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June 28, 2024

**1215846 Ontario Ltd (DiBlasio Homes)**
**Attn: Selo Clark Di Blasio**
**6620 Rothschild Trail**
**Mississauga, ON L5W 0A6**

**Email: selo.c@diblasiocorp.com**

**Re: Addendum No.1 –Noise Feasibility Study, Proposed Residential Development**
**6620 Rothschild Trail, Mississauga, Ontario**
**HGC Project No. 01800949**

## Introduction & Summary

As requested, HGC Engineering has prepared this addendum letter for the referenced development. Our latest noise report for the development is entitled, "Noise Feasibility Study, Proposed Residential Development, 6620 Rothschild Trail, Mississauga, Ontario" dated May 5, 2021 ("Noise Study"). This addendum letter has been prepared based on a review of the latest Site Plan dated May 31, 2024 as attached. Since the completion of the Noise Study, the design of the site has changed and the development is now proposed to consist of 3 blocks of 2 ½ storey townhouse units.

The criteria, description of neighbouring uses, analysis and noise control recommendations contained in the Noise Study remain applicable. The recommendations are summarized in this letter for ease of reference. Central air conditioning and upgraded building will be required for all units. All residential units will also require noise warning clauses. The residential development is considered feasible from a noise perspective.

## Traffic Noise Predictions

*Road Traffic*

Traffic data for Mavis Road and McLaughlin Road in the form of ultimate Annual Average Daily Traffic (AADT) data and the parameters as detailed in the Noise Study were used in the updated analysis. The sound level predictions were conducted at the plane of the windows of the upper storey windows and at a typical rear yard OLA. All stamson calculations are attached.

**Table 1: Future Predicted Traffic Sound Levels, [dBA]**

| Prediction Location | Description | Daytime – at Façade $L_{EQ(16)}$ | Nighttime - at Façade $L_{EQ(8)}$ |
|---|---|---|---|
| [A] | West Façade | <55 | <50 |
| [B] | South Façade | <55 | <50 |
| [C] | East Façade | <55 | <50 |
| [D] | North Façade | <55 | <50 |
| [E] | OLA – At Grade | <55 | -- |

The results indicate that road traffic noise meets MECP guideline limits at the proposed development

*Air Traffic*
The 2005 Composite Noise Contour Map for the Lester B. Pearson International Airport was obtained. This Map indicated that the proposed site is located between the 30 and 35 NEF/NEP contour, approximately at NEF 32, as shown on Figure 2.

The NEF contour map was used to determine the Acoustical Insulation Factors (AIF) required for the building components for the proposed building. The MECP indoor noise criteria for aircraft traffic noise was used as a guideline.

## Discussion & Recommendations

*Indoor Living Areas & Ventilation Requirements*
The Blocks are located between the 30 to 35 NEF contours for Lester B. Pearson International Airport, as such, central air conditioning is required for all the residential units or the entire building so that windows may remain closed.

*Minimum Building Façade Constructions*
Since the building is located between the 30 and 35 NEF/NEP contours for the Lester B. Pearson International Airport, air traffic noise must be considered in the building designs. The site is located at approximately NEF 32.

MECP guidelines recommend that building components including windows, walls, ceilings and roofs, where applicable, must be designed so that the indoor sound levels comply with MECP noise criteria. The acoustical performance of the building components (windows, doors, and walls) must also be specified.

The acoustic insulation factors (AIF) required for road traffic and air traffic must be combined to obtain an overall AIF for the building. The required building components are selected based on the overall AIF value. To do so, calculations were performed to determine the acoustical insulation factors to maintain indoor sound levels within MECP guidelines. The calculation methods were developed by the National

Research Council (NRC). They are based on the predicted future sound levels at the building facades, and the area ratios of the facade components (walls, windows, ceiling/roof and doors) and the floor area of the adjacent room.

Exterior Wall Constructions
It is recommended that all exterior walls of the building be of brick or masonry construction, which would provide sufficient acoustical insulation for the interior spaces.

Exterior Doors
For any exterior doors, they should be composed of steel with a total thickness of at least 45 mm with foam or glass fibre insulation provided with integral frames and magnetic weather-stripping. Patio doors would be considered as contributing to the total window area provided below.

Ceiling/Roof System
Sloped roofs with ventilated attics are recommended above all noise sensitive rooms in all dwelling units. Cathedral ceilings or vaulted ceilings are not recommended. If such constructions are desirable, HGC Engineering should be contacted to provide updated recommendations for upgrades to other building components.

Acoustical Requirements for Glazing

Building elevations are not yet available. Therefore, assumed window to floor area ratios of 40% for living/dining rooms and 25% for bedrooms were used in determining preliminary window requirements. The minimum glazing for all units must achieve a sound transmission class (STC) rating of at least 33 for bedrooms and STC of at least 31 for living/dining rooms in order to achieve the target indoor sound level criteria due to air traffic.

