INITIAL STUDY

APPENDIX G: NOISE DATA

KWAQN

Office
7404 Kingsley Way,
Riverside, CA

15-Minute Noise Measurement Datasheet

Project: Melrose Ave & Seward St Project, Los Angeles.
Site Address/Location: 6101 Melrose Ave, Los Angeles, CA 90038
Date: 5/20/2021
Field Tech/Engineer: Ian Edward Gallagher

General Location: 6101 Melrose Ave, Los Angeles, CA 90038
Sound Meter: Larson Davis Sound Track LxT2 **SN:** 1152
Settings: A-weighted, slow, 1-min, 15-minute interval
Meteorological Con.: 72 deg F, 7 mph wind, 47% humidity, ~20% cloud, mostly sunshine.
Site ID: NM-1 2 3 & 4

Site Observations: Main noise sources are from vehicular traffic travelling along Melrose Ave, Seward St, June St & other surrounding roads . The local buildings reflect much of the sound. Other noise sources include bird song, occasional low altitude aircraft (propeller & jet, and helicopter). Residential ambiance, pedestrians, music playing from residences or passing vehicles, distant dogs barking. Sirens of distant emergency vehicles (city ambiance). Leaf rustle from trees due to 7 mph breeze.

Site Topo: Suburbia/ urbanscape. Residential/commercial off site in all directions.
Ground Type: Hard site conditions, acoustically refractive, absorptive; mostly reflective.

NM locations, lat , long :

NM1 Meter: 34° 5'0.13"N 118°20'2.76"W
NM2 Meter: 34° 5'0.89"N 118°20'1.76"W
NM3 Meter: 34° 5'2.69"N 118°20'2.80"W
NM4 Meter: 34° 5'0.14"N 118°19'58.78"W

Figure 1: Monitoring Locations

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Office
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15-Minute Noise Measurement Datasheet - Cont.

Project: Melrose Ave & Seward St Project, Los Angeles.
Site Address/Location: 6101 Melrose Ave, Los Angeles, CA 90038
Site ID: NM-1 2 3 & 4

Figure 2: STNM1 Photo

NM1 looking NW across Melrose Avenue & N June Street intersection towards residence

705 N June Street, Los Angeles . 598 vehicles passed thru intersection during measurement.

Figure 3: STNM2 Photo

NM2 looking NW from northern sidewalk on Melrose Ave towards main entrance to public library building

6121 Melrose Avenue, Los Angeles. 564 vehicles passed microphone during measurement.

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15-Minute Noise Measurement Datasheet - Cont.

