SOUND LEVEL ASSESSMENT REPORT

Grazing Yak Solar Project
El Paso County, Colorado

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1.0   EXECUTIVE SUMMARY

The Grazing Yak Solar Project (the Project) is a proposed solar power generation facility with a total capacity of approximately 35 megawatts (MW). The project will span a 270 acre site (Project Area) in El Paso County, Colorado. The Project is being developed by Grazing Yak Solar, LLC, a wholly-owned indirect subsidiary of NextEra Energy Resources (NEER). Epsilon Associates, Inc. (Epsilon) has been retained by NEER to conduct a sound level assessment for this Project.

The assessment included computer modeling to predict operational sound levels and construction sound levels from the Project. These predicted sound levels were then compared to the El Paso County regulatory limits. The operational sound analysis includes a total of 12 photovoltaic (PV) inverters, all of which have a capacity of 2,700 kW which is representative of the proposed inverters for Grazing Yak Solar. The construction sound analysis includes three expected phases (site clearing & grading, pile driving, and crane/trucking activities). This Project is required to comply with the El Paso County Ordinance Concerning Noise Levels in Unincorporated El Paso County, which are set forth in Section 4 of this report. The most restrictive of the sound level limits applicable to operational sound levels is the nighttime maximum sound level of 50 dBA for a residential, commercial, or non-specified area. Although this is a solar power generation facility, nighttime limits are applicable as there will be periods during the year when inverters have the potential to operate prior to sunset which would be during a "nighttime" period per the ordinance definition. The most restrictive of the sound level limits applicable to construction sound levels for any area during the daytime is 80 dBA.

The worst-case operational L_{eq} sound levels produced by the Project were predicted through modeling. These modeled sound levels are below the El Paso County limit of 50 dBA at all receptors and project boundaries, and therefore the operational sound from the Project will comply with the County sound level limits when operating at full capacity.

The worst-case construction sound levels produced by the Project were predicted through modeling. These modeled sound levels are above the El Paso County limit of 80 dBA at adjacent property lines when construction activities are occurring close to the project boundary. It is Epsilon's understanding that NEER will obtain a temporary construction sound level waiver for these adjacent properties. At all other locations farther away than these closest adjacent parcels, the modeled construction sound levels are below the El Paso County limit of 80 dBA, and therefore construction activities associated with the Project will comply with the County sound level limits.
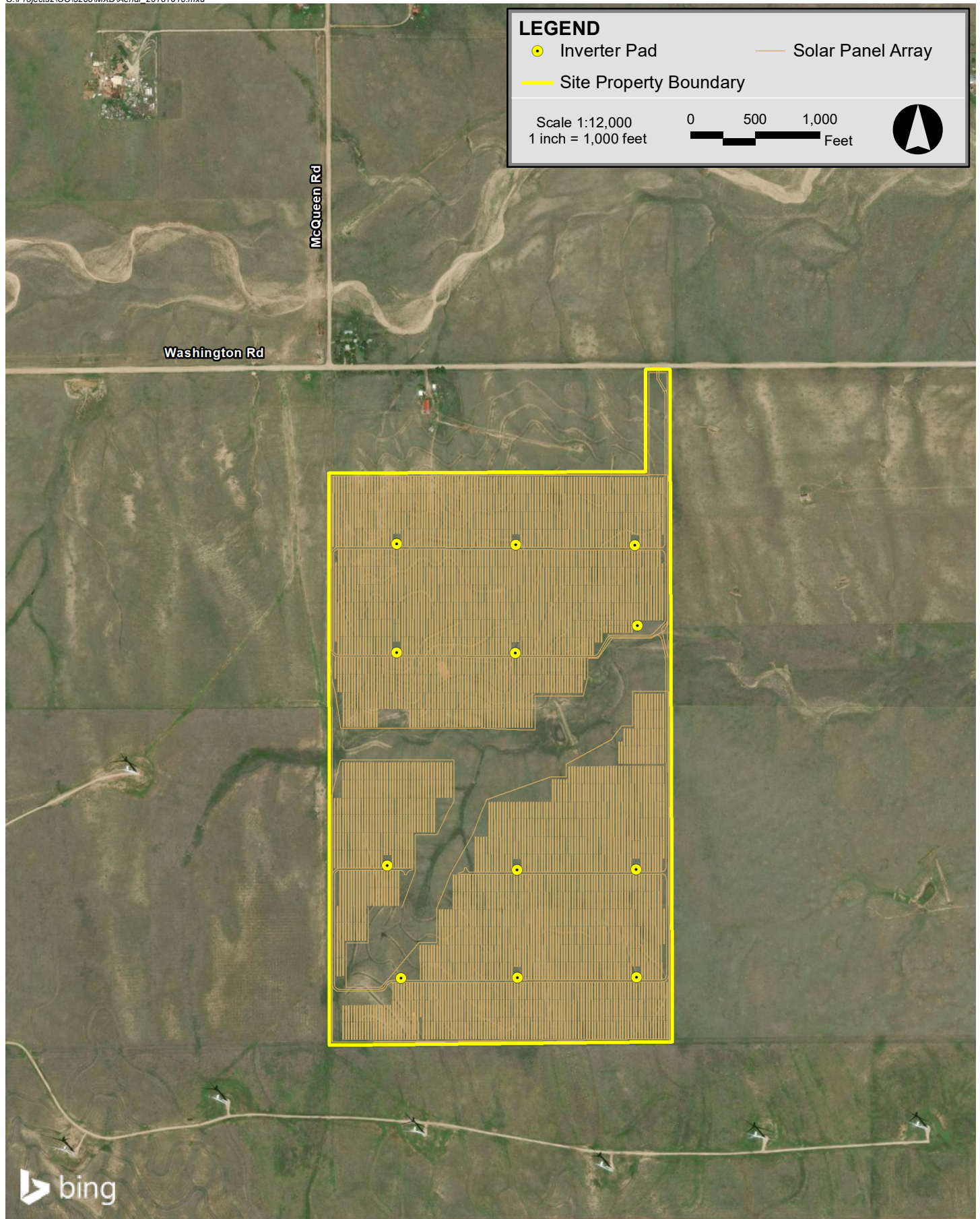
2.0   INTRODUCTION