Note that acoustic performance varies with manufacturer's construction details, and these are only guidelines to provide some indication of the type of glazing likely to be required. Acoustical test data for the selected assemblies should be requested from the supplier, to ensure that the stated acoustic performance levels will be achieved by their assemblies.

**Warning Clauses**

The MECP guidelines recommend that appropriate warning clauses be used in the Development Agreements and in purchase, sale and lease agreements (typically by reference to the Development Agreements), to inform future owners and occupants about noise concerns from transportation sources in the area. The following clauses are recommended and are based on the Type numbers outlined in MECP NPC-300

Type A:

Purchasers/tenants are advised that sound levels due to increasing road and air traffic may occasionally 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

Type D:

This dwelling unit has been supplied with a central air conditioning system which 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.

These sample clauses are provided by the MECP as examples and can be modified by the Municipality as required.

**Summary of Recommendations**

The following list and table summarizes the recommendation for the proposed development.

1. Central air conditioning systems are required for all residential units.
2. Certain minimum building and glazing constructions are recommended.
3. Warning clauses should be used to inform future residents of the road traffic and air traffic noise.

**Table 2: Summary of Noise Control Requirements and Noise Warning Clauses**

| Units | Acoustic Barrier | Ventilation Requirements * | Type of Warning Clause | Building Façade Constructions (STC requirements)[1] |
|---|---|---|---|---|
| All | -- | Central A/C | A, D | LR/DR: STC-31<br>BR: STC-33 |

Notes:
* The location, installation and sound rating of the air conditioning condensers must be compliant with MECP Guideline NPC-300
OBC – meeting the minimum requirements of the Ontario Building Code.
1 – Based on assumed window to floor area ratios of 40% for LR/DR and 25% for BR. Actual requirements to be confirmed based on review of floor plans and building elevations.

**Implementation**

1) Prior to an application for a building permit, a Professional Engineer qualified to provide acoustical engineering services in the Province of Ontario shall review the building plans to ensure that the windows and building constructions (exterior walls and roof/ceiling systems) are adequately designed to ensure acceptable indoor noise levels.

**Limitations**

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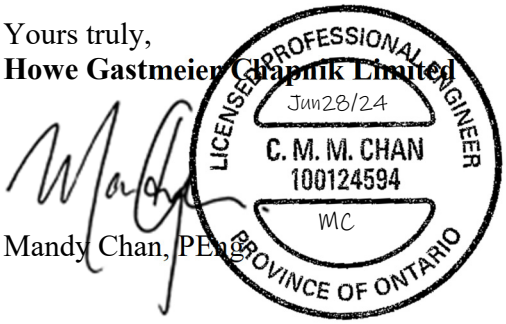
Any conclusions and/or recommendations herein reflect the judgment of HGC Engineering based on information available at the time of preparation and were developed in good faith on information provided by others, as noted in the report, which has been assumed to be factual and accurate. Changed conditions or information occurring or becoming known after the date of this report could affect the results and conclusions presented.

We trust this information is sufficient for your present purposes. If you require further information or require clarification, please do not hesitate to contact us.

