

**PHASE 1 NOISE CONTROL  
FEASIBILITY STUDY**

**130 HUNTMAR DRIVE**

**Prepared for:  
LIONESS DEVELOPMENT INC.**

**PROJECT No: 191002**

**CITY OF OTTAWA**

**FEBRUARY 2020**



**REVISION 0**

**PHASE 1 NOISE CONTROL FEASIBILITY STUDY**

**LIONESS DEVELOPMENT INC.**

**130 HUNTMAR DRIVE**

**CITY OF OTTAWA**

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**PHASE 1 NOISE CONTROL FEASIBILITY STUDY**

**LIONESS DEVELOPMENT INC.**

**130 HUNTMAR DRIVE**

**CITY OF OTTAWA**

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## **1.0 INTRODUCTION**

Atrél Engineering has been retained by Lioness Development Inc. to conduct an environmental noise impact assessment in support of the major zoning by-law amendment and Plan of Subdivision application. The proposed residential development is located in the western Ottawa region at 130 Huntmar Drive. The purpose of this study is to identify the possible noise sources, and evaluate the potential location for noise mitigation measures. The current assessment is considered a phase 1 noise control feasibility study and will need to be revised to a phase 2 noise control detailed study at the detail design stage of the project. Refer to the location map in Appendix “A” for the site location and the study extent.

## **2.0 CRITERIA**

The criteria used in the current environmental noise impact assessment are outlined in the Ministry of Environment, Conservation and Parks (MOECP) and City of Ottawa Environmental Noise Control Guidelines. The guidelines offers traffic and road parameters as well as noise level limits for outdoor and indoor living areas.

A summary of the noise level criteria from the guidelines is described in the subsections.

### **2.1 Noise Level Criterion for Outdoor Living Areas**

As outlined in the MOECP and City of Ottawa Noise Control Guidelines, the recommended outdoor area noise level limit from 7:00 to 23:00 is 55dBA Leq. (NPC-300, 2013 Table C-1). The measuring unit “Leq” is defined as the energy equivalent sound level during an hour. The point of assessment for outdoor living area is at 3m from the building façade, 1.5m above grade and aligned with the midpoint of the subject façade.

When the calculated sound level are under the prescribed limits, no further action is required from the developer. If the sound levels exceeds the abovementioned limits, noise mitigation measure shall be evaluated as well as the addition of warning clauses on the deeds of the concerned lots.

## **2.2 Indoor Sound Level Criteria**

The recommended indoors sound level limits for dwellings given by the MOECP and the City of Ottawa Noise Control Guidelines are summarized in the following table:

<b>Type of Space</b>	<b>Equivalent Sound Level (Leq), dBA</b>
General offices, reception areas, retails stores, etc. (Time period: 16 hr, 07:00 – 23:00)	50
Living/dining areas of residences, hospitals, schools, nursing/retirement homes, day-care centres, theatres, places of worship, libraries, individual or semi-private offices, conference rooms, reading rooms, etc. (Time period: 16 hr, 07:00 – 23:00)	45
Sleeping quarters of hotels/motels (Time period: 8 hr, 23:00 – 07:00)	45
Sleeping quarters of residences, hospitals, nursing/retirement homes, etc. (Time period: 8 hr, 23:00 – 07:00)	40

The point of assessment for an indoor living area is at the center of the exposed window with a height of 1.5m minimum for a one story dwelling, 4.5m for a two stories dwelling and 7.5m for a three stories dwelling. For the purpose of this study, the typical dwelling first story center of window is located at 2.5m above the ground.

## **2.3 Outdoor, Ventilation and Warning Clause Requirements**

As per the MOECP and City of Ottawa and Noise Control Guidelines, if the noise levels exceeds the prescribed noise level limits and noise mitigation measures doesn't attenuate the noise level within the permissible limits, the purchaser or tenant should be advised, with a warning clause, that sound levels may occasionally interfere with outdoor activities.

The following table describes the warning clause requirements for Outdoor living condition, Indoor living daytime and also Indoor living nighttime condition.

Assessment Location	$L_{eq}$ (8 or 16 hrs as noted) (dBA)	Ventilation Requirements	Outdoor Control Measures	Warning Clause
OUTDOOR LIVING AREA (OLA)	$L_{eq 16 hr}$ Less than or equal to 55 dBA	N/A	None required	Not required
	$L_{eq 16 hr}$ Greater than 55 dBA to less than or equal to 60 dBA	N/A	Control measures (barriers) may not be required but should be considered	Required if resultant $L_{eq}$ exceeds 55 dBA Type A
	$L_{eq 16 hr}$ Greater than 60 dBA	N/A	Control measures (barriers) required to reduce the $L_{eq}$ to below 60 dBA and as close to 55 dBA as technically, economically and administratively feasible	Required if resultant $L_{eq}$ exceeds 55 dBA Type B
PLANE OF LIVING ROOM WINDOW	$L_{eq 16 hr}$ Less than or equal to 55 dBA	None required	N/A	Not required
	$L_{eq 16 hr}$ Greater than 55 dBA to less than or equal to 65 dBA	Forced air heating with provision for central air conditioning	N/A	Required Type C
	$L_{eq 16 hr}$ Greater than 65 dBA	Central air Conditioning	N/A	Required Type D
PLANE OF BEDROOM WINDOW	$L_{eq 8 hr}$ Greater than 50 dBA to less than or equal to 60 dBA	Forced air heating with provision for central air conditioning	N/A	Required Type C
	$L_{eq 8 hr}$ Greater than 60 dBA	Central air conditioning	N/A	Required Type D

## **2.4 Relevant Warning Clauses**

The MOECP and City of Ottawa Noise Control Guidelines offers warning clauses samples for each scenario which are summarized in the following table:

<b>TYPE</b>	<b>WARNING CLAUSE</b>
Type A	"Purchasers/tenants are advised that sound levels due to increasing (road) (Transitway) (rail) (air) traffic may occasionally interfere with some activities of the dwelling occupants as the sound levels exceed the City's and the Ministry of the Environment's noise criteria."
Type B	"Purchasers/tenants are advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing (road) (Transitway) (rail) (air) traffic may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the City's and the Ministry of the Environment's noise criteria."
Type C	"This dwelling unit has been fitted with a forced air heating system and the ducting, etc. was sized to accommodate central air conditioning. Installation of central air conditioning by the occupant will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the City's and the Ministry of the Environment's noise criteria. (Note: The location and installation of the outdoor air conditioning device should be done so as to comply with noise criteria of MOE Publication NPC-216, Residential Air Conditioning Devices and thus minimize the noise impacts both on and in the immediate vicinity of the subject property."
Type D	"This dwelling unit has been supplied with a central air conditioning system which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the City's and the Ministry of the Environment's noise criteria."

## **3.0 ANALYSIS**

The known significant noise sources in the proximity of the subject site results from the surface transportation. The noise source parameters are taken from the City of Ottawa guidelines for the exception of the LRT for which the parameters were estimated based on the available data and previous studies. The following table summarizes the noise source parameters used in this study:

<b>Noise Source</b>	<b>AADT</b>	<b>Speed Limit (km/h)</b>	<b>Gradient (%)</b>	<b>Pavement Type</b>	<b>Day/Night (%)</b>
Maple Grove Road	35,000	60	0.1	1	92/8
Huntmar Drive	35,000	50	0.1	1	92/8
Palladium Drive	35,000	70	0.1	1	92/8
North-South Arterial Road	35,000	50	0.1	1	92/8
East-West Arterial Road	35,000	50	0.1	1	92/8
LRT	16,550	60	0.1	1	90/10

The noise analysis was undertaken using the Stamson (version 5.03) program as supplied by the MOECP. As a phase 1 environmental noise control assessment, the subject site was studied using the critical noise level setback which returns a distance for a desired noise level in dBA. A summary of the critical setbacks for the three different conditions is shown in the following tables:

Living – Day condition

Noise Source	Living daytime condition – Noise level setbacks (m)					
	<45 dBA	50 dBA	55 dBA	60 dBA	65 dBA	70 dBA
Huntmar Drive, North-South Arterial Road, East-West Arterial Road	500+	281.2	138.9	68.5	33.8	16.7
Maple Grove Road	500+	348.5	172.0	84.9	41.9	20.7
Palladium Drive	500+	420.0	207.3	102.3	50.5	24.9
LRT	500+	412.4	206.1	103.0	51.5	25.8

Living – Night condition

Noise Source	Living night condition – Noise level setbacks (m)					
	<45 dBA	50 dBA	55 dBA	60 dBA	65 dBA	70 dBA
Huntmar Drive, North-South Arterial Road, East-West Arterial Road	218.2	104.9	50.4	24.2	<15	<15
Maple Grove Road	272.7	131.0	63.0	30.2	<15	<15
Palladium Drive	330.9	159.0	76.4	36.7	17.6	<15
LRT	380.2	185.0	90.2	43.9	21.4	<15

Outside condition

Noise Source	Outside condition – Noise level setbacks (m)					
	<45 dBA	50 dBA	55 dBA	60 dBA	65 dBA	70 dBA
Huntmar Drive, North-South Arterial Road, East-West Arterial Road	500+	265.0	132.5	66.2	33.1	16.5
Maple Grove Road	500+	327.1	163.5	81.7	40.8	20.4
Palladium Drive	500+	393.0	196.4	98.1	49.0	24.5
LRT	500+	412.4	206.1	103.0	51.5	25.8

Drawing 191002-N1, 191002-N2 and 191002-N3 in appendix “C” illustrates the critical setback distance for each noise source and scenario.



#### **4.0 NOISE MITIGATION MEASURES**

The results shows that part of the proposed project is subject to noise levels exceeding the prescribed City of Ottawa and MOECC noise level limits. In such areas, noise mitigation measures will be evaluated in order to reduce the calculated noise level within the allowable limits. As described in the City of Ottawa Noise Control Guidelines, the noise mitigation measure includes: distance setbacks, insertion of noise insensitive land, orientation of building, berms and acoustic barriers.

Where physically possible, noise barrier are proposed as a preliminary noise mitigation measure, refer to drawing 191002-N4 for the noise barrier location. The noise barriers shown on drawing 191002-N4 were found necessary based on an un-attenuated noise control analysis, however, will need to be re-evaluated and confirmed with a detailed grading plan and proposed dwellings. All parts of the subdivision with satisfactory noise levels are to be confirmed and re-evaluated with a detailed grading plan with dwellings as well.

