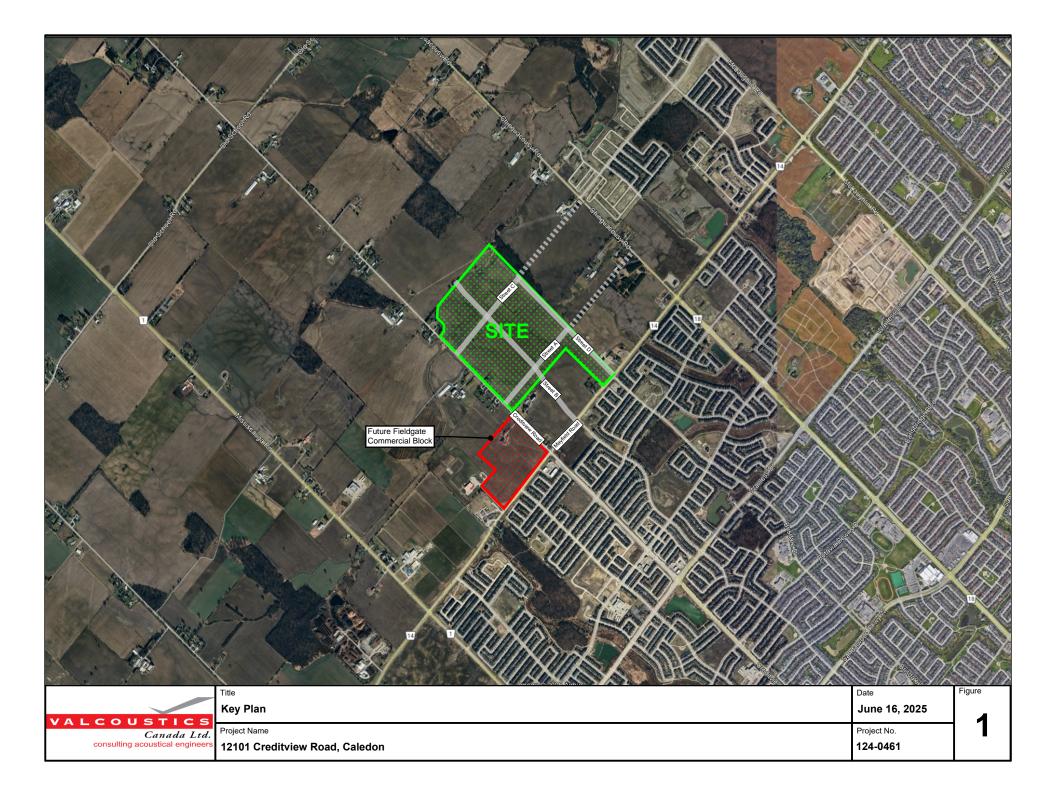
The approvals and administrative procedures are available to ensure that the noise requirements are implemented.

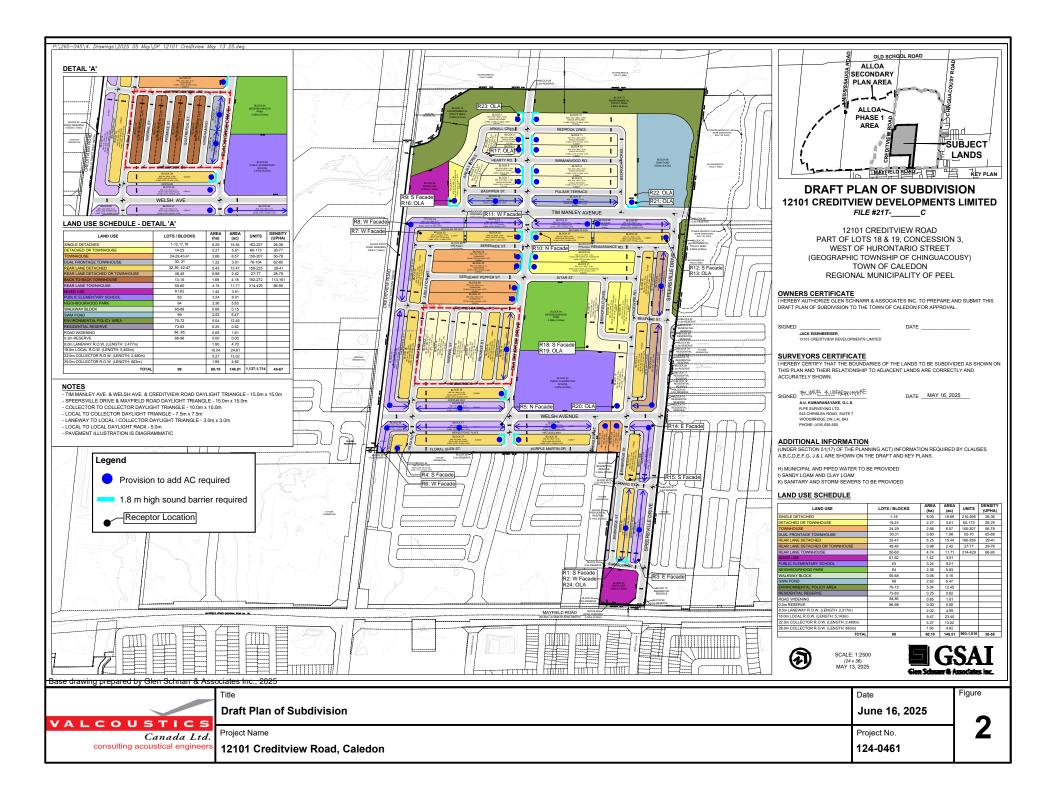
7.0 REFERENCES

- 1. PC STAMSON 5.04, "Computer Program for Road Traffic Noise Assessment", Ontario Ministry of the Environment.
- 2. Building Practice Note No. 56: "Controlling Sound Transmission into Buildings", by J. D. Quirt, Division of Building Research, National Council of Canada, September 1985.
- 3. "Environmental Noise Assessment in Land-Use Planning 1987", Ontario Ministry of the Environment, February 1987, ISBN 0-7729-2804-5.
- 4. MECP Publication NPC-300, "Stationary and Transportation Sources Approval and Planning" Ontario Ministry of the Environment, August 2013.
- 5. "General Guidelines for the Preparation of Acoustical Reports in the Region of Peel", Region of Peel. November 2012.
- 6. "Development Standards Manual, Version 5.0", Town of Caledon, 2019.
- 7. "Traffic Impact Study: Alloa Phase 1 Lands Tertiary Plan," by C.F. Crozier Associates Inc., December 2024.