The proposed Project to be located in El Paso County, Colorado will consist of twelve (12) 2,700 kW PV inverters and a solar panel array on a parcel approximately 270 acres in size. This parcel is located within the Golden West Wind Energy Center. The Project will be tied into an existing collector substation several miles north of the proposed array, and therefore the substation was not included in this analysis. Figure 2-1 shows the locations of the 12 proposed inverters, the solar panel array, and the project boundary over aerial imagery in El Paso County.

Ground-mounted solar array PV inverters and transformers produce a humming sound during time periods when sunlight is shining onto the panels, when the array generates electricity. At night, or when there is no sunlight shining on the panels, the project equipment does not produce any operational sound.

This report presents the findings of a sound level modeling analysis for the Project. The operational sound of the PV inverters was modeled in Cadna/A using sound data from measurements of a similar PV inverter unit provided by NEER. The construction activities associated with the Project were modeled using the Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM) using empirical data and standard sound levels of construction equipment. The results of this analysis are found within this report.

LEGEND

⊙ Inverter Pad   —— Solar Panel Array

—— Site Property Boundary

Scale 1:12,000
1 inch = 1,000 feet

0   500   1,000

Feet

McQueen Rd

Washington Rd

Grazing Yak Solar   El Paso County, Colorado

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Figure 2-1
Aerial Locus

3.0   SOUND METRICS

There are several ways in which sound levels are measured and quantified. All of them use the logarithmic decibel (dB) scale.   The following information defines the sound level terminology used in this analysis.

The decibel scale is logarithmic to accommodate the wide range of sound intensities found in the environment. A property of the decibel scale is that the sound pressure levels of two or more separate sounds are not directly additive. For example, if a sound of 50 dB is added to another sound of 50 dB, the total is only a 3-decibel increase (53 dB), which is equal to doubling in sound energy but not equal to a doubling in decibel quantity (100 dB). Thus, every 3-dB change in sound level represents a doubling or halving of sound energy. Relative to this characteristic, a change in sound levels of less than 3 dB is imperceptible to the human ear.

Another mathematical property of decibels is that if one source of sound is at least 10 dB louder than another source, then the total sound level is simply the sound level of the higher-level source. For example, a sound source at 60 dB plus another sound source at 47 dB is equal to 60 dB.

A sound level meter (SLM) that is used to measure sound is a standardized instrument.[1]   It contains "weighting networks" (e.g., A-, C-, Z-weightings) to adjust the frequency response of the instrument. Frequencies, reported in Hertz (Hz), are detailed characterizations of sounds, often addressed in musical terms as "pitch" or "tone". The most commonly used weighting network is the A-weighting because it most closely approximates how the human ear responds to sound at various frequencies. The A-weighting network is the accepted scale used for community sound level measurements; therefore, sounds are frequently reported as detected with a sound level meter using this weighting. A-weighted sound levels emphasize middle frequency sounds (i.e., middle pitched – around 1,000 Hz), and de-emphasize low and high frequency sounds. These sound levels are reported in decibels designated as "dBA". Z-weighted sound levels are measured sound levels without any weighting curve and are otherwise referred to as "unweighted". Sound pressure levels for some common indoor and outdoor environments are shown in Figure 3-1.

Because the sounds in our environment vary with time they cannot simply be described with a single number. Two methods are used for describing variable sounds. These are exceedance levels and the equivalent level, both of which are derived from a large number of moment-to-moment A-weighted sound level measurements. Exceedance levels are values