#### **5.0 RECOMMENDATION AND CONCLUSION**

The Projected noise level for the daytime building face area, nighttime building face area and the outdoor living area are expected to be above the City of Ottawa guideline limits at various location. Mitigation measure such as the orientation of dwellings and acoustic barriers will be provided in order to reduce the noise levels. Generic warning clauses and sound attenuating building materials will be applied to buildings located in proximity of the major arterial roads and where noise levels exceeds the prescribed limits. As a Phase 1 Environmental Noise Control Study, the following noise mitigation measures are proposed:

- A noise barrier along the northern boundary of Block 18, Block 19, the southern boundary of Block 20, Block 21, Block 26, Block 27, Block 32, Block 33 and Block 35. Also, a noise barrier is proposed on the side lots between Block 7 and 8, Block 11 and Block 12, Block 13 and Block 14, Block 24 and Block 25, Block 28 and Block 29, Block 30 and Block 31.
- Noise sensitive area such as Block 2, Block 3, Block 7, Block 9, Block 10, and Block 11 is managed by inserting insensitive lands between the noise source and the proposed buildings. The noise generated from the North-South Arterial Road and the Future LRT will be attenuated by the future construction of mid-density site plans and commercial lands (Block 1, Block 4, Block 5, and Block 6). Similarly Block 20, Block 21, Block 32, Block 33 and Block 35 will experience shielding by the future schools (Block 34 and Pin 04509-0017).

- Without noise mitigation methods, part of Blocks 2, 3, 7, 8, 11, 12, 13, 14, 18, 19, 20, 21, 24, 25, 28, 29, 30, 31, 33 and 35 are considered Type “A” and may be subject to noise warning clause for outside living area (refer to drawing 191002-N3).
- Without noise mitigation methods, part of Blocks 3, 7, 8, 11, 12, 13, 14, 19, 20, 24, 25, 28, 29, 30, 31, 33 and 35 are considered Type “B” and may be subject to noise warning clause for outside living area (refer to drawing 191002-N3).
- Without noise mitigation methods, Block 2, 9, 10, 21, 32 and part of Blocks 3, 7, 8, 11, 12, 13, 14, 15, 18, 19, 20, 24, 25, 26, 27, 28, 29, 30, 31, 33 and 35 are considered Type “C” and may be subject to noise warning clause for inside living area (refer to drawing 191002-N1 & 191002-N2).
- Without noise mitigation methods, part of Blocks 3, 7, 8, 11, 12, 13, 14, 19, 20, 24, 25, 26, 27, 28, 29, 30, 31, 33 and 35 are considered Type “D” and may be subject to noise warning clause for inside living area (refer to drawing 191002-N1 & 191002-N2).

The environmental noise control study shall be updated at the detailed design stage in which the mitigation measures will be re-evaluated and design accordingly.

Respectfully submitted by:

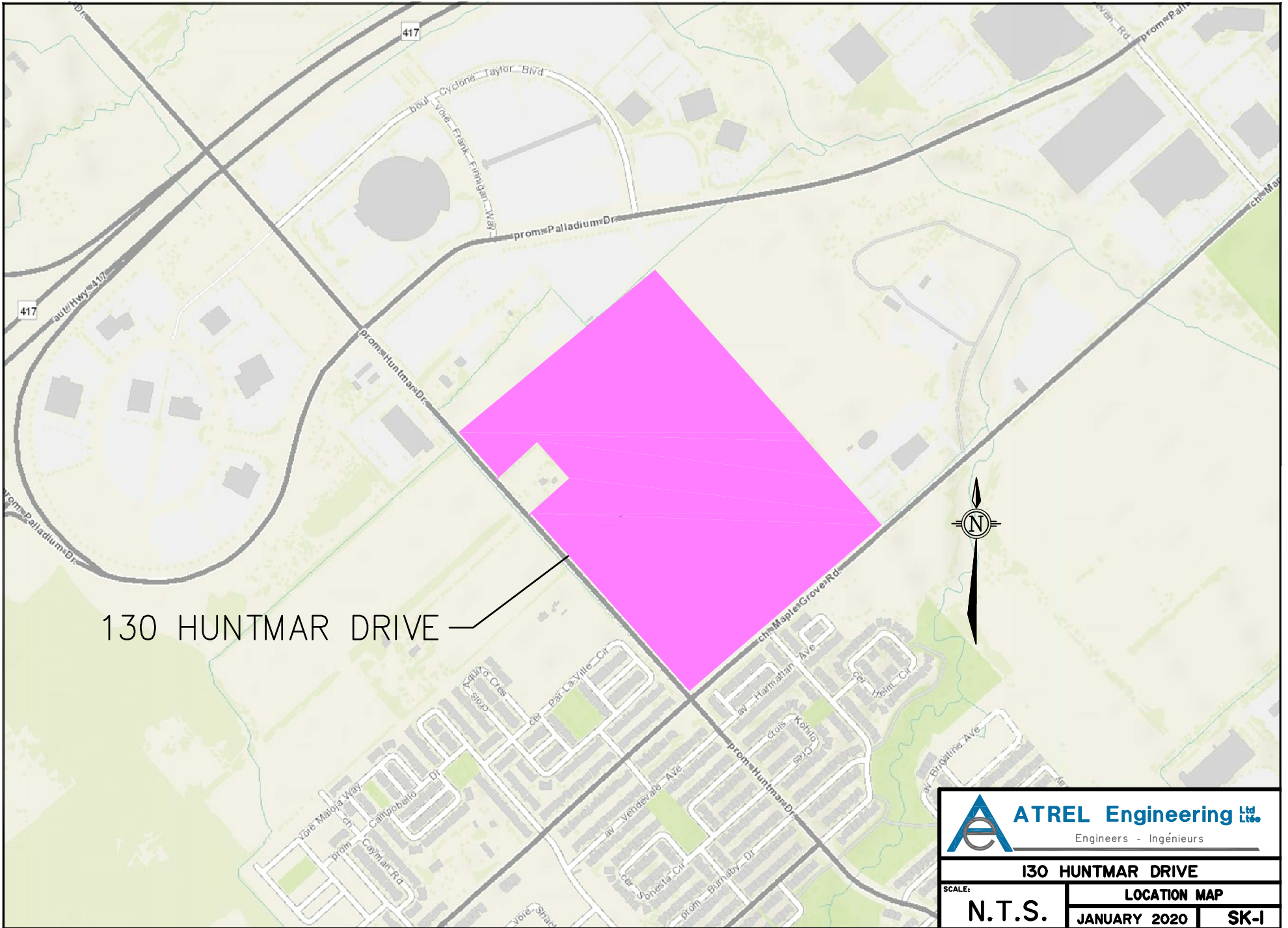
**ATREL ENGINEERING LTD**




André Sauvé, P. Eng

**APPENDIX 'A'**

Location Map – SK1



130 HUNTMAR DRIVE

 <b>ATREL Engineering</b> Engineers - Ingénieurs		
<b>130 HUNTMAR DRIVE</b>		
SCALE:	<b>LOCATION MAP</b>	
<b>N.T.S.</b>	<b>JANUARY 2020</b>	<b>SK-1</b>

**APPENDIX 'B'**

Table 1 - Forecast Traffic Volume

**Forecast Traffic Volume**

**TABLE 1**

**ROAD : Maple Grove Road** POSTED SPEED LIMIT (km/h):  
**TOTAL AADT : 35,000**

**CALCULATION OF AADT (DAY / NIGHT)**

<u>DAY</u>		<u>NIGHT</u>	
TOTAL TRAFFIC:	<input type="text" value="32200"/>	TOTAL TRAFFIC:	<input type="text" value="2800"/>
CAR:	<input type="text" value="28336"/>	CAR:	<input type="text" value="2464"/>
MEDIUM TRUCK:	<input type="text" value="2254"/>	MEDIUM TRUCK:	<input type="text" value="196"/>
HEAVY TRUCK:	<input type="text" value="1610"/>	HEAVY TRUCK:	<input type="text" value="140"/>
Total	32200	Total	2800

**ROAD : Huntmar Drive** POSTED SPEED LIMIT (km/h):  
**TOTAL AADT : 35,000**

**CALCULATION OF AADT (DAY / NIGHT)**

<u>DAY</u>		<u>NIGHT</u>	
TOTAL TRAFFIC:	<input type="text" value="32200"/>	TOTAL TRAFFIC:	<input type="text" value="2800"/>
CAR:	<input type="text" value="28336"/>	CAR:	<input type="text" value="2464"/>
MEDIUM TRUCK:	<input type="text" value="2254"/>	MEDIUM TRUCK:	<input type="text" value="196"/>
HEAVY TRUCK:	<input type="text" value="1610"/>	HEAVY TRUCK:	<input type="text" value="140"/>
Total	32200	Total	2800

**ROAD : Palladium Drive** POSTED SPEED LIMIT (km/h):  
**TOTAL AADT : 35,000**

**CALCULATION OF AADT (DAY / NIGHT)**

<u>DAY</u>		<u>NIGHT</u>	
TOTAL TRAFFIC:	<input type="text" value="32200"/>	TOTAL TRAFFIC:	<input type="text" value="2800"/>
CAR:	<input type="text" value="28336"/>	CAR:	<input type="text" value="2464"/>
MEDIUM TRUCK:	<input type="text" value="2254"/>	MEDIUM TRUCK:	<input type="text" value="196"/>
HEAVY TRUCK:	<input type="text" value="1610"/>	HEAVY TRUCK:	<input type="text" value="140"/>
Total	32200	Total	2800

**ROAD : North-South Arterial Road** POSTED SPEED LIMIT (km/h):  
**TOTAL AADT : 35,000**

**CALCULATION OF AADT (DAY / NIGHT)**

<u>DAY</u>		<u>NIGHT</u>	
TOTAL TRAFFIC:	<input type="text" value="32200"/>	TOTAL TRAFFIC:	<input type="text" value="2800"/>
CAR:	<input type="text" value="28336"/>	CAR:	<input type="text" value="2464"/>
MEDIUM TRUCK:	<input type="text" value="2254"/>	MEDIUM TRUCK:	<input type="text" value="196"/>
HEAVY TRUCK:	<input type="text" value="1610"/>	HEAVY TRUCK:	<input type="text" value="140"/>
Total	32200	Total	2800

**ROAD : East-West Arterial Road** POSTED SPEED LIMIT (km/h):  
**TOTAL AADT : 35,000**

**CALCULATION OF AADT (DAY / NIGHT)**

<u>DAY</u>		<u>NIGHT</u>	
TOTAL TRAFFIC:	<input type="text" value="32200"/>	TOTAL TRAFFIC:	<input type="text" value="2800"/>
CAR:	<input type="text" value="28336"/>	CAR:	<input type="text" value="2464"/>
MEDIUM TRUCK:	<input type="text" value="2254"/>	MEDIUM TRUCK:	<input type="text" value="196"/>
HEAVY TRUCK:	<input type="text" value="1610"/>	HEAVY TRUCK:	<input type="text" value="140"/>
Total	32200	Total	2800