JH\sk

12101 Creditview Road, Caledon - Noise v1_0.docx





APPENDIX A TRAFFIC DATA CORRESPONDENCE



Date: March 19, 2025

Request Type: Jane Hu, Valcoustics Canada Ltd Noise Traffic Data Request

Location: Mayfield Road - 700m West of Chinguacousy Road

Jane Hu,

As per your request, please see below traffic data from 2023:

	Existing	Ultimate
24 Hour Traffic Volume	19992	48600
# of Lanes	2	6
Day/Night Split	85/15	85/15
Day Trucks	2.6% Medium	2.6% Medium
(% of Total Volume)	2.5% Heavy	2.5% Heavy
Night Trucks	1.5% Medium	1.5% Medium
(% of Total Volume)	1.8% Heavy	1.8% Heavy
Right-of-Way Width	50 me	eters
Posted Speed Limit	80 kn	n/h

Note:

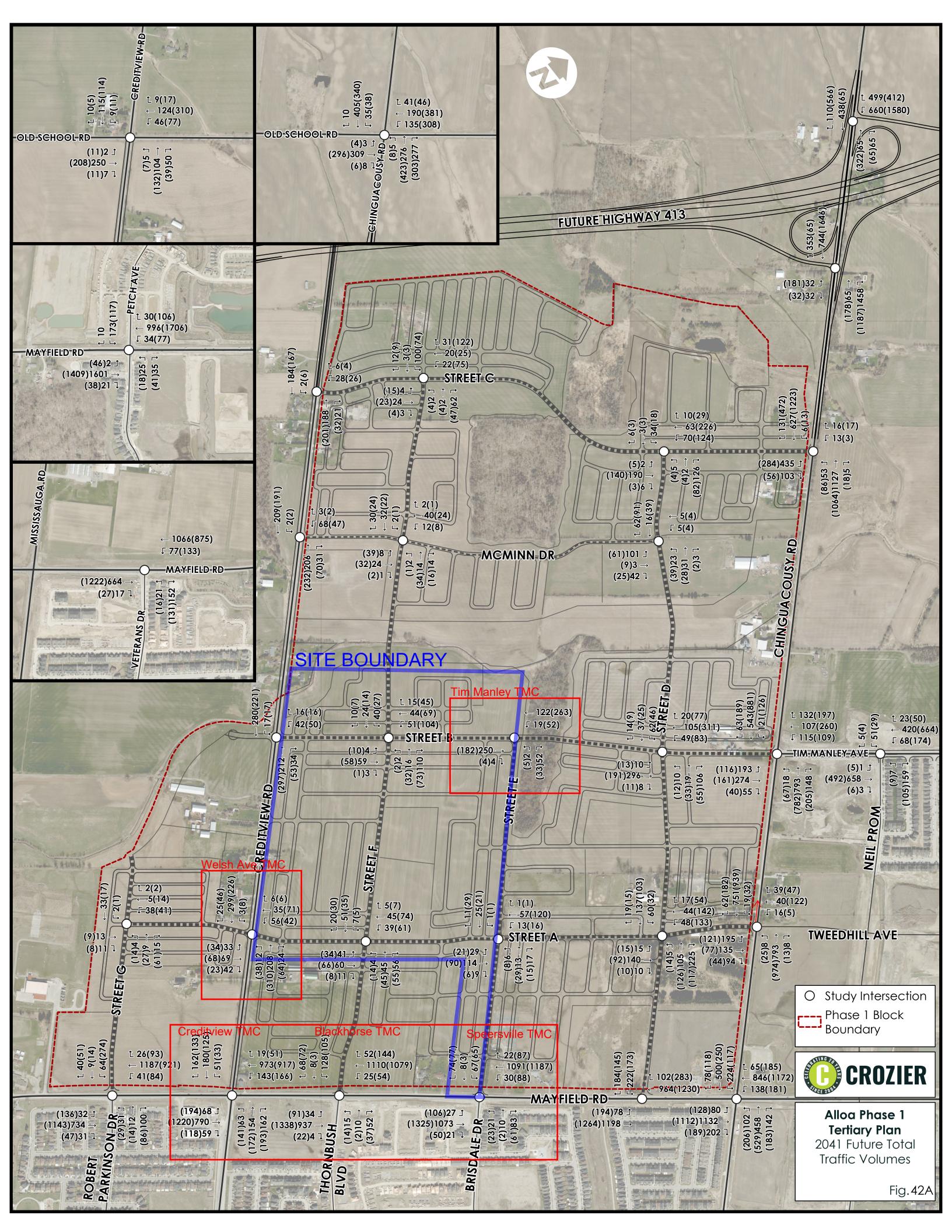
1. The current volume is not the Annual Average Daily Traffic, but the averaged raw volumes over three data collection days. For Annual Average Traffic Volume, visit the Peel Open Data website below: http://opendata.peelregion.ca/data-categories/transportation/traffic-count-stations.aspx'2. The ultimate volume is the planned volume during a level of service 'D' where a 2 second vehicle headway and a volume to capacity ratio of 0.9 is assumed. Traffic signals and hourly variations in traffic are also incorporated into the ultimate volume.

If you require further assistance, please contact me at transportationplanningdata@peelregion.ca

Regards,

Karan Bedi

Intermediate Planner, Transportation Planning
Transportation Division | Public Works | Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor
Brampton, ON L6T 4B9



Turning Movement Count Location Name: CHINGUACOUSY RD & TIM MANLEY AVE Date: Tue, Apr 23, 2024 Deployment Lead: David Chu

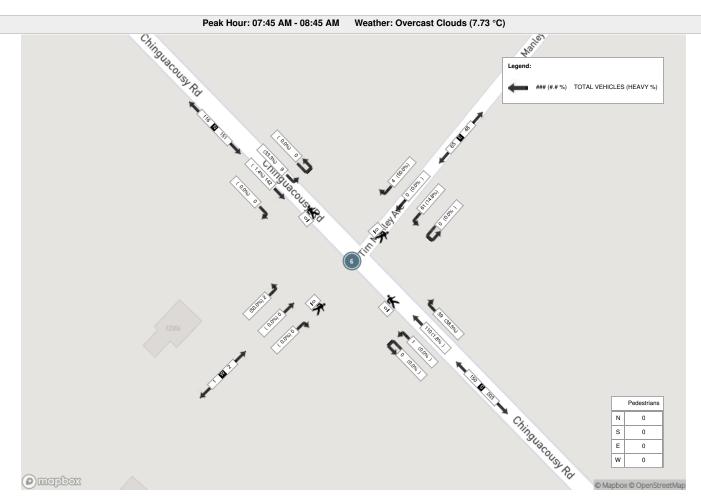
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06:15:00	0	11	0	0	0	11	1	0	4	0	0	5	4	32	0	0	0	36	0	0	0	0	0	0	52	
06:30:00	0	6	2	0	0	8	3	0	5	0	0	8	7	23	0	0	0	30	0	0	0	0	0	0	46	
06:45:00	0	15	5	0	0	20	0	0	6	0	0	6	6	24	0	0	0	30	0	0	0	0	0	0	56	187
07:00:00	0	9	2	0	0	11	2	0	14	0	0	16	15	28	0	0	0	43	0	0	0	0	0	0	70	224
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07:30:00	0	21	2	0	0	23	0	0	11	0	0	11	8	25	0	0	0	33	0	0	0	0	0	0	67	259
07:45:00	0	47	1	0	0	48	2	0	13	0	0	15	0	34	0	0	0	34	0	0	1	0	0	1	98	301
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09:30:00	0	8	0	0	0	8	5	0	9	0	0	14	6	15	0	0	0	21	0	0	0	0	0	0	43	225
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***BREAK						1																				
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17:30:00	0	50	4	0	0	54	1	0	9	0	0	10	14	27	0	0	0	41	0	0	0	0	0	0	105	388
17:45:00	0	46	0	0	0	46	1	0	7	0	0	8	17	29	0	0	0	46	0	0	0	0	0	0	100	401
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Heavy	0.2%	20	9	0%		-	1.0%	0%	57	0%		-	56	19	0%	0%		40.3 %	0%	0%	0.2%	0%		0.376	-	-
Heavy %	0%	2.4%	16.7%	0%		-	19.5%	0%	15.7%	0%		-	15.2%	2.3%	0%	0%		-	0%	0%	16.7%	0%		-	-	_
Bicycles	-	-		-		-	-	-		-		-		-	-	-		-	-	-		-		-	-	-
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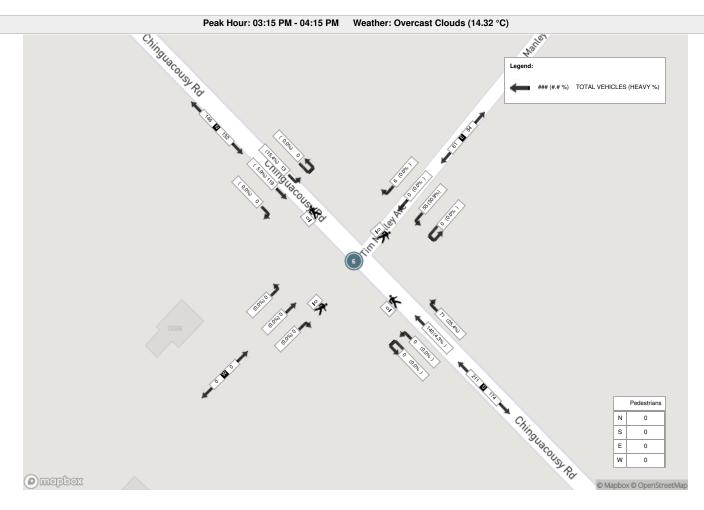
Turning Movement Count Location Name: CHINGUACOUSY RD & TIM MANLEY AVE Date: Tue, Apr 23, 2024 Deployment Lead: David Chu