Project: Melrose Ave & Seward St Project, Los Angeles.
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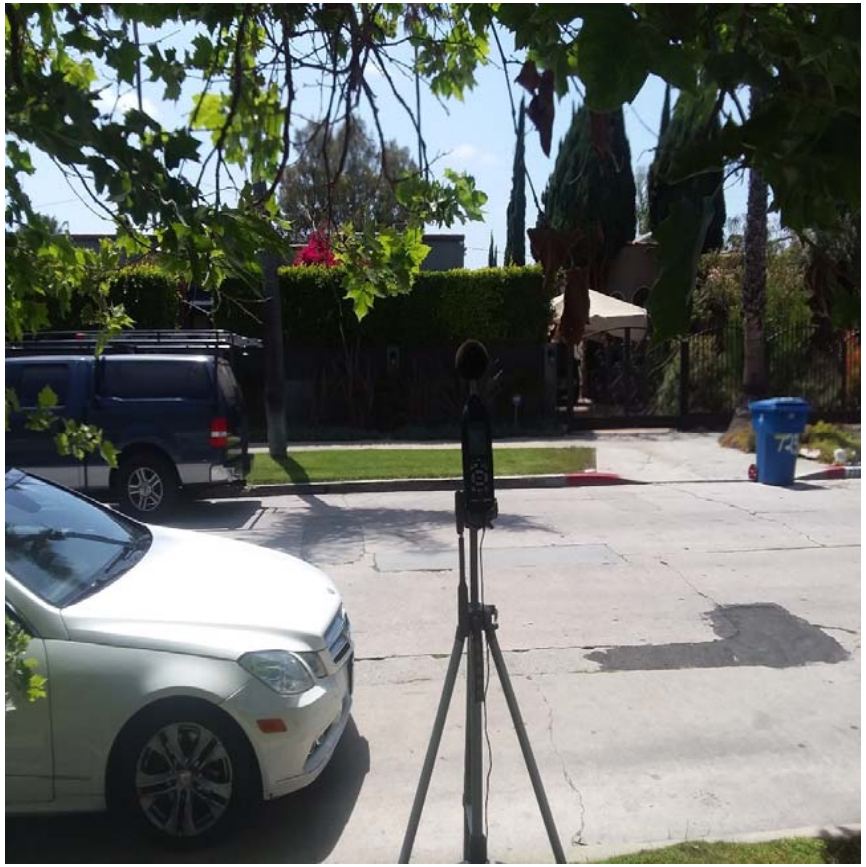
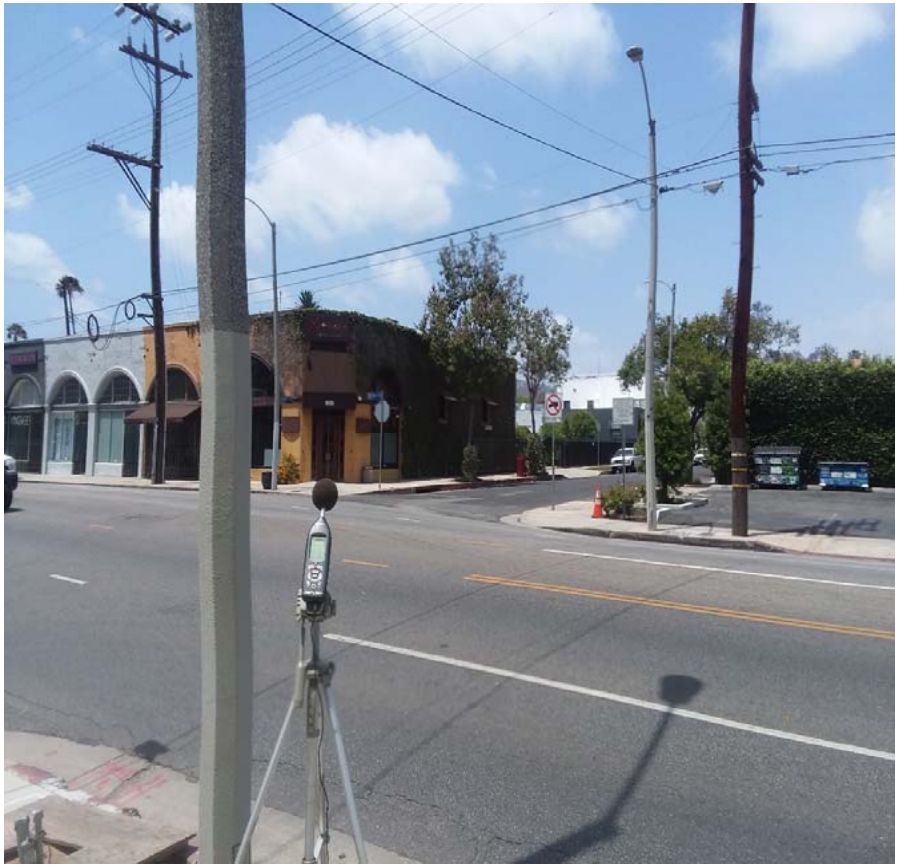
Site ID: NM-1 2 3 & 4

Figure 4: STNM3 Photo



NM3 looking from eastern sidewalk on N June Street, across N june Street towards residence 717 N June Street, Los Angeles. 14 vehicles passed microphone during measurement.

Figure 5: STNM4 Photo



NM4 looking NW across Melrose Avenue & Seward St intersection towards commercial building 6101 Melrose Avenue, Los Angeles. 528 vehicles passed thru intersection during measurement.

