

**Appendix F:
Noise Supporting Information**

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Project Number: 5153.0002

Sheet 1 of 3

Project Name: La Cañada High School Noise monitoring

Test Personnel: Kevin Bolland

Noise Measurement Survey

Site Number: ST-3 Date: October 23, 2019 Time: From 1048 To 1103

Site Location:

ST-3, on concrete Basketball courts. Between court 1 & 2.

Primary Noise Sources: Traffic from freeway.

Measurement Results

	dBA
Leq	60.6
Lmax	68.0
Lmin	57.4
L5	62.2
L10	61.8
L50	60.4
L90	59.0
Ldn	
CNEL	

Observed Noise Sources/Events

Time	Noise Source/Event	dBA
1052	Motorcycle on freeway	62.0
1053	Motorcycle passing school	62.5
1058	Large Truck on freeway	61.1
1100	Large Truck on freeway	62.3
1101	Truck passing school	61.8

Comments: _____

Equipment: Larson Davis LXT2
Settings: A-Weighted Other

Measured Difference: -0.003 dBA
Slow Fast Windscreen

Atmospheric Conditions:

Maximum Wind Velocity (mph)	Average Wind Velocity (mph)	Temperature (F)	Relative Humidity (%)
<u>3.8</u>	<u>1.4</u>	<u>89.5</u>	<u>14</u>
Comments:			

Project Number: 5153.0002
 Project Name: La Cañada High School
 Test Personnel: Kevin Bolland

Noise Measurement Survey

Site Number: ST-1 Date: 10/23/19 Time: From 1117 To _____

Site Location:

ST-1, Approximately 25 feet from the corner of Berkshire and
~~Boothill road~~ under a trel
Oak Grove Drive

Primary Noise Sources: Traffic, Passing Street Sweepers, Trucks,
Pedestrians

Measurement Results

	dB(A)
Leq	67.4
Lmax	79.6
Lmin	56.0
L5	72.4
L10	70.8
L50	64.9
L90	59.9
Ldn	
CNEL	

Observed Noise Sources/Events

Time	Noise Source/Event	dB(A)
1118	Street Sweeper	72.5
1119	Street Sweeper	71.6
1120	Passing Bus	71.2
1122	Passing Truck	69.8
1123	Street Sweeper & Truck	69.9
1124	Passing Truck	73.1
1124	Passing Truck	74.0
1127	Helicopter	72.7
1130	Passing Truck	72.2

Comments: Multiple street sweepers made multiple passes.

Equipment: Larson Davis LXT 2
 Settings: A-Weighted Other

Measured Difference: 0.00 dB(A)
 Slow Fast Windscreen

Atmospheric Conditions:

Maximum Wind Velocity (mph)	Average Wind Velocity (mph)	Temperature (F)	Relative Humidity (%)
3.8	1.0	86.9	14
Comments:			

Project Number: 5153.0002

Sheet 3 of 3

Project Name: La Canada High School

Test Personnel: Kevin Bolland

Noise Measurement Survey

Site Number: ST-2 Date: 10-23-19 Time: From 1141 To 1156

Site Location:

ST-2 - Approximately 100 feet from freeway on-ramp, across the street from the Methodist church on the sidewalk

Primary Noise Sources: Street Sweeper kept making passes. Passing Trucks, cars. Freeway Ambient noise.

Measurement Results

	dBA
Leq	70.2
Lmax	85.6
Lmin	55.9
L5	76.2
L10	72.5
L50	65.0
L90	60.1
Ldn	
CNEL	

Observed Noise Sources/Events

Time	Noise Source/Event	dBA
1141	Street Sweeper	84.7
1142	Street Sweeper	75.1
1145	Passing Truck	85.0
1146	Passing Truck	83.1
1147	Passing Truck	85.5
1150	Passing Truck	78.2 78.2
1154	Passing Truck	77.3
1155	Passing Truck	80.8

Comments: _____

Equipment: Larson Davis LXT 2
Settings: A-Weighted Other

Measured Difference: -0.05 dBA
Slow Fast Windscreen

Atmospheric Conditions:

Maximum Wind Velocity (mph)	Average Wind Velocity (mph)	Temperature (F)	Relative Humidity (%)
6.7	1.2	90.2	14
Comments:			