								Pe	ak Houi	: 07:45	AM - 0	8:45 AM Wea	tner: Ov	ercast (Clouds	(7.73 °C	3)								
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Totals %	0%	38.6%	2.4%	0%		41%	1.1%	0%	16.6%	0%		17.7%	10.6%	29.9%	0.3%	0%		40.8%	0%	0%	0.5%	0%		0.5%	
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Heavy	0	2	3	0		5	2	0	9	0		11	15	2	0	0		17	0	0	1	0		1	
Heavy %	0%	1.4%	33.3%	0%		3.3%	50%	0%	14.8%	0%		16.9%	38.5%	1.8%	0%	0%		11.3%	0%	0%	50%	0%		50%	
Lights	0	140	6	0		146	2	0	52	0		54	24	108	1	0		133	0	0	1	0		1	
Lights %	0%	98.6%	66.7%	0%		96.7%	50%	0%	85.2%	0%		83.1%	61.5%	98.2%	100%	0%		88.7%	0%	0%	50%	0%		50%	
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Buses	0	2	2	0		4	0	0	2	0		2	3	2	0	0		5	0	0	0	0		0	
Buses %	0%	1.4%	22.2%	0%		2.6%	0%	0%	3.3%	0%		3.1%	7.7%	1.8%	0%	0%		3.3%	0%	0%	0%	0%		0%	
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Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	
icycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	=	-	-	-	-	0	-	-	-	-	-	0	=	

Turning Movement Count Location Name: CHINGUACOUSY RD & TIM MANLEY AVE Date: Tue, Apr 23, 2024 Deployment Lead: David Chu

								Pea	K Hour:	03:15 P	M - 04:1	15 PM Weathe	er: Over	ast Clo	uas (1	4.32 °C)								
Start Time			CH	N Approad	ch ISY RD					E Approa	ch Y AVE				СН	S Approa	ch JSY RD					W Appr WEST DRI	oach VEWAY		Int. T (15 n
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
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Approach%	0%	90.2%	9.8%	0%		-	9.8%	0%	90.2%	0%		-	33.6%	66.4%	0%	0%		-	0%	0%	0%	0%		-	
Totals %	0%	29.5%	3.2%	0%		32.7%	1.5%	0%	13.6%	0%		15.1%	17.6%	34.7%	0%	0%		52.2%	0%	0%	0%	0%		0%	
PHF	0	0.83	0.65	0		0.8	0.75	0	0.81	0		0.8	0.68	0.88	0	0		0.84	0	0	0	0		0	
Heavy	0	7	2	0		9		0	17	0		17	18	6	0	0		24		0	0	0		0	
Heavy %	0%	5.9%	15.4%	0%		6.8%	0%	0%	30.9%	0%		27.9%	25.4%	4.3%	0%	0%		11.4%	0%	0%	0%	0%		0%	
Lights	0	112	11	0		123	6	0	38	0		44	53	134	0	0		187		0	0	0		0	
Lights %	0%	94.1%	84.6%	0%		93.2%	100%	0%	69.1%	0%		72.1%	74.6%	95.7%	0%	0%		88.6%	0%	0%	0%	0%		0%	
ingle-Unit Trucks	0	0	0	0		0	0	0	12	0		12	13	0	0	0		13	0	0	0	0		0	
ngle-Unit Trucks %	0%	0%	0%	0%		0%	0%	0%	21.8%	0%		19.7%	18.3%	0%	0%	0%		6.2%	0%	0%	0%	0%		0%	
Buses	0	7	2	0		9	0	0	5	0		5	5	5	0	0		10	0	0	0	0		0	
Buses %	0%	5.9%	15.4%	0%		6.8%	0%	0%	9.1%	0%		8.2%	7%	3.6%	0%	0%		4.7%	0%	0%	0%	0%		0%	
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Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	
icycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	





Crozier & Associates ACCOUNTS PAYABLE TORONTO - SELECT PROVINCE -, M1W1Y6 - SELECT COUNTRY -

Turning Movement Count (7 . MAYFIELD RD & BRISDALE DR) CustID: 01420005 E Approach S Approach W Approach Int. Total Int. Total MAYFIELD RD BRISDALE DR MAYFIELD RD (15 min) (1 hr) Start Time UTurn Right UTurn Right Thru UTurn Thru Left Peds Left Peds Peds Approach Total Approach Total Approach Total E:W E:S E:E E: S:E S:W S:S S: W:S W:E W:W W: 06:00:00 06:15:00 06:30:00 06:45:00 07:00:00 07:15:00 07:30:00 07:45:00 08:00:00 08:15:00 08:30:00 08:45:00 09:00:00 09:15:00 09:30:00 09:45:00 ***BREAK*** 15:00:00 15:15:00 15:30:00 15:45:00 16:00:00 16:15:00 16:30:00



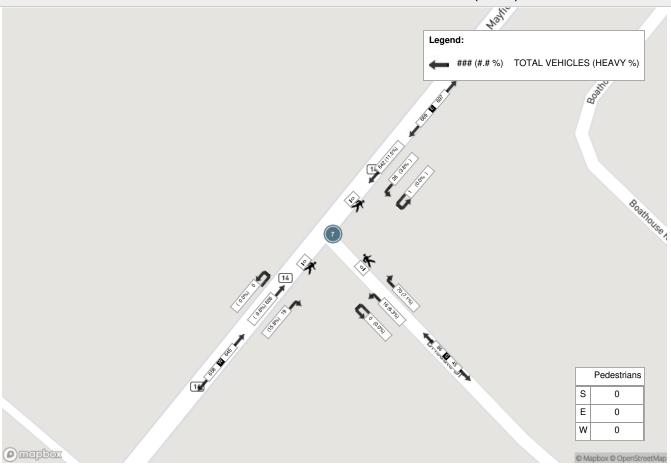
Grand Total	4333	374	1	1	4708	481	128	1	1	610	183	4804	0	0	4987	10305	-
Approach%	92%	7.9%	0%		-	78.9%	21%	0.2%		-	3.7%	96.3%	0%		-	-	-
Totals %	42%	3.6%	0%		45.7%	4.7%	1.2%	0%		5.9%	1.8%	46.6%	0%		48.4%	-	-
Heavy	291	9	0		-	16	11	0		-	9	296	0		-	-	-
Heavy %	6.7%	2.4%	0%		-	3.3%	8.6%	0%		-	4.9%	6.2%	0%		-	-	-
Bicycles	-	-	-		-	-	-	-		-	-	-	-		-	-	-
Bicycle %	-	-	-		-	-	-	-		-	-	-	-		-	-	-

