

GTA WEST OFFICE (CORPORATE) 9358 GOREWAY DRIVE BRAMPTON, ONTARIO L6P 0M7 T: (905) 794-0600 F: (905) 794-0611 May 4, 2022

PROVIDING CONSULTING SERVICES IN: MUNICIPAL ENGINEERING TRANSPORTATION PLANNING TRAFFIC & PARKING STUDIES ROADS & BRIDGES DEVELOPMENT ENGINEERING SERVICES WATER RESOURCES ENVIRONMENTAL NOISE STUDIES LAND USE & ENVIRONMENTAL PLANNING STRUCTURAL ENGINEERING

May 2nd 2022

Town of Caledon Engineering Services 6311 Old Church Road Caledon, Ontario L7C 1J6

Attn: Mr. Daniel Oh, P. Eng., PMP

Re: Response to the Town of Caledon and the Peer Review Comments (Thornton Tomasetti) for the Noise Impact Study Zancor Homes (Bolton) Ltd.
Chickadee Lane Rounding Out Area "B" 13935, 13951 and 13999 Chickadee Lane, 0 King Street and 550, 600 and 615 Glasgow Road Proposed Residential Subdivision Town of Caledon Town of Caledon Town File No. POPA 2020-0001, 21T-20001C and RZ 2020-0004 Our File No. W17003

Dear Mr. Oh,

The Town of Caledon's Engineering Services Department has provided comments to our Noise Impact Study dated March 26th 2019 in a letter to Rosemarie Humphries that was dated May 13th 2021. In addition, the Town of Caledon retained Thornton Tomasetti for the Peer Review and they have provided comments in a Memorandum dated June 10th 2021. The memorandum that contains the Peer Review comments are included in **Appendix A** for your reference.

This Response to Comments Letter addresses the comments referenced above.



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Town of Caledon - Noise Impact Study

Comment 1:

The Environmental Noise Feasibility Study prepared by Candevcon Ltd., dated March 26th, 2019 is currently under a peer review. Once completed, the peer reviewer's comments will be circulated under a separate cover.

Response:

This comment has been noted.

Comment 2:

Figure 4 of the Noise Report suggests that 3.1m high acoustic fences are required for Block 2. Please note that as per the TOC Development Standard, the maximum allowable height for noise fences is 2.4m. The difference in the required fence height should be achieved with the use of a berm.

Response:

This comment has been noted.

Comment 3:

The study should also assess the potential impact of the increased traffic noise on the existing DeRose subdivision and investigate if any upgrades or new noise attenuation measures are required,

Response:

A noise mitigation assessment for the existing DeRose Subdivision is beyond the scope of work needed for the Draft Plan of Subdivision, Official Plan Amendment and Zoning By-Law Amendment. Therefore, the updated Noise Impact Study will not assess the noise mitigation requirements for the existing DeRose Subdivision.



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Thornton Tomasetti - Peer Review Comments - Noise Impact Study

Comment 1:

The ultimate road traffic data used in the calculations are acceptable; however, the Town of Caledon requirements as noted in the Development Standards Manual, Version 5.0, 2019 (DSM) requires that traffic noise assessments are to be calculated based on a traffic speed of 10 km/h over the posted speed. The calculations, assessment, and noise mitigation requirements should be updated based on the increase in road speed limit.

Response:

Sound level projections have been updated to consider the traffic speed on Emil Kolb Parkway, which is 10 km/h above the speed limit.

Comment 2:

A three-way roundabout is located to the west of the proposed development, with King Street extending south from the roundabout and Emil Kolb Parkway continuing to the west. King Street, which is an arterial road, has not been assessed in the NIS. The NIS should include the assumptions or justification on whether to assess the King Street traffic noise impact on the Site.

Response:

The report was revised accordingly. The existing residential lands that are at the southeast corner of the King Street at Emil Kolb Parkway intersection will shield the proposed dwelling units from the roadway noise source on King Street. In addition, since Emil Kolb Parkway is between King Street and the proposed Residential Subdivision, the roadway noise source on Emil Kolb Parkway will drown out the roadway noise source on King Street.



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Comment 3:

The DSM requirements for noise assessments and mitigation should be included as part of the noise criteria for the proposed development.

Response:

The report was revised accordingly.

Comment 4:

Receptor location 10 and 11 are shown in Figure 3; however, the calculation results are not provided in Table 3.

Response:

The report was revised accordingly.

Comment 5:

The receptor heights for the daytime sound level calculations at the receptors should be at the 2nd storey height as a worst-case scenario.

Response:

The report was revised accordingly.

Comment 6:

For the two (2) dwelling units in Block 2 that are the closest to Emil Kolb Parkway, a reflective ground surface was assumed.



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Response:

The calculation outputs for R1 and R4 at the exterior building façade were revised to assume that the ground is reflective. In addition, sound level projections at the exterior building façade for units in Block 8 were assumed to have a reflective ground and sound level projections at the exterior building façade for units in Block 9 were assumed to have an absorptive ground, which is why mandatory air conditioning is required for all the units in Block 8 and provision for air is required for the unit in Block 9 that flanks Street 'C'.

Comment 7:

It should be noted for clarity the assumed or planned fronting of the residential units and the location of back-yard areas. For example, it may be assumed that Block 6 fronts on Street 'C'; however, the direction of Lot 1 and Block 8 is not stated and it may affect the noise control recommendations for their backyards.

Response:

Block 10 fronts Chickadee Lane and Lot 1 fronts Street 'C'.

Comment 8:

The DSM requirements for daytime sound levels in outdoor areas to meet 55 dBA or lower should be noted, as they are more restrictive than the MECP NPC-300 guidelines.

Response:

The report was revised accordingly.

Comment 9:

As noted in the DSM, a maximum noise barrier height is 2.4m and additional height may be provided by an earth berm. Additionally, the minimum requirements for a noise barrier (no gaps, surface density, etc.) should be noted in the NIS.



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Response:

The report was revised accordingly. For the three (3) units in Block 4 that are the closest to Emil Kolb Parkway, with the proposed acoustic fence barrier, sound levels at the outdoor living area exceed the limit by no more than 5 dBA. As per the Town of Caledon requirements, outdoor living areas with daytime sound levels that exceed the limit by no more than 5 dBA will need the Town's approval.



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We trust that this Letter satisfactorily addresses all of the Town of Caledon and Peer Review comments. However, if you have any questions on the above please advise.

Yours truly,

CANDEVCON LIMITED



Brian Wong, P. Eng. Intermediate Transportation Engineer

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David Lee, P. Eng. Project Manager

Attachments: Appendix A – Comments received from Thornton Tomasetti (Peer Review).

APPENDIX A

COMMENTS RECEIVED FROM THORTON TOMASETTI (PEER REVIEW)

June 10, 2021

Daniel Oh Town of Caledon 6311 Old Church Road Caledon, ON L7C 1J6 daniel.oh@caledon.ca

Re: Peer Review – Noise Impact Study – Proposed Residential Subdivision, 13935, 13951 and 13999 Chickadee Lane, 0 King Street and 500, 600 and 615 Glasgow Road, Part of Lot 10, Concession 5 and 6, Town of Caledon, Ontario, by Candevcon Ltd., March 26, 2019

1. Introduction

Thornton Tomasetti Canada Inc. (TT) was retained by the Town of Caledon to conduct a peer review of the *Noise Impact Study, Chickadee Lane Rounding Out Area "B"* (the NIS), for the proposed residential development located at 13935, 13951 and 13999 Chickadee Lane, 0 King Street and 500, 600 and 615 Glasgow Road, Part of Lot 10, Concession 5 and 6, Town of Caledon (the Site) prepared by Candevcon Limited, dated March 26, 2019.

The NIS analyzes the impact of noise from transportation on the Site and presents noise mitigation measures for the residential development to meet the noise criteria of the Ontario Ministry of the Environment, Conservation and Parks (MECP), Region of Peel and the Town of Caledon.