KWAQN

Office
7404 Kingsley Way,
Riverside, CA

15-Minute Noise Measurement Datasheet - Cont.

Project: Melrose Ave & Seward St Project, Los Angeles.
Site Address/Location: 6101 Melrose Ave, Los Angeles, CA 90038
Site ID: NM-1 2 3 & 4

Table 1: Noise Measurement Summary

Location	Start	Stop	Leq/ dB	Lmax/ dB	Lmin/ dB	L2/ dB	L8/ dB	L25/ dB	L50/ dB	L90/ dB
NM 1	12:55 PM	1:10 PM	70.9	88.0	53.0	76.4	74.1	71.5	69.2	61.3
NM 2	1:56 PM	2:11 PM	73.5	88.5	53.9	79.6	76.7	74.5	72.3	63.0
NM 3	2:25 PM	2:40 PM	57.5	70.1	48.0	64.7	61.7	57.1	55.2	51.9
NM 4	1:22 PM	1:37 PM	74.6	89.4	56.8	80.4	77.8	75.3	72.8	65.2

Table A
Construction Noise by Phase - Library Receptor West of the Project Site (NM2)

A	B	C	D	E	F	G	H	I
Equipment Type	# of Equipment	Equipment Lmax at 50 feet, dBA[1, 2]	Distance to Receptor[3]	Equipment Usage Percent	Usage Factor	Dist. Correction dB	Usage Adj. dB	Noise Level Leq (dBA) at Receptor
Demolition								
Concrete/Industrial Saw	1	89.6	78	20	0.20	-3.9	-7.0	78.7
Rubber Tired Dozers	1	82	78	40	0.40	-3.9	-4.0	74.2
Tractors/Loaders/Backhoes	3	79	78	40	1.20	-3.9	0.8	75.9
							Log Sum	81.5
Grading/Excavation								
Excavator	1	81	78	40	0.40	-3.9	-4.0	73.2
Bore/Drill Rig	1	79	78	20	0.20	-3.9	-7.0	68.1
Rubber Tired Dozers	1	82	78	40	0.40	-3.9	-4.0	74.2
Tractors/Loaders/Backhoes	2	79	78	25	0.50	-3.9	-3.0	72.1
							Log Sum	77.3
Foundation								
Forklifts	2	64	78	50	1.00	-3.9	0.0	60.1
Generator Sets	1	81	78	40	0.40	-3.9	-4.0	73.2
Concrete Pumps	2	81	78	20	0.40	-3.9	-4.0	73.2
							Log Sum	76.3
Building Construction								
Cranes	1	81	78	16	0.16	-3.9	-8.0	69.2
Forklifts	1	64	78	50	0.50	-3.9	-3.0	57.1
Generator Sets	1	81	78	40	0.40	-3.9	-4.0	73.2
Welders	3	73	78	40	1.20	-3.9	0.8	69.9
Tractors/Loaders/Backhoes	1	79	78	25	0.25	-3.9	-6.0	69.1
							Log Sum	76.8
Architectural Coating								
Aerial Lift	1	75	78	20	0.20	-3.9	-7.0	64.1
Air Compressors	1	78	78	40	0.40	-3.9	-4.0	70.2
							Log Sum	71.1

Notes:

(1) Source: Referenced noise levels from the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (September 2018).

(2) Source: https://www.google.com/url?q=http://www.noisetesting.info/blog/warehouse-forklift-workplace-noise-levels/&sa=D&source=hangouts&ust=1545259247311000&usg=AFQjCNHFcKKoEKUjv5VZMOtw_KO977Em1A

(3) Distance to receptor calculated from center of site. Construction noise projected from the center of the project site to the structural façade of the nearest sensitive use.

