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# APPENDIX 3.7-1

## NOISE MODELING DATA

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**N O I S E M O N I T O R I N G D A T A**

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# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.094.s	Computer's File Name	LxT_0005424-20250723 140331-LxT_Data.094.ldbin		
Meter	LxT1 0005424	Firmware	2.404		
User	AC	Location	ST-1		
Job Description	EUSD				
Note					
Start Time	2025-07-23 14:03:31	Duration	0:15:00.0	Pause Time	0:00:00.0
End Time	2025-07-23 14:18:31	Run Time	0:15:00.0	Calibration Deviation	---
Pre-Calibration	2025-07-23 10:01:17	Post-Calibration	None		

## Results

### Overall Metrics

LA <sub>eq</sub>	61.3 dB		
LAE	90.8 dB	SEA	--- dB
EA	134.9 μPa²h		
EA8	4.3 mPa²h		
EA40	21.6 mPa²h		
LA <sub>Speak</sub>	97.4 dB	2025-07-23 14:09:11	
LA <sub>Smax</sub>	81.2 dB	2025-07-23 14:09:11	
LA <sub>Smin</sub>	47.2 dB	2025-07-23 14:16:40	
LA <sub>eq</sub>	61.3 dB		
LC <sub>eq</sub>	71.6 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	10.3 dB
LA <sub>Ieq</sub>	64.9 dB	LA <sub>Ieq</sub> - LA <sub>eq</sub>	3.6 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LASpk > 135.0 dB	0	0:00:00.0
LASpk > 137.0 dB	0	0:00:00.0
LASpk > 140.0 dB	0	0:00:00.0

### Community Noise

<b>LDN</b>	<b>LDay</b>	<b>LNight</b>
--- dB	--- dB	0.0 dB
<b>LDEN</b>	<b>LDay</b>	<b>LEve</b>
--- dB	--- dB	--- dB
		<b>LNight</b>
		--- dB

### Any Data

	<b>A</b>		<b>C</b>		<b>Z</b>
	Level	Time Stamp	Level	Time Stamp	Level
L <sub>eq</sub>	61.3 dB		--- dB		--- dB
L <sub>q(max)</sub>	81.2 dB	2025-07-23 14:09:11	--- dB	None	--- dB
L <sub>S(min)</sub>	47.2 dB	2025-07-23 14:16:40	--- dB	None	--- dB
L <sub>Peak(max)</sub>	97.4 dB	2025-07-23 14:09:11	--- dB	None	--- dB

### Overloads

<b>Count</b>	<b>Duration</b>
0	0:00:00.0

### Statistics

LAS 2.0	70.3 dB
LAS 8.0	62.4 dB
LAS 25.0	57.8 dB
LAS 50.0	53.3 dB
LAS 90.0	49.3 dB
LAS 99.0	47.9 dB



Project Name: \_\_\_\_\_

Date: 7/23/25

Project Number: EUSD-20

Monitoring Personnel: AC

Monitoring Site #: ST#1

Time Start: 2:02 End: 2:17

Site Location/Address: At the southern end of Paul Ecke Center ES at Halcyon Road

Primary Noise Source: Consistent vehicle traffic; Consistent music playing from residence, Train Passbys; horns

Measurement Results	
Percentiles	dB(A)
Leq	61.3
Lmax	81.2
Lmin	47.2
L2	70.3
L8	67.4
L25	57.8
L50	53.3
Other	
SEL/CNEL	

Observed Noise Sources/Events		
Time	Noise Source Event	dB(A)
3:20	plane fly over head	60
5:20	Sunline pass by	79
5:41	motorcycle	81
12:12	Trn-horns → Pass by @ 1247	75

Data File: 99 Photos: yes

Comments (sound walls, height, etc.): 6ft wooden fence

Max Wind Velocity (knots/hr)	Average Wind Velocity (knots/hr)	Temperature (F)	Relative Humidity (%)
<u>13mph</u>		<u>73</u>	<u>65%</u>

Traffic counts in both directions:

