NOISE IMPACT STUDY

Proposed Commercial/Industrial Development
13846&13940 Airport Rd, Caledon, ON

October 2021

TOWN OF CALEDON
PLANNING
RECEIVED
March 18, 2022

Prepared for
RG Consulting Inc.

TRANS-PLAN
Transportation Engineering

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October 6, 2021

c/o RG Consulting Inc.

Mr. Trevor Alkema, BES

2201 Finch Avenue West, Suite #27

Toronto, ON M9M 2Y9

Re: Proposed Commercial/Industrial Development, 13846 and 13940 Airport Road, Caledon (Sandhill), Ontario – Noise Impact Study

Dear Mr. Alkema,

TRANS-PLAN is pleased to submit this Noise Impact Study in support of the proposed commercial/industrial buildings development, located at 13846 and 13940 Airport Road, on the southwest quadrant of Airport Road and King Street (ON Highway 9), in the community of Sandhill, in the town of Caledon, Regional Municipality of Peel.

The proposed development consists of eight commercial buildings with the following specifications:

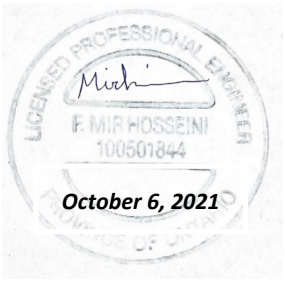
- Block 1: Two 2-storey buildings (Building B and Building C) with total building areas of 3933 m^2 and 1210 m^2, respectively. Two 1-storey buildings (Building A and Building H) with ground floor areas of 375 m^2 and 136.3 m^2, respectively.
- Block 3: Four 2-storey buildings (Building D, Building E, Building F, and Building G) with total building areas of 1097 m^2, 4198 m^2, 4396 m^2, and 4396 m^2, respectively.

In support of your application, and as required by the Town of Caledon and the Regional Municipality of Peel, we have prepared this Noise Impact Study report to meet the submission requirement. The sound levels from transportation sources (road) in the vicinity of the site (Airport Road and King Street) were predicted and assessed against the applicable Ministry of the Environment, Conservation and Parks (MECP) noise guidelines. The noise impact of the proposed development on its surrounding has also been investigated.

The following mitigation measures are required to ensure the applicable MECP noise guideline requirements can be met, and a suitable acoustic environment can be provided for the office occupants and retail clients and employees:

- Installation of central air conditioning for all units, allowing windows to remain closed.
- Upgraded wall construction (STC 54) and minimum Ontario Building Code window requirement (STC25) for all buildings.

With the appropriate design and recommendations outlined in this report, the proposed commercial/industrial development is considered feasible.



October 6, 2021

Sincerely,

Farhad Hosseini, P.Eng.

Acoustics Engineer

Trans-Plan Transportation Inc.
Transportation Consultants

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1. INTRODUCTION

Trans-Plan has been retained to complete a Noise Impact Study for the proposed commercial/industrial development, located at 13846 and 13940 Airport Road, southwest of the intersection of Airport Road and King Street, in the Town of Caledon, Peel Region, ON. This assessment includes the following studies and scope of work:

The Noise Impact Study includes the following:

- Review and assessment of the future sound levels from nearby transportation sources and their anticipated traffic growth,
- Review and assessment of the noise impact of the proposed development (as a stationary source) on the noise sensitive receptors that are located close to the development.
- Necessary mitigation in order to meet the requirements of the Ministry of the Environment, Conservation and Parks (MECP), the Town of Caledon (the Town), and the Peel Region (the Region).

2. SITE LOCATION

The subject site, shown in Figure 1, is located southwest of the intersection of Airport Road and King Street, in the town of Caledon, Peel Region. The subject site is currently encompassing an existing house with a GFA of 64.6 m^2 which will be retained and expanded to cover a GFA of 136.3 m^2 as well as two aluminum siding buildings. The proposed development is surrounded by Highway Commercial (CH) and Unserviced Industrial (MU) land uses according to the Town of Caledon's Zoning By-Law 2006-50. The site's immediate surroundings also include Sandhill United Church, a 2-storey dwelling located at 13857 Airport Road, and a single storey dwelling located at 13972 Airport Road.

3. PROPOSED DEVELOPMENT

The site plan, provided by RG Consulting Inc., is shown in Figure 2. The proposed development consists of five (5) blocks. Block 1 and Block 3 each consists of four buildings having the following specifications:

- Block 1: Two 2-storey buildings (Building B and Building C) with total building areas of 3933 m^2 and 1210 m^2, respectively. Two 1-storey buildings (Building A and Building H) with ground floor areas of 375 m^2 and 136.3 m^2, respectively.

- Block 3: Four 2-storey buildings (Building D, Building E, Building F, and Building G) with total building areas of 1097 m^2, 4198 m^2, 4396 m^2, and 4396 m^2, respectively.

The site plan of the proposed development is presented in Appendix A .

4. NOISE SOURCES

4.1 Transportation Sources

The major transportation noise sources in the vicinity of the site include road traffic on Airport Road and King Street.

4.1.1 Road Traffic Sources

Airport Road is a two-lane north/south suburban connector roadway, as defined in Region of Peel's Road Characterization Study 2013, with a posted speed limit of 60 km/h in the study area. According to the

Region of Peel's Transportation System Planning, Airport Road will be ultimately widened to include four lanes with a Right-Of-Way (ROW) of 45 meters.

King Street is a two-lane east/west suburban connector roadway with a posted speed limit of 70 km/h and a Right-Of-Way of 30 meters.

Airport Road forms a signalized intersection with King Street and King Street forms a signalized intersection with Airport Road.

The ultimate Annual Average Daily Traffic (AADT) projections for the two above-mentioned roads were provided by the Peel Region. Table 1 summarizes these traffic data with the raw data included in Appendix B.

Table 1 – Road Traffic Data

Roadway	AADT[1]	Year	No. of Lanes	% Trucks				Posted Speed Limit (km/h)	Day/Night Split	% Grade
				Daytime		Nighttime				
				Med	Heavy	Med	Heavy			
Airport Road	32,400	Ultimate	4	4.37	7.34	4.68	6.92	60	85% / 15%	0
King Street	16,200	Ultimate	2	2.97	7.54	3.48	9.25	70	89% / 11%	0

Notes: 1. Annual Average Daily Traffic provided by Transportation Services Department of Peel Region.

5. NOISE CRITERIA

5.1 Ministry of the Environment, Conservation and Parks

Noise criteria for the stationary and transportation sources are outlined within the MECP publication NPC-300 "Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning. The applicable criteria for this project are summarized in Table 2 and Table 3.

These criteria are the normally allowable maximum limits, beyond which mitigation or control measures are required. These measures take the form of ventilation requirements, building component construction, and/or sound barriers. Table 2 and Table 3 summarize the applicable criteria for stationary and transportation sources, respectively. This information is also presented in Appendix C.

Table 2 is used to evaluate the noise impact of the proposed commercial development on the noise sensitive receptors in the vicinity of the proposed commercial development. Office and retail spaces are not recognized as noise sensitive spaces by the MECP's NPC-300. However, it contains recommended daytime indoor sound levels for these spaces that are presented as good practice guidelines. These indoor sound levels for office and retail spaces are presented in Table 3 and form the basis of the noise control measures of this study.

Table 2 – Applicable Noise Criteria Summary for Stationary Sources

Point of Reception	Time Period	L_{eq} (dBA) Class 1	L_{eq} (dBA) Class 2	L_{eq} (dBA) Class 3	L_{eq} (dBA) Class 4
Plane of Window	7:00-19:00	50	50	45	60
	19:00-23:00	50	50	40	60
	23:00-7:00	45	45	40	55
Outdoor Living Area	7:00-19:00	50	50	45	55
	19:00-23:00	50	45	40	55

Table 3 – Applicable Noise Criteria Summary for Transportation Sources

Point of Reception	Time Period[1]	L_{eq} (dBA) from Road Sources[2]	L_{eq} (dBA) from Rail Sources[2]	Control Measures
Plane of Window	Day	>65		Central Air Conditioning Mandatory
		55 - 65		Provision for installation of Air Conditioning at occupant's discretion
	Night	>60		Central Air Conditioning Mandatory
		50 - 60		Provision for installation of Air Conditioning at occupant's discretion
Indoor Living Areas	Day	45	40	Building Construction / Architectural Design
	Night	45	40	
Indoor Sleeping Quarters	Day	45	40	
	Night	40	35	
General Offices/Retail Stores[3]	Day	50[3]	45[3]	
Outdoor Living Area	Day	55[4]		Sound Barrier

Notes: 1. 16-hour Daytime Period runs from 07:00 – 23:00. 8-hour Nighttime Period runs from 23:00 – 07:00.
2. Leq-Energy equivalent continuous sound level over the specified time period.
3. These sound levels are for good practice and recommendation, only.
4. Up to 5dB excess above the criteria is allowed if noise control measures are not feasible for technical, economic or administrative reasons with appropriate Warning Clauses included.

5.2 Town of Caledon/Peel Region

The Region of Peel guidelines are similar to the MECP Guidelines, except that the nighttime level for triggering the central air conditioning requirement is 1 dBA more stringent that the level specified by the MECP. Specifically, mandatory air conditioning for nighttime sound levels of 60 dBA or greater triggers the requirement for central air conditioning, and the provision for adding air conditioning at a later date when nighttime sound levels are between 51 dBA and 59 dBA inclusive.

6. NOISE IMPACT ASSESSMENT

6.1 Noise Impact Assessment on the Proposed Commercial Development by the Surroundings

The daytime and nighttime energy equivalent sound pressure levels ($L_{eq\ Day}$ – 16-hour energy equivalent continuous sound level and $L_{eq\ Night}$ – 8-hour energy equivalent continuous sound level) were calculated using STAMSON V5.04, the computerized road and rail traffic noise prediction software of the MECP. This software is configured to implement Ontario Road Noise Analysis Method for Environment and Transportation (ORNAMENT) and Sound from Trains Environmental Analysis Method (STEAM) algorithms. To be conservative, screening from existing buildings in the vicinity of the site was not included. Sample calculations are included in Appendix D.

6.1.1 Sound Levels at the Building Façades

6.1.1.1 Sound from transportation sources

The plane of window assessment points were calculated at the height of the first and second-floor plane of windows for the east and north facades of the proposed buildings. The highest unmitigated daytime sound levels of 71 dBA and 69 dBA occur at the east and north façades of both buildings A and B, respectively. Table 4.demonstrates the daytime and nighttime energy equivalent sound levels originating form road traffic at all planes of window locations on the façades of the eight proposed buildings in blocks 1 and 3.

Since these buildings are exclusively used for commercial purposes, only daytime energy equivalent sound levels ($L_{eq,16h}$) are of interest for this analysis. The nighttime energy equivalent sound levels ($L_{eq,\ 8h}$) are provided for demonstration purposes only.

Figure 3 demonstrates the positions of the plane of the window points of receptions relative to the facades of the eight buildings.

Table 4 – Predicted Unmitigated Sound Level at the Facades of the Proposed Buildings

Building	Floor	Façade	Plane of Window Elevation (m)	Source	Distance (m)	$L_{eq,Day}$ (dBA)	$L_{eq,Night}$ (dBA)
A	1st	East (P1)	1.5	Airport Road	28.5	71	66
				King Street	148.5	59	54
				Total	-	**71**	**66**
		North (P2)		Airport Road	28.5	68	63
				King Street	148.5	62	57

Building	Floor	Façade	Plane of Window Elevation (m)	Source	Distance (m)	$L_{eq,Day}$ (dBA)	$L_{eq,Night}$ (dBA)
				Total	-	**69**	**64**
B	2nd	East (P3)	4.5	Airport Road	29	71	66
				King Street	178	58	53
				Total	-	**71**	**66**
		North (P4)		Airport Road	29	68	63
				King Street	178	61	56
				Total	-	**69**	**64**
	1st	East (P5)	1.5	Airport Road	29	71	66
				King Street	178	58	53
				Total	-	**71**	**66**
		North (P6)		Airport Road	29	68	63
				King Street	178	61	56
				Total	-	**69**	**64**
C	2nd	East (P7)	4.5	Airport Road	36.5	70	65
				King Street	261	56	50
				Total	-	**70**	**65**
		North (P8)	4.5	Airport Road	36.5	66	61
				King Street	261	60	54

Building	Floor	Façade	Plane of Window Elevation (m)	Source	Distance (m)	$L_{eq,Day}$ (dBA)	$L_{eq,Night}$ (dBA)
				Total	-	**67**	**62**
	1st	East (P9)	1.5	Airport Road	28.5	71	66
				King Street	246	57	52
				Total	-	**71**	**66**
		North (P10)		Airport Road	28.5	68	63
				King Street	246	57	52
				Total	-	**68**	**63**
D	2nd	East (P11)	4.5	Airport Road	36	70	65
				King Street	320	55	50
				Total	-	**70**	**65**
		North (P12)		Airport Road	36	66	62
				King Street	320	59	53
				Total	-	**67**	**62**
	1st	East (P13)	1.5	Airport Road	28.7	71	66
				King Street	328	56	50
				Total	-	**71**	**66**
		North (P14)		Airport Road	28.7	68	63
				King Street	328	56	50

Building	Floor	Façade	Plane of Window Elevation (m)	Source	Distance (m)	$L_{eq,Day}$ (dBA)	$L_{eq,Night}$ (dBA)
				Total	-	**68**	**63**
E	2nd	East (P15)	4.5	Airport Road	28.5	71	66
				King Street	382	55	50
				Total	-	**71**	**66**
		North (P16)		Airport Road	31	68	63
				King Street	363	55	50
				Total	-	**68**	**63**
	1st	East (P17)	1.5	Airport Road	28.5	71	66
				King Street	382	55	50
				Total	-	**71**	**66**
		North (P18)		Airport Road	31	68	63
				King Street	363	55	50
				Total	-	**68**	**63**
F	2nd	East (P19)	4.5	Airport Road	29	71	66
				King Street	463	54	49
				Total	-	**71**	**66**
		North (P20)		Airport Road	32	67	63
				King Street	445	54	49

Building	Floor	Façade	Plane of Window Elevation (m)	Source	Distance (m)	$L_{eq,Day}$ (dBA)	$L_{eq,Night}$ (dBA)
				Total	-	**67**	**63**
	1st	East (P21)	1.5	Airport Road	29	71	66
				King Street	463	54	49
				Total	-	**71**	**66**
		North (P22)		Airport Road	32	67	63
				King Street	445	54	49
				Total	-	**67**	**63**
G	2nd	East (23)	4.5	Airport Road	32	70	66
				King Street	500	54	48
				Total	-	**70**	**66**
		North (24)		Airport Road	34	67	62
				King Street	500	54	48
				Total	-	**67**	**62**
	1st	East (25)	1.5	Airport Road	32	70	66
				King Street	500	54	48
				Total	-	**70**	**66**
		North (26)		Airport Road	34	67	62
				King Street	500	54	48

Building	Floor	Façade	Plane of Window Elevation (m)	Source	Distance (m)	$L_{eq,Day}$ (dBA)	$L_{eq,Night}$ (dBA)
				Total	-	**67**	**62**
H	1st	East (27)	1.5	Airport Road	79	63	59
				King Street	150	59	54
				Total	-	**65**	**60**
		North (28)		Airport Road	79	63	59
				King Street	150	62	57
				Total	-	**66**	**61**

6.1.1.2 Sound from Stationary Sources

The subject site is surrounded by commercial land uses to its immediate north and east, industrial land uses to its immediate south and southeast, and agricultural land uses to its immediate west. The subject site does not contain any noise sensitive land uses. Moreover, there are noise sensitive receptors, such as Sandhill United Church, that are closer to the current commercial facilities than the subject site. Therefore, by extension, the noise impact of these facilities on the subject site must comply with the criteria defined by NPC-300.