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[1]   *American National Standard Specification for Sound Level Meters*, ANSI S1.4-1983 (R2006), published by the Standards Secretariat of the Acoustical Society of America, Melville, NY.
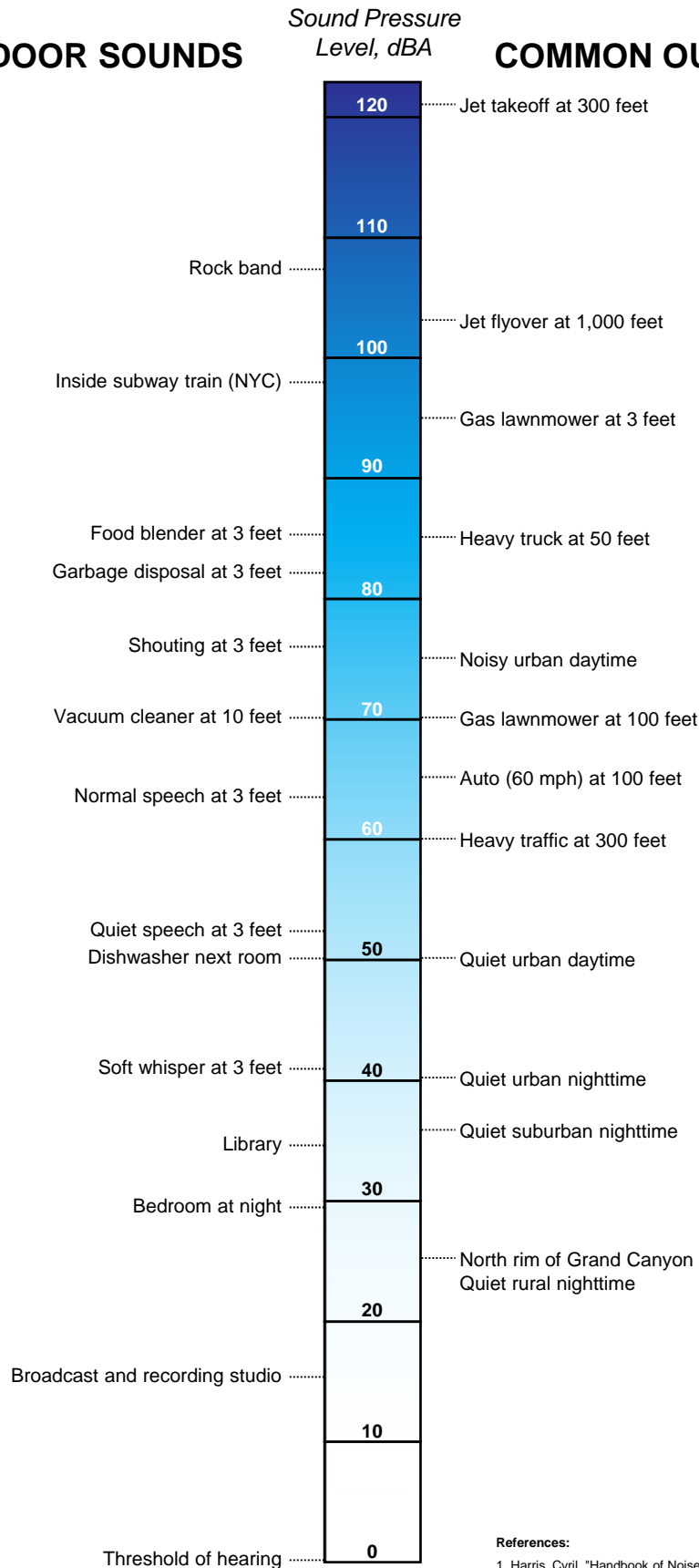
from the cumulative amplitude distribution of all of the sound levels observed during a measurement period. Exceedance levels are designated L_n, where n can have a value between 0 and 100 in terms of percentage. Several sound level metrics that are reported in community sound monitoring are described below.

♦ L_{10} is the sound level exceeded only 10 percent of the time. It is close to the maximum level observed during the measurement period. The L_{10} is sometimes called the intrusive sound level because it is caused by occasional louder sounds like those from passing motor vehicles.

♦ L_{50} is the sound level exceeded 50 percent of the time. It is the median level observed during the measurement period. The L_{50} is affected by occasional louder sounds like those from passing motor vehicles; however, it is often found comparable to the equivalent sound level under relatively steady sound level conditions.

♦ L_{90} is the sound level exceeded 90 percent of the time during the measurement period. The L_{90} is close to the lowest sound level observed. It is essentially the same as the residual sound level, which is the sound level observed when there are no obvious nearby intermittent sound sources.

♦ L_{eq}, the equivalent level, is the level of a hypothetical steady sound that would have the same energy (*i.e.,* the same time-averaged mean square sound pressure) as the actual fluctuating sound observed. The equivalent level is designated L_{eq} and is typically A-weighted. The equivalent level represents the time average of the fluctuating sound pressure, but because sound is represented on a logarithmic scale and the averaging is done with linear mean square sound pressure values, the L_{eq} is mostly determined by loud sounds if there are fluctuating sound levels.

♦ L_{max}, the maximum level, is the highest instantaneous sound pressure level (root mean squared) of a given time period. The L_{max} is typically A-weighted and can be based on either a fast or slow time constant.

COMMON INDOOR SOUNDS

Sound Pressure Level, dBA

COMMON OUTDOOR SOUNDS

Indoor	dBA	Outdoor
	120	Jet takeoff at 300 feet
Rock band	110	
	100	Jet flyover at 1,000 feet
Inside subway train (NYC)		Gas lawnmower at 3 feet
	90	
Food blender at 3 feet		Heavy truck at 50 feet
Garbage disposal at 3 feet	80	
Shouting at 3 feet		Noisy urban daytime
Vacuum cleaner at 10 feet	70	Gas lawnmower at 100 feet
		Auto (60 mph) at 100 feet
Normal speech at 3 feet	60	Heavy traffic at 300 feet
Quiet speech at 3 feet	50	
Dishwasher next room		Quiet urban daytime
Soft whisper at 3 feet	40	Quiet urban nighttime
Library		Quiet suburban nighttime
	30	
Bedroom at night		North rim of Grand Canyon Quiet rural nighttime
	20	
Broadcast and recording studio		
	10	
Threshold of hearing	0	

References:

1. Harris, Cyril, "Handbook of Noise Acoustical Measurements and Noise Control", p 1-10., 1998

2. "Controlling Noise", USAF, AFMC, AFDTC, Elgin AFB, Fact Sheet, August 1996

3. California Dept. of Trans., "Technical Noise Supplement", Oct, 1998

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Figure 3-1
Common Sound Levels in the Environment

4.0 NOISE REGULATIONS

The proposed Grazing Yak Solar Project within El Paso County, CO is required to comply with Section 5 of the Ordinance Concerning Noise Levels in Unincorporated El Paso County (Ordinance NO. 02-1) which states:

Section 5. Maximum Permissible Noise Levels:

(a) Sound levels shall be measured in dB(A) as provided for in Section 6 of this Ordinance

(b) During the time periods indicated below, and on the types of property indicated below, the sound levels permitted by this Ordinance shall be observed:

Land Uses	Maximum Noise [dB(A)] 7:00 a.m. – 7:00 p.m.	Maximum Noise [dB(A)] 7:00 p.m. – 7:00 a.m.
Residential property or Commercial area	55 dB(A)	50 dB(A)
Industrial area or Construction Activities	80 dB(A)	75 dB(A)
Non-specified areas	55 dB(A)	50 dB(A)

(c) In the hours between 7:00 a.m. and 7:00 p.m., the noise levels permitted by this section may be exceeded by ten (10) dBA for a period not to exceed fifteen (15) minutes in any one (1) hour period.