Roadway	# Lanes	Posted Speed	Autos	MD	HD



# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.090.s	Computer's File Name	LxT_0005424-20250723 104706-LxT_Data.090.ldbin		
Meter	LxT1 0005424	Firmware	2.404		
User	AC	Location	ST-2		
Job Description	EUSD-2.0				
Note					
Start Time	2025-07-23 10:47:06	Duration	0:15:00.0	Pause Time	0:00:00.0
End Time	2025-07-23 11:02:06	Run Time	0:15:00.0	Calibration Deviation	---
Pre-Calibration	2025-07-23 10:01:17	Post-Calibration	None		

## Results

### Overall Metrics

LA <sub>eq</sub>	53.2 dB		
LAE	82.7 dB	SEA	--- dB
EA	20.9 μPa²h		
EA8	668.6 μPa²h		
EA40	3.3 mPa²h		
LA <sub>Speak</sub>	88.6 dB	2025-07-23 10:59:36	
LA <sub>Smax</sub>	69.4 dB	2025-07-23 10:52:09	
LA <sub>Smin</sub>	41.1 dB	2025-07-23 10:54:21	
LA <sub>eq</sub>	53.2 dB		
LC <sub>eq</sub>	63.2 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	10.0 dB
LA <sub>Ieq</sub>	56.2 dB	LA <sub>Ieq</sub> - LA <sub>eq</sub>	3.0 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LASpk > 135.0 dB	0	0:00:00.0
LASpk > 137.0 dB	0	0:00:00.0
LASpk > 140.0 dB	0	0:00:00.0

### Community Noise

<b>LDN</b>	<b>LDay</b>	<b>LNight</b>
--- dB	--- dB	0.0 dB
<b>LDEN</b>	<b>LDay</b>	<b>LEve</b>
--- dB	--- dB	---
		<b>LNight</b>
		---

### Any Data

	<b>A</b>		<b>C</b>		<b>Z</b>	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	53.2 dB		--- dB		--- dB	
L <sub>q(max)</sub>	69.4 dB	2025-07-23 10:52:09	--- dB	None	--- dB	None
L <sub>S(min)</sub>	41.1 dB	2025-07-23 10:54:21	--- dB	None	--- dB	None
L <sub>Peak(max)</sub>	88.6 dB	2025-07-23 10:59:36	--- dB	None	--- dB	None

### Overloads

<b>Count</b>	<b>Duration</b>
0	0:00:00.0

### Statistics

LAS 2.0	65.1 dB
LAS 8.0	52.5 dB
LAS 25.0	47.7 dB
LAS 50.0	45.7 dB
LAS 90.0	42.9 dB
LAS 99.0	41.5 dB



Project Name: \_\_\_\_\_

Date: 7/23/25

Project Number: EUSD - 2.0

Monitoring Personnel: JC

Monitoring Site #: ST#2

Time Start: 10:47 End: 11:02

Site Location/Address: At the southern portion of Pupil Ecker Central ES at the playground structures, just west of 182 Halcyon Road

Primary Noise Source: Residential noise; Roadway noise from Vulcan Ave; PCH/Bus (random cars, motor cycles); Sand practice in portable classrooms

Measurement Results	
Percentiles	dBA
Leq	53.2
Lmax	64.4
Lmin	41.1
L2	65.1
L8	52.5
L25	47.7
L50	45.7
Other	
SEL/CNEL	

Observed Noise Sources/Events		
Time	Noise Source Event	dBA
0:02	Train Passing by	68
1:56	Motorcycles	56
5:00	Helicopter flying overhead	69

Data File: 90  Photos: yes

Comments (sound walls, height, etc.): A ~~10~~ +7ft wooden fence

Max Wind Velocity (knots/hr)	Average Wind Velocity (knots/hr)	Temperature (F)	Relative Humidity (%)
<u>15mph</u>		<u>73°</u>	<u>65%</u>

Traffic counts in both directions:

Roadway	# Lanes	Posted Speed	Autos	MD	HD

# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.095.s	Computer's File Name	LxT_0005424-20250723 142845-LxT_Data.095.ldbin		
Meter	LxT1 0005424	Firmware	2.404		
User	AC	Location	ST-3		
Job Description	EUSD-2.0				
Note					
Start Time	2025-07-23 14:28:45	Duration	0:15:00.0		
End Time	2025-07-23 14:43:45	Run Time	0:15:00.0	Pause Time	0:00:00.0
Pre-Calibration	2025-07-23 10:01:17	Post-Calibration	None	Calibration Deviation	---

## Results

### Overall Metrics

LA <sub>eq</sub>	47.9 dB		
LAE	77.4 dB	SEA	--- dB
EA	6.2 μPa²h		
EA8	197.3 μPa²h		
EA40	986.6 μPa²h		
LA <sub>Speak</sub>	86.7 dB	2025-07-23 14:36:40	
LA <sub>Smax</sub>	55.1 dB	2025-07-23 14:38:34	
LA <sub>Smin</sub>	44.2 dB	2025-07-23 14:35:38	
LA <sub>eq</sub>	47.9 dB		
LC <sub>eq</sub>	62.1 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	14.2 dB
LA <sub>Ieq</sub>	51.1 dB	LA <sub>Ieq</sub> - LA <sub>eq</sub>	3.2 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LASpk > 135.0 dB	0	0:00:00.0
LASpk > 137.0 dB	0	0:00:00.0
LASpk > 140.0 dB	0	0:00:00.0

### Community Noise

<b>LDN</b>	<b>LDay</b>	<b>LNight</b>	
--- dB	--- dB	0.0 dB	
<b>LDEN</b>	<b>LDay</b>	<b>LEve</b>	<b>LNight</b>
--- dB	--- dB	--- dB	--- dB

### Any Data

	<b>A</b>		<b>C</b>		<b>Z</b>	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	47.9 dB		--- dB		--- dB	
L <sub>q(max)</sub>	55.1 dB	2025-07-23 14:38:34	--- dB	None	--- dB	None
L <sub>S(min)</sub>	44.2 dB	2025-07-23 14:35:38	--- dB	None	--- dB	None
L <sub>Peak(max)</sub>	86.7 dB	2025-07-23 14:36:40	--- dB	None	--- dB	None

### Overloads

<b>Count</b>	<b>Duration</b>
0	0:00:00.0

### Statistics

LAS 2.0	52.9 dB
LAS 8.0	50.2 dB
LAS 25.0	48.4 dB
LAS 50.0	47.2 dB
LAS 90.0	45.3 dB
LAS 99.0	44.4 dB



Project Name: \_\_\_\_\_ Date: 7/23/25  
 Project Number: EUSD-20 Monitoring Personnel: AE  
 Monitoring Site #: ST #3 Time Start: 2:27 End: 2:42

Site Location/Address: At the western portion of the Orpheus Park playground structure

Primary Noise Source: Distant Roadway traffic; Distant dog barking

Measurement Results	
Percentiles	dB(A)
Leq	47.9
Lmax	55.1
Lmin	44.2
L2	52.9
L8	50.2
L25	48.4
L50	47.2
Other	
SEL/CNEL	

Observed Noise Sources/Events		
Time	Noise Source Event	dB(A)
4:00	Plane flying overhead	54

Data File: 95  Photos: \_\_\_\_\_

Comments (sound walls, height, etc.): N/A

Max Wind Velocity (knots/hr)	Average Wind Velocity (knots/hr)	Temperature (F)	Relative Humidity (%)
13 mph		73°	65%

Traffic counts in both directions:

Roadway	# Lanes	Posted Speed	Autos	MD	HD

# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.093.s	Computer's File Name	LxT_0005424-20250723 133921-LxT_Data.093.ldbin		
Meter	LxT1 0005424	Firmware	2.404		
User	AC	Location	ST-4		
Job Description	EUSD-2.0				
Note					
Start Time	2025-07-23 13:39:21	Duration	0:15:00.0	Pause Time	0:00:00.0
End Time	2025-07-23 13:54:21	Run Time	0:15:00.0	Calibration Deviation	---
Pre-Calibration	2025-07-23 10:01:17	Post-Calibration	None		