2. SACL Peer Review Comments

2.1. Section 2.1 Roadway Traffic Noise Sources

The ultimate road traffic data used in the calculations are acceptable; however, the Town of Caledon requirements as noted in the Development Standards Manual, Version 5.0, 2019 (DSM) requires that traffic noise assessments are to be calculated based on a traffic speed of 10 km/h over the posted speed. The calculations, assessment, and noise mitigation requirements should be updated based on the increase in road speed limit.

A three-way roundabout is located to the west of the proposed development, with King Street extending south from the roundabout and Emil Kolb Parkway continuing to the west. King Street, which is an arterial road, has not been assessed in the NIS. The NIS should include the assumptions or justification on whether to assess the King Street traffic noise impact on the Site.

2.2. Section 2.4 Noise Criteria

The DSM requirements for noise assessments and mitigation should be included as part of the noise criteria for the proposed development.



2.3. Section 2.5 Projected Sound Levels and Appendix C

Receptor location 10 and 11 are shown in Figure 3; however, the calculation results are not provided in Table 3.

The receptor heights for the daytime sound level calculations at the receptors should be at the 2nd storey height as a worst-case scenario.

The calculation output for R1 shows absorptive ground was used in the calculation. In consideration of Street C and green area shown between R1 and its closest point to the Emil Kolb Parkway, it may be more appropriate to model at least part of the ground between R1 and the Parkway as reflective.

It should be noted for clarity the assumed or planned fronting of the residential units and the location of back-yard areas. For example, it may be assumed that Block 6 fronts on Street 'C'; however, the direction of Lot 1 and Block 8 is not stated and it may affect the noise control recommendations for their backyards.

2.4. Section 3.1 Outdoor Recreation Areas

The DSM requirements for daytime sound levels in outdoor areas to meet 55 dBA or lower should be noted, as they are more restrictive than the MECP NPC-300 guidelines.

2.5. Section 3.2 Minimum Barrier Requirements

As noted in the DSM, a maximum noise barrier height is 2.4m and additional height may be provided by an earth berm. Additionally, the minimum requirements for a noise barrier (no gaps, surface density, etc.) should be noted in the NIS.

SWALS)W Thornton Tomasetti

Caledon – Chickadee Lane Peer Review TT Project SW21045 June 10, 2021

3. Concluding Remarks

The Noise Impact Study prepared by Candevcon Limited, dated March 26, 2019 for the proposed residential development located at 13935, 13951 and 13999 Chickadee Lane, 0 King Street and 500, 600 and 615 Glasgow Road, Part of Lot 10, Concession 5 and 6 in the Town of Caledon was reviewed. While the calculations and noise mitigation recommendations provided are in line with the Ontario Ministry of the Environment, Conservation and Parks NPC-300 and the Region of Peel noise assessment guidelines, the NIS should be updated to also include the Town of Caledon Development Standards Manual requirements and criteria. Changes in the noise mitigation requirements may result from the updated sound level calculations.

Please do not hesitate to contact us if there are any questions.

Yours Truly, Thornton Tomasetti Canada Inc.

Galen Wong, M.A.Sc. Senior Project Director

Reviewed by:

Pearlie Yung, M.Sc., P.Eng. Senior Project Engineer



Disclaimer: Achieving the required noise control requirements relies on correct incorporation of noise control recommendations into Architectural and Mechanical drawings and specifications, as well as correct installation during construction. On Request, TT will conduct drawing reviews and onsite reviews of noise control measures and provide observations as appropriate; however, notwithstanding the foregoing, it is expressly understood and agreed that TT shall not have control or charge of, and shall not be responsible for the acts or omissions, including but not limited to means, methods, techniques, sequences and procedures, of the Design Professionals and/or Contractors performing design and/or construction on the Project. Accordingly, TT shall not be held responsible for the failure of any party to properly incorporate the noise control measures stated in this report.

23-366 Revus Avenue, Mississauga, ON | L5G 4S5 | t: 905-271-7888 | w: www.thorntontomasetti.com