Therefore, operational sound levels at the closest property lines were conservatively evaluated against the most stringent 50 dBA limit, and daytime construction sound levels were evaluated against the 80 dBA limit.

5.0 OPERATIONAL SOUND LEVELS

5.1 Sound Sources

5.1.1 Photovoltaic Inverters

The operational sound level analysis for the Project conservatively includes 12 photovoltaic (PV) inverters operating at full load. All 12 of the units have a capacity of 2,700 kW and will be mounted on individual concrete pads. The pads will be approximately four feet in height, and the PV units will be approximately six feet in height. Measured sound levels of a similar sized PV inverter from a technical report[2] were provided by NEER. The report presented measured broadband sound pressure levels at distances close to an inverter unit operating at full load. The data from this report were used to calculate a sound power level which was then entered into the acoustic model. The resulting broadband sound power level of the unit used for acoustic modeling was 79 dBA.

5.2 Modeling Methodology

The sound impacts associated with the proposed solar project were predicted using the Cadna/A sound level calculation software developed by DataKustik GmbH. This software uses the ISO 9613-2 international standard for sound propagation (Acoustics - Attenuation of sound during propagation outdoors - Part 2: General method of calculation). The benefits of this software are a more refined set of computations due to the inclusion of topography, ground attenuation, multiple building reflections (if applicable), drop-off with distance, and atmospheric absorption. The Cadna/A software allows for calculation of sound from multiple sources as well as computation of diffraction.

Inputs and significant parameters employed in the model are described below:

♦ *Project Layout:* An AutoCAD plan of the Project layout was provided by NEER via email on September 21, 2018. The 12 proposed PV inverters were input into the model. The proposed PV inverters, panel locations, and project boundary are identified in Figure 5-1.

♦ *Modeling Receptor Locations:* A dataset containing receptors within 1-mile of the solar array was provided by NEER on September 21, 2018. Included in the dataset was the occupancy status for each receptor. All of the 80 provided receptors were input into the Cadna/A model. These modeling receptors were modeled as discrete

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[2]   Two Creeks Solar Project Appendix A. Acoustic Noise Specifications – Inverters. August 16, 2018.

points at a height of 1.5 meters above ground level to mimic the ears of a typical standing person. All modeling receptors are identified in Figure 5-1 and are distinguished as either occupied or unoccupied.

♦ A modeling grid with 10-meter spacing was calculated for the entire Project Area. The grid was modeled at a height of 1.5 meters above ground level (AGL) for consistency with the discrete modeling points. This modeling grid allowed for the creation of sound level isolines.

♦ *Terrain Elevation:* Elevation contours for the modeling domain were directly imported into Cadna/A which allowed for consideration of terrain shielding where appropriate. The terrain height contour elevations for the modeling domain were generated from elevation information derived from the National Elevation Dataset (NED) developed by the U.S. Geological Survey.

♦ *Source Sound Levels:* Maximum broadband sound power levels for the PV inverters provided in a technical report for a similar unit was input to the model. These sound levels represent "worst-case" operational sound level emissions.

♦ *Meteorological Conditions:* A temperature of 10ºC (50ºF) and a relative humidity of 70% was assumed in the model.

♦ *Ground Attenuation:* Spectral ground absorption was calculated using a G-factor of 0 for the inverter pad areas which corresponds to a hard ground surface (concrete). All other areas of the modeling domain used a G-factor of 0.5 which corresponds to "mixed ground" consisting of both hard and porous ground cover. This method yields more conservative results (i.e., higher sound levels) as the vast majority of the area is actually agricultural.

G:\Projects2\CO\5268\MXD\Modeling_Receptor_Locations_20181016.mxd

LEGEND

- ⊙ Inverter Pad
- ● Occupied Receptor
- ● Unoccupied Receptor
- ▬ Site Property Boundary
- ▬ Solar Panel Array