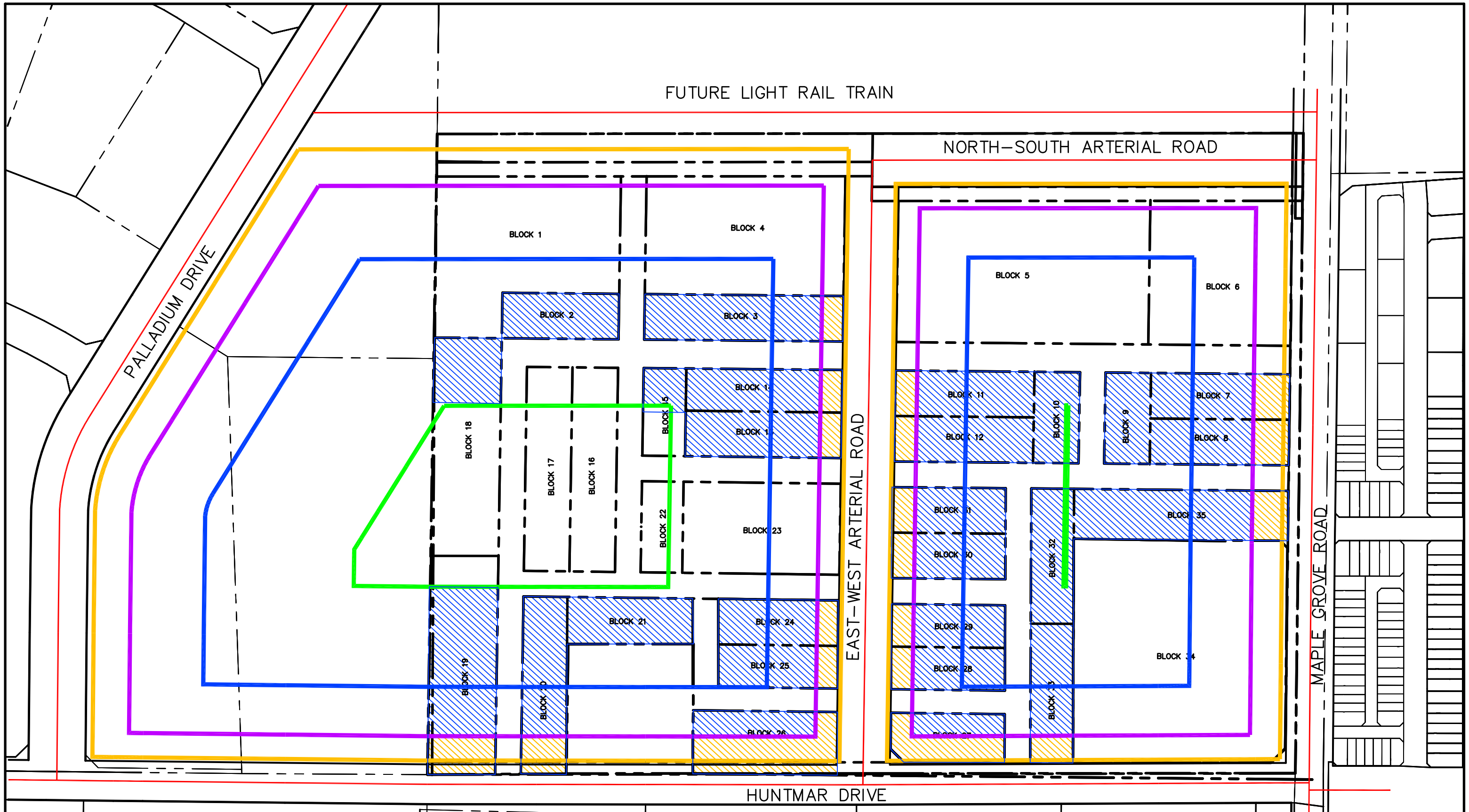
**ROAD : LRT** POSTED SPEED LIMIT (km/h):  
**TOTAL AADT : 16,550**

**CALCULATION OF AADT (DAY / NIGHT)**

<u>DAY</u>		<u>NIGHT</u>	
TOTAL TRAFFIC:	<input type="text" value="14895"/>	TOTAL TRAFFIC:	<input type="text" value="1655"/>

## **APPENDIX 'C'**

Drawing 191002-N1 Critical setback distance – Living building face Day  
Drawing 191002-N2 Critical setback distance – Living building face Night  
Drawing 191002-N3 Critical setback distance – Living Outside  
Drawing 191002-N4 Proposed Mitigation Measures



FUTURE LIGHT RAIL TRAIN

NORTH-SOUTH ARTERIAL ROAD

PALLADIUM DRIVE

EAST-WEST ARTERIAL ROAD

MAPLE GROVE ROAD

HUNTMAR DRIVE

BLOCK 1

BLOCK 4

BLOCK 2

BLOCK 3

BLOCK 5

BLOCK 6

BLOCK 18

BLOCK 17

BLOCK 16

BLOCK 15

BLOCK 14

BLOCK 13

BLOCK 22

BLOCK 23

BLOCK 11

BLOCK 12

BLOCK 10

BLOCK 9

BLOCK 7

BLOCK 8

BLOCK 19

BLOCK 20

BLOCK 21

BLOCK 24

BLOCK 25

BLOCK 26

BLOCK 31

BLOCK 30

BLOCK 32

BLOCK 35




BLOCK 29

BLOCK 28





BLOCK 33

BLOCK 34

LEGEND

-  ROAD CENTERLINE
-  GENERIC WARNING CLAUSE TYPE "C"
-  GENERIC WARNING CLAUSE TYPE "D"

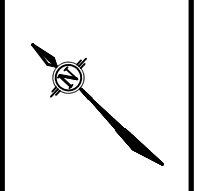
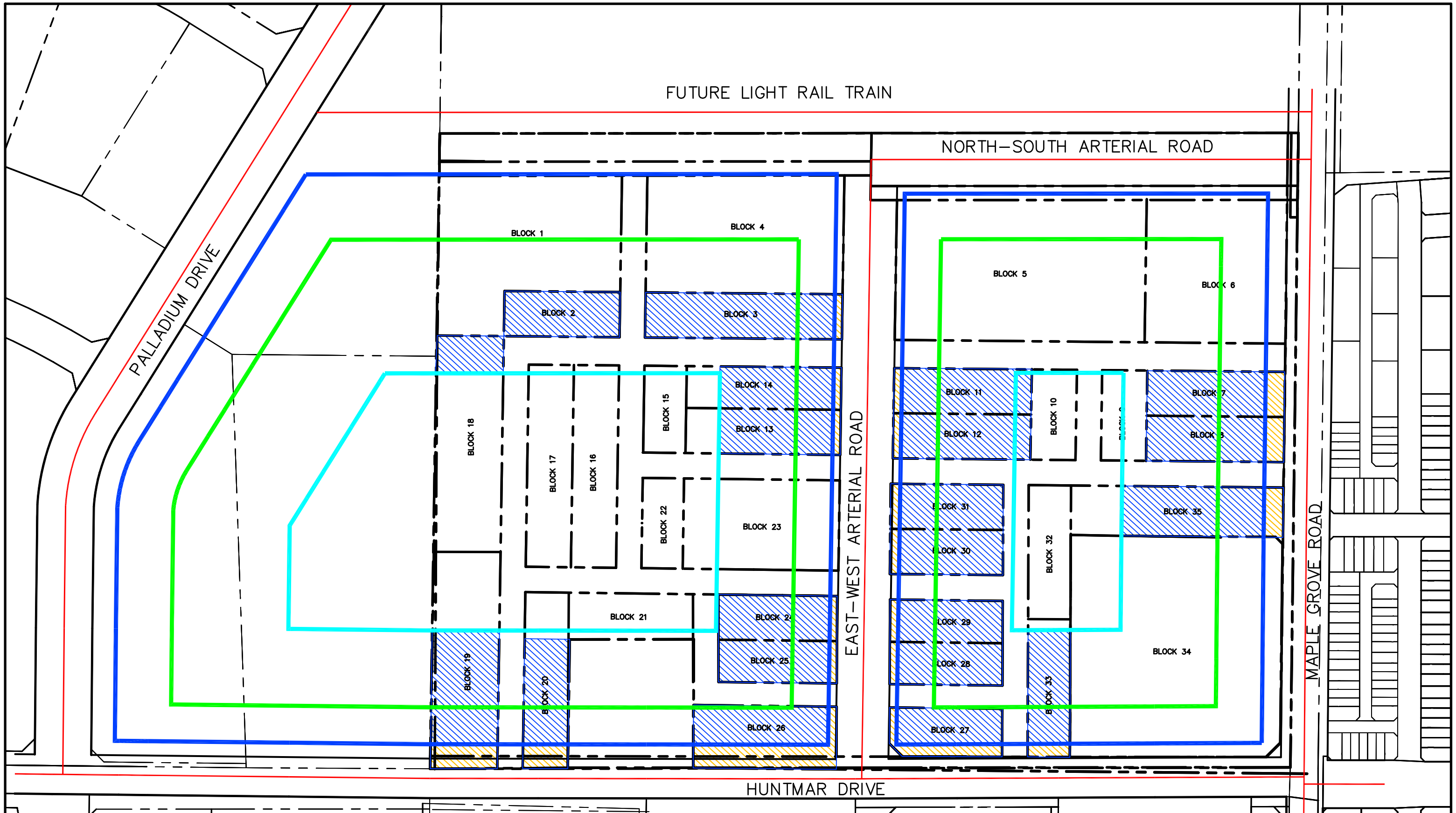
NOISE LEVEL