6.2 Noise Impact Assessment on the Surroundings by the Proposed commercial developments

The proposed development is surrounded by lands designated as Highway Commercial (CH), Unserviced Industrial (MU), and Agricultural lands, based on the Town of Caledon's Zoning By law 2006-50. The zoning map of the Town of Caledon is provided as Appendix E. However, an examination of the aerial imagery of the study area revealed the presence of noise sensitive land uses including a 2-storey detached dwelling to the north of the site (13972 Airport Road), Sandhill United Church (13889 Airport Road) to the east of the site, and a 2-storey dwelling (13857 Airport Road) to the east of the site. The presence of these noise sensitive receptors warrants the investigation of the noise impact of the proposed development as a stationary source of noise on these sensitive receptors.

Since the development is currently in its early stages of planning, the mechanical equipment drawings and their models have not been finalized yet. Therefore, for the sake of this analysis, the sound power level data of a widely used commercial rooftop HVAC Unit (York ZF060) are used. Table 5 demonstrates the sound power levels used in this analysis with the HVAC technical data sheet presented in Appendix F.

Table 5 – Outdoor Sound Power Level for the Proposed HVAC Equipment

Brand	Octave Band Sound Power Levels dB, re 10^{-12} Watts								Sound Rating Number[1] (dBA)
	Centre Frequency (Hz)								
	63	125	250	500	1000	2000	4000	8000	
York ZF069 (5.0 Tons)	86.5	87.5	81.5	77.5	75	71.5	68	70.5	82

[1] Rated in accordance with ARI 270 Standard

To determine the potential number of rooftop HVAC units for each proposed building, it is assumed that the total cooling capacity in tons for commercial uses is determined by the approximate relationship of one-ton of cooling per 350 ft^2 of floor area. Table 6 demonstrates the number of rooftop HVAC units required per building.

Table 6 – Calculation of the Number of Rooftop HVAC Units

Building	Floor	Floor Area (SF)	Ton of Cooling Required	Number of HVAC Units (5.0 Ton)
Building A	Ground Floor	4036	12	2
Building B	Ground Floor	31215	89	18
	2nd Floor	11119	32	6
Building C	Ground Floor	8288	24	5
	2nd Floor	4736	14	3
Building D	Ground Floor	7664	22	4
	2nd Floor	4144	12	2
Building E	Ground Floor	36350	104	21
	2nd Floor	8837	25	5
Building F	Ground Floor	37415	107	21
	2nd Floor	9902	28	6
Building G	Ground Floor	37415	107	21
	2nd Floor	9902	28	6

It is assumed that the units are functioning incessantly during daytime and nighttime and that the development is located at a class 1 area as defined by the MECP's NPC-300. The highest one-hour daytime and nighttime equivalent sound levels ($L_{eq,1h}$) are calculated at the Plane of the window and outdoor living area point of reception of the first row of dwellings using Cadna/A. Cadna/A is configured to implement

the ISO 9613-2 environmental sound propagation algorithms. Table 7 presents the one-hour equivalent sound level at the plane of the window and outdoor living area of the most exposed dwellings with the sound level contours and point of receptions presented as Figure 4.

Table 7 – Noise Impact of the Proposed Building on its Surroundings using 8 HVAC Units/Block

Location		Elevation (m)	Equivalent Sound Level		Criteria (Plane of Window) Class 1		Compliance	
			Day ($L_{eq,1h}$)	Night ($L_{eq,1h}$)	Day	Night	Day	Night
Plane of Window	13972 Airport Road	4.5	43	43	50	45	Yes	Yes
Outdoor Living Area	13972 Airport Road	1.5	41	41	50	N/A	Yes	N/A
Plane of Window	13857 Airport Road	4.5	45	45	50	45	Yes	Yes
Outdoor Living Area	13857 Airport Road	1.5	43	43	50	N/A	Yes	N/A
Plane of Window	Sandhill United Church	1.5	45	45	50	45	Yes	Yes

This analysis demonstrates that the sound levels at the plane of window and outdoor living area points of reception comply with the exclusion limits of Class 2 area of NPC-300.

7. NOISE CONTROL REQUIREMENTS

7.1 Architectural Design / Building Components

The indoor noise guidelines of NPC-300 do not recognize offices as noise sensitive spaces. However, it contains recommended indoor daytime energy equivalent sound levels ($L_{eq,16h}$) for general offices and retail stores as presented in Table 3. These levels can be achieved using appropriate construction for exterior walls, windows, and doors. To assess the building construction requirements, the worst-case office/retail store plane of window sound levels are considered:

- For Block 1:
  - Building A and B: the daytime equivalent sound level of 71 dBA at the plane of an office window on the east façade due to road traffic and the daytime sound level of 69 dBA at the plane of an office window on the north façade due to road traffic,

  - Building C (2nd Floor): the daytime equivalent sound level of 70 dBA at the plane of an office window on the east façade due to road traffic and the daytime equivalent sound level of 67 dBA at the plane of an office window on the northern façade due to road traffic.
  - Building C (1st Floor): the daytime equivalent sound level of 71 dBA at the plane of an office/retail window on the east façade due to road traffic and the daytime sound level of 68 dBA at the plane of an office/retail window on the north façade due to road traffic.
  - Building H: the daytime equivalent sound level of 65 dBA at the plane of an office window on the east façade and the daytime equivalent sound level of 66 dBA at the plane of an office window on the north façade.
- For Block 3:
  - Building D (2nd Floor): the daytime sound level of 70 dBA at the plane of an office window on the east façade due to road traffic and the daytime sound level of 67 dBA due to road traffic on the northern façade.
  - Building D (1st Floor): the daytime sound level of 71 dBA at the plane of an office window on the east façade due to road traffic and the daytime sound level of 68 dBA at the plane of an office window due to road traffic on the northern façade.
  - Building E (2nd Floor): the daytime equivalent sound level of 71 dBA at the plane of an office window on the east façade due to road traffic and the daytime equivalent sound level of 68 dBA at the plane of an office window on the north façade.
  - Building F (2nd Floor): the daytime equivalent sound level of 71 dBA at the plane of an office window on the east façade due to road traffic and the daytime equivalent sound level of 67 dBA at the plane of an office window on the north façade.
  - Building G (2nd Floor): the daytime equivalent sound level of 70 dBA at the plane of an office window on the east façade due to road traffic and the daytime equivalent sound level of 67 dBA at the plane of an office window on the north façade due to road traffic.

Since the internal partitions are not readily available, it is assumed that the ratio of window area to floor area is 20% while the ratio of wall area to floor area is 50%. Wall construction was assumed to have a Sound Transmission Class (STC) rating of STC 54, typical for concrete wall construction and window STC requirements were ascertained using the method outlined in the National Research Council of Canada Building Practice Note 56 (BPN 56).

The Sound Transmission Class (STC) requirements for office and retail windows were calculated on a case-by-case basis and the results are presented in Table 8.

7.2 Noise Control Summary

The complete summary of Noise Control features for the building are included in Table 8 below.

Table 8 – Minimum Noise Abatement Measures

Location			Ventilation[1]	Exterior Wall	Exterior Window
Building	Floor	Facade			
Building A	Ground Floor	East	Air Conditioning for all buildings and units	STC 54[2]	STC25[2]
		North			STC23
Building B	Ground Floor	East			STC25
		North			STC23
	2nd Floor	East			STC25
		North			STC23
Building C	Ground Floor	East			STC25
		North			STC22
	2nd Floor	East			STC24
		North			STC21
Building D	Ground Floor	East			STC25
		North			STC22
	2nd Floor	East			STC24
		North			STC21
Building E	Ground Floor	East			STC25
		North			STC22
	2nd Floor	East			STC25
		North			STC22
Building F	Ground Floor	East			STC25
		North			STC21
	2nd Floor	East			STC25
		North			STC21
Building G	Ground Floor	East			STC24
		North			STC21
	2nd Floor	East			STC24
		North			STC21

Notes: 1. To allow windows to remain closed for noise control purposes
2. Sound Transmission Class (STC) Rating (Reference ASTM-E413)

These results suggest that the minimum Ontario Building Code requirement for windows (STC25) is sufficient to achieve the daytime indoor equivalent sound level of 50 dBA. The final sound isolation requirements including the wall and window construction should be reviewed when full architectural plans are developed. This is typically required by the city at the building permit application.

8. SUMMARY AND RECOMMEDATIONS

Our Noise Impact Study for the eight (8) proposed commercial buildings development at 13846 and 13940 Airport Road in the Town of Caledon, Peel Region is summarized as follows:

8.1 Summary of Noise Impact Study

The sound levels from transportation sources in the vicinity of the site (Airport Road and King Street) were predicted according to ORNAMENT using STAMSON V5.04 and assessed against the applicable noise guidelines from NPC-300.

The noise impact of the eight (8) proposed commercial buildings on their immediate surroundings was investigated. Based on the cooling requirements of similar commercial buildings, a total number of 120 rooftop HVAC units, each having 5 tons of cooling capacity, is required for the proposed development. The resulting equivalent sound levels on the plane of bedroom windows and the outdoor living areas of the most exposed dwellings on Airport Road and King Street suggest that the MECP's NPC-300 criteria is met.

8.2 Recommendations

The following mitigation measures are required to ensure the applicable MECP noise guideline requirements can be met, and a suitable acoustic environment can be provided for the dwelling occupants:

- Installation of central air conditioning for all units, allowing for windows to remain closed.
- Upgraded wall construction (STC 54) and minimum Ontario Building Code window requirement (STC25) for all buildings.

With the appropriate design and recommendations outlined in this report, the proposed commercial development is considered feasible.

Respectfully submitted,

Farhad Hosseini, P.Eng.
Acoustics Engineer
Trans-Plan Transportation Inc.
Transportation Consultants