Scale 1:22,800
1 inch = 1,900 feet

0   950   1,900   Feet

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Figure 5-1
Modeling Receptor Locations
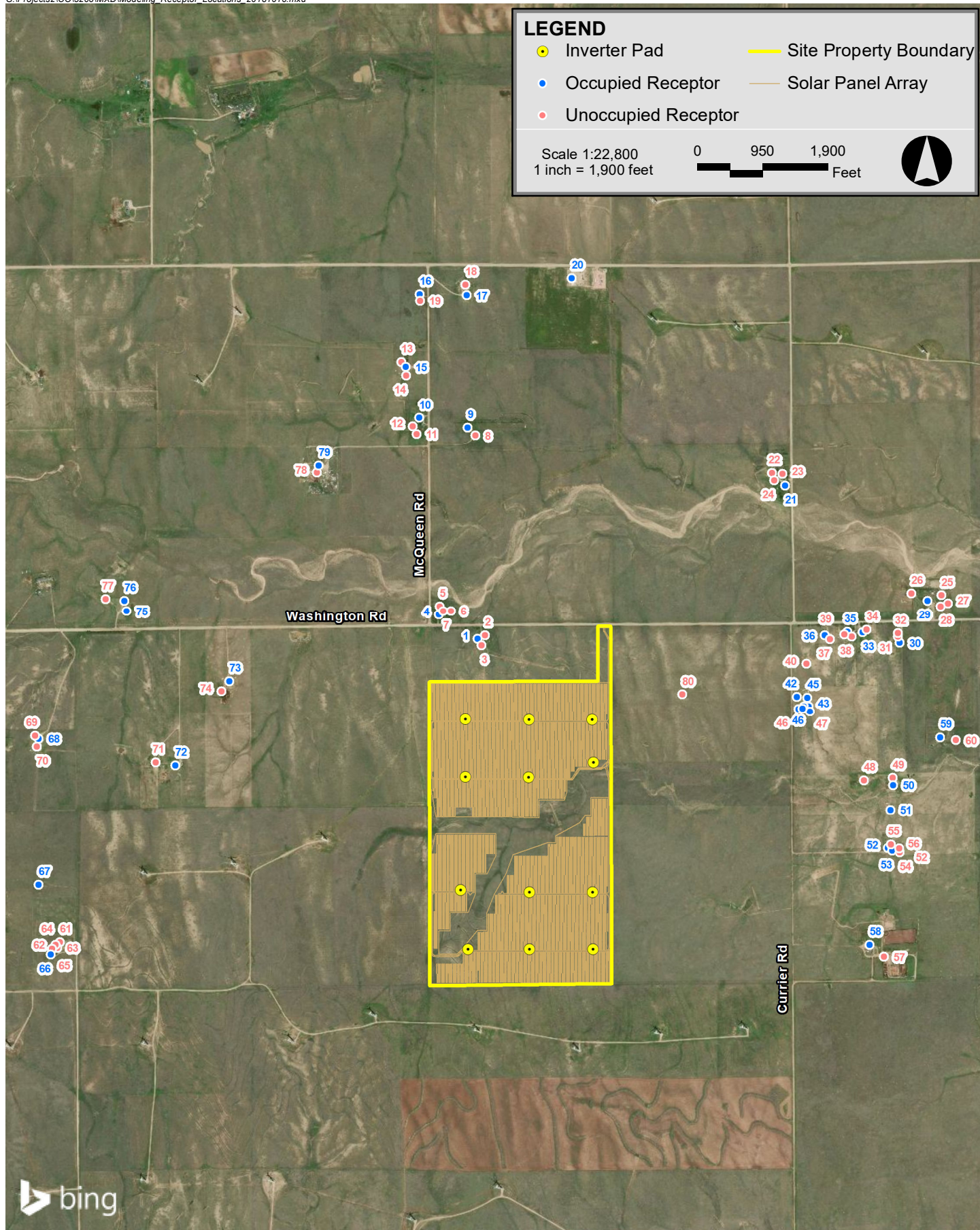
Several modeling assumptions inherent in the ISO 9613-2 calculation methodology, or selected as conditional inputs by Epsilon, were implemented in the Cadna/A model to ensure conservative results (i.e., higher sound levels), and are described below:
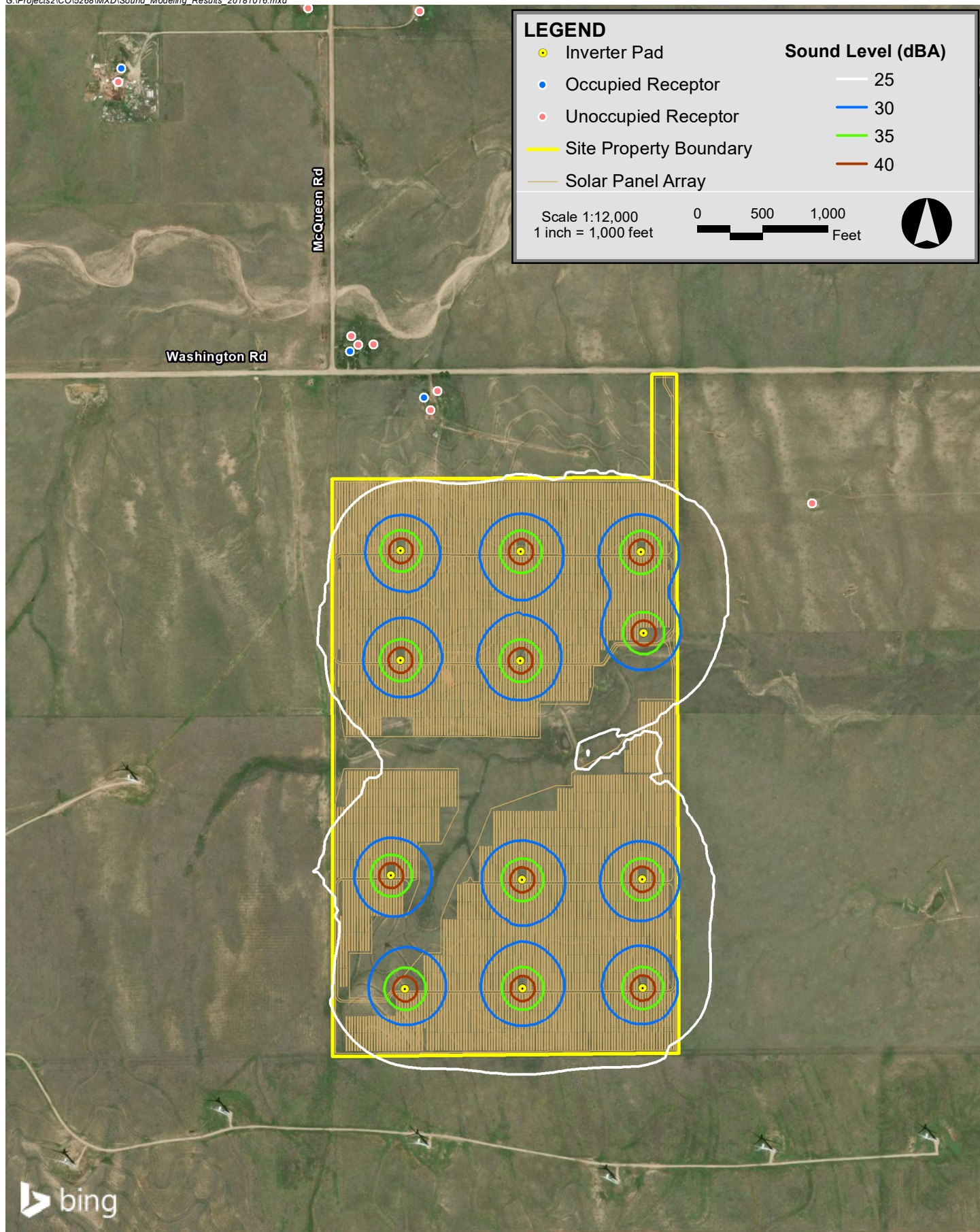
♦ All modeled sources were assumed to be operating simultaneously and at maximum load corresponding to the greatest sound level impacts.

♦ As per ISO 9613-2, the model assumed favorable conditions for sound propagation, corresponding to a moderate, well-developed ground-based temperature inversion, as might occur on a calm, clear night or equivalently downwind propagation.

♦ Meteorological conditions assumed in the model (T = 10°C/RH = 70%) were selected to minimize atmospheric attenuation in the 500 Hz and 1 kHz octave bands where the human ear is most sensitive.

♦ No additional attenuation due to tree shielding, air turbulence, or wind shadow effects was considered in the model.

5.3   Sound Level Modeling Results

All modeled sound levels, as output from Cadna/A are A-weighted equivalent sound levels (L_{eq}, dBA).

Table A-1 in Appendix A shows the predicted Project Only broadband (dBA) sound levels at the 80 receptors modeled within 1 mile of the Project Area. These broadband L_{eq} sound levels range from 3 to 20 dBA and represent the worst-case future L_{eq} sound levels produced solely by PV inverters associated with the Project. In addition to these discrete modeling points, sound level isolines generated from the modeling grid are presented in Figure 5-2.

LEGEND

		Sound Level (dBA)
⊙	Inverter Pad	— 25
●	Occupied Receptor	— 30
●	Unoccupied Receptor	— 35
—	Site Property Boundary	— 40
—	Solar Panel Array	

Scale 1:12,000
1 inch = 1,000 feet

0   500   1,000 Feet

McQueen Rd

Washington Rd

Grazing Yak Solar   El Paso County, Colorado

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Figure 5-2
Operational Sound Levels

6.0   CONSTRUCTION SOUND LEVELS

6.1   Construction Activities

Construction activities related to the installation of the solar array will generally consist of three principal phases, including:

- Site clearing and grading

- Pile driving, and

- Erection (solar panel array installation)

The primary noise-producing equipment for the first phase of construction includes a backhoe, bulldozer, and dump truck. The primary equipment for the second phase is an impact pile driver. During the third phase, construction equipment will include operation of a crane and a flatbed truck. Construction of the Project is expected to last approximately five months.
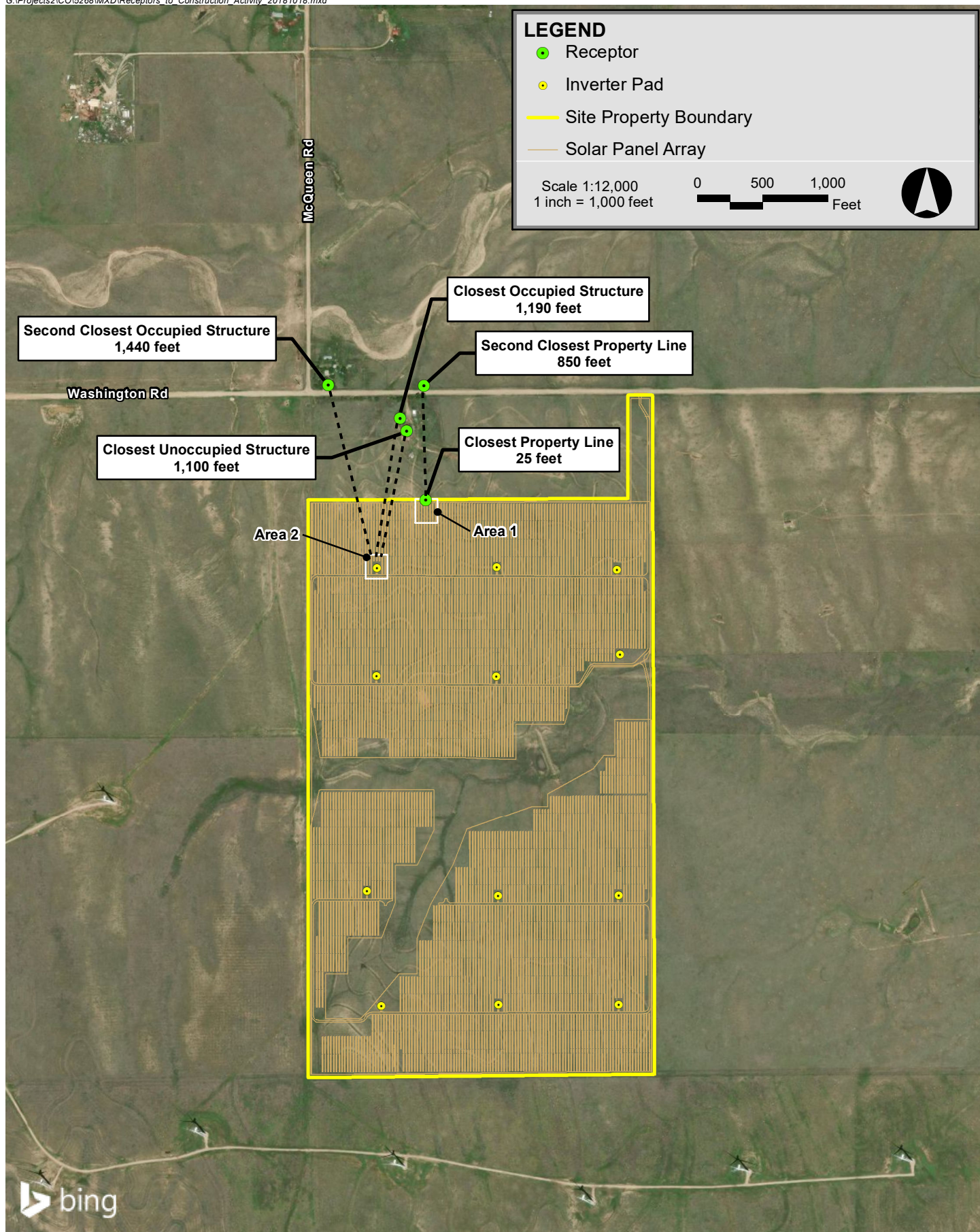
6.2   Modeling Methodology

