Appendix I

Noise and Vibration Data

Noise Measurement Field Data

Project:	Cedarwoods Fullerton Warehouse	**Job Number:**	094925102
Site No.:	1	**Date:**	7/15/2025
Analyst:	Coryn and Dharma	**Time:**	8:41 a.m. - 8:51 a.m.
Location:	Adjacent 823 Lark Avenue, along South Placentia Avenue		

Noise Sources:	traffic (cars/heavy duty trucks), person jogging by, music from phone, weed wacker, lawn mower
Comments:	

Results (dBA):

Leq:	Lmin:	Lmax:	Peak:
73.1	56.4	91.6	109.5

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	67
Wind (mph):	2
Sky:	Partly Cloudy
Bar. Pressure (inHg):	29.94
Humidity:	82%

Photo:

Kimley»Horn

Measurement Report

Report Summary

Meter's File Name	ST-1.153.s	Computer's File Name	LxTse_0007061-20250715 084144-ST-1.153.ldbin
Meter	LxT SE 0007061	Firmware	2.404
User		Location	
Job Description			
Note			

Measurement

Start Time	2025-07-15 08:41:44	Duration	0:10:00.0		
End Time	2025-07-15 08:51:44	Run Time	0:10:00.0	Pause Time	0:00:00.0
Pre-Calibration	2025-07-15 08:34:53	Post-Calibration	None	Calibration Deviation	0.0

Results

Overall Metrics

LA_{eq}	73.1 dB		
LAE	100.9 dB	SEA	--- dB
EA	1.4 mPa²h		
LA_{peak}	109.5 dB	2025-07-15 08:46:08	
LAS_{max}	91.6 dB	2025-07-15 08:46:14	
LAS_{min}	56.4 dB	2025-07-15 08:44:17	
LA_{eq}	73.1 dB		
LC_{eq}	81.1 dB	LC_{eq} - LA_{eq}	8.0 dB
LAI_{eq}	75.6 dB	LAI_{eq} - LA_{eq}	2.5 dB

Exceedances	Count	Duration
LAS > 85.0 dB	1	0:00:09.6
LAS > 115.0 dB	0	0:00:00.0
LApk > 135.0 dB	0	0:00:00.0
LApk > 137.0 dB	0	0:00:00.0
LApk > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight	
	73.1 dB	73.1 dB	--- dB	
	LDEN	LDay	LEve	LNight
	73.1 dB	73.1 dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	73.1 dB		81.1 dB		--- dB	
$LS_{(max)}$	91.6 dB	2025-07-15 08:46:14	--- dB	None	--- dB	None
$LS_{(min)}$	56.4 dB	2025-07-15 08:44:17	--- dB	None	--- dB	None
$L_{Peak(max)}$	109.5 dB	2025-07-15 08:46:08	--- dB	None	--- dB	None

Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 5.0	76.4 dB
LAS 10.0	74.7 dB
LAS 33.3	70.4 dB
LAS 50.0	68.4 dB
LAS 66.6	66.3 dB
LAS 90.0	62.4 dB

Noise Measurement Field Data

Project:	Cedarwoods Fullerton Warehouse	**Job Number:**	094925102
Site No.:	2	**Date:**	7/15/2025
Analyst:	Coryn and Dharma	**Time:**	8:56 a.m. - 9:06 a.m.
Location:	entrance to Interface Rehab		
Noise Sources:	traffic (cars/heavy duty trucks), cars entering/exiting parking lot of rehab center		
Comments:			

Results (dBA):

Leq:	Lmin:	Lmax:	Peak:
71.5	50.5	80.8	100.3

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	68
Wind (mph):	2
Sky:	Partly Cloudy
Bar. Pressure (inHg):	29.94
Humidity:	80%

Photo:

Kimley»Horn

Measurement Report

Report Summary

Meter's File Name	ST-1.154.s	Computer's File Name	LxTse_0007061-20250715 085640-ST-1.154.ldbin
Meter	LxT SE 0007061	Firmware	2.404
User		Location	
Job Description			
Note			