## Results

### Overall Metrics

LA <sub>eq</sub>	52.3 dB		
LAE	81.8 dB	SEA	--- dB
EA	17.0 μPa²h		
EA8	543.4 μPa²h		
EA40	2.7 mPa²h		
LA <sub>Speak</sub>	89.0 dB		2025-07-23 13:44:14
LA <sub>Smax</sub>	72.9 dB		2025-07-23 13:44:14
LA <sub>Smin</sub>	41.8 dB		2025-07-23 13:45:36
LA <sub>eq</sub>	52.3 dB		
LC <sub>eq</sub>	62.7 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	10.4 dB
LA <sub>Ieq</sub>	55.6 dB	LA <sub>Ieq</sub> - LA <sub>eq</sub>	3.3 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LASpk > 135.0 dB	0	0:00:00.0
LASpk > 137.0 dB	0	0:00:00.0
LASpk > 140.0 dB	0	0:00:00.0

### Community Noise

<b>LDN</b>	<b>LDay</b>	<b>LNight</b>
--- dB	--- dB	0.0 dB
<b>LDEN</b>	<b>LDay</b>	<b>LEve</b>
--- dB	--- dB	--- dB
		<b>LNight</b>
		--- dB

### Any Data

	<b>A</b>		<b>C</b>		<b>Z</b>	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	52.3 dB		--- dB		--- dB	
L <sub>q(max)</sub>	72.9 dB	2025-07-23 13:44:14	--- dB	None	--- dB	None
L <sub>S(min)</sub>	41.8 dB	2025-07-23 13:45:36	--- dB	None	--- dB	None
L <sub>Peak(max)</sub>	89.0 dB	2025-07-23 13:44:14	--- dB	None	--- dB	None

### Overloads

<b>Count</b>	<b>Duration</b>
0	0:00:00.0

### Statistics

LAS 2.0	62.1 dB
LAS 8.0	53.9 dB
LAS 25.0	49.1 dB
LAS 50.0	46.7 dB
LAS 90.0	44.1 dB
LAS 99.0	43.0 dB



Project Name: \_\_\_\_\_

Date: 7/23/25

Project Number: EUSD - 2.0

Monitoring Personnel: AL

Monitoring Site #: ST #4

Time Start: 1:38 End: 1:53

Site Location/Address: In front of (south of) 156 Union Street.

Primary Noise Source: distant & local Roadway noise; consistent small air planes flying overhead.

Measurement Results	
Percentiles	dBA
Leq	52.3
Lmax	72.9
Lmin	41.8
L2	62.1
L8	53.9
L25	49.1
L50	46.7
Other	44.1
SEL/CNEL	43.0

Observed Noise Sources/Events		
Time	Noise Source Event	dBA

Data File: 93  Photos: \_\_\_\_\_

Comments (sound walls, height, etc.): N/A

Max Wind Velocity (knots/hr)	Average Wind Velocity (knots/hr)	Temperature (F)	Relative Humidity (%)
13		73	65%

Traffic counts in both directions:

Roadway	# Lanes	Posted Speed	Autos	MD	HD

# Train Measurement Report

## Report Summary

Meter's File Name	LxT_Data.117.s	Computer's File Name	LxT_0005424-20250801 103706-LxT_Data.117.ldbin		
Meter	LxT1 0005424	Firmware	2.404		
User AC		Location			
Job Description	EUSD-03.0				
Note	Train Measurement				
Start Time	2025-08-01 10:37:06	Duration	0:00:12.7		
End Time	2025-08-01 10:37:19	Run Time	0:00:00.7	Pause Time	0:00:12.0
Pre-Calibration	2025-08-01 10:23:18	Post-Calibration	None	Calibration Deviation	---