The sound impacts associated with construction of the Project were predicted using the Roadway Construction Noise Model[3] (RCNM) sound level calculation software developed by the Federal Highway Administration (FHWA). This software predicts noise from construction operations based on a compilation of empirical data and the application of acoustical propagation formulas.

For each phase of construction, sound levels produced by the equipment group associated with that phase were predicted assuming the equipment was located at two different locations: Area 1 and Area 2. Area 1 represents a location 25 feet from the site property line, which is the shortest distance to an adjacent parcel that construction could occur. Area 2 is a second representative location where construction activity is expected to occur and is conservatively located at the closest inverter pad to a structure. Sound levels from each phase of construction were predicted at five different distances representing the closest property lines and structures to Area 1 and Area 2. The distances evaluated for construction noise impacts are: 1) 25 feet, 2) 850 feet, 3) 1,100 feet, 4) 1,190 feet, and 5) 1,440 feet. Figure 6-1 shows the assumed locations of construction activity and distances between those areas and the closest receptors.

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[3]   Federal Highway Administration's Roadway Construction Noise Model (RCNM) Software Version 1.1, 12/08/2008. US Department of Transportation Research and Innovative Technology Administration.

LEGEND

- Receptor
- Inverter Pad
- Site Property Boundary
- Solar Panel Array

Scale 1:12,000
1 inch = 1,000 feet

0   500   1,000   Feet

Closest Occupied Structure
1,190 feet

Second Closest Occupied Structure
1,440 feet

Second Closest Property Line
850 feet

Washington Rd

Closest Unoccupied Structure
1,100 feet

Closest Property Line
25 feet

McQueen Rd

Area 2   Area 1

bing

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Figure 6-1
Closest Receptors to Construction Activity

At times when construction activity is occurring further away from property boundaries and receptors, sound levels will be less than those predicted in this analysis.

6.3   Sound Level Modeling Results

All modeled sound levels, as output from RCNM are presented as both A-weighted equivalent sound levels (L_{eq}, dBA) and A-weighted maximum sound levels (L_{max}, dBA).

Tables 6-1 through 6-3 below show the predicted sound levels at the four receptors for each phase of construction.   The broadband L_{eq} sound levels range from 45 to 100 dBA.   The broadband L_{max} sound levels range from 51 to 107 dBA and represent the worst-case sound levels produced during construction activity associated with the project.   Although sound levels at the closest property line is predicted to exceed the construction sound level limits, it is Epsilon's understanding that NEER will seek noise waivers from these closest adjacent properties.

Table 6-1   Sound Level During Phase 1 (Site Grading)

Receptor	Distance from Activity to Receptor	L_{max} (dBA)	L_{eq} (dBA)
Closest Property Line	25 ft	88	86
2nd Closest Property Line	850 ft	57	55
Closest Occupied Structure	1,190 ft	54	52
Closest Unoccupied Structure	1,100 ft	55	53
2nd Closest Occupied Structure	1,440 ft	53	51

Table 6-2   Sound Level During Phase 2 (Pile Driving)

Receptor	Distance from Activity to Receptor	L_{max} (dBA)	L_{eq} (dBA)
Closest Property Line	25 ft	107	100
2nd Closest Property Line	850 ft	77	70
Closest Occupied Structure	1,190 ft	74	67
Closest Unoccupied Structure	1,100 ft	74	67
2nd Closest Occupied Structure	1,440 ft	72	65

Table 6-3   Sound Level During Phase 3 (Panel Erection)

Receptor	Distance from Activity to Receptor	L_{max} (dBA)	L_{eq} (dBA)
Closest Property Line	25 ft	87	81
2nd Closest Property Line	850 ft	56	50
Closest Occupied Structure	1,190 ft	53	45
Closest Unoccupied Structure	1,100 ft	54	48
2nd Closest Occupied Structure	1,440 ft	51	45

7.0   EVALUATION OF SOUND LEVELS

The proposed Grazing Yak Solar Project within El Paso County, CO is required to comply with the sound level requirements in Section 5 of the Ordinance Concerning Noise Levels in Unincorporated El Paso County (Ordinance NO. 02-1) presented in Section 4 of this report.

7.1   Operational Sound Levels

For operational sound from the Project, the receptors and project boundary line have been conservatively evaluated against the nighttime residential sound level limit of 50 dBA. Although this is a solar power generation facility, nighttime limits are applicable as there will be periods during the year when inverters have the potential to operate prior to sunset which would be during a "nighttime" period per the ordinance definition.