Figure 1 – Site Location

Figure 2 – Site Plan

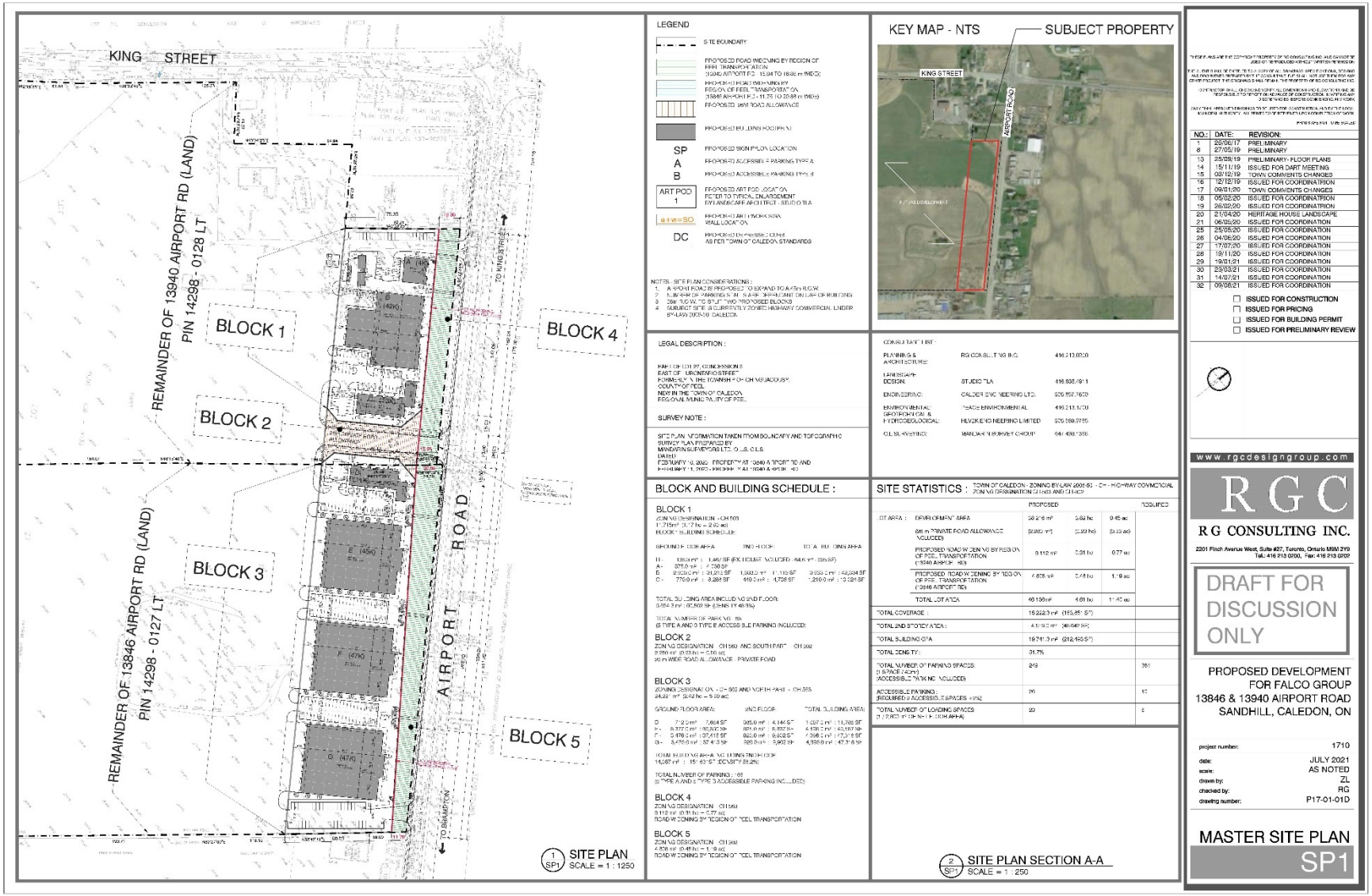
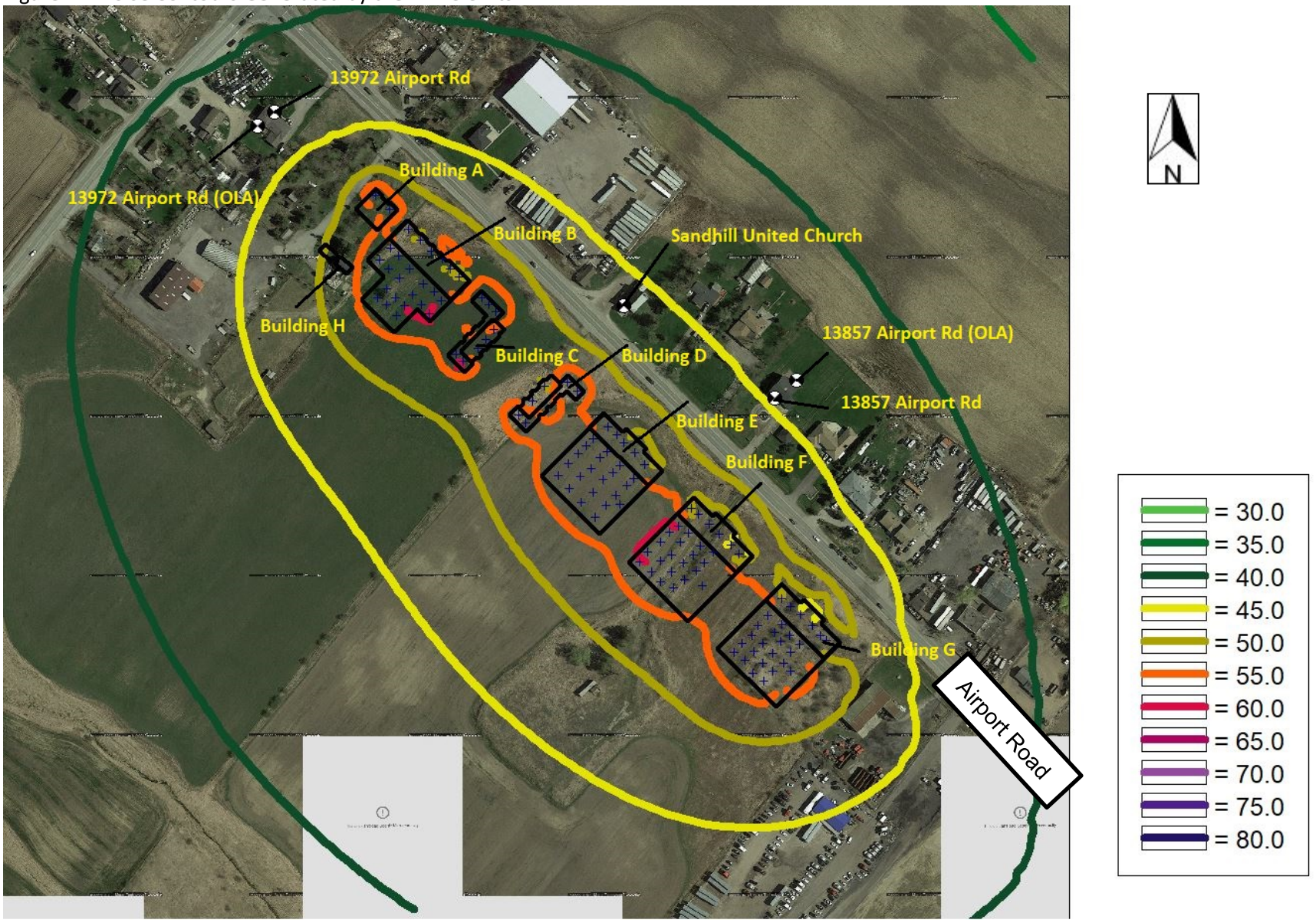


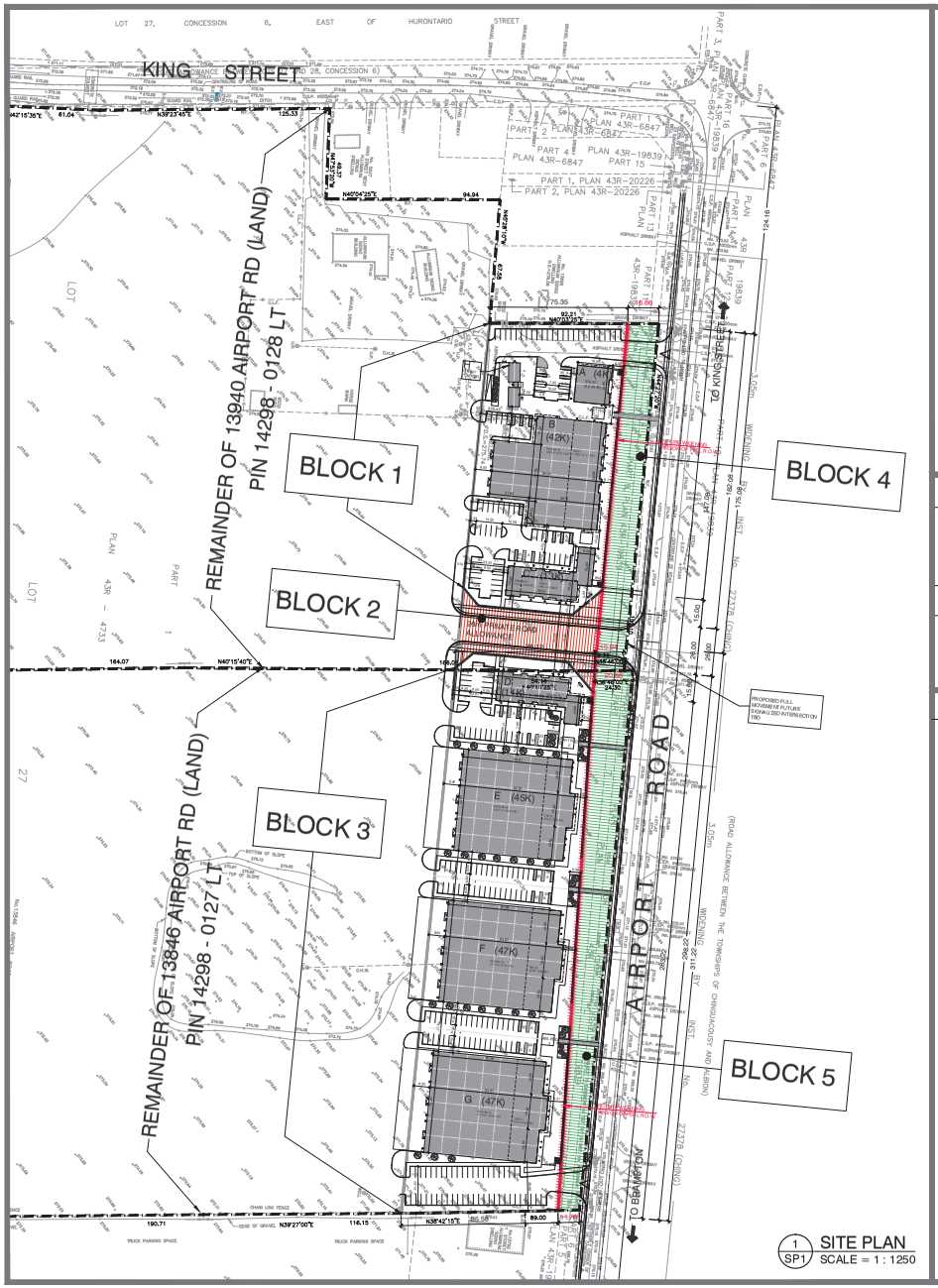
Figure 3 – Position of Plane of the Window Points of Reception Relative the buildings

Figure 4 – Noise Contours Generated by the HVAC Units



APPENDIX A

Site Plan



1 SP1 SITE PLAN SCALE = 1 : 1250

LEGEND

- SITE BOUNDARY
- PROPOSED ROAD WIDENING BY REGION OF PEEL TRANSPORTATION (13940 AIRPORT RD - 15.94 TO 16.86 m WIDE))
- PROPOSED ROAD WIDENING BY REGION OF PEEL TRANSPORTATION (13846 AIRPORT RD - 11.76 TO 20.88 m WIDE)
- PROPOSED 26M ROAD ALLOWANCE
- PROPOSED BUILDING FOOTPRINT
- SP A — PROPOSED SIGN PYLON LOCATION
- A — PROPOSED ACCESSIBLE PARKING TYPE A
- B — PROPOSED ACCESSIBLE PARKING TYPE B
- ART POD 1 — PROPOSED ART POD LOCATION REFER TO TYPICAL ENLARGEMENT BY LANDSCAPE ARCHITECT - STUDIO TLA
- a+w=SO — PROPOSED ART+WORK SIGN WALL LOCATION
- DC — PROPOSED DEPRESSED CURB, AS PER TOWN OF CALEDON STANDARDS.

NOTES - SITE PLAN CONSIDERATIONS :

1. AIRPORT ROAD IS PROPOSED TO EXPAND TO A 45m R.O.W.
2. NUMBER OF PARKING STALLS ARE DEPENDANT ON USE OF BUILDING
3. 26m R.O.W. TO SPLIT TWO PROPOSED BLOCKS
4. SUBJECT SITE IS CURRENTLY ZONED HIGHWAY COMMERCIAL UNDER BY-LAW 2006-50, CALEDON

KEY MAP - NTS

SUBJECT PROPERTY

LEGAL DESCRIPTION :

PART OF LOT 27, CONCESSION 6
EAST OF HURONTARIO STREET
FORMERLY IN THE TOWNSHIP OF CHINGUACOUSY,
COUNTY OF PEEL,
NEW IN THE TOWN OF CALEDON
REGIONAL MUNICIPALITY OF PEEL

SURVEY NOTE :

SITE PLAN INFORMATION TAKEN FROM BOUNDARY AND TOPOGRAPHIC SURVEY PLAN PREPARED BY
MANDARIN SURVEYORS LTD. O.L.S., C.L.S.
DATED:
FEBRUARY 10, 2020 - PROPERTY AT 13840 AIRPORT RD AND
FEBRUARY 11, 2020 - PROPERTY AT 13940 AIRPORT RD

CONSULTANT LIST :

PLANNING & ARCHITECTURE:	RG CONSULTING INC.	416.213.0200
LANDSCAPE DESIGN:	STUDIO TLA	416.638.4911
ENGINEERING:	CALDER ENGINEERING LTD.	905.857.7600
ENVIRONMENTAL:	PEACE ENVIRONMENTAL	416.213.1700
GEOTECHNICAL & HYDROGEOLOGICAL:	HLV2K ENGINEERING LIMITED	905.569.9765
O.L.S.URVEYING:	MANDARIN SURVEY GROUP	647.430.1366

BLOCK AND BUILDING SCHEDULE :

BLOCK 1

ZONING DESIGNATION - CH 563
11,715m² (1.17 hc = 2.90 ac)
BLOCK 1 BUILDING SCHEDULE:

	GROUND FLOOR AREA:	2ND FLOOR:	TOTAL BUILDING AREA:
H -	136.3 m² : 1,467 SF (EX. HOUSE INCLUDED - 64.6 m² - 695 SF)		
A -	375.0 m² : 4,036 SF		
B -	2,900.0 m² : 31,215 SF	1,033.0 m² : 11,119 SF	3,933.0 m² : 42,334 SF
C -	770.0 m² : 8,288 SF	440.0 m² : 4,736 SF	1,210.0 m² : 13,024 SF

TOTAL BUILDING AREA INCLUDING 2ND FLOOR:
5,854.3 m² : 60,862 SF (DENSITY 48.3%)

TOTAL NUMBER OF PARKING : 83
6 TYPE A AND 3 TYPE B ACCESSIBLE PARKING INCLUDED)

BLOCK 2

ZONING DESIGNATION - CH 563 AND SOUTH PART - CH 302
2,280 m² (0.23 hc = 0.56 ac)
26 m WIDE ROAD ALLOWANCE - PRIVATE ROAD

BLOCK 3

ZONING DESIGNATION - CH 302 AND NORTH PART - CH 563
24,221 m² (2.42 hc = 5.99 ac)

	GROUND FLOOR AREA:	2ND FLOOR:	TOTAL BUILDING AREA:
D -	712.0 m² : 7,664 SF	385.0 m² : 4,144 SF	1,097.0 m² : 11,786 SF
E -	3,377.0 m² : 36,350 SF	821.0 m² : 8,837 SF	4,198.0 m² : 45,187 SF
F -	3,476.0 m² : 37,415 SF	920.0 m² : 9,902 SF	4,396.0 m² : 47,318 SF
G -	3,476.0 m² : 37,415 SF	920.0 m² : 9,902 SF	4,396.0 m² : 47,318 SF

TOTAL BUILDING AREA INCLUDING 2ND FLOOR:
14,087 m² : 151,631SF (DENSITY 58.2%)

TOTAL NUMBER OF PARKING : 166
(6 TYPE A AND 6 TYPE B ACCESSIBLE PARKING INCLUDED)

BLOCK 4

ZONING DESIGNATION - CH 563
3,112 m² (0.31 hc = 0.77 ac)
ROAD WIDENING BY REGION OF PEEL TRANSPORTATION

BLOCK 5

ZONING DESIGNATION - CH 302
4,808 m² (0.48 hc = 1.19 ac)
ROAD WIDENING BY REGION OF PEEL TRANSPORTATION

SITE STATISTICS :

TOWN OF CALEDON - ZONING BY-LAW 2006-50 - CH - HIGHWAY COMMERCIAL
ZONING DESIGNATION CH-563 AND CH-302

		PROPOSED			REQUIRED
LOT AREA :	DEVELOPMENT AREA (26 m PRIVATE ROAD ALLOWANCE INCLUDED)	38,216 m² (2,280 m²)	3.82 hc (0.23 hc)	9.45 ac (0.53 ac)	
	PROPOSED ROAD WIDENING BY REGION OF PEEL TRANSPORTATION (13940 AIRPORT RD)	3,112 m²	0.31 hc	0.77 ac	
	PROPOSED ROAD WIDENING BY REGION OF PEEL TRANSPORTATION (13846 AIRPORT RD)	4,808 m²	0.48 hc	1.19 ac	
	TOTAL LOT AREA	46,136m²	4.61 hc	11.40 ac	
TOTAL COVERAGE :		15,222.3 m² (163,851 SF)			
TOTAL 2ND STOREY AREA :		4,519.0 m² (48,642 SF)			
TOTAL BUILDING GFA :		19,741.3 m² (212,493 SF)			
TOTAL DENSITY :		51.7%			
TOTAL NUMBER OF PARKING SPACES: (1 SPACE / 40m²) (ACCESSIBLE PARKING INCLUDED)		249			381
ACCESSIBLE PARKING : (REQUIRED 2 ACCESSIBLE SPACES + 2%)		20			10
TOTAL NUMBER OF LOADING SPACES: (1 / 2,800 m² OF NET FLOOR AREA)		23			6

2 SP1 SITE PLAN SECTION A-A SCALE = 1 : 250

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PRINTS ARE NOT TO BE SCALED

NO.:	DATE:	REVISION:
1	26/06/17	PRELIMINARY
8	27/05/19	PRELIMINARY
13	25/09/19	PRELIMINARY- FLOOR PLANS
14	15/11/19	ISSUED FOR DART MEETING
15	03/12/19	TOWN COMMENTS CHANGES
16	12/12/19	ISSUED FOR COORDINATION
17	09/01/20	TOWN COMMENTS CHANGES
18	05/02/20	ISSUED FOR COORDINATION
19	26/02/20	ISSUED FOR COORDINATION
20	21/04/20	HERITAGE HOUSE LANDSCAPE
21	06/05/20	ISSUED FOR COORDINATION
25	25/05/20	ISSUED FOR COORDINATION
26	04/06/20	ISSUED FOR COORDINATION
27	17/07/20	ISSUED FOR COORDINATION
28	19/11/20	ISSUED FOR COORDINATION
29	19/01/21	ISSUED FOR COORDINATION
30	23/03/21	ISSUED FOR COORDINATION
31	14/07/21	ISSUED FOR COORDINATION
32	09/08/21	ISSUED FOR COORDINATION

- ☐ ISSUED FOR CONSTRUCTION
- ☐ ISSUED FOR PRICING
- ☐ ISSUED FOR BUILDING PERMIT
- ☐ ISSUED FOR PRELIMINARY REVIEW

www.rgcdesigngroup.com

RGC

R G CONSULTING INC.