Table B
Construction Noise by Phase - Residential Receptors West of the Project Site (NM3)

A	B	C	D	E	F	G	H	I
Equipment Type	# of Equipment	Equipment Lmax at 50 feet, dBA[1, 2]	Distance to Receptor[3]	Equipment Usage Percent	Usage Factor	Dist. Correction dB	Usage Adj. dB	Noise Level Leq (dBA) at Receptor
Demolition								
Concrete/Industrial Saw	1	89.6	140	20	0.20	-8.9	-7.0	73.7
Rubber Tired Dozers	1	82	140	40	0.40	-8.9	-4.0	69.1
Tractors/Loaders/Backhoes	3	79	140	40	1.20	-8.9	0.8	70.8
							Log Sum	76.4
Grading/Excavation								
Excavator	1	81	140	40	0.40	-8.9	-4.0	68.1
Bore/Drill Rig	1	79	140	20	0.20	-8.9	-7.0	63.1
Rubber Tired Dozers	1	82	140	40	0.40	-8.9	-4.0	69.1
Tractors/Loaders/Backhoes	2	79	140	25	0.50	-8.9	-3.0	67.0
							Log Sum	72.2
Foundation								
Forklifts	2	64	140	50	1.00	-8.9	0.0	55.1
Generator Sets	1	81	140	40	0.40	-8.9	-4.0	68.1
Concrete Pumps	2	81	140	20	0.40	-8.9	-4.0	68.1
							Log Sum	71.2
Building Construction								
Cranes	1	81	140	16	0.16	-8.9	-8.0	64.1
Forklifts	1	64	140	50	0.50	-8.9	-3.0	52.0
Generator Sets	1	81	140	40	0.40	-8.9	-4.0	68.1
Welders	3	73	140	40	1.20	-8.9	0.8	64.8
Tractors/Loaders/Backhoes	1	79	140	25	0.25	-8.9	-6.0	64.0
							Log Sum	71.7
Architectural Coating								
Aerial Lift	1	75	140	20	0.20	-8.9	-7.0	59.1
Air Compressors	1	78	140	40	0.40	-8.9	-4.0	65.1
							Log Sum	66.0

Notes:

(1) Source: Referenced noise levels from the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (September 2018).

(2) Source: https://www.google.com/url?q=http://www.noisetesting.info/blog/warehouse-forklift-workplace-noise-levels/&sa=D&source=hangouts&ust=1545259247311000&usg=AFQjCNHFcKKoEKUjv5VZMOtw_KO977Em1A

(3) Distance to receptor calculated from center of site. Construction noise projected from the center of the project site to the structural façade of the nearest sensitive use.

Table C
Construction Noise by Phase - Residential Receptors Southwest of the Project Site (NM1)

A	B	C	D	E	F	G	H	I
Equipment Type	# of Equipment	Equipment Lmax at 50 feet, dBA[1, 2]	Distance to Receptor[3]	Equipment Usage Percent	Usage Factor	Dist. Correction dB	Usage Adj. dB	Noise Level Leq (dBA) at Receptor
Demolition								
Concrete/Industrial Saw	1	89.6	209	20	0.20	-12.4	-7.0	70.2
Rubber Tired Dozers	1	82	209	40	0.40	-12.4	-4.0	65.6
Tractors/Loaders/Backhoes	3	79	209	40	1.20	-12.4	0.8	67.4
							Log Sum	72.9
Grading/Excavation								
Excavator	1	81	209	40	0.40	-12.4	-4.0	64.6
Bore/Drill Rig	1	79	209	20	0.20	-12.4	-7.0	59.6
Rubber Tired Dozers	1	82	209	40	0.40	-12.4	-4.0	65.6
Tractors/Loaders/Backhoes	2	79	209	25	0.50	-12.4	-3.0	63.6
							Log Sum	68.7
Foundation								
Forklifts	2	64	209	50	1.00	-12.4	0.0	51.6
Generator Sets	1	81	209	40	0.40	-12.4	-4.0	64.6
Concrete Pumps	2	81	209	20	0.40	-12.4	-4.0	64.6
							Log Sum	67.7
Building Construction								
Cranes	1	81	209	16	0.16	-12.4	-8.0	60.6
Forklifts	1	64	209	50	0.50	-12.4	-3.0	48.6
Generator Sets	1	81	209	40	0.40	-12.4	-4.0	64.6
Welders	3	73	209	40	1.20	-12.4	0.8	61.4
Tractors/Loaders/Backhoes	1	79	209	25	0.25	-12.4	-6.0	60.6
							Log Sum	68.2
Architectural Coating								
Aerial Lift	1	75	209	20	0.20	-12.4	-7.0	55.6
Air Compressors	1	78	209	40	0.40	-12.4	-4.0	61.6
							Log Sum	62.6