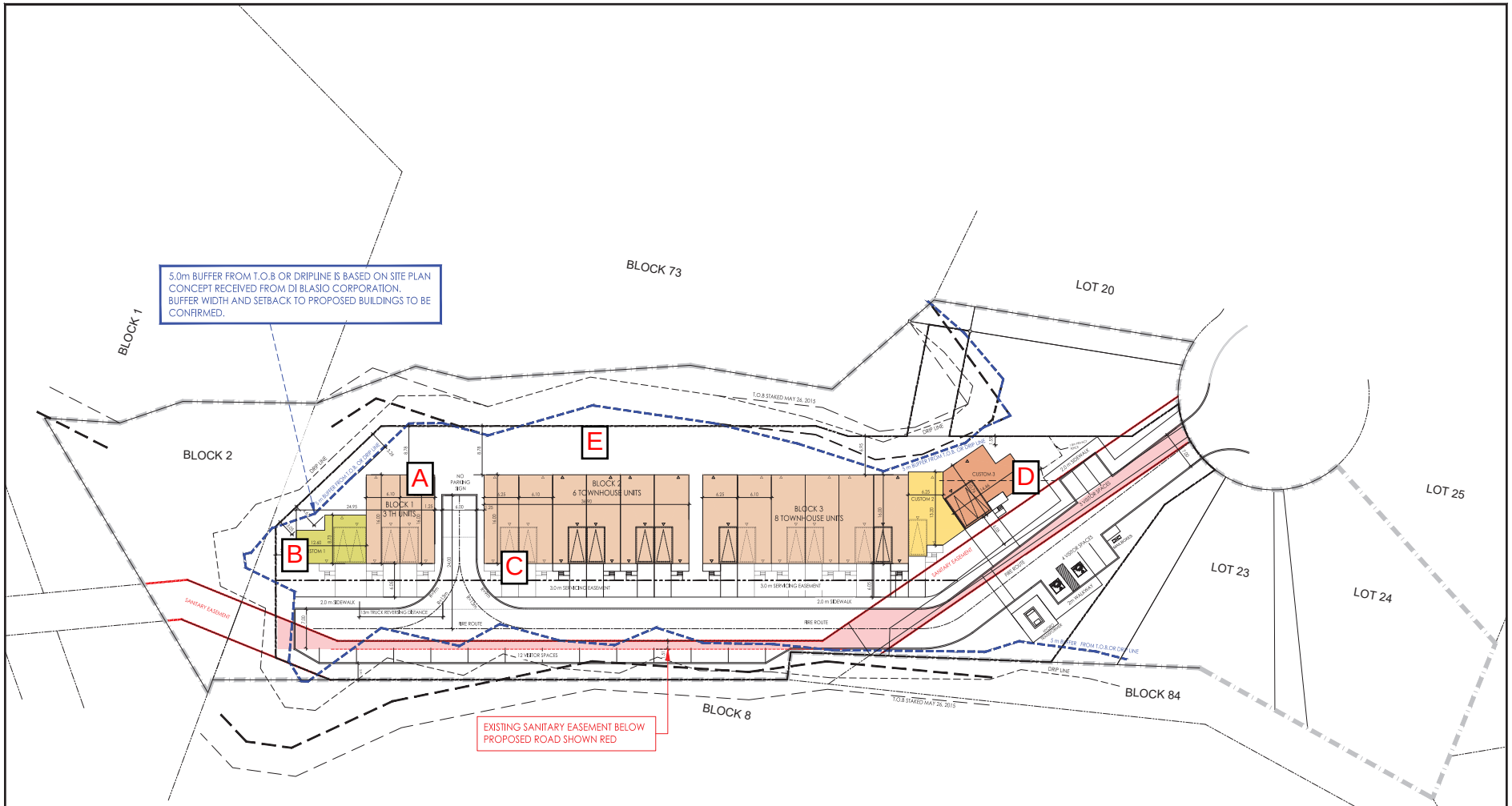
Thank you.

Yours truly,
**Howe Gastmeier Chapnik Limited**




Mandy Chan, PEng.

Attach: Figures 1 & 2, Stamson Outputs




| | | |
|---|---|---|
| SITE AREA | 1.27 Ha | 3.14 Ac |
| DEVELOPABLE AREA | 0.67 Ha | 1.66 Ac |
| 20FT - 2.5 ST TOWNS | 14 | |
| CUSTOM 1 - 2.5 ST TOWNS | 1 | |
| CUSTOM 2 - 2.5 ST TOWNS | 1 | |
| CUSTOM 3 - 2.5 ST TOWNS | 1 | |
| TOTAL NO. OF UNITS | 17 | |
| DENSITY | 25.30 UPH | 10.24 UPAc |
| VISITOR PARKING SPACES | 19 | |

WASTE COLLECTION NOTES:

1. INTERNAL ROADWAYS MUST BE CONSTRUCTED OF A SOLID SURFACE MATERIAL, SUCH AS ASPHALT, CONCRETE OR LOCKSTONE, AND DESIGNED TO SUPPORT A MINIMUM OF 35 TONNES, THE WEIGHT OF A FULLY LOADED WASTE COLLECTION VEHICLE.
2. OVERHEAD CLEARANCE OUTSIDE OF THE COLLECTION POINT - OUTSIDE THE COLLECTION POINT, A CLEAR HEIGHT OF 4.4 METRES FROM THE TOP OF THE ACCESS ROAD, ALONG THE WASTE COLLECTION VEHICLE.
3. THE MAXIMUM GRADE PERMITTED ALONG THE WASTE COLLECTION VEHICLE ACCESS ROUTE IS 8 PERCENT.
4. EACH DWELLING UNIT WITHIN A DEVELOPMENT MUST HAVE ITS OWN IDENTIFIABLE COLLECTION POINT. SEE APPENDIX 9 (WASTE COLLECTION DESIGN STANDARDS MANUAL) FOR AN EXAMPLE OF A COLLECTION POINT. THE COLLECTION POINT MUST BE LOCATED ALONG THE CURB, ADJACENT TO THE DRIVEWAY, AND MUST BE DIRECTLY ACCESSIBLE TO THE WASTE COLLECTION VEHICLE AND FREE OF OBSTRUCTIONS SUCH AS PARKED CARS.
5. EACH DWELLING UNITS' COLLECTION POINT ALONG THE CURB MUST BE AT LEAST 3 SQUARE METRES, OR 32 SQUARE FEET IN ORDER TO PROVIDE SUFFICIENT SPACE FOR THE PLACEMENT OF CARTS: MAXIMUM (1) LARGE GARBAGE CART OR RECYCLING CART (360 LITRES) AND ONE (1) SOURCE SEPARATED ORGANICS CARTS (100 LITRES), OVERFLOW WASTE (I.E., ADDITIONAL BAGS), YARD WASTE AND BULKY ITEMS.
6. A MINIMUM OF 3.75 SQUARE METERS (2.5 METERS BY 1.5 METERS) MUST BE PROVIDED IN THE GARAGE, BACKYARD, OR SIDE FOR STORAGE OF CARTS, WITH DIRECT ACCESS TO THE COLLECTION POINT LOCATION.