2201 Finch Avenue West, Suite #27, Toronto, Ontario M9M 2Y9
Tel.: 416 213 0200, Fax: 416 213 0202

DRAFT FOR DISCUSSION ONLY

PROPOSED DEVELOPMENT
FOR FALCO GROUP
13846 & 13940 AIRPORT ROAD
SANDHILL, CALEDON, ON

project number:	1710
date:	JULY 2021
scale:	AS NOTED
drawn by:	ZL
checked by:	RG
drawing number:	P17-01-01D

MASTER SITE PLAN

SP1

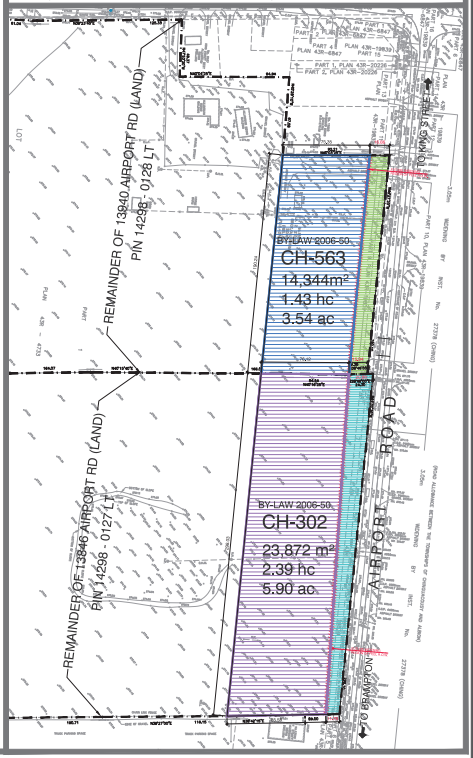
art + work = Sandhill, On

SURVEY NOTE :	LEGAL DESCRIPTION :
SITE PLAN INFORMATION TAKEN FROM BOUNDARY AND TOPOGRAPHIC SURVEY PLAN PREPARED BY MANDARIN SURVEYORS LTD. O.L.S. C.L.S. DATED: FEBRUARY 10, 2020 - PROPERTY AT 13840 AIRPORT RD AND FEBRUARY 11, 2020 - PROPERTY AT 13940 AIRPORT RD	PART OF LOT 27, CONCESSION 6 EAST OF HURONTARIO STREET FORMERLY IN THE TOWNSHIP OF CHINGUACOUSY, COUNTY OF PEEL, NEW IN THE TOWN OF CALEDON REGIONAL MUNICIPALITY OF PEEL

1 CP1 CONTEXT PLAN
SCALE = 1 : 2000

KEY MAP - NTS — SUBJECT PROPERTY

TOWN OF CALEDON - ZONING BY-LAW 2006-50
ZONING DESIGNATION CH-563 AND CH-302
(CH - HIGHWAY COMMERCIAL)



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ONLY FINAL APPROVED DRAWINGS TO BE USED FOR CONSTRUCTION AND BY THE LOCAL MUNICIPAL AUTHORITY. ALL PRINTS TO BE RETURNED UPON COMPLETION OF WORK.

PRINTS ARE NOT TO BE SCALED

NO.:	DATE:	REVISION:
1	26.06/17	PRELIMINARY
8	27.05/19	PRELIMINARY
9	11.06/19	PRELIMINARY
10	18.06/19	PRELIMINARY
11	30.07/19	PRELIMINARY
12	01.08/19	PRELIMINARY
13	25.09/19	PRELIMINARY- FLOOR PLANS
14	15/11/19	ISSUED FOR DART MEETING
15	03/12/19	TOWN COMMENTS CHANGES
16	12/12/19	ISSUED FOR COORDINATRION
22	25/05/20	ISSUED FOR COORDINATION
23	04/06/20	ISSUED FOR COORDINATION
24	22/07/20	ISSUED FOR CDISCUSSION
25	19/11/20	ISSUED FOR CDISCUSSION
26	23/03/21	ISSUED FOR CDISCUSSION
27	09/08/21	ISSUED FOR CDISCUSSION

- ☐ ISSUED FOR CONSTRUCTION
- ☐ ISSUED FOR PRICING
- ☐ ISSUED FOR BUILDING PERMIT
- ☐ ISSUED FOR PRELIMINARY REVIEW

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Tel.: 416 213 0200, Fax: 416 213 0202

DRAFT FOR DISCUSSION ONLY

PROPOSED DEVELOPMENT
FOR FALCO GROUP
13846 & 13940 AIRPORT ROAD
SANDHILL, CALEDON, ON

project number:	1710
date:	MARCH 2021
scale:	AS NOTED
drawn by:	ZL
checked by:	RG
drawing number:	P17-01-01D

CONTEXT PLAN
CP1

APPENDIX B

Road Traffic Data

Date: August 16, 2021
From: Farhad Hosseini, Trans-Plan Transportation Inc.
Re: Traffic Data Request – Airport Road (1.5 km North of Old School Road)

Farhad,
As per your request, we are providing the following 2019 traffic data:

	Existing	Ultimate
24 Hour Traffic Volume	8,952	32,400
# of Lanes	2	4
Day/Night Split	85/15	85/15
Day Trucks (% of Total Volume)	4.37% Medium 7.34% Heavy	4.37% Medium 7.34% Heavy
Night Trucks (% of Total Volume)	4.68% Medium 6.92% Heavy	4.68% Medium 6.92% Heavy
Right-of-Way Width	45 metres	
Posted Speed Limit	60 km/h	

Please note:

1. The current volume is not the Annual Average Daily Traffic, but the averaged raw volumes over three data collection days. If you need the Annual Average Traffic Volume, please 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 robert.jay@peelregion.ca.

Regards,

Robbie Jay
Transportation Planner, Transportation System Planning
Transportation Division, Public Works Services, Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor
Brampton, ON L6T 4B9
W: (905) 791-7800 x6456
E: robert.jay@peelregion.ca

Date: August 16, 2021
From: Farhad Hosseini, Trans-Plan Transportation Inc.
Re: Traffic Data Request – King Street (0.5 km West of Airport Road)

Farhad,
As per your request, we are providing the following 2019 traffic data:

	Existing	Ultimate
24 Hour Traffic Volume	11,194	16,200
# of Lanes	2	2
Day/Night Split	89/11	89/11
Day Trucks (% of Total Volume)	2.97% Medium 7.54% Heavy	2.97% Medium 7.54% Heavy
Night Trucks (% of Total Volume)	3.48% Medium 9.25% Heavy	3.48% Medium 9.25% Heavy
Right-of-Way Width	30 metres	
Posted Speed Limit	70 km/h	

Please note:

1. The current volume is not the Annual Average Daily Traffic, but the averaged raw volumes over three data collection days. If you need the Annual Average Traffic Volume, please 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 robert.jay@peelregion.ca.

Regards,

Robbie Jay
Transportation Planner, Transportation System Planning
Transportation Division, Public Works Services, Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor
Brampton, ON L6T 4B9
W: (905) 791-7800 x6456
E: robert.jay@peelregion.ca

APPENDIX C

MECP Environmental Noise Guidelines

Ministry of the Environment, Conservation and Parks (MECP) Guideline Limits

Table 1 – Transportation Noise Criteria Summary

Space	Time Period	Criteria		
		Road (L_{eq} – dBA)[1]	Rail (L_{eq} – dBA)[1]	Aircraft (NEF/NEP)[2]
General offices, reception areas, retail stores, etc.	07:00 – 23:00	50	45	15
Living/dining, den areas of residences, hospitals, nursing homes, schools, daycare centres, libraries, theatres, places of worship etc.	07:00 – 23:00	45	40	5
	23:00 – 07:00[3]	45	40	
Individual or semi-private offices, conference rooms, etc.	07:00 – 23:00	45	40	10
Sleeping Quarters of residences, hospitals, nursing/retirement homes, etc.	07:00 – 23:00	45	40	0
	23:00 – 07:00	40	35	
Sleeping Quarters of hotels/motels	23:00 – 07:00	45	40	5
Outdoor Living Area	07:00 – 23:00	55[4]		30

Notes: 1. Leq – Energy equivalent continuous sound level over the specified time period.
2. NEF – Noise Exposure Forecast and NEP – Noise Exposure Projection contours are determined by methods approved by Transport Canada and apply over the full 24-hour period. Indoor values are representative of the indoor sound levels and are used as assessment criteria for the evaluation of acoustic insulation requirements.
3. Schools, daycare centres, libraries, theatres and places of worship have no criteria during in the nighttime time period.
4. Up to 5dB excess above the criteria is allowed if noise control measures are not feasible for technical, economic or administrative reasons with appropriate Warning Clauses included on occupancy agreements.

Source: Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning, publication NPC-300, August 2013

APPENDIX D

Sample Calculations

STAMSON 5.0 NORMAL REPORT Date: 19-08-2021 10:02:12

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building A_EastFacade

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 28.50 / 28.50 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 148.50 / 148.50 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 70.94 + 0.00) = 70.94 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	73.73	0.00	-2.79	0.00	0.00	0.00	0.00	70.94

Segment Leq : 70.94 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 59.09 + 0.00) = 59.09 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	72.06	0.00	-9.96	-3.01	0.00	0.00	0.00	59.09

Segment Leq : 59.09 dBA

Total Leq All Segments: 71.21 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 66.28 + 0.00) = 66.28 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	69.07	0.00	-2.79	0.00	0.00	0.00	0.00	66.28

Segment Leq : 66.28 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 53.70 + 0.00) = 53.70 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-9.96	-3.01	0.00	0.00	0.00	53.70

Segment Leq : 53.70 dBA

Total Leq All Segments: 66.51 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 71.21

(NIGHT): 66.51

STAMSON 5.0 NORMAL REPORT Date: 19-08-2021 10:09:05

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building A North Facade

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 28.50 / 28.50 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 148.50 / 148.50 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 67.93 + 0.00) = 67.93 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	73.73	0.00	-2.79	-3.01	0.00	0.00	0.00	67.93

Segment Leq : 67.93 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 62.10 + 0.00) = 62.10 dBA

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

---

-90 90 0.00 72.06 0.00 -9.96 0.00 0.00 0.00 0.00 62.10

Segment Leq : 62.10 dBA

Total Leq All Segments: 68.94 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 63.27 + 0.00) = 63.27 dBA

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

---

-90 0 0.00 69.07 0.00 -2.79 -3.01 0.00 0.00 0.00 63.27

Segment Leq : 63.27 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 56.71 + 0.00) = 56.71 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	66.67	0.00	-9.96	0.00	0.00	0.00	0.00	56.71

Segment Leq : 56.71 dBA

Total Leq All Segments: 64.14 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 68.94

(NIGHT): 64.14

STAMSON 5.0 NORMAL REPORT Date: 19-08-2021 11:56:35

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building B_East Facade

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 29.10 / 29.10 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 178.18 / 178.18 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 70.85 + 0.00) = 70.85 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	73.73	0.00	-2.88	0.00	0.00	0.00	0.00	70.85

Segment Leq : 70.85 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 58.30 + 0.00) = 58.30 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	72.06	0.00	-10.75	-3.01	0.00	0.00	0.00	58.30

Segment Leq : 58.30 dBA

Total Leq All Segments: 71.08 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 66.19 + 0.00) = 66.19 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	69.07	0.00	-2.88	0.00	0.00	0.00	0.00	66.19

Segment Leq : 66.19 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 52.91 + 0.00) = 52.91 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-10.75	-3.01	0.00	0.00	0.00	52.91

Segment Leq : 52.91 dBA

Total Leq All Segments: 66.39 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 71.08

(NIGHT): 66.39

TAMSON 5.0 NORMAL REPORT Date: 19-08-2021 12:02:40

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building B_North Facade

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 29.10 / 29.10 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 178.18 / 178.18 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 67.84 + 0.00) = 67.84 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	73.73	0.00	-2.88	-3.01	0.00	0.00	0.00	67.84

Segment Leq : 67.84 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 61.31 + 0.00) = 61.31 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	72.06	0.00	-10.75	0.00	0.00	0.00	0.00	61.31

Segment Leq : 61.31 dBA

Total Leq All Segments: 68.71 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 63.18 + 0.00) = 63.18 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	69.07	0.00	-2.88	-3.01	0.00	0.00	0.00	63.18

Segment Leq : 63.18 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 55.92 + 0.00) = 55.92 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	66.67	0.00	-10.75	0.00	0.00	0.00	0.00	55.92

Segment Leq : 55.92 dBA

Total Leq All Segments: 63.93 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 68.71

(NIGHT): 63.93

STAMSON 5.0 NORMAL REPORT Date: 20-08-2021 09:53:20

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: bb_east1.te Time Period: Day/Night 16/8 hours

