Appendix C

Noise Data

Environmental Noise Assessment

5175 Vincent Avenue

City of Irwindale, California

June 11, 2020

Project # 200107

Prepared for:

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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.
ASTC	Apparent Sound Transmission Class. Similar to STC but includes sound from flanking paths and correct for room reverberation. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
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 +5 dBA and nighttime hours weighted by +10 dBA.
DNL	See definition of Ldn.
IIC	Impact Insulation Class. An integer-number rating of how well a building floor attenuates impact sounds, such as footsteps. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	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 L50 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.
NIC	Noise Isolation Class. A rating of the noise reduction between two spaces. Similar to STC but includes sound from flanking paths and no correction for room reverberation.
NNIC	Normalized Noise Isolation Class. Similar to NIC but includes a correction for room reverberation.
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.
RT60	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 a rating, in decibels, of a discrete event, such as an aircraft flyover or train pass by, that compresses the total sound energy into a one-second event.
SPC	Speech Privacy Class. SPC is a method of rating speech privacy in buildings. It is designed to measure the degree of speech privacy provided by a closed room, indicating the degree to which conversations occurring within are kept private from listeners outside the room.
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. The STC rating is typically used to rate the sound transmission of a specific building element when tested in laboratory conditions where flanking paths around the assembly don't exist. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
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.

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Appendix B: Continuous and Short-Term Ambient Noise Measurement Results

Appendix B1: Continuous Noise Monitoring Results

Site: LT-1

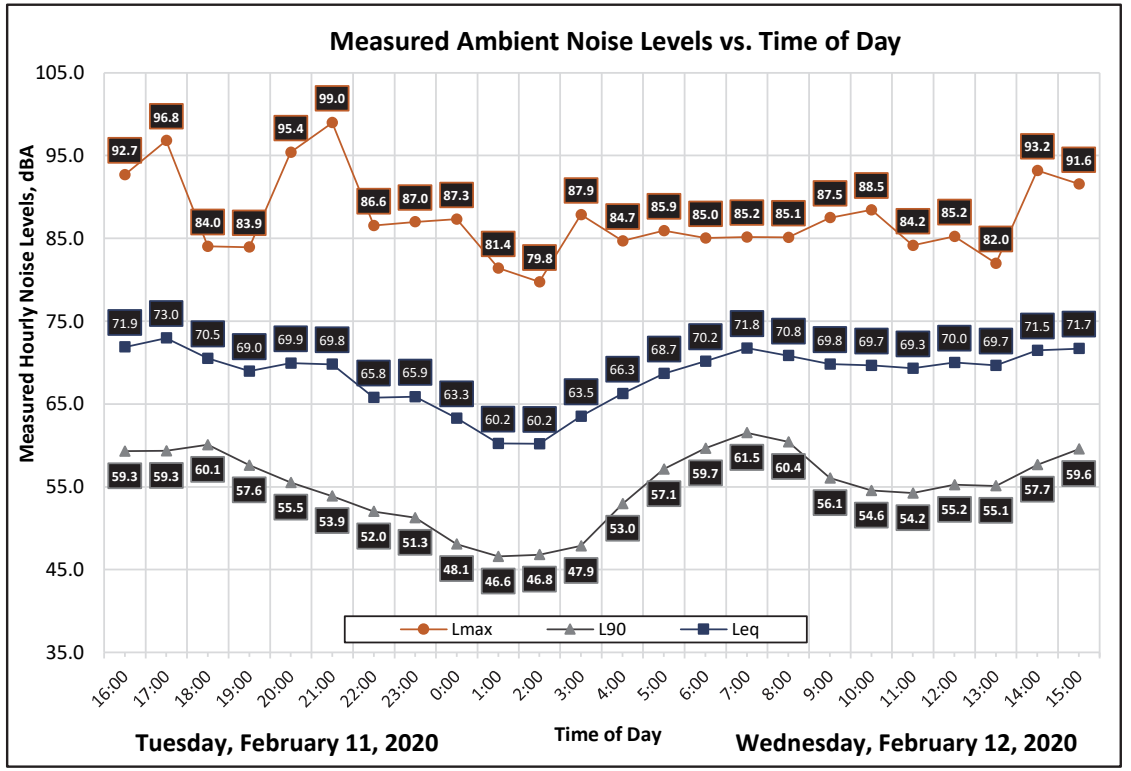
Project: 5175 Vincent Ave. Irwindale **Meter:** LDL 812-1

Location: Northeastern Project Boundary **Calibrator:** CAL200

Coordinates: 34.1058500°, -117.9255560°

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Tuesday, February 11, 2020	16:00	71.9	92.7	68.8	59.3
Tuesday, February 11, 2020	17:00	73.0	96.8	68.9	59.3
Tuesday, February 11, 2020	18:00	70.5	84.0	68.0	60.1
Tuesday, February 11, 2020	19:00	69.0	83.9	65.9	57.6
Tuesday, February 11, 2020	20:00	69.9	95.4	64.5	55.5
Tuesday, February 11, 2020	21:00	69.8	99.0	62.0	53.9
Tuesday, February 11, 2020	22:00	65.8	86.6	59.5	52.0
Tuesday, February 11, 2020	23:00	65.9	87.0	56.5	51.3
Wednesday, February 12, 2020	0:00	63.3	87.3	53.3	48.1
Wednesday, February 12, 2020	1:00	60.2	81.4	50.5	46.6
Wednesday, February 12, 2020	2:00	60.2	79.8	50.0	46.8
Wednesday, February 12, 2020	3:00	63.5	87.9	53.7	47.9
Wednesday, February 12, 2020	4:00	66.3	84.7	60.1	53.0
Wednesday, February 12, 2020	5:00	68.7	85.9	63.5	57.1
Wednesday, February 12, 2020	6:00	70.2	85.0	67.3	59.7
Wednesday, February 12, 2020	7:00	71.8	85.2	69.6	61.5
Wednesday, February 12, 2020	8:00	70.8	85.1	68.8	60.4
Wednesday, February 12, 2020	9:00	69.8	87.5	66.6	56.1
Wednesday, February 12, 2020	10:00	69.7	88.5	66.4	54.6
Wednesday, February 12, 2020	11:00	69.3	84.2	66.5	54.2
Wednesday, February 12, 2020	12:00	70.0	85.2	67.0	55.2
Wednesday, February 12, 2020	13:00	69.7	82.0	67.1	55.1
Wednesday, February 12, 2020	14:00	71.5	93.2	68.3	57.7
Wednesday, February 12, 2020	15:00	71.7	91.6	68.9	59.6

Statistics	Leq	Lmax	L50	L90
Day Average	70.7	88.9	67.2	57.3
Night Average	66.0	85.1	57.1	51.4
Day Low	69.0	82.0	62.0	53.9
Day High	73.0	99.0	69.6	61.5
Night Low	60.2	79.8	50.0	46.6
Night High	70.2	87.9	67.3	59.7
Ldn	73.5	Day %		83.0
CNEL	73.8	Night %		17.0

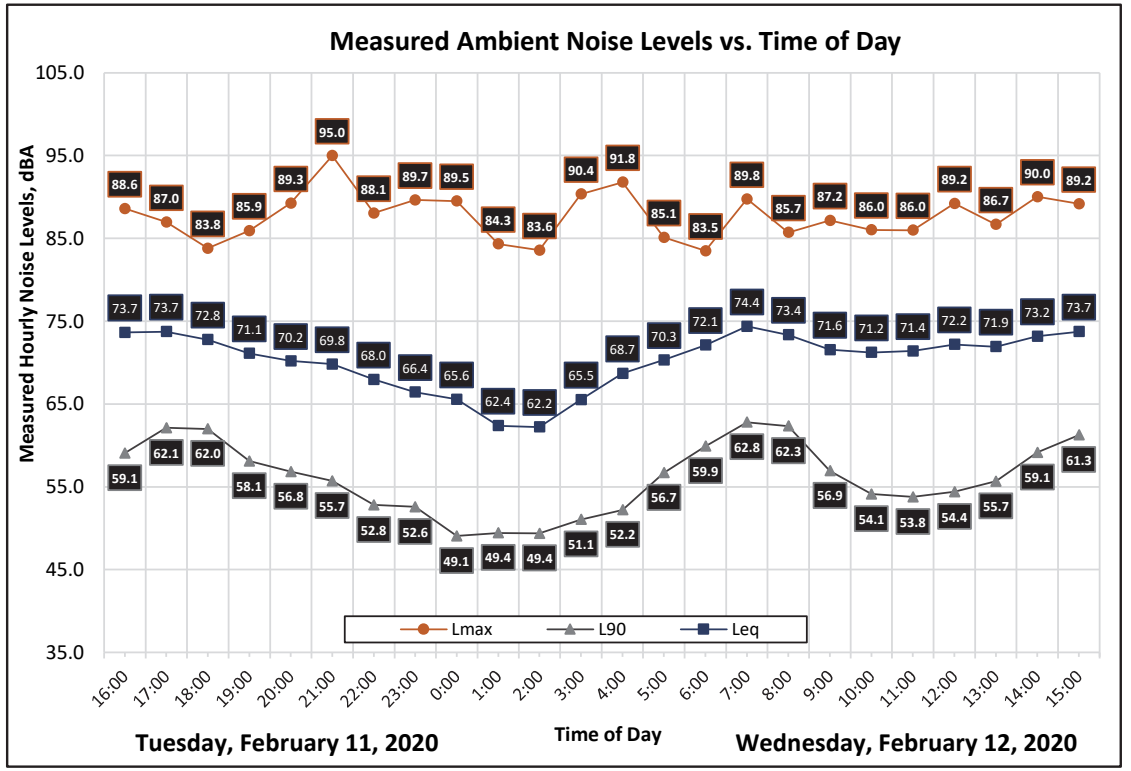


Appendix B2: Continuous Noise Monitoring Results

Site: LT-2
Project: 5175 Vincent Ave. Irwindale
Meter: LDL 820-2
Location: Southeastern Project Boundary
Calibrator: CAL200
Coordinates: 34.1033290°, -117.9255740°

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Tuesday, February 11, 2020	16:00	73.7	88.6	71.5	59.1
Tuesday, February 11, 2020	17:00	73.7	87.0	71.7	62.1
Tuesday, February 11, 2020	18:00	72.8	83.8	70.7	62.0
Tuesday, February 11, 2020	19:00	71.1	85.9	68.1	58.1
Tuesday, February 11, 2020	20:00	70.2	89.3	66.4	56.8
Tuesday, February 11, 2020	21:00	69.8	95.0	63.7	55.7
Tuesday, February 11, 2020	22:00	68.0	88.1	61.7	52.8
Tuesday, February 11, 2020	23:00	66.4	89.7	58.1	52.6
Wednesday, February 12, 2020	0:00	65.6	89.5	56.3	49.1
Wednesday, February 12, 2020	1:00	62.4	84.3	52.4	49.4
Wednesday, February 12, 2020	2:00	62.2	83.6	52.6	49.4
Wednesday, February 12, 2020	3:00	65.5	90.4	55.4	51.1
Wednesday, February 12, 2020	4:00	68.7	91.8	61.2	52.2
Wednesday, February 12, 2020	5:00	70.3	85.1	64.9	56.7
Wednesday, February 12, 2020	6:00	72.1	83.5	68.9	59.9
Wednesday, February 12, 2020	7:00	74.4	89.8	73.0	62.8
Wednesday, February 12, 2020	8:00	73.4	85.7	71.7	62.3
Wednesday, February 12, 2020	9:00	71.6	87.2	68.7	56.9
Wednesday, February 12, 2020	10:00	71.2	86.0	68.0	54.1
Wednesday, February 12, 2020	11:00	71.4	86.0	68.2	53.8
Wednesday, February 12, 2020	12:00	72.2	89.2	69.5	54.4
Wednesday, February 12, 2020	13:00	71.9	86.7	69.5	55.7
Wednesday, February 12, 2020	14:00	73.2	90.0	71.2	59.1
Wednesday, February 12, 2020	15:00	73.7	89.2	71.6	61.3

Statistics	Leq	Lmax	L50	L90
Day Average	72.5	88.0	69.6	58.3
Night Average	67.9	87.3	59.0	52.6
Day Low	69.8	83.8	63.7	53.8
Day High	74.4	95.0	73.0	62.8
Night Low	62.2	83.5	52.4	49.1
Night High	72.1	91.8	68.9	59.9
Ldn	75.3	Day %		82.7
CNEL	75.6	Night %		17.3

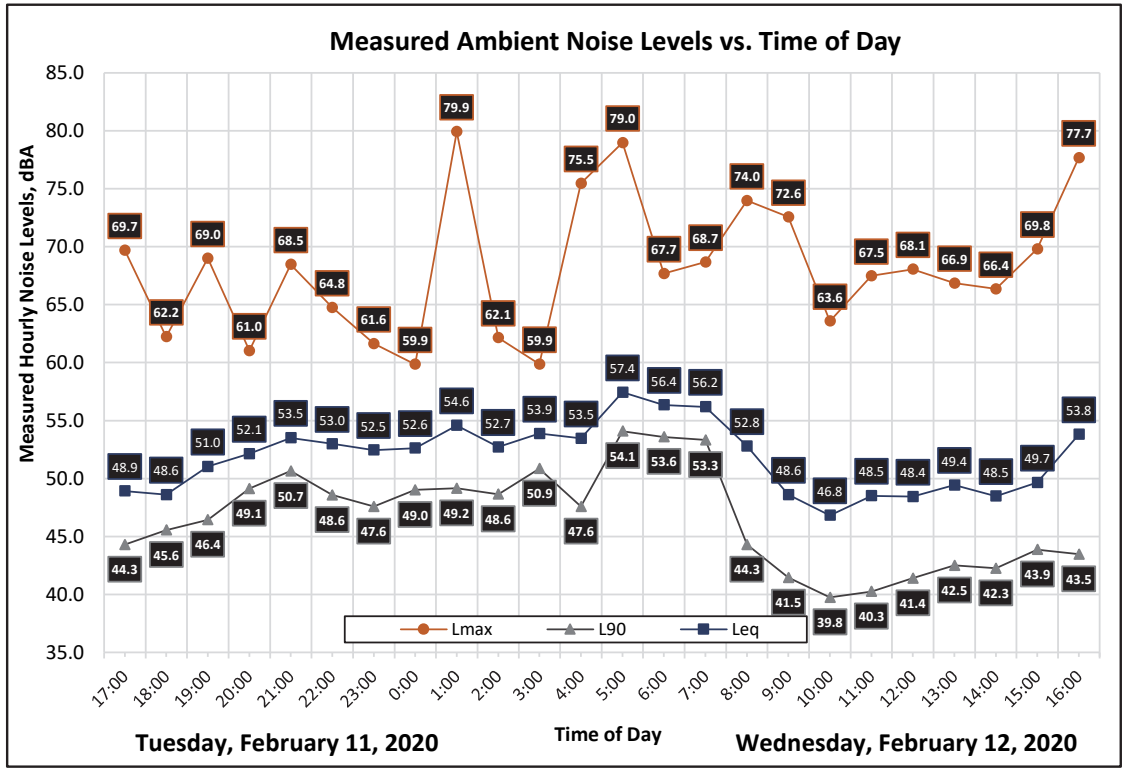


Appendix B3: Continuous Noise Monitoring Results

Site: LT-3
Project: 5175 Vincent Ave. Irwindale
Meter: LDL 820-1
Location: Southwestern Project Boundary
Calibrator: CAL200
Coordinates: 34.1060816°, -117.9295424°

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Tuesday, February 11, 2020	17:00	48.9	69.7	46.5	44.3
Tuesday, February 11, 2020	18:00	48.6	62.2	47.4	45.6
Tuesday, February 11, 2020	19:00	51.0	69.0	49.1	46.4
Tuesday, February 11, 2020	20:00	52.1	61.0	51.4	49.1
Tuesday, February 11, 2020	21:00	53.5	68.5	52.7	50.7
Tuesday, February 11, 2020	22:00	53.0	64.8	52.0	48.6
Tuesday, February 11, 2020	23:00	52.5	61.6	51.6	47.6
Tuesday, February 11, 2020	0:00	52.6	59.9	52.3	49.0
Wednesday, February 12, 2020	1:00	54.6	79.9	51.9	49.2
Wednesday, February 12, 2020	2:00	52.7	62.1	51.7	48.6
Wednesday, February 12, 2020	3:00	53.9	59.9	53.4	50.9
Wednesday, February 12, 2020	4:00	53.5	75.5	51.5	47.6
Wednesday, February 12, 2020	5:00	57.4	79.0	56.6	54.1
Wednesday, February 12, 2020	6:00	56.4	67.7	55.8	53.6
Wednesday, February 12, 2020	7:00	56.2	68.7	55.9	53.3
Wednesday, February 12, 2020	8:00	52.8	74.0	47.5	44.3
Wednesday, February 12, 2020	9:00	48.6	72.6	44.5	41.5
Wednesday, February 12, 2020	10:00	46.8	63.6	42.6	39.8
Wednesday, February 12, 2020	11:00	48.5	67.5	43.0	40.3
Wednesday, February 12, 2020	12:00	48.4	68.1	44.4	41.4
Wednesday, February 12, 2020	13:00	49.4	66.9	46.1	42.5
Wednesday, February 12, 2020	14:00	48.5	66.4	45.4	42.3
Wednesday, February 12, 2020	15:00	49.7	69.8	46.4	43.9
Wednesday, February 12, 2020	16:00	53.8	77.7	46.8	43.5

Statistics	Leq	Lmax	L50	L90
Day Average	51.3	68.4	47.3	44.6
Night Average	54.4	67.8	53.0	49.9
Day Low	46.8	61.0	42.6	39.8
Day High	56.2	77.7	55.9	53.3
Night Low	52.5	59.9	51.5	47.6
Night High	57.4	79.9	56.6	54.1
Ldn	60.5	Day %		44.9
CNEL	60.7	Night %		55.1

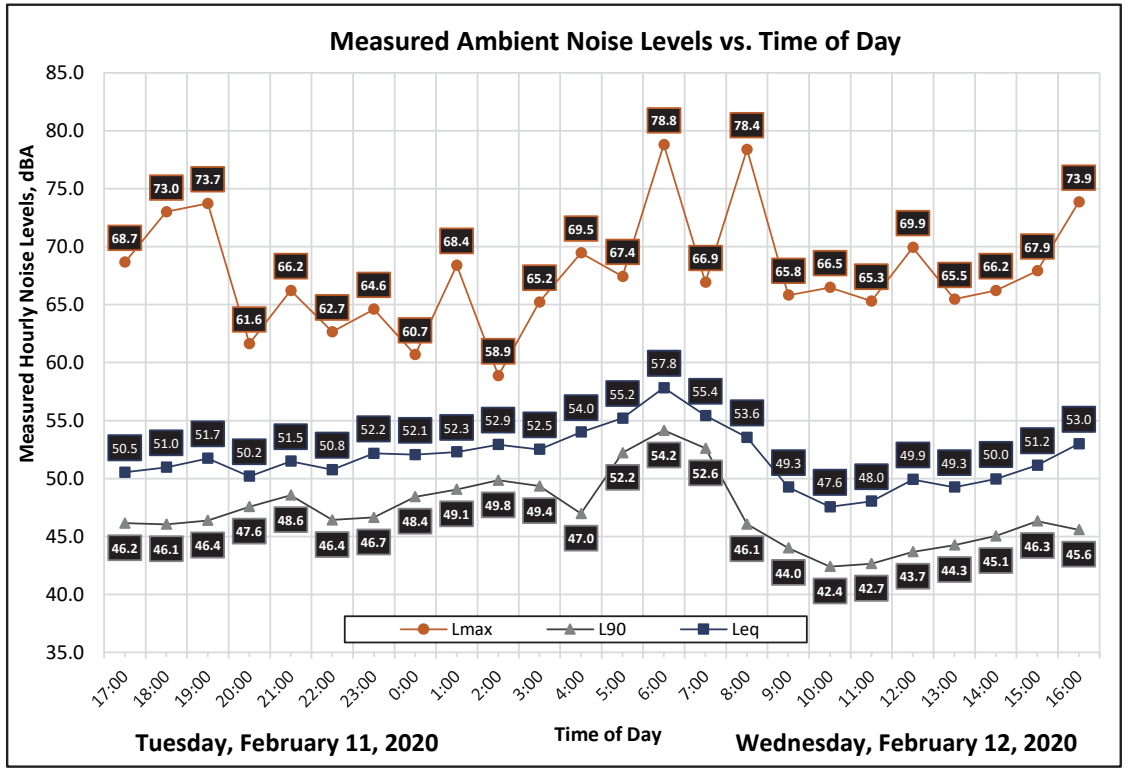


Appendix B4: Continuous Noise Monitoring Results

Site: LT-4
Project: 5175 Vincent Ave. Irwindale
Meter: LDL 812-2
Location: Northwestern Project Boundary
Calibrator: CAL200
Coordinates: 34.1027966°, -117.9296225°

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Tuesday, February 11, 2020	17:00	50.5	68.7	48.6	46.2
Tuesday, February 11, 2020	18:00	51.0	73.0	48.9	46.1
Tuesday, February 11, 2020	19:00	51.7	73.7	48.5	46.4
Tuesday, February 11, 2020	20:00	50.2	61.6	49.4	47.6
Tuesday, February 11, 2020	21:00	51.5	66.2	50.6	48.6
Tuesday, February 11, 2020	22:00	50.8	62.7	50.0	46.4
Tuesday, February 11, 2020	23:00	52.2	64.6	51.5	46.7
Tuesday, February 11, 2020	0:00	52.1	60.7	51.1	48.4
Wednesday, February 12, 2020	1:00	52.3	68.4	51.2	49.1
Wednesday, February 12, 2020	2:00	52.9	58.9	52.4	49.8
Wednesday, February 12, 2020	3:00	52.5	65.2	51.6	49.4
Wednesday, February 12, 2020	4:00	54.0	69.5	52.6	47.0
Wednesday, February 12, 2020	5:00	55.2	67.4	54.5	52.2
Wednesday, February 12, 2020	6:00	57.8	78.8	56.7	54.2
Wednesday, February 12, 2020	7:00	55.4	66.9	54.6	52.6
Wednesday, February 12, 2020	8:00	53.6	78.4	48.9	46.1
Wednesday, February 12, 2020	9:00	49.3	65.8	46.8	44.0
Wednesday, February 12, 2020	10:00	47.6	66.5	44.7	42.4
Wednesday, February 12, 2020	11:00	48.0	65.3	44.7	42.7
Wednesday, February 12, 2020	12:00	49.9	69.9	46.0	43.7
Wednesday, February 12, 2020	13:00	49.3	65.5	46.7	44.3
Wednesday, February 12, 2020	14:00	50.0	66.2	47.2	45.1
Wednesday, February 12, 2020	15:00	51.2	67.9	48.7	46.3
Wednesday, February 12, 2020	16:00	53.0	73.9	48.4	45.6

Statistics	Leq	Lmax	L50	L90
Day Average	51.3	68.6	48.2	45.8
Night Average	53.8	66.2	52.4	49.2
Day Low	47.6	61.6	44.7	42.4
Day High	55.4	78.4	54.6	52.6
Night Low	50.8	58.9	50.0	46.4
Night High	57.8	78.8	56.7	54.2
Ldn	60.0	Day %		48.2
CNEL	60.1	Night %		51.8



Appendix C: Traffic Noise Calculation Inputs and Results

Appendix C-1

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

Project #: 190602
Description: 5175 Vincent Avenue - Existing
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	Arrow Hwy.	Maine Ave. to Azusa Canyon Rd.	24,540	83	0	17	2.0%	5.0%	45	160	0	389	181	84	65.8
2	Arrow Hwy.	Azusa Canyon Rd. to 4th St.	28,630	83	0	17	2.0%	5.0%	45	500	0	431	200	93	59.0
3	Arrow Hwy.	4th St. to Irwindale Ave.	26,900	83	0	17	2.0%	5.0%	45	80	0	414	192	89	70.7
4	Arrow Hwy.	Irwindale Ave. to Vincent Ave.	22,430	83	0	17	2.0%	5.0%	45	60	0	367	170	79	71.8
5	Arrow Hwy.	East of Vincent Ave.	22,290	83	0	17	2.0%	5.0%	45	50	0	365	169	79	73.0
6	Azusa Ave.	Paramount St. Gladstone St.	19,400	83	0	17	2.0%	5.0%	35	70	0	248	115	53	68.2
7	Cypress St.	West of Vincent Ave.	15,680	83	0	17	1.0%	1.0%	40	100	0	172	80	37	63.5
8	Cypress St.	East of Vincent Ave.	16,090	83	0	17	1.0%	1.0%	40	50	0	175	81	38	68.2
9	Gladstone St.	Vincent Ave. to Vernon Ave.	15,740	83	0	17	2.0%	5.0%	45	45	0	289	134	62	72.1
10	Gladstone St.	Vernon Ave. to Azusa Ave.	14,760	83	0	17	2.0%	5.0%	45	65	0	277	129	60	69.5
11	Irwindale Ave.	South of Arrow Hwy.	15,650	83	0	17	1.0%	1.0%	35	50	0	139	64	30	66.7
13	Vincent Ave.	Gladstone St. to Arrow Hwy.	9,470	83	0	17	2.0%	5.0%	50	50	0	236	110	51	70.1
14	Vincent Ave.	Project North Driveway to Project South Driveway	10,860	83	0	17	2.0%	5.0%	50	50	0	259	120	56	70.7
15	Vincent Ave.	Project South Driveway to Cypress St.	10,860	83	0	17	2.0%	5.0%	50	45	0	259	120	56	71.4
16	Vincent Ave.	Project South Driveway to Cypress St.	11,130	83	0	17	2.0%	5.0%	50	45	0	263	122	57	71.5
17	Vincent Ave.	Cypress St. to San Bernardino Rd.	12,960	83	0	17	2.0%	5.0%	40	45	0	220	102	47	70.4
18	Vincent Ave.	San Bernardino to Badillo St.	15,220	83	0	17	2.0%	5.0%	40	500	-5	245	114	53	50.4
19	Vincent Ave.	Badillo St. to Puente Ave.	17,940	83	0	17	2.0%	5.0%	40	55	0	274	127	59	70.5
20	Vincent Ave.	Puente Ave. to Rowland St.	18,500	83	0	17	2.0%	5.0%	40	50	0	279	130	60	71.2
21	Vincent Ave.	Rowland St. to Workman Ave.	19,530	83	0	17	2.0%	5.0%	40	50	0	290	134	62	71.4
22	Vincent Ave.	Workman Ave. to I-10 WB Ramps	22,640	83	0	17	2.0%	5.0%	40	60	0	320	148	69	70.9

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Appendix C-2

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

Project #: 190602
Description: 5175 Vincent Avenue - Existing Plus Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	Arrow Hwy.	Maine Ave. to Azusa Canyon Rd.	25,830	83	0	17	2.3%	5.4%	45	160	0	415	193	89	66.2
2	Arrow Hwy.	Azusa Canyon Rd. to 4th St.	30,000	83	0	17	2.3%	5.4%	45	500	0	457	212	99	59.4
3	Arrow Hwy.	4th St. to Irwindale Ave.	28,270	83	0	17	2.3%	5.4%	45	80	0	440	204	95	71.1
4	Arrow Hwy.	Irwindale Ave. to Vincent Ave.	23,880	83	0	17	2.4%	5.5%	45	60	0	396	184	85	72.3
5	Arrow Hwy.	East of Vincent Ave.	22,570	83	0	17	2.1%	5.1%	45	50	0	371	172	80	73.1
6	Azusa Ave.	Paramount St. Gladstone St.	20,000	83	0	17	2.2%	5.3%	35	70	0	259	120	56	68.5
7	Cypress St.	West of Vincent Ave.	15,760	83	0	17	1.0%	1.0%	40	100	0	173	80	37	63.6
8	Cypress St.	East of Vincent Ave.	16,170	83	0	17	1.0%	1.0%	40	50	0	176	81	38	68.2
9	Gladstone St.	Vincent Ave. to Vernon Ave.	16,780	83	0	17	2.4%	5.5%	45	45	0	313	145	68	72.6
10	Gladstone St.	Vernon Ave. to Azusa Ave.	15,500	83	0	17	2.3%	5.4%	45	65	0	295	137	64	69.8
11	Irwindale Ave.	South of Arrow Hwy.	15,730	83	0	17	1.0%	1.0%	35	50	0	139	65	30	66.7
13	Vincent Ave.	Gladstone St. to Arrow Hwy.	11,150	83	0	17	2.9%	6.3%	50	50	0	285	132	61	71.3
14	Vincent Ave.	Project North Driveway to Project South Driveway	12,800	83	0	17	2.9%	6.3%	50	50	0	312	145	67	71.9
15	Vincent Ave.	Project South Driveway to Cypress St.	11,820	83	0	17	2.5%	5.7%	50	45	0	286	133	62	72.0
16	Vincent Ave.	Project South Driveway to Cypress St.	12,090	83	0	17	2.5%	5.7%	50	45	0	290	134	62	72.1
17	Vincent Ave.	Cypress St. to San Bernardino Rd.	13,760	83	0	17	2.4%	5.5%	40	45	0	238	111	51	70.9
18	Vincent Ave.	San Bernardino to Badillo St.	16,020	83	0	17	2.3%	5.4%	40	500	-5	262	122	57	50.8
19	Vincent Ave.	Badillo St. to Puente Ave.	18,580	83	0	17	2.2%	5.3%	40	55	0	287	133	62	70.8
20	Vincent Ave.	Puente Ave. to Rowland St.	19,140	83	0	17	2.2%	5.3%	40	50	0	292	136	63	71.5
21	Vincent Ave.	Rowland St. to Workman Ave.	20,050	83	0	17	2.2%	5.2%	40	50	0	300	139	65	71.7
22	Vincent Ave.	Workman Ave. to I-10 WB Ramps	23,160	83	0	17	2.1%	5.2%	40	60	0	330	153	71	71.1

Appendix C-3

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

Project #: 190602
Description: 5175 Vincent Avenue - Future Baseline no Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	Arrow Hwy.	Maine Ave. to Azusa Canyon Rd.	24,790	83	0	17	2.0%	5.0%	45	160	0	392	182	84	65.8
2	Arrow Hwy.	Azusa Canyon Rd. to 4th St.	28,920	83	0	17	2.0%	5.0%	45	500	0	434	202	94	59.1
3	Arrow Hwy.	4th St. to Irwindale Ave.	27,180	83	0	17	2.0%	5.0%	45	80	0	417	193	90	70.7
4	Arrow Hwy.	Irwindale Ave. to Vincent Ave.	22,660	83	0	17	2.0%	5.0%	45	60	0	369	171	80	71.8
5	Arrow Hwy.	East of Vincent Ave.	22,500	83	0	17	2.0%	5.0%	45	50	0	367	170	79	73.0
6	Azusa Ave.	Paramount St. Gladstone St.	19,600	83	0	17	2.0%	5.0%	35	70	0	249	116	54	68.3
7	Cypress St.	West of Vincent Ave.	15,840	83	0	17	1.0%	1.0%	40	100	0	173	80	37	63.6
8	Cypress St.	East of Vincent Ave.	16,250	83	0	17	1.0%	1.0%	40	50	0	176	82	38	68.2
9	Gladstone St.	Vincent Ave. to Vernon Ave.	15,900	83	0	17	2.0%	5.0%	45	45	0	291	135	63	72.2
10	Gladstone St.	Vernon Ave. to Azusa Ave.	14,920	83	0	17	2.0%	5.0%	45	65	0	279	130	60	69.5
11	Irwindale Ave.	South of Arrow Hwy.	15,810	83	0	17	1.0%	1.0%	35	50	0	140	65	30	66.7
13	Vincent Ave.	Gladstone St. to Arrow Hwy.	9,570	83	0	17	2.0%	5.0%	50	50	0	238	110	51	70.2
14	Vincent Ave.	Project North Driveway to Project South Driveway	10,970	83	0	17	2.0%	5.0%	50	50	0	260	121	56	70.7
15	Vincent Ave.	Project South Driveway to Cypress St.	10,970	83	0	17	2.0%	5.0%	50	45	0	260	121	56	71.4
16	Vincent Ave.	Project South Driveway to Cypress St.	11,230	83	0	17	2.0%	5.0%	50	45	0	264	123	57	71.5
17	Vincent Ave.	Cypress St. to San Bernardino Rd.	13,080	83	0	17	2.0%	5.0%	40	45	0	222	103	48	70.4
18	Vincent Ave.	San Bernardino to Badillo St.	15,390	83	0	17	2.0%	5.0%	40	500	-5	247	115	53	50.4
19	Vincent Ave.	Badillo St. to Puente Ave.	18,120	83	0	17	2.0%	5.0%	40	55	0	276	128	59	70.5
20	Vincent Ave.	Puente Ave. to Rowland St.	18,670	83	0	17	2.0%	5.0%	40	50	0	281	131	61	71.3
21	Vincent Ave.	Rowland St. to Workman Ave.	19,710	83	0	17	2.0%	5.0%	40	50	0	292	135	63	71.5
22	Vincent Ave.	Workman Ave. to I-10 WB Ramps	22,870	83	0	17	2.0%	5.0%	40	60	0	322	149	69	70.9

Appendix C-4

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

Project #: 190602
Description: 5175 Vincent Avenue - Future Baseline with Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	Arrow Hwy.	Maine Ave. to Azusa Canyon Rd.	26,080	83	0	17	2.3%	5.4%	45	160	0	417	194	90	66.2
2	Arrow Hwy.	Azusa Canyon Rd. to 4th St.	30,290	83	0	17	2.3%	5.4%	45	500	0	460	214	99	59.5
3	Arrow Hwy.	4th St. to Irwindale Ave.	28,550	83	0	17	2.3%	5.4%	45	80	0	443	206	95	71.2
4	Arrow Hwy.	Irwindale Ave. to Vincent Ave.	24,110	83	0	17	2.4%	5.5%	45	60	0	399	185	86	72.3
5	Arrow Hwy.	East of Vincent Ave.	22,780	83	0	17	2.1%	5.1%	45	50	0	373	173	80	73.1
6	Azusa Ave.	Paramount St. Gladstone St.	20,200	83	0	17	2.2%	5.2%	35	70	0	260	121	56	68.6
7	Cypress St.	West of Vincent Ave.	15,920	83	0	17	1.0%	1.0%	40	100	0	174	81	37	63.6
8	Cypress St.	East of Vincent Ave.	16,330	83	0	17	1.0%	1.0%	40	50	0	177	82	38	68.2
9	Gladstone St.	Vincent Ave. to Vernon Ave.	16,940	83	0	17	2.4%	5.5%	45	45	0	315	146	68	72.7
10	Gladstone St.	Vernon Ave. to Azusa Ave.	15,660	83	0	17	2.3%	5.4%	45	65	0	297	138	64	69.9
11	Irwindale Ave.	South of Arrow Hwy.	15,890	83	0	17	1.0%	1.0%	35	50	0	140	65	30	66.7
13	Vincent Ave.	Gladstone St. to Arrow Hwy.	11,250	83	0	17	2.9%	6.2%	50	50	0	286	133	62	71.4
14	Vincent Ave.	Project North Driveway to Project South Driveway	12,910	83	0	17	2.5%	5.1%	50	50	0	294	136	63	71.5
15	Vincent Ave.	Project South Driveway to Cypress St.	11,930	83	0	17	2.0%	4.4%	50	45	0	267	124	57	71.6
16	Vincent Ave.	Project South Driveway to Cypress St.	12,190	83	0	17	2.5%	5.7%	50	45	0	291	135	63	72.2
17	Vincent Ave.	Cypress St. to San Bernardino Rd.	13,880	83	0	17	2.4%	5.5%	40	45	0	240	111	52	70.9
18	Vincent Ave.	San Bernardino to Badillo St.	16,190	83	0	17	2.3%	5.4%	40	500	-5	264	123	57	50.8
19	Vincent Ave.	Badillo St. to Puente Ave.	18,760	83	0	17	2.2%	5.3%	40	55	0	289	134	62	70.8
20	Vincent Ave.	Puente Ave. to Rowland St.	19,310	83	0	17	2.2%	5.3%	40	50	0	294	136	63	71.5
21	Vincent Ave.	Rowland St. to Workman Ave.	20,230	83	0	17	2.2%	5.2%	40	50	0	302	140	65	71.7
22	Vincent Ave.	Workman Ave. to I-10 WB Ramps	23,390	83	0	17	2.1%	5.2%	40	60	0	332	154	71	71.1

Appendix C-5

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

Project #: 190602
Description: 5175 Vincent Avenue - Future Baseline Cumulative no Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	Arrow Hwy.	Maine Ave. to Azusa Canyon Rd.	27,550	83	0	17	2.0%	5.0%	45	160	0	420	195	91	66.3
2	Arrow Hwy.	Azusa Canyon Rd. to 4th St.	31,250	83	0	17	2.0%	5.0%	45	500	0	457	212	99	59.4
3	Arrow Hwy.	4th St. to Irwindale Ave.	29,510	83	0	17	2.0%	5.0%	45	80	0	440	204	95	71.1
4	Arrow Hwy.	Irwindale Ave. to Vincent Ave.	25,270	83	0	17	2.0%	5.0%	45	60	0	397	184	86	72.3
5	Arrow Hwy.	East of Vincent Ave.	23,420	83	0	17	2.0%	5.0%	45	50	0	377	175	81	73.2
6	Azusa Ave.	Paramount St. Gladstone St.	20,490	83	0	17	2.0%	5.0%	35	70	0	257	119	55	68.5
7	Cypress St.	West of Vincent Ave.	15,850	83	0	17	1.0%	1.0%	40	100	0	173	80	37	63.6
8	Cypress St.	East of Vincent Ave.	16,280	83	0	17	1.0%	1.0%	40	50	0	176	82	38	68.2
9	Gladstone St.	Vincent Ave. to Vernon Ave.	16,330	83	0	17	2.0%	5.0%	45	45	0	297	138	64	72.3
10	Gladstone St.	Vernon Ave. to Azusa Ave.	15,340	83	0	17	2.0%	5.0%	45	65	0	285	132	61	69.6
11	Irwindale Ave.	South of Arrow Hwy.	16,370	83	0	17	1.0%	1.0%	35	50	0	143	66	31	66.8
13	Vincent Ave.	Gladstone St. to Arrow Hwy.	10,210	83	0	17	2.0%	5.0%	50	50	0	248	115	53	70.4
14	Vincent Ave.	Project North Driveway to Project South Driveway	11,730	83	0	17	2.0%	5.0%	50	50	0	272	126	59	71.0
15	Vincent Ave.	Project South Driveway to Cypress St.	11,730	83	0	17	2.0%	5.0%	50	45	0	272	126	59	71.7
16	Vincent Ave.	Project South Driveway to Cypress St.	11,990	83	0	17	2.0%	5.0%	50	45	0	276	128	60	71.8
17	Vincent Ave.	Cypress St. to San Bernardino Rd.	13,800	83	0	17	2.0%	5.0%	40	45	0	230	107	50	70.6
18	Vincent Ave.	San Bernardino to Badillo St.	16,110	83	0	17	2.0%	5.0%	40	500	-5	255	118	55	50.6
19	Vincent Ave.	Badillo St. to Puente Ave.	18,590	83	0	17	2.0%	5.0%	40	55	0	280	130	60	70.6
20	Vincent Ave.	Puente Ave. to Rowland St.	19,140	83	0	17	2.0%	5.0%	40	50	0	286	133	62	71.4
21	Vincent Ave.	Rowland St. to Workman Ave.	19,980	83	0	17	2.0%	5.0%	40	50	0	294	137	63	71.5
22	Vincent Ave.	Workman Ave. to I-10 WB Ramps	23,150	83	0	17	2.0%	5.0%	40	60	0	325	151	70	71.0

Appendix C-6

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

Project #: 190602
Description: 5175 Vincent Avenue - Future Baseline Cumulative with Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	Arrow Hwy.	Maine Ave. to Azusa Canyon Rd.	28,840	83	0	17	2.3%	5.4%	45	160	0	445	207	96	66.7
2	Arrow Hwy.	Azusa Canyon Rd. to 4th St.	32,620	83	0	17	2.3%	5.4%	45	500	0	482	224	104	59.8
3	Arrow Hwy.	4th St. to Irwindale Ave.	30,880	83	0	17	2.3%	5.4%	45	80	0	466	216	100	71.5
4	Arrow Hwy.	Irwindale Ave. to Vincent Ave.	26,720	83	0	17	2.3%	5.5%	45	60	0	425	197	92	72.8
5	Arrow Hwy.	East of Vincent Ave.	23,700	83	0	17	2.1%	5.1%	45	50	0	383	178	83	73.3
6	Azusa Ave.	Paramount St. Gladstone St.	21,090	83	0	17	2.2%	5.2%	35	70	0	268	124	58	68.7
7	Cypress St.	West of Vincent Ave.	15,930	83	0	17	1.0%	1.0%	40	100	0	174	81	37	63.6
8	Cypress St.	East of Vincent Ave.	16,360	83	0	17	1.0%	1.0%	40	50	0	177	82	38	68.2
9	Gladstone St.	Vincent Ave. to Vernon Ave.	17,370	83	0	17	2.4%	5.5%	45	45	0	320	149	69	72.8
10	Gladstone St.	Vernon Ave. to Azusa Ave.	16,080	83	0	17	2.3%	5.4%	45	65	0	302	140	65	70.0
11	Irwindale Ave.	South of Arrow Hwy.	16,450	83	0	17	1.0%	1.0%	35	50	0	143	67	31	66.9
13	Vincent Ave.	Gladstone St. to Arrow Hwy.	11,890	83	0	17	2.9%	6.2%	50	50	0	296	137	64	71.6
14	Vincent Ave.	Project North Driveway to Project South Driveway	13,670	83	0	17	2.9%	6.2%	50	50	0	325	151	70	72.2
15	Vincent Ave.	Project South Driveway to Cypress St.	12,690	83	0	17	2.5%	5.6%	50	45	0	299	139	64	72.3
16	Vincent Ave.	Project South Driveway to Cypress St.	12,950	83	0	17	2.5%	5.6%	50	45	0	303	140	65	72.4
17	Vincent Ave.	Cypress St. to San Bernardino Rd.	14,600	83	0	17	2.3%	5.5%	40	45	0	247	115	53	71.1
18	Vincent Ave.	San Bernardino to Badillo St.	16,910	83	0	17	2.3%	5.4%	40	500	-5	272	126	59	51.0
19	Vincent Ave.	Badillo St. to Puente Ave.	19,230	83	0	17	2.2%	5.3%	40	55	0	293	136	63	70.9
20	Vincent Ave.	Puente Ave. to Rowland St.	19,780	83	0	17	2.2%	5.3%	40	50	0	299	139	64	71.6
21	Vincent Ave.	Rowland St. to Workman Ave.	20,500	83	0	17	2.2%	5.2%	40	50	0	304	141	66	71.8
22	Vincent Ave.	Workman Ave. to I-10 WB Ramps	23,670	83	0	17	2.1%	5.2%	40	60	0	334	155	72	71.2