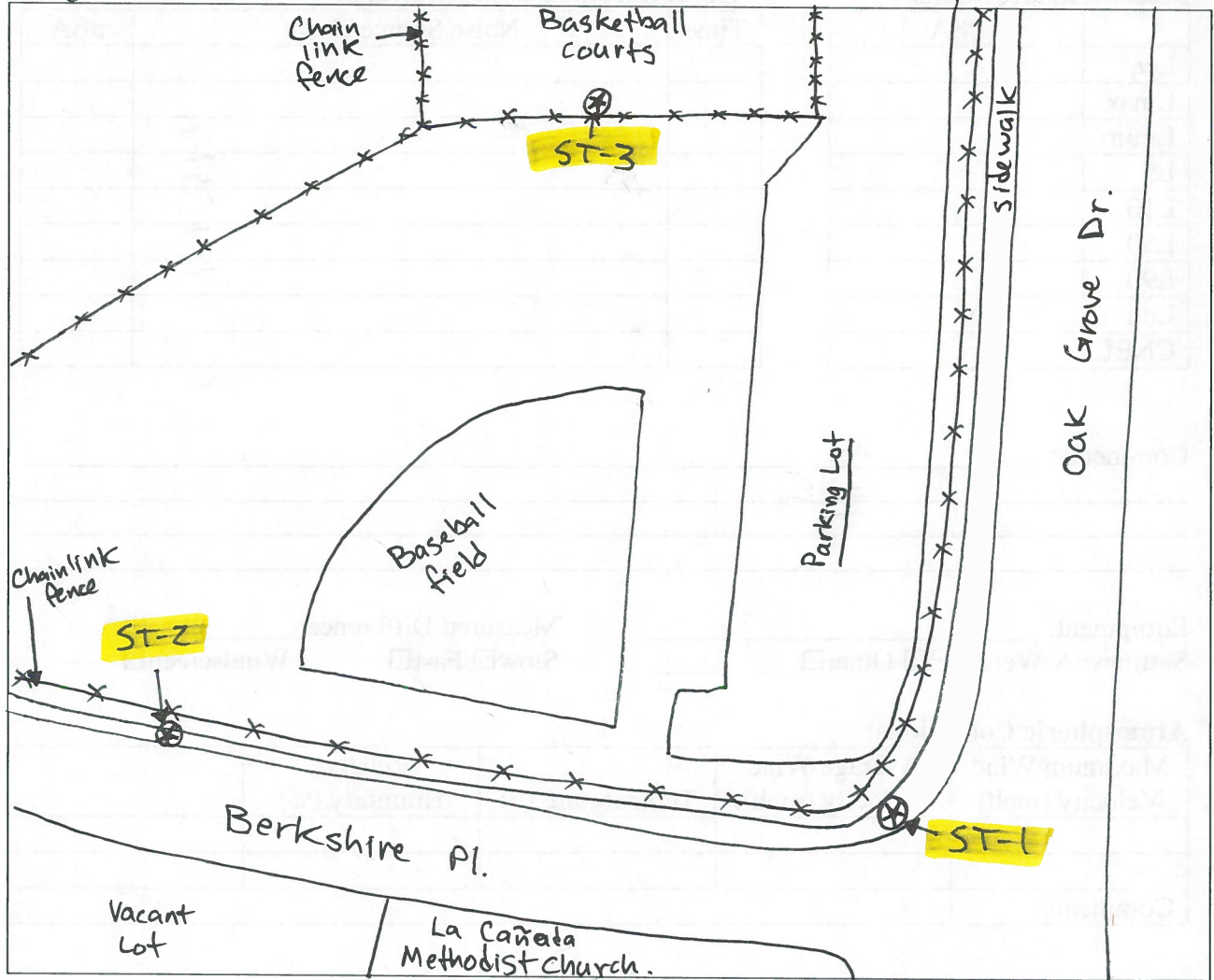
Photos Taken:

Photo Number	Location/Description

Traffic Description:

Roadway	# Lanes	Posted Speed	Average Speed	NB/EB Counts	SB/WB Counts

Diagram/Further Comments:



Parking Lot activity

Receptor: La Canada Methodist Church located south of lot

No.	Equipment Description	Reference (dBA)	Quantity	Usage factor[1]	Distance to Receptor	Ground Effect[2]	Shielding (dBA)[3]	Calculated (dBA)		Energy	
		50 ft Lmax						Lmax	Leq		
1	parking lot activity	70	3	1	280	1	5	50.0	27.3	540.2032264	
2	parking lot activity	70	2	1	300	1	5	49.4	24.7	292.8034871	
3	parking lot activity	70	2	1	315	1	5	49.0	24.0	252.9346611	
4	parking lot activity	70	2	1	330	1	5	48.6	23.4	219.9875936	
5											
6											
7											
8											
9											
10											
								Lmax[4]	50	Leq	31

Notes:

[1] Percentage of time activity occurs each hour

[2] Soft ground terrain between project site and receptor.

[3] Shielding due to terrain or structures

[4] Calculated Lmax is the Loudest value.

TABLE Existing-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/14/2020
ROADWAY SEGMENT: Foothill Boulevard - west of Oak Grove Drive
NOTES: New Outdoor Pool Facility and South of Campus Improvement Project
- Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8500 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.30

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	75.2	160.3

TABLE Existing-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/14/2020
ROADWAY SEGMENT: Oak Grove Drive - Foothill Boulevard to Berkshire Place
NOTES: New Outdoor Pool Facility and South of Campus Improvement Project
- Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15600 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.15

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	86.9	181.5

TABLE Existing-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/14/2020
ROADWAY SEGMENT: Berkshire Place - west of Oak Grove Drive
NOTES: New Outdoor Pool Facility and South of Campus Improvement Project
- Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12400 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.01

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	98.3	206.8

TABLE Existing with Construction Traffic-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/14/2020
ROADWAY SEGMENT: Foothill Boulevard - west of Oak Grove Drive
NOTES: New Outdoor Pool Facility and South of Campus Improvement Project
- Existing with Construction Traffic

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8500 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.49	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.65	0.02	0.09

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.38

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	76.1	162.3

TABLE Existing with Construction Traffic-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/14/2020

ROADWAY SEGMENT: Oak Grove Drive - Foothill Boulevard to Berkshire Place

NOTES: New Outdoor Pool Facility and South of Campus Improvement Project
- Existing with Construction Traffic

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15700 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.48	12.57	9.34
M-TRUCKS	1.56	0.09	0.20
H-TRUCKS	0.65	0.02	0.09

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.31

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	88.9	186.0

TABLE Existing with Construction Traffic-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/14/2020
ROADWAY SEGMENT: Berkshire Place - west of Oak Grove Drive
NOTES: New Outdoor Pool Facility and South of Campus Improvement Project
- Existing with Construction Traffic

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12500 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.48	12.57	9.34
M-TRUCKS	1.56	0.09	0.20
H-TRUCKS	0.65	0.02	0.09

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.16

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	100.4	211.3

