

September 24, 2026

Milton Meadows Block 82/83
65 Royal Park Way
Woodbridge, ON
L4H 1J5

Attention: Doug Skeffington
dskeff@royalpark.com

**Re: Environmental Noise Brief
Milton Meadows Royal Park North – Block 81 Phase 2
Proposed Residential Development
Milton, Ontario
VCL File: 119-0087-010**

1.0 INTRODUCTION

1.1 BACKGROUND AND PURPOSE

Trinity Consultants Canada Inc. – Valcoustics (Valcoustics) previously prepared an Environmental Noise Feasibility Study dated April 10, 2024 (herein referred to as the “Noise Report”) for the proposed Royal Park North subdivision. The overall site is located on the southwest corner of Highway 401 and the future Tremaine Road realignment in the Town of Milton. The Noise Report provided the assessment results and corresponding mitigation requirements to address both stationary and transportation noise source impacts onto the entire subdivision, following the Ministry of the Environment, Conservation and Parks (MECP) noise guidelines.

This Noise Brief has been prepared as part of the Zoning By-law Amendment (ZBA) application for the condominium townhouse blocks on the northwest portion of the residential subdivision, identified as Block 81 Phase 2 on Registered Plan 20M-1303 (note: this block was previously referenced as Block 83 on the Draft Plan of Subdivision in prior Noise Reports). The ZBA application is to allow increased density for these blocks with the introduction of additional townhouse units in the form of back-to-back townhouses and decked townhouses. The dwellings setbacks are the same as in the Noise Report and thus, the sound level predictions do not change. Thus, this Letter provides a summary of the information provided in the Noise Report and how it relates to the new design. Note that a separate study for the Block 81 Phase 1 lands to the east was submitted under a separate cover.

Figure 1 shows a context plan, indicating the location of the site on the northwest portion of the Royal Park North development, closest to Highway 401 and Gaetan Road.

1.2 PROPOSED SITE

The site will consist of four (4) back-to-back townhouse blocks (Blocks 1 to 4) and nine (9) lane access townhouse blocks (unlabelled in the drawings, but denoted Blocks 5 to 13 in this Letter.)

The northern row of townhouse blocks (Blocks 5 to 13) front toward Highway 401 and will have small rooftop terraces which will be less than 4 m in depth and no grade-level amenity spaces. These dwellings will also have rear lane access garages.

The back-to-back townhouse blocks will have balconies/terraces less than 4 m in depth and no grade-level amenity areas.

The assessment is based on the Site Plan prepared by Romanov Romanov Architects Incorporated dated September 24, 2026. Attachment A contains the Site Plan.

2.0 TRANSPORTATION SOURCE ASSESSMENT SUMMARY

The applicable noise guidelines and assessment method used to prepare this Letter are the same as those presented in the Noise Report. The results of the assessment and corresponding noise control requirements are also the same as in the Noise Report. Note that in the Noise Report, the townhouse blocks were labelled 81-10 to 81-13 (now Blocks 1 to 4) and 81-22 to 81-30 (now Blocks 5 to 13).

The four back-to-back blocks were previously shown as two-storey townhouse dwellings with garages in the Noise Report. The revised design has not impacted the setback from the roads but has increased the height by one storey. However, the previous calculations were done conservatively at a third-floor window height (7.5 m above grade); therefore, the previous analysis is still applicable and the current results for Blocks 1 to 4 are the same as what was presented in the Noise Report.

Table 1 presents the results from the Noise Report for receptor locations corresponding to the dwellings in Block 81 Phase 2 but with the lot numbering as described above.

The highest predicted sound levels due to road traffic at the dwellings on Block 81 Phase 2 are 75 dBA during the daytime and nighttime at Block 5, closest to Highway 401.

The following transportation noise mitigation measures are required:

- Mandatory air conditioning, exterior walls meeting STC-54, and windows up to STC-37 are required for Blocks 5 to 13; and
- Mandatory air conditioning, exterior walls meeting STC-54, and windows up to STC-32 are required for Blocks 1 to 4.

None of the dwellings have outdoor amenity areas that would qualify as Outdoor Living Areas, per the definition in Publication NPC-300. Thus, sound barriers are not required for any dwelling. Figure 2 and Table 2 summarize the transportation noise abatement requirements.

