Project:
Bear River Site Development Noise Analysis
Nevada County California
August 6, 2014

jcb Project # 2014-166

Prepared for:

Attn: Martin Wood
SCO Planning & Engineering, Inc.
140 Litton Drive, Suite 240
Grass Valley, CA 95947

1287 High Street, Auburn, California 95603 * 530-823-0960 (p) * (530)823-0961 (f)

INTRODUCTION

This report describes the existing noise environment in the area of the proposed Nevada County Corporation Yard Project in Nevada County, California, and will quantify the potential of the proposed project to generate noise levels exceeding the applicable Nevada County exterior noise level standards at noise-sensitive receptors in the project area.

The Nevada County Corporation Yard Project proposes to construct a new facility at 12350 La Barr Meadows Road on an existing 39.29 acre parcel. The project proposes the following:

- Construct a 28,000 S.F. Public Works and Transit Service Building and 6,000 S.F. County Storage Facility;
- Construct a Driveway Access Road;
- Construct a paved Vehicular and Truck circulation area along with 14 Bus Parking Stalls on approximately 2.4 acres;
- Construct Storage Sheds;
- Construct a Sand Storage Building and 35 paved employee parking stalls;
- Construct Emergency Overflow Parking;
- Concrete Demudding and Wash Basins.

Figure 1 shows the proposed project site plan.

The primary noise sources associated with the Nevada County Corporation Yard Project include, traffic on La Barr Meadows Road, loading and unloading of heavy equipment, and the starting, idling and exiting of vehicles and equipment.

ENVIRONMENTAL SETTING

BACKGROUND INFORMATION ON NOISE

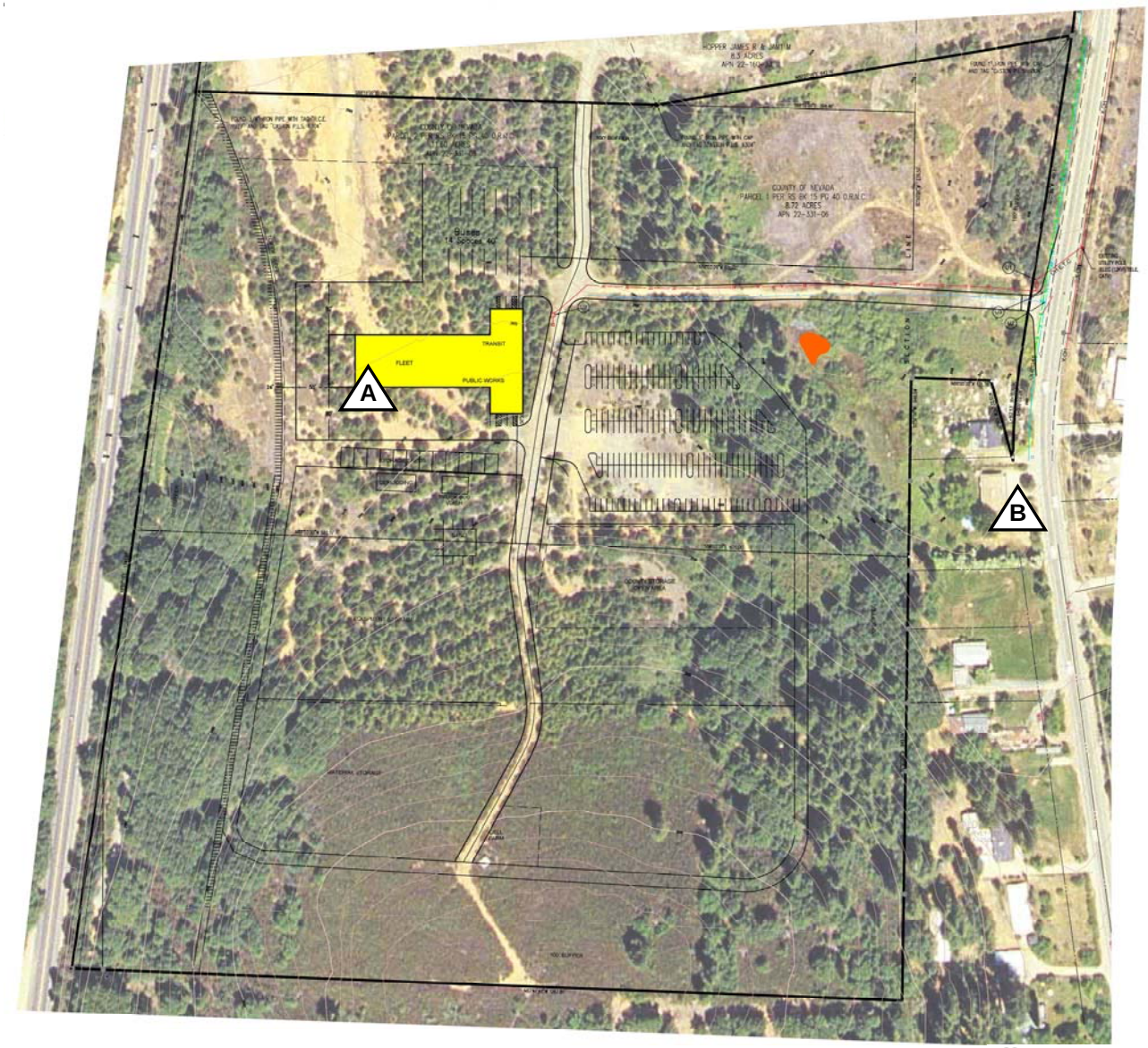
Fundamentals of Acoustics

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

Figure 1
Bear River Site Development – Nevada County, California
Project Site and Noise Measurement Locations



N

△ : Continuous Noise Measurement Site

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The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70 dBA sound is half as loud as an 80 dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Table 1 lists several examples of the noise levels associated with common situations. Appendix A provides a summary of acoustical terms used in this report.

TABLE 1
TYPICAL NOISE LEVELS

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol. November, 2009.

Effects of Noise on People

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference;
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- A 10 dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING CONDITIONS

The existing noise environment in the proposed project area is defined primarily by traffic on Highway 49 and La Barr Meadows Road which are adjacent to the west and east side of the project site.

EXISTING AMBIENT NOISE LEVELS

To quantify the existing ambient noise environment in the project vicinity, j.c. brennan & associates Inc. conducted continuous hourly noise level measurements on the project site, on July 8th, 2014.

The noise measurement location is shown on Figure 1. A summary of the noise level measurement survey results is provided in Table 2.

Equipment used for the noise measurement survey included a Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter. The meter was calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

TABLE 2
SUMMARY OF EXISTING BACKGROUND NOISE MEASUREMENT DATA

Site	Date	L_{dn}	Average[1] Measured Hourly Noise Levels, dB					
			Daytime (7am-10pm)			Nighttime (10pm-7am)		
			L_{eq}	L_{50}	L_{max}	L_{eq}	L_{50}	L_{max}
Continuous 24-hour Noise Level Measurements								
A	7/8/2014	56.9	54	54	63	50	46	59
B	7/8/2014	70	68	63	84	61	43	80

1. Average values reported are the average of the hourly measured values over the daytime or nighttime period. Continuous measurements were conducted for 1-hour intervals over the 24-hr measurement period

Source: j.c. brennan & associates, Inc., 2014

EXISTING TRAFFIC NOISE LEVELS

To describe existing noise levels due to traffic, the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. The model is based upon the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly Leq values for free-flowing traffic conditions. Traffic volumes for existing conditions were obtained from the Nevada County General Plan EIR. Truck usage on the area roadways were estimated from field observations. Existing traffic noise levels are summarized in Table 3. Appendix C shows the inputs to the FHWA Model.

Table 3
Existing Traffic Noise Levels and Distance to Contours

Roadway	Segment	Ldn (dB) @ 100 feet	Distance to Contours (feet)		
			65 dB L_{dn}	60 dB L_{dn}	55 dB L_{dn}
La Barr Meadows Road	McNight Way to Dog Bar Road (ADT = 6,695 vehicles)	61 dBA	54	116	251

Notes: Distances to traffic noise contours are measured in feet from the centerlines of the roadways.
Source: j.c. brennan & associates, Inc., 2014 - FHWA RD-77-108 Traffic Noise Prediction Model, Nevada County General Plan Final EIR, Volume I, 1995

Regulatory Context

Nevada County Zoning Ordinance

Table L-II 4.1.7 (Table 3) of the Nevada County Zoning Regulations establishes the following noise standards which would apply to the proposed project on-site operations and activities.

Table 4
Exterior Noise Limits
Nevada County Zoning Regulations

Land Use Category	Time Period	Noise Level, dBA	
		L_{eq}	L_{max}
Rural (AG, TPZ, AE, OS, FR, IDR Zoning Districts)	7am – 7pm	55	75
	7pm – 10pm	50	65
	10pm – 7am	40	55
Residential and Public (RA, R2, R1, R3, P Zoning Districts)	7am – 7pm	55	75
	7pm – 10pm	50	65
	10pm – 7am	45	60
Commercial and Recreation (C1, CH, CS, C2, C3, OP, REC Zoning Districts)	7am – 7pm	70	90
	7pm – 7 am	65	75
Business Park (BP Zoning Districts)	7am – 7pm	65	85
	7pm – 7 am	60	70
Industrial (M1, M2 Zoning Districts)	Anytime	80	90
Source: Nevada County Zoning Regulations			

Nevada County General Plan

The Nevada County General Plan Noise Element has standards which are identical to the Zoning Code shown above. However, the Noise Element also has policies for determining significant impacts. The following policies from the General Plan Noise Element apply to this project:

> Policy 9.1d If the measured ambient level exceeds that permitted, then the allowable noise exposure standard shall be set at 5 dBA above the ambient.
>
> Policy 9.1e Because of the unique nature of sound, the County reserves the right to provide for a more restrictive standard than shown in the Exterior Noise Limits table contained in this policy. The maximum adjustment shall be limited to be not less than the current ambient noise levels and shall not exceed the standards of this policy or as they may be further adjusted by Policy 9.1b. Imposition of a noise level adjustment shall only be considered if one or more of the following conditions are found to exist.
>
> Unique characteristics of the noise source:
>
> (a). The noise contains a very high or low frequency, is of a pure tone (a steady, audible tone such as a whine, screech, or hum), or contains a wide divergence in frequency spectra between the noise source and ambient level.
>
> (b). The noise is impulsive in nature (such as hammering, riveting, or explosion), contains music or speech.
>
> (c). The noise source is of a long duration.

Unique characteristics of the noise receptor when the ambient noise level is determined to be 5 dBA or more below the Policy 9.1 standard for those projects requiring a General Plan amendment, rezoning, and/or conditional use permit. In such instances, the new standard shall not exceed 10 dBA above the ambient or the Policy 9.1 standard, whichever is more restrictive.

Additionally, the Nevada County General Plan establishes acceptable exterior noise levels of 60 dB Ldn for residential and school uses (Chapter 9, Figure 1). These standards are generally applied to transportation-related noise sources, such as aircraft operations, railroad operations and roadway traffic.

ANALYSIS OF POTENTIAL NOISE IMPACTS

Traffic Noise Impact Assessment Methodology

To assess noise impacts due to project-related traffic increases on the local roadway network, traffic noise levels are predicted at sensitive receptors for existing and future, project and no-project conditions for the Proposed Project. Noise impacts are identified at existing noise-sensitive areas if the noise levels generated by the project create significant increases in traffic noise levels.

To describe existing and projected noise levels due to traffic, the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. The model is based upon the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site.

The FHWA model was developed to predict hourly Leq values for free-flowing traffic conditions. To predict traffic noise levels in terms of Ldn, it is necessary to adjust the input volume to account for the day/night distribution of traffic.

The traffic impact analysis for the project did not include daily trip generation, or hourly volumes on the local roadways. For this analysis, the traffic impact study conducted for the Truckee Corporation Yard Relocation was utilized. That analysis was conducted in 2008 by LSC Transportation Consultants. Based upon that analysis, a the corporation yard would produce 193 trips/day. An additional 193 ADT on La Barr Meadows Road would result in an increase in traffic noise of less than 0.2 dB Ldn. The Truckee Corporation Yard may not be a direct comparison to the Nevada County Corporation Yard. However, even if the Nevada County Corporation Yard resulted in twice the traffic generation of the Truckee yard, the increase in traffic noise levels would be less than 0.5 dB Ldn.

Corporation Yard Noise Levels

Typical Morning Operations

j.c. brennan & associates, Inc. conducted noise measurements at the existing Corporation Yard on Loma Rica Drive, between the hours of 6:00 a.m. and 7:00 a.m. Noise level measurements were conducted at two locations during that time period. The 6:00 a.m. to 7:00 a.m. period was selected based upon discussions with the Corporation Yard staff who indicated that this was the

busiest time period when trucks and equipment are warming up and leaving the yard. During the noise level measurements, staff was arriving at the site, trucks and equipment were started and warmed up. Equipment and was loaded on trailers, and vehicles exited the site. The results of the noise measurements are shown in Table 5. Figure 2 shows the noise measurement locations.

Table 5
Existing Corporation Yard Measured Noise Levels

Site	Location	Time	Measured Hourly Noise Levels		
			Leq	L50	Lmax
1	East Property Line (At 300 feet from Center of Corp Yard)	6:00 am - 7:00 am	51 dB	49 dB	64 dB
2	Southwest Property Line (At 225 feet from Center of Corp Yard)	6:00 am - 7:00 am	53 dB	52 dB	69 dB

Bus Stall Noise Levels

The noise measurements which were conducted for the existing corporation yard did not include buses warming up and leaving the yard. j.c. brennan & associates, Inc. staff conducted noise level measurements of the Nevada Joint Union School bus facility in 2002. The noise level measurements were conducted at a distance of 25 feet from 10 school buses which were fueling, starting up and leaving the site. The overall noise levels were 70 dB Leq and 80 dB Lmax at a distance of 25 feet.

Cumulative Corporation Yard Noise Levels at the Nearest Property Residential Property Line

The nearest residential property line is approximately 400 feet from the center of the project site. Assuming that the Corporation Yard operations all occur simultaneously, during the 6:00 a.m. to 7:00 a.m. hour, the predicted cumulative noise level is calculated to be 50 dB Leq, and 64 dB Lmax.

The noise level standard is 45 dB Leq, and 60 dB Lmax, as shown in Table 4. However, Policy 9.1d of the General Plan, states:

> *If the measured ambient level exceeds that permitted, then the allowable noise exposure standard shall be set at 5 dBA above the ambient.*

The background measured noise levels during the 6:00 a.m. to 7:00 a.m. hour, as shown in Appendix B, was 55 dB Leq and 60 dB Lmax at Noise Measurement Site B, and 67 dB Leq, and 80 dB Lmax at Site A. Therefore, the calculated cumulative noise levels will comply with the General Plan and Zoning Ordinance standards.

CONCLUSIONS

The proposed project is predicted to comply with the Nevada County General Plan Noise Element or Zoning Regulations. Additionally, the proposed project is not predicted to generate noise levels which are higher than the measured ambient noise levels. Therefore, no additional noise reduction measures are warranted.

Figure 2
Existing Corporation Yard and Noise Measurement Locations

N

(#) **Noise Measurement Locations**

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Appendix A
Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
L_{dn}	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period of time.
$L_{(n)}$	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L_{50} is the sound level exceeded 50% of the time during the one hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
Noise	Unwanted sound.
NRC	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the “Maximum” level, which is the highest RMS level.
RT_{60}	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
SEL	Sound Exposure Level. SEL is s rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy into a one-second event.
STC	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Simple Tone	Any sound which can be judged as audible as a single pitch or set of single pitches.

Appendix B
2014-166 Bear River SiteDevelopment
24hr Continuous Noise Monitoring - Site A
7/8/14 - 7/9/2014

Hour	Leq	Lmax	L50	L90
9:00	54	64	54	50
10:00	54	63	53	50
11:00	54	69	54	50
12:00	54	61	54	51
13:00	53	63	53	50
14:00	54	64	54	50
15:00	56	74	55	51
16:00	54	60	54	51
17:00	54	60	54	51
18:00	54	62	53	49
19:00	53	60	53	47
20:00	53	59	53	48
21:00	52	58	51	45
22:00	50	61	49	41
23:00	48	61	45	38
0:00	47	57	45	38
1:00	45	58	40	28
2:00	45	60	42	33
3:00	46	56	41	35
4:00	47	58	43	34
5:00	52	61	50	43
6:00	55	60	54	50
7:00	56	71	56	52
8:00	55	61	55	51

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	55.8	51.6	54.0	54.7	44.8	49.5
Lmax (Maximum)	74.1	58.2	63.2	61.3	56.3	59.0
L50 (Median)	55.5	51.0	53.6	54.4	39.7	45.5
L90 (Background)	52.4	44.8	49.7	49.9	27.8	37.9

Computed Ldn, dB	56.9
% Daytime Energy	82%
% Nighttime Energy	18%

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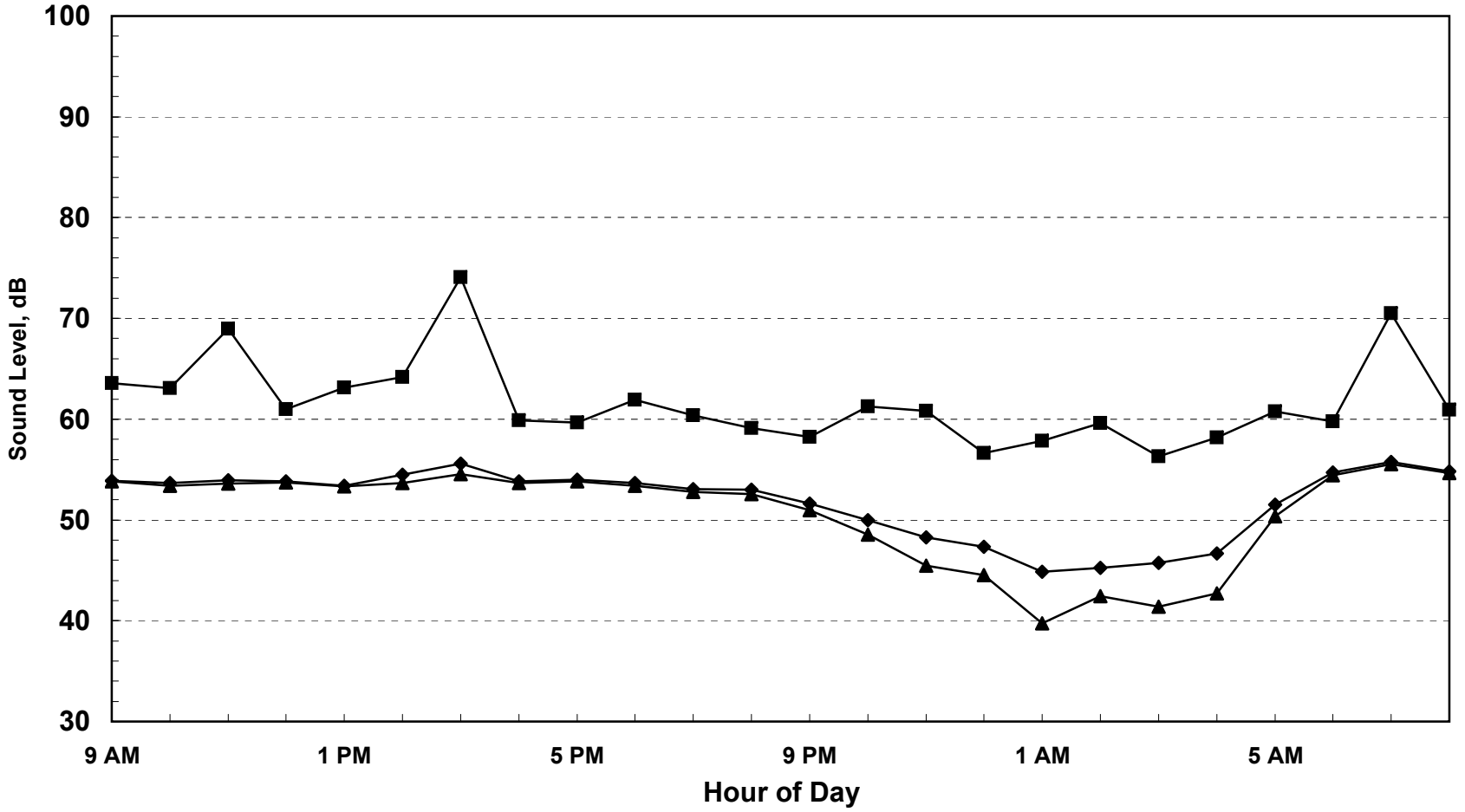
Appendix B

2014-166 Bear River SiteDevelopment

24hr Continuous Noise Monitoring - Site A

7/8/14 - 7/9/2014



Ldn = 56.9 dB

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Appendix B
2014-166 Bear River Site Development
24hr Continuous Noise Monitoring - Site B
7/8/14 - 7/9/2014

Hour	Leq	Lmax	L50	L90
9:00	68	82	63	45
10:00	68	82	63	46
11:00	68	85	63	46
12:00	69	84	65	48
13:00	69	83	64	48
14:00	69	82	64	46
15:00	69	84	64	49
16:00	69	87	64	46
17:00	69	80	66	49
18:00	69	92	62	49
19:00	67	81	59	45
20:00	67	89	57	45
21:00	65	80	54	42
22:00	64	86	48	40
23:00	60	82	42	37
0:00	58	79	42	37
1:00	54	76	38	31
2:00	50	75	39	34
3:00	51	75	38	33
4:00	58	79	38	32
5:00	63	81	46	40
6:00	67	85	59	46
7:00	69	84	66	51
8:00	69	83	66	50

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	69.3	64.7	68.4	66.9	50.5	61.1
Lmax (Maximum)	92.0	79.9	83.9	86.0	74.7	79.8
L50 (Median)	65.9	54.2	62.7	59.1	37.6	43.4
L90 (Background)	51.2	42.2	46.9	46.1	31.3	36.7

