



**Property Line Sounds - WITHOUT Attenuation**

- First Floor Exhaust Fan = 26 dB
- Generator = 47 dB
- Mezzanine Exhaust Fan = 31 dB

**Property Line Sounds - With Attenuation**

- First Floor Exhaust Fan = 26 dB
- Generator = 0 dB
- Mezzanine Exhaust Fan = 18 dB

\*This does not take into account the advantages of installing a berm/vegetative buffer between the building and the residences. This will offer a greater advantage for sound attenuation.

**Mezzanine Exhaust Fan**

- Located in the Mezzanine.
- Exhaust fan operates at 65 dB.
- Normal block wall will provide 20% sound attenuation.

**Generator**

- Located in Generator Room.
- Generator operates at 82 dB.
- Generator Room is surrounded by sound absorptive block wall with 80% sound attenuation.
- Intake louver to the east, exhaust louver to the north.

**First Floor Exhaust Fan**

- Located on east wall of lift station.
- Exhaust fan operates at 62 dB.
- Majority of sound will be directed toward the east.
- Fan is scheduled to run 5 times daily.

**Berm with vegetative buffer**

dB (SPL)	Source (with distance)
194	Theoretical limit for a sound wave at 1 atmosphere environmental pressure; pressure waves with a greater intensity behave as shock waves.
180	Krakatoa volcano explosion at 1 mile in air [1] <a href="#">dP</a>
160	M1 Garand being fired at 1 meter (3 ft)
150	Jet engine at 30 m (100 ft)
140	Low Caliber Rifle being fired at 1 m (3 ft); the engine of a Formula One car at 1 meter (3 ft)
130	Threshold of pain; civil defense siren at 100 ft (30 m)
120	Train horn at 1 m (3 ft). Perforation of eardrums.
110	Football stadium during kickoff at 50 yard line; chainsaw at 1 m (3 ft)
100	Jackhammer at 2 m (7 ft); inside disco
90	Loud factory, heavy truck at 1 m (3 ft)
80	Vacuum cleaner at 1 m (3 ft), curbside of busy street, PLVI of City
70	Busy traffic at 5 m (16 ft)
60	Office or restaurant inside
50	Quiet restaurant inside
40	Residential area at night
30	Theatre, no talking
20	Whispering
10	Human breathing at 3 m (10 ft)
0	Threshold of human hearing (with healthy ears); sound of a mosquito flying 3 m (10 ft) away

NO.	REVISIONS	DATE
1	AGENCY REVIEW	11/27/24

**CIVIL**  
**LIFT STATION - SITE PLAN**  
 RIDGE LIFT STATION, FORCE MAIN, AND SANITARY SEWER  
 VILLAGE OF COTTAGE GROVE  
 DANE COUNTY, WISCONSIN

**JOB NO.**  
 4750.024  
**PROJECT MGR.**  
 TAW



**SHEET**  
 16  
**CE1.7**