3.0 STATIONARY SOURCE ASSESSMENT SUMMARY

The stationary source assessment considered the noise impact from the nearby existing industries (Modatek, Karmax, and a future hypothetical industry at 99 Peru Road). The applicable noise guidelines and assessment method used to prepare this letter are the same as those presented in the Noise Report. Attachment C contains additional details.

Figure 3 shows the worst-case sound levels due to non-impulse sources (cumulative impact from Modatek, Karmax, and 99 Peru Road). Figure 4 shows the worst-case sound levels due to impulses (which occur at the Modatek facility). The sound levels shown represent the highest predicted sound level at that façade location, at any floor. As shown, the highest sound levels are predicted to be 43 dBA due to non-impulse sources and 42 dBAI due to impulse sources. These sound levels are below the most stringent nighttime minimum exclusion sound level limit of 45 dBA/dBAI at an outdoor plane of window under NPC-300. Comparing to the minimum exclusion limits is a conservative assessment as the applicable limits at these blocks would be defined by the ambient sound levels (due to the proximity of Highway 401) and would be higher than the minimum exclusion limits. Therefore, the impact from stationary sources onto the Block 81 Phase 2 dwellings is predicted to comply with the applicable guideline limits.

Note that the assessment accounts for acoustical screening from Block 81 Phase 1 as well as the single-family dwellings on Block 80 to the southeast (both of which are under construction and expected to be built prior to occupancy of the site). Other parts of the Royal Park North development have not been included in the assessment, under the assumption that these may be built after Block 81 Phase 2 is built and occupied. The analysis also accounts for the existing berms that have been constructed on the employment block lands and on Block 79. The berms can be seen on Figure 1.

As shown in the figures, there are no sound level excesses predicted at any of the dwellings in Block 81 Phase 2. Therefore, no additional mitigation is required.

Warning clauses are recommended to be registered on title or included in the development agreement that is registered on title, see Table 2.

4.0 CONCLUSION

This Noise Brief summarizes the acoustical assessment completed as part of the Noise Report for the townhouse blocks on Block 81 Phase 2. With the design of the development, including the mitigation measures to address transportation sources, a suitable acoustical environment can be provided for the occupants and the applicable MECP noise guideline requirements met. Meeting the MECP noise guidelines also ensures that the stationary noise sources can continue to operate without impediment and that compatibility of land uses is achieved with respect to environmental noise.

Thank you,

TRINITY CONSULTANTS CANADA INC. – VALCOUSTICS

Per:



Anthony Amarra, M.Sc.

Per:



Mark Levkoe, P.Eng.



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Milton Meadows Royal Park North, L#6 - Block 81 Phase 2 Noise Brief V1_0.docx.docx

TABLE 1: PREDICTED SOUND LEVELS DUE TO ROAD TRAFFIC

Location	Source	Distance (m) ⁽¹⁾	Leq Day (dBA)	Leq Night (dBA)
Block 5 North Façade	Highway 401 Westbound A	104	68	68
	Highway 401 Westbound B	99	69	69
	Highway 401 Eastbound A	94	69	69
	Highway 401 Eastbound B	89	69	69
	Tremaine Road Northbound	468	48	42
	Tremaine Road Southbound	458	48	42
	TOTAL	—	75	75
Block 1 West Façade	Highway 401 Westbound A	145	63	63
	Highway 401 Westbound B	140	64	64
	Highway 401 Eastbound A	135	64	64
	Highway 401 Eastbound B	130	64	64
	TOTAL	—	70	70

Note:

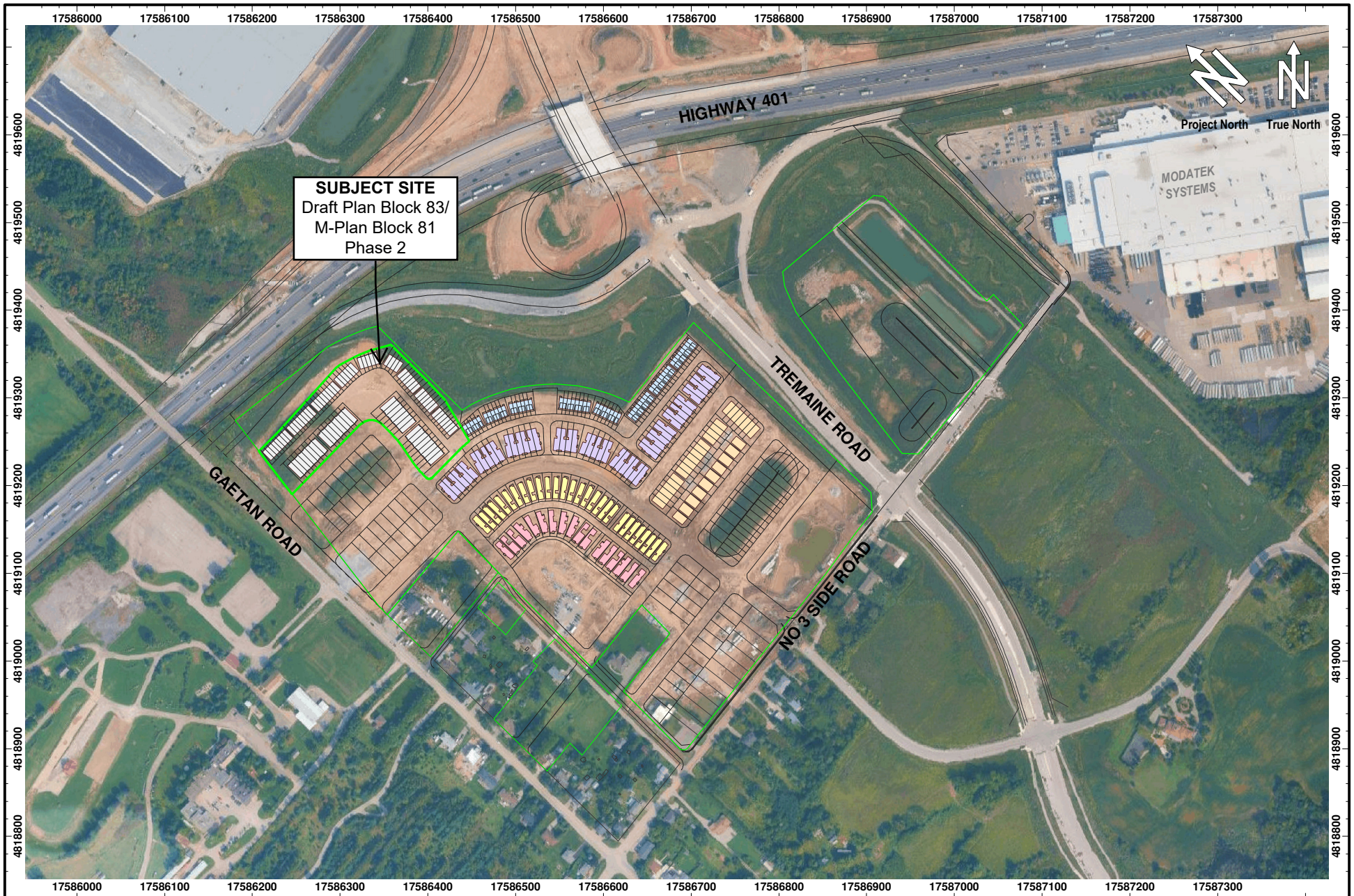
(1) Distance measured from receptor to centreline of roadway.