Measurement

Start Time	2025-07-15 08:56:40	Duration	0:10:00.0		
End Time	2025-07-15 09:06:40	Run Time	0:10:00.0	Pause Time	0:00:00.0
Pre-Calibration	2025-07-15 08:34:51	Post-Calibration	None	Calibration Deviation	0.0

Results

Overall Metrics

LA_{eq}	71.5 dB		
LAE	99.3 dB	SEA	--- dB
EA	941.7 µPa²h		
LA_{peak}	100.3 dB	2025-07-15 09:01:17	
LAS_{max}	80.8 dB	2025-07-15 09:01:09	
LAS_{min}	50.5 dB	2025-07-15 09:03:55	
LA_{eq}	71.5 dB		
LC_{eq}	76.3 dB	LC_{eq} - LA_{eq}	4.8 dB
LAI_{eq}	73.9 dB	LAI_{eq} - LA_{eq}	2.4 dB

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

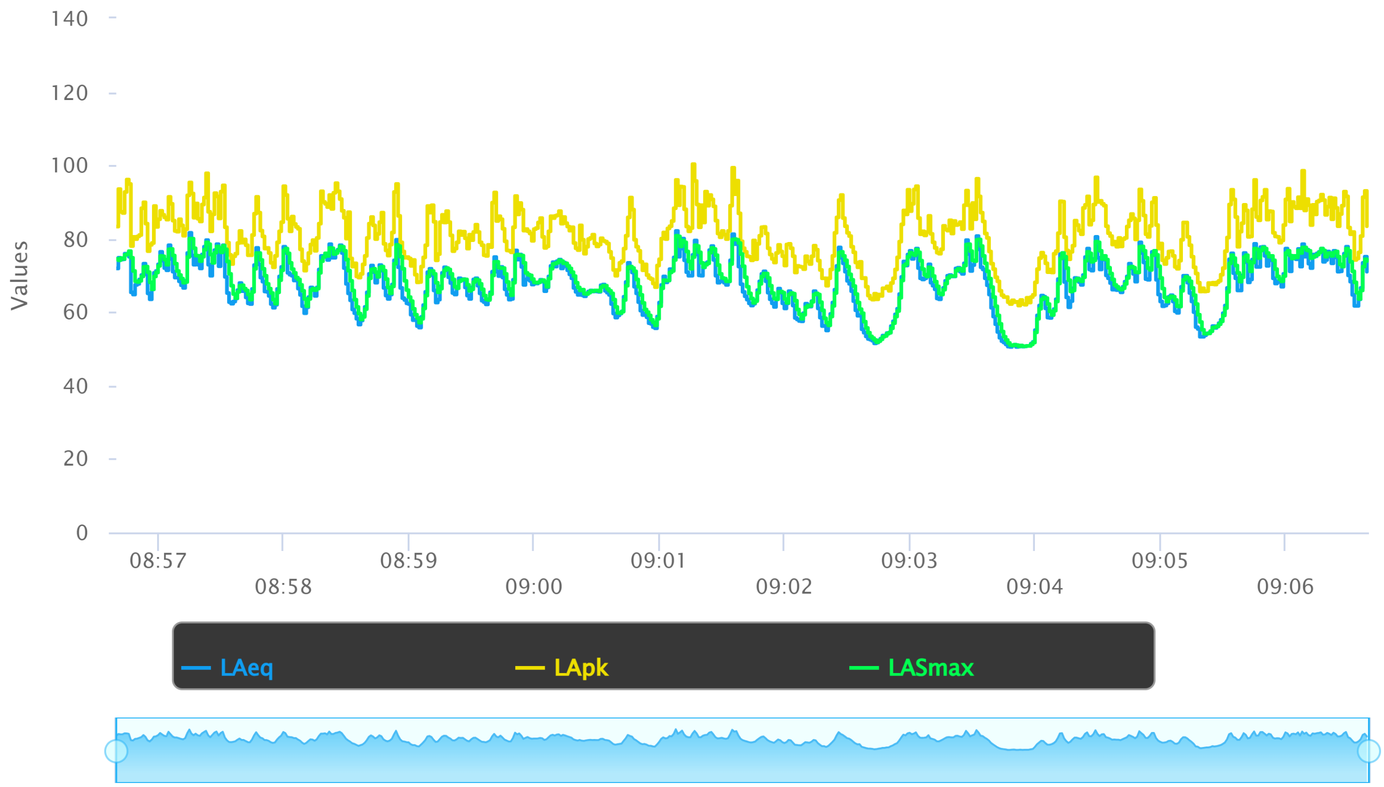
Community Noise	LDN	LDay	LNight	
	71.5 dB	71.5 dB	--- dB	
	LDEN	LDay	LEve	LNight
	71.5 dB	71.5 dB	--- dB	--- dB

Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	71.5 dB		76.3 dB		--- dB	
$LS_{(max)}$	80.8 dB	2025-07-15 09:01:09	--- dB	None	--- dB	None
$LS_{(min)}$	50.5 dB	2025-07-15 09:03:55	--- dB	None	--- dB	None
$L_{Peak(max)}$	100.3 dB	2025-07-15 09:01:17	--- dB	None	--- dB	None

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

Statistics	
LAS 5.0	76.9 dB
LAS 10.0	75.7 dB
LAS 33.3	71.6 dB
LAS 50.0	68.6 dB
LAS 66.6	65.6 dB
LAS 90.0	58.0 dB

Time History



Dark Mode

Noise Measurement Field Data

Project:	Cedarwoods Fullerton Warehouse	**Job Number:**	094925102
Site No.:	3	**Date:**	7/15/2025
Analyst:	Coryn and Dharma	**Time:**	9:18 a.m. - 9:28 a.m.
Location:	adjacent to Doggi Dogi Pet Spa		
Noise Sources:	car door opening/closing, front door alarm, traffic (cars/heavy duty trucks), people talking		
Comments:			

Results (dBA):

Leq:	Lmin:	Lmax:	Peak:
61.3	50.5	73.9	88.3

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	68
Wind (mph):	3
Sky:	Partly Cloudy
Bar. Pressure (inHg):	29.96
Humidity:	78%

Photo:

Kimley»Horn

Measurement Report

Report Summary

Meter's File Name	ST-1.155.s	Computer's File Name	LxTse_0007061-20250715 091831-ST-1.155.ldbin
Meter	LxT SE 0007061	Firmware	2.404
User		Location	
Job Description			
Note			

Measurement

Start Time	2025-07-15 09:18:31	Duration	0:10:00.0		
End Time	2025-07-15 09:28:31	Run Time	0:10:00.0	Pause Time	0:00:00.0
Pre-Calibration	2025-07-15 08:34:51	Post-Calibration	None	Calibration Deviation	0.0

Results

Overall Metrics

LA_{eq}	61.3 dB		
LAE	89.1 dB	SEA	--- dB
EA	89.9 µPa²h		
LA_{peak}	88.3 dB	2025-07-15 09:27:18	
LAS_{max}	73.9 dB	2025-07-15 09:20:12	
LAS_{min}	50.5 dB	2025-07-15 09:19:25	
LA_{eq}	61.3 dB		
LC_{eq}	71.2 dB	LC_{eq} - LA_{eq}	9.9 dB
LAI_{eq}	62.8 dB	LAI_{eq} - LA_{eq}	1.5 dB

