

October 14, 2022

Via Email: jbelding@goodcars.com

Ms. Jenni Belding
Glendale Chrysler
10070 Manchester Road
Glendale, MO 63122

Re: ADDENDUM 1 Glendale Chrysler – Car
Wash Sound Study - Revised Sound
Data
McClure Engineering No. 104271.000

Dear Ms. Belding,

We have revised our acoustical calculations to include the eight (8') foot height fence on the south property line and a six (6') foot vinyl fence on the east property line. A summary of our calculations is provided in this brief letter.

In our report dated August 24, 2022, our acoustical model did not include the calculations with the proposed fence. The proposed fence along the south property line will be an eight-foot-high Bufftech Galveston fence. There exists a six-foot-high vinyl fence along the east property line.

The sound from the operation of the carwash with blowers on and doors open will be below the 55 dBA daytime Sound Level Limit set by St Louis County. Our results are summarized in **Table 1**. This data is calculated from our SoundPlan Model. These maps are provided in **Figure 1** and **2**. The receiver points are shown on the sound maps.

Table 1 – Summary of Measured and Calculated Sound Level Results

Measured Property Line Scenario	SPL Day, dBA	
	Leq Daytime (7am to 10pm) Average Ambient Sound Level	54.7
Calculated Property Line Scenario with Fence	Doors Open	Doors Closed
815 Brookside Dr. South PL	44.0	32.0
825 Brookside Dr. South PL	39.4	36.5
835 Brookside Dr. South PL	39.3	36.9
845 Brookside Dr. South PL	42.5	35.0
855 Brookside Dr. South PL	41.6	29.4
865 Brookside Dr. South PL	39.6	25.1
Glendale Gardens Condos - West PL	43.0	22.5
Church East PL	49.0	30

The background sound was removed from the calculations so only the sound from the carwash is determined from the full operation of a new car wash.

The sound map shown in **Figure 1** shows the calculated sound levels from the carwash with doors open and without background sound levels.



Figure 1 – Sound Map of Carwash Doors Open – No Background Sound

Figure 2 is a sound map with doors closed during the carwash operation.



S:\104271.000 Glendale Car Wash Acoustical Testing\04 Acoustics\Calculations\SoundPLAN\Glendale Car Wash\Map 1 - Dryer Source-Closed Doors.sit

Figure 2 – Sound Map of Carwash Doors Closed – No Background Sound

Conclusion

With the planned Bufftech Galveston eight foot (8') height fence along the south property line, the sound level from the carwash will be less than 55 dBA at the South, East and West property lines.

Please contact me if you have any questions.

Sincerely,

Gary Brown