TABLE 2: NOISE ABATEMENT MEASURES

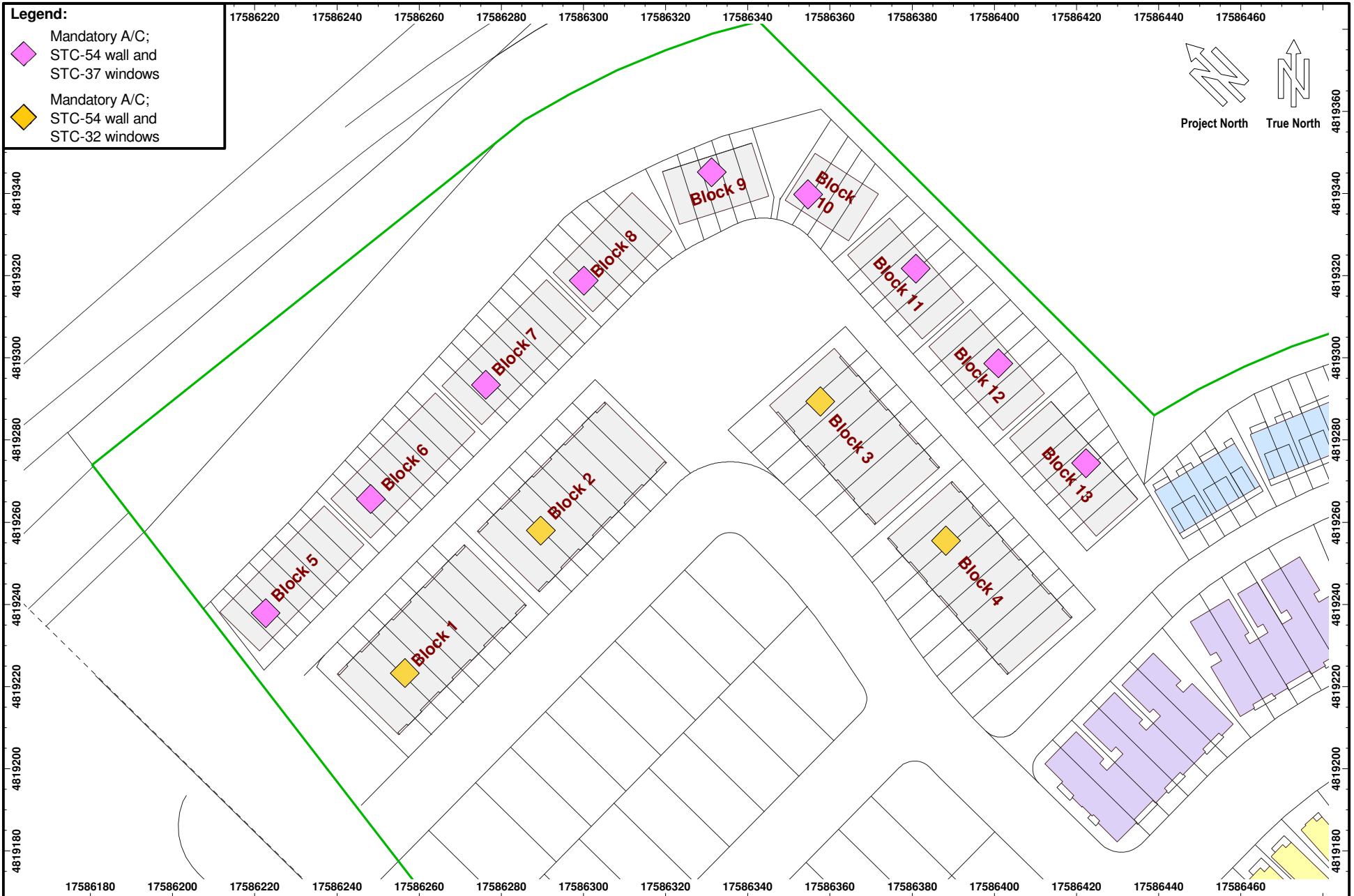
Dwelling	Air Conditioning ⁽¹⁾	Exterior Wall ⁽²⁾	Exterior Window ⁽³⁾	Warning Clause ⁽⁴⁾
Blocks 1 to 4	Mandatory	STC-54	STC-32	A + B + C
Blocks 5 to 13	Mandatory	STC-54	STC-37	A + B + C

Notes:

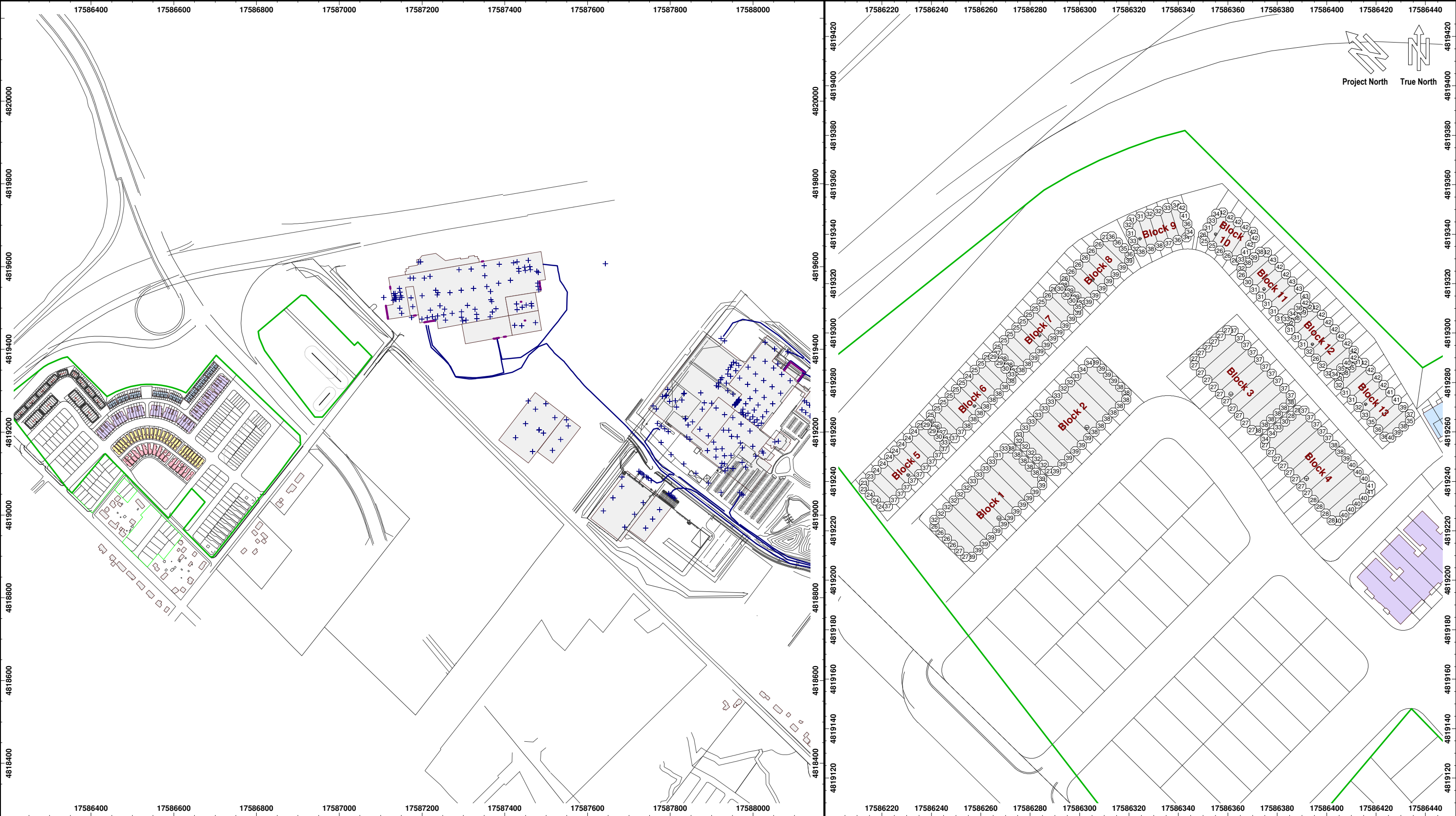
- (1) Central air conditioning allows windows to remain closed for noise control purposes.
Provision for adding air conditioning typically takes the form of a ducted ventilation system sized to accommodate the addition of central air conditioning by the occupant.
- (2) Window and exterior wall requirements were based on standard assumptions and should be reviewed once building floor plans are finalized.
- (3) A sliding glass walkout door should be considered a window and included in the percentage of glazing.
The window STC rating applies to the entire window assembly and not just the glazing. The window supplier should provide acoustical laboratory test data (following a recognized test standard) for the intended windows indicating the STC ratings can be met.
- (5) Standard example warning clause to be registered on title and be included in Offers of Purchase and Sale and Leases on designated units:
 - A. "Purchasers are advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing road traffic may occasionally interfere with some activities of the dwelling occupants as the sound level may exceed the noise guidelines of the Municipality and the Ministry of the Environment."
 - B. "This dwelling unit has been designed with a central air conditioning system which will allow windows and exterior doors to remain closed, thereby ensuring that indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment."
 - C. "Purchasers/occupants are advised that due to the proximity to the commercial/industrial uses in the vicinity, noise from these facilities may at times be audible."
- (6) All exterior doors shall be fully weather-stripped.



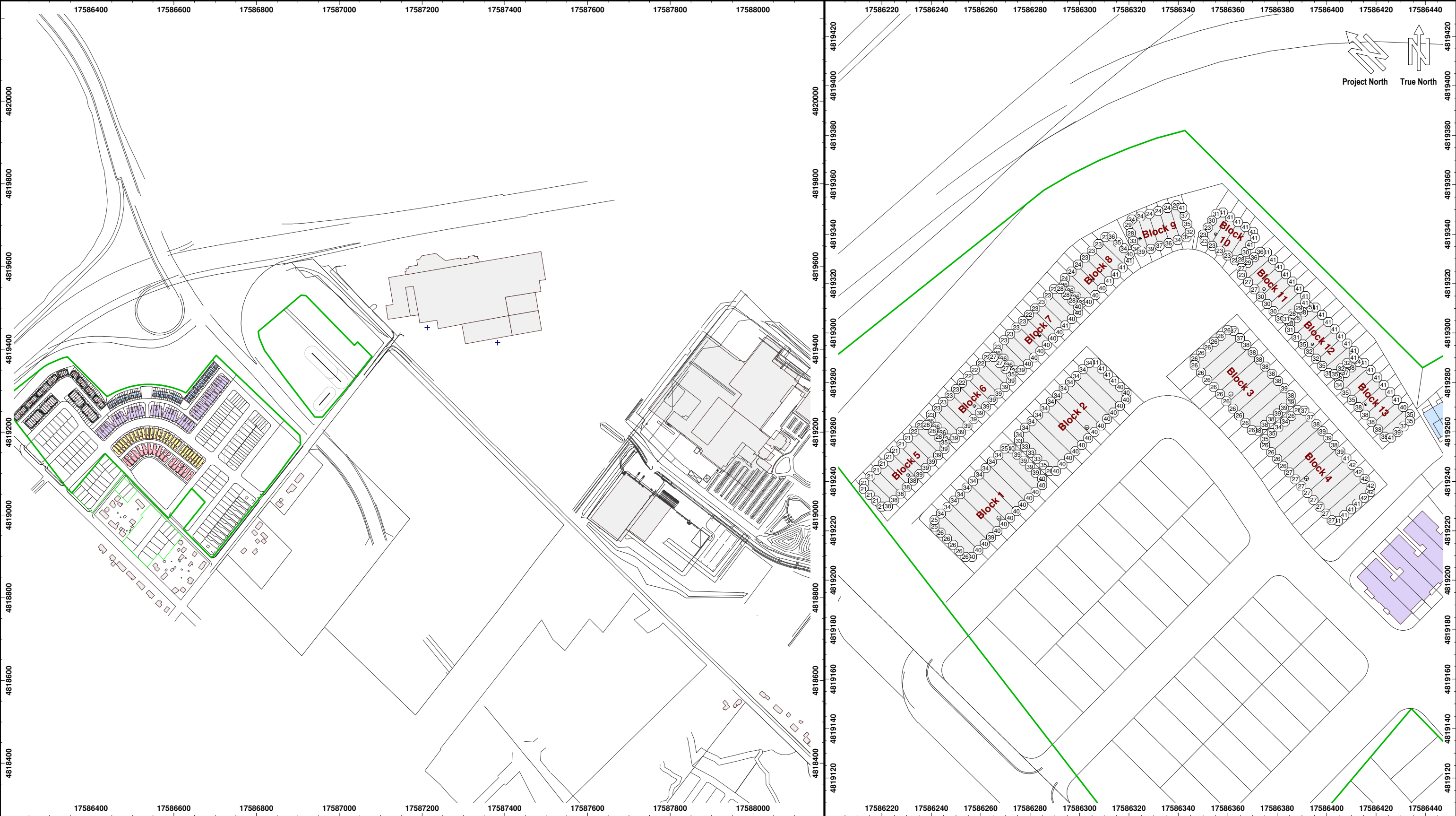
	Title		Date	Figure 1
	Context Plan		2026-09-24	
	Project Name		Project No.	
	Milton Meadows/Royal Park North - Block 83 Phase 2		119-0087-010	



	Title		Date	Figure 2
	Transportation Noise Abatement Requirements		2026-09-24	
	Project Name		Project No.	
	Milton Meadows/Royal Park North - Block 83 Phase 2		119-0087-010	