					Peak Hour: 08:	15 AM - 0	9:15 AM	Weath	er: Over	cast Clouds (7.73	°C)							
Start Time				oroach IELD RD				S App BRISD	roach ALE DR			W Approach MAYFIELD RD						
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total			
08:15:00	160	9	0	0	169	24	4	0	0	28	5	193	0	0	198	395		
08:30:00	146	5	0	0	151	14	3	0	0	17	4	150	0	0	154	322		
08:45:00	182	4	0	0	186	18	4	0	0	22	5	125	0	0	130	338		
09:00:00	154	8	1	0	163	14	5	0	0	19	5	158	0	0	163	345		
Grand Total	642	26	1	0	669	70	16	0	0	86	19	626	0	0	645	1400		
Approach%	96%	3.9%	0.1%		-	81.4%	18.6%	0%		-	2.9%	97.1%	0%		-	-		
Totals %	45.9%	1.9%	0.1%		47.8%	5%	1.1%	0%		6.1%	1.4%	44.7%	0%		46.1%	-		
PHF	0.88	0.72	0.25		0.9	0.73	8.0	0		0.77	0.95	0.81	0		0.81	-		
Heavy	74	1	0		75	5	1	0		6	3	60	0		63			
Heavy %	11.5%	3.8%	0%		11.2%	7.1%	6.3%	0%		7%	15.8%	9.6%	0%		9.8%	-		
Lights	568	25	1		594	65	15	0		80	16	566	0		582			
Lights %	88.5%	96.2%	100%		88.8%	92.9%	93.8%	0%		93%	84.2%	90.4%	0%		90.2%	-		
Single-Unit Trucks	30	1	0		31	1	1	0		2	0	18	0		18	-		
Single-Unit Trucks %	4.7%	3.8%	0%		4.6%	1.4%	6.3%	0%		2.3%	0%	2.9%	0%		2.8%	-		
Buses	33	0	0		33	4	0	0		4	3	39	0		42	-		
Buses %	5.1%	0%	0%		4.9%	5.7%	0%	0%		4.7%	15.8%	6.2%	0%		6.5%	-		
Articulated Trucks	11	0	0		11	0	0	0		0	0	3	0		3	-		
Articulated Trucks %	1.7%	0%	0%		1.6%	0%	0%	0%		0%	0%	0.5%	0%		0.5%	-		
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-		
Pedestrians%	-	-	-	0%		-	-	-	0%		-	-	-	0%		-		

					Peak Hour: 03:	00 PM - 0	4:00 PM	Weath	er: Over	cast Clouds (14.32	2 °C)					
Start Time				proach IELD RD					oroach ALE DR				Int. Tota (15 min			
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
15:00:00	150	16	0	0	166	12	5	0	0	17	11	175	0	0	186	369
15:15:00	159	22	0	0	181	16	5	0	0	21	10	159	0	0	169	371
15:30:00	148	9	0	0	157	17	3	0	0	20	9	194	0	0	203	380
15:45:00	157	20	0	0	177	6	3	0	0	9	8	194	0	0	202	388
Grand Total	614	67	0	0	681	51	16	0	0	67	38	722	0	0	760	1508
Approach%	90.2%	9.8%	0%		-	76.1%	23.9%	0%		-	5%	95%	0%		-	-
Totals %	40.7%	4.4%	0%		45.2%	3.4%	1.1%	0%		4.4%	2.5%	47.9%	0%		50.4%	-
PHF	0.97	0.76	0		0.94	0.75	0.8	0		0.8	0.86	0.93	0		0.94	-
Heavy	39	0	0		39	2	4	0		6	3	83	0		86	
Heavy %	6.4%	0%	0%		5.7%	3.9%	25%	0%		9%	7.9%	11.5%	0%		11.3%	-
Lights	575	67	0		642	49	12	0		61	35	639	0		674	<u>-</u>
Lights %	93.6%	100%	0%		94.3%	96.1%	75%	0%		91%	92.1%	88.5%	0%		88.7%	-
Single-Unit Trucks	17	0	0		17	0	0	0		0	0	29	0		29	-
Single-Unit Trucks %	2.8%	0%	0%		2.5%	0%	0%	0%		0%	0%	4%	0%		3.8%	-
Buses	17	0	0		17	2	4	0		6	3	41	0		44	-
Buses %	2.8%	0%	0%		2.5%	3.9%	25%	0%		9%	7.9%	5.7%	0%		5.8%	-
Articulated Trucks	5	0	0		5	0	0	0		0	0	13	0		13	-
Articulated Trucks %	0.8%	0%	0%		0.7%	0%	0%	0%		0%	0%	1.8%	0%		1.7%	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
Pedestrians%	-	-	-	0%		-	-	-	0%		-	-	-	0%		-

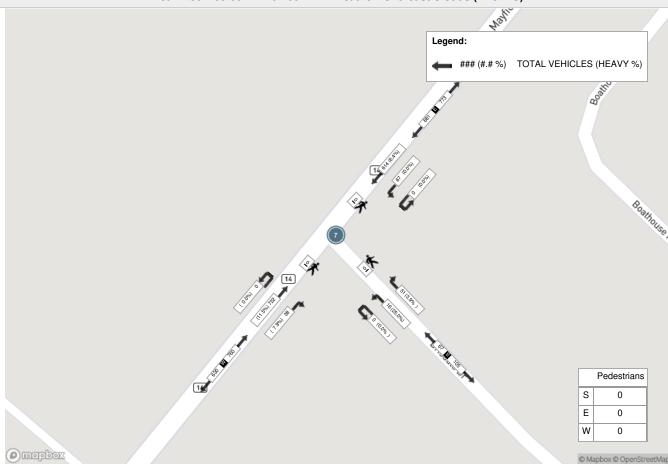
Crozier & Associates ACCOUNTS PAYABLE TORONTO - SELECT PROVINCE -, M1W1Y6 - SELECT COUNTRY -

Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (7.73 °C)



Crozier & Associates ACCOUNTS PAYABLE TORONTO - SELECT PROVINCE -, M1W1Y6 - SELECT COUNTRY -

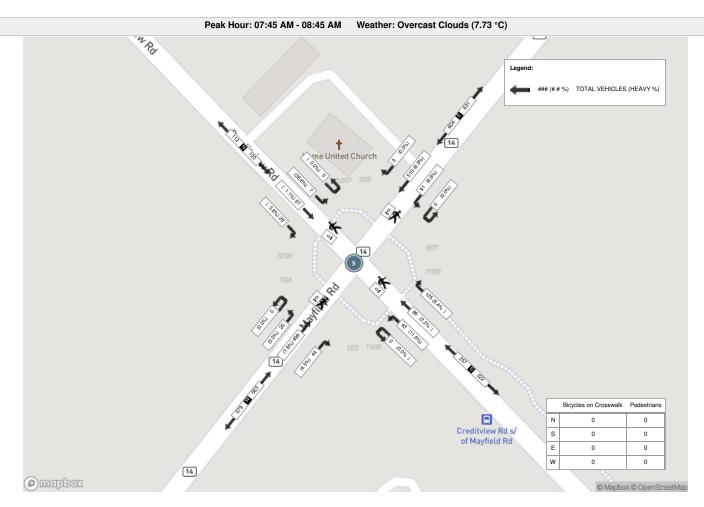
Peak Hour: 03:00 PM - 04:00 PM Weather: Overcast Clouds (14.32 °C)