X Road Traffic Noise Prediction Locations

Figure 1: Site Plan Showing Prediction Locations

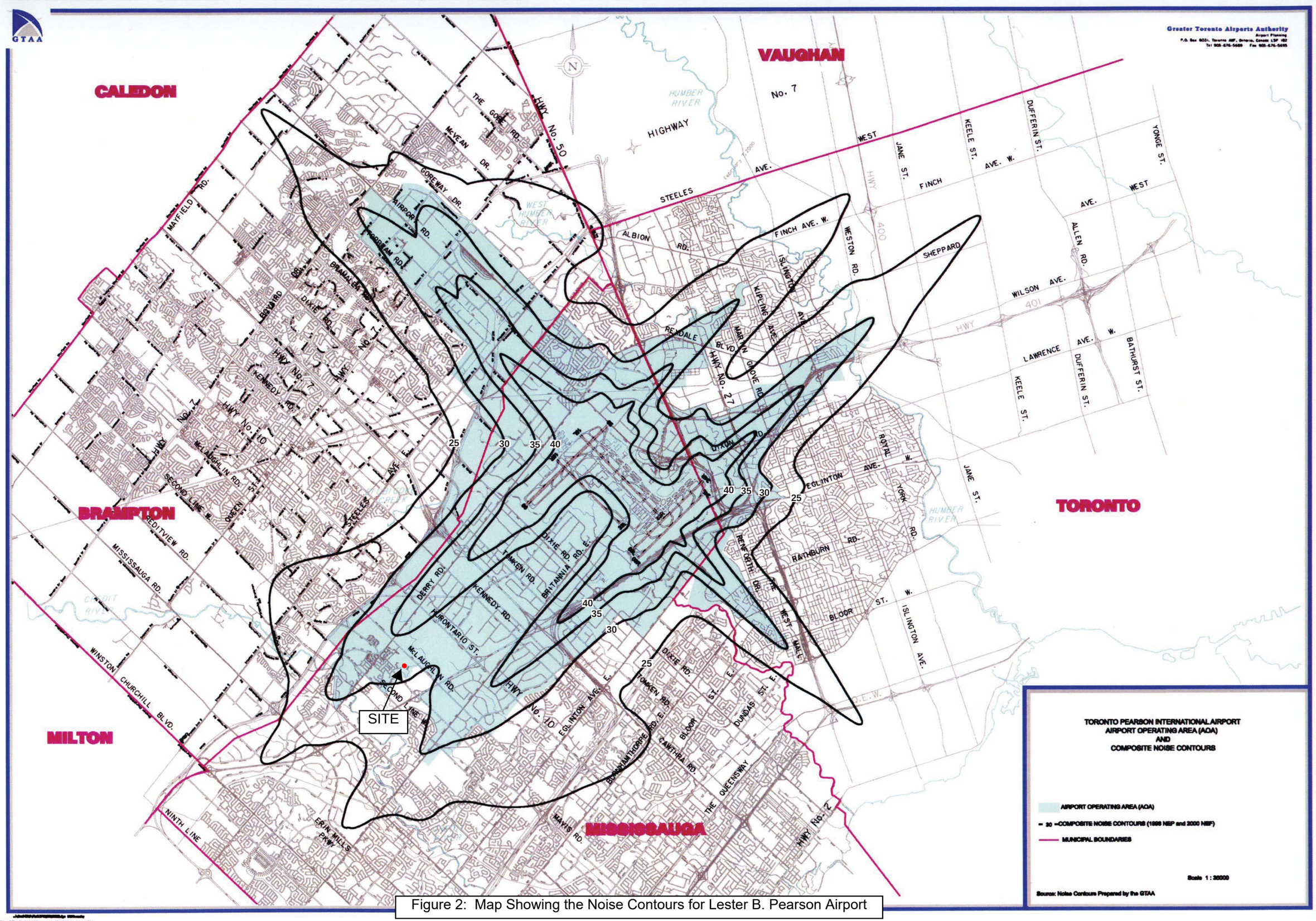



Figure 2: Map Showing the Noise Contours for Lester B. Pearson Airport

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STAMSON 5.0        NORMAL REPORT        Date: 28-06-2024 08:44:21
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: west.te              Time Period: Day/Night 16/8 hours
Description: Predicted daytime and nighttime sound levels at the upper storey windows
of the west façade of Block 1,typical of west facades of Blocks 2 and 3 and Customs 1
to 3.