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

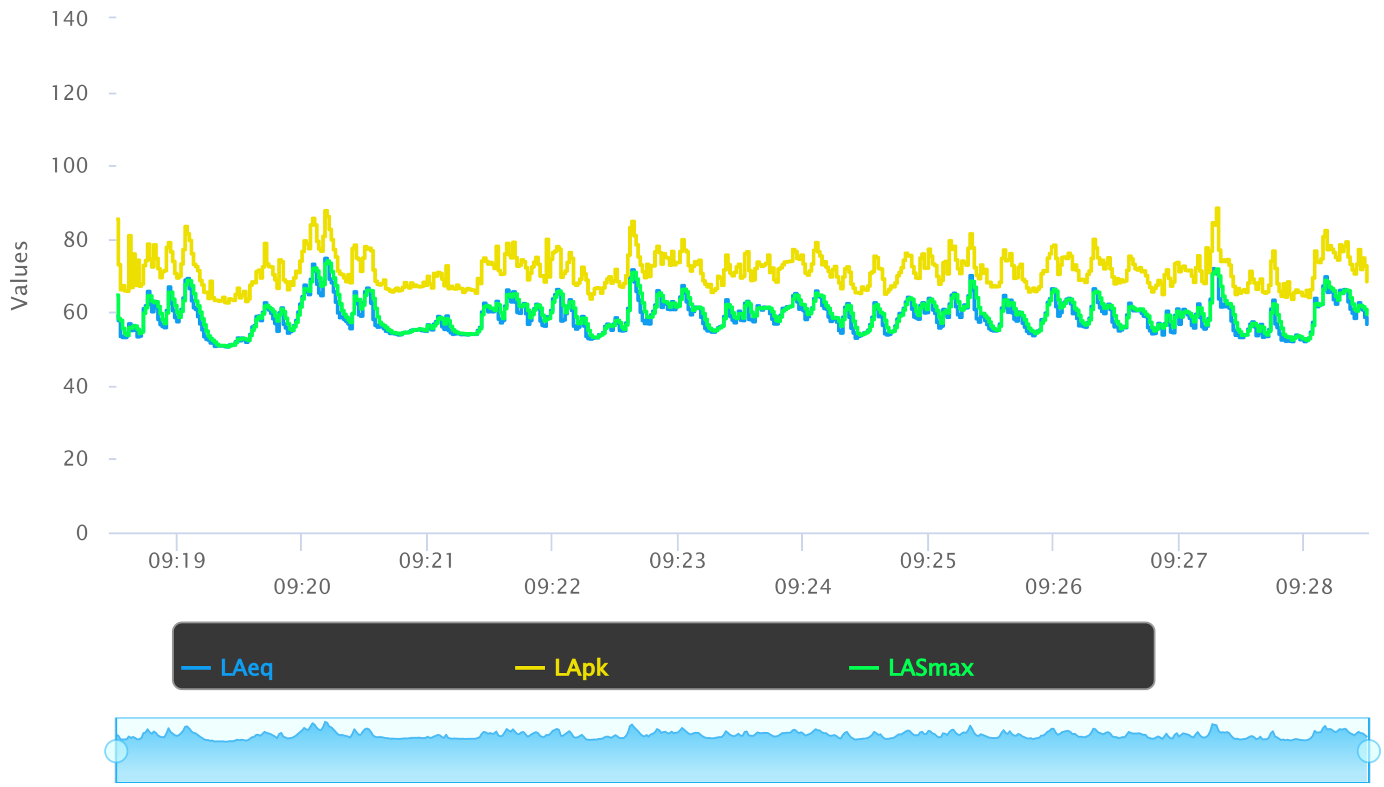
Community Noise	LDN	LDay	LNight	
	61.3 dB	61.3 dB	--- dB	
	LDEN	LDay	LEve	LNight
	61.3 dB	61.3 dB	--- dB	--- dB

Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	61.3 dB		71.2 dB		--- dB	
$LS_{(max)}$	73.9 dB	2025-07-15 09:20:12	--- dB	None	--- dB	None
$LS_{(min)}$	50.5 dB	2025-07-15 09:19:25	--- dB	None	--- dB	None
$L_{Peak(max)}$	88.3 dB	2025-07-15 09:27:18	--- dB	None	--- dB	None

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

Statistics	
LAS 5.0	66.0 dB
LAS 10.0	64.4 dB
LAS 33.3	60.9 dB
LAS 50.0	58.9 dB
LAS 66.6	56.7 dB
LAS 90.0	54.0 dB

Time History



Dark
Mode

On-site Construction Noise Impact on Receptors

Parameters

Construction Hours:	Daytime hours (7 am to 7 pm)	8
	Evening hours (7 pm to 10 pm)	0
	Nighttime hours (10 pm to 7 am)	0
Leq to L10 factor		3

	Receptor	Shielding	Direction
1	Commercial	0	N
2	Residential	0	S
3	Interface Rehab	0	E

Construction Noise Levels by Phase (Leq)

