



McDONALD'S RESTAURANTS OF CANADA LIMITED
1325 TransCanada Highway
DORVAL, QUEBEC, CANADA H9P 2V5
Main Phone Number: 514-685-4411

May 4, 2021

Brenda Guy
Manager of Community Development
30 King Street East, Gananoque

Dear Ms. Guy

Re: Site Plan Application / 670 King Street East, Gananoque / Drive – Thru Speaker Volume

I have enclosed for your information a memo from HME Electronics, our supplier of Drive-thru speakers, outlining the sound pressure levels emanating from their drive-thru speakers, and I have highlighted in yellow what those pressure levels are with automated volume control (AVC), which all of our speakers have. I have also included a decibel sheet that compares certain sounds to their various decibel ranges and finally a site plan which includes a landscape plan.

I would draw your attention to the information that at 16 feet from the speaker, the sound pressure level is at a range of 36 decibels. You will note from the attached decibel sheet that whispering is in the range of 35 to 45 decibels, or within the same range. The distance from the outside menu board to the adjacent motel is approximately 21.0 meters, as well as on the opposite side of the restaurant, which acts as a barrier.

Therefore, I draw your attention to the following pertinent facts:

- The decibel level 16 feet from the speaker in the menu board (without a vehicle in the drive-thru lane) is 36 decibels, which is comparable to a whisper
- This would also be a comparative decibel level as the existing configuration has with the McDonald's crew person speaking to the customer at the current face to face booth
- The sound levels in the proposed system would be very similar to the current system
- Additionally, due to the location of the menu board, the existing restaurant has been used as a barrier between the speaker and the adjacent motel
- The speaker is at a height of 36 inches or less above ground, which places it in a position where the vehicle provides additional screening, reducing even further the decibel levels described above, and lower than from the current drive-thru booth.

Technology has come a long way and McDonald's is always looking to improve even further. Any visit to a drive-thru speaker in a McDonald's today will show that the noise levels from speakers in our drive-thru do not carry, and are hard to hear on the opposite side of the lane when a vehicle is there.

Should you have any questions, please reach out to me.

McDonald's Restaurants of Canada Limited

DocuSigned by:

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Domenic Lasorsa

Regional Reinvestment Consultant



Customer Driven

Memo

Re: Drive-Thru Sound Pressure Levels From the Menu Board or Speaker Post

The sound pressure levels from the menu board or speaker post are as follows:

1. Sound pressure level (SPL) contours (A weighted) were measured on a typical HME SPP2 speaker post. The test condition was for pink noise set to 84 dBA at 1 foot in front of the speaker. All measurements were conducted outside with the speaker post placed 8 feet from a non-absorbing building wall and at an oblique angle to the wall. These measurements should not be construed to guarantee performance with any particular speaker post in any particular environment. They are typical results obtained under the conditions described above.
2. The SPL levels are presented for different distances from the speaker post:

Distance from the Speaker (Feet)	SPL (dBA)
1 foot	84 dBA
2 feet	78 dBA
4 feet	72 dBA
8 feet	66 dBA
16 feet	60 dBA
32 feet	54 dBA

3. The above levels are based on factory recommended operating levels, which are preset for HME components and represent the optimum level for drive-thru operations in the majority of the installations.

Also, HME incorporates automatic volume control (AVC) into many of our Systems. AVC will adjust the outbound volume based on the outdoor, ambient noise level. When ambient noise levels naturally decrease at night, AVC will reduce the outbound volume on the system. See below for example:

Distance from Outside Speaker	Decibel Level of standard system with 45 dB of outside noise <u>without</u> AVC	Decibel level of standard system with 45 dB of outside noise <u>with</u> AVC active
1 foot	84 dBA	60 dBA
2 feet	78 dBA	54 dBA
4 feet	72 dBA	48 dBA
8 feet	66 dBA	42 dBA
16 feet	60 dBA	36 dBA

If there are any further questions regarding this issue please contact HME customer service at 1-800-848-4468.

Thank you for your interest in HME's products.