## Results

### Overall Metrics

LA <sub>eq</sub>	67.3 dB		
LAE	65.8 dB	SEA	--- dB
EA	0.4 µPa²h		
EA8	17.2 mPa²h		
EA40	85.9 mPa²h		
LA <sub>Speak</sub>	80.8 dB	2025-08-01 10:37:06	
LA <sub>Smax</sub>	69.4 dB	2025-08-01 10:37:07	
LA <sub>Smin</sub>	65.1 dB	2025-08-01 10:37:06	
LA <sub>eq</sub>	67.3 dB		
LC <sub>eq</sub>	75.9 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	8.6 dB
LA <sub>Ieq</sub>	71.3 dB	LA <sub>Ieq</sub> - LA <sub>eq</sub>	4.0 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LASpk > 135.0 dB	0	0:00:00.0
LASpk > 137.0 dB	0	0:00:00.0
LASpk > 140.0 dB	0	0:00:00.0

### Community Noise

<b>LDN</b>	<b>LDay</b>	<b>LNight</b>	
--- dB	--- dB	0.0 dB	
<b>LDEN</b>	<b>LDay</b>	<b>LEve</b>	<b>LNight</b>
--- dB	--- dB	--- dB	--- dB

### Any Data

	<b>A</b>		<b>C</b>		<b>Z</b>	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	71.3 dB		--- dB		--- dB	
L <sub>q(max)</sub>	69.4 dB	2025-08-01 10:37:07	--- dB	None	--- dB	None
L <sub>S(min)</sub>	65.1 dB	2025-08-01 10:37:06	--- dB	None	--- dB	None
L <sub>Peak(max)</sub>	80.8 dB	2025-08-01 10:37:06	--- dB	None	--- dB	None

### Overloads

Count	Duration
0	0:00:00.0

### Statistics

LAS 2.0	69.4 dB
LAS 8.0	69.1 dB
LAS 25.0	68.1 dB
LAS 50.0	67.0 dB
LAS 90.0	65.5 dB
LAS 99.0	65.1 dB

# Train Measurement Report

## Report Summary

Meter's File Name	LxT_Data.118.s	Computer's File Name	LxT_0005424-20250801 104628-LxT_Data.118.ldbin		
Meter	LxT1 0005424	Firmware	2.404		
User AC		Location			
Job Description	EUSD-03.0				
Note	Train Measurement				
Start Time	2025-08-01 10:46:28	Duration	0:00:06.2		
End Time	2025-08-01 10:46:34	Run Time	0:00:00.8	Pause Time	0:00:05.4
Pre-Calibration	2025-08-01 10:23:16	Post-Calibration	None	Calibration Deviation	---

## Results

### Overall Metrics

LA <sub>eq</sub>	75.5 dB		
LAE	74.5 dB	SEA	--- dB
EA	3.2 µPa²h		
EA8	113.5 mPa²h		
EA40	567.7 mPa²h		
LA <sub>Speak</sub>	89.1 dB	2025-08-01 10:46:28	
LA <sub>Smax</sub>	76.0 dB	2025-08-01 10:46:29	
LA <sub>Smin</sub>	71.3 dB	2025-08-01 10:46:28	
LA <sub>eq</sub>	75.5 dB		
LC <sub>eq</sub>	80.8 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	5.3 dB
LA <sub>Ieq</sub>	76.3 dB	LA <sub>Ieq</sub> - LA <sub>eq</sub>	0.8 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LASpk > 135.0 dB	0	0:00:00.0
LASpk > 137.0 dB	0	0:00:00.0
LASpk > 140.0 dB	0	0:00:00.0

### Community Noise

<b>LDN</b>	<b>LDay</b>	<b>LNight</b>	
--- dB	--- dB	0.0 dB	
<b>LDEN</b>	<b>LDay</b>	<b>LEve</b>	<b>LNight</b>
--- dB	--- dB	--- dB	--- dB