Description: Building B_East Facade_1st Floor

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 29.10 / 29.10 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 178.18 / 178.18 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 70.85 + 0.00) = 70.85 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	73.73	0.00	-2.88	0.00	0.00	0.00	0.00	70.85

Segment Leq : 70.85 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 58.30 + 0.00) = 58.30 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	72.06	0.00	-10.75	-3.01	0.00	0.00	0.00	58.30

Segment Leq : 58.30 dBA

Total Leq All Segments: 71.08 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 66.19 + 0.00) = 66.19 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	69.07	0.00	-2.88	0.00	0.00	0.00	0.00	66.19

Segment Leq : 66.19 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 52.91 + 0.00) = 52.91 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-10.75	-3.01	0.00	0.00	0.00	52.91

Segment Leq : 52.91 dBA

Total Leq All Segments: 66.39 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 71.08

(NIGHT): 66.39

STAMSON 5.0 NORMAL REPORT Date: 20-08-2021 09:56:48

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: bb_nort1.te Time Period: Day/Night 16/8 hours

Description: Building B_North Facade_1st Floor

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 29.10 / 29.10 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 178.18 / 178.18 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 67.84 + 0.00) = 67.84 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	73.73	0.00	-2.88	-3.01	0.00	0.00	0.00	67.84

Segment Leq : 67.84 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 61.31 + 0.00) = 61.31 dBA

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

---

-90 90 0.00 72.06 0.00 -10.75 0.00 0.00 0.00 0.00 61.31

Segment Leq : 61.31 dBA

Total Leq All Segments: 68.71 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 63.18 + 0.00) = 63.18 dBA

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

---

-90 0 0.00 69.07 0.00 -2.88 -3.01 0.00 0.00 0.00 63.18

Segment Leq : 63.18 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 55.92 + 0.00) = 55.92 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	66.67	0.00	-10.75	0.00	0.00	0.00	0.00	55.92

Segment Leq : 55.92 dBA

Total Leq All Segments: 63.93 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 68.71

(NIGHT): 63.93

STAMSON 5.0 NORMAL REPORT Date: 19-08-2021 12:41:02

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building C_East Facade

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 36.50 / 36.50 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 16.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 261.00 / 261.00 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 69.87 + 0.00) = 69.87 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	73.73	0.00	-3.86	0.00	0.00	0.00	0.00	69.87

Segment Leq : 69.87 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 55.79 + 0.00) = 55.79 dBA

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

---

16 90 0.00 72.06 0.00 -12.41 -3.86 0.00 0.00 0.00 55.79

Segment Leq : 55.79 dBA

Total Leq All Segments: 70.04 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 65.20 + 0.00) = 65.20 dBA

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

---

-90 90 0.00 69.07 0.00 -3.86 0.00 0.00 0.00 0.00 65.20

Segment Leq : 65.20 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 50.41 + 0.00) = 50.41 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
16	90	0.00	66.67	0.00	-12.41	-3.86	0.00	0.00	0.00	50.41

Segment Leq : 50.41 dBA

Total Leq All Segments: 65.34 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 70.04

(NIGHT): 65.34

STAMSON 5.0 NORMAL REPORT Date: 19-08-2021 12:51:25

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building C_North Facade

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -72.00 deg 0.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 36.50 / 36.50 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 261.00 / 261.00 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 65.89 + 0.00) = 65.89 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-72	0	0.00	73.73	0.00	-3.86	-3.98	0.00	0.00	0.00	65.89

Segment Leq : 65.89 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 59.65 + 0.00) = 59.65 dBA

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

---

-90 90 0.00 72.06 0.00 -12.41 0.00 0.00 0.00 0.00 59.65

Segment Leq : 59.65 dBA

Total Leq All Segments: 66.82 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 61.22 + 0.00) = 61.22 dBA

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

---

-72 0 0.00 69.07 0.00 -3.86 -3.98 0.00 0.00 0.00 61.22

Segment Leq : 61.22 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 54.27 + 0.00) = 54.27 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	66.67	0.00	-12.41	0.00	0.00	0.00	0.00	54.27

Segment Leq : 54.27 dBA

Total Leq All Segments: 62.02 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 66.82

(NIGHT): 62.02

TAMSON 5.0 NORMAL REPORT Date: 19-08-2021 15:18:52

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: bc_east1.te Time Period: Day/Night 16/8 hours

Description: Building C_East Facade_1st Floor

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 28.50 / 28.50 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 246.00 / 246.00 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 70.94 + 0.00) = 70.94 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	73.73	0.00	-2.79	0.00	0.00	0.00	0.00	70.94

Segment Leq : 70.94 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 56.90 + 0.00) = 56.90 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	72.06	0.00	-12.15	-3.01	0.00	0.00	0.00	56.90

Segment Leq : 56.90 dBA

Total Leq All Segments: 71.11 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 66.28 + 0.00) = 66.28 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	69.07	0.00	-2.79	0.00	0.00	0.00	0.00	66.28

Segment Leq : 66.28 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 51.51 + 0.00) = 51.51 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-12.15	-3.01	0.00	0.00	0.00	51.51

Segment Leq : 51.51 dBA

Total Leq All Segments: 66.42 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 71.11

(NIGHT): 66.42

TAMSON 5.0 NORMAL REPORT Date: 19-08-2021 15:29:35

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: bc_nort1.te Time Period: Day/Night 16/8 hours

Description: Building C_North Facade_1st Floor

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 28.50 / 28.50 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 246.00 / 246.00 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 67.93 + 0.00) = 67.93 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	73.73	0.00	-2.79	-3.01	0.00	0.00	0.00	67.93

Segment Leq : 67.93 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 56.90 + 0.00) = 56.90 dBA

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

---

0 90 0.00 72.06 0.00 -12.15 -3.01 0.00 0.00 0.00 56.90

Segment Leq : 56.90 dBA

Total Leq All Segments: 68.26 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 63.27 + 0.00) = 63.27 dBA

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

---

-90 0 0.00 69.07 0.00 -2.79 -3.01 0.00 0.00 0.00 63.27

Segment Leq : 63.27 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 51.51 + 0.00) = 51.51 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-12.15	-3.01	0.00	0.00	0.00	51.51

Segment Leq : 51.51 dBA

Total Leq All Segments: 63.55 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 68.26

(NIGHT): 63.55

STAMSON 5.0 NORMAL REPORT Date: 19-08-2021 13:07:26

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building D_East Facade

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 36.00 / 36.00 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 6.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 320.00 / 320.00 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 69.93 + 0.00) = 69.93 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	73.73	0.00	-3.80	0.00	0.00	0.00	0.00	69.93

Segment Leq : 69.93 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 55.46 + 0.00) = 55.46 dBA

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

---

6 90 0.00 72.06 0.00 -13.29 -3.31 0.00 0.00 0.00 55.46

Segment Leq : 55.46 dBA

Total Leq All Segments: 70.08 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 65.26 + 0.00) = 65.26 dBA

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

---

-90 90 0.00 69.07 0.00 -3.80 0.00 0.00 0.00 0.00 65.26

Segment Leq : 65.26 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 50.07 + 0.00) = 50.07 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
6	90	0.00	66.67	0.00	-13.29	-3.31	0.00	0.00	0.00	50.07

Segment Leq : 50.07 dBA

Total Leq All Segments: 65.39 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 70.08

(NIGHT): 65.39

STAMSON 5.0 NORMAL REPORT Date: 19-08-2021 13:15:26

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building D_North Facade

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -81.00 deg 0.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 36.00 / 36.00 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 320.00 / 320.00 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 66.46 + 0.00) = 66.46 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-81	0	0.00	73.73	0.00	-3.80	-3.47	0.00	0.00	0.00	66.46

Segment Leq : 66.46 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 58.77 + 0.00) = 58.77 dBA

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

---

-90 90 0.00 72.06 0.00 -13.29 0.00 0.00 0.00 0.00 58.77

Segment Leq : 58.77 dBA

Total Leq All Segments: 67.14 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 61.80 + 0.00) = 61.80 dBA

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

---

-81 0 0.00 69.07 0.00 -3.80 -3.47 0.00 0.00 0.00 61.80

Segment Leq : 61.80 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 53.38 + 0.00) = 53.38 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	66.67	0.00	-13.29	0.00	0.00	0.00	0.00	53.38

Segment Leq : 53.38 dBA

Total Leq All Segments: 62.38 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 67.14

(NIGHT): 62.38

STAMSON 5.0 NORMAL REPORT Date: 19-08-2021 15:37:20

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: bd_east1.te Time Period: Day/Night 16/8 hours

Description: Building D_East Facade_1st Floor

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 28.70 / 28.70 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 328.00 / 328.00 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 70.91 + 0.00) = 70.91 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	73.73	0.00	-2.82	0.00	0.00	0.00	0.00	70.91

Segment Leq : 70.91 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 55.65 + 0.00) = 55.65 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	72.06	0.00	-13.40	-3.01	0.00	0.00	0.00	55.65

Segment Leq : 55.65 dBA

Total Leq All Segments: 71.04 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 66.25 + 0.00) = 66.25 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	69.07	0.00	-2.82	0.00	0.00	0.00	0.00	66.25

Segment Leq : 66.25 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 50.26 + 0.00) = 50.26 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-13.40	-3.01	0.00	0.00	0.00	50.26

Segment Leq : 50.26 dBA

Total Leq All Segments: 66.36 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 71.04

(NIGHT): 66.36

STAMSON 5.0 NORMAL REPORT Date: 19-08-2021 15:52:55

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: bd_nort1.te Time Period: Day/Night 16/8 hours

Description: Building D_North Facade_1st Floor

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 28.70 / 28.70 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 328.00 / 328.00 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 67.90 + 0.00) = 67.90 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	73.73	0.00	-2.82	-3.01	0.00	0.00	0.00	67.90

Segment Leq : 67.90 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 55.65 + 0.00) = 55.65 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	72.06	0.00	-13.40	-3.01	0.00	0.00	0.00	55.65

Segment Leq : 55.65 dBA

Total Leq All Segments: 68.15 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 63.24 + 0.00) = 63.24 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	69.07	0.00	-2.82	-3.01	0.00	0.00	0.00	63.24

Segment Leq : 63.24 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 50.26 + 0.00) = 50.26 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-13.40	-3.01	0.00	0.00	0.00	50.26

Segment Leq : 50.26 dBA

Total Leq All Segments: 63.45 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 68.15

(NIGHT): 63.45

STAMSON 5.0 NORMAL REPORT Date: 19-08-2021 13:29:11

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building E_East Facade

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 28.50 / 28.50 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 382.00 / 382.00 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 70.94 + 0.00) = 70.94 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	73.73	0.00	-2.79	0.00	0.00	0.00	0.00	70.94

Segment Leq : 70.94 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 54.99 + 0.00) = 54.99 dBA

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

---

0 90 0.00 72.06 0.00 -14.06 -3.01 0.00 0.00 0.00 54.99

Segment Leq : 54.99 dBA

Total Leq All Segments: 71.05 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 66.28 + 0.00) = 66.28 dBA

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

---

-90 90 0.00 69.07 0.00 -2.79 0.00 0.00 0.00 0.00 66.28

Segment Leq : 66.28 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 49.60 + 0.00) = 49.60 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-14.06	-3.01	0.00	0.00	0.00	49.60

Segment Leq : 49.60 dBA

Total Leq All Segments: 66.37 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 71.05

(NIGHT): 66.37

STAMSON 5.0 NORMAL REPORT Date: 19-08-2021 14:16:26

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building E_North Facade

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 31.00 / 31.00 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 363.00 / 363.00 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 67.57 + 0.00) = 67.57 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	73.73	0.00	-3.15	-3.01	0.00	0.00	0.00	67.57

Segment Leq : 67.57 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 55.21 + 0.00) = 55.21 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	72.06	0.00	-13.84	-3.01	0.00	0.00	0.00	55.21

Segment Leq : 55.21 dBA

Total Leq All Segments: 67.82 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 62.90 + 0.00) = 62.90 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	69.07	0.00	-3.15	-3.01	0.00	0.00	0.00	62.90

Segment Leq : 62.90 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 49.82 + 0.00) = 49.82 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-13.84	-3.01	0.00	0.00	0.00	49.82

Segment Leq : 49.82 dBA

Total Leq All Segments: 63.11 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 67.82

(NIGHT): 63.11

STAMSON 5.0 NORMAL REPORT Date: 20-08-2021 10:35:38

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: be_east1.te Time Period: Day/Night 16/8 hours

Description: Building E_East Facade_1st Floor

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 28.50 / 28.50 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 382.00 / 382.00 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 70.94 + 0.00) = 70.94 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	73.73	0.00	-2.79	0.00	0.00	0.00	0.00	70.94

Segment Leq : 70.94 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 54.99 + 0.00) = 54.99 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	72.06	0.00	-14.06	-3.01	0.00	0.00	0.00	54.99

Segment Leq : 54.99 dBA

Total Leq All Segments: 71.05 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 66.28 + 0.00) = 66.28 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	69.07	0.00	-2.79	0.00	0.00	0.00	0.00	66.28

Segment Leq : 66.28 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 49.60 + 0.00) = 49.60 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-14.06	-3.01	0.00	0.00	0.00	49.60

Segment Leq : 49.60 dBA

Total Leq All Segments: 66.37 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 71.05

(NIGHT): 66.37

STAMSON 5.0 NORMAL REPORT Date: 20-08-2021 10:38:36

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: be_nort1.te Time Period: Day/Night 16/8 hours

Description: Building E_North Facade_1st Floor

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 31.00 / 31.00 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 363.00 / 363.00 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 67.57 + 0.00) = 67.57 dBA

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

---

-90 0 0.00 73.73 0.00 -3.15 -3.01 0.00 0.00 0.00 67.57

Segment Leq : 67.57 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 55.21 + 0.00) = 55.21 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	72.06	0.00	-13.84	-3.01	0.00	0.00	0.00	55.21

Segment Leq : 55.21 dBA

Total Leq All Segments: 67.82 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 62.90 + 0.00) = 62.90 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	69.07	0.00	-3.15	-3.01	0.00	0.00	0.00	62.90

Segment Leq : 62.90 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 49.82 + 0.00) = 49.82 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-13.84	-3.01	0.00	0.00	0.00	49.82

Segment Leq : 49.82 dBA

Total Leq All Segments: 63.11 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 67.82

(NIGHT): 63.11

STAMSON 5.0 NORMAL REPORT Date: 19-08-2021 14:03:57

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building F_East Facade

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 29.35 / 29.35 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 463.00 / 463.00 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 70.82 + 0.00) = 70.82 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	73.73	0.00	-2.92	0.00	0.00	0.00	0.00	70.82

Segment Leq : 70.82 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 54.15 + 0.00) = 54.15 dBA