-  45dBA
-  50dBA
-  55dBA
-  60dBA
-  65dBA
-  70dBA



130 HUNTMAR DRIVE  
 CRITICAL SETBACK - LIVING DAY  
 SCALE: 1:2500 FEB. 2020 191002-NI



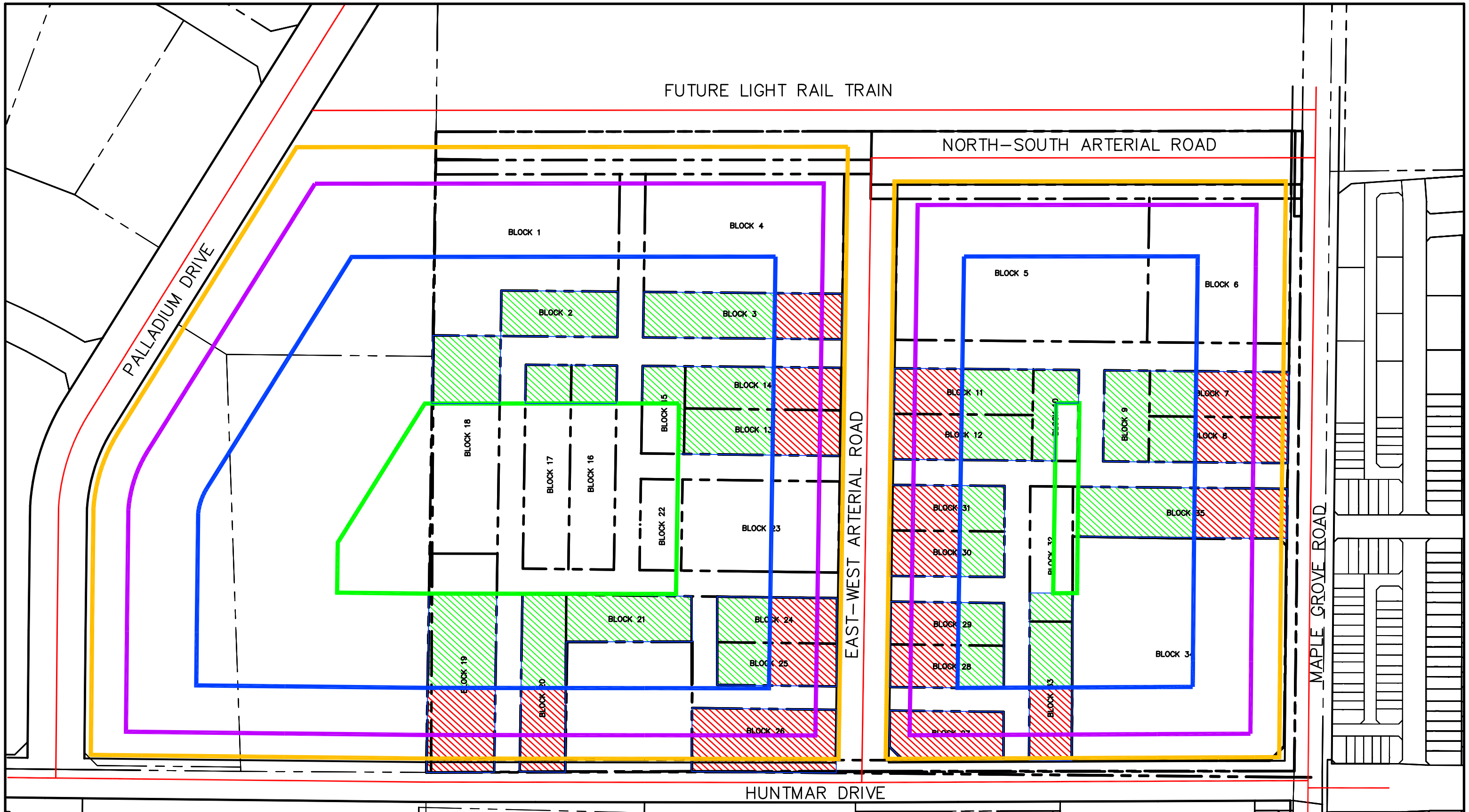


LEGEND		NOISE LEVEL	
	ROAD CENTERLINE		45dBA
	NOISE BARRIER		50dBA
	GENERIC WARNING CLAUSE TYPE "C"		55dBA
	GENERIC WARNING CLAUSE TYPE "D"		60dBA
			65dBA
			70dBA

**ATREL Engineering Ltd.**  
 Engineers - Ingénieurs

**130 HUNTMAR DRIVE**  
**CRITICAL SETBACK - LIVING NIGHT**

SCALE: **1:2500** | **FEB. 2020** | **I91002-N2**



FUTURE LIGHT RAIL TRAIN

NORTH-SOUTH ARTERIAL ROAD

PALLADIUM DRIVE

EAST-WEST ARTERIAL ROAD

MAPLE GROVE ROAD

HUNTMAR DRIVE

BLOCK 1

BLOCK 4

BLOCK 5

BLOCK 6

BLOCK 2

BLOCK 3

BLOCK 11

BLOCK 7

BLOCK 18

BLOCK 17

BLOCK 16

BLOCK 15

BLOCK 14

BLOCK 13

BLOCK 12

BLOCK 9

BLOCK 8

BLOCK 22

BLOCK 23

BLOCK 31

BLOCK 35

BLOCK 19

BLOCK 20

BLOCK 21

BLOCK 24

BLOCK 25

BLOCK 29

BLOCK 28

BLOCK 34

BLOCK 30




BLOCK 26

BLOCK 32

BLOCK 33

BLOCK 27

LEGEND

-  ROAD CENTERLINE
-  GENERIC WARNING CLAUSE TYPE "A"
-  EXTENSIVE MITIGATION OUTDOOR - TYPE "B"

NOISE LEVEL

-  45dBA
-  50dBA
-  55dBA
-  60dBA
-  65dBA
-  70dBA



130 HUNTMAR DRIVE  
CRITICAL SETBACK - OUTDOOR

SCALE: 1:2500 FEB. 2020 191002-N3



## **APPENDIX 'D'**

### Sample Calculations

Filename: L45HUNT.te Time Period: Day/Night 16/8 hours  
 Description:

Living - 45 dBA off Huntmar Drive, NS Arterial Road & EW Arterial Road

Road data, segment # 1: HUNTMAR ETC. (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 50 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: HUNTMAR ETC. (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 500.00 / 218.19 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: HUNTMAR ETC. (day)

Source height = 1.50 m

ROAD (0.00 + 45.93 + 0.00) = 45.93 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	72.16	0.00	-24.83	-1.41	0.00	0.00	0.00	45.93

Segment Leq : 45.93 dBA

Total Leq All Segments: 45.93 dBA

Results segment # 1: HUNTMAR ETC. (night)

Source height = 1.50 m

ROAD (0.00 + 45.00 + 0.00) = 45.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	64.56	0.00	-18.26	-1.30	0.00	0.00	0.00	45.00

Segment Leq : 45.00 dBA

Total Leq All Segments: 45.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 45.93  
 (NIGHT): 45.00

Filename: O45HUNT.te Time Period: Day/Night 16/8 hours  
 Description:

Outside - 45 dBA off Huntmar Drive, NS Arterial Road & EW Arterial Road

Road data, segment # 1: HUNTMAR ETC. (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 50 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: HUNTMAR ETC. (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 500.00 / 218.19 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: HUNTMAR ETC. (day)

Source height = 1.50 m

ROAD (0.00 + 45.42 + 0.00) = 45.42 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	72.16	0.00	-25.28	-1.46	0.00	0.00	0.00	45.42

Segment Leq : 45.42 dBA

Total Leq All Segments: 45.42 dBA

~~Results segment # 1: HUNTMAR ETC. (night)~~

~~Source height = 1.50 m~~

~~ROAD (0.00 + 45.00 + 0.00) = 45.00 dBA~~

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	64.56	0.00	-18.26	-1.30	0.00	0.00	0.00	45.00

~~Segment Leq : 45.00 dBA~~

~~Total Leq All Segments: 45.00 dBA~~

TOTAL Leq FROM ALL SOURCES (DAY): 45.42  
 (NIGHT): 45.00

File name: L45MGROV.te Time Period: Day/Ni ght 16/8 hours  
 Description:

Living - 45 dBA off Maple Grove Road

Road data, segment # 1: Maple Grove (day/ni ght)

Car traffic volume : 28336/2464 veh/ Ti mePeriod  
 Medi um truck volume : 2254/196 veh/ Ti mePeriod  
 Heavy truck volume : 1610/140 veh/ Ti mePeriod  
 Posted speed limit : 60 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Maple Grove (day/ni ght)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 500.00 / 272.66 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: Maple Grove (day)

Source height = 1.50 m

ROAD (0.00 + 47.44 + 0.00) = 47.44 dBA

Angle1	Angle2	Al pha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	73.68	0.00	-24.83	-1.41	0.00	0.00	0.00	47.44

Segment Leq : 47.44 dBA

Total Leq All Segment s: 47.44 dBA

Results segment # 1: Maple Grove (ni ght)

Source height = 1.50 m

ROAD (0.00 + 45.00 + 0.00) = 45.00 dBA

Angle1	Angle2	Al pha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	66.08	0.00	-19.78	-1.30	0.00	0.00	0.00	45.00

Segment Leq : 45.00 dBA

Total Leq All Segment s: 45.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 47.44  
 (NI GHT): 45.00

File name: O45MGROV.te Time Period: Day/Ni ght 16/8 hours  
 Description:

Outside - 45 dBA off Maple Grove Road

Road data, segment # 1: Maple Grove (day/ni ght)

Car traffic volume : 28336/2464 veh/ Ti mePeriod  
 Medi um truck volume : 2254/196 veh/ Ti mePeriod  
 Heavy truck volume : 1610/140 veh/ Ti mePeriod  
 Posted speed limit : 60 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Maple Grove (day/ni ght)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 500.00 / 15.00 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: Maple Grove (day)

Source height = 1.50 m

ROAD (0.00 + 46.94 + 0.00) = 46.94 dBA

Angle1	Angle2	Al pha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	73.68	0.00	-25.28	-1.46	0.00	0.00	0.00	46.94

Segment Leq : 46.94 dBA

Total Leq All Segment s: 46.94 dBA

~~Results segment # 1: Maple Grove (ni ght)~~

~~Source height = 1.50 m~~

~~ROAD (0.00 + 64.78 + 0.00) = 64.78 dBA~~

Angle1	Angle2	Al pha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	66.08	0.00	0.00	-1.30	0.00	0.00	0.00	64.78

~~Segment Leq : 64.78 dBA~~

~~Total Leq All Segment s: 64.78 dBA~~

TOTAL Leq FROM ALL SOURCES (DAY): 46.94  
 (NI GHT): 64.78



File name: L45PALLA.t Time Period: Day/Ni ght 16/8 hours  
 Description:

Living - 45 dBA off Palladium Drive

Road data, segment # 1: PALLADIUM (day/ni ght)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 70 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: PALLADIUM (day/ni ght)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 500.00 / 330.91 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: PALLADIUM (day)

Source height = 1.50 m

ROAD (0.00 + 48.26 + 0.00) = 48.26 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.00	0.00	-25.28	-1.46	0.00	0.00	0.00	48.26

Segment Leq : 48.26 dBA

Total Leq All Segment s: 48.26 dBA

Results segment # 1: PALLADIUM (ni ght)

Source height = 1.50 m

ROAD (0.00 + 45.00 + 0.00) = 45.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	67.40	0.00	-21.10	-1.30	0.00	0.00	0.00	45.00

Segment Leq : 45.00 dBA

Total Leq All Segment s: 45.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY) : 48.26  
 (NI GHT) : 45.00

File name: O45PALLA.t Time Period: Day/Ni ght 16/8 hours  
 Description:

Outside - 45 dBA off Palladium Drive

Road data, segment # 1: PALLADIUM (day/ni ght)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 70 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: PALLADIUM (day/ni ght)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 500.00 / 15.00 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: PALLADIUM (day)

Source height = 1.50 m

ROAD (0.00 + 48.26 + 0.00) = 48.26 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.00	0.00	-25.28	-1.46	0.00	0.00	0.00	48.26

Segment Leq : 48.26 dBA

Total Leq All Segment s: 48.26 dBA

~~Results segment # 1: PALLADIUM (ni ght)~~

~~Source height = 1.50 m~~

~~ROAD (0.00 + 66.10 + 0.00) = 66.10 dBA~~  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	67.40	0.00	0.00	-1.30	0.00	0.00	0.00	66.10

~~Segment Leq : 66.10 dBA~~

~~Total Leq All Segment s: 66.10 dBA~~

TOTAL Leq FROM ALL SOURCES (DAY) : 48.26  
 (NI GHT) : 66.10

Filename: L45LRT.te Time Period: Day/Night 16/8 hours  
 Description:

Living - 45 dBA off LRT

RT/Customer data, segment # 1: LRT (day/night)

1 - Bus:  
 Traffic volume : 14895/1655 veh/TimePeriod  
 Speed : 60 km/h

Data for Segment # 1: LRT (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 500.00 / 380.17 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: LRT (day)