### Any Data

	<b>A</b>		<b>C</b>		<b>Z</b>	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	76.1 dB		--- dB		--- dB	
L <sub>q(max)</sub>	76.0 dB	2025-08-01 10:46:29	--- dB	None	--- dB	None
L <sub>S(min)</sub>	71.3 dB	2025-08-01 10:46:28	--- dB	None	--- dB	None
L <sub>Peak(max)</sub>	89.1 dB	2025-08-01 10:46:28	--- dB	None	--- dB	None

### Overloads

Count	Duration
0	0:00:00.0

### Statistics

LAS 2.0	76.0 dB
LAS 8.0	75.9 dB
LAS 25.0	75.8 dB
LAS 50.0	75.7 dB
LAS 90.0	75.6 dB
LAS 99.0	71.3 dB

C O N S T R U C T I O N   M O D E L I N G   R E S U L T S

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## EUSD-03.0 - Construction Noise Modeling Attenuation Calculations

Levels in dBA Leq

Phase	RCNM				
	Reference Noise Level	Receptor to North	Receptor to East	Receptor to South	Receptor to West
<i>Distance in feet</i>	50	110	245	110	375
Site Prep	80.0	73	66	73	62
Grading	81.0	74	67	74	63
<i>Distance in feet</i>	50	90	165	80	340
Building Construction	78.0	73	68	74	61
Architectural Coating	77.0	72	67	73	60
<i>Distance in feet</i>	50	75	155	65	280
Paving	77.0	73	67	75	62

Attenuation calculated through Inverse Square Law:  $L_p(R2) = L_p(R1) - 20\text{Log}(R2/R1)$

**EUSD-03.0 - Vibration Damage Attenuation Calculations**

Levels, PPV (in/sec)

<i>Distance in feet</i>	<b>Vibration Reference Level</b>	<b>Receptor to North</b>	<b>Receptor to East</b>	<b>Receptor to South</b>	<b>Receptor to West</b>
	<b>at 25 feet</b>	<i>75</i>	<i>155</i>	<i>65</i>	<i>280</i>
Vibratory Roller	0.21	0.040	0.014	0.050	0.006
Large Bulldozer	0.089	0.017	0.006	0.021	0.002
Caisson Drilling	0.089	0.017	0.006	0.021	0.002
Loaded Trucks	0.076	0.015	0.005	0.018	0.002
Static Roller	0.05	0.010	0.003	0.012	0.001
Jackhammer	0.035	0.007	0.002	0.008	0.001
Small Bulldozer	0.003	0.001	0.000	0.001	0.000

T R A F F I C M O D E L I N G R E S U L T S

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Traffic Noise Calculator: FHWA 77-108																							Euclid and Heil Residential (EUSD-03.0) Existing Traffic Noise Traffic Conditions																						
		Output					Inputs															Auto Inputs																							
		dBA at 50 feet			Distance to CNEL Contour																																								
ID	L <sub>eq</sub> 24hr	L <sub>dn</sub>	CNEL	70 dBA	65 dBA	60 dBA	Roadway	Segment From - To	ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Receiver	Ground Absorption	Lane Distance																							
1	53.5	56.3	57.0	7	15	32	Vulcan Avenue	the North	Union Street	2,380	25	0.0%	96.0%	2.5%	1.5%	75.0%	15.0%	10.0%	2	Soft	50	0.5	20																						
2	54.4	57.2	57.9	8	17	36	Vulcan Avenue	Union Street	the South	2,900	25	0.0%	96.0%	2.5%	1.5%	75.0%	15.0%	10.0%	2	Soft	50	0.5	20																						
3	49.8	52.6	53.3	4	8	18	Union Street	the East	Vulcan Avenue	1,500	20	0.0%	96.0%	2.5%	1.5%	75.0%	15.0%	10.0%	2	Soft	50	0.5	20																						
4	53.1	55.9	56.6	6	14	29	Hemes Avenue	the North	Union Street	3,200	20	0.0%	96.0%	2.5%	1.5%	75.0%	15.0%	10.0%	2	Soft	50	0.5	20																						
5	53.1	55.9	56.6	6	14	30	Cereus Street	the East	Hermes Avenue	3,220	20	0.0%	96.0%	2.5%	1.5%	75.0%	15.0%	10.0%	2	Soft	50	0.5	20																						
6	52.5	55.3	56.0	6	13	27	Hygeia Avenue	the North	Cereus Street	2,800	20	0.0%	96.0%	2.5%	1.5%	75.0%	15.0%	10.0%	2	Soft	50	0.5	20																						
7	48.5	51.3	52.0	3	7	15	Hygeia Avenue	Cereus Street	the South	1,120	20	0.0%	96.0%	2.5%	1.5%	75.0%	15.0%	10.0%	2	Soft	50	0.5	20																						