								Tu	ırning l	Moveme	ent Cou	unt (9 . MAYFIEI	LD RD	& CRED)ITVIE	W RD)	CustID	: 01420659								
			CI	N Approac	:h V RD				C	S Approac	h / RD		W Approach MAYFIELD RD							E Approach MAYFIELD RD						Int. Total (1 hr)
Start Time	Right N:W	Thru N:S	Left N:E	UTurn N:N	Peds N:	Approach Total	Right S:E	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	UTurn W:W	Peds W:	Approach Total	Right E:N	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total		
06:00:00	3	2	1	0	0	6	17	16	7	0	0	40	3	68	1	0	0	72	2	69	4	0	0	75	193	
06:15:00	3	13	1	0	0	17	14	12	8	0	0	34	5	61	6	0	0	72	0	79	7	0	0	86	209	
06:30:00	2	4	1	0	0	7	8	12	12	0	0	32	0	95	4	0	0	99	1	137	9	0	0	147	285	
06:45:00	3	17	0	0	0	20	20	14	12	0	0	46	4	71	1	0	0	76	0	109	8	0	0	117	259	946
07:00:00	6	15	1	0	0	22	16	19	8	0	1	43	6	114	8	0	0	128	1	106	12	0	0	119	312	1065
07:15:00	4	26	3	0	0	33	24	19	5	0	0	48	8	119	5	0	0	132	1	109	15	0	0	125	338	1194
07:30:00	3	32	2	0	0	37	21	20	12	0	0	53	4	124	5	0	0	133	1	104	23	0	0	128	351	1260
07:45:00	4	26	1	0	0	31	26	14	5	0	0	45	10	115	3	0	0	128	2	116	25	0	0	143	347	1348
08:00:00	7	30	1	0	0	38	28	30	12	0	0	70	13	124	4	0	0	141	0	140	23	0	0	163	412	1448
08:15:00	8	14	5	0	0	27	37	25	11	0	0	73	12	144	6	0	0	162	1	135	23	0	0	159	421	1531
08:30:00	7	17	0	0	0	24	34	20	15	0	0	69	9	116	7	0	0	132	0	119	20	0	0	139	364	1544
08:45:00	3	14	1	0	0	18	22	12	18	0	0	52	7	84	4	0	0	95	0	150	26	0	0	176	341	1538
09:00:00	3	4	3	0	0	10	22	15	21	0	0	58	4	136	6	0	0	146	0	153	17	0	0	170	384	1510
09:15:00	7	11	3	0	0	21	16	9	8	0	0	33	7	112	3	0	0	122	2	102	12	0	0	116	292	1381
09:30:00	1	7	1	0	0	9	24	13	11	0	0	48	5	89	2	0	0	96	0	92	22	0	0	114	267	1284
09:45:00	6	11	2	0	0	19	15	9	3	0	0	27	5	107	3	0	0	115	1	86	17	0	0	104	265	1208
***BREAK																										
15:00:00	4	15	3	0	0	22	38	27	20	0	0	85	11	139	4	0	0	154	0	108	31	0	0	139	400	
15:15:00	0	14	2	0	0	16	27	20	15	0	0	62	12	146	4	0	0	162	3	121	32	0	0	156	396	
15:30:00	4	12	1	0	0	17	30	28	23	0	0	81	13	165	2	0	2	180	1	122	26	0	0	149	427	1000
15:45:00	12	29	2	0	0	43	25	22	18	0	0	65	21	164	7	0	2	192	3	112	25	0	1	140	440	1663
16:00:00	8	19 34	1	0	0	28	17 32	25 28	12	0	0	54	14	139	6	0	0	159	2	108	29	0	0	139	380	1643 1637
16:15:00	3		2	0	0	39	24		15	0	0	75 58	9	128	2	0	0	139	-	104	32 17	0	0	137	390 374	1584
16:45:00	5	26	2	0	0	33	28	24 17	10	0	2	59	12	134	5	0	0	157	0	120 94	31	0	0	139	374	1521
17:00:00	5	26	1	0	0	32	19	26	11	0	1	56	11	140	5	0	0	156	2	110	24	0	0	136	380	1521
17:15:00	4	30	2	0	0	36	32	18	11	0	0	61	10	148	7	0	0	165	3	102	31	0	0	136	398	1529
17:30:00	3	30	1	0	0	34	30	16	13	0	0	59	10	159	4	0	0	173	3	102	31	0	0	135	401	1556
17:45:00	2	24	2	0	0	28	26	14	9	0	0	49	12	144	1	0	0	157	2	101	41	0	0	144	378	1557
18:00:00	4	22	1	0	0	27	32	32	9	0	0	73	14	140	9	0	0	163	1	105	37	0	0	143	406	1583
18:15:00	6	32	1	0	0	39	28	14	12	0	0	54	7	155	2	0	0	164	4	102	31	0	0	137	394	1579
18:30:00	6	27	2	0	0	35	26	15	9	0	0	50	12	116	6	0	0	134	1	102	36	0	0	139	358	1536
18:45:00	7	12	3	0	0	22	36	26	7	0	1	69	13	114	3	0	0	130	1	84	31	0	0	116	337	1495
Grand Total	151	619	56	0	0	826	794	611	376	0	6	1781	291	3950	137	0	4	4378	41	3502	748	0	1	4291	11276	-
Approach%	18.3%	74.9%	6.8%	0%		-	44.6%	34.3%	21.1%	0%		-	6.6%	90.2%	3.1%	0%		-	1%	81.6%	17.4%	0%		-		-
Totals %	1.3%	5.5%	0.5%	0%		7.3%	7%	5.4%	3.3%	0%		15.8%	2.6%	35%	1.2%	0%		38.8%	0.4%	31.1%	6.6%	0%		38.1%	-	-
Heavy	4	14	6	0		-	40	15	32	0		-	21	256	4	0		-	2	249	37	0		-	-	-
Heavy %	2.6%	2.3%	10.7%	0%		-	5%	2.5%	8.5%	0%		-	7.2%	6.5%	2.9%	0%		-	4.9%	7.1%	4.9%	0%		-	-	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-

								Peak	Hour: 0	7:45 AN	/ 1 - 08:4	5 AM Weath	er: Ove	rcast C	louds (7.73 °C)								
Start Time		N Approach CREDITVIEW RD						S Approach CREDITVIEW RD								W Approac	:h RD		E Approach MAYFIELD RD					Int. Total (15 min)	
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
07:45:00	4	26	1	0	0	31	26	14	5	0	0	45	10	115	3	0	0	128	2	116	25	0	0	143	347
08:00:00	7	30	1	0	0	38	28	30	12	0	0	70	13	124	4	0	0	141	0	140	23	0	0	163	412
08:15:00	8	14	5	0	0	27	37	25	11	0	0	73	12	144	6	0	0	162	1	135	23	0	0	159	421
08:30:00	7	17	0	0	0	24	34	20	15	0	0	69	9	116	7	0	0	132	0	119	20	0	0	139	364
Grand Total	26	87	7	0	0	120	125	89	43	0	0	257	44	499	20	0	0	563	3	510	91	0	0	604	1544
Approach%	21.7%	72.5%	5.8%	0%		-	48.6%	34.6%	16.7%	0%		-	7.8%	88.6%	3.6%	0%		-	0.5%	84.4%	15.1%	0%		-	٠.
Totals %	1.7%	5.6%	0.5%	0%		7.8%	8.1%	5.8%	2.8%	0%		16.6%	2.8%	32.3%	1.3%	0%		36.5%	0.2%	33%	5.9%	0%		39.1%	-
PHF	0.81	0.73	0.35	0		0.79	0.84	0.74	0.72	0		0.88	0.85	0.87	0.71	0		0.87	0.38	0.91	0.91	0		0.93	-
Heavy	1	1	2	0		4	8		5			15	2	39				41		35	6			41	
Heavy %	3.8%	1.1%	28.6%	0%		3.3%	6.4%	2.2%	11.6%	0%		5.8%	4.5%	7.8%	0%	0%		7.3%	0%	6.9%	6.6%	0%		6.8%	-
Lights	25	86	5	0		116	117	87	38			242	42	460	20			522	3	475	85			563	
Lights %	96.2%	98.9%	71.4%	0%		96.7%	93.6%	97.8%	88.4%	0%		94.2%	95.5%	92.2%	100%	0%		92.7%	100%	93.1%	93.4%	0%		93.2%	-
Single-Unit Trucks	0	0	0	0		0	3	0	0	0		3	0	27	0	0		27	0	17	3	0		20	-
Single-Unit Trucks %	0%	0%	0%	0%		0%	2.4%	0%	0%	0%		1.2%	0%	5.4%	0%	0%		4.8%	0%	3.3%	3.3%	0%		3.3%	-
Buses	0	1	2	0		3	5	2	4	0		11	2	8	0	0		10	0	8	3	0		11	-
Buses %	0%	1.1%	28.6%	0%		2.5%	4%	2.2%	9.3%	0%		4.3%	4.5%	1.6%	0%	0%		1.8%	0%	1.6%	3.3%	0%		1.8%	-
Articulated Trucks	1	0	0	0		1	0	0	1	0		1	0	4	0	0		4	0	10	0	0		10	-
Articulated Trucks %	3.8%	0%	0%	0%		0.8%	0%	0%	2.3%	0%		0.4%	0%	0.8%	0%	0%		0.7%	0%	2%	0%	0%		1.7%	-
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	-
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
Pedestrians%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-

								Pea	k Hour:	03:00 F	PM - 04:	00 PM Weath	ner: Ove	ercast (Clouds	(14.32 °	C)								
Start Time			C	N Approac	th V RD					S Approa	ch W RD					W Approa	ch RD		E Approach MAYFIELD RD					Int. Total (15 min)	
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
15:00:00	4	15	3	0	0	22	38	27	20	0	0	85	11	139	4	0	0	154	0	108	31	0	0	139	400
15:15:00	0	14	2	0	0	16	27	20	15	0	0	62	12	146	4	0	0	162	3	121	32	0	0	156	396
15:30:00	4	12	1	0	0	17	30	28	23	0	0	81	13	165	2	0	2	180	1	122	26	0	0	149	427
15:45:00	12	29	2	0	0	43	25	22	18	0	1	65	21	164	7	0	2	192	3	112	25	0	1	140	440
Grand Total	20	70	8	0	0	98	120	97	76	0	1	293	57	614	17	0	4	688	7	463	114	0	1	584	1663
Approach%	20.4%	71.4%	8.2%	0%		-	41%	33.1%	25.9%	0%		-	8.3%	89.2%	2.5%	0%		-	1.2%	79.3%	19.5%	0%		-	-
Totals %	1.2%	4.2%	0.5%	0%		5.9%	7.2%	5.8%	4.6%	0%		17.6%	3.4%	36.9%	1%	0%		41.4%	0.4%	27.8%	6.9%	0%		35.1%	-
PHF	0.42	0.6	0.67	0		0.57	0.79	0.87	0.83	0		0.86	0.68	0.93	0.61	0		0.9	0.58	0.95	0.89	0		0.94	-
Heavy	1	0	2	0		3	6	2	15	0		23	4	77	1	0		82	1	33	5	0		39	
Heavy %	5%	0%	25%	0%		3.1%	5%	2.1%	19.7%	0%		7.8%	7%	12.5%	5.9%	0%		11.9%	14.3%	7.1%	4.4%	0%		6.7%	-
Lights	19	70	6	0		95	114	95	61	0		270	53	537	16	0		606	6	430	109	0		545	
Lights %	95%	100%	75%	0%		96.9%	95%	97.9%	80.3%	0%		92.2%	93%	87.5%	94.1%	0%		88.1%	85.7%	92.9%	95.6%	0%		93.3%	-
Single-Unit Trucks	0	0	1	0		1	1	0	1	0		2	1	27	0	0		28	0	14	1	0		15	-
Single-Unit Trucks %	0%	0%	12.5%	0%		1%	0.8%	0%	1.3%	0%		0.7%	1.8%	4.4%	0%	0%		4.1%	0%	3%	0.9%	0%		2.6%	-
Buses	1	0	1	0		2	5	2	14	0		21	3	36	1	0		40	1	15	4	0		20	-
Buses %	5%	0%	12.5%	0%		2%	4.2%	2.1%	18.4%	0%		7.2%	5.3%	5.9%	5.9%	0%		5.8%	14.3%	3.2%	3.5%	0%		3.4%	-
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	14	0	0		14	0	4	0	0		4	-
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	2.3%	0%	0%		2%	0%	0.9%	0%	0%		0.7%	-
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	-
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	-
Pedestrians	-	-	-	-	0	=	-	-	-	-	1	-	-	-	-	-	4	=	-	-	-	-	1	-	-
Pedestrians%	-	-	-	-	0%		-	-	-	-	16.7%		-	-	-	-	66.7%		-	-	-	-	16.7%		-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-





Crozier & Associates ACCOUNTS PAYABLE TORONTO - SELECT PROVINCE -, M1W1Y6 - SELECT COUNTRY -

Turning Movement Count (8 . MAYFIELD RD & THORNBUSH BLVD) CustID: 01420377 E Approach S Approach W Approach Int. Total Int. Total MAYFIELD RD THORNBUSH BLVD MAYFIELD RD (15 min) (1 hr) Start Time UTurn UTurn Right Thru UTurn Thru Left Peds Right Left Peds Peds Approach Total Approach Total Approach Total E:E E:W E:S E: S:E S:W S:S S: W:S W:E W:W W: 06:00:00 06:15:00 06:30:00 06:45:00 07:00:00 07:15:00 07:30:00 07:45:00 08:00:00 08:15:00 08:30:00 08:45:00 09:00:00 09:15:00 09:30:00 09:45:00 ***BREAK*** 15:00:00 15:15:00 15:30:00 15:45:00 16:00:00 16:15:00 16:30:00 16:45:00 17:00:00