The highest predicted worst-case Project Only L_{eq} sound level at a modeling receptor is 20 dBA. This sound level is modeled at four different receptors (ID #1, #2, #3 and #80). Of these four receptors, only ID #1 is an occupied structure. As shown in Figure 5-2, the 35 dBA sound isoline remains completely within the Project boundary. Therefore, the project sound levels are below the most restrictive El Paso County sound limit of 50 dBA for all receptors and property lines. Project Only modeled sound levels at receptors sorted from high to low are presented in Table A-1 of Appendix A.

7.2   Construction Sound Levels

For construction sound from the project, the receptors and project boundary line have been evaluated against the daytime sound level limit of 80 dBA[4].

The highest predicted worst-case L_{eq} construction sound level at a modeling receptor is 100 dBA. The highest predicted worst-case L_{max} construction sound level at a modeling receptor is 107 dBA. Both of these sound levels occur at the closest property line during times when construction activity is closest to the Project boundaries. Although these sound levels exceed the El Paso County construction noise limit, it is Epsilon's understanding that NEER will obtain a sound waiver for these closest properties. At all other locations during all phases of construction, sound levels are predicted to be below the County limit.

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[4]   Construction of the project is expected to occur during daytime hours only (7 a.m. – 7 p.m.)

8.0   CONCLUSIONS

A sound level modeling assessment was conducted for the Grazing Yak Solar Project in El Paso County, Colorado.

The highest predicted worst-case Project Only operational sound levels at a project boundary and at discrete point modeling receptors were all below the most restrictive El Paso County sound limit of 50 dBA. The highest predicted construction sound levels at an adjacent property boundary were above the El Paso County sound limit of 80 dBA. It is Epsilon's understanding that NEER will seek a sound waiver at these closest adjacent properties for construction noise. At all other structures farther away than the closest adjacent properties, construction sound levels all predicted to be below the El Paso County sound limit of 80 dBA.

Table A-1: Sound Level Modeling Results at Discrete Points in El Paso County - Sorted by Sound Level

| Modeling ID | Occupancy Status | Coordinates UTM NAD83 Zone 13N | | Source Only Broadband Sound Level (dBA) |
		X (m)	Y (m)	
3	Unoccupied	564533	4315126	20
80	Unoccupied	565424	4314909	20
1	Occupied	564518	4315155	20
2	Unoccupied	564550	4315171	20
4	Occupied	564345	4315264	18
7	Unoccupied	564365	4315278	18
5	Unoccupied	564349	4315299	17
6	Unoccupied	564400	4315279	17
45	Occupied	565978	4314895	13
41	Occupied	565940	4314844	13
46	Occupied	565963	4314856	12
47	Occupied	565957	4314847	13
42	Occupied	565932	4314898	12
43	Occupied	565983	4314856	12
44	Occupied	565989	4314832	12
48	Unoccupied	566230	4314527	12
58	Occupied	566255	4313796	11
51	Occupied	566347	4314397	11
52	Occupied	566335	4314227	11
50	Occupied	566359	4314507	11
53	Occupied	566356	4314215	11
55	Unoccupied	566349	4314243	11
54	Unoccupied	566387	4314208	11
56	Unoccupied	566385	4314224	11
57	Unoccupied	566318	4313744	11
49	Unoccupied	566357	4314538	11
40	Unoccupied	565975	4315044	11
9	Occupied	564472	4316092	10
78	Unoccupied	563805	4315892	10
8	Unoccupied	564508	4316056	10
11	Unoccupied	564248	4316063	10
79	Occupied	563812	4315923	10
12	Unoccupied	564229	4316098	10
74	Unoccupied	563382	4314924	9
14	Unoccupied	564201	4316323	9
15	Occupied	564198	4316361	9
73	Occupied	563417	4314968	8
13	Unoccupied	564180	4316384	8
36	Occupied	566056	4315170	8
37	Unoccupied	566078	4315153	8
38	Unoccupied	566175	4315165	8
39	Unoccupied	566143	4315175	7
72	Occupied	563176	4314593	7
17	Occupied	564468	4316680	7
19	Unoccupied	564261	4316655	7
35	Occupied	566156	4315186	7
16	Occupied	564260	4316683	7

Table A-1: Sound Level Modeling Results at Discrete Points in El Paso County - Sorted by Sound Level

Modeling ID	Occupancy Status	Coordinates UTM NAD83 Zone 13N		Source Only Broadband Sound Level (dBA)
		X (m)	Y (m)	
18	Unoccupied	564462	4316727	7
20	Occupied Workspace	564935	4316756	7
33	Occupied	566223	4315183	7
71	Unoccupied	563091	4314607	7
30	Occupied	566387	4315138	7
60	Unoccupied	566637	4314705	7
31	Unoccupied	566380	4315165	7
32	Unoccupied	566380	4315179	7
34	Unoccupied	566241	4315196	7
24	Unoccupied	565831	4315858	6
21	Occupied	565879	4315835	6
22	Unoccupied	565821	4315891	6
23	Unoccupied	565868	4315886	6
59	Occupied	566566	4314716	6
75	Occupied	562961	4315278	6
29	Occupied	566512	4315325	5
76	Occupied Workspace	562952	4315325	5
25	Unoccupied	566573	4315349	5
26	Unoccupied	566439	4315358	5
28	Unoccupied	566569	4315300	4
27	Unoccupied	566602	4315314	4
67	Occupied	562570	4314065	4
77	Unoccupied	562868	4315334	4
61	Unoccupied	562665	4313807	4
63	Unoccupied	562654	4313783	4
64	Unoccupied	562645	4313796	4
62	Unoccupied	562642	4313783	4
65	Unoccupied	562631	4313779	4
66	Occupied	562626	4313753	4
68	Occupied	562572	4314711	3
70	Unoccupied	562564	4314676	3
69	Unoccupied	562555	4314724	3