Road data, segment # 1: MavisNB (day/night)
-------------------------------------------
Car traffic volume  : 22275/2475  veh/TimePeriod
Medium truck volume :  1361/151   veh/TimePeriod
Heavy truck volume  :  1114/124   veh/TimePeriod
Posted speed limit  :    70 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1: MavisNB (day/night)
-----------------------------------------
Angle1   Angle2           : -20.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 325.00 / 325.00 m
Receiver height           :   7.00 / 7.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: MavisSB (day/night)
-------------------------------------------
Car traffic volume  : 22275/2475  veh/TimePeriod  *
Medium truck volume :  1361/151   veh/TimePeriod  *
Heavy truck volume  :  1114/124   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):  27500
    Percentage of Annual Growth        :   2.50
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   5.50
    Heavy Truck  % of Total Volume     :   4.50
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: MavisSB (day/night)
-----------------------------------------
Angle1   Angle2           : -20.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 345.00 / 345.00 m
Receiver height           :   7.00 / 7.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

```
Road data, segment # 3: McLaughlin (day/night)
-----------------------------------------------
Car traffic volume  : 33611/3735  veh/TimePeriod  *
Medium truck volume :   572/64    veh/TimePeriod  *
Heavy truck volume  :   468/52    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):  38500
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   1.65
    Heavy Truck  % of Total Volume     :   1.35
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: McLaughlin (day/night)
--------------------------------------------
Angle1   Angle2           :  20.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 370.00 / 370.00 m
Receiver height           :   7.00 / 7.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Results segment # 1: MavisNB (day)
----------------------------------

Source height = 1.46 m

ROAD (0.00 + 50.34 + 0.00) = 50.34 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -20     90   0.50  73.40   0.00 -19.99  -3.08   0.00   0.00   0.00  50.34
-------------------------------------------------------------------------------

Segment Leq : 50.34 dBA

Results segment # 2: MavisSB (day)
----------------------------------

Source height = 1.46 m

ROAD (0.00 + 49.95 + 0.00) = 49.95 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -20     90   0.50  73.40   0.00 -20.38  -3.08   0.00   0.00   0.00  49.95
-------------------------------------------------------------------------------

Segment Leq : 49.95 dBA

Results segment # 3: McLaughlin (day)
-------------------------------------

Source height = 1.08 m

ROAD (0.00 + 45.24 + 0.00) = 45.24 dBA
```

| Angle1 | Angle2 | Alpha | RefLeq | P.Adj | D.Adj | F.Adj | W.Adj | H.Adj | B.Adj | SubLeq |
|---|---|---|---|---|---|---|---|---|---|---|
| 20 | 90 | 0.51 | 71.91 | 0.00 | -20.99 | -5.68 | 0.00 | 0.00 | 0.00 | 45.24 |

Segment Leq : 45.24 dBA

Total Leq All Segments: 53.81 dBA

Results segment # 1: MavisNB (night)

Source height = 1.46 m

ROAD (0.00 + 43.81 + 0.00) = 43.81 dBA

| Angle1 | Angle2 | Alpha | RefLeq | P.Adj | D.Adj | F.Adj | W.Adj | H.Adj | B.Adj | SubLeq |
|---|---|---|---|---|---|---|---|---|---|---|
| -20 | 90 | 0.50 | 66.87 | 0.00 | -19.99 | -3.08 | 0.00 | 0.00 | 0.00 | 43.81 |

Segment Leq : 43.81 dBA

Results segment # 2: MavisSB (night)

Source height = 1.46 m

ROAD (0.00 + 43.42 + 0.00) = 43.42 dBA

| Angle1 | Angle2 | Alpha | RefLeq | P.Adj | D.Adj | F.Adj | W.Adj | H.Adj | B.Adj | SubLeq |
|---|---|---|---|---|---|---|---|---|---|---|
| -20 | 90 | 0.50 | 66.87 | 0.00 | -20.38 | -3.08 | 0.00 | 0.00 | 0.00 | 43.42 |

Segment Leq : 43.42 dBA

Results segment # 3: McLaughlin (night)

Source height = 1.08 m

ROAD (0.00 + 38.71 + 0.00) = 38.71 dBA

| Angle1 | Angle2 | Alpha | RefLeq | P.Adj | D.Adj | F.Adj | W.Adj | H.Adj | B.Adj | SubLeq |
|---|---|---|---|---|---|---|---|---|---|---|
| 20 | 90 | 0.51 | 65.38 | 0.00 | -20.99 | -5.68 | 0.00 | 0.00 | 0.00 | 38.71 |

Segment Leq : 38.71 dBA

Total Leq All Segments: 47.28 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 53.81
(NIGHT): 47.28

```
STAMSON 5.0        NORMAL REPORT        Date: 28-06-2024 08:43:37
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: south.te             Time Period: Day/Night 16/8 hours
Description: Predicted daytime and nighttime sound levels at the upper storey windows
of the south façade of Custom 1.

Road data, segment # 1: MavisNB (day/night)
-------------------------------------------
Car traffic volume  : 22275/2475  veh/TimePeriod
Medium truck volume :  1361/151   veh/TimePeriod
Heavy truck volume  :  1114/124   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):  55000
    Percentage of Annual Growth        :   2.50
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   5.50
    Heavy Truck  % of Total Volume     :   4.50
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 1: MavisNB (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   40.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 1
House density             :     20 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 315.00 / 315.00 m
Receiver height           :   7.00 / 7.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: MavisSB (day/night)
-------------------------------------------
Car traffic volume  : 22275/2475  veh/TimePeriod  *
Medium truck volume :  1361/151   veh/TimePeriod  *
Heavy truck volume  :  1114/124   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):  27500
    Percentage of Annual Growth        :   2.50
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   5.50
    Heavy Truck  % of Total Volume     :   4.50
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: MavisSB (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   40.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 1
House density             :     20 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 335.00 / 335.00 m
```

```
Receiver height           :   7.00 / 7.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 3: McLaughlin (day/night)
-----------------------------------------------
Car traffic volume  : 33611/3735  veh/TimePeriod  *
Medium truck volume :   572/64    veh/TimePeriod  *
Heavy truck volume  :   468/52    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):  38500
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   1.65
    Heavy Truck  % of Total Volume     :   1.35
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: McLaughlin (day/night)
-----------------------------------------------
Angle1   Angle2           :   0.00 deg   15.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 1
House density             :     20 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 380.00 / 380.00 m
Receiver height           :   7.00 / 7.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Results segment # 1: MavisNB (day)
-----------------------------------

Source height = 1.46 m

ROAD (0.00 + 51.37 + 0.00) = 51.37 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     40   0.50  73.40   0.00 -19.78  -2.25   0.00   0.00   0.00  51.37
-------------------------------------------------------------------------------

Segment Leq : 51.37 dBA

Results segment # 2: MavisSB (day)
-----------------------------------

Source height = 1.46 m

ROAD (0.00 + 50.97 + 0.00) = 50.97 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     40   0.50  73.40   0.00 -20.18  -2.25   0.00   0.00   0.00  50.97
-------------------------------------------------------------------------------

Segment Leq : 50.97 dBA
```

```
Results segment # 3: McLaughlin (day)
-------------------------------------

Source height = 1.08 m

ROAD (0.00 + 39.93 + 0.00) = 39.93 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     15   0.51  71.91   0.00 -21.16 -10.82   0.00   0.00   0.00  39.93
-------------------------------------------------------------------------------

Segment Leq : 39.93 dBA

Total Leq All Segments: 54.34 dBA

Results segment # 1: MavisNB (night)
-------------------------------------

Source height = 1.46 m

ROAD (0.00 + 44.04 + 0.00) = 44.04 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     40   0.50  66.87   0.00 -19.78  -2.25   0.00  -0.80   0.00  44.04
-------------------------------------------------------------------------------

Segment Leq : 44.04 dBA

Results segment # 2: MavisSB (night)
-------------------------------------

Source height = 1.46 m

ROAD (0.00 + 43.64 + 0.00) = 43.64 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     40   0.50  66.87   0.00 -20.18  -2.25   0.00  -0.80   0.00  43.64
-------------------------------------------------------------------------------

Segment Leq : 43.64 dBA

Results segment # 3: McLaughlin (night)
---------------------------------------

Source height = 1.08 m

ROAD (0.00 + 32.60 + 0.00) = 32.60 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     15   0.51  65.38   0.00 -21.16 -10.82   0.00  -0.80   0.00  32.60
-------------------------------------------------------------------------------

Segment Leq : 32.60 dBA

Total Leq All Segments: 47.01 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 54.34
                           (NIGHT): 47.01
```

```
STAMSON 5.0        NORMAL REPORT        Date: 28-06-2024 08:43:01
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: east.te              Time Period: Day/Night 16/8 hours
Description: Predicted daytime and nighttime sound levels at the upper storey windows
of the east façade of Block 2,typical of east facades of Blocks 1 and 3.

Road data, segment # 1: MavisNB (day/night)
-------------------------------------------
Car traffic volume  : 22275/2475  veh/TimePeriod
Medium truck volume :  1361/151   veh/TimePeriod
Heavy truck volume  :  1114/124   veh/TimePeriod
Posted speed limit  :    70 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1: MavisNB (day/night)
-----------------------------------------
Angle1   Angle2           :  20.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 325.00 / 325.00 m
Receiver height           :   7.00 / 7.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: MavisSB (day/night)
-------------------------------------------
Car traffic volume  : 22275/2475  veh/TimePeriod  *
Medium truck volume :  1361/151   veh/TimePeriod  *
Heavy truck volume  :  1114/124   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):  27500
    Percentage of Annual Growth        :   2.50
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   5.50
    Heavy Truck  % of Total Volume     :   4.50
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: MavisSB (day/night)
-----------------------------------------
Angle1   Angle2           :  20.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 345.00 / 345.00 m
Receiver height           :   7.00 / 7.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