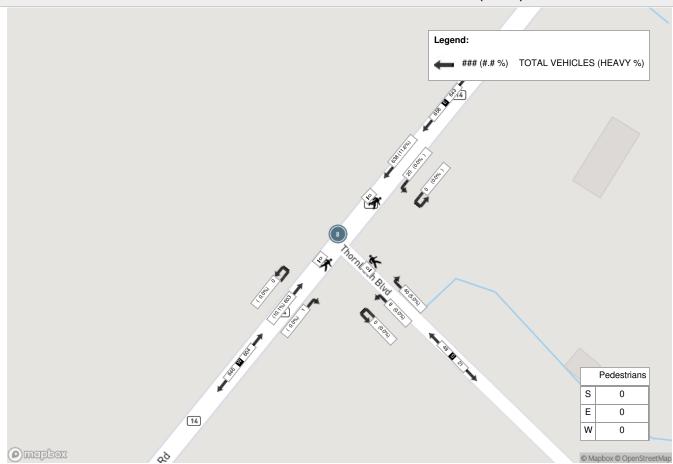
Grand Total	4228	213	0	0	4441	258	50	0	1	308	56	4757	1	0	4814	9563	-
Approach%	95.2%	4.8%	0%		-	83.8%	16.2%	0%		-	1.2%	98.8%	0%		-	-	-
Totals %	44.2%	2.2%	0%		46.4%	2.7%	0.5%	0%		3.2%	0.6%	49.7%	0%		50.3%	-	-
Heavy	290	8	0		-	9	0	0		-	4	296	0		-	-	-
Heavy %	6.9%	3.8%	0%		-	3.5%	0%	0%		-	7.1%	6.2%	0%		-	-	-
Bicycles	-	-	-		-	-	-	-		-	-	-	-		-	-	-
Bicycle %	-	-	-		-	-	-	-		-	-	-	-		-	-	-

					Peak Hour: 08:	:15 AM - 0	9:15 AM	Weath	er: Over	cast Clouds (7.73	°C)					
Start Time				proach IELD RD				S App	roach JSH BLVD					proach TIELD RD		Int. Tota (15 min
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
08:15:00	154	5	0	0	159	7	2	0	0	9	0	185	0	0	185	353
08:30:00	138	8	0	0	146	8	0	0	0	8	0	153	0	0	153	307
08:45:00	183	3	0	0	186	14	3	0	0	17	1	111	0	0	112	315
09:00:00	163	4	0	0	167	11	3	0	0	14	0	154	0	0	154	335
Grand Total	638	20	0	0	658	40	8	0	0	48	1	603	0	0	604	1310
Approach%	97%	3%	0%		-	83.3%	16.7%	0%		-	0.2%	99.8%	0%		-	-
Totals %	48.7%	1.5%	0%		50.2%	3.1%	0.6%	0%		3.7%	0.1%	46%	0%		46.1%	-
PHF	0.87	0.63	0		0.88	0.71	0.67	0		0.71	0.25	0.81	0		0.82	-
Heavy	74	0	0		74	2	0	0		2	0	61	0		61	<u>-</u>
Heavy %	11.6%	0%	0%		11.2%	5%	0%	0%		4.2%	0%	10.1%	0%		10.1%	-
Lights	564	20	0		584	38	8	0		46	1	542	0		543	<u>-</u>
Lights %	88.4%	100%	0%		88.8%	95%	100%	0%		95.8%	100%	89.9%	0%		89.9%	-
Single-Unit Trucks	31	0	0		31	0	0	0		0	0	18	0		18	-
Single-Unit Trucks %	4.9%	0%	0%		4.7%	0%	0%	0%		0%	0%	3%	0%		3%	-
Buses	32	0	0		32	2	0	0		2	0	40	0		40	-
Buses %	5%	0%	0%		4.9%	5%	0%	0%		4.2%	0%	6.6%	0%		6.6%	-
Articulated Trucks	11	0	0		11	0	0	0		0	0	3	0		3	-
Articulated Trucks %	1.7%	0%	0%		1.7%	0%	0%	0%		0%	0%	0.5%	0%		0.5%	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
Pedestrians%	-	-	-	0%		-	-	-	0%		-	-	-	0%		-

					Peak Hour: 03:0	00 PM - 04	1:00 PM	Weathe	r: Overc	ast Clouds (14.32	°C)					
Start Time				proach IELD RD					roach JSH BLVD					proach IELD RD		Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
15:00:00	147	9	0	0	156	7	2	0	0	9	1	180	0	0	181	346
15:15:00	157	6	0	0	163	6	1	0	0	7	2	167	0	0	169	339
15:30:00	143	10	0	0	153	5	1	0	0	6	2	189	0	0	191	350
15:45:00	140	11	0	0	151	8	3	0	0	11	5	195	0	0	200	362
Grand Total	587	36	0	0	623	26	7	0	0	33	10	731	0	0	741	1397
Approach%	94.2%	5.8%	0%		-	78.8%	21.2%	0%		-	1.3%	98.7%	0%		-	-
Totals %	42%	2.6%	0%		44.6%	1.9%	0.5%	0%		2.4%	0.7%	52.3%	0%		53%	-
PHF	0.93	0.82	0		0.96	0.81	0.58	0		0.75	0.5	0.94	0		0.93	-
Heavy	43	0	0		43	4	0	0		4	1	80	0		81	<u>-</u>
Heavy %	7.3%	0%	0%		6.9%	15.4%	0%	0%		12.1%	10%	10.9%	0%		10.9%	-
Lights	544	36	0		580	22	7	0		29	9	651	0		660	<u>-</u>
Lights %	92.7%	100%	0%		93.1%	84.6%	100%	0%		87.9%	90%	89.1%	0%		89.1%	-
Single-Unit Trucks	17	0	0		17	0	0	0		0	0	27	0		27	-
Single-Unit Trucks %	2.9%	0%	0%		2.7%	0%	0%	0%		0%	0%	3.7%	0%		3.6%	-
Buses	21	0	0		21	4	0	0		4	1	41	0		42	-
Buses %	3.6%	0%	0%		3.4%	15.4%	0%	0%		12.1%	10%	5.6%	0%		5.7%	-
Articulated Trucks	5	0	0		5	0	0	0		0	0	12	0		12	-
Articulated Trucks %	0.9%	0%	0%		0.8%	0%	0%	0%		0%	0%	1.6%	0%		1.6%	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
Pedestrians%	-	-	-	0%		-	-	-	0%		-	-	-	0%		-



Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (7.73 °C)





Peak Hour: 03:00 PM - 04:00 PM Weather: Overcast Clouds (14.32 °C) Legend: ### (#.# %) TOTAL VEHICLES (HEAVY %) Pedestrians S 0 Е 0 14 W

(D) mapbox

© Mapbox © OpenStreetMap

APPENDIX B ENVIRONMENTAL NOISE GUIDELINES

APPENDIX B ENVIRONMENTAL NOISE GUIDELINES MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS (MECP)

Reference: MECP Publication NPC-300, October 2013: "Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning".