Notes:

(1) Source: Referenced noise levels from the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (September 2018).

(2) Source: https://www.google.com/url?q=http://www.noisetesting.info/blog/warehouse-forklift-workplace-noise-levels/&sa=D&source=hangouts&ust=1545259247311000&usg=AFQjCNHFcKKoEKUjv5VZMOtw_KO977Em1A

(3) Distance to receptor calculated from center of site. Construction noise projected from the center of the project site to the structural façade of the nearest sensitive use.

Table D
Construction Noise by Phase - Receptors Southeast of the Project Site (NM4)

A	B	C	D	E	F	G	H	I
Equipment Type	# of Equipment	Equipment Lmax at 50 feet, dBA[1, 2]	Distance to Receptor[3]	Equipment Usage Percent	Usage Factor	Dist. Correction dB	Usage Adj. dB	Noise Level Leq (dBA) at Receptor
Demolition								
Concrete/Industrial Saw	1	89.6	243	20	0.20	-13.7	-7.0	68.9
Rubber Tired Dozers	1	82	243	40	0.40	-13.7	-4.0	64.3
Tractors/Loaders/Backhoes	3	79	243	40	1.20	-13.7	0.8	66.1
							Log Sum	71.6
Grading/Excavation								
Excavator	1	81	243	40	0.40	-13.7	-4.0	63.3
Bore/Drill Rig	1	79	243	20	0.20	-13.7	-7.0	58.3
Rubber Tired Dozers	1	82	243	40	0.40	-13.7	-4.0	64.3
Tractors/Loaders/Backhoes	2	79	243	25	0.50	-13.7	-3.0	62.3
							Log Sum	67.4
Foundation								
Forklifts	2	64	243	50	1.00	-13.7	0.0	50.3
Generator Sets	1	81	243	40	0.40	-13.7	-4.0	63.3
Concrete Pumps	2	81	243	20	0.40	-13.7	-4.0	63.3
							Log Sum	66.4
Building Construction								
Cranes	1	81	243	16	0.16	-13.7	-8.0	59.3
Forklifts	1	64	243	50	0.50	-13.7	-3.0	47.3
Generator Sets	1	81	243	40	0.40	-13.7	-4.0	63.3
Welders	3	73	243	40	1.20	-13.7	0.8	60.1
Tractors/Loaders/Backhoes	1	79	243	25	0.25	-13.7	-6.0	59.2
							Log Sum	66.9
Architectural Coating								
Aerial Lift	1	75	243	20	0.20	-13.7	-7.0	54.3
Air Compressors	1	78	243	40	0.40	-13.7	-4.0	60.3
							Log Sum	61.3

Notes:

(1) Source: Referenced noise levels from the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (September 2018).

(2) Source: https://www.google.com/url?q=http://www.noisetesting.info/blog/warehouse-forklift-workplace-noise-levels/&sa=D&source=hangouts&ust=1545259247311000&usg=AFQjCNHFcKKoEKUjv5VZMOtw_KO977Em1A

(3) Distance to receptor calculated from center of site. Construction noise projected from the center of the project site to the structural façade of the nearest sensitive use.

