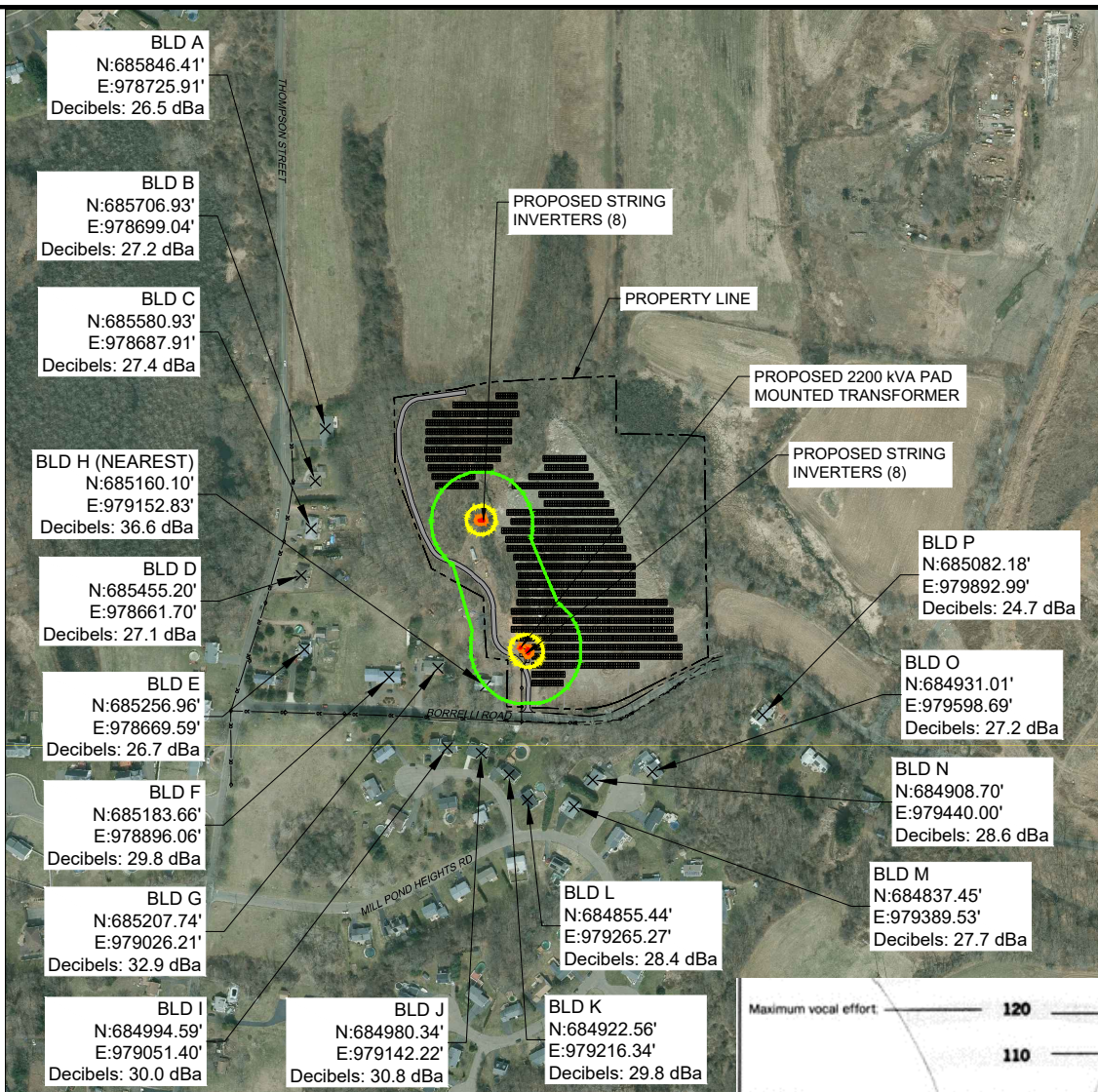


# Exhibit Q

## Noise Study

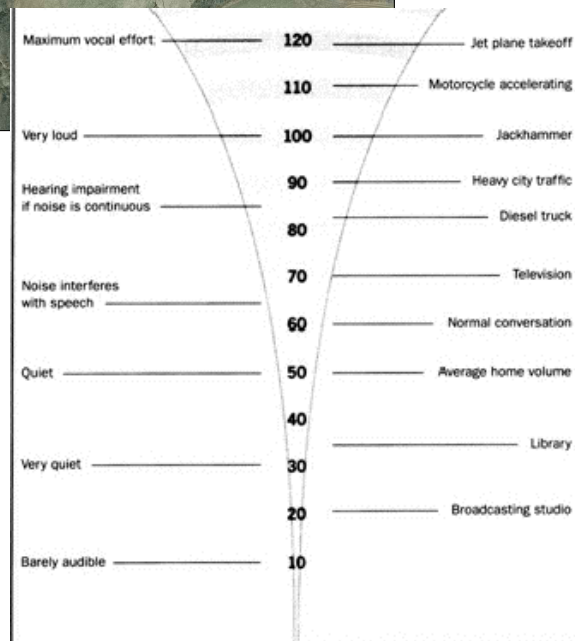
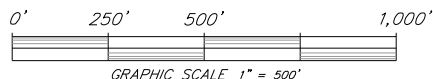


#### NOTES:

- KACO specifies that the Blueplanet 125 TL3 Three Phase String Inverters create 59.2 dBA at a distance of 1 meter from the unit. Calculated sound levels for these units at 3 meters is 49.7 dBA.
- Sound levels for the Cooper 2200 kVA Pad Mounted Transformers have a sound level of 62 dBA [measured at 0.3 meter, as per NEMA TR1 (ANSI/IEEE Std. C57.12-90-1993, sec. 13.3.4)]. Assuming the measurement was taken at 1 meter to be conservative, the calculated sound level at 3 meters is 52.5 dBA.
- Other decibel ranges were derived using the following distance damping equation  $[L_2 = L_1 - 20 \text{ Log}(d_1/d_2)]$ . This damping equation was the only factor considered in decibel range attenuation estimates. Elevation, ambient noise, vegetation, angle of solar array and other structures which would further effect the attenuation of sound levels were not