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

---

0 90 0.00 72.06 0.00 -14.89 -3.01 0.00 0.00 0.00 54.15

Segment Leq : 54.15 dBA

Total Leq All Segments: 70.91 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 66.15 + 0.00) = 66.15 dBA

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

---

-90 90 0.00 69.07 0.00 -2.92 0.00 0.00 0.00 0.00 66.15

Segment Leq : 66.15 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 48.77 + 0.00) = 48.77 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-14.89	-3.01	0.00	0.00	0.00	48.77

Segment Leq : 48.77 dBA

Total Leq All Segments: 66.23 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 70.91

(NIGHT): 66.23

STAMSON 5.0 NORMAL REPORT Date: 19-08-2021 14:12:16

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building F_North Facade

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 31.80 / 31.80 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 445.00 / 445.00 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 67.46 + 0.00) = 67.46 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	73.73	0.00	-3.26	-3.01	0.00	0.00	0.00	67.46

Segment Leq : 67.46 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 54.33 + 0.00) = 54.33 dBA

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

---

0 90 0.00 72.06 0.00 -14.72 -3.01 0.00 0.00 0.00 54.33

Segment Leq : 54.33 dBA

Total Leq All Segments: 67.67 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 62.79 + 0.00) = 62.79 dBA

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

---

-90 0 0.00 69.07 0.00 -3.26 -3.01 0.00 0.00 0.00 62.79

Segment Leq : 62.79 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 48.94 + 0.00) = 48.94 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-14.72	-3.01	0.00	0.00	0.00	48.94

Segment Leq : 48.94 dBA

Total Leq All Segments: 62.97 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 67.67

(NIGHT): 62.97

STAMSON 5.0 NORMAL REPORT Date: 20-08-2021 11:18:46

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: bf_east1.te Time Period: Day/Night 16/8 hours

Description: Building F_East Facade_1st Floor

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 29.35 / 29.35 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 463.00 / 463.00 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 70.82 + 0.00) = 70.82 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	73.73	0.00	-2.92	0.00	0.00	0.00	0.00	70.82

Segment Leq : 70.82 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 54.15 + 0.00) = 54.15 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	72.06	0.00	-14.89	-3.01	0.00	0.00	0.00	54.15

Segment Leq : 54.15 dBA

Total Leq All Segments: 70.91 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 66.15 + 0.00) = 66.15 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	69.07	0.00	-2.92	0.00	0.00	0.00	0.00	66.15

Segment Leq : 66.15 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 48.77 + 0.00) = 48.77 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-14.89	-3.01	0.00	0.00	0.00	48.77

Segment Leq : 48.77 dBA

Total Leq All Segments: 66.23 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 70.91

(NIGHT): 66.23

STAMSON 5.0 NORMAL REPORT Date: 20-08-2021 11:22:03

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building F_North Facade_1st Floor

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 31.80 / 31.80 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 445.00 / 445.00 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 67.46 + 0.00) = 67.46 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	73.73	0.00	-3.26	-3.01	0.00	0.00	0.00	67.46

Segment Leq : 67.46 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 54.33 + 0.00) = 54.33 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	72.06	0.00	-14.72	-3.01	0.00	0.00	0.00	54.33

Segment Leq : 54.33 dBA

Total Leq All Segments: 67.67 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 62.79 + 0.00) = 62.79 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	69.07	0.00	-3.26	-3.01	0.00	0.00	0.00	62.79

Segment Leq : 62.79 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 48.94 + 0.00) = 48.94 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-14.72	-3.01	0.00	0.00	0.00	48.94

Segment Leq : 48.94 dBA

Total Leq All Segments: 62.97 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 67.67

(NIGHT): 62.97

STAMSON 5.0 NORMAL REPORT Date: 19-08-2021 14:23:41

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building G_East Facade

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 32.00 / 32.00 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 500.00 / 500.00 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 70.44 + 0.00) = 70.44 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	73.73	0.00	-3.29	0.00	0.00	0.00	0.00	70.44

Segment Leq : 70.44 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 53.82 + 0.00) = 53.82 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	72.06	0.00	-15.23	-3.01	0.00	0.00	0.00	53.82

Segment Leq : 53.82 dBA

Total Leq All Segments: 70.53 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 65.77 + 0.00) = 65.77 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	69.07	0.00	-3.29	0.00	0.00	0.00	0.00	65.77

Segment Leq : 65.77 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 48.43 + 0.00) = 48.43 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-15.23	-3.01	0.00	0.00	0.00	48.43

Segment Leq : 48.43 dBA

Total Leq All Segments: 65.85 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 70.53

(NIGHT): 65.85

STAMSON 5.0 NORMAL REPORT Date: 19-08-2021 14:29:04

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building G_North Facade

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 34.40 / 34.40 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 500.00 / 500.00 m

Receiver height : 4.50 / 4.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 67.12 + 0.00) = 67.12 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	73.73	0.00	-3.60	-3.01	0.00	0.00	0.00	67.12

Segment Leq : 67.12 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 53.82 + 0.00) = 53.82 dBA

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

---

0 90 0.00 72.06 0.00 -15.23 -3.01 0.00 0.00 0.00 53.82

Segment Leq : 53.82 dBA

Total Leq All Segments: 67.32 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 62.45 + 0.00) = 62.45 dBA

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

---

-90 0 0.00 69.07 0.00 -3.60 -3.01 0.00 0.00 0.00 62.45

Segment Leq : 62.45 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 48.43 + 0.00) = 48.43 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-15.23	-3.01	0.00	0.00	0.00	48.43

Segment Leq : 48.43 dBA

Total Leq All Segments: 62.62 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 67.32

(NIGHT): 62.62

STAMSON 5.0 NORMAL REPORT Date: 20-08-2021 11:48:28

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: bg_east1.te Time Period: Day/Night 16/8 hours

Description: Building G_East Facade_1st Floor

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 32.00 / 32.00 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 500.00 / 500.00 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 70.44 + 0.00) = 70.44 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	73.73	0.00	-3.29	0.00	0.00	0.00	0.00	70.44

Segment Leq : 70.44 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 53.82 + 0.00) = 53.82 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	72.06	0.00	-15.23	-3.01	0.00	0.00	0.00	53.82

Segment Leq : 53.82 dBA

Total Leq All Segments: 70.53 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 65.77 + 0.00) = 65.77 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	69.07	0.00	-3.29	0.00	0.00	0.00	0.00	65.77

Segment Leq : 65.77 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 48.43 + 0.00) = 48.43 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-15.23	-3.01	0.00	0.00	0.00	48.43

Segment Leq : 48.43 dBA

Total Leq All Segments: 65.85 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 70.53

(NIGHT): 65.85

STAMSON 5.0 NORMAL REPORT Date: 20-08-2021 11:50:55

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: bg_nort1.te Time Period: Day/Night 16/8 hours

Description: Building G_North Facade_1st Floor

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 34.40 / 34.40 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 500.00 / 500.00 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 67.12 + 0.00) = 67.12 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	73.73	0.00	-3.60	-3.01	0.00	0.00	0.00	67.12

Segment Leq : 67.12 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 53.82 + 0.00) = 53.82 dBA

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

---

0 90 0.00 72.06 0.00 -15.23 -3.01 0.00 0.00 0.00 53.82

Segment Leq : 53.82 dBA

Total Leq All Segments: 67.32 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 62.45 + 0.00) = 62.45 dBA

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

---

-90 0 0.00 69.07 0.00 -3.60 -3.01 0.00 0.00 0.00 62.45

Segment Leq : 62.45 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 48.43 + 0.00) = 48.43 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-15.23	-3.01	0.00	0.00	0.00	48.43

Segment Leq : 48.43 dBA

Total Leq All Segments: 62.62 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 67.32

(NIGHT): 62.62

STAMSON 5.0 NORMAL REPORT Date: 20-08-2021 13:17:21

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building H_East Facade

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg -3.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 78.90 / 78.90 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 150.19 / 150.19 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 63.37 + 0.00) = 63.37 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	-3	0.00	73.73	0.00	-7.21	-3.16	0.00	0.00	0.00	63.37

Segment Leq : 63.37 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 59.04 + 0.00) = 59.04 dBA

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

---

0 90 0.00 72.06 0.00 -10.01 -3.01 0.00 0.00 0.00 59.04

Segment Leq : 59.04 dBA

Total Leq All Segments: 64.73 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 58.70 + 0.00) = 58.70 dBA

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

---

-90 -3 0.00 69.07 0.00 -7.21 -3.16 0.00 0.00 0.00 58.70

Segment Leq : 58.70 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 53.66 + 0.00) = 53.66 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.67	0.00	-10.01	-3.01	0.00	0.00	0.00	53.66

Segment Leq : 53.66 dBA

Total Leq All Segments: 59.88 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 64.73

(NIGHT): 59.88

STAMSON 5.0 NORMAL REPORT Date: 20-08-2021 13:22:40

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Description: Building H_North Facade

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

Car traffic volume : 24316/4297 veh/TimePeriod

Medium truck volume : 1203/227 veh/TimePeriod

Heavy truck volume : 2021/336 veh/TimePeriod

Posted speed limit : 60 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Airport Road (day/night)

Angle1 Angle2 : -90.00 deg -3.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 78.90 / 78.90 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Road data, segment # 2: King Street (day/night)

Car traffic volume : 12903/1555 veh/TimePeriod

Medium truck volume : 428/62 veh/TimePeriod

Heavy truck volume : 1087/165 veh/TimePeriod

Posted speed limit : 70 km/h

Road gradient : 0 %

Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: King Street (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 2 (Reflective ground surface)

Receiver source distance : 150.19 / 150.19 m

Receiver height : 1.50 / 1.50 m

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

Reference angle : 0.00

Results segment # 1: Airport Road (day)

Source height = 1.65 m

ROAD (0.00 + 63.37 + 0.00) = 63.37 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	-3	0.00	73.73	0.00	-7.21	-3.16	0.00	0.00	0.00	63.37

Segment Leq : 63.37 dBA

Results segment # 2: King Street (day)

Source height = 1.66 m

ROAD (0.00 + 62.05 + 0.00) = 62.05 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	72.06	0.00	-10.01	0.00	0.00	0.00	0.00	62.05

Segment Leq : 62.05 dBA

Total Leq All Segments: 65.77 dBA

Results segment # 1: Airport Road (night)

Source height = 1.62 m

ROAD (0.00 + 58.70 + 0.00) = 58.70 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	-3	0.00	69.07	0.00	-7.21	-3.16	0.00	0.00	0.00	58.70

Segment Leq : 58.70 dBA

Results segment # 2: King Street (night)

Source height = 1.74 m

ROAD (0.00 + 56.67 + 0.00) = 56.67 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	66.67	0.00	-10.01	0.00	0.00	0.00	0.00	56.67

Segment Leq : 56.67 dBA

Total Leq All Segments: 60.81 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 65.77

(NIGHT): 60.81

Receiver
Name: SandHill United Church-2
ID: SHUC2
X: 17595625.33 m
Y: 4853535.87 m
Z: 1.50 m

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
1	17595587.46	4853484.51	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	47.1	0.6	-0.5	0.0	0.0	0.0	0.0	0.0	33.9

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
2	17595594.34	4853478.43	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	47.3	0.6	-0.5	0.0	0.0	0.0	0.0	0.0	33.7

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
3	17595572.34	4853481.41	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	48.6	0.6	-0.5	0.0	0.0	0.0	0.0	0.0	32.3

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
4	17595615.09	4853454.45	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	49.3	0.7	-0.5	0.0	0.0	0.0	0.0	0.0	31.6

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
5	17595539.60	4853531.56	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	49.7	0.7	-0.3	0.0	0.0	0.0	0.0	0.0	31.0

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
6	17595620.76	4853448.62	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	49.8	0.7	-0.4	0.0	0.0	0.0	0.0	0.0	31.0

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
7	17595564.40	4853471.88	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	49.9	0.7	-0.4	0.0	0.0	4.5	0.0	0.0	26.4

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
8	17595538.34	4853519.38	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	50.0	0.7	-0.4	0.0	0.0	0.0	0.0	0.0	30.9

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
9	17595534.77	4853536.19	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	50.1	0.7	-0.3	0.0	0.0	0.0	0.0	0.0	30.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
10	17595604.92	4853446.12	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	50.3	0.7	-0.3	0.0	0.0	11.6	0.0	0.0	18.8

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
11	17595625.43	4853443.28	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	50.3	0.7	-0.4	0.0	0.0	0.0	0.0	0.0	30.4

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
12	17595530.56	4853541.02	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	50.5	0.7	-0.3	0.0	0.0	0.0	0.0	0.0	30.1

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
13	17595532.87	4853512.66	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	50.6	0.7	-0.4	0.0	0.0	0.0	0.0	0.0	30.2

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
14	17595600.25	4853441.28	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	50.8	0.7	-0.3	0.0	0.0	5.3	0.0	0.0	24.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
15	17595614.42	4853437.78	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	50.9	0.7	-0.3	0.0	0.0	14.1	0.0	0.0	15.6

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
16	17595632.76	4853436.78	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	51.0	0.7	-0.4	0.0	0.0	0.0	0.0	0.0	29.8

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
17	17595554.90	4853462.28	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	51.2	0.8	-0.2	0.0	0.0	14.0	0.0	0.0	15.4

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
18	17595527.62	4853507.19	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	51.2	0.8	-0.4	0.0	0.0	0.0	0.0	0.0	29.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
19	17595559.93	4853456.72	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	51.2	0.8	-0.2	0.0	0.0	13.8	0.0	0.0	15.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
20	17595609.75	4853433.44	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	51.3	0.8	-0.2	0.0	0.0	11.3	0.0	0.0	17.9

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
21	17595595.24	4853435.94	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	51.4	0.8	-0.2	0.0	0.0	0.0	0.0	0.0	29.2

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
22	17595622.92	4853427.94	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	51.7	0.8	-0.2	0.0	0.0	13.8	0.0	0.0	15.1

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
23	17595639.60	4853428.77	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	51.7	0.8	-0.4	0.0	0.0	0.0	0.0	0.0	29.0

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
24	17595603.58	4853426.44	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	52.0	0.8	-0.2	0.0	0.0	9.1	0.0	0.0	19.4

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
25	17595515.05	4853554.74	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	52.0	0.8	-0.3	0.0	0.0	0.0	0.0	0.0	28.6

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
26	17595618.59	4853423.61	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	52.0	0.8	-0.2	0.0	0.0	11.2	0.0	0.0	17.2

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
27	17595588.41	4853429.27	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	52.0	0.8	-0.2	0.0	0.0	0.0	0.0	0.0	28.4

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
28	17595517.33	4853498.16	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	52.2	0.8	-0.2	0.0	0.0	10.1	0.0	0.0	18.2