Source height = 0.50 m

RT/Customer (0.00 + 48.61 + 0.00) = 48.61 dBA  

Angle1	Angle2	Alpha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.35	-25.28	-1.46	0.00	0.00	0.00	48.61

Segment Leq : 48.61 dBA

Total Leq All Segments: 48.61 dBA

Results segment # 1: LRT (night)

Source height = 0.50 m

RT/Customer (0.00 + 45.00 + 0.00) = 45.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.60	68.82	-22.46	-1.35	0.00	0.00	0.00	45.00

Segment Leq : 45.00 dBA

Total Leq All Segments: 45.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 48.61  
 (NIGHT): 45.00

Filename: O45LRT.te Time Period: Day/Night 16/8 hours  
 Description:

Outside - 45 dBA off LRT

RT/Customer data, segment # 1: LRT (day/night)

1 - Bus:  
 Traffic volume : 14895/1655 veh/TimePeriod  
 Speed : 60 km/h

Data for Segment # 1: LRT (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 500.00 / 380.17 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: LRT (day)

Source height = 0.50 m

RT/Customer (0.00 + 48.61 + 0.00) = 48.61 dBA  

Angle1	Angle2	Alpha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.35	-25.28	-1.46	0.00	0.00	0.00	48.61

Segment Leq : 48.61 dBA

Total Leq All Segments: 48.61 dBA

~~Results segment # 1: LRT (night)~~

~~Source height = 0.50 m~~

~~RT/Customer (0.00 + 45.00 + 0.00) = 45.00 dBA~~  

Angle1	Angle2	Alpha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.60	68.82	-22.46	-1.35	0.00	0.00	0.00	45.00

~~Segment Leq : 45.00 dBA~~

~~Total Leq All Segments: 45.00 dBA~~

TOTAL Leq FROM ALL SOURCES (DAY): 48.61  
~~(NIGHT): 45.00~~



Filename: L50HUNT.te Time Period: Day/Night 16/8 hours  
 Description:

Living - 50 dBA off Huntmar Drive, NS Arterial Road & EW Arterial Road

Road data, segment # 1: HUNTMAR ETC. (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 50 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: HUNTMAR ETC. (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 281.18 / 104.87 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: HUNTMAR ETC. (day)

Source height = 1.50 m

ROAD (0.00 + 50.00 + 0.00) = 50.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	72.16	0.00	-20.75	-1.41	0.00	0.00	0.00	50.00

Segment Leq : 50.00 dBA

Total Leq All Segments: 50.00 dBA

Results segment # 1: HUNTMAR ETC. (night)

Source height = 1.50 m

ROAD (0.00 + 50.00 + 0.00) = 50.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	64.56	0.00	-13.26	-1.30	0.00	0.00	0.00	50.00

Segment Leq : 50.00 dBA

Total Leq All Segments: 50.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 50.00  
 (NIGHT): 50.00

Filename: C50HUNT.te Time Period: Day/Night 16/8 hours  
 Description:

Outside - 50 dBA off Huntmar Drive, NS Arterial Road & EW Arterial Road

Road data, segment # 1: HUNTMAR ETC. (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 50 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: HUNTMAR ETC. (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 265.00 / 218.19 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: HUNTMAR ETC. (day)

Source height = 1.50 m

ROAD (0.00 + 50.00 + 0.00) = 50.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	72.16	0.00	-20.70	-1.46	0.00	0.00	0.00	50.00

Segment Leq : 50.00 dBA

Total Leq All Segments: 50.00 dBA

~~Results segment # 1: HUNTMAR ETC. (night)~~

~~Source height = 1.50 m~~

~~ROAD (0.00 + 45.00 + 0.00) = 45.00 dBA~~

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	64.56	0.00	-18.26	-1.30	0.00	0.00	0.00	45.00

~~Segment Leq : 45.00 dBA~~

~~Total Leq All Segments: 45.00 dBA~~

TOTAL Leq FROM ALL SOURCES (DAY): 50.00  
 (NIGHT): 45.00

Filename: L50MGROV.te Time Period: Day/Night 16/8 hours  
 Description:

Living - 50 dBA off Maple Grove Road

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

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 60 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Maple Grove (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 348.44 / 131.04 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: Maple Grove (day)

Source height = 1.50 m

ROAD (0.00 + 50.00 + 0.00) = 50.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	73.68	0.00	-22.27	-1.41	0.00	0.00	0.00	50.00

Segment Leq : 50.00 dBA

Total Leq All Segments: 50.00 dBA

Results segment # 1: Maple Grove (night)

Source height = 1.50 m

ROAD (0.00 + 50.00 + 0.00) = 50.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	66.08	0.00	-14.78	-1.30	0.00	0.00	0.00	50.00

Segment Leq : 50.00 dBA

Total Leq All Segments: 50.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 50.00  
 (NIGHT): 50.00

Filename: C50MGROV.te Time Period: Day/Night 16/8 hours  
 Description:

Outside - 50 dBA off Maple Grove Road

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

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 60 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Maple Grove (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 327.12 / 15.00 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: Maple Grove (day)

Source height = 1.50 m

ROAD (0.00 + 50.00 + 0.00) = 50.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	73.68	0.00	-22.22	-1.46	0.00	0.00	0.00	50.00

Segment Leq : 50.00 dBA

Total Leq All Segments: 50.00 dBA

~~Results segment # 1: Maple Grove (night)~~

~~Source height = 1.50 m~~

~~ROAD (0.00 + 64.78 + 0.00) = 64.78 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	66.08	0.00	0.00	-1.30	0.00	0.00	0.00	64.78

~~Segment Leq : 64.78 dBA~~

~~Total Leq All Segments: 64.78 dBA~~

~~TOTAL Leq FROM ALL SOURCES (DAY): 50.00  
 (NIGHT): 64.78~~

File name: L50PALLA.t Time Period: Day/Night 16/8 hours  
 Description:

Living - 50 dBA off Palladium Drive

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

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 70 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: PALLADIUM (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 419.96 / 158.98 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: PALLADIUM (day)

Source height = 1.50 m

ROAD (0.00 + 50.00 + 0.00) = 50.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	75.00	0.00	-23.59	-1.41	0.00	0.00	0.00	50.00

Segment Leq : 50.00 dBA

Total Leq All Segments: 50.00 dBA

Results segment # 1: PALLADIUM (night)

Source height = 1.50 m

ROAD (0.00 + 50.00 + 0.00) = 50.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	67.40	0.00	-16.10	-1.30	0.00	0.00	0.00	50.00

Segment Leq : 50.00 dBA

Total Leq All Segments: 50.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY) : 50.00  
 (NIGHT) : 50.00

File name: C50PALLA.t Time Period: Day/Night 16/8 hours  
 Description:

Outside - 50 dBA off Palladium Drive

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

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 70 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: PALLADIUM (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 392.96 / 15.00 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: PALLADIUM (day)

Source height = 1.50 m

ROAD (0.00 + 50.00 + 0.00) = 50.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.00	0.00	-23.54	-1.46	0.00	0.00	0.00	50.00

Segment Leq : 50.00 dBA

Total Leq All Segments: 50.00 dBA

Results segment # 1: PALLADIUM (night)

Source height = 1.50 m

ROAD (0.00 + 66.10 + 0.00) = 66.10 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	67.40	0.00	0.00	-1.30	0.00	0.00	0.00	66.10

Segment Leq : 66.10 dBA

Total Leq All Segments: 66.10 dBA

TOTAL Leq FROM ALL SOURCES (DAY) : 50.00  
 (NIGHT) : 66.10

File name: L50LRT.te Time Period: Day/Ni ght 16/8 hours  
 Description:

Living - 50 dBA off LRT

RT/ Cust om dat a, segment # 1: LRT (day/ni ght)

1 - Bus:  
 Traffic volume : 14895/1655 veh/ Ti mePeriod  
 Speed : 60 km/h

Data for Segment # 1: LRT (day/ni ght)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 412.38 / 185.03 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: LRT (day)

Source height = 0.50 m

RT/ Cust om (0.00 + 50.00 + 0.00) = 50.00 dBA

Angle1	Angle2	Al pha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.35	-23.89	-1.46	0.00	0.00	0.00	50.00

Segment Leq : 50.00 dBA

Total Leq All Segment s: 50.00 dBA

Results segment # 1: LRT (ni ght)

Source height = 0.50 m

RT/ Cust om (0.00 + 50.00 + 0.00) = 50.00 dBA

Angle1	Angle2	Al pha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.60	68.82	-17.46	-1.35	0.00	0.00	0.00	50.00

Segment Leq : 50.00 dBA

Total Leq All Segment s: 50.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 50.00  
 (NI GHT): 50.00

File name: O50LRT.te Time Period: Day/Ni ght 16/8 hours  
 Description:

Outside - 50 dBA off LRT

RT/ Cust om dat a, segment # 1: LRT (day/ni ght)

1 - Bus:  
 Traffic volume : 14895/1655 veh/ Ti mePeriod  
 Speed : 60 km/h

Data for Segment # 1: LRT (day/ni ght)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 412.38 / 380.17 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: LRT (day)

Source height = 0.50 m

RT/ Cust om (0.00 + 50.00 + 0.00) = 50.00 dBA

Angle1	Angle2	Al pha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.35	-23.89	-1.46	0.00	0.00	0.00	50.00

Segment Leq : 50.00 dBA

Total Leq All Segment s: 50.00 dBA

~~Results segment # 1: LRT (ni ght)~~

~~Source height = 0.50 m~~

~~RT/ Cust om (0.00 + 45.00 + 0.00) = 45.00 dBA~~

Angle1	Angle2	Al pha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.60	68.82	-22.46	-1.35	0.00	0.00	0.00	45.00

~~Segment Leq : 45.00 dBA~~

~~Total Leq All Segment s: 45.00 dBA~~

~~TOTAL Leq FROM ALL SOURCES (DAY): 50.00  
 (NI GHT): 45.00~~

Filename: L55HUNT.te Time Period: Day/Night 16/8 hours  
 Description:

Living - 55 dBA off Huntmar Drive, NS Arterial Road & EW Arterial Road

Road data, segment # 1: HUNTMAR ETC. (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 50 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: HUNTMAR ETC. (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 138.85 / 50.40 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: HUNTMAR ETC. (day)

Source height = 1.50 m

ROAD (0.00 + 55.00 + 0.00) = 55.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	72.16	0.00	-15.75	-1.41	0.00	0.00	0.00	55.00

Segment Leq : 55.00 dBA

Total Leq All Segments: 55.00 dBA  
 Results segment # 1: HUNTMAR ETC. (night)

Source height = 1.50 m

ROAD (0.00 + 55.00 + 0.00) = 55.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	64.56	0.00	-8.26	-1.30	0.00	0.00	0.00	55.00

Segment Leq : 55.00 dBA

Total Leq All Segments: 55.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY) : 55.00  
 (NIGHT) : 55.00

Filename: C05HUNT.te Time Period: Day/Night 16/8 hours  
 Description:

Outside - 55 dBA off Huntmar Drive, NS Arterial Road & EW Arterial Road

Road data, segment # 1: HUNTMAR ETC. (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 50 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: HUNTMAR ETC. (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 132.46 / 218.19 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: HUNTMAR ETC. (day)

Source height = 1.50 m

ROAD (0.00 + 55.00 + 0.00) = 55.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	72.16	0.00	-15.70	-1.46	0.00	0.00	0.00	55.00

Segment Leq : 55.00 dBA

Total Leq All Segments: 55.00 dBA

~~Results segment # 1: HUNTMAR ETC. (night)~~

~~Source height = 1.50 m~~

~~ROAD (0.00 + 45.00 + 0.00) = 45.00 dBA~~

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	64.56	0.00	-18.26	-1.30	0.00	0.00	0.00	45.00

~~Segment Leq : 45.00 dBA~~

~~Total Leq All Segments: 45.00 dBA~~

TOTAL Leq FROM ALL SOURCES (DAY) : 55.00  
 (NIGHT) : 45.00

File name: L55MGROV.te Time Period: Day/Night 16/8 hours  
 Description:

Living - 55 dBA off Maple Grove Road

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

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 60 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Maple Grove (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 172.01 / 62.96 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: Maple Grove (day)

Source height = 1.50 m

ROAD (0.00 + 55.00 + 0.00) = 55.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	73.68	0.00	-17.27	-1.41	0.00	0.00	0.00	55.00

Segment Leq : 55.00 dBA

Total Leq All Segments: 55.00 dBA

Results segment # 1: Maple Grove (night)

Source height = 1.50 m

ROAD (0.00 + 55.00 + 0.00) = 55.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	66.08	0.00	-9.78	-1.30	0.00	0.00	0.00	55.00

Segment Leq : 55.00 dBA

Total Leq All Segments: 55.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY) : 55.00  
 (NIGHT) : 55.00

File name: C05MGROV.te Time Period: Day/Night 16/8 hours  
 Description:

Outside - 55 dBA off Maple Grove Road

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

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 60 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Maple Grove (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 163.48 / 15.00 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: Maple Grove (day)

Source height = 1.50 m

ROAD (0.00 + 55.00 + 0.00) = 55.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	73.68	0.00	-17.22	-1.46	0.00	0.00	0.00	55.00

Segment Leq : 55.00 dBA

Total Leq All Segments: 55.00 dBA

~~Results segment # 1: Maple Grove (night)~~

~~Source height = 1.50 m~~

~~ROAD (0.00 + 64.78 + 0.00) = 64.78 dBA~~

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	66.08	0.00	0.00	-1.30	0.00	0.00	0.00	64.78

~~Segment Leq : 64.78 dBA~~

~~Total Leq All Segments: 64.78 dBA~~

TOTAL Leq FROM ALL SOURCES (DAY) : 55.00  
~~(NIGHT) : 64.78~~

File name: L55PALLA.t Time Period: Day/Night 16/8 hours  
 Description:

Living - 55 dBA off Palladium Drive

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

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 70 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: PALLADIUM (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 207.29 / 76.34 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: PALLADIUM (day)

Source height = 1.50 m

ROAD (0.00 + 55.00 + 0.00) = 55.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	75.00	0.00	-18.59	-1.41	0.00	0.00	0.00	55.00

Segment Leq : 55.00 dBA

Total Leq All Segments: 55.00 dBA

Results segment # 1: PALLADIUM (night)

Source height = 1.50 m

ROAD (0.00 + 55.00 + 0.00) = 55.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	67.40	0.00	-11.10	-1.30	0.00	0.00	0.00	55.00

Segment Leq : 55.00 dBA

Total Leq All Segments: 55.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY) : 55.00  
 (NIGHT) : 55.00

File name: C05PALLA.t Time Period: Day/Night 16/8 hours  
 Description:

Outside - 55 dBA off Palladium Drive

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

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 70 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: PALLADIUM (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 196.40 / 15.00 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: PALLADIUM (day)

Source height = 1.50 m

ROAD (0.00 + 55.00 + 0.00) = 55.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.00	0.00	-18.54	-1.46	0.00	0.00	0.00	55.00

Segment Leq : 55.00 dBA

Total Leq All Segments: 55.00 dBA

Results segment # 1: PALLADIUM (night)

Source height = 1.50 m

ROAD (0.00 + 66.10 + 0.00) = 66.10 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	67.40	0.00	0.00	-1.30	0.00	0.00	0.00	66.10

Segment Leq : 66.10 dBA

Total Leq All Segments: 66.10 dBA

TOTAL Leq FROM ALL SOURCES (DAY) : 55.00  
 (NIGHT) : 66.10

File name: L55LRT.te Time Period: Day/Night 16/8 hours  
 Description:

Living - 55 dBA off LRT

RT/Custom data, segment # 1: LRT (day/night)

1 - Bus:  
 Traffic volume : 14895/1655 veh/TimePeriod  
 Speed : 60 km/h

Data for Segment # 1: LRT (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 206.11 / 90.19 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: LRT (day)

Source height = 0.50 m

RT/Custom (0.00 + 55.00 + 0.00) = 55.00 dBA

Angle1	Angle2	Alpha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.35	-18.89	-1.46	0.00	0.00	0.00	55.00

Segment Leq : 55.00 dBA

Total Leq All Segments: 55.00 dBA

Results segment # 1: LRT (night)

Source height = 0.50 m

RT/Custom (0.00 + 55.00 + 0.00) = 55.00 dBA

Angle1	Angle2	Alpha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.60	68.82	-12.47	-1.35	0.00	0.00	0.00	55.00

Segment Leq : 55.00 dBA

Total Leq All Segments: 55.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 55.00  
 (NIGHT): 55.00

File name: C05LRT.te Time Period: Day/Night 16/8 hours  
 Description:

Outside - 55 dBA off LRT

RT/Custom data, segment # 1: LRT (day/night)

1 - Bus:  
 Traffic volume : 14895/1655 veh/TimePeriod  
 Speed : 60 km/h

Data for Segment # 1: LRT (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 206.11 / 380.17 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: LRT (day)

Source height = 0.50 m

RT/Custom (0.00 + 55.00 + 0.00) = 55.00 dBA

Angle1	Angle2	Alpha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.35	-18.89	-1.46	0.00	0.00	0.00	55.00

Segment Leq : 55.00 dBA

Total Leq All Segments: 55.00 dBA

Results segment # 1: LRT (night)

Source height = 0.50 m

RT/Custom (0.00 + 45.00 + 0.00) = 45.00 dBA

Angle1	Angle2	Alpha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.60	68.82	-22.46	-1.35	0.00	0.00	0.00	45.00

Segment Leq : 45.00 dBA

Total Leq All Segments: 45.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 55.00  
 (NIGHT): 45.00



Filename: L60HUNT.te Time Period: Day/Night 16/8 hours  
 Description:

Living - 60 dBA off Huntmar Drive, NS Arterial Road & EW Arterial Road

Road data, segment # 1: HUNTMAR ETC. (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 50 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: HUNTMAR ETC. (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 68.52 / 24.21 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: HUNTMAR ETC. (day)

Source height = 1.50 m

ROAD (0.00 + 60.00 + 0.00) = 60.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	72.16	0.00	-10.75	-1.41	0.00	0.00	0.00	60.00

Segment Leq : 60.00 dBA

Total Leq All Segments: 60.00 dBA

Results segment # 1: HUNTMAR ETC. (night)

Source height = 1.50 m

ROAD (0.00 + 60.00 + 0.00) = 60.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	64.56	0.00	-3.26	-1.30	0.00	0.00	0.00	60.00

Segment Leq : 60.00 dBA

Total Leq All Segments: 60.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 60.00  
 (NIGHT): 60.00

Filename: O60HUNT.te Time Period: Day/Night 16/8 hours  
 Description:

Outside - 60 dBA off Huntmar Drive, NS Arterial Road & EW Arterial Road

Road data, segment # 1: HUNTMAR ETC. (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 50 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: HUNTMAR ETC. (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 66.21 / 218.19 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: HUNTMAR ETC. (day)

Source height = 1.50 m

ROAD (0.00 + 60.00 + 0.00) = 60.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	72.16	0.00	-10.70	-1.46	0.00	0.00	0.00	60.00

Segment Leq : 60.00 dBA

Total Leq All Segments: 60.00 dBA

~~Results segment # 1: HUNTMAR ETC. (night)~~

~~Source height = 1.50 m~~

~~ROAD (0.00 + 45.00 + 0.00) = 45.00 dBA~~

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	64.56	0.00	-18.26	-1.30	0.00	0.00	0.00	45.00

~~Segment Leq : 45.00 dBA~~

~~Total Leq All Segments: 45.00 dBA~~

TOTAL Leq FROM ALL SOURCES (DAY): 60.00  
 (NIGHT): 45.00

Filename: L60MGROV.te Time Period: Day/Night 16/8 hours  
 Description:

Living - 60 dBA off Maple Grove Road

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

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 60 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Maple Grove (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 84.86 / 30.22 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: Maple Grove (day)

Source height = 1.50 m

ROAD (0.00 + 60.00 + 0.00) = 60.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	73.68	0.00	-12.27	-1.41	0.00	0.00	0.00	60.00

Segment Leq : 60.00 dBA

Total Leq All Segments: 60.00 dBA

Results segment # 1: Maple Grove (night)

Source height = 1.50 m

ROAD (0.00 + 60.00 + 0.00) = 60.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	66.08	0.00	-4.78	-1.30	0.00	0.00	0.00	60.00

Segment Leq : 60.00 dBA

Total Leq All Segments: 60.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY) : 60.00  
 (NIGHT) : 60.00

Filename: O60MGROV.te Time Period: Day/Night 16/8 hours  
 Description:

Outside - 60 dBA off Maple Grove Road

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

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 60 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Maple Grove (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 81.66 / 15.00 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: Maple Grove (day)

Source height = 1.50 m

ROAD (0.00 + 60.00 + 0.00) = 60.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	73.68	0.00	-12.22	-1.46	0.00	0.00	0.00	60.00

Segment Leq : 60.00 dBA

Total Leq All Segments: 60.00 dBA

~~Results segment # 1: Maple Grove (night)~~

~~Source height = 1.50 m~~

~~ROAD (0.00 + 64.78 + 0.00) = 64.78 dBA~~  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	66.08	0.00	0.00	-1.30	0.00	0.00	0.00	64.78

~~Segment Leq : 64.78 dBA~~

~~Total Leq All Segments: 64.78 dBA~~

~~TOTAL Leq FROM ALL SOURCES (DAY) : 60.00~~  
~~(NIGHT) : 64.78~~

File name: L60PALLA.t Time Period: Day/Ni ght 16/8 hours  
 Description:

Living - 60 dBA off Palladium Drive

Road data, segment # 1: PALLADIUM (day/ni ght)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 70 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: PALLADIUM (day/ni ght)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 102.27 / 36.67 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: PALLADIUM (day)