Table E
Construction Noise Levels (L_{eq})

Construction Phase	Receptor Location	Existing Ambient Noise Levels (dBA Leq)[1]	Unmitigated Construction Noise Levels (dBA Leq)[2]	Noise Level Where Construction Impacts Would Be Significant?[3]	Is Construciton Noise Level Significant Without BMPs?	Increase Over Ambient Noise Levels (dBA)	Noise Level Reduction needed with BMPs[3] (dBA)	Final Projected Noise Levels (dBA Leq)
Demolition	West (NM2)	73.5	81.5	78.5	Yes	8.0	14	67.5
	West (NM3)	57.5	76.4	62.5	Yes	18.9	14	62.4
	Southwest (NM1)	70.9	72.9	75.9	No	2.0	0	72.9
	Southeast (NM4)	74.6	71.6	79.6	No	-3.0	0	71.6
Grading/Excavation	West (NM2)	73.5	77.3	78.5	No	3.8	14	63.3
	West (NM3)	57.5	72.2	62.5	Yes	14.7	14	58.2
	Southwest (NM1)	70.9	68.7	75.9	No	-2.2	0	68.7
	Southeast (NM4)	74.6	67.4	79.6	No	-7.2	0	67.4
Foundation	West (NM2)	73.5	76.3	78.5	No	2.8	14	62.3
	West (NM3)	57.5	71.2	62.5	Yes	13.7	14	57.2
	Southwest (NM1)	70.9	67.7	75.9	No	-3.2	0	67.7
	Southeast (NM4)	74.6	66.4	79.6	No	-8.2	0	66.4
Building Construction	West (NM2)	73.5	76.8	78.5	No	3.3	14	62.8
	West (NM3)	57.5	71.7	62.5	Yes	14.2	14	57.7
	Southwest (NM1)	70.9	68.2	75.9	No	-2.7	0	68.2
	Southeast (NM4)	74.6	66.9	79.6	No	-7.7	0	66.9
Architectural Coating	West (NM2)	73.5	71.1	78.5	No	-2.4	14	57.1
	West (NM3)	57.5	66.0	62.5	No	8.5	14	52.0
	Southwest (NM1)	70.9	62.6	75.9	No	-8.3	0	62.6
	Southeast (NM4)	74.6	61.3	79.6	No	-13.3	0	61.3

Notes:

(1) Noise measurement locations are shown on Figure 4.X.

(2) Construction noise calculated in Tables A through D.

(3) Noise level reduction with incorporation of MM NOI-1 which requires a 14 dBA noise reduction from mufflers and/or shielding. Noise levels with mitigation are less than 5 dBA over ambient noise levels at receptor locations.

(4) Noise level reduction with incorporation of MM NOI-1 which requires a 14 dBA noise reduction from mufflers and/or shielding. Noise levels with mitigation are less than 5 dBA over ambient noise levels at receptor locations.

Table F						
Noise Levels 50 feet from Roadway Centerline*						
Road Segments	**Existing**		**Existing Plus Project**			**Is the Increase Significant ?**
	ADT	**dB CNEL**	**ADT**	**Total**	**Project-Specific Increase**	
Willoughby Avenue						
w/o Highland Ave	2,940	62.4	2,970	62.4	0.0	**No**
e/o Highland Ave	4,850	64.6	4,880	64.6	0.0	**No**
Melrose Avenue						
w/o Highland Ave	11,790	68.4	11,900	68.5	0.1	**No**
e/o Highland Ave	12,680	68.7	12,700	68.7	0.0	**No**
w/o Wilcox Ave	10,900	68.1	10,940	68.1	0.0	**No**
e/o Wilcox Ave	12,510	68.7	12,650	68.7	0.0	**No**
Highland Avenue						
n/o Willoughby Ave	13,420	69.0	13,530	69.0	0.0	**No**
s/o Willoughby Ave	13,680	69.1	13,690	69.1	0.0	**No**
s/o Melrose Ave	14,050	69.2	14,160	69.2	0.0	**No**
Wilcox Avenue						
n/o Melrose Ave	2,600	61.8	2,600	61.8	0.0	**No**
s/o Melrose Ave	3,420	63.0	3,450	63.1	0.1	**No**
*The uniform distance of 50 feet allows for direct comparisons of potential increases or decreases in noise levels based upon various traffic scenarios; however, at this distance, no specific noise standard necessarily applies						