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
29	17595632.43	4853419.27	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	52.4	0.8	-0.2	0.0	0.0	14.1	0.0	0.0	14.0

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
30	17595513.13	4853502.57	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	52.4	0.8	-0.2	0.0	0.0	12.4	0.0	0.0	15.6

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
31	17595611.75	4853418.77	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	52.4	0.8	-0.2	0.0	0.0	10.0	0.0	0.0	18.0

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
32	17595509.21	4853560.41	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	52.5	0.8	-0.3	0.0	0.0	0.0	0.0	0.0	28.1

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
33	17595596.58	4853420.60	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	52.5	0.8	-0.2	0.0	0.0	5.7	0.0	0.0	22.2

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
34	17595627.59	4853414.60	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	52.7	0.8	-0.2	0.0	0.0	11.4	0.0	0.0	16.3

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
35	17595502.88	4853538.90	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	52.8	0.9	-0.2	0.0	0.0	0.0	0.0	0.0	27.6

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
36	17595581.91	4853421.27	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	52.8	0.9	-0.2	0.0	0.0	0.0	0.0	0.0	27.6

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
37	17595503.55	4853566.58	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	53.0	0.9	-0.3	0.0	0.0	0.0	0.0	0.0	27.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
38	17595498.04	4853544.57	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	53.1	0.9	-0.2	0.0	0.0	10.1	0.0	0.0	17.1

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
39	17595604.75	4853409.93	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	53.1	0.9	-0.2	0.0	0.0	8.9	0.0	0.0	18.4

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
40	17595620.42	4853407.93	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	53.1	0.9	-0.1	0.0	0.0	9.7	0.0	0.0	17.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
41	17595588.91	4853412.77	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	53.2	0.9	-0.1	0.0	0.0	0.0	0.0	0.0	27.2

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
42	17595495.21	4853529.90	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	53.3	0.9	-0.1	0.0	0.0	0.0	0.0	0.0	27.0

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
43	17595622.76	4853402.10	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	53.5	0.9	-0.1	0.0	0.0	9.5	0.0	0.0	17.3

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
44	17595496.54	4853572.08	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	53.5	0.9	-0.3	0.0	0.0	0.0	0.0	0.0	26.9

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
45	17595613.75	4853401.43	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	53.6	0.9	-0.1	0.0	0.0	9.1	0.0	0.0	17.6

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
46	17595490.87	4853550.07	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	53.6	0.9	-0.1	0.0	0.0	11.0	0.0	0.0	15.7

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
47	17595597.25	4853403.60	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	53.6	0.9	-0.1	0.0	0.0	7.3	0.0	0.0	19.4

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
48	17595489.71	4853536.07	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	53.6	0.9	-0.1	0.0	0.0	0.0	0.0	0.0	26.6

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
49	17595483.70	4853542.90	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	54.0	0.9	-0.1	0.0	0.0	5.8	0.0	0.0	20.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
50	17595488.71	4853579.59	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	54.1	0.9	-0.3	0.0	0.0	0.0	0.0	0.0	26.2

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
51	17595606.25	4853393.59	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	54.1	0.9	-0.1	0.0	0.0	8.5	0.0	0.0	17.6

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
52	17595670.64	4853399.57	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	54.2	0.9	-0.3	0.0	0.0	0.0	0.0	0.0	26.2

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
53	17595481.54	4853560.08	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	54.3	1.0	-0.1	0.0	0.0	11.9	0.0	0.0	14.1

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
54	17595478.53	4853535.40	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	54.3	1.0	-0.1	0.0	0.0	4.2	0.0	0.0	21.7

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
55	17595675.89	4853395.37	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	54.5	1.0	-0.2	0.0	0.0	0.0	0.0	0.0	25.9

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
56	17595474.70	4853554.24	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	54.6	1.0	-0.1	0.0	0.0	9.6	0.0	0.0	15.9

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
57	17595472.87	4853528.73	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	54.7	1.0	-0.1	0.0	0.0	4.2	0.0	0.0	21.3

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
58	17595662.31	4853387.76	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	54.7	1.0	-0.1	0.0	0.0	0.0	0.0	0.0	25.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
59	17595481.04	4853587.09	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	54.7	1.0	-0.2	0.0	0.0	0.0	0.0	0.0	25.6

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
60	17595472.20	4853541.07	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	54.7	1.0	-0.1	0.0	0.0	6.8	0.0	0.0	18.6

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
61	17595474.20	4853568.58	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	54.8	1.0	-0.1	0.0	0.0	12.8	0.0	0.0	12.6

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
62	17595656.31	4853383.43	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	54.8	1.0	-0.1	0.0	0.0	5.9	0.0	0.0	19.4

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
63	17595682.83	4853388.86	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.0	1.0	-0.2	0.0	0.0	0.0	0.0	0.0	25.3

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
64	17595669.15	4853382.93	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.0	1.0	-0.1	0.0	0.0	8.8	0.0	0.0	16.3

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
65	17595466.03	4853536.07	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.0	1.0	-0.1	0.0	0.0	4.2	0.0	0.0	20.9

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
66	17595466.20	4853546.57	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.1	1.0	-0.1	0.0	0.0	7.9	0.0	0.0	17.2

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
67	17595467.36	4853560.41	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.1	1.0	-0.1	0.0	0.0	9.6	0.0	0.0	15.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
68	17595650.31	4853377.09	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.1	1.0	-0.1	0.0	0.0	7.8	0.0	0.0	17.2

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
69	17595468.70	4853573.92	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.1	1.0	-0.1	0.0	0.0	12.5	0.0	0.0	12.4

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
70	17595663.64	4853376.76	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.3	1.0	-0.1	0.0	0.0	0.0	0.0	0.0	24.8

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
71	17595460.36	4853540.90	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.4	1.0	-0.1	0.0	0.0	6.1	0.0	0.0	18.7

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
72	17595461.86	4853566.08	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.4	1.0	-0.1	0.0	0.0	9.4	0.0	0.0	15.3

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
73	17595641.63	4853370.42	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.4	1.0	-0.1	0.0	0.0	8.1	0.0	0.0	16.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
74	17595689.34	4853381.92	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.4	1.0	-0.2	0.0	0.0	0.0	0.0	0.0	24.8

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
75	17595676.98	4853374.45	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.6	1.0	-0.1	0.0	0.0	10.2	0.0	0.0	14.4

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
76	17595468.06	4853600.41	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.6	1.0	-0.1	0.0	0.0	0.0	0.0	0.0	24.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
77	17595657.48	4853368.42	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.6	1.0	-0.1	0.0	0.0	6.0	0.0	0.0	18.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
78	17595635.97	4853363.25	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.8	1.1	-0.1	0.0	0.0	8.0	0.0	0.0	16.3

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
79	17595650.14	4853363.92	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.8	1.1	-0.1	0.0	0.0	7.5	0.0	0.0	16.8

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
80	17595672.36	4853368.35	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.8	1.1	-0.1	0.0	0.0	5.8	0.0	0.0	18.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
81	17595685.80	4853370.25	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.9	1.1	-0.1	0.0	0.0	14.3	0.0	0.0	9.9

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
82	17595697.32	4853374.57	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	55.9	1.1	-0.2	0.0	0.0	0.0	0.0	0.0	24.2

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
83	17595665.85	4853362.68	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	56.0	1.1	-0.1	0.0	0.0	2.4	0.0	0.0	21.8

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
84	17595644.14	4853356.58	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	56.1	1.1	-0.2	0.0	0.0	7.6	0.0	0.0	16.4

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
85	17595679.50	4853362.89	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	56.2	1.1	-0.2	0.0	0.0	7.7	0.0	0.0	16.3

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
86	17595459.24	4853609.24	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	56.2	1.1	-0.2	0.0	0.0	0.0	0.0	0.0	24.0

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
87	17595657.86	4853356.80	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	56.2	1.1	-0.2	0.0	0.0	6.0	0.0	0.0	17.9

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
88	17595703.20	4853368.69	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	56.3	1.1	-0.2	0.0	0.0	0.0	0.0	0.0	23.8

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
89	17595674.46	4853357.85	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	56.3	1.1	-0.2	0.0	0.0	4.5	0.0	0.0	19.3

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
90	17595650.09	4853350.50	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	56.4	1.1	-0.2	0.0	0.0	7.2	0.0	0.0	16.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
91	17595666.48	4853351.34	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	56.5	1.1	-0.2	0.0	0.0	3.3	0.0	0.0	20.4

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
92	17595658.70	4853346.51	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	56.7	1.1	-0.2	0.0	0.0	5.9	0.0	0.0	17.6

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
93	17595678.45	4853347.35	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	56.8	1.1	-0.2	0.0	0.0	4.7	0.0	0.0	18.7

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
94	17595731.70	4853339.07	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	58.0	1.2	-0.1	0.0	0.0	0.0	0.0	0.0	22.0

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
95	17595722.11	4853327.31	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	58.2	1.3	-0.4	0.0	0.0	6.4	0.0	0.0	15.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
96	17595737.52	4853333.51	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	58.3	1.3	-0.1	0.0	0.0	0.0	0.0	0.0	21.6

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
97	17595715.76	4853320.95	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	58.4	1.3	-0.4	0.0	0.0	6.9	0.0	0.0	14.9

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
98	17595711.79	4853314.07	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	58.5	1.3	-0.4	0.0	0.0	6.1	0.0	0.0	15.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
99	17595731.37	4853321.75	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	58.6	1.3	-0.4	0.0	0.0	10.6	0.0	0.0	11.0

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
100	17595744.14	4853328.22	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	58.6	1.3	-0.1	0.0	0.0	0.0	0.0	0.0	21.3

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
101	17595704.90	4853308.91	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	58.6	1.3	-0.4	0.0	0.0	5.7	0.0	0.0	15.9

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
102	17595727.01	4853316.45	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	58.7	1.3	-0.4	0.0	0.0	6.5	0.0	0.0	15.0

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
103	17595699.35	4853303.09	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	58.8	1.3	-0.4	0.0	0.0	5.8	0.0	0.0	15.6

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
104	17595719.20	4853308.78	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	58.8	1.3	-0.4	0.0	0.0	6.2	0.0	0.0	15.2

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
105	17595736.93	4853314.47	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	58.9	1.3	-0.4	0.0	0.0	9.4	0.0	0.0	11.9

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
106	17595712.84	4853303.35	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	58.9	1.3	-0.4	0.0	0.0	6.0	0.0	0.0	15.3

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
107	17595730.84	4853310.50	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	58.9	1.3	-0.4	0.0	0.0	6.2	0.0	0.0	15.1

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
108	17595752.34	4853321.07	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	58.9	1.3	-0.1	0.0	0.0	0.0	0.0	0.0	20.9

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
109	17595706.89	4853297.53	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	59.0	1.3	-0.4	0.0	0.0	5.8	0.0	0.0	15.4

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
110	17595725.42	4853302.29	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	59.1	1.3	-0.4	0.0	0.0	5.8	0.0	0.0	15.3

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
111	17595743.55	4853308.38	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	59.2	1.3	-0.4	0.0	0.0	8.9	0.0	0.0	12.1

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
112	17595757.37	4853314.19	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	59.2	1.4	-0.1	0.0	0.0	0.0	0.0	0.0	20.6

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
113	17595719.20	4853295.41	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	59.2	1.4	-0.5	0.0	0.0	5.7	0.0	0.0	15.2

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
114	17595737.33	4853303.09	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	59.2	1.4	-0.5	0.0	0.0	5.7	0.0	0.0	15.2

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
115	17595712.18	4853289.19	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	59.4	1.4	-0.5	0.0	0.0	5.7	0.0	0.0	15.2

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
116	17595761.87	4853311.01	7.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	59.4	1.4	-0.1	0.0	0.0	0.0	0.0	0.0	20.4

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
117	17595732.83	4853295.68	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	59.4	1.4	-0.5	0.0	0.0	5.3	0.0	0.0	15.5

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
118	17595725.81	4853290.25	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	59.5	1.4	-0.5	0.0	0.0	5.5	0.0	0.0	15.2

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
119	17595719.33	4853283.37	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	59.6	1.4	-0.5	0.0	0.0	5.5	0.0	0.0	15.1

Point Source, ISO 9613, Name: "Rooftop_HVAC_Unit", ID: "RHVACU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
120	17595737.33	4853289.98	4.00	0	DEN	A	81.1	0.0	0.0	0.0	0.0	59.6	1.4	-0.5	0.0	0.0	5.6	0.0	0.0	14.9

APPENDIX E

Zoning Map of the Town of Caledon

SECTION 2

ESTABLISHMENT OF ZONES

2.1 ZONES

The Provisions of this By-law apply to all lands within the limits of the Town of Caledon. All lands in the Town, with the exception of those lands within the Niagara Escarpment Plan Area that are subject to Development Control administered by the Niagara Escarpment Commission pursuant to the Niagara Escarpment Planning and Development Act and lands designated Environmental Policy Area and Open Space Policy Area within the Town's Official Plan are contained within one or more of the following *Zones*:

ZONE	SYMBOL
Residential Zones	
Estate Residential	**RE**
Rural Residential	**RR**
Residential One	**R1**
Residential Two	**R2**
Residential Townhouse	**RT**
Mixed Density Residential	**RMD**
Multiple Residential	**RM**
Commercial Zones	
Core Commercial	**CC**
Village Core Commercial	**CCV**
General Commercial	**C**
Neighbourhood Commercial	**CN**
Village Commercial	**CV**
Highway Commercial	**CH**
Bolton Highway Commercial	**CHB**
Village Highway Commercial	**CHV**
Tourist Camp Commercial	**CT**
Industrial Zones	
Prestige Industrial	**MP**
Serviced Industrial	**MS**
Unserviced Industrial	**MU**
Airport Industrial	**MA**
Extractive Industrial	**MX**
Waste Management Industrial	**MD**
Institutional Zone	
Institutional	**I**
Agricultural and Rural Zones	
Agricultural	**A1**
Agricultural –Oak Ridges Moraine	**A1-ORM**

Rural	**A2**
Rural – Oak Ridges Moraine	**A2-ORM**
Small Agricultural Holdings	**A3**
Small Agricultural Holdings – Oak Ridges Moraine	**A3-ORM**

Environmental Zones

Environmental Policy Area 1 Zone	**EPA1**
Environmental Policy Area 1 Zone – Oak Ridges Moraine	**EPA1-ORM**
Environmental Policy Area 2 Zone	**EPA2**
Environmental Policy Area 1 Zone – Oak Ridges Moraine	**EPA2-ORM**

Open Space Zones

Open Space	**OS**
Open Space – Oak Ridges Moraine	**OS-ORM**

2.2 ZONE SYMBOLS

The *Zone* symbols may be used in this By-law and on the Schedules to this By-law to refer to *lots*, *buildings* and *structures* and to the *use* of *lots*, *buildings* and *structures* permitted by this By-law.