Demolition	Site Preparation	Grading	Infrastructure Improvements	Building Construction	Paving	Architectural Coating	Maximum Construction
80.5	79.4	80.0	80.5	81.4	80.3	70.8	84.0
61.3	61.8	62.0	60.5	63.8	61.1	49.2	65.7
59.0	59.6	59.7	58.1	61.6	58.8	46.8	63.4

					RECEPTOR 1			RECEPTOR 2			RECEPTOR 3		
Construction Phase	**Equipment Type**	**No. of Equip.**	**Acoustical Usage Factor**	**Reference Noise Level at 50ft per Unit, Lmax**	**Distance (feet)**	**Noise Level at Receptor 1, Lmax**	**Noise Level at Receptor 1, Leq**	**Distance (feet)**	**Noise Level at Receptor 2, Lmax**	**Noise Level at Receptor 2, Leq**	**Distance (feet)**	**Noise Level at Receptor 3, Lmax**	**Noise Level at Receptor 3, Leq**
Demolition													
	Concrete Saw	1	20%	90	70	86.7	79.7	840	65.1	58.1	1110	62.7	55.7
	Excavator	2	40%	81	140	74.8	70.8	910	58.5	54.5	1180	56.3	52.3
	Excavator	1	40%	81	210	68.2	64.3	980	54.9	50.9	1250	52.7	48.8
	Dozer	1	40%	82	210	69.2	65.3	980	55.9	51.9	1250	53.7	49.8
	Dozer	1	40%	82	280	66.7	62.8	1050	55.3	51.3	1320	53.3	49.3
	Combined LEQ						**80.5**			**61.3**			**59.0**
Site Preparation													
	Tractor	1	40%	84	70	81.1	77.1	840	59.5	55.5	1110	57.1	53.1
	Tractor	2	40%	84	140	78.1	74.1	910	61.8	57.8	1180	59.6	55.6
	Tractor	1	40%	84	210	71.5	67.6	980	58.2	54.2	1250	56.0	52.1
	Dozer	1	40%	82	210	69.2	65.3	980	55.9	51.9	1250	53.7	49.8
	Dozer	1	40%	82	280	66.7	62.8	1050	55.3	51.3	1320	53.3	49.3
	Combined LEQ						**79.4**			**61.8**			**59.6**
Grading													
	Grader	1	40%	85	70	82.1	78.1	840	60.5	56.5	1110	58.1	54.1
	Tractor	2	40%	84	140	78.1	74.1	910	61.8	57.8	1180	59.6	55.6
	Tractor	1	40%	84	210	71.5	67.6	980	58.2	54.2	1250	56.0	52.1
	Dozer	1	40%	82	210	69.2	65.3	980	55.9	51.9	1250	53.7	49.8
	Excavator	1	40%	81	280	65.7	61.8	1050	54.3	50.3	1320	52.3	48.3
	Combined LEQ						**80.0**			**62.0**			**59.7**
Infrastructure Improvements													
	Concrete Saw	1	20%	90	70	86.7	79.7	840	65.1	58.1	1110	62.7	55.7
	Slurry Trenching Machine	1	50%	80	140	71.5	68.4	910	55.2	52.2	1180	52.9	49.9
	Tractor	1	40%	84	140	75.1	71.1	910	58.8	54.8	1180	56.5	52.6
	Combined LEQ						**80.5**			**60.5**			**58.1**
Building Construction													
	All Other Equipment > 5 HP	1	50%	85	70	82.1	79.1	840	60.5	57.5	1110	58.1	55.1
	All Other Equipment > 5 HP	2	50%	85	140	79.1	76.1	910	62.8	59.8	1180	60.6	57.5
	Tractor	2	40%	84	210	74.5	70.6	980	61.2	57.2	1250	59.1	55.1
	Tractor	1	40%	84	280	69.0	65.1	1050	57.6	53.6	1320	55.6	51.6
	Generator	1	50%	81	280	65.6	62.6	1050	54.2	51.1	1320	52.2	49.2
	Welder/Torch	1	40%	74	280	59.0	55.1	1050	47.6	43.6	1320	45.6	41.6
	Combined LEQ						**81.4**			**63.8**			**61.6**
Paving													
	All Other Equipment > 5 HP	1	50%	85	70	82.1	79.1	840	60.5	57.5	1110	58.1	55.1
	All Other Equipment > 5 HP	1	50%	85	140	76.1	73.0	910	59.8	56.8	1180	57.5	54.5
	Roller	1	20%	80	140	71.1	64.1	910	54.8	47.8	1180	52.5	45.6
	Roller	1	20%	80	210	67.5	60.5	980	54.2	47.2	1250	52.0	45.1
	Paver	1	50%	77	210	64.7	61.7	980	51.4	48.3	1250	49.2	46.2
	Paver	1	50%	77	280	62.2	59.2	1050	50.8	47.7	1320	48.8	45.8
Combined LEQ							**80.3**			**61.1**			**58.8**
Architectural Coating													
	Compressor (air)	1	40%	78	70	74.8	70.8	840	53.2	49.2	1110	50.8	46.8
	Combined LEQ						**70.8**			**49.2**			**46.8**
Overlapping Phases													
Infrastructure Improvements + Building Construction							84.0			65.5			63.2
Building Construction + Paving							83.9			65.7			63.4
Maximum Noise Level							**84.0**			**65.7**			**63.4**