Overview		Close-up View of Block 83 Phase 2 Buildings	
Trinity Consultants VALCOUSTICS CANADA	Title		Date
	Predicted Sound Levels (dBA) due to Non-Impulse Sources (Modatek, Karmax, 99 Peru Road)		2026-09-24
	Project Name		Project No.
Milton Meadows/Royal Park North - Block 83 Phase 2		119-0087-010	
			Figure
			3



	Title Predicted Excesses (dBAI) due to Impulse Sources (Modatek)	Date 2026-09-24	Figure 4
	Project Name Milton Meadows/Royal Park North - Block 83 Phase 2	Project No. 119-0087-010	

ATTACHMENT A

DRAWINGS

ATTACHMENT B

TRANSPORTATION NOISE SAMPLE CALCULATION

STAMSON 5.04 NORMAL REPORT Date: 24-09-2026 15:25:50
 MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: blk5n.te Time Period: Day/Night 16/8 hours
 Description: Block 5 - North Facade

Road data, segment # 1: Hwy401 WB A (day/night)

```

-----
Car traffic volume : 36722/18358 veh/TimePeriod *
Medium truck volume : 2153/1077 veh/TimePeriod *
Heavy truck volume : 6460/3230 veh/TimePeriod *
Posted speed limit : 100 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
  
```

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

```

24 hr Traffic Volume (AADT or SADT): 68000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 4.75
Heavy Truck % of Total Volume : 14.25
Day (16 hrs) % of Total Volume : 66.67
  
```

Data for Segment # 1: Hwy401 WB A (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 : 104.00 / 104.00 m
Receiver height : 7.50 / 7.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00
  
```

Road data, segment # 2: Hwy401 WB B (day/night)

```

-----
Car traffic volume : 36722/18358 veh/TimePeriod *
Medium truck volume : 2153/1077 veh/TimePeriod *
Heavy truck volume : 6460/3230 veh/TimePeriod *
Posted speed limit : 100 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
  
```

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

```

24 hr Traffic Volume (AADT or SADT): 68000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 4.75
Heavy Truck % of Total Volume : 14.25
Day (16 hrs) % of Total Volume : 66.67
  
```

Data for Segment # 2: Hwy401 WB B (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 : 99.00 / 99.00 m
Receiver height : 7.50 / 7.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00
  
```

CANADA

Road data, segment # 3: Hwy401 EB A (day/night)

```
-----
Car traffic volume : 36722/18358 veh/TimePeriod *
Medium truck volume : 2153/1077 veh/TimePeriod *
Heavy truck volume : 6460/3230 veh/TimePeriod *
Posted speed limit : 100 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

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

```
24 hr Traffic Volume (AADT or SADT): 68000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 4.75
Heavy Truck % of Total Volume : 14.25
Day (16 hrs) % of Total Volume : 66.67
```

Data for Segment # 3: Hwy401 EB A (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 : 94.00 / 94.00 m
Receiver height : 7.50 / 7.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00
```

Road data, segment # 4: Hwy401 EB B (day/night)

```
-----
Car traffic volume : 36722/18358 veh/TimePeriod *
Medium truck volume : 2153/1077 veh/TimePeriod *
Heavy truck volume : 6460/3230 veh/TimePeriod *
Posted speed limit : 100 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

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

```
24 hr Traffic Volume (AADT or SADT): 68000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 4.75
Heavy Truck % of Total Volume : 14.25
Day (16 hrs) % of Total Volume : 66.67
```

Data for Segment # 4: Hwy401 EB B (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 : 89.00 / 89.00 m
Receiver height : 7.50 / 7.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00
```

CANADA

Road data, segment # 5: N Tremaine N (day/night)

```
-----
Car traffic volume : 21114/2346 veh/TimePeriod *
Medium truck volume : 918/102 veh/TimePeriod *
Heavy truck volume : 918/102 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 3 %
Road pavement : 1 (Typical asphalt or concrete)
```

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

```
24 hr Traffic Volume (AADT or SADT): 25500
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 4.00
Heavy Truck % of Total Volume : 4.00
Day (16 hrs) % of Total Volume : 90.00
```

Data for Segment # 5: N Tremaine N (day/night)

```
-----
Angle1 Angle2 : -90.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 468.00 / 468.00 m
Receiver height : 7.50 / 7.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00
```