```
Road data, segment # 3: McLaughlin (day/night)
-----------------------------------------------
Car traffic volume  : 33611/3735  veh/TimePeriod  *
Medium truck volume :   572/64    veh/TimePeriod  *
Heavy truck volume  :   468/52    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):  38500
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   1.65
    Heavy Truck  % of Total Volume     :   1.35
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: McLaughlin (day/night)
--------------------------------------------
Angle1   Angle2           : -20.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 370.00 / 370.00 m
Receiver height           :   7.00 / 7.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Results segment # 1: MavisNB (day)
----------------------------------

Source height = 1.46 m

ROAD (0.00 + 47.76 + 0.00) = 47.76 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
    20     90   0.50  73.40   0.00 -19.99  -5.65   0.00   0.00   0.00  47.76
-------------------------------------------------------------------------------

Segment Leq : 47.76 dBA

Results segment # 2: MavisSB (day)
----------------------------------

Source height = 1.46 m

ROAD (0.00 + 47.37 + 0.00) = 47.37 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
    20     90   0.50  73.40   0.00 -20.38  -5.65   0.00   0.00   0.00  47.37
-------------------------------------------------------------------------------

Segment Leq : 47.37 dBA

Results segment # 3: McLaughlin (day)
-------------------------------------

Source height = 1.08 m

ROAD (0.00 + 47.83 + 0.00) = 47.83 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
```

```
   -20     90   0.51  71.91   0.00 -20.99  -3.10   0.00   0.00   0.00  47.83
-------------------------------------------------------------------------------

Segment Leq : 47.83 dBA

Total Leq All Segments: 52.43 dBA

Results segment # 1: MavisNB (night)
-----------------------------------

Source height = 1.46 m

ROAD (0.00 + 41.23 + 0.00) = 41.23 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
    20     90   0.50  66.87   0.00 -19.99  -5.65   0.00   0.00   0.00  41.23
-------------------------------------------------------------------------------

Segment Leq : 41.23 dBA

Results segment # 2: MavisSB (night)
-----------------------------------

Source height = 1.46 m

ROAD (0.00 + 40.84 + 0.00) = 40.84 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
    20     90   0.50  66.87   0.00 -20.38  -5.65   0.00   0.00   0.00  40.84
-------------------------------------------------------------------------------

Segment Leq : 40.84 dBA

Results segment # 3: McLaughlin (night)
--------------------------------------

Source height = 1.08 m

ROAD (0.00 + 41.30 + 0.00) = 41.30 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -20     90   0.51  65.38   0.00 -20.99  -3.10   0.00   0.00   0.00  41.30
-------------------------------------------------------------------------------

Segment Leq : 41.30 dBA

Total Leq All Segments: 45.90 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 52.43
                           (NIGHT): 45.90
```

```
STAMSON 5.0        NORMAL REPORT        Date: 28-06-2024 08:43:11
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: north.te             Time Period: Day/Night 16/8 hours
Description: Predicted daytime and nighttime sound levels at the upper storey windows
of the north façade of Custom 3.