Source for Ref. Noise Levels: RCNM, 2005

Off-site Construction Noise Impact on Receptors

Parameters

Construction Hours:	Daytime hours (7 am to 7 pm)	8
	Evening hours (7 pm to 10 pm)	0
	Nighttime hours (10 pm to 7 am)	0
Leq to L10 factor		3

	Receptor	Shielding	Direction
1	Commercial	0	N
2	Residential	0	S
3	Interface Rehab	0	E

Construction Phase	Equipment Type	No. of Equip.	Acoustical Usage Factor	Reference Noise Level at 50ft per Unit, Lmax	RECEPTOR 1 Distance (feet)	RECEPTOR 1 Noise Level at Receptor 1, Lmax	RECEPTOR 1 Noise Level at Receptor 1, Leq	RECEPTOR 2 Distance (feet)	RECEPTOR 2 Noise Level at Receptor 2, Lmax	RECEPTOR 2 Noise Level at Receptor 2, Leq	RECEPTOR 3 Distance (feet)	RECEPTOR 3 Noise Level at Receptor 3, Lmax	RECEPTOR 3 Noise Level at Receptor 3, Leq
Paving													
	Pavement Scarafier	1	20%	90	50	89.5	82.5	1350	60.9	53.9	1400	60.6	53.6
	Roller	1	20%	80	55	79.2	72.2	1400	51.1	44.1	1450	50.8	43.8
	Paver	1	50%	77	60	75.6	72.6	1450	48.0	44.9	1500	47.7	44.6
Combined LEQ							**83.3**			**54.8**			**54.5**

Source for Ref. Noise Levels: RCNM, 2005

Operational Noise

Mechanical Equipment

Sensitive Receptor	Reference Level (dBA)	Reference Distance (feet)[1]	Distance to Receptor (feet)[2]	Noise Level at Receptor (dBA)[3]	Daytime Noise Standard (dBA)[4]	Exceeded?	Nighttime Noise Standard (dBA)[4]	Exceeded?
City of Placentia								
Residential	52	50	815	27.8	55	No	50	No
Interface Rehab	52	50	1076	25.3	65	No	65	No

1. Source: Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden. (2010). *Noise Navigator Sound Level Database with Over 1700 Measurement Values.*
2. Distance measured from the nearest rooftop to the nearest sensitive receptor.
3. Calculated using the inverse square law formula for sound attenuation: dBA2 = dBA1+20Log(d1/d2), where dBA2 = estimated noise level at receptor; dBA1 = reference noise level; d1 = reference distance; d2 = receptor location distance.
4. Pursuant to City of Placentia Municipal Code, Section 23.76.050, the residential daytime exterior noise standard is 55 dBA and the nighttime exterior noise standard is 50 dBA and the commercial exterior noise standard is 65 dBA anytime of day.