Table G						
Noise Levels 50 feet from Roadway Centerline*						
Road Segments	**Existing**		**Future (2024) with Project**			**Is the Increase Significant ?**
	ADT	**dB CNEL**	**ADT**	**Total**	**Project-Specific Increase**	
Willoughby Avenue						
w/o Highland Ave	2,940	62.4	3,370	63.0	0.6	**No**
e/o Highland Ave	4,850	64.6	5,160	64.8	0.2	**No**
Melrose Avenue						
w/o Highland Ave	11,790	68.4	12,710	68.7	0.3	**No**
e/o Highland Ave	12,680	68.7	13,260	68.9	0.2	**No**
w/o Wilcox Ave	10,900	68.1	11,400	68.3	0.2	**No**
e/o Wilcox Ave	12,510	68.7	13,340	69.0	0.3	**No**
Highland Avenue						
n/o Willoughby Ave	13,420	69.0	14,240	69.2	0.2	**No**
s/o Willoughby Ave	13,680	69.1	14,320	69.3	0.2	**No**
s/o Melrose Ave	14,050	69.2	14,740	69.4	0.2	**No**
Wilcox Avenue						
n/o Melrose Ave	2,600	61.8	2,710	62.0	0.2	**No**
s/o Melrose Ave	3,420	63.0	3,580	63.2	0.2	**No**
*The uniform distance of 50 feet allows for direct comparisons of potential increases or decreases in noise levels based upon various traffic scenarios; however, at this distance, no specific noise standard necessarily applies						

VdB Calculations
Based on reference equation 7-3 from Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, 2018, pg 185

*Lv (distance) = Lv (ref) - 30*log (D/25)*

large bulldozer @ 8 feet

Lv 101.85

large bulldozer @ 50 feet

Lv 77.97

large bulldozer @ 80 feet

Lv 71.85

large bulldozer @ 63 feet

Lv 74.96

GROUNDBORNE VIBRATION ANALYSIS

Project:	Melrose and Seward	Date:	6/18/21
Source:	Large Bulldozer		
Scenario:	Unmitigated		
Location:	Project Site		
Address:	Remaining Creative Offices to the North		

PPV = PPVref(25/D)^n (in/sec)

INPUT

Equipment = Type	2	Large Bulldozer	INPUT SECTION IN GREEN
PPVref =	0.089	Reference PPV (in/sec) at 25 ft.	
D =	5.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	

Note: Based on reference equation 7-2 from Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, 2018, pg 185.

RESULTS

PPV =	0.995	IN/SEC	OUTPUT IN BLUE

GROUNDBORNE VIBRATION ANALYSIS

Project:	Melrose and Seward	Date:	6/18/21
Source:	Large Bulldozer		
Scenario:	Unmitigated		
Location:	Project Site		
Address:	Library and Residential Garage 8 feet to the west		

PPV = PPVref(25/D)^n (in/sec)

INPUT

Equipment = Type	2	Large Bulldozer	INPUT SECTION IN GREEN
PPVref =	0.089	Reference PPV (in/sec) at 25 ft.	
D =	8.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	

Note: Based on reference equation 7-2 from Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, 2018, pg 185.

RESULTS

PPV =	0.492	IN/SEC	OUTPUT IN BLUE

GROUNDBORNE VIBRATION ANALYSIS

Project:	Melrose and Seward	Date:	6/18/21
Source:	Large Bulldozer		
Scenario:	Mitigated		
Location:	Project Site		
Address:	Remaining Creative Offices to the North and library/residential to west		

PPV = PPVref(25/D)^n (in/sec)

INPUT

Equipment = Type	2	Large Bulldozer	INPUT SECTION IN GREEN
PPVref =	0.089	Reference PPV (in/sec) at 25 ft.	
D =	15.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	

Note: Based on reference equation 7-2 from Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, 2018, pg 185.

RESULTS

PPV =	0.191	IN/SEC	OUTPUT IN BLUE