Road data, segment # 1: MavisNB (day/night)
-------------------------------------------
Car traffic volume  : 22275/2475  veh/TimePeriod
Medium truck volume :  1361/151   veh/TimePeriod
Heavy truck volume  :  1114/124   veh/TimePeriod
Posted speed limit  :    70 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1: MavisNB (day/night)
-----------------------------------------
Angle1   Angle2           :  60.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 388.00 / 388.00 m
Receiver height           :   7.00 / 7.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: MavisSB (day/night)
-------------------------------------------
Car traffic volume  : 22275/2475  veh/TimePeriod  *
Medium truck volume :  1361/151   veh/TimePeriod  *
Heavy truck volume  :  1114/124   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):  27500
    Percentage of Annual Growth        :   2.50
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   5.50
    Heavy Truck  % of Total Volume     :   4.50
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: MavisSB (day/night)
-----------------------------------------
Angle1   Angle2           :  60.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 408.00 / 408.00 m
Receiver height           :   7.00 / 7.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

```
Road data, segment # 3: McLaughlin (day/night)
-----------------------------------------------
Car traffic volume  : 33611/3735  veh/TimePeriod  *
Medium truck volume :   572/64    veh/TimePeriod  *
Heavy truck volume  :   468/52    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):  38500
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   1.65
    Heavy Truck  % of Total Volume     :   1.35
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: McLaughlin (day/night)
--------------------------------------------
Angle1   Angle2           : -40.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 300.00 / 300.00 m
Receiver height           :   7.00 / 7.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Results segment # 1: MavisNB (day)
----------------------------------

Source height = 1.46 m

ROAD (0.00 + 41.30 + 0.00) = 41.30 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
    60     90   0.50  73.40   0.00 -21.14 -10.97   0.00   0.00   0.00  41.30
-------------------------------------------------------------------------------

Segment Leq : 41.30 dBA

Results segment # 2: MavisSB (day)
----------------------------------

Source height = 1.46 m

ROAD (0.00 + 40.97 + 0.00) = 40.97 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
    60     90   0.50  73.40   0.00 -21.47 -10.97   0.00   0.00   0.00  40.97
-------------------------------------------------------------------------------

Segment Leq : 40.97 dBA
```

```
Results segment # 3: McLaughlin (day)
-------------------------------------

Source height = 1.08 m

ROAD (0.00 + 50.03 + 0.00) = 50.03 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -40     90   0.51  71.91   0.00 -19.62  -2.27   0.00   0.00   0.00  50.03
-------------------------------------------------------------------------------

Segment Leq : 50.03 dBA

Total Leq All Segments: 51.03 dBA

Results segment # 1: MavisNB (night)
-------------------------------------

Source height = 1.46 m

ROAD (0.00 + 34.77 + 0.00) = 34.77 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
    60     90   0.50  66.87   0.00 -21.14 -10.97   0.00   0.00   0.00  34.77
-------------------------------------------------------------------------------

Segment Leq : 34.77 dBA

Results segment # 2: MavisSB (night)
-------------------------------------

Source height = 1.46 m

ROAD (0.00 + 34.44 + 0.00) = 34.44 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
    60     90   0.50  66.87   0.00 -21.47 -10.97   0.00   0.00   0.00  34.44
-------------------------------------------------------------------------------

Segment Leq : 34.44 dBA

Results segment # 3: McLaughlin (night)
---------------------------------------

Source height = 1.08 m

ROAD (0.00 + 43.50 + 0.00) = 43.50 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -40     90   0.51  65.38   0.00 -19.62  -2.27   0.00   0.00   0.00  43.50
-------------------------------------------------------------------------------

Segment Leq : 43.50 dBA

Total Leq All Segments: 44.50 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 51.03
                           (NIGHT): 44.50
```

```
STAMSON 5.0        NORMAL REPORT        Date: 28-06-2024 08:43:23
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: ola.te               Time Period: 16 hours
Description: Predicted daytime sound levels in the rear yard OLA of Block 2, typical
of all OLAs.

Road data, segment # 1: MavisNB
-------------------------------
Car traffic volume  : 22275 veh/TimePeriod
Medium truck volume :  1361 veh/TimePeriod
Heavy truck volume  :  1114 veh/TimePeriod
Posted speed limit  :    70 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1: MavisNB
-----------------------------
Angle1   Angle2           : -20.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1
House density             :     20 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 320.00 m
Receiver height           :   1.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: MavisSB
-------------------------------
Car traffic volume  : 22275 veh/TimePeriod  *
Medium truck volume :  1361 veh/TimePeriod  *
Heavy truck volume  :  1114 veh/TimePeriod  *
Posted speed limit  :    70 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 2: MavisSB
-----------------------------
Angle1   Angle2           : -20.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1
House density             :     20 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 340.00 m
Receiver height           :   1.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Road data, segment # 3: McLaughlin
----------------------------------
Car traffic volume  : 33611 veh/TimePeriod  *
Medium truck volume :   572 veh/TimePeriod  *
Heavy truck volume  :   468 veh/TimePeriod  *
Posted speed limit  :    70 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)
```

```
Data for Segment # 3: McLaughlin
--------------------------------
Angle1   Angle2           :  20.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1
House density             :     20 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 370.00 m
Receiver height           :   1.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Results segment # 1: MavisNB
----------------------------

Source height = 1.46 m

ROAD (0.00 + 47.24 + 0.00) = 47.24 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -20     90   0.66  73.40   0.00 -22.06  -3.31   0.00  -0.80   0.00  47.24
-------------------------------------------------------------------------------

Segment Leq : 47.24 dBA

Results segment # 2: MavisSB
----------------------------

Source height = 1.46 m

ROAD (0.00 + 46.80 + 0.00) = 46.80 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -20     90   0.66  73.40   0.00 -22.50  -3.31   0.00  -0.80   0.00  46.80
-------------------------------------------------------------------------------

Segment Leq : 46.80 dBA


Results segment # 3: McLaughlin
-------------------------------

Source height = 1.08 m

ROAD (0.00 + 41.94 + 0.00) = 41.94 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
    20     90   0.66  71.91   0.00 -23.11  -6.06   0.00  -0.80   0.00  41.94
-------------------------------------------------------------------------------

Segment Leq : 41.94 dBA

Total Leq All Segments: 50.66 dBA


TOTAL Leq FROM ALL SOURCES:       50.66
```