Road data, segment # 6: N Tremaine S (day/night)

```
-----
Car traffic volume : 21114/2346 veh/TimePeriod *
Medium truck volume : 918/102 veh/TimePeriod *
Heavy truck volume : 918/102 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 3 %
Road pavement : 1 (Typical asphalt or concrete)
```

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

```
24 hr Traffic Volume (AADT or SADT): 25500
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 4.00
Heavy Truck % of Total Volume : 4.00
Day (16 hrs) % of Total Volume : 90.00
```

Data for Segment # 6: N Tremaine S (day/night)

```
-----
Angle1 Angle2 : -90.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 458.00 / 458.00 m
Receiver height : 7.50 / 7.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00
```

CANADA

Results segment # 1: Hwy401 WB A (day)

Source height = 1.94 m

ROAD (0.00 + 68.48 + 0.00) = 68.48 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.47	81.92	0.00	-12.33	-1.11	0.00	0.00	0.00	68.48

Segment Leq : 68.48 dBA

Results segment # 2: Hwy401 WB B (day)

Source height = 1.94 m

ROAD (0.00 + 68.79 + 0.00) = 68.79 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.47	81.92	0.00	-12.02	-1.11	0.00	0.00	0.00	68.79

Segment Leq : 68.79 dBA

Results segment # 3: Hwy401 EB A (day)

Source height = 1.94 m

ROAD (0.00 + 69.12 + 0.00) = 69.12 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.47	81.92	0.00	-11.69	-1.11	0.00	0.00	0.00	69.12

Segment Leq : 69.12 dBA

Results segment # 4: Hwy401 EB B (day)

Source height = 1.94 m

ROAD (0.00 + 69.47 + 0.00) = 69.47 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.47	81.92	0.00	-11.34	-1.11	0.00	0.00	0.00	69.47

Segment Leq : 69.47 dBA

CANADA

Results segment # 5: N Tremaine N (day)

Source height = 1.41 m

ROAD (0.00 + 47.96 + 0.00) = 47.96 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.48	74.26	0.00	-22.15	-4.15	0.00	0.00	0.00	47.96

Segment Leq : 47.96 dBA

Results segment # 6: N Tremaine S (day)

Source height = 1.41 m

ROAD (0.00 + 48.10 + 0.00) = 48.10 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.48	74.26	0.00	-22.01	-4.15	0.00	0.00	0.00	48.10

Segment Leq : 48.10 dBA

Total Leq All Segments: 75.02 dBA

Results segment # 1: Hwy401 WB A (night)

Source height = 1.94 m

ROAD (0.00 + 68.48 + 0.00) = 68.48 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.47	81.92	0.00	-12.33	-1.11	0.00	0.00	0.00	68.48

Segment Leq : 68.48 dBA

Results segment # 2: Hwy401 WB B (night)

Source height = 1.94 m

ROAD (0.00 + 68.79 + 0.00) = 68.79 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.47	81.92	0.00	-12.02	-1.11	0.00	0.00	0.00	68.79

Segment Leq : 68.79 dBA

CANADA

Results segment # 3: Hwy401 EB A (night)

Source height = 1.94 m

ROAD (0.00 + 69.12 + 0.00) = 69.12 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.47	81.92	0.00	-11.69	-1.11	0.00	0.00	0.00	69.12

Segment Leq : 69.12 dBA

Results segment # 4: Hwy401 EB B (night)

Source height = 1.94 m

ROAD (0.00 + 69.47 + 0.00) = 69.47 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.47	81.92	0.00	-11.34	-1.11	0.00	0.00	0.00	69.47

Segment Leq : 69.47 dBA

Results segment # 5: N Tremaine N (night)

Source height = 1.41 m

ROAD (0.00 + 41.42 + 0.00) = 41.42 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.48	67.73	0.00	-22.15	-4.15	0.00	0.00	0.00	41.42

Segment Leq : 41.42 dBA

Results segment # 6: N Tremaine S (night)

Source height = 1.41 m

ROAD (0.00 + 41.56 + 0.00) = 41.56 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.48	67.73	0.00	-22.01	-4.15	0.00	0.00	0.00	41.56

Segment Leq : 41.56 dBA

Total Leq All Segments: 75.01 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 75.02
(NIGHT): 75.01