Source height = 1.50 m

ROAD (0.00 + 60.00 + 0.00) = 60.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	75.00	0.00	-13.59	-1.41	0.00	0.00	0.00	60.00

Segment Leq : 60.00 dBA

Total Leq All Segments: 60.00 dBA

Results segment # 1: PALLADIUM (ni ght)

Source height = 1.50 m

ROAD (0.00 + 60.00 + 0.00) = 60.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	67.40	0.00	-6.10	-1.30	0.00	0.00	0.00	60.00

Segment Leq : 60.00 dBA

Total Leq All Segments: 60.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 60.00  
 (NI GHT): 60.00

File name: O60PALLA.t Time Period: Day/Ni ght 16/8 hours  
 Description:

Outside - 60 dBA off Palladium Drive

Road data, segment # 1: PALLADIUM (day/ni ght)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 70 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: PALLADIUM (day/ni ght)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 98.12 / 15.00 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: PALLADIUM (day)

Source height = 1.50 m

ROAD (0.00 + 60.00 + 0.00) = 60.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.00	0.00	-13.54	-1.46	0.00	0.00	0.00	60.00

Segment Leq : 60.00 dBA

Total Leq All Segments: 60.00 dBA

Results segment # 1: PALLADIUM (ni ght)

Source height = 1.50 m

ROAD (0.00 + 66.10 + 0.00) = 66.10 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	67.40	0.00	0.00	-1.30	0.00	0.00	0.00	66.10

Segment Leq : 66.10 dBA

Total Leq All Segments: 66.10 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 60.00  
 (NI GHT): 66.10

File name: L60LRT.te Time Period: Day/Ni ght 16/8 hours  
 Description:

Living - 60 dBA off LRT

RT/ Cust om dat a, segment # 1: LRT (day/ni ght)

1 - Bus:  
 Traffic volume : 14895/1655 veh/ Ti mePeriod  
 Speed : 60 km/h

Data for Segment # 1: LRT (day/ni ght)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 102.98 / 43.89 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: LRT (day)

Source height = 0.50 m

RT/ Cust om (0.00 + 60.00 + 0.00) = 60.00 dBA

Angle1	Angle2	Al pha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.35	-13.89	-1.46	0.00	0.00	0.00	60.00

Segment Leq : 60.00 dBA

Total Leq All Segment s: 60.00 dBA

Results segment # 1: LRT (ni ght)

Source height = 0.50 m

RT/ Cust om (0.00 + 60.00 + 0.00) = 60.00 dBA

Angle1	Angle2	Al pha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.60	68.82	-7.46	-1.35	0.00	0.00	0.00	60.00

Segment Leq : 60.00 dBA

Total Leq All Segment s: 60.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 60.00  
 (NI GHT): 60.00

File name: O60LRT.te Time Period: Day/Ni ght 16/8 hours  
 Description:

Outside - 60 dBA off LRT

RT/ Cust om dat a, segment # 1: LRT (day/ni ght)

1 - Bus:  
 Traffic volume : 14895/1655 veh/ Ti mePeriod  
 Speed : 60 km/h

Data for Segment # 1: LRT (day/ni ght)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 102.98 / 380.17 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: LRT (day)

Source height = 0.50 m

RT/ Cust om (0.00 + 60.00 + 0.00) = 60.00 dBA

Angle1	Angle2	Al pha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.35	-13.89	-1.46	0.00	0.00	0.00	60.00

Segment Leq : 60.00 dBA

Total Leq All Segment s: 60.00 dBA

~~Results segment # 1: LRT (ni ght)~~

~~Source height = 0.50 m~~

~~RT/ Cust om (0.00 + 45.00 + 0.00) = 45.00 dBA~~

Angle1	Angle2	Al pha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.60	68.82	-7.46	-1.35	0.00	0.00	0.00	45.00

~~Segment Leq : 45.00 dBA~~

~~Total Leq All Segment s: 45.00 dBA~~

~~TOTAL Leq FROM ALL SOURCES (DAY): 60.00  
 (NI GHT): 45.00~~

Filename: L65HUNT.te Time Period: Day/Night 16/8 hours  
 Description:

Living - 65 dBA off Huntmar Drive, NS Arterial Road & EW Arterial Road

Road data, segment # 1: HUNTMAR ETC. (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 50 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: HUNTMAR ETC. (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 33.83 / 15.00 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: HUNTMAR ETC. (day)

Source height = 1.50 m

ROAD (0.00 + 65.00 + 0.00) = 65.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	72.16	0.00	-5.76	-1.41	0.00	0.00	0.00	65.00

Segment Leq : 65.00 dBA

Total Leq All Segments: 65.00 dBA

Results segment # 1: HUNTMAR ETC. (night)

Source height = 1.50 m

ROAD (0.00 + 63.26 + 0.00) = 63.26 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	64.56	0.00	0.00	-1.30	0.00	0.00	0.00	63.26

Segment Leq : 63.26 dBA

Total Leq All Segments: 63.26 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 65.00  
 (NIGHT): 63.26

Filename: O65HUNT.te Time Period: Day/Night 16/8 hours  
 Description:

Outside - 65 dBA off Huntmar Drive, NS Arterial Road & EW Arterial Road

Road data, segment # 1: HUNTMAR ETC. (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 50 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: HUNTMAR ETC. (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 33.09 / 218.19 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: HUNTMAR ETC. (day)

Source height = 1.50 m

ROAD (0.00 + 65.00 + 0.00) = 65.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	72.16	0.00	-5.70	-1.46	0.00	0.00	0.00	65.00

Segment Leq : 65.00 dBA

Total Leq All Segments: 65.00 dBA

~~Results segment # 1: HUNTMAR ETC. (night)~~

~~Source height = 1.50 m~~

~~ROAD (0.00 + 45.00 + 0.00) = 45.00 dBA~~

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	64.56	0.00	-18.26	-1.30	0.00	0.00	0.00	45.00

~~Segment Leq : 45.00 dBA~~

~~Total Leq All Segments: 45.00 dBA~~

TOTAL Leq FROM ALL SOURCES (DAY): 65.00  
 (NIGHT): 45.00

File name: L65MGROV.te Time Period: Day/Night 16/8 hours  
 Description:

Living - 65 dBA off Maple Grove Road

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

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 60 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Maple Grove (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 41.88 / 15.00 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: Maple Grove (day)

Source height = 1.50 m

ROAD (0.00 + 65.00 + 0.00) = 65.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	73.68	0.00	-7.27	-1.41	0.00	0.00	0.00	65.00

Segment Leq : 65.00 dBA

Total Leq All Segments: 65.00 dBA

Results segment # 1: Maple Grove (night)

Source height = 1.50 m

ROAD (0.00 + 64.78 + 0.00) = 64.78 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	66.08	0.00	0.00	-1.30	0.00	0.00	0.00	64.78

Segment Leq : 64.78 dBA

Total Leq All Segments: 64.78 dBA

TOTAL Leq FROM ALL SOURCES (DAY) : 65.00  
 (NIGHT) : 64.78

File name: O65MGROV.te Time Period: Day/Night 16/8 hours  
 Description:

Outside - 65 dBA off Maple Grove Road

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

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 60 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Maple Grove (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 40.81 / 15.00 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: Maple Grove (day)

Source height = 1.50 m

ROAD (0.00 + 65.00 + 0.00) = 65.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	73.68	0.00	-7.22	-1.46	0.00	0.00	0.00	65.00

Segment Leq : 65.00 dBA

Total Leq All Segments: 65.00 dBA

Results segment # 1: Maple Grove (night)

Source height = 1.50 m

ROAD (0.00 + 64.78 + 0.00) = 64.78 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	66.08	0.00	0.00	-1.30	0.00	0.00	0.00	64.78

Segment Leq : 64.78 dBA

Total Leq All Segments: 64.78 dBA

TOTAL Leq FROM ALL SOURCES (DAY) : 65.00  
 (NIGHT) : 64.78

File name: L65PALLA.t Time Period: Day/Ni ght 16/8 hours  
 Description:

Living - 65 dBA off Palladium Drive

Road data, segment # 1: PALLADIUM (day/ni ght)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 70 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: PALLADIUM (day/ni ght)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 50.46 / 17.61 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: PALLADIUM (day)

Source height = 1.50 m

ROAD (0.00 + 65.00 + 0.00) = 65.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	75.00	0.00	-8.59	-1.41	0.00	0.00	0.00	65.00

Segment Leq : 65.00 dBA

Total Leq All Segment s: 65.00 dBA

Results segment # 1: PALLADIUM (ni ght)

Source height = 1.50 m

ROAD (0.00 + 65.00 + 0.00) = 65.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	67.40	0.00	-1.09	-1.30	0.00	0.00	0.00	65.00

Segment Leq : 65.00 dBA

Total Leq All Segment s: 65.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY) : 65.00  
 (NI GHT) : 65.00

File name: O65PALLA.t Time Period: Day/Ni ght 16-8 hours  
 Description:

Outside - 65 dBA off Palladium Drive

Road data, segment # 1: PALLADIUM (day/ni ght)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 70 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: PALLADIUM (day/ni ght)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 49.04 / 15.00 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: PALLADIUM (day)

Source height = 1.50 m

ROAD (0.00 + 65.00 + 0.00) = 65.00 dBA  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.00	0.00	-8.54	-1.46	0.00	0.00	0.00	65.00

Segment Leq : 65.00 dBA

Total Leq All Segment s: 65.00 dBA

~~Results segment # 1: PALLADIUM (ni ght)~~

~~Source height = 1.50 m~~

~~ROAD (0.00 + 66.10 + 0.00) = 66.10 dBA~~  

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	67.40	0.00	0.00	-1.30	0.00	0.00	0.00	66.10

~~Segment Leq : 66.10 dBA~~

~~Total Leq All Segment s: 66.10 dBA~~

TOTAL Leq FROM ALL SOURCES (DAY) : 65.00  
 (NI GHT) : 66.10

File name: L65LRT.te Time Period: Day/Ni ght 16/8 hours  
 Description:

Living - 65 dBA off LRT

RT/ Cust om dat a, segment # 1: LRT (day/ni ght)

1 - Bus:  
 Traffic volume : 14895/1655 veh/ Ti me Peri od  
 Speed : 60 km/h

Data for Segment # 1: LRT (day/ni ght)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 51.47 / 21.36 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: LRT (day)

Source height = 0.50 m

RT/ Cust om (0.00 + 65.00 + 0.00) = 65.00 dBA

Angle1	Angle2	Al pha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.35	-8.89	-1.46	0.00	0.00	0.00	65.00

Segment Leq : 65.00 dBA

Total Leq All Segment s: 65.00 dBA

Results segment # 1: LRT (ni ght)

Source height = 0.50 m

RT/ Cust om (0.00 + 65.00 + 0.00) = 65.00 dBA

Angle1	Angle2	Al pha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.60	68.82	-2.46	-1.35	0.00	0.00	0.00	65.00

Segment Leq : 65.00 dBA

Total Leq All Segment s: 65.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 65.00  
 (NI GHT): 65.00