Computed Ldn, dB	69.6
% Daytime Energy	90%
% Nighttime Energy	10%

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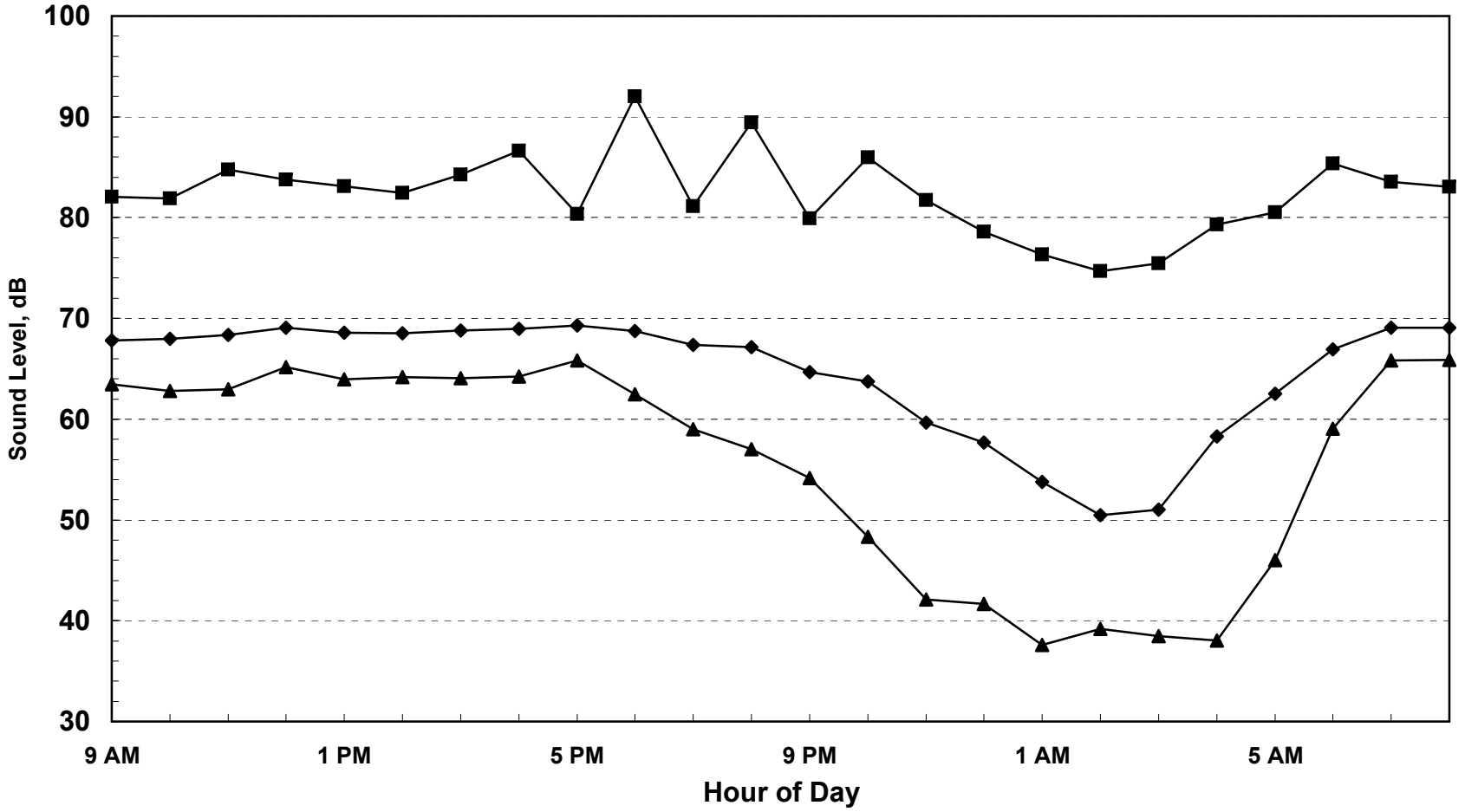
Appendix B

2014-166 Bear River Site Development

24hr Continuous Noise Monitoring - Site B

7/8/14 - 7/9/2014



Ldn = 69.6 dB

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Appendix C

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2014-166 Bear River Site Development (Nevada County Corporation Yard)
Description: Existing Traffic Conditions
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	La Barr Meadows	McNight Way to Dog Bar Road	6,695	85		15	2	1	45	100	
2	La Barr Meadows	McNight Way to Dog Bar Road	6,888	85		15	2	1	45	100	
3	La Barr Meadows	McNight Way to Dog Bar Road	7,081	85		15	2	1	45	100	

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Appendix C

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2014-166 Bear River Site Development (Nevada County Corporation Yard)
Description: Existing Traffic Conditions
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment	Autos	Medium Trucks	Heavy Trucks	Total
1	La Barr Meadows	McNight Way to Dog Bar Road	59.7	51.1	52.6	61
2	La Barr Meadows	McNight Way to Dog Bar Road	59.9	51.3	52.7	61
3	La Barr Meadows	McNight Way to Dog Bar Road	60.0	51.4	52.9	61

Appendix C

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2014-166 Bear River Site Development (Nevada County Corporation Yard)
Description: Existing Traffic Conditions
Ldn/CNEL: Ldn
Hard/Soft: Soft

			-------- Distances to Traffic Noise Contours --------				
Segment	Roadway Name	Segment	75	70	65	60	55
1	La Barr Meadows	McNight Way to Dog Bar Road	12	25	54	116	251
2	La Barr Meadows	McNight Way to Dog Bar Road	12	26	55	118	255
3	La Barr Meadows	McNight Way to Dog Bar Road	12	26	56	121	260

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