2.3 ZONE SCHEDULES

The *Zones* and *Zone* boundaries are shown in SCHEDULE A, *Zone* Maps 1 through 88 and SCHEDULE B, Structural Envelope "SE" Maps are attached to and form part of this By-law.

2.4 DETERMINING ZONE BOUNDARIES

When determining the location of *zone* boundaries as shown in any Schedule forming part of this By-law, the following provisions shall apply:

i) a boundary indicated as following a highway, *street*, *lane*, railway right-of-way, utility corridor or watercourse shall be the centerline of such highway, *street*, *lane*, railway right-of-way, utility corridor or watercourse unless the context otherwise requires;

ii) a boundary indicated as following a shoreline shall follow such shoreline, and in the event of change in the shoreline, the boundary shall be construed as moving with the actual shoreline;

iii) a boundary indicated as following *lot lines* shown on a registered Plan of Subdivision, or the municipal boundaries of the Town of Caledon shall follow such *lot lines*;

iv) where a boundary is indicated as running parallel to a *street line* and the distance from the *street line* is not indicated, the boundary shall be deemed to be parallel to such a *street line* and the distance from the *street line* shall be determined according to the scale shown in the Schedule(s);

v) where none of the above provisions apply, the *Zone* boundary shall be scaled from the legally approved Schedule(s).

2.5 OVERLAY ZONES

i) Where a *zone* symbol in the Schedules to this By-law is followed by the suffix '**T**' – 'Temporary *Use*', the applicable provisions and regulations of the underlying *zone* shall continue to apply, subject to the additional temporary permitted *uses* and regulations contained in Section 13.4 of this By-law.

ii) Where lands fall within a *Wellhead Protection Area* boundary overlay on the Schedules to this By-law, the applicable provisions and regulations of the underlying *zone* shall continue to apply, subject to the applicable provisions of Subsection 4.40 of this By-law.

iii) Where a *zone* symbol on the Schedules to this By-law is followed by the suffix 'E' – 'Environmental Policy Area', the applicable standards of the underlying *zone* shall continue to apply, however the 'E' suffix identifies that such lands are designated Environmental Policy Area in the Town of Caledon Official Plan. Where an approval is required under the *Planning Act* for the use of land that is subject to an 'E' suffix, such an approval must address environmental matters in accordance with the applicable provisions of the Town of Caledon Official Plan prior to the granting of such approval

iv) Where a zone symbol on the Schedules to this By-law is followed by the suffix 'ORM' – 'Oak Ridges Moraine', the applicable standards of the underlying zone shall continue to apply, however, the 'ORM' suffix identifies that such lands are within the Oak Ridges Moraine Conservation Plan Area and are subject to the special provisions dealing with Areas of High Aquifer Vulnerability and Areas of Special Prohibitions for *Oak Ridges Moraine Conservation Plan Area* in Sections 4.29.2 and 4.29.3 (Prohibited Uses) and in accordance with Schedule D – ORMCP Areas of High Aquifer Vulnerability, Schedule E – ORMCP Areas of Special Prohibitions and Schedule F – Designated Agricultural Area within ORMCPA, of this By-law.

Lands within the Caledon East Secondary Plan Area and within the *Oak Ridges Moraine Conservation Plan Area* shall be subject to the special prohibitions of Sections 4.29.2 (Prohibited Uses) and Schedule E – ORMCP Areas of High Aquifer Vulnerability of this By-law.

2.6 SITE SPECIFIC ZONES

Where a *Zone* symbol in the attached Schedule(s) is followed by a dash and a number, such as **CV-128**, the symbol refers to a site-specific exception that applies to the lands noted. Site-specific exceptions are listed in Section 13 of this By-law. Unless specifically amended by the *Zone* Exception, all other provisions of the Parent *Zone* apply.

2.7 HOLDING ZONES

Notwithstanding any other provision in this By-law, where a *Zone* symbol is followed by the letter (**H**), no person shall *use* the land to which the letter (**H**) applies for any *use* other than the *use* which legally existed on the effective date of this By-law, until the (**H**) is removed in

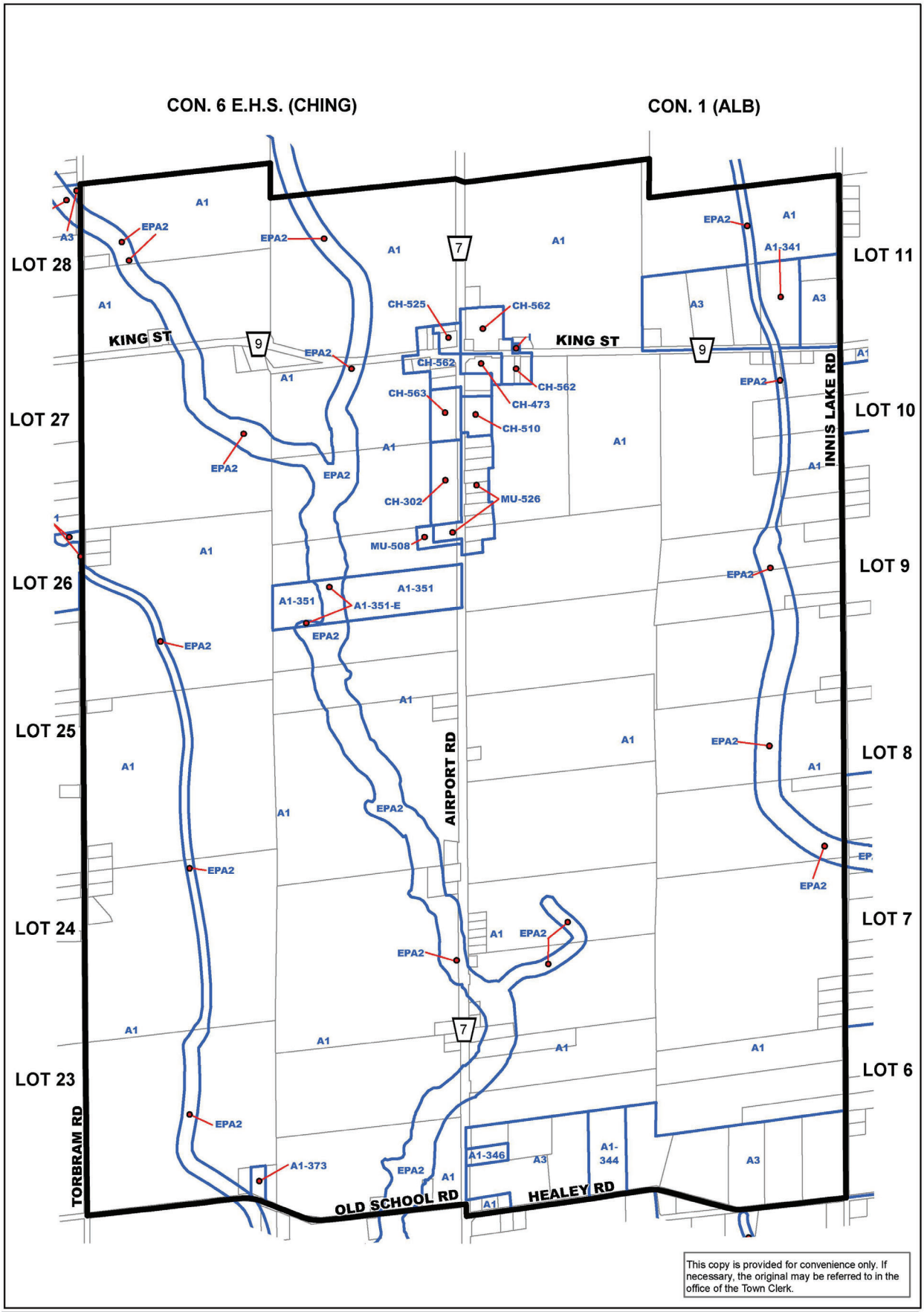
accordance with the policies of the Official Plan and the provisions of this By-law, as amended and/or the requirements of any amending By-law and the Planning Act, as amended.

2.8 CONSERVATION AUTHORITY REGULATIONS

No development shall be undertaken on lands that are subject to a regulation made under Subsection 29(1) of the Conservation Authorities Act without the permission of the relevant conservation authority.

2.9 DEFINITIONS

For the convenience of the reader, all words that are *italicized* are defined in Section 3 of this By-law.



This copy is provided for convenience only. If necessary, the original may be referred to in the office of the Town Clerk.

INDEX MAP
Not to scale

A2 ZONE SYMBOL

A2-### ZONE SYMBOL
Note: Number of suffixes represent Exceptions which can be looked up in the Exceptions section of the By-law.

ZONE BOUNDARY

SE STRUCTURAL ENVELOPE MAP

NIAGARA ESCARPMENT DEVELOPMENT CONTROL AREA
Lands lying within the Development Control area pursuant to the Niagara Planning and Development Act are subject to permit requirements under Ontario Regulations 685/50, as amended.

OAK RIDGES MORAINE CONSERVATION PLAN AREA BOUNDARY

WELLHEAD PROTECTION AREA BOUNDARY
WP-2 WP-5 WP-10 WP-25
Zone Maps amended to indicate the 2, 5, 10, and 25 year Wellhead Protection Areas.

The base data on this map is provided for convenience only. The Town of Caledon is not responsible for any deficiency or inaccuracy in the base data, and will not accept any liability whatsoever therefor. The reproduction of the base data, in whole or in part, by any means is prohibited without the prior written permission of the Town of Caledon.

BY-LAW 2006-50
ZONE MAP 13
SCHEDULE "A"
0 140 280 560 m
TOWN OF CALEDON

Date: 3 April 2006
Revised: August 21, 2015

File: S:\POLICY SECTION\GIS\zoning_bylaw\2015_mxd

13

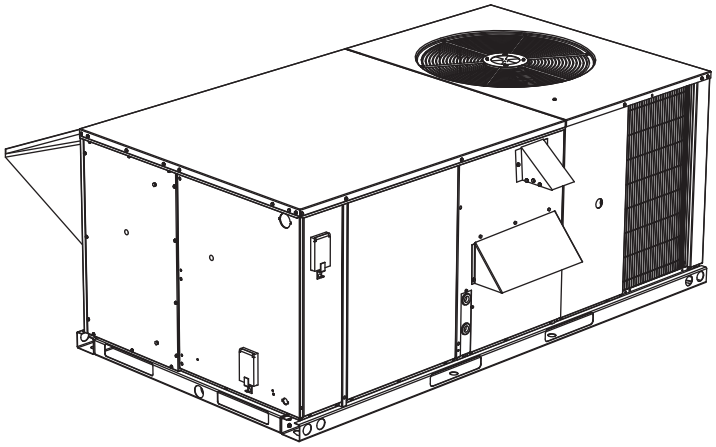
APPENDIX F

Sound Power Levels of the Proposed HVAC Units

YORK®
Heating and Air Conditioning

TECHNICAL GUIDE

R-410A
ZF / ZR / XP SERIES
3 - 6 TON
60 Hertz



Description

YORK® ZF/ZR/XP Series units are convertible single package high efficiency rooftops with a common roof curb for the 3, 4, 5 and 6 Ton sizes (ZR, XP not available in 6 Ton). Although the units are primarily designed for curb mounting on a roof, they can also be slab-mounted at ground level or set on steel beams above a finished roof.

All ZF/ZR/XP Series units are self-contained and assembled on rigid full perimeter base rails allowing for overhead rigging. Every unit is completely charged, wired, piped and tested at the factory to provide a quick and easy field installation.

All models (including those with an economizer) are convertible between bottom and horizontal duct connections.

ZF/ZR Series units are available in the following configurations: cooling only, cooling with electric heat, and cooling with one or two stage gas heat. Electric heaters are available as factory-installed option or field installed accessory.

XP Series units are available in the following configurations: cooling and heating only and cooling and heating with electric heat.

Tested in accordance with:

DESIGN CERTIFIED

C SA US

CERTIFIED

ARI PERFORMANCE CERTIFIED ™
ARI Standard 210/240 Unitary Small AC
Certification applies only when the complete system is listed with ARI.
www.aridirectory.org

ARI PERFORMANCE CERTIFIED ™
ARI Standard 210/240 Unitary Small HP
Certification applies only when the complete system is listed with ARI.
www.aridirectory.org

FOR DISTRIBUTION USE ONLY - NOT TO BE USED AT POINT OF RETAIL SALE

Sound Performance

ZF/ZR/XP Indoor Sound Power Levels

Size (Tons)	CFM	ESP (IWG)	Blower		Sound Power, dB (10^{-12}) Watts							
					Sound Rating[1] dB (A)	Octave Band Centerline Frequency (Hz)						
			RPM	BHP		63	125	250	500	1000	2000	4000	8000
036 (3.0)	1200	0.2	630	0.41	63	82	77	59	50	43	42	40	45
048 (4.0)	1600	0.2	791	0.54	72	95	84	58	54	46	44	45	44
060 (5.0)	2000	0.2	840	0.67	62	84	71	58	53	50	49	49	49
072 (6.0)	2200	0.3	920	1.45	76	61	71	68	67	72	66	61	54

1. These values have been accessed using a model of sound propagation from a point source into the hemispheric/free field. The dBA values provided are to be used for reference only. Calculation of dBA values cover matters of system design and the fan manufacture has no way of knowing the details of each system. This constitutes an exception to any specification or guarantee requiring a dBA value of sound data in any other form than sound power level ratings.

ZF/ZR Outdoor Sound Power Levels

Size (Tons)	Sound Rating[1] dB (A)	Octave Band Centerline Frequency (Hz)							
		63	125	250	500	1000	2000	4000	8000
036 (3.0)	81	87.5	86.0	81.0	77.0	75.0	69.5	65.5	70.5
048 (4.0)	80	84.5	81.0	80.0	78.0	75.0	70.0	67.0	70.5
060 (5.0)	82	86.5	87.5	81.5	77.5	75.0	71.5	68.0	70.5

1. Rated in accordance with ARI 270 standard.

Sound Power Level Spectrum for the Model

XP Outdoor Sound Power Levels

Size (Tons)	Sound Rating[1] dB (A)	Octave Band Centerline Frequency (Hz)							
		63	125	250	500	1000	2000	4000	8000
036 (3.0)	76	83.5	84.5	76.5	72.0	68.0	66.0	60.0	56.0
048 (4.0)	80	85.0	83.0	81.0	77.5	75.5	71.5	67.5	61.5
060 (5.0)	80	86.0	84.0	81.0	77.0	75.5	71.0	66.5	60.5

1. Rated in accordance with ARI 270 standard.