Loading Dock

Sensitive Receptor	Reference Level (dBA)	Reference Distance (feet)[1]	Distance to Receptor (feet)[2]	Noise Level at Receptor (dBA)[3]	Daytime Noise Standard (dBA)[4]	Exceeded?	Nighttime Noise Standard (dBA)[4]	Exceeded?
City of Placentia								
Residential	64.4	50	1273	36.3	55	No	50	No
Interface Rehab	64.4	50	1030	38.1	65	No	65	No

1. Source: Loading dock reference noise level measurements conducted by Kimley-Horn on December 18, 2018.
2. Distance measured from the loading dock on the project site plan to the nearest sensitive receptor.
3. Calculated using the inverse square law formula for sound attenuation: dBA2 = dBA1+20Log(d1/d2), where dBA2 = estimated noise level at receptor; dBA1 = reference noise level; d1 = reference distance; d2 = receptor location distance.
4. Pursuant to City of Placentia Municipal Code, Section 23.76.050, the residential daytime exterior noise standard is 55 dBA and the nighttime exterior noise standard is 50 dBA and the commercial exterior noise standard is 65 dBA anytime of day.

Parking

$L_{eq(h)} = SEL_{ref} + 10\log(NA/1{,}000) – 35.6$

$L_{eq(h)}$	=	42.4	hourly L_{eq} noise level at 50 feet
SEL_{ref}	=	92	reference noise level for stationary noise source represented in sound exposure level (SEL) at 50 feet
NA	=	40	number of automobiles per hour
35.6	=	35.6	Constant, calculated as 10 times the logarithm of the number of

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

Sensitive Receptor	Reference Level (dBA)	Reference Distance (feet)[1]	Distance to Receptor (feet)[2]	Noise Level at Receptor (dBA)[3]	Daytime Noise Standard (dBA)[4]	Exceeded?	Nighttime Noise Standard (dBA)[4]	Exceeded?
City of Placentia								
Residential	42.4	50	1058	15.9	55	No	50	No
Interface Rehab	42.4	50	1050	16.0	65	No	65	No

1. Source: Federal Transit Administration. (2018). *Transit Noise and Vibration Impact Assessment Manual.*
2. Distance measured from the nearest parking space on the project site plan to the nearest sensitive receptor.
3. Calculated using the inverse square law formula for sound attenuation: dBA2 = dBA1+20Log(d1/d2), where dBA2 = estimated noise level at receptor; dBA1 = reference noise level; d1 = reference distance; d2 = receptor location distance.
4. Pursuant to City of Placentia Municipal Code, Section 23.76.050, the residential daytime exterior noise standard is 55 dBA and the nighttime exterior noise standard is 50 dBA and the commercial exterior noise standard is 65 dBA anytime of day.

Truck Back-up Beepers

Source	Noise Level	Reference Dist. (feet)	Dist. to Residential Uses (feet)[1]	Building Row*	Distance Attenuation	Total Trucks per Hour[2]	Duration per Truck (minutes)	Total Duration (minutes)	anti-log	Total Noise Energy	Samples		dBA Leq
City of Placentia													
Residential	97	3.28	1273	0	45.2	3	0.13	0.40	33272.9173	13309.16691	60	221.8194	23.46
Interface Rehab	97	3.28	1030	0	47.1	3	0.13	0.40	50824.5144	20329.80577	60	338.8301	25.30

1. Distance measured from the loading dock on the project site plan to the nearest sensitive receptor.
2. Total trucks per hour based on one-way peak hour trips from Appendix I.

Composite Noise

Sensitive Receptor	Mechanical Equipment (dBA)	Loading Dock (dBA)	Parking (dBA)	Back-up Beepers (dBA)	Combined Noise at Receptor (dBA)	Threshold (day/night)	Exceeded?	Ambient (dBA)	Ambient + Operationa l (dBA)	Incremental Increase (dBA)	Threshold (dBA)	Exceeded?
City of Placentia												
Residential	27.8	36.3	15.9	23.5	37.1	55/50	No	73.1	73.1	0.0	3.0	No
Interface Rehab	25.3	38.1	16.0	25.3	38.6	65/65	No	71.5	71.5	0.0	3.0	No