SPACE	SOURCE	TIME PERIOD	CRITERION
Living/dining, den areas of residences, hospitals, nursing homes, schools, daycare centres, etc.	Road Rail Aircraft	07:00 to 23:00 07:00 to 23:00 24-hour period	45 dBA 40 dBA NEF/NEP 5
Living/dining, den areas of residences, hospitals, nursing homes, etc. (except schools or daycare centres)	Road Rail Aircraft	23:00 to 07:00 23:00 to 07:00 24-hour period	45 dBA 40 dBA NEF/NEP 5
Sleeping quarters	Road Rail Aircraft	07:00 to 23:00 07:00 to 23:00 24-hour period	45 dBA 40 dBA NEF/NEP 0
Sleeping quarters	Road Rail Aircraft	23:00 to 07:00 23:00 to 07:00 24-hour period	40 dBA 35 dBA NEF/NEP 0
Outdoor Living Areas	Road and Rail	07:00 to 23:00	55 dBA
Outdoor Point of Reception	Aircraft	24-hour period	NEF/NEP 30#
	Stationary Source Class 1 Area Class 2 Area Class 3 Area	07:00 to 19:00 ⁽¹⁾ 19:00 to 23:00 ⁽¹⁾ 07:00 to 19:00 ⁽²⁾ 19:00 to 23:00 ⁽²⁾ 07:00 to 19:00 ⁽³⁾	50° dBA 50° dBA 50° dBA 45° dBA 45° dBA
	Class 4 Area	19:00 to 23:00 ⁽³⁾ 07:00 to 19:00 ⁽⁴⁾ 19:00 to 23:00 ⁽⁴⁾	40* dBA 55* dBA 55* dBA

..../cont'd

SPACE	SOURCE	TIME PERIOD	CRITERION
Plane of a Window of	Stationary Source		
Noise Sensitive Spaces	Class 1 Area	07:00 to 19:00 ⁽¹⁾	50* dBA
·		19:00 to 23:00 ⁽¹⁾	50* dBA
		23:00 to 07:00 ⁽¹⁾	45^{*} dBA
	Class 2 Area	07:00 to 19:00 ⁽²⁾	50* dBA
		19:00 to 23:00 ⁽²⁾	50* dBA
		23:00 to 07:00 ⁽²⁾	45^{*} dBA
	Class 3 Area	07:00 to 19:00 ⁽³⁾	45^{*} dBA
		19:00 to 23:00 ⁽³⁾	45* dBA
		23:00 to 07:00 ⁽³⁾	40* dBA
	Class 4 Area	07:00 to 19:00 ⁽⁴⁾	60° dBA
		19:00 to 23:00 ⁽⁴⁾	60* dBA
		23:00 to 07:00 ⁽⁴⁾	55* dBA

MECP Publication ISBN 0-7729-2804-5, 1987: "Environmental Noise Assessment Reference: in Land-Use Planning".

EXCESS ABOVE RECOMMENDED SOUND LEVEL LIMITS (dBA)	CHANGE IN SUBJECTIVE LOUDNESS ABOVE	MAGNITUDE OF THE NOISE PROBLEM	NOISE CONTROL MEASURES (OR ACTION TO BE TAKEN)
No excess (<55 dBA)	_	No expected noise problem	None
1 to 5 inclusive (56 to 60 dBA)	Noticeably louder	Slight noise impact	If no physical measures are taken, then prospective purchasers or tenants should be made aware by suitable warning clauses.
6 to 10 inclusive (61 - 65 dBA)	Almost twice as loud	Definite noise impact	Recommended.
11 to 15 inclusive (66 - 70 dBA)	Almost three times as loud	Serious noise impact	Strongly Recommended.
16 and over (>70 dBA)	Almost four times as loud	Very serious noise impact	Strongly Recommended (may be mandatory).

may not apply to in-fill or re-development. or the minimum hourly background sound exposure $L_{\text{eq(1)}}$, due to road traffic, if higher.

Class 1 Area: Urban.
Class 2 Area: Urban during day; rural-like evening and night. (1) (2) (3) (4)

Class 3 Area: Rural.

Class 4 Area: Subject to land use planning authority's approval.

APPENDIX C

SAMPLE SOUND LEVEL CALCULATIONS - TRANSPORTATION SOURCES

STAMSON 5.0 NORMAL REPORT Date: 18-06-2025 11:49:09

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r6.te Time Period: Day/Night 16/8 hours

Description: R6 - Block 55 W Facade

Road data, segment # 1: Mayfield EB (day/night)

Car traffic volume : 19602/3525 veh/TimePeriod Medium truck volume: 537/55 veh/TimePeriod
Heavy truck volume: 516/66 veh/TimePeriod
Posted speed limit: 90 km/h
Road gradient: 0 %
Road pavement: 1 (Typical asphalt or concrete)

Data for Segment # 1: Mayfield EB (day/night)

Angle1 Angle2 : -5.00 deg 90.00 deg
Wood depth : 0 (No woods:
No of house rows : 0 / 0
Surface : 1 (Absorptive) (No woods.)

(Absorptive ground surface)

Receiver source distance : 375.00 / 375.00 m

Receiver height : 7.50 / 7.50 m

Topography : 1 (Flat/gentle slope; no barrier)

Reference angle : 0.00

Road data, segment # 2: Mayfield WB (day/night)

Car traffic volume : 19602/3525 veh/TimePeriod Medium truck volume : 537/55 veh/TimePeriod Heavy truck volume : 516/66 veh/TimePeriod

Posted speed limit : 90 km/h

Road gradient : 0 % Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: Mayfield WB (day/night)

Angle1 Angle2 : -5.00 deg 90.00 deg Angle: Angle:
Wood depth :
No of house rows : : 0 (No woods.)

0 / 0

1 (Absorptive ground surface) :

Receiver source distance : 391.00 / 391.00 m Receiver height : 7.50 / 7.50 m

Topography : 1 (Flat/gentle slope; no barrier)

Reference angle : 0.00

Road data, segment # 3: Creditview (day/night) _____

Car traffic volume : 6367/707 veh/TimePeriod *

Posted speed limit : 70 km/h Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 6880 Percentage of Annual Growth : 2.00 Number of Years of Growth : 4.00
Medium Truck % of Total Volume : 3.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 3: Creditview (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)

Receiver source distance : 19.00 / 19.00 m Receiver height : 7.50 / 7.50 m

Topography : 1 (Flat/gentle slope; no barrier)

Reference angle : 0.00

Results segment # 1: Mayfield EB (day)

Source height = 1.26 m

ROAD (0.00 + 48.64 + 0.00) = 48.64 dBA

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj

SubLeq

-5 90 0.49 73.29 0.00 -20.79 -3.86 0.00 0.00 0.00

Segment Leq: 48.64 dBA

Results segment # 2: Mayfield WB (day)

Source height = 1.26 m

ROAD (0.00 + 48.37 + 0.00) = 48.37 dBA

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq

-5 90 0.49 73.29 0.00 -21.06 -3.86 0.00 0.00 0.00

Segment Leq: 48.37 dBA

Results segment # 3: Creditview (day)

Source height = 1.19 m

ROAD (0.00 + 63.02 + 0.00) = 63.02 dBA

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq

------90 90 0.49 65.71 0.00 -1.53 -1.15 0.00 0.00 0.00

Segment Leq: 63.02 dBA

Total Leg All Segments: 63.32 dBA

Results segment # 1: Mayfield EB (night)

Source height = 1.16 m

ROAD (0.00 + 43.35 + 0.00) = 43.35 dBA

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq

______ -5 90 0.49 68.04 0.00 -20.83 -3.86 0.00 0.00 0.00

43.35

Segment Leq: 43.35 dBA

Results segment # 2: Mayfield WB (night)

Source height = 1.16 m

ROAD (0.00 + 43.08 + 0.00) = 43.08 dBA

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq

-5 90 0.49 68.04 0.00 -21.10 -3.86 0.00 0.00 0.00

Segment Leq: 43.08 dBA

Results segment # 3: Creditview (night)

Source height = 1.19 m

ROAD (0.00 + 56.49 + 0.00) = 56.49 dBA

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq

------90 90 0.49 59.17 0.00 -1.53 -1.15 0.00 0.00 0.00

Segment Leq: 56.49 dBA

Total Leq All Segments: 56.88 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 63.32

(NIGHT): 56.88