Traffic Noise Calculator: FHWA 77-108																							Euclid and Heil Residential (EUSD-03.0) Existing Plus Project Traffic Noise Traffic Conditions																						
ID	Output						Inputs															Auto Inputs																							
	dBA at 50 feet			Distance to CNEL Contour			Roadway	Segment From - To	ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Receiver	Ground Absorption	Lane Distance																							
L <sub>eq</sub> 24hr	L <sub>dn</sub>	CNEL	70 dBA	65 dBA	60 dBA																																								
1	54.0	56.8	57.5	7	16	34	Vulcan Avenue	the North	Union Street	2,678	25	0.0%	96.0%	2.5%	1.5%	75.0%	15.0%	10.0%	2	Soft	50	0.5	20																						
2	54.8	57.6	58.3	8	18	38	Vulcan Avenue	Union Street	the South	3,198	25	0.0%	96.0%	2.5%	1.5%	75.0%	15.0%	10.0%	2	Soft	50	0.5	20																						
3	50.6	53.4	54.1	4	9	20	Union Street	the East	Vulcan Avenue	1,798	20	0.0%	96.0%	2.5%	1.5%	75.0%	15.0%	10.0%	2	Soft	50	0.5	20																						
4	53.5	56.3	56.9	7	15	31	Hemes Avenue	the North	Union Street	3,498	20	0.0%	96.0%	2.5%	1.5%	75.0%	15.0%	10.0%	2	Soft	50	0.5	20																						
5	53.5	56.3	57.0	7	15	31	Cereus Street	the East	Hermes Avenue	3,518	20	0.0%	96.0%	2.5%	1.5%	75.0%	15.0%	10.0%	2	Soft	50	0.5	20																						
6	52.9	55.7	56.4	6	13	29	Hygeia Avenue	the North	Cereus Street	3,098	20	0.0%	96.0%	2.5%	1.5%	75.0%	15.0%	10.0%	2	Soft	50	0.5	20																						
7	49.6	52.3	53.0	4	8	17	Hygeia Avenue	Cereus Street	the South	1,418	20	0.0%	96.0%	2.5%	1.5%	75.0%	15.0%	10.0%	2	Soft	50	0.5	20																						

# R a i l M o d e l i n g R e s u l t s

Noise Model Based on Federal Transit Administration General Transit Noise Assessment  
 Developed for Chicago Create Project  
 Copyright 2006, HMMH Inc.  
 Case: EUSD-03.0 Paul Ecke School Rebuild Rail Noise

RESULTS			
Noise Source	Leq - 1-hr (dB)		
All Sources	60		
Source 1	55		
Source 2	58		
Source 3	0		
Source 4	0		
Source 5	0		
Source 6	0		
Source 7	0		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	1

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Commuter Diesel Locomotive	2	Commuter Rail Cars	3	
Distance (source to receiver)	distance (ft)	125	distance (ft)	125	
Noisiest Hour of	speed (mph)	72	speed (mph)	72	
Activity During	trains/hour	4	trains/hour	4	
Sensitive Hours	locos/train	1	cars/train	7	
Wheel Flats?		n	% of cars w/ wheel flats		
Jointed Track?	Y/N	n	Y/N		
Embedded Track?	Y/N	n	Y/N		
Aerial Structure?	Y/N	n	Y/N		
Barrier Present?	Y/N	n	Y/N		
Intervening Rows of Buildings	number of rows	0	number of rows		