File name: O65LRT.te Time Period: Day/~~Ni ght~~ 16/~~8~~ hours  
 Description:

Outside - 65 dBA off LRT

RT/ Cust om dat a, segment # 1: LRT (day/~~ni ght~~)

1 - Bus:  
 Traffic volume : 14895/~~1655~~ veh/ Ti me Peri od  
 Speed : 60 km/h

Data for Segment # 1: LRT (day/~~ni ght~~)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / ~~0~~  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 51.47 / ~~380.17~~ m  
 Receiver height : 1.50 / ~~4.50~~ m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: LRT (day)

Source height = 0.50 m

RT/ Cust om (0.00 + 65.00 + 0.00) = 65.00 dBA

Angle1	Angle2	Al pha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.35	-8.89	-1.46	0.00	0.00	0.00	65.00

Segment Leq : 65.00 dBA

Total Leq All Segment s: 65.00 dBA

~~Results segment # 1: LRT (ni ght)~~

~~Source height = 0.50 m~~

~~RT/ Cust om (0.00 + 45.00 + 0.00) = 45.00 dBA~~

Angle1	Angle2	Al pha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.60	68.82	-2.46	-1.35	0.00	0.00	0.00	45.00

~~Segment Leq : 45.00 dBA~~

~~Total Leq All Segment s: 45.00 dBA~~

TOTAL Leq FROM ALL SOURCES (DAY): 65.00  
~~(NI GHT): 45.00~~



Filename: L70HUNT.te Time Period: Day/N ight 16/8 hours  
 Description:

Living - 70 dBA off Huntmar Drive, NS Arterial Road & EW Arterial Road

Road data, segment # 1: HUNTMAR ETC. (day/ni ght)

Car traffic volume : 28336/ 2464 veh/ Ti mePeriod  
 Medi um truck volume : 2254/ 196 veh/ Ti mePeriod  
 Heavy truck volume : 1610/ 140 veh/ Ti mePeriod  
 Posted speed limit : 50 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: HUNTMAR ETC. (day/ni ght)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 16.69 / 15.00 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: HUNTMAR ETC. (day)

Source height = 1.50 m

ROAD (0.00 + 70.00 + 0.00) = 70.00 dBA

Angle1	Angle2	Al pha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	72.16	0.00	-0.76	-1.41	0.00	0.00	0.00	70.00

Segment Leq : 70.00 dBA

Total Leq All Segment s: 70.00 dBA

Results segment # 1: HUNTMAR ETC. (ni ght)

Source height = 1.50 m

ROAD (0.00 + 63.26 + 0.00) = 63.26 dBA

Angle1	Angle2	Al pha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	64.56	0.00	0.00	-1.30	0.00	0.00	0.00	63.26

Segment Leq : 63.26 dBA

Total Leq All Segment s: 63.26 dBA

TOTAL Leq FROM ALL SOURCES (DAY) : 70.00  
 (NI GHT) : 63.26

Filename: O70HUNT.te Time Period: Day/~~Ni ght~~ 16/~~8~~ hours  
 Description:

Outside - 70 dBA off Huntmar Drive, NS Arterial Road & EW Arterial Road

Road data, segment # 1: HUNTMAR ETC. (day/~~ni ght~~)

Car traffic volume : 28336/~~2464~~ veh/ Ti mePeriod  
 Medi um truck volume : 2254/~~196~~ veh/ Ti mePeriod  
 Heavy truck volume : 1610/~~140~~ veh/ Ti mePeriod  
 Posted speed limit : 50 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: HUNTMAR ETC. (day/~~ni ght~~)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 /~~0~~  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 16.54 /~~218.19~~ m  
 Receiver height : 1.50 /~~4.50~~ m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: HUNTMAR ETC. (day)

Source height = 1.50 m

ROAD (0.00 + 70.00 + 0.00) = 70.00 dBA

Angle1	Angle2	Al pha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	72.16	0.00	-0.70	-1.46	0.00	0.00	0.00	70.00

Segment Leq : 70.00 dBA

Total Leq All Segment s: 70.00 dBA

~~Results segment # 1: HUNTMAR ETC. (ni ght)~~

~~Source height = 1.50 m~~

~~ROAD (0.00 + 45.00 + 0.00) = 45.00 dBA~~

Angle1	Angle2	Al pha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	64.56	0.00	-18.26	-1.30	0.00	0.00	0.00	45.00

~~Segment Leq : 45.00 dBA~~

~~Total Leq All Segment s: 45.00 dBA~~

TOTAL Leq FROM ALL SOURCES (DAY) : 70.00  
 (~~NI GHT~~) : ~~45.00~~

Filename: L70MGROV.te Time Period: Day/Night 16/8 hours  
 Description:

Living - 70 dBA off Maple Grove Road

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

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 60 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Maple Grove (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 20.67 / 15.00 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: Maple Grove (day)

Source height = 1.50 m

ROAD (0.00 + 70.00 + 0.00) = 70.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	73.68	0.00	-2.27	-1.41	0.00	0.00	0.00	70.00

Segment Leq : 70.00 dBA

Total Leq All Segments: 70.00 dBA

Results segment # 1: Maple Grove (night)

Source height = 1.50 m

ROAD (0.00 + 64.78 + 0.00) = 64.78 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	66.08	0.00	0.00	-1.30	0.00	0.00	0.00	64.78

Segment Leq : 64.78 dBA

Total Leq All Segments: 64.78 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 70.00  
 (NIGHT): 64.78

Filename: O70MGROV.t Time Period: Day/Night 16/8 hours  
 Description:

Outside - 70 dBA off Maple Grove Road

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

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 60 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Maple Grove (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 20.42 / 15.00 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: Maple Grove (day)

Source height = 1.50 m

ROAD (0.00 + 70.00 + 0.00) = 70.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	73.68	0.00	-2.22	-1.46	0.00	0.00	0.00	70.00

Segment Leq : 70.00 dBA

Total Leq All Segments: 70.00 dBA

~~Results segment # 1: Maple Grove (night)~~

~~Source height = 1.50 m~~

~~ROAD (0.00 + 64.78 + 0.00) = 64.78 dBA~~

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	66.08	0.00	0.00	-1.30	0.00	0.00	0.00	64.78

~~Segment Leq : 64.78 dBA~~

~~Total Leq All Segments: 64.78 dBA~~

~~TOTAL Leq FROM ALL SOURCES (DAY): 70.00  
 (NIGHT): 64.78~~

File name: L70PALLA.t Time Period: Day/Ni ght 16/8 hours  
 Description:

Living - 70 dBA off Palladium Drive

Road data, segment # 1: PALLADIUM (day/ni ght)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 70 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: PALLADIUM (day/ni ght)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 24.89 / 15.00 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: PALLADIUM (day)

Source height = 1.50 m

ROAD (0.00 + 70.00 + 0.00) = 70.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.63	75.00	0.00	-3.59	-1.41	0.00	0.00	0.00	70.00

Segment Leq : 70.00 dBA

Total Leq All Segments: 70.00 dBA

Results segment # 1: PALLADIUM (ni ght)

Source height = 1.50 m

ROAD (0.00 + 66.10 + 0.00) = 66.10 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	67.40	0.00	0.00	-1.30	0.00	0.00	0.00	66.10

Segment Leq : 66.10 dBA

Total Leq All Segments: 66.10 dBA

TOTAL Leq FROM ALL SOURCES (DAY) : 70.00  
 (NI GHT) : 66.10

File name: O70PALLA.t Time Period: Day/Ni ght 16/8 hours  
 Description:

Outside - 70 dBA off Palladium Drive

Road data, segment # 1: PALLADIUM (day/ni ght)

Car traffic volume : 28336/2464 veh/TimePeriod  
 Medium truck volume : 2254/196 veh/TimePeriod  
 Heavy truck volume : 1610/140 veh/TimePeriod  
 Posted speed limit : 70 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: PALLADIUM (day/ni ght)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 24.50 / 15.00 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: PALLADIUM (day)

Source height = 1.50 m

ROAD (0.00 + 70.00 + 0.00) = 70.00 dBA

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.00	0.00	-3.54	-1.46	0.00	0.00	0.00	70.00

Segment Leq : 70.00 dBA

Total Leq All Segments: 70.00 dBA

~~Results segment # 1: PALLADIUM (ni ght)~~

~~Source height = 1.50 m~~

~~ROAD (0.00 + 66.10 + 0.00) = 66.10 dBA~~

Angle1	Angle2	Alpha	Ref Leq	P. Adj	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.57	67.40	0.00	0.00	-1.30	0.00	0.00	0.00	66.10

~~Segment Leq : 66.10 dBA~~

~~Total Leq All Segments: 66.10 dBA~~

TOTAL Leq FROM ALL SOURCES (DAY) : 70.00  
 (NI GHT) : 66.10

File name: L70LRT.te Time Period: Day/Night 16/8 hours  
 Description:

Living - 70 dBA off LRT

RT/Custom data, segment # 1: LRT (day/night)

1 - Bus:  
 Traffic volume : 14895/1655 veh/TimePeriod  
 Speed : 60 km/h

Data for Segment # 1: LRT (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 25.75 / 15.00 m  
 Receiver height : 2.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: LRT (day)

Source height = 0.50 m

RT/Custom (0.00 + 70.00 + 0.00) = 70.00 dBA

Angle1	Angle2	Alpha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.35	-3.90	-1.46	0.00	0.00	0.00	70.00

Segment Leq : 70.00 dBA

Total Leq All Segments: 70.00 dBA

Results segment # 1: LRT (night)

Source height = 0.50 m

RT/Custom (0.00 + 67.46 + 0.00) = 67.46 dBA

Angle1	Angle2	Alpha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.60	68.82	0.00	-1.35	0.00	0.00	0.00	67.46

Segment Leq : 67.46 dBA

Total Leq All Segments: 67.46 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 70.00  
 (NIGHT): 67.46

File name: O70LRT.te Time Period: Day/Night 16/8 hours  
 Description:

Outside - 70 dBA off LRT

RT/Custom data, segment # 1: LRT (day/night)

1 - Bus:  
 Traffic volume : 14895/1655 veh/TimePeriod  
 Speed : 60 km/h

Data for Segment # 1: LRT (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 25.75 / 380.17 m  
 Receiver height : 1.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: LRT (day)

Source height = 0.50 m

RT/Custom (0.00 + 70.00 + 0.00) = 70.00 dBA

Angle1	Angle2	Alpha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.66	75.35	-3.90	-1.46	0.00	0.00	0.00	70.00

Segment Leq : 70.00 dBA

Total Leq All Segments: 70.00 dBA

Results segment # 1: LRT (night)

Source height = 0.50 m

RT/Custom (0.00 + 45.00 + 0.00) = 45.00 dBA

Angle1	Angle2	Alpha	Ref Leq	D. Adj	F. Adj	W Adj	H. Adj	B. Adj	SubLeq
-90	90	0.60	68.82	-22.46	-1.35	0.00	0.00	0.00	45.00

Segment Leq : 45.00 dBA

Total Leq All Segments: 45.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 70.00  
 (NIGHT): 45.00