considered in this study. Daytime sound levels depicted on this plan are for (16) KACO 125kW string inverters, and (1) 2200kVA Cooper Pad Mounted Transformer with all equipment operating simultaneously at maximum noise level.
- Nighttime operation noise levels area shown on plan "Sound 2".
- Sound levels reported do not account for any background noise. Local background noise may exceed sound created by project equipment.

#### Legend:

- 70 dBA range
- 60 dBA range
- 50 dBA range
- 40 dBA range



Decibel Breakdown Compared to Everyday Noises

**KREBS & LANSING**  
CONSULTING ENGINEERS  
164 Main Street, Suite 201  
Colchester, Vermont 05446  
P: (802) 878-0375  
www.krebsandlansing.com

**ecos**  
ENERGY  
222 SOUTH 9TH STREET  
SUITE 1600  
MINNEAPOLIS, MN 55402

## DAYTIME FULL OPERATION SOUND LEVEL PLAN

Project: BORRELLI ROAD SOLAR

Location: EAST HAVEN, CT

Plan ID:

**S-1**

## BASIC SOUND LEVEL ESTIMATES FOR NOISE PRODUCED BY PROJECT TRANSFORMERS AND INVERTERS

DRAWN BY:

CPG

CHECKED BY:

JBC

Revision Date:

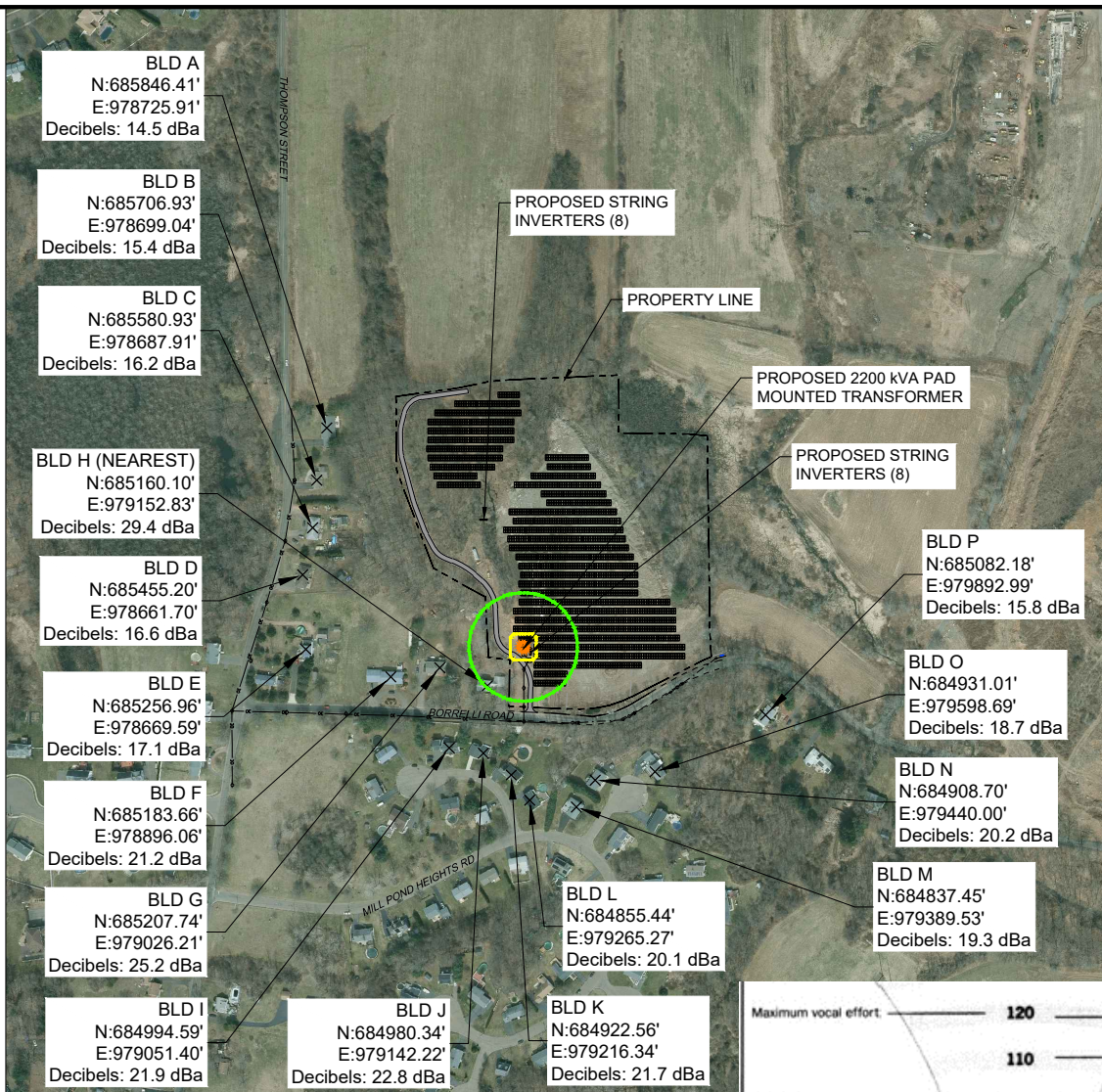
Scale:

1" = 500'

Date:

12/11/24



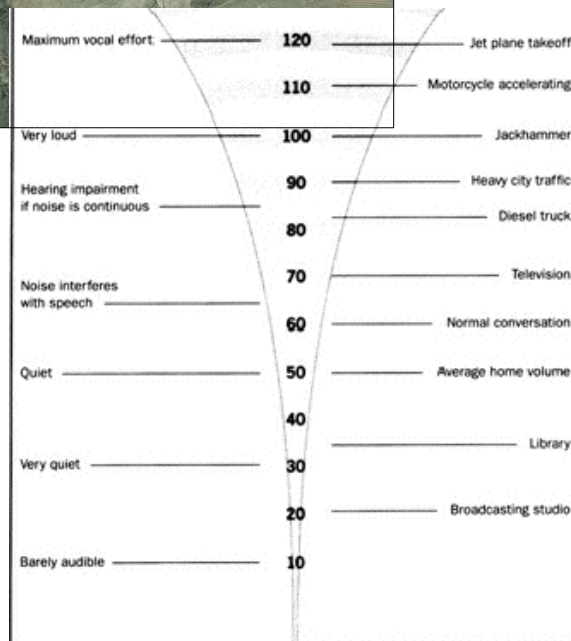


#### NOTES:

1. Sound levels for the Cooper 2200 kVA Pad Mounted Transformers have sound level of 62 dBA [measured at 0.3 meter, as per NEMA TR1 (ANSI/IEEE Std. C57.12-90-1993, sec. 13.3.4)] Assuming the measurement was taken at 1 meter to be conservative, the calculated sound level at 3 meters is 52.5 dBA.
2. Other decibel ranges were derived using the following distance damping equation  $[L_2 = L_1 - 20 \log(d_1/d_2)]$ . This damping equation was the only factor considered in decibel range attenuation estimates. Elevation, ambient noise, vegetation, angle of solar array and other structures which would further effect the attenuation of sound levels were not considered in this study. Nighttime sound levels depicted are for the (1) 2200 kVA Cooper Pad Mounted Transformer operating at maximum noise level.
3. For nighttime calculations it was assumed that the array inverters make negligible noise when not loaded with power or operating. For the nighttime calculation we assumed they will make no noise and only modeled the (1) 2200 kVA Cooper Pad Mounted Transformer running at maximum noise.
4. Sound levels reported do not account for any background noise. Local background noise may exceed sound created by project equipment.

#### Legend:

- 50 dBA range
- 40 dBA range
- 30 dBA range



Decibel Breakdown Compared to Everyday Noises

## NIGHTTIME OPERATION SOUND LEVEL PLAN

Project: BORRELLI ROAD SOLAR

Location: EAST HAVEN, CT

Plan ID:

**S-2**

## BASIC SOUND LEVEL ESTIMATES FOR NOISE PRODUCED BY PROJECT TRANSFORMERS

Scale:  
1" = 500'

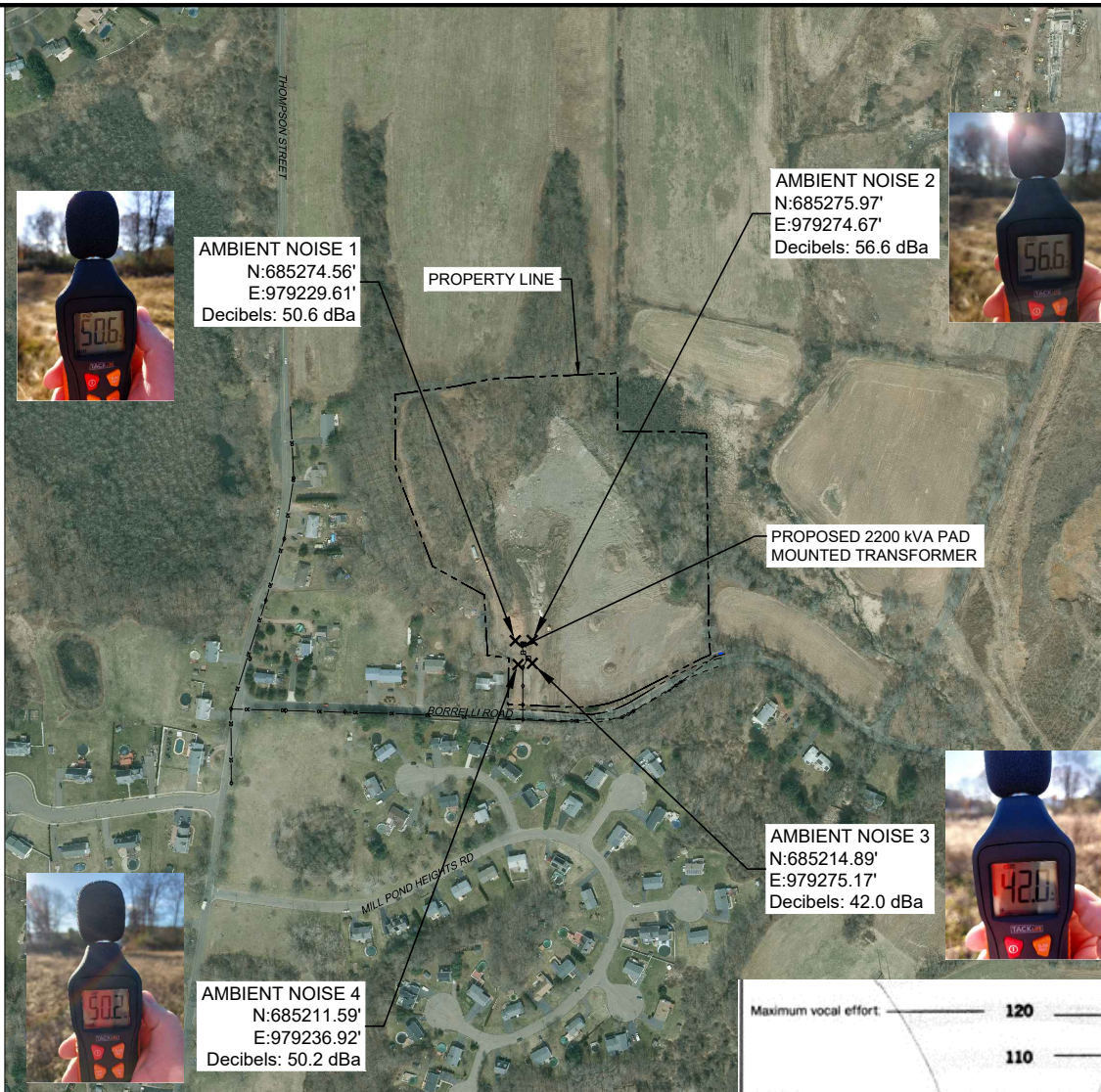
Date:  
12/11/24

DRAWN BY:  
CPG

CHECKED BY: JBC

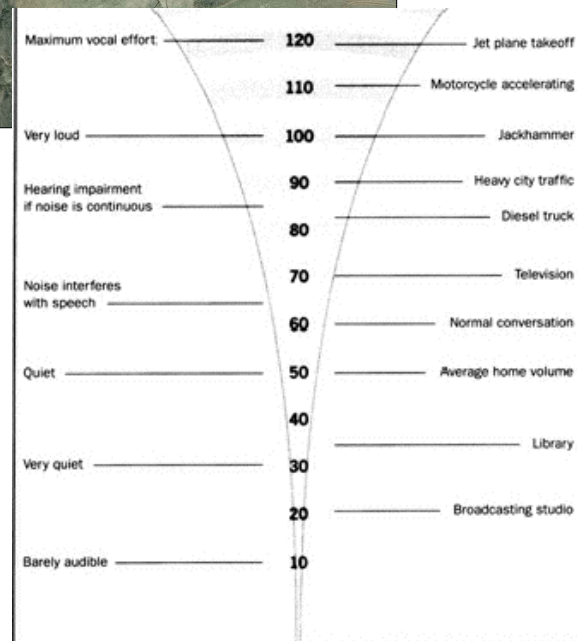
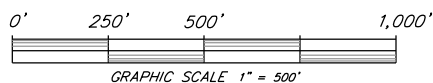
Revision Date:





#### NOTES:

1. Sound levels for the Cooper 2200 kVA Pad Mounted Transformers have sound level of 62 dBA [measured at 0.3 meter, as per NEMA TR1 (ANSI/IEEE Std. C57.12-90-1993, sec. 13.3.4)] Assuming the measurement was taken at 1 meter to be conservative, the calculated sound level at 3 meters is 52.5 dBA.
2. Other decibel ranges were derived using the following distance damping equation [ $L_2 = L_1 - 20 \log(d_1/d_2)$ ]. This damping equation was the only factor considered in decibel range attenuation estimates. Elevation, ambient noise, vegetation, angle of solar array and other structures which would further effect the attenuation of sound levels were not considered in this study. Nighttime sound levels depicted are for the (1) 2200 kVA Cooper Pad Mounted Transformer operating at maximum noise level.
3. For nighttime calculations it was assumed that the array inverters make negligible noise when not loaded with power or operating. For the nighttime calculation we assumed they will make no noise and only modeled the (1) 2200 kVA Cooper Pad Mounted Transformer running at maximum noise.
4. Sound levels reported do not account for any background noise. Local background noise may exceed sound created by project equipment.



Decibel Breakdown Compared to Everyday Noises

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**ecos**  
ENERGY  
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SUITE 1600  
MINNEAPOLIS, MN 55402

### NIGHTTIME OPERATION SOUND LEVEL PLAN

Project: BORRELLI ROAD SOLAR

Location: EAST HAVEN, CT

Plan ID:

**S-3**

### EXISTING SOUND LEVEL READINGS NEAR PROPOSED PROJECT TRANSFORMERS

Scale:  
1" = 500'

Date:  
12/11/24

DRAWN BY:  
CPG

CHECKED BY: JBC

Revision Date: