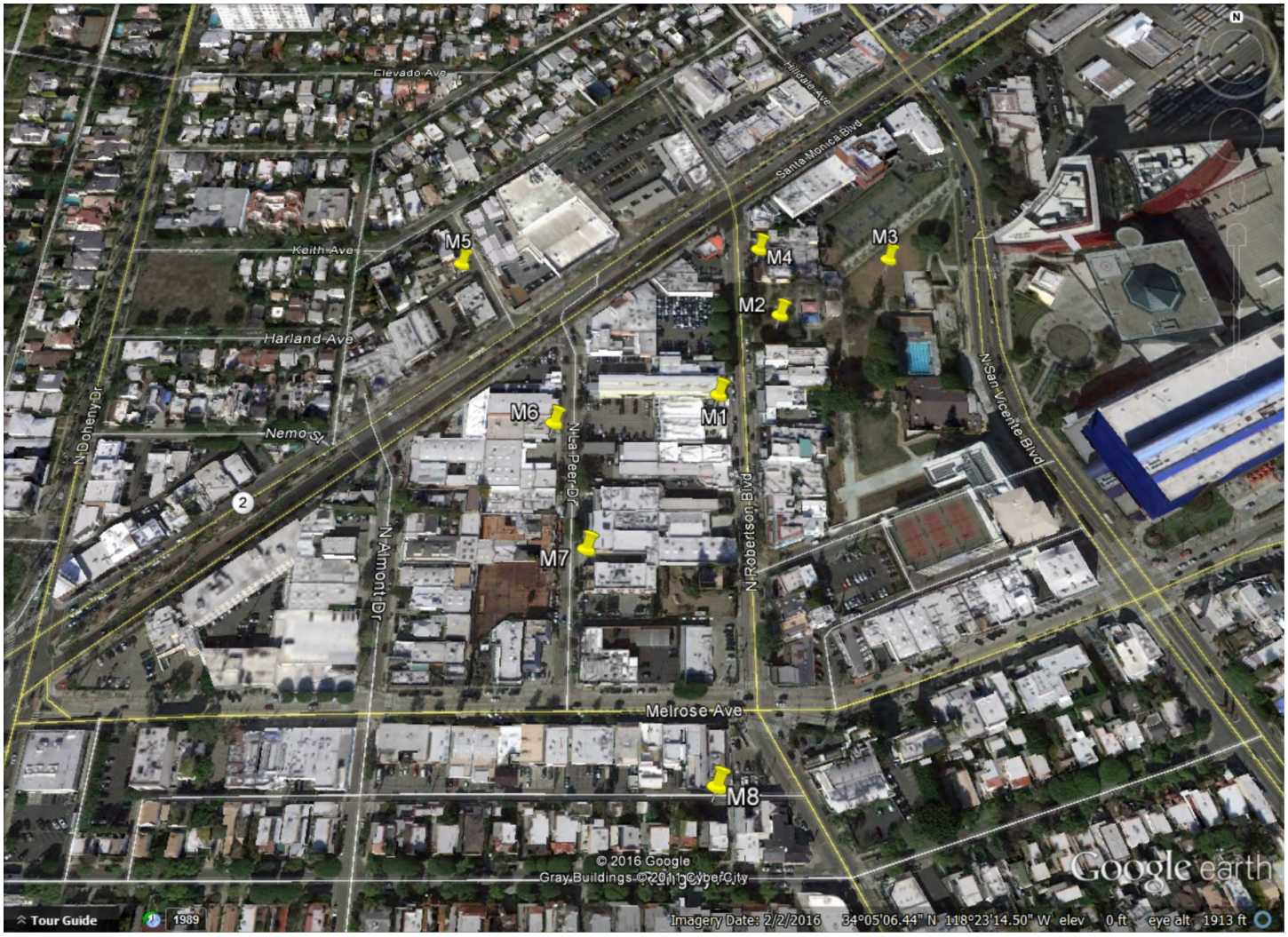
APPENDIX H

Noise Impact Modeling Data


Elevado Ave
Fillmore Ave
Santa Monica Blvd
Keith Ave
Harland Ave
Nemo St
N Doheny Dr
N Almont Dr
N Hilla Peer Dr
N Robertson Blvd
N San Vicente Blvd
Melrose Ave
M1
M2
M3
M4
M5
M6
M7
M8
2
© 2016 Google
Gray Buildings © 2011 CyberCity
Google earth
Tour Guide
1989
Imagery Date: 2/2/2016 34°05'06.44" N 118°23'14.50" W elev 0 ft eye alt 1913 ft

M1 – Project Site

655 North Robertson Blvd West Hollywood, California 90069

FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT Robertson Lane — PROJECT # 8595
SITE ID M1
SITE ADDRESS 665 N. Robertson Blvd West Hollywood, CA 90069 — OBSERVER(S) Stephanie Tang
START DATE 2/25/15 — END DATE 2/25/15
START TIME 2:29pm — END TIME 2:44pm

METEOROLOGICAL CONDITIONS
TEMP 74.0 F — HUMIDITY 45.1 % R.H. — WIND (CALM) (LIGHT) MODERATE
WINDSPD 10 MPH — DIR. N NE E SE S SW W NW — VARIABLE STEADY GUSTY
SKY (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT Piccolo SLM — TYPE 1 (2) — SERIAL # 130625008
CALIBRATOR B&KWA CA114 — SERIAL # 4901511
CALIBRATION CHECK — PRE-TEST 94.0 dBA SPL — POST-TEST 94.0 dBA SPL — WINDSCRN ✓

SETTINGS (A-WTD) (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
M1	2:29pm	2:44pm	65.5	78.6	52.8				

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: Robertson Blvd — DIST. TO RDWY C/L OR EOP: ~60'
TRAFFIC COUNT DURATION: 15 MIN

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	SPEED NB/EB	SPEED SB/WB
	AUTOS	85	73		
	MED TRKS	2	0		
	HVY TRKS	1	0		
	BUSES	0	0		
	MOTRCLS	0	1		

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___

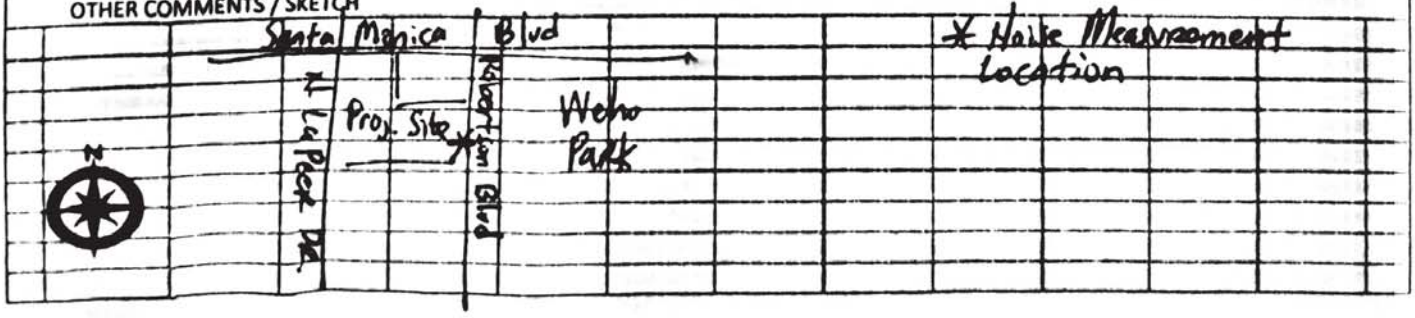
COUNT 2 (OR RDWY 2)	DIRECTION	NB/EB	SB/WB	SPEED NB/EB	SPEED SB/WB
	AUTOS				
	MED TRKS				
	HVY TRKS				
	BUSES				
	MOTRCLS				

___ MIN

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY: 30mph

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) (DIST. INDUSTRIAL)
DIST. KIDS PLAYING (DIST. CONVRSTNS / YELLING) (DIST. TRAFFIC (LIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: Vehicle Approaching noise meter Measurement location; Dist. Traffic off Santa Monica Blvd

DESCRIPTION / SKETCH
TERRAIN (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS See Attached
OTHER COMMENTS / SKETCH



M2 – West Hollywood Park (Facing Robertson Blvd)

647 N. San Vicente Blvd West Hollywood, California 90048

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT Robertson Lane
PROJECT # 8595
SITE ID M2 - West Hollywood Park (Jogging Robertson Blvd)
SITE ADDRESS 647N San Vicente Blvd West Hollywood, CA 90048
OBSERVER(S) Stephanie Tang
START DATE 2/25/15 END DATE 2/25/15
START TIME 3:32 pm END TIME 3:47 Am

METEOROLOGICAL CONDITIONS
TEMP 73.7 F HUMIDITY 50.7 % R.H. WIND CALM (LIGHT) MODERATE
WINDSPD 0.8 MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
SKY (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT Piccolo SLM TYPE 1 (2) SERIAL # 1306250
CALIBRATOR BSWA CA114 SERIAL # 490151
CALIBRATION CHECK PRE-TEST 94.0 dBA SPL POST-TEST 94.0 dBA SPL WINDSCRN ✓

SETTINGS (A-WTD) (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
M2	3:32am	3:47Am	66.0	82.9	56.2				

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: Robertson Blvd DIST. TO RDWY C/L OR EOP: ~80'
TRAFFIC COUNT DURATION: 15 MIN

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	103	71		
MED TRKS	1	0		
HVY TRKS	1	0		
BUSES	0	0		
MOTRCLS	0	2		

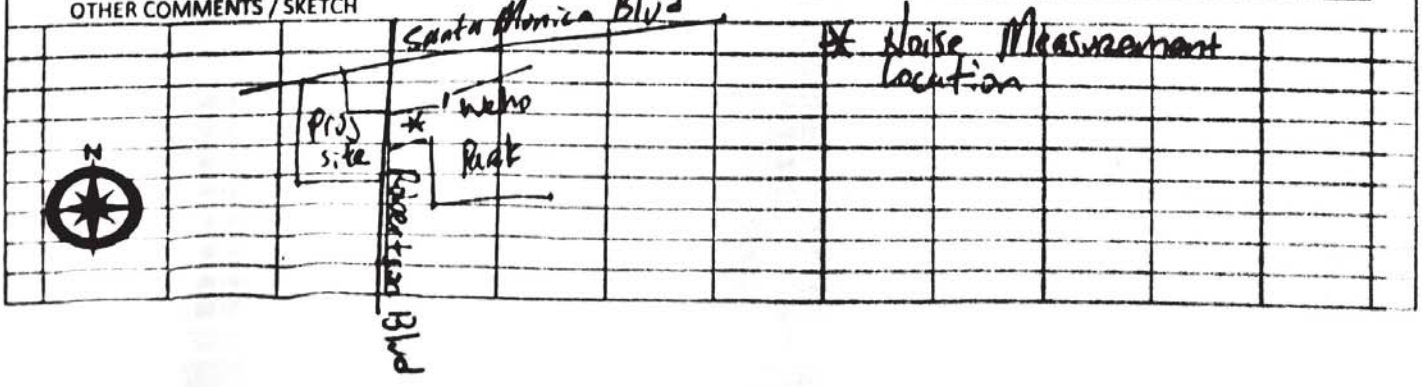
IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___

COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY: 30mph

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) (RUSTLING LEAVES) DIST. BARKING DOGS (BIRDS) (DIST. INDUSTRIAL) (DIST. KIDS PLAYING) (DIST. CONVRSTNS) YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: Dist traffic off Santa Monica Blvd

DESCRIPTION / SKETCH
TERRAIN (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS See Attached
OTHER COMMENTS / SKETCH



M3 – West Hollywood Park (Facing San Vicente Blvd)

647 N. San Vicente Blvd West Hollywood, California 90048

FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT Robertson Lane
SITE ID M3 - West Hollywood Park (facing San Vicente) PROJECT # 8595
SITE ADDRESS 417 N. San Vicente Blvd West Hollywood, CA 90048
START DATE 2/25/15 END DATE 2/25/15 OBSERVER(S) Stephanie Tang
START TIME 3:59 PM END TIME 4:14

METEOROLOGICAL CONDITIONS
TEMP 70.9 F HUMIDITY 49.2 % R.H. WIND CALM (LIGHT) MODERATE
WINDSPD 10 MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
SKY (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT Piccolo SLM TYPE 1 (2) SERIAL # 1306 2500
CALIBRATOR B&KWA CA114 SERIAL # 49015
CALIBRATION CHECK PRE-TEST 94.0 dBA SPL POST-TEST 94.0 dBA SPL WINDSCRN ✓

SETTINGS (A-WTD) (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
M3	3:59	4:14	62.6	78.7	56.6				

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: San Vicente Blvd DIST. TO RDWY C/L OR EOP: ~220'
TRAFFIC COUNT DURATION: 15 MIN SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	209	191		
MED TRKS	3	8		
HVY TRKS	2	1		
BUSES	9	2		
MOTRCLS	1	1		

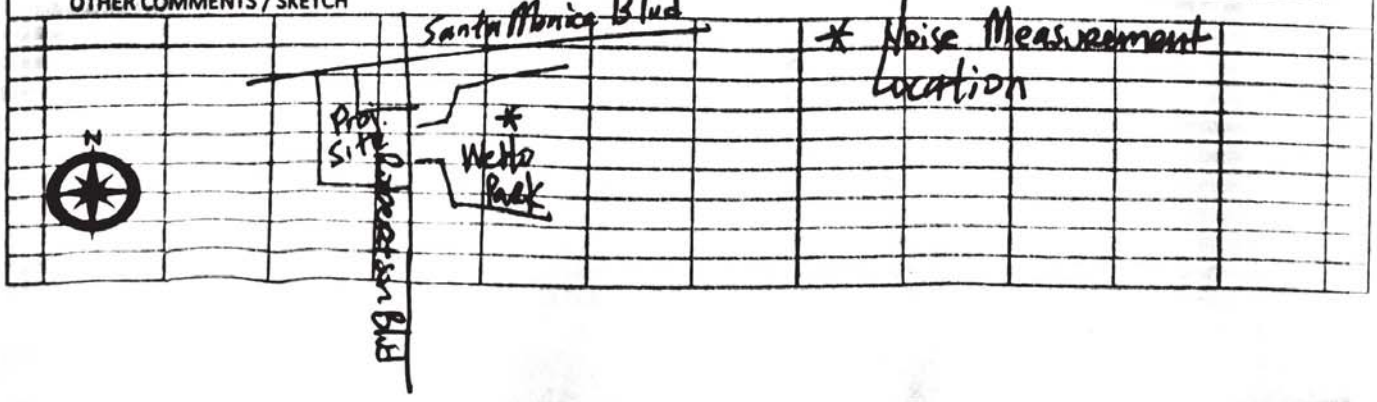
IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___

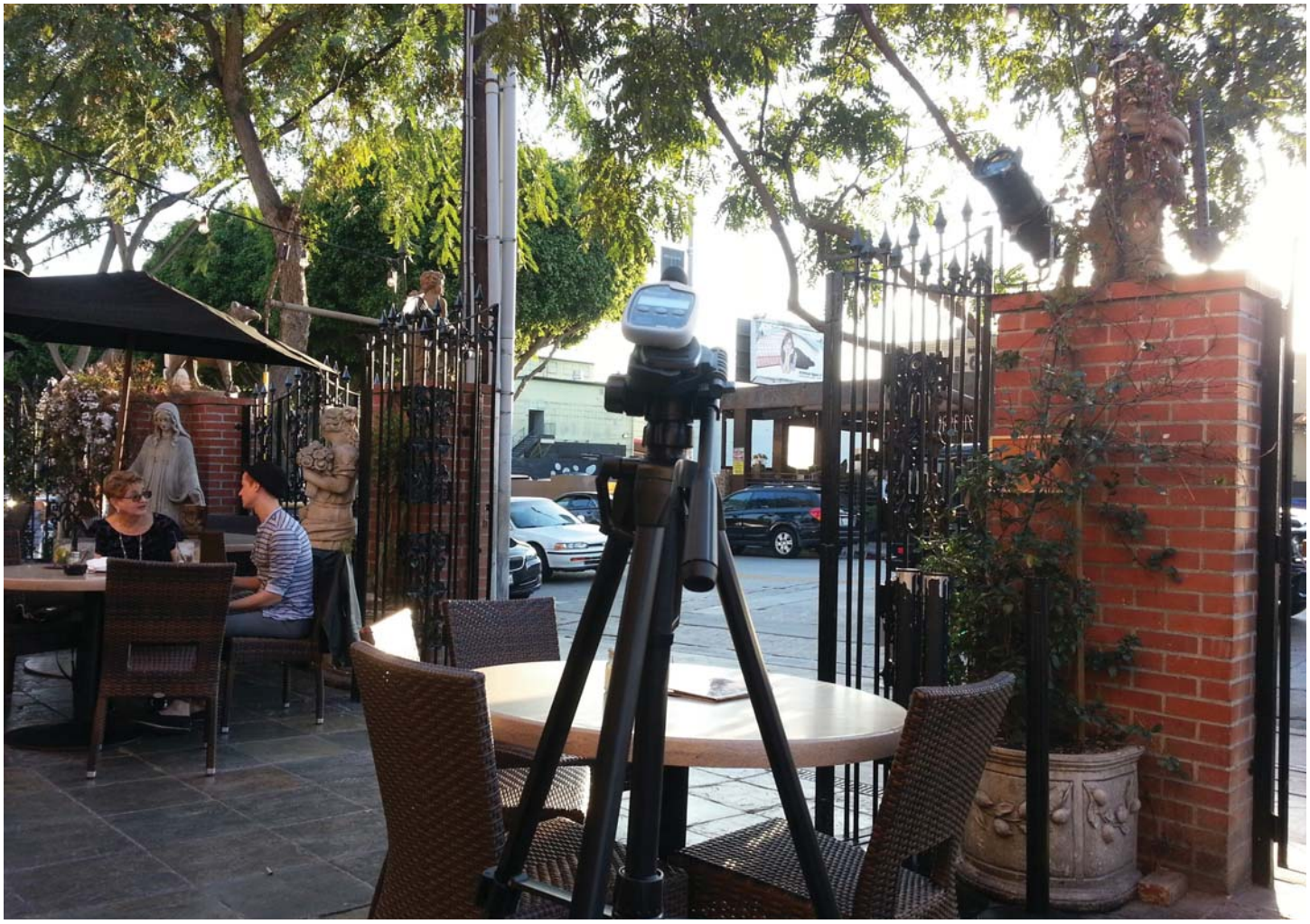
COUNT 2 (OR RDWY 2)	MIN NB/EB	MIN SB/WB	SPEED NB/EB	SPEED SB/WB

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY: 35 mph

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) (RUSTLING LEAVES) DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
(DIST. KIDS PLAYING) (DIST. CONVRSTNS/ YELLING) (DIST. TRAFFIC (LIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: Dist traffic along Santa Monica Blvd

DESCRIPTION / SKETCH
TERRAIN (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS See Attached
OTHER COMMENTS / SKETCH





M4 – The Abbey (Bar)

692 N. Robertson Blvd West Hollywood, California 90069

FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT Robertson Lane
SITE ID M4 - Abbey (Bar)
SITE ADDRESS 692 N. Robertson Blvd West Hollywood 90069
START DATE 2/25/15 END DATE 2/25/15
START TIME 4:41pm END TIME 4:56pm
PROJECT # 8595
OBSERVER(S) Stephanie Tang

METEOROLOGICAL CONDITIONS

TEMP 70.9 F HUMIDITY 47.6 % R.H. WIND CALM (LIGHT) MODERATE
WINDSPD 0.9 MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
SKY (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT Piccolo SLM TYPE 1 (2) SERIAL # 13062500
CALIBRATOR B&KA CAL14 SERIAL # 4470157
CALIBRATION CHECK PRE-TEST 94.0 dBA SPL POST-TEST 94.0 dBA SPL WINDSCRN √

SETTINGS (A-WTD) (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
M4	4:41pm	4:56pm	73.0	80.9	66.6				

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: Robertson Blvd DIST. TO RDWY C/L OR EOP: ~40'
TRAFFIC COUNT DURATION: 15 MIN SPEED ___ MIN SPEED

	DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB
COUNT 1 (OR RDWY 1)	AUTOS	118	79			IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___				
	MED TRKS	0	0							
	HVY TRKS	0	0							
	BUSES	0	0							
	MOTRCLS	0	1							

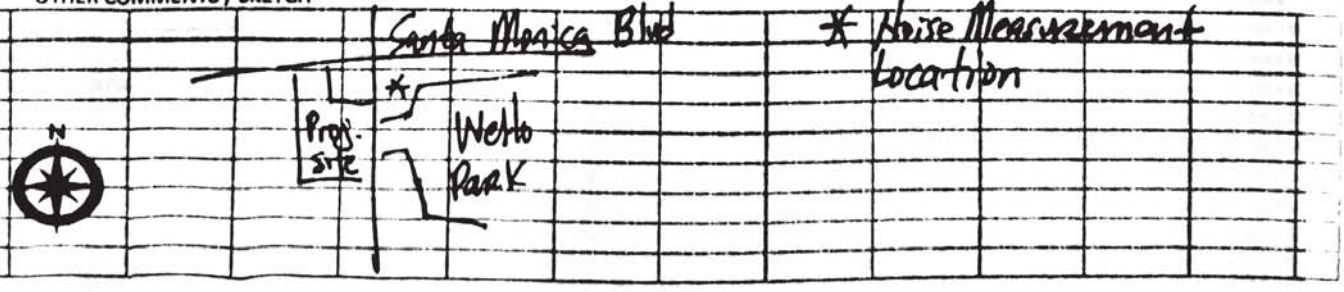
COUNT 2 (OR RDWY 2)

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY: 30mph

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING (DIST. CONVRSTNS / YELLING) (DIST. TRAFFIC (1ST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: Dist traffic off Santa Monica Blvd; Bar Music at Noise Measurement Location

DESCRIPTION / SKETCH

TERRAIN (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS See Attached
OTHER COMMENTS / SKETCH



M5 – Side of SFR Garage

715 Ramage Street West Hollywood, California 90069

FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT Robertson Lane PROJECT # 8595
SITE ID M5 - Side of SFR Garage
SITE ADDRESS 715 Ramage St West Hollywood, CA 90069 OBSERVER(S) Stephanie Tang
START DATE 2/26/15 END DATE 2/26/15
START TIME 10:30AM END TIME 10:45AM

METEOROLOGICAL CONDITIONS

TEMP 67.6 F HUMIDITY 48.6 % R.H. WIND CALM (LIGHT) MODERATE
WINDSPD 0.9 MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
SKY SUNNY CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT Piccolo SLM TYPE 1 (2) SERIAL # 130625008
CALIBRATOR BSWA CA114 SERIAL # 49015
CALIBRATION CHECK PRE-TEST 94.0 dBA SPL POST-TEST 94.0 dBA SPL WINDSCRN ✓

SETTINGS (A-WTD) (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
M5	10:30AM	10:45AM	62.0	69.4	53.1				

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: Ramage DIST. TO RDWY C/L OR EOP: ~55'
TRAFFIC COUNT DURATION: 15 MIN

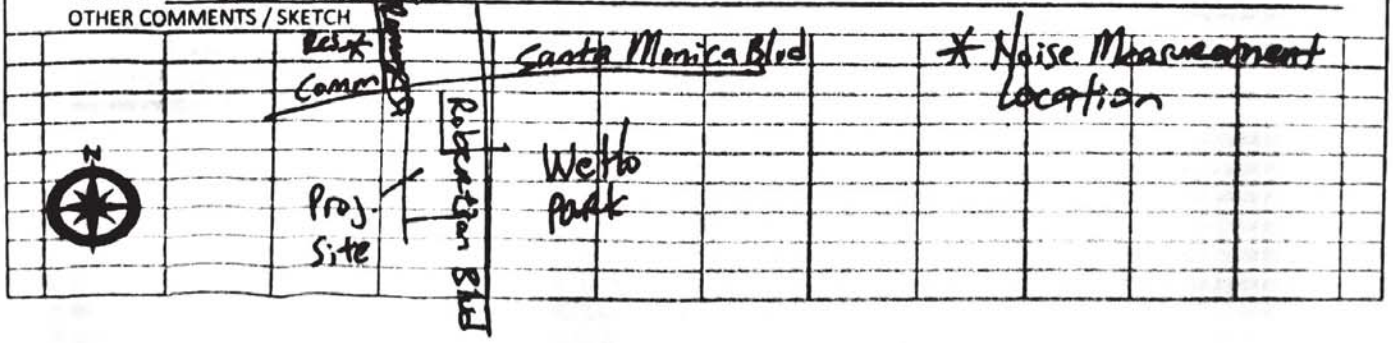
COUNT 1 (OR RDWY 1)	DIRECTION	SPEED NB/EB	SPEED SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	COUNT 2 (OR RDWY 2)	MIN NB/EB	MIN SB/WB	SPEED NB/EB	SPEED SB/WB
	AUTOS	3	3						
	MED TRKS	1	1						
	HVY TRKS	0	0						
	BUSES	0	0						
	MOTRCLS	0	0						

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING (DIST. CONVRSTNS) YELLING (DIST. TRAFFIC (LIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: Vehicle going through Alley; Dist traffic off Santa Monica Blvd

DESCRIPTION / SKETCH

TERRAIN (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS See Attached
OTHER COMMENTS / SKETCH



M6 – Commercial

655 N. La Peer Drive West Hollywood, California 90069

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT Robertson Lane — PROJECT # 8595
SITE ID M6 - Commercial
SITE ADDRESS 655 N. La Peer Dr. West Hollywood, CA 90069 — OBSERVER(S) Stephanie Tang
START DATE 2/26/15 — END DATE 2/26/15
START TIME 10:50AM — END TIME 11:11AM

METEOROLOGICAL CONDITIONS

TEMP 69.8 F — HUMIDITY 46.5 % R.H. — WIND (CALM) (LIGHT) MODERATE
WINDSPD 0.8 MPH — DIR. N NE S SE S SW W NW — VARIABLE STEADY GUSTY
SKY SUNNY CLEAR — OVRCAST (PRTLY CLDY) FOG — RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT Piccolo SLM — TYPE 1 (2) — SERIAL # 130625008
CALIBRATOR BSWA CA114 — SERIAL # 490157
CALIBRATION CHECK — PRE-TEST 94.0 dBA SPL — POST-TEST 94.0 dBA SPL — WINDSCRN ✓

SETTINGS (A-WTD) (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
M6	10:50AM	11:11AM	71.1	87.9	55.2				

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE (TRAFFIC) AIRCRAFT RAIL (INDUSTRIAL) OTHER:
ROADWAY TYPE: N. La Peer Dr. — DIST. TO RDWY C/L OR EOP:
TRAFFIC COUNT DURATION: 15 MIN — SPEED — ___ MIN — SPEED

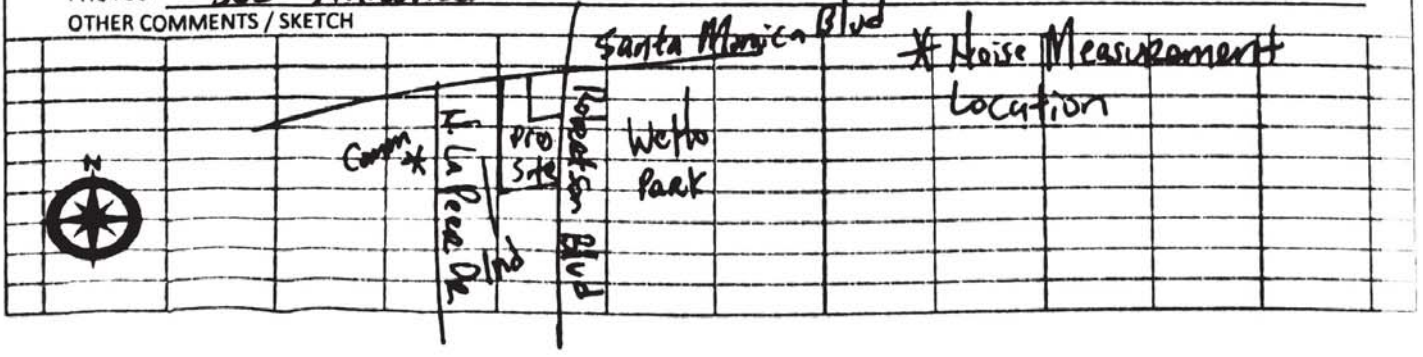
	DIRECTION	COUNT 1 (OR RDWY 1) NB/EB	COUNT 1 (OR RDWY 1) SB/WB	COUNT 1 SPEED NB/EB	COUNT 1 SPEED SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	COUNT 2 (OR RDWY 2) NB/EB	COUNT 2 (OR RDWY 2) SB/WB	COUNT 2 SPEED NB/EB	COUNT 2 SPEED SB/WB
COUNT 1 (OR RDWY 1)	AUTOS	18	5							
	MED TRKS	0	0							
	HVY TRKS	3	2							
	BUSES	0	0							
	MOTRCLS	0	0							

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY: 30mph

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) RUSTLING LEAVES DIST. BARKING DOGS BIRDS (DIST. INDUSTRIAL)
DIST. KIDS PLAYING (DIST. CONVRSTNS) YELLING (DIST. TRAFFIC (LIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: Industrial operation across the Street; Trucks; Dist traffic off Santa Monica Blvd

DESCRIPTION / SKETCH

TERRAIN (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS See Attached
OTHER COMMENTS / SKETCH



M7 – Commercial

634 N. La Peer Drive West Hollywood, California 90069

FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT Robertson Lane — PROJECT # 8595
SITE ID M1 - Commercial
SITE ADDRESS 634 N. La Peer DR. West Hollywood, CA 90069 — OBSERVER(S) Stephanie Tang
START DATE 2/26/15 — END DATE 2/26/15
START TIME 11:19AM — END TIME 11:34AM

METEOROLOGICAL CONDITIONS

TEMP 71.4 F — HUMIDITY 43.8 % R.H. — WIND (CALM) LIGHT MODERATE
WINDSPD 0 MPH — DIR. N NE S SE S SW W NW — VARIABLE STEADY GUSTY
SKY (SUNNY) CLEAR — OVRCAST (PRTLY CLDY) FOG — RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT Piccolo SLM — TYPE 1 (2) — SERIAL # 130625008
CALIBRATOR B&K CAL14 — SERIAL # 49957
CALIBRATION CHECK — PRE TEST 94.0 dBA SPL — POST-TEST 94.0 dBA SPL — WINDSCRN ✓

SETTINGS (A-WTD) (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
M1	11:19AM	11:34AM	64.9	76.9	58.3				

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: N. La Peer DR. — DIST. TO RDWY C/L OR EOP: ~20'
TRAFFIC COUNT DURATION: ___ MIN — SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	6	19		
MED TRKS	1	3		
HVY TRKS	1	0		
BUSES	0	0		
MOTRCLS	0	0		

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___

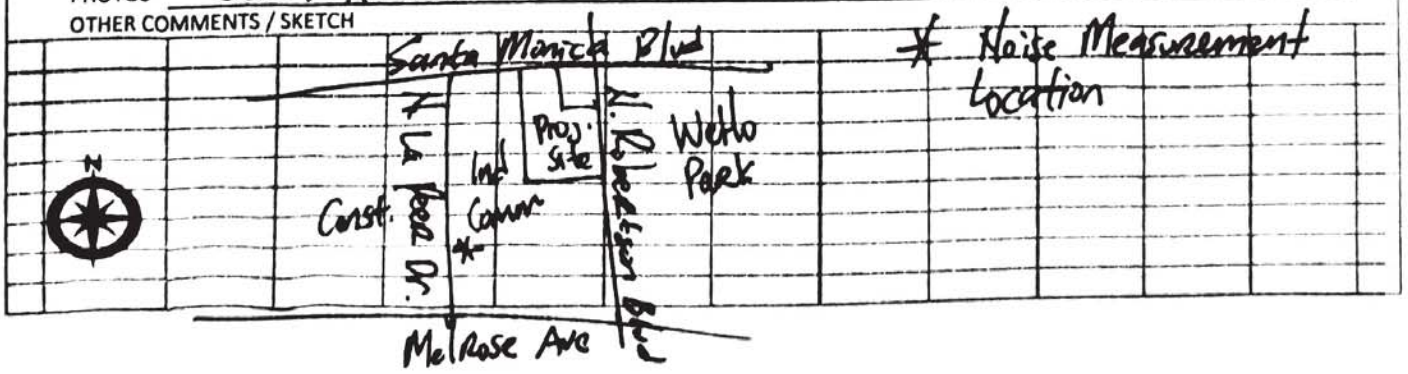
COUNT 2 (OR RDWY 2)	___ MIN NB/EB	SB/WB	SPEED NB/EB	SB/WB

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY: 30mph

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) RUSTLING LEAVES DIST. BARKING DOGS BIRDS (DIST. INDUSTRIAL)
DIST. KIDS PLAYING (DIST. CONVRSTNS) YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: Const. Activity Across the Street

DESCRIPTION / SKETCH

TERRAIN (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS See Attached
OTHER COMMENTS / SKETCH




7FOJ053
7DFD845

FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT: Robertson Lane — PROJECT #: 8595
SITE ID: M8 - Residential (Back of Res).
SITE ADDRESS: 8817 Rangely Ave West Hollywood, CA 90048 — OBSERVER(S): Stephanie Tang
START DATE: 2/26/15 — END DATE: 2/26/15
START TIME: 12:27pm — END TIME: 12:42pm

METEOROLOGICAL CONDITIONS

TEMP: 73.1 F — HUMIDITY: 48.0 % R.H. — WIND: CALM (LIGHT) MODERATE VARIABLE STEADY GUSTY
WINDSPD: 1.0 MPH — DIR. N NE S SE S SW W NW
SKY: (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo Sum — TYPE 1 (2) — SERIAL # 130625008
CALIBRATOR: B&KA CA114 — SERIAL # 49015
CALIBRATION CHECK — PRE-TEST: 94.0 dBA SPL — POST-TEST: 94.0 dBA SPL — WINDSCRN: ✓

SETTINGS: (A-WTD) (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
M8	12:27pm	12:42pm	61.0	74.5	51.7				

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: Robertson Blvd — DIST. TO RDWY C/L OR EOP: ~150'
TRAFFIC COUNT DURATION: 15 MIN

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
	AUTOS	117	130		
	MED TRKS	4	2		
	HVY TRKS	0	0		
	BUSES	0	0		
	MOTRCLS	1	0		

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE

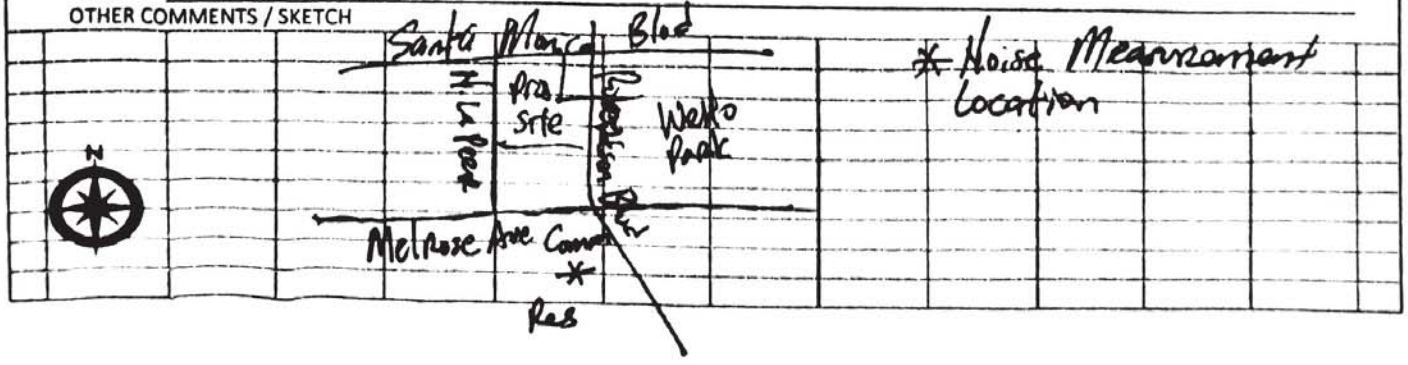
COUNT 2 (OR RDWY 2)	DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
	AUTOS				
	MED TRKS				
	HVY TRKS				
	BUSES				
	MOTRCLS				

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY: 30mph

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING (DIST. CONVRSTNS / YELLING) DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: Vehicles driving through alley

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS: See Attached
OTHER COMMENTS / SKETCH



<Organization?>				14 September 2016							
<Analysis By?>				TNM 2.5							
INPUT: ROADWAYS							Average pavement type shall be used unless				
PROJECT/CONTRACT:	<Project Name?>						a State highway agency substantiates the use				
RUN:	Robertson Lane Existing + Project						of a different type with the approval of FHWA				
Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
N. San Vicente Blvd	70.0	point3	3	2,050.0	1.0	0.00				Average	
		point4	4	2,050.0	1,400.0	0.00					
N. Robertson Blvd	45.0	point11	11	1,300.0	1.0	0.00				Average	
		point35	35	1,300.0	455.5	0.00				Average	
		point12	12	1,300.0	910.0	0.00					
N. La Peer Dr	35.0	point13	13	950.0	1.0	0.00				Average	
		point14	14	950.0	670.0	0.00					
N. La Cienega Blvd	70.0	point15	15	4,050.0	-300.0	0.00				Average	
		point16	16	4,050.0	2,750.0	0.00					
Melrose Avenue	50.0	point19	19	0.0	0.0	0.00				Average	
		point20	20	4,025.0	0.0	0.00					
Santa Monica Blvd	80.0	point26	26	-185.0	-90.0	0.00				Average	
		point33	33	527.5	395.0	0.00				Average	
		point34	34	1,240.0	880.0	0.00				Average	
		point32	32	1,952.5	1,365.0	0.00				Average	
		point27	27	4,090.0	2,820.0	0.00					
Ramage Street	30.0	point28	28	820.0	640.0	0.00				Average	
		point29	29	590.0	940.0	0.00					
Almont Drive	45.0	point30	30	700.0	15.0	0.00				Average	
		point31	31	700.0	500.0	0.00					

<Organization?> 14 September 2016
<Analysis By?> TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: Robertson Lane Existing + Project

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
N. San Vicente Blvd	point3	3	2891	35	60	35	60	35	0	0	0	0
	point4	4										
N. Robertson Blvd	point11	11	2075	30	43	30	43	30	0	0	0	0
	point35	35	1251	30	26	30	26	30	0	0	0	0
	point12	12										
N. La Peer Dr	point13	13	117	30	2	30	2	30	0	0	0	0
	point14	14										
N. La Cienega Blvd	point15	15	0	0	0	0	0	0	0	0	0	0
	point16	16										
Melrose Avenue	point19	19	2405	35	50	35	50	35	0	0	0	0
	point20	20										
Santa Monica Blvd	point26	26	4326	35	90	35	90	35	0	0	0	0
	point33	33	4197	35	87	35	87	35	0	0	0	0
	point34	34	4501	35	94	35	94	35	0	0	0	0
	point32	32	5191	35	108	35	108	35	0	0	0	0
	point27	27										
Ramage Street	point28	28	24	25	8	25	0	0	0	0	0	0
	point29	29										
Almont Drive	point30	30	284	30	6	30	6	30	0	0	0	0
	point31	31										

<Organization?>						14 September 2016					
<Analysis By?>						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	<Project Name?>										
RUN:	Robertson Lane Existing + Project										
Receiver											
Name	No.	#DUs	Coordinates (ground)			Height	Input Sound Levels and Criteria				Active
			X	Y	Z	above	Existing	Impact Criteria		NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	2	1	1,260.0	510.0	0.00	4.92	0.00	66	10.0	8.0	Y
M2	3	1	1,345.0	710.0	0.00	5.00	0.00	66	10.0	8.0	Y
M3	5	1	1,830.0	930.0	0.00	5.00	0.00	66	10.0	8.0	Y
M4	7	1	1,330.0	890.0	0.00	5.00	0.00	66	10.0	8.0	Y
M5	9	1	675.0	750.0	0.00	5.00	0.00	66	10.0	8.0	Y
M6	11	1	905.0	380.0	0.00	5.00	0.00	66	10.0	8.0	Y
M7	13	1	975.0	270.0	0.00	5.00	0.00	66	10.0	8.0	Y
M8	15	1	3,885.0	-155.0	0.00	5.00	0.00	66	10.0	8.0	Y

<Organization?>
<Analysis By?>

14 September 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: Robertson Lane Existing + Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	2	1	0.0	67.4	66	67.4	10	Snd Lvl	67.4	0.0	8	-8.0
M2	3	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8	-8.0
M3	5	1	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
M4	7	1	0.0	73.5	66	73.5	10	Snd Lvl	73.5	0.0	8	-8.0
M5	9	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
M6	11	1	0.0	64.5	66	64.5	10	----	64.5	0.0	8	-8.0
M7	13	1	0.0	63.7	66	63.7	10	----	63.7	0.0	8	-8.0
M8	15	1	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	8	0.0	0.0	0.0
All Impacted	3	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

<Organization?>				14 September 2016							
<Analysis By?>				TNM 2.5							
INPUT: ROADWAYS							Average pavement type shall be used unless				
PROJECT/CONTRACT:	<Project Name?>						a State highway agency substantiates the use				
RUN:	Robertson Lane Existing + Project						of a different type with the approval of FHWA				
Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
N. San Vicente Blvd	70.0	point3	3	2,050.0	1.0	0.00				Average	
		point4	4	2,050.0	1,400.0	0.00					
N. Robertson Blvd	45.0	point11	11	1,300.0	1.0	0.00				Average	
		point35	35	1,300.0	455.5	0.00				Average	
		point12	12	1,300.0	910.0	0.00					
N. La Peer Dr	35.0	point13	13	950.0	1.0	0.00				Average	
		point14	14	950.0	670.0	0.00					
N. La Cienega Blvd	70.0	point15	15	4,050.0	-300.0	0.00				Average	
		point16	16	4,050.0	2,750.0	0.00					
Melrose Avenue	50.0	point19	19	0.0	0.0	0.00				Average	
		point20	20	4,025.0	0.0	0.00					
Santa Monica Blvd	80.0	point26	26	-185.0	-90.0	0.00				Average	
		point33	33	527.5	395.0	0.00				Average	
		point34	34	1,240.0	880.0	0.00				Average	
		point32	32	1,952.5	1,365.0	0.00				Average	
		point27	27	4,090.0	2,820.0	0.00					
Ramage Street	30.0	point28	28	820.0	640.0	0.00				Average	
		point29	29	590.0	940.0	0.00					
Almont Drive	45.0	point30	30	700.0	15.0	0.00				Average	
		point31	31	700.0	500.0	0.00					

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

<Organization?>	**14 September 2016**
<Analysis By?>	**TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes

PROJECT/CONTRACT:	**<Project Name?>**
RUN:	**Robertson Lane Existing + Project**

Roadway	**Points**											
Name	**Name**	**No.**	**Segment**									
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
N. San Vicente Blvd	point3	3	2944	35	61	35	61	35	0	0	0	0
	point4	4										
N. Robertson Blvd	point11	11	2153	30	45	30	45	30	0	0	0	0
	point35	35	1358	30	28	30	28	30	0	0	0	0
	point12	12										
N. La Peer Dr	point13	13	165	30	3	30	3	30	0	0	0	0
	point14	14										
N. La Cienega Blvd	point15	15	0	0	0	0	0	0	0	0	0	0
	point16	16										
Melrose Avenue	point19	19	2466	35	51	35	51	35	0	0	0	0
	point20	20										
Santa Monica Blvd	point26	26	4514	35	94	35	94	35	0	0	0	0
	point33	33	4364	35	91	35	91	35	0	0	0	0
	point34	34	4628	35	96	35	96	35	0	0	0	0
	point32	32	5314	35	111	35	111	35	0	0	0	0
	point27	27										
Ramage Street	point28	28	24	25	8	25	0	0	0	0	0	0
	point29	29										
Almont Drive	point30	30	284	30	6	30	6	30	0	0	0	0
	point31	31										

<Organization?>						14 September 2016					
<Analysis By?>						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	<Project Name?>										
RUN:	Robertson Lane Existing + Project										
Receiver											
Name	No.	#DUs	Coordinates (ground)			Height	Input Sound Levels and Criteria				Active
			X	Y	Z	above	Existing	Impact Criteria		NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	2	1	1,260.0	510.0	0.00	4.92	0.00	66	10.0	8.0	Y
M2	3	1	1,345.0	710.0	0.00	5.00	0.00	66	10.0	8.0	Y
M3	5	1	1,830.0	930.0	0.00	5.00	0.00	66	10.0	8.0	Y
M4	7	1	1,330.0	890.0	0.00	5.00	0.00	66	10.0	8.0	Y
M5	9	1	675.0	750.0	0.00	5.00	0.00	66	10.0	8.0	Y
M6	11	1	905.0	380.0	0.00	5.00	0.00	66	10.0	8.0	Y
M7	13	1	975.0	270.0	0.00	5.00	0.00	66	10.0	8.0	Y
M8	15	1	3,885.0	-155.0	0.00	5.00	0.00	66	10.0	8.0	Y

RESULTS: SOUND LEVELS **<Project Name?>**

<Organization?> **14 September 2016**
<Analysis By?> **TNM 2.5**
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **Robertson Lane Existing + Project**
BARRIER DESIGN: **INPUT HEIGHTS**
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.
ATMOSPHERICS: **68 deg F, 50% RH**

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	2	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8	-8.0
M2	3	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0
M3	5	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0
M4	7	1	0.0	73.6	66	73.6	10	Snd Lvl	73.6	0.0	8	-8.0
M5	9	1	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0
M6	11	1	0.0	64.8	66	64.8	10	----	64.8	0.0	8	-8.0
M7	13	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
M8	15	1	0.0	62.1	66	62.1	10	----	62.1	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	8	0.0	0.0	0.0
All Impacted	3	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

<Organization?> 14 September 2016
<Analysis By?> TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: Robertson Lane Future Without Project

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
N. San Vicente Blvd	70.0	point3	3	2,050.0	1.0	0.00				Average	
		point4	4	2,050.0	1,400.0	0.00					
N. Robertson Blvd	45.0	point11	11	1,300.0	1.0	0.00				Average	
		point35	35	1,300.0	455.5	0.00				Average	
		point12	12	1,300.0	910.0	0.00					
N. La Peer Dr	35.0	point13	13	950.0	1.0	0.00				Average	
		point14	14	950.0	670.0	0.00					
N. La Cienega Blvd	70.0	point15	15	4,050.0	-300.0	0.00				Average	
		point16	16	4,050.0	2,750.0	0.00					
Melrose Avenue	50.0	point19	19	0.0	0.0	0.00				Average	
		point20	20	4,025.0	0.0	0.00					
Santa Monica Blvd	80.0	point26	26	-185.0	-90.0	0.00				Average	
		point33	33	527.5	395.0	0.00				Average	
		point34	34	1,240.0	880.0	0.00				Average	
		point32	32	1,952.5	1,365.0	0.00				Average	
		point27	27	4,090.0	2,820.0	0.00					
Ramage Street	30.0	point28	28	820.0	640.0	0.00				Average	
		point29	29	590.0	940.0	0.00					
Almont Drive	45.0	point30	30	700.0	15.0	0.00				Average	
		point31	31	700.0	500.0	0.00					

<Organization?> 14 September 2016
<Analysis By?> TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: Robertson Lane Future Without Project

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
N. San Vicente Blvd	point3	3	3639	35	76	35	76	35	0	0	0	0
	point4	4										
N. Robertson Blvd	point11	11	2442	30	51	30	51	30	0	0	0	0
	point35	35	1377	30	29	30	29	30	0	0	0	0
	point12	12										
N. La Peer Dr	point13	13	122	30	3	30	3	30	0	0	0	0
	point14	14										
N. La Cienega Blvd	point15	15	0	0	0	0	0	0	0	0	0	0
	point16	16										
Melrose Avenue	point19	19	2746	35	57	35	57	35	0	0	0	0
	point20	20										
Santa Monica Blvd	point26	26	524	35	109	35	109	35	0	0	0	0
	point33	33	5196	35	108	35	108	35	0	0	0	0
	point34	34	5562	35	116	35	116	35	0	0	0	0
	point32	32	6277	35	131	35	131	35	0	0	0	0
	point27	27										
Ramage Street	point28	28	24	25	8	25	0	0	0	0	0	0
	point29	29										
Almont Drive	point30	30	385	30	8	30	8	30	0	0	0	0
	point31	31										

<Organization?>
<Analysis By?>

14 September 2016
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: Robertson Lane Future Without Project

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	2	1	1,260.0	510.0	0.00	4.92	0.00	66	10.0	8.0	Y
M2	3	1	1,345.0	710.0	0.00	5.00	0.00	66	10.0	8.0	Y
M3	5	1	1,830.0	930.0	0.00	5.00	0.00	66	10.0	8.0	Y
M4	7	1	1,330.0	890.0	0.00	5.00	0.00	66	10.0	8.0	Y
M5	9	1	675.0	750.0	0.00	5.00	0.00	66	10.0	8.0	Y
M6	11	1	905.0	380.0	0.00	5.00	0.00	66	10.0	8.0	Y
M7	13	1	975.0	270.0	0.00	5.00	0.00	66	10.0	8.0	Y
M8	15	1	3,885.0	-155.0	0.00	5.00	0.00	66	10.0	8.0	Y

<Organization?>
<Analysis By?>

14 September 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: Robertson Lane Future Without Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc					
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	2	1	0.0	67.9	66	67.9	10	Snd Lvl	67.9	0.0	8	-8.0
M2	3	1	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
M3	5	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
M4	7	1	0.0	74.3	66	74.3	10	Snd Lvl	74.3	0.0	8	-8.0
M5	9	1	0.0	64.7	66	64.7	10	----	64.7	0.0	8	-8.0
M6	11	1	0.0	65.1	66	65.1	10	----	65.1	0.0	8	-8.0
M7	13	1	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0
M8	15	1	0.0	62.6	66	62.6	10	----	62.6	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	8	0.0	0.0	0.0
All Impacted	3	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

<Organization?> 14 September 2016
<Analysis By?> TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: Robertson Lane Future With Project

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
N. San Vicente Blvd	70.0	point3	3	2,050.0	1.0	0.00				Average	
		point4	4	2,050.0	1,400.0	0.00					
N. Robertson Blvd	45.0	point11	11	1,300.0	1.0	0.00				Average	
		point35	35	1,300.0	455.5	0.00				Average	
		point12	12	1,300.0	910.0	0.00					
N. La Peer Dr	35.0	point13	13	950.0	1.0	0.00				Average	
		point14	14	950.0	670.0	0.00					
N. La Cienega Blvd	70.0	point15	15	4,050.0	-300.0	0.00				Average	
		point16	16	4,050.0	2,750.0	0.00					
Melrose Avenue	50.0	point19	19	0.0	0.0	0.00				Average	
		point20	20	4,025.0	0.0	0.00					
Santa Monica Blvd	80.0	point26	26	-185.0	-90.0	0.00				Average	
		point33	33	527.5	395.0	0.00				Average	
		point34	34	1,240.0	880.0	0.00				Average	
		point32	32	1,952.5	1,365.0	0.00				Average	
		point27	27	4,090.0	2,820.0	0.00					
Ramage Street	30.0	point28	28	820.0	640.0	0.00				Average	
		point29	29	590.0	940.0	0.00					
Almont Drive	45.0	point30	30	700.0	15.0	0.00				Average	
		point31	31	700.0	500.0	0.00					

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

<Organization?>				**14 September 2016**								
<Analysis By?>				**TNM 2.5**								
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	**<Project Name?>**											
RUN:	**Robertson Lane Future With Project**											
Roadway	**Points**											
Name	**Name**	**No.**	**Segment**									
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
N. San Vicente Blvd	point3	3	3659	35	76	35	76	35	0	0	0	0
	point4	4										
N. Robertson Blvd	point11	11	2523	30	53	30	53	30	0	0	0	0
	point35	35	1484	30	31	30	31	30	0	0	0	0
	point12	12										
N. La Peer Dr	point13	13	170	30	4	30	4	30	0	0	0	0
	point14	14										
N. La Cienega Blvd	point15	15	0	0	0	0	0	0	0	0	0	0
	point16	16										
Melrose Avenue	point19	19	2807	35	58	35	58	35	0	0	0	0
	point20	20										
Santa Monica Blvd	point26	26	5440	35	113	35	113	35	0	0	0	0
	point33	33	4980	35	104	35	104	35	0	0	0	0
	point34	34	5689	35	119	35	119	35	0	0	0	0
	point32	32	6368	35	133	35	133	35	0	0	0	0
	point27	27										
Ramage Street	point28	28	24	25	8	25	0	0	0	0	0	0
	point29	29										
Almont Drive	point30	30	385	30	8	30	8	30	0	0	0	0
	point31	31										

<Organization?>						14 September 2016					
<Analysis By?>						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	<Project Name?>										
RUN:	Robertson Lane Future With Project										
Receiver											
Name	No.	#DUs	Coordinates (ground)			Height	Input Sound Levels and Criteria				Active
			X	Y	Z	above	Existing	Impact Criteria		NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	2	1	1,260.0	510.0	0.00	4.92	0.00	66	10.0	8.0	Y
M2	3	1	1,345.0	710.0	0.00	5.00	0.00	66	10.0	8.0	Y
M3	5	1	1,830.0	930.0	0.00	5.00	0.00	66	10.0	8.0	Y
M4	7	1	1,330.0	890.0	0.00	5.00	0.00	66	10.0	8.0	Y
M5	9	1	675.0	750.0	0.00	5.00	0.00	66	10.0	8.0	Y
M6	11	1	905.0	380.0	0.00	5.00	0.00	66	10.0	8.0	Y
M7	13	1	975.0	270.0	0.00	5.00	0.00	66	10.0	8.0	Y
M8	15	1	3,885.0	-155.0	0.00	5.00	0.00	66	10.0	8.0	Y

RESULTS: SOUND LEVELS **<Project Name?>**

<Organization?> **14 September 2016**
<Analysis By?> **TNM 2.5**
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **Robertson Lane Future With Project**
BARRIER DESIGN: **INPUT HEIGHTS**
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.
ATMOSPHERICS: **68 deg F, 50% RH**

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	2	1	0.0	68.2	66	68.2	10	Snd Lvl	68.2	0.0	8	-8.0
M2	3	1	0.0	68.4	66	68.4	10	Snd Lvl	68.4	0.0	8	-8.0
M3	5	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
M4	7	1	0.0	74.4	66	74.4	10	Snd Lvl	74.4	0.0	8	-8.0
M5	9	1	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
M6	11	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0
M7	13	1	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
M8	15	1	0.0	62.7	66	62.7	10	----	62.7	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	8	0.0	0.0	0.0
All Impacted	3	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Noise Impact Study

ROBERTSON LANE HOTEL PROJECT
WEST HOLLYWOOD, CALIFORNIA

Prepared for:
City of West Hollywood
Community Development Department

June 2016

Report Ref:
R2014115.3

Prepared by:
Acoustical Engineering Services, Inc.
22801 Crespi Street
Woodland Hills, CA 91364

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EXECUTIVE SUMMARY

In response to a request from the City of West Hollywood, Acoustical Engineering Services, Inc. (AES) has conducted this Noise Impact Study (Study) to analyze the potential noise impacts that would result from the outdoor uses associated with the proposed Robertson Lane Hotel in the City of West Hollywood, California (Project), as shown in Figure 1 (on page 6).

The current ambient noise levels at the sensitive noise receptors (e.g., residential and park) in the vicinity of the Project Site were measured and tabulated in this report. The measured ambient sound data were utilized as baseline levels in conjunction with the City of West Hollywood noise standards and guidelines, to define the Project's noise impact thresholds. In general, the existing sound environment in the vicinity of the Project Site is dominated by local auto traffic (e.g., Santa Monica Boulevard and Robertson Boulevard) and nearby commercial uses (e.g., retail uses and restaurants).

Potential noise impacts from the Project's outdoor uses (due to people gathering and the use of amplified sound systems) at the Project's Levels 1, 3, 4 and 9 were evaluated at the off-site noise sensitive uses. To represent a conservative noise scenario, the noise levels were calculated based on the assumption of concurrent use of all the outdoor areas with the maximum number of people as well as simultaneous use of amplified sound. The key findings of the noise analysis are as follows:

- The estimated noise levels from the people gathering (e.g., talking/conversing) at the Project's proposed outdoor uses would be below the applicable significance threshold for both daytime and nighttime hours.

- The Project's amplified sound system at the Levels 1, 3 and 4 outdoor areas (i.e., outdoor dining, terrace, and pool area) would be employed primarily to broadcast background music. The amplified sound system would be designed to a maximum 75 dBA (L_{eq}) sound level (during daytime hours from 8:00 a.m. to 10:00 p.m.) and 55 to 65 dBA (L_{eq}) sound level (during nighttime hours from 10:00 p.m. to 8:00 a.m.). The estimated noise levels from the Levels 1, 3 and 4 amplified sound system to the off-site noise sensitive receptors would be below the applicable significance threshold for both daytime and nighttime hours.

- The Project's amplified sound system at the Level 9 outdoor areas would be used in connection with the Hotel for scheduled banquets and parties. During daytime hours from 8:00 a.m. to 10:00 p.m. the sound level output for the outdoor amplified sound system at Level 9 would be higher than Levels 1, 3, and 4, at approximately 85 dBA (L_{eq}). Based on the maximum 85 dBA amplified sound level, the Project sound system sound output would be below the applicable daytime significance threshold at the off-site sensitive receptors. During nighttime hours from 10:00 p.m. to 8:00 a.m. the

amplified sound system would be designed to a maximum of 65 dBA (L_{eq}). The estimated noise levels from the Level 9 amplified sound system to the off-site noise sensitive receptors would be below the applicable significance threshold for nighttime hours.

- The cumulative noise levels from use of the outdoor areas on Levels 1, 3, 4 and 9 (including both people gathering and the use of amplified sound system) would be below the applicable significance threshold for both daytime and nighttime hours.

1 INTRODUCTION

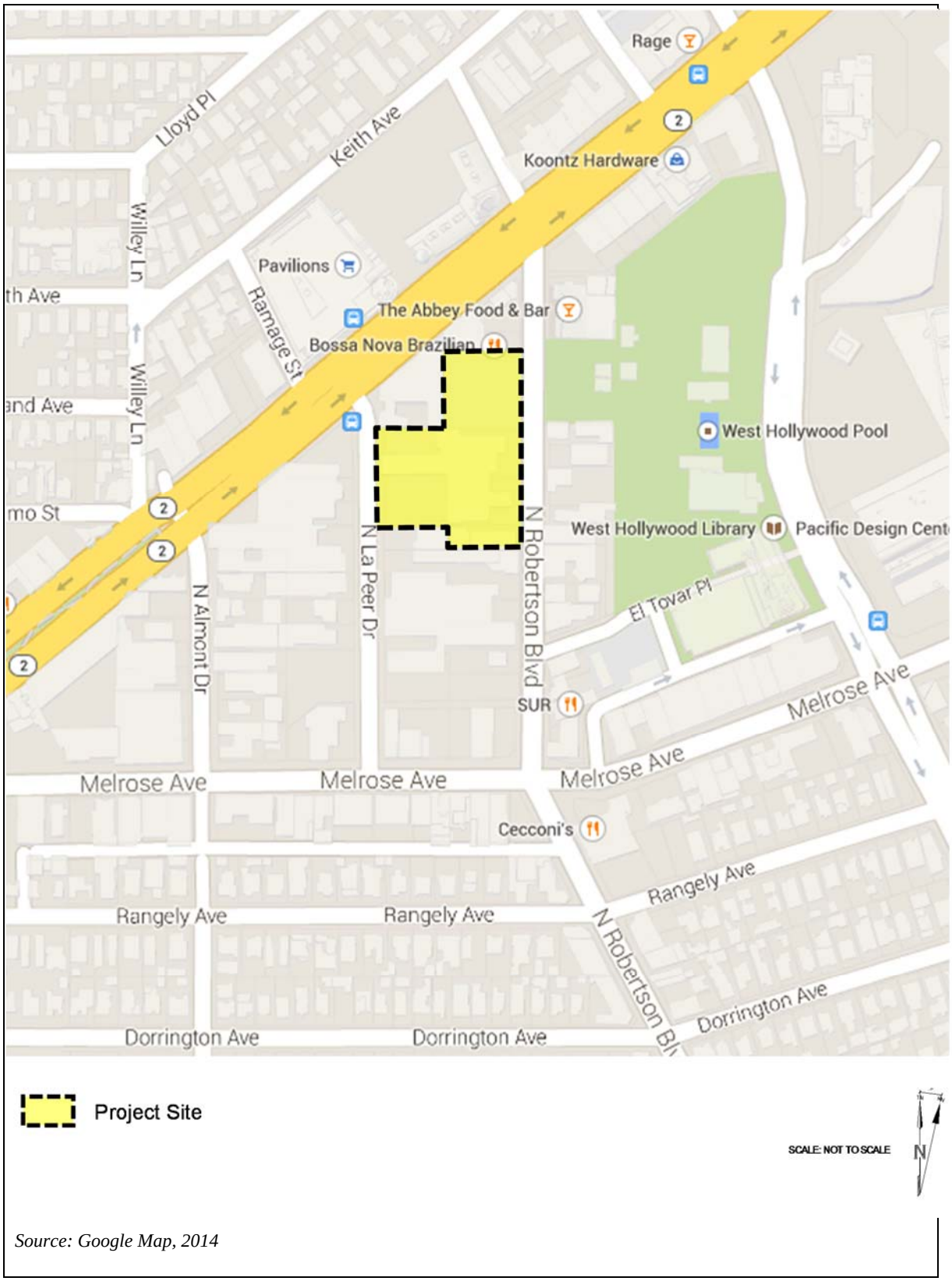
The proposed Robertson Lane Hotel Project includes several outdoor uses which would operate from 7 a.m. to 2 a.m. The outdoor uses, dining and meeting areas, located on the Hotel building Levels 1, 3, 4 and 9 will incorporate amplified sound systems to enhance/ broadcast and reinforce background music and spoken words. This study evaluates the potential noise impacts from the Project's outdoor uses on existing off-site sensitive land uses and develops noise Project Design Features, as required.

1.1 Purpose

The objectives of this noise study are to:

a) Determine potential noise impacts on noise sensitive uses from Project operation-related outdoor uses, including people gathering and amplified sound systems, and

b) Provide Project Design Features to avoid or reduce the potential noise impacts.



Source: Google Map, 2014

Figure 1. Project Site Map

2 ENVIRONMENTAL SETTING

2.1 Fundamentals of Sound and Environmental Noise

Noise is commonly defined as sound that is undesirable because it can interfere with speech communication and hearing, may cause sleep disturbance, or may otherwise be considered annoying (unwanted sound). The decibel (dB) is a conventional unit for measuring the amplitude of sound because it accounts for the large variations in sound pressure amplitude and reflects the way people perceive changes in sound amplitude.[1] The human hearing system is not equally sensitive to sound at all frequencies. Therefore, to approximate this human frequency-dependent response, the A-weighted filtering system is used to adjust measured sound levels (dBA). The term "A-weighted" refers to filtering the noise signal in a manner that corresponds to the way the human ear perceives sound. Examples of various sound levels in different environments are provided in Table 1 (on page 8).

Generally, people judge the relative magnitude of sound sensation by subjective terms such as "loudness" or "noisiness." To the normal human ear, a change in sound level of 3 dB is considered "just perceptible," a change in sound level of 5 dB is considered "clearly noticeable," and a change (i.e., increase) of 10 dB is generally recognized as "twice as loud."[2]

2.1.1 Outdoor Sound Propagation

In an outdoor environment, sound levels attenuate (reduce) through the air as a function of distance. Such attenuation is commonly referred to as "distance loss" or "geometric spreading," and is based on the noise source configuration (e.g., point source, or line source). For a point source, such as electronic speaker systems and outdoor gatherings, the rate of sound attenuation is about 6 dB per doubling of distance from the noise source. For example, an outdoor speaker system generates a sound level of 60 dBA at a distance of five feet would attenuate to 54 dBA at a distance of 10 feet. For a line source, such as a constant flow of traffic on a roadway, the rate of sound attenuation is about 3 dB per doubling of distance.[3]

In addition, structures (e.g., buildings, parapet walls) and natural topography (e.g., hills) that obstruct the line-of-sight between a noise source and a receptor further reduce the noise level if the receptor is located within the "shadow" of the obstruction, such as behind a sound wall. This type of sound attenuation is known as "barrier insertion loss." If a receptor is located behind the wall but still has a view of the source (i.e., line-of-sight is not fully blocked), some barrier insertion loss would still occur, however to a lesser extent. Additionally, a receptor located on the same side of the wall as a noise source may actually experience an increase in the perceived noise level as the wall reflects noise back to the receptor, thereby compounding

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1 *All sound levels measured in decibel (dB) in this study are relative to $2x10^{-5}$ N/m^2.*

2 *Engineering Noise Control, Bies & Hansen, 1988.*

3 *Caltrans, "Technical Noise Supplement (TeNS)", 2009.*

the noise. Outdoor noise barriers can provide noise level reductions ranging from approximately 5 dBA (where the barrier just breaks the line-of-sight between the noise source and receiver) to an upper range of 20 dBA with a more substantial barrier.[4]

Table 1. Typical Noise Levels

Common Outdoor Activities	Noise Levels, dBA	Common Indoor Activities
	110	Rock Band
Jet Fly-over at 1000 feet		
	100	
Gas Lawn Mower at 3 feet		
	90	
Diesel Truck at 50 feet at 50 mph		Food Blender at 3 feet
	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime		
Gas Lawn Mower at 100 feet	**70**	Vacuum Cleaner at 10 feet
Commercial Area		Normal Speech at 3 feet
Heavy Traffic at 300 feet	**60**	
		Large Business Office
Quiet Urban Daytime	**50**	Dishwasher Next Room
Quiet Urban Nighttime	**40**	Theater, Large Conference Room (background)
Quiet Suburban Nighttime		
	30	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (background)
	20	
		Broadcast/Recording Studio (background)
	10	
Lowest Threshold of Human Hearing	**0**	Lowest Threshold of Human Hearing
Source: Caltrans, Technical Noise Supplement (TeNS), 2009		

2.1.2 Environmental Noise Descriptors

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider the total acoustical energy content, as well as the time and duration of occurrence. The most frequently used noise descriptors, including those used by the City of West Hollywood, are summarized below.

[4] *Caltrans, "Technical Noise Supplement (TeNS)", 2009.*

Equivalent Sound Level (L_{eq}). L_{eq} is a measurement of the acoustic energy content of noise averaged over a specified time period. Thus, the L_{eq} of a time-varying sound and that of a steady sound are the same if they deliver the same amount of energy to the receptor's ear during exposure. L_{eq} for one-hour periods, during the daytime or nighttime hours, and 24 hours are commonly used in environmental noise assessments. L_{eq} can be measured for any time period, but is typically measured for an increment of no less than 15 minutes for environmental studies. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during day or night.

Statistical Sound Level (L_n). L_n is a statistical description of the sound level that is exceeded over some fraction of a given period of time. For example, the L_{50} noise level represents the noise level that is exceeded 50 percent of the time. Half the time the noise level exceeds this level and half the time the noise level is less than this level. L_{90} noise level represents the noise level that is exceeded 90 percent of the time and for environmental noise is representative of background ambient noise level.

Community Noise Equivalent Level (CNEL). CNEL is the time average of all A-weighted sound levels for a 24-hour period with a 10 dBA adjustment (upward) added to the sound levels that occur between the hours of 10:00 P.M. and 7:00 A.M. (nighttime), and a 5 dBA adjustment (upward) added to the sound levels which occur between the hours of 7:00 P.M. and 10:00 P.M. (evening). These penalties attempt to account for increased human sensitivity to noise during the nighttime and evening periods, particularly where sleep is the most probable activity. CNEL has been adopted by the State of California to define the community noise environment for development of the community noise element of a General Plan and is also used by the City of West Hollywood for land use planning in the City's General Plan.[5]

Day/Night Average Sound Level (L_{dn}). L_{dn} is the time average of all A-weighted sound levels for a 24-hour period, similar to the CNEL. L_{dn} includes a 10 dBA adjustment (upward) added to the sound levels that occur between the hours of 10:00 P.M. and 7:00 A.M. (nighttime). Unlike CNEL, L_{dn} does not include the 5 dBA adjustment (upward) to the sound levels which occur between the hours of 7:00 P.M. and 10:00 P.M. (evening). L_{dn} is typically within one dBA of CNEL and the two measurements are often used interchangeably for the purposes of defining the community noise environment and measuring A-weighted sound levels for a 24-hour period.

2.2 Regulatory Framework

Government agencies have established noise standards and guidelines to protect citizens from potential hearing damage and other adverse physiological and social effects associated with

[5] *State of California, General Plan Guidelines, 2003. City of West Hollywood, West Hollywood General Plan 2035, Chapter 10 Safety and Noise, September 6, 2011.*

noise. The City of West Hollywood General Plan establishes L_{dn}/CNEL guidelines for land use compatibility and includes a number of goals, objectives, and policies for land use planning purposes. The City also has regulations to control unnecessary, excessive and annoying noise, as set forth in the City of West Hollywood Noise Control Ordinance, Municipal Code Chapter 9.08. Standards and guidelines that may be applicable to this project are discussed below.

2.2.1 City of West Hollywood General Plan

The overall purpose of the General Plan is to guide policy makers in making land use determinations and in preparing noise ordinances that would limit exposure of citizens to excessive noise levels. The following City of West Hollywood General Plan policies and objectives are applicable to the Project:[6]

- SN-3.2: Require the inclusion of noise-reducing design features in development projects to address the impact of noise on residential development.
- SN-3.3: Review development proposals to ensure that noise standards and compatibility criteria set forth in the General Plan are met.
- SN-3.6: Require development projects to implement mitigation measures, where necessary, to reduce noise levels to meet the adopted standards and criteria. Such measures may include, but are not limited to, berms, walls, and sound attenuating architectural design and construction methods.
- SN-3.7: Require new development to meet adopted noise standards and regulations.
- SN-5.1: Work to minimize stationary noise impacts on sensitive receptors and noise emanating from construction activities, private developments/residences, landscaping activities, night clubs and bars, and special events.
- SN-5.3: Require that entertainment uses, restaurants, and bars engage in responsible management and operation to control the activities of their patrons on-site and within reasonable and legally justifiable proximity to minimize noise impacts on adjacent residences.
- SN-5.4: Require mitigation as needed for development of new nightclubs, bars, and other high noise-generating uses adjacent to residences, schools, senior citizen housing, and other noise-sensitive uses.

[6] *City of West Hollywood, West Hollywood General Plan 2035, Chapter 10 Safety and Noise, September 6, 2011.*

The General Plan provides non-transportation source noise level guidance for use in determining general compatibility of proposed residential properties with adjacent properties. The noise levels represent the maximum acceptable noise levels for new developments as measured from any adjoining or proposed residential property within the City. The General Plan provides that proposed development should generally not cause, or if residential in nature, be exposed to a noise level that exceeds 55 dBA (L_{eq}) during the daytime (8 a.m. to 10 p.m.) or 50 dBA (L_{eq}) during the nighttime (10 p.m. to 8 a.m.).[7] The City's noise compatibility guidelines are provided in Table 2 (on page 12).

2.2.2 City of West Hollywood Noise Control Ordinance

Chapter 9.08, *Noise,* of the City's Municipal Code (Noise Ordinance) establishes acceptable ambient sound levels to regulate intrusive noises within specific land use zones and provides procedures and criteria for the measurement of the sound level of noise sources. These procedures recognize and account for differences in the perceived level of different types of noise and/or noise sources. The following sections of the Noise Ordinance are applicable to the proposed Project:

Section 9.08.050 – Prohibited Noises – Specific Examples

Notwithstanding any other provisions of this chapter, the following acts and the causing or permitting thereof, are declared to be in violation of this chapter.

Part a. *Radios, Phonographs, Etc.* The using, operating or permitting to be played, used or operated between the hours of 10:00 p.m. and 8:00 a.m. of any radio, musical instrument, phonograph, television set, or instrument or device similar to those heretofore specifically mentioned for the production or reproduction of sound in volume sufficiently loud as to be plainly audible at a distance of fifty feet or more therefrom.

Part k. *Commercial Establishments Adjacent to Residential Property.* Notwithstanding any provision of this code to the contrary, continuous, repeated or sustained noise from the premises of any commercial establishment which is adjacent to one or more residential dwelling units, including any outdoor area part of or under the control of the establishment, between the hours of 10:00 p.m. and 8:00 a.m. that is plainly audible from the residential dwelling unit's property line.

[7] *City of West Hollywood, West Hollywood General Plan 2035, Chapter 10 Safety and Noise, September 6, 2011, Table 10-1.*

Table 2. City of West Hollywood Guidelines for Noise Compatible Land Use

Land Use Category	*Community Noise Exposure L_{dn} or CNEL, dBA*						
	55	*60*	*65*	*70*	*75*	*80*	
Residential							
Transient Lodging — Motel, Hotel							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters							
Sports Arena, Outdoor Spectator Sports							
Playgrounds, Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial, and Professional							
Industrial, Manufacturing, Utilities, Agriculture							

	ZONE A – Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved meet conventional Title 24 construction standards, No special noise insulation requirements.
	ZONE B – Conditionally Acceptable: New construction or development should be undertaken only after a detailed noise analysis is made and noise reduction measures are identified and included in the project design.
	ZONE C – Normally Unacceptable: New construction or development is discouraged. If new construction is proposed, a detailed analysis is required, noise reduction measures must be identified, and noise insulation features included in the design.
	ZONE D – Clearly Unacceptable: New construction or development should not be undertaken.

Source: Table 10-2: Noise/Land Use Compatibility Matrix, West Hollywood General Plan 2035, City of West Hollywood, 2011

2.3 Existing Ambient Noise Levels

Some land uses are considered more sensitive to intrusive noise than others based on the types of activities typically involved at the receptor location. Based on a review of the land uses in the Project area, a total of five noise sensitive receptor locations were selected to represent

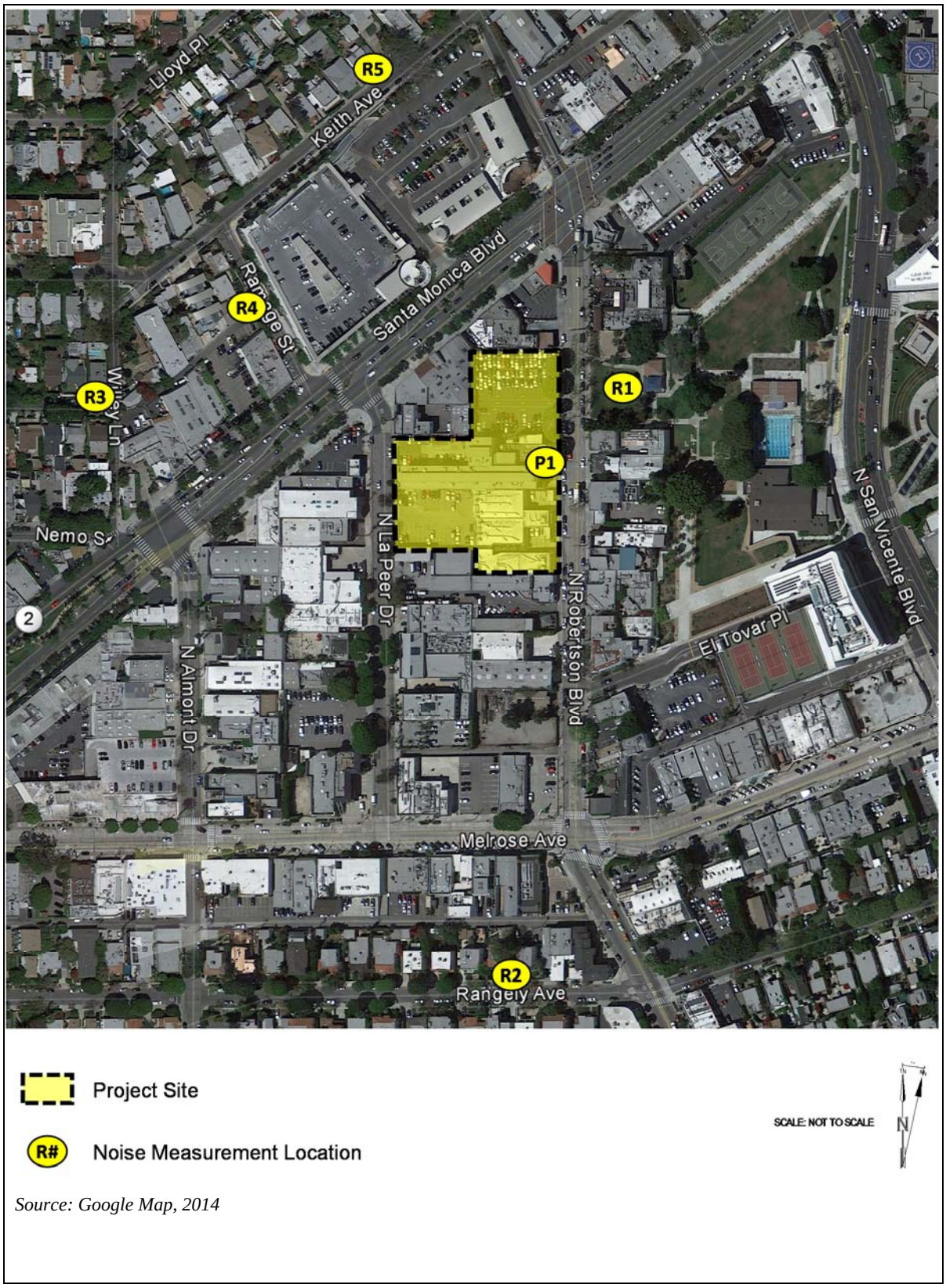
noise sensitive uses surrounding the Project area. The locations of the five noise-sensitive receptors are identified as R1 through R5 in Figure 2 (on page 14). The nearest residential use (R4) is approximately 330 feet from the Project Site.

Ambient noise measurements were taken at the five off-site locations in the vicinity of the Project Site and one on-site location. Descriptions of the noise measurement locations are provided in Table 3 (on page 15). The off-site noise measurements locations range from approximately 60 feet (R1) to 710 feet (R2) from the Project Site. The ambient noise monitoring program was conducted using several Quest Technologies Model 2900 Integrating/Logging Sound Level Meters, these sound level meters meet and exceed the minimum industry standard performance requirements for "Type 2" standard instruments as defined in the American National Standard Institute (ANSI) S1.4.

The ambient noise levels were measured between May 5 and May 6, 2014. Two 15-minute measurements were conducted at each of the off-site receptor locations during both daytime and nighttime hours. A 24-hour measurement was conducted at the Project Site (receptor P1). A 15-minute measurement is a reasonable duration for sampling ambient noise levels where street traffic is the dominant source (typical of urban environments), as traffic noise generally does not vary significantly within an hour.[8]

Table 4 (on page 15) presents the measured ambient noise levels at the selected receptors in L_{eq} and L_{90} in the vicinity of the Project Site. Based on field observation and measured sound data, the current ambient noise environment in the vicinity of the Project Site is controlled primarily by vehicular traffic on local roadways, and commercial uses, and other typical urban noise.

[8] *Caltrans, Technical Noise Supplement, Chapter 3.3, November 2009*



Source: Google Map, 2014

Figure 2. Noise Measurement Locations

Table 3. Description of Noise Measurement Locations

Location	Description	Approximate Distance to Project Site,[a] Feet	Representing Nearby Land Uses	Sensitive Receptor
R1	West Hollywood Park, directly east of the Project Site	60	Public Park	Yes
R2	Residence on Rangely Avenue, south of the Project Site	710	Residential	Yes
R3	Residence at the corner of Willey Lane and Harland Avenue, west of the Project Site	510	Residential	Yes
R4	Residence on Ramage Street, north of Santa Monica Boulevard, northwest of the Project Site	330	Residential	Yes
R5	Residence on Keith Avenue, north of the Project Site	500	Residential	Yes
P1	On Project Site – Project east boundary	--	--	--

[a] *Distances are estimated based on Google Earth map and are referenced to the Project nearest boundary.*

Table 4. Existing Ambient Noise Levels

Location	Noise-Sensitive Land Use	Measured Ambient Noise Levels, dBA L_{eq}/L_{90}		CNEL (24-hour)
		Daytime Hours (8 a.m. to 10 p.m.)	Nighttime Hours (10 p.m. to 8 a.m.)	
R1	Park	58.3 / 52.6	58.8 / 55.6	63.4[a]
R2	Residential	53.6 / 47.9	52.5 / 41.8	57.4[a]
R3	Residential	54.4 / 47.8	49.6 / 46.1	55.7[a]
R4	Residential	61.1 / 53.2	58.6 / 51.7	63.9[a]
R5	Residential	62.3 / 51.3	55.1 / 48.8	62.4[a]
P1	Project Site	63.8 – 68.9 / 51.8 – 65.4[b]	55.8 – 66.6 / 46.6 – 55.1[b]	70.2

[a] *Estimated based on short-term (15-minute) noise measurement based on FTA procedures.*

[b] *Measurements at Location P1 are 24-hour; therefore, a range of noise levels during the daytime and nighttime hours are provided.. The CNEL at Location P1 is calculated based on the 24-hour measurements.*

3 IMPACT ANALYSIS

3.1 Thresholds of Significance

Appendix G of the CEQA Guidelines provides a set of sample questions that address impacts with regard to noise. These questions are as follows:

Would the project result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise levels; or
- For a project within the vicinity of private airstrip, would the project expose people residing or working the project area to excessive noise levels.

With regards to these questions from Appendix G of the CEQA Guidelines, the Project Site is not located within an airport land use plan or within two miles of a public or private airport or within the vicinity of a private airstrip. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels associated with a public or private airport or from a private airstrip. As such, no further analysis of airport operation-related noise is necessary.

In addition, pursuant to Mitigation Measure 3.9-1 of the 2035 General Plan Final EIR, the City of West Hollywood has determined that the City should use the following thresholds and procedures for CEQA analysis of proposed projects:

- The City shall apply the noise standards specified in Table 10-1 and Table 10-2 of the Safety and Noise Element to proposed projects analyzed under CEQA.
- In addition, an increase in ambient noise levels is assumed to be a significant noise concern if a proposed project causes ambient noise levels to exceed the following:

- Where the existing ambient noise level is less than 60 dB, a project-related permanent increase in ambient noise levels of 5 dB L_{dn} or greater.

- Where the existing ambient noise level is greater than 60 dB, a project-related permanent increase in ambient noise levels of 3 dB L_{dn} or greater.

- A project-related temporary increase in ambient noise levels of 10 dB L_{eq} or greater.

The City of West Hollywood General Plan Final EIR does not have quantitative noise limits as applied to people gathering or outdoor amplified sound systems. However, as noted above the West Hollywood Noise Ordinance Section 9.08.050 prohibits the following:

Part a. *Radios, Phonographs, Etc.* The using, operating or permitting to be played, used or operated between the hours of 10:00 p.m. and 8:00 a.m. of any radio, musical instrument, phonograph, television set, or instrument or device similar to those heretofore specifically mentioned for the production or reproduction of sound in volume sufficiently loud as to be plainly audible at a distance of fifty feet or more therefrom.

Part k. *Commercial Establishments Adjacent to Residential Property.* Notwithstanding any provision of this code to the contrary, continuous, repeated or sustained noise from the premises of any commercial establishment which is adjacent to one or more residential dwelling units, including any outdoor area part of or under the control of the establishment, between the hours of 10:00 p.m. and 8:00 a.m. that is plainly audible from the residential dwelling unit's property line.

To ensure compliance with the West Hollywood Noise Ordinance Section 9.08.050 restrictions on noise that is "plainly audible" between the hours of 10:00 p.m. and 8:00 a.m., it has been determined that the significance threshold for the people gathering in the Project's outdoor areas or from the Project's outdoor amplified sound system between 10:00 p.m. and 8:00 a.m. (nighttime hours) would be 5 dBA below the lowest measured background sound level (L_{90}) at the property line of the affected noise sensitive receptor during the nighttime hours. The L_{90} noise level is generally considered to represent the true background or ambient level, as it excludes intermittent peak noise sources such as a truck passing by or dog barking.

The significance threshold of 5 dBA below the lowest background sound levels measured in L_{90} is also a more conservative threshold than the City's General Plan. The General Plan provides that proposed development should generally not cause a noise level that exceeds 50 dBA (L_{eq}) during the nighttime (10 p.m. to 8 a.m.).[9] As showing in Table 7, the applicable

[9] *City of West Hollywood, West Hollywood General Plan 2035, Chapter 10 Safety and Noise, September 6, 2011, Table 10-1.*

nighttime thresholds for all residential sensitive receptors is below 50 dBA (L_{eq}). Therefore, the significance threshold of 5 dBA below the lowest background sound levels measured in L_{90} is a more conservative threshold than provided in the City's General Plan, and addresses the requirement in Noise Ordinance Section 9.08.050 that new noise sources not be "plainly audible" at sensitive receptors.

Therefore, the Project would have a significant impact on noise levels from people gathering or from outdoor amplified sound systems if:

- The noise level generated at the outdoor uses, including people gathering and amplified sound systems increase the existing ambient noise level (L_{eq}) at noise sensitive uses by 5 dBA (where the existing ambient noise level is less than 60 dBA L_{eq}) or 3 dBA (where the existing ambient noise level is 60 dBA L_{eq} or greater), during the daytime hours between 8:00 a.m. and 10:00 p.m.; or

- The noise level generated from the outdoor uses, including people gathering and amplified sound systems, at the property line of a noise sensitive use exceeds the lowest background noise level (L_{90}) minus 5 dBA, during the nighttime hours between 10:00 p.m. and 8:00 a.m.

3.2 Operation Impacts

The Project operation includes outdoor dining and outdoor meeting uses at various levels including, Level 1, Level 3, Level 4 and Level 9 of the new hotel buildings. Noise sources associated with the outdoor uses typically include noise from people gathering and conversing, and use of amplified sound systems. Table 5 (on page 19) presents the anticipated number of people at each of the outdoor spaces and the Project's proposed amplified sound levels, used for the noise analysis. The outdoor spaces at the upper levels (i.e., Levels 3, 4 and 9) would be shielded to the off-site receptors by the Project's proposed 6-ft (at Level 4) and 8-ft high (at Levels 3 and 9) solid parapet walls (translucent glass). The Project's proposed amplified sound levels and the glass parapet walls will be implemented as Project Design Features as further discussed in Section 4 (on page 21). Implementation of all Project Design Features outlined in Section 4 (on page 21) was assumed for the noise analysis.

Noise levels associated with the people gathering at the outdoor areas were assumed to be 62 dBA and 65 dBA at a distance of 3.3 feet (1 meter), for women and men speaking in raised voice effort, respectively. To represent a typical scenario, the noise analysis assumed that up to 50 percent of the people (half of which would be female and the other half male) would be talking at the same time. In addition, to represent a conservative noise scenario, the noise levels from the use of the Project's outdoor spaces were calculated based on the assumption of concurrent use of all the outdoor spaces with the maximum number of people as well as simultaneous use of the amplified sound systems. This represents a conservative worst case analysis because the Project would not be expected to operate all the outdoor spaces at capacity, concurrently.

Table 5. Outdoor Use Assumptions

Hotel Level	Description	Estimated Total Number of People[a]	Amplified Sound System Levels, dBA (L_{eq}) for Background Music, Banquet and Party	
			Daytime Hours (8 a.m. to 10 p.m.)	Nighttime Hours (10 p.m. to 8 a.m.)
Level 1	Outdoor dining at the northeast corner, facing Robertson Blvd.	25	75	60
	Outdoor dining at the east side, facing Robertson Blvd.	30	75	60
	Outdoor dining at the center of the Hotel (near the Lobby)	32	75	60
	Outdoor dining at the southwest corner, facing La Peer Dr.	32	75	60
Level 3	Outdoor dining at the west side, facing La Peer Dr.	64	75	55
Level 4	Outdoor meeting at the northeast corner, facing Robertson Blvd.	500	75	65
	Outdoor pool deck at the east side, facing Robertson Blvd.	316	75	65
Level 9	Outdoor dining at the northeast corner, facing Robertson Blvd.	450	85	65
	Outdoor dining at the west side, facing La Peer Dr.	270	85	65
	Outdoor dining at the southwest corner, facing La Peer Dr.	209	85	65

[a] *Source: Hodgetts + Fung, 2016 & 2013 CA Building Code, Table 1004.1.2*

Table 6 (below) presents the estimated noise levels at the off-site noise sensitive receptors from people gathering and amplified sound system at the Project's outdoor use areas during the daytime. As indicated in Table 6, the estimated noise levels at all off-site noise-sensitive receptors would be below the daytime significance threshold.

Table 6. Outdoor Uses Noise Levels – Daytime Hours (8 a.m. to 10 p.m.)

Location	Estimated Noise Levels from Outdoor Areas, dBA (L_{eq})			Existing Daytime Ambient, dBA (L_{eq})	Significance Threshold,[a] dBA (L_{eq})	Significant Impact?
	People	Amplified Sound	People + Amplified Sound			
R1	48.3	62.0	62.2	58.3	63.3	No
R2	30.2	47.7	47.8	53.6	58.6	No
R3	36.3	55.9	55.9	54.4	59.4	No
R4	37.7	56.5	56.6	61.1	64.1	No
R5	37.3	54.3	54.4	62.3	65.3	No

[a] *Significance threshold is equal to ambient plus 5 dBA where the existing ambient is less than 60 dBA and plus 3 dBA where the existing ambient is equal to or greater than 60 dBA.*

Table 7 (below) presents the estimated noise levels at the off-site noise sensitive receptors from people gathering and the amplified sound at the Project's outdoor use areas during the nighttime. As indicated in Table 7, the estimated noise levels at all off-site noise-sensitive receptors would be below the nighttime significance threshold.

Table 7. Outdoor Uses Noise Levels – Nighttime Hours (10 p.m. to 8 a.m.)

Location	Estimated Noise Levels from Outdoor Areas, dBA (L_{eq})			Nighttime Ambient Noise Levels, dBA (L_{90})	Nighttime Significance Threshold,[a] dBA (L_{90})	Significant Impact?
	People	Amplified Sound	People + Amplified Sound			
R1	48.3	46.2	50.4	55.6	50.6	No
R2	30.2	29.1	32.7	41.8	36.8	No
R3	36.3	36.1	39.2	46.1	41.1	No
R4	37.7	36.9	40.3	51.7	46.7	No
R5	37.3	34.7	39.2	48.8	43.8	No

[a] *Nighttime hours significance threshold is equal to nighttime ambient L_{90} minus 5 dBA.*

4 PROJECT DESIGN FEATURES

As analyzed above, the outdoor uses including people gathering in the Project's outdoor areas and the use of an amplified sound system would be below the applicable significance threshold at all of the off-site noise sensitive receptors during both the daytime and nighttime hours. The following Project Design Features would be implemented as part of the Project to ensure the noise impacts would be less than significant:

1) The amplified sound system shall be calibrated for the outdoor uses so as to not exceed the following levels. The amplified sound system sound output is to be measured at the distance provided below on a plane parallel from the face of the speaker:
    a. Level 1:
        i. 75 dBA (L_{eq}) at 15 feet, during daytime hours from 8:00 a.m. to 10:00 p.m.
        ii. 60 dBA (L_{eq}) at 15 feet, during nighttime hours from 10:00 p.m. to 8:00 a.m.
    b. Level 3:
        i. 75 dBA (L_{eq}) at 25 feet, during daytime hours from 8:00 a.m. to 10:00 p.m.
        ii. 55 dBA (L_{eq}) at 25 feet, during nighttime hours from 10:00 p.m. to 8:00 a.m.
    c. Level 4:
        i. 75 dBA (L_{eq}) at 35 feet, during daytime hours from 8:00 a.m. to 10:00 p.m.
        ii. 65 dBA (L_{eq}) at 35 feet, during nighttime hours from 10:00 p.m. to 8:00 a.m.
    d. Level 9:
        i. 85 dBA (L_{eq}) at 35 feet, during daytime hours from 8:00 a.m. to 10:00 p.m.
        ii. 65 dBA (L_{eq}) at 35 feet, during nighttime hours from 10:00 p.m. to 8:00 a.m.
2) Orientate the Level 9 outdoor speaker system, such that, the sound projection from the speakers would aim toward the audience/guest area and away from the off-site noise sensitive receptors.
3) Provide a 6-ft high solid parapet wall (e.g., translucent glass) at the outdoor use areas at Level 4.
4) Provide an 8-ft high solid parapet wall (e.g., translucent glass) at the outdoor use areas at Levels 3 and 9.

With the implementation of the Project Design Features above, the estimated noise levels from use of the Project's outdoor areas (people gathering plus amplified sound) would be below the applicable significance thresholds and potential noise impacts from the Project would be less than significant.

Robertson Lane Hotel Project

Appendices

Provided by Acoustical Engineering Services

May 2016

Appendix A - Ambient Noise Data

Appendix B - Noise Calculations

Appendix A

Ambient Noise Data

Location: R1 - Park
Date: 5/5/2014

Time	Overload	Leq	Lmax	L10	L90	L90
1:00:08 PM	No	56.3	61	59.2	53.2	
1:01:08 PM	No	54.8	58.2	56.8	52.3	
1:02:08 PM	No	55	59.2	57.5	52	
1:03:08 PM	No	55.2	64.4	57.1	52.5	
1:04:08 PM	No	56.4	60.2	57.7	54.6	
1:05:08 PM	No	56.4	65.7	58.3	53.3	
1:06:08 PM	No	60	67.3	63	52.3	
1:07:08 PM	No	58.6	67.4	61	54.8	
1:08:08 PM	No	56.5	62.5	58.3	53.4	
1:09:08 PM	No	55.5	59.8	58.4	51.7	
1:10:08 PM	No	55.3	57.7	57.1	52.8	
1:11:08 PM	No	65.2	71.2	69.5	55.7	
1:12:08 PM	No	59.8	67.9	63.6	53.3	
1:13:08 PM	No	53.1	57.5	54.7	50.8	
1:14:08 PM	No	56.9	62.7	59.5	53.7	
		58.3				

Time	Overload	Leq	Lmax	L10	L90
11:53:27 PM	No	59.3	63.2	62.3	53.6
11:54:27 PM	No	56.6	58.6	57.6	55.6
11:55:27 PM	No	56.7	59.4	57.5	55.8
11:56:27 PM	No	57.2	60.9	58.2	56.2
11:57:27 PM	No	56.8	60.6	57.9	55.6
11:58:27 PM	No	58.8	61.4	60.1	57.2
11:59:27 PM	No	57.5	59.9	58.6	56.1
12:00:27 AM	No	57.2	60.3	58.9	55
12:01:27 AM	No	61.7	69.1	64.6	57.6
12:02:27 AM	No	60.4	64.7	62.8	56.2
12:03:27 AM	No	60.6	63.9	62.5	57.8
12:04:27 AM	No	58.8	62.6	61.1	52.7
12:05:27 AM	No	58.8	62.1	61.3	55.5
12:06:27 AM	No	58.5	61.7	60.7	53.1
12:07:27 AM	No	59.1	61.9	61	55.2
		58.8			

Location: R2 - Residential use on Rangely Avenue
Date: 5/5/2014

Time	Overload	Leq	Lmax	L10	L90	L90
2:31:41 PM	No	51	59.1	53.5	48	
2:32:41 PM	No	53.4	61.1	57.2	48.9	
2:33:41 PM	No	51.8	55.4	54.2	48.1	
2:34:41 PM	No	56.2	62	59.1	52.2	
2:35:41 PM	No	49.2	54.2	50.7	46.9	
2:36:41 PM	No	55.4	63.4	58.4	50.5	
2:37:41 PM	No	52.1	60.5	54.5	48	
2:38:41 PM	No	53.9	61.7	57.4	50	
2:39:41 PM	No	53.8	63.3	57.7	48.6	
2:40:41 PM	No	48.6	53.3	50.4	46.8	
2:41:41 PM	No	52.7	63	55.3	46.9	
2:42:41 PM	No	55.6	67.1	59.5	47.9	
2:43:41 PM	No	51.6	61.8	52.3	47.2	
2:44:41 PM	No	56.1	65.1	60.1	48.9	
2:45:41 PM	No	53.5	60.1	55.5	49.2	
		53.6				

Time	Overload	Leq	Lmax	L10	L90
11:23:18 PM	No	50.9	60.7	53.5	43.6
11:24:18 PM	No	49.4	57.3	52.2	45.3
11:25:18 PM	No	50.9	57.5	54.5	43.5
11:26:18 PM	No	62	79.4	58.8	44.3
11:27:18 PM	No	49.1	62.5	51.7	43.7
11:28:18 PM	No	49.5	55.8	51.9	46.3
11:29:18 PM	No	46.1	53.3	50.2	41.3
11:30:18 PM	No	46.2	55	50	41.8
11:31:18 PM	No	44.9	52.4	49.1	41.1
11:32:18 PM	No	43.5	48.8	46.4	40.7
11:33:18 PM	No	51.1	54.9	53.6	47.3
11:34:18 PM	No	47.3	53.5	50.2	43.5
11:35:18 PM	No	45.9	51.9	49.4	41.4
11:36:18 PM	No	48.9	55.9	52	44.9
11:37:18 PM	No	51.1	61	54.2	42.8
		52.5			

Location: R3 - Residential use at corner of Willey Lane and Harland Avenue
Date: 5/5/2014

Time	Overload	Leq	Lmax	L10	L90	L90
1:56:01 PM	No	48.1	50.2	49.3	46.9	
1:57:01 PM	No	53.5	64.4	55.5	47.2	
1:58:01 PM	No	50.5	55.4	52.5	49	
1:59:01 PM	No	54.2	60.8	57.7	49.7	
2:00:01 PM	No	56.7	65.2	58.6	50.6	
2:01:01 PM	No	53.2	58.1	56.6	49.3	
2:02:01 PM	No	50.1	55.6	51.8	47.9	
2:03:01 PM	No	49.3	51.1	50.2	48.4	
2:04:01 PM	No	49.4	55.9	51.9	47	
2:05:01 PM	No	61.5	74.8	64.6	48.6	
2:06:01 PM	No	56.7	68.2	59.7	47.5	
2:07:01 PM	No	53	57.8	55.5	50.4	
2:08:01 PM	No	51	58.9	53.1	48.4	
2:09:01 PM	No	51.8	57.2	53.4	50	
2:10:01 PM	No	51.8	60.1	54.4	47.4	
		54.4				

Time	Overload	Leq	Lmax	L10	L90
10:59:13 PM	No	48.8	52.5	50.8	45.9
11:00:13 PM	No	47.8	52.1	50.5	45.7
11:01:13 PM	No	48.5	51.7	50.6	46.1
11:02:13 PM	No	47.3	52.1	49.2	45.9
11:03:13 PM	No	48	51.9	50.5	46.3
11:04:13 PM	No	48.2	52.9	52	45.6
11:05:13 PM	No	48.3	52	50.4	46.1
11:06:13 PM	No	51.1	54.6	53.4	47
11:07:13 PM	No	47.8	49.8	48.9	46.6
11:08:13 PM	No	50.9	53.3	52.4	48.8
11:09:13 PM	No	53.1	61.3	55.8	49.3
11:10:13 PM	No	49.4	54.7	51.4	46.5
11:11:13 PM	No	48	50.3	49.3	46.7
11:12:13 PM	No	49.8	55.4	52.7	47.2
11:13:13 PM	No	51.5	54.8	53.3	49.3
		49.6			

Location: R4 - Residential use on Ramage Street
Date: 5/5/2014

Time	Overload	Leq	Lmax	L10	L90
1:37:55 PM	No	57.9	64.4	61.9	51.8
1:38:55 PM	No	56.9	64.4	58.4	54.8
1:39:55 PM	No	68.0	77.1	73.6	57.2
1:40:55 PM	No	65.6	76.8	70.2	54.8
1:41:55 PM	No	54.8	57.7	57.2	51.7
1:42:55 PM	No	57.6	62.8	59.9	54.8
1:43:55 PM	No	54.0	60.2	55.4	51.9
1:44:55 PM	No	60.5	72.2	61.9	53.5
1:45:55 PM	No	55.7	59.7	58.4	51.7
1:46:55 PM	No	58.3	65.7	59.7	53.8
1:47:55 PM	No	57.2	60.9	59	54.5
1:48:55 PM	No	61.3	69	66.1	54.8
1:49:55 PM	No	58.6	68.6	61.6	54.6
1:50:55 PM	No	56.7	61.9	58.7	54.2
1:51:55 PM	No	62.5	72.5	65.7	54.6
		61.1			

Time	Overload	Leq	Lmax	Lpeak	L10	L90
10:42:19 PM	No	65.6	73.6	70.6	54.9	
10:43:19 PM	No	59.3	68.4	64	52.7	
10:44:19 PM	No	56.2	60.4	58.6	52.9	
10:45:19 PM	No	55.8	64	58.4	52.2	
10:46:19 PM	No	57.0	64.9	59.4	53.1	
10:47:19 PM	No	57.6	69.6	60.4	50.5	
10:48:19 PM	No	56.1	61.8	58.5	51.7	
10:49:19 PM	No	57.4	62.6	59.7	53.3	
10:50:19 PM	No	55.7	62.6	59.9	50.4	
10:51:19 PM	No	56.3	64.7	58.5	51.6	
10:52:19 PM	No	57.3	61	60.3	52.3	
10:53:19 PM	No	54.4	58.3	56.6	51.7	
10:54:19 PM	No	57.1	62.3	59.3	52	
10:55:19 PM	No	54.2	60.4	57	50.2	
10:56:19 PM	No	60.3	72.1	63.1	52.9	
		58.6				

Location: R5 - Residential use on Keith Avenue
Date: 5/5/2014

Time	Overload	Leq	Lmax	L10	L90
1:20:40 PM	No	63.6	76.6	66.4	52.3
1:21:40 PM	No	60.8	72.1	62.5	51.1
1:22:40 PM	No	66	73.8	72.2	52.8
1:23:40 PM	No	62.1	72.6	67.2	52
1:24:40 PM	No	57.4	70.1	57.1	50.9
1:25:40 PM	No	59.2	67.3	64.1	51.9
1:26:40 PM	No	54.4	58.8	57.7	51.3
1:27:40 PM	No	62.5	74.9	66.8	51.5
1:28:40 PM	No	60.1	70.2	65	49.7
1:29:40 PM	No	60.6	71.1	65.6	49.3
1:30:40 PM	No	63.5	73.7	68.9	51.9
1:31:40 PM	No	58.9	70	60.8	53
1:32:40 PM	No	67.1	80.8	68.9	51.7
1:33:40 PM	No	58.4	69.4	62.9	50.2
1:34:40 PM	No	63.3	72.6	68.2	53
		62.3			

Time	Overload	Leq	Lmax	L10	L90
10:21:12 PM	No	56.7	66.3	61.5	48.3
10:22:12 PM	No	60.8	70.9	65.5	50.9
10:23:12 PM	No	57.5	64	60.7	49.2
10:24:12 PM	No	52.3	63.4	53.3	49.3
10:25:12 PM	No	57.8	71.1	59.3	50
10:26:12 PM	No	50.8	54.6	51.6	49.6
10:27:12 PM	No	50.5	53.5	51.5	49.4
10:28:12 PM	No	49.8	53.2	51.8	48.5
10:29:12 PM	No	49.3	53.9	50.4	48.3
10:30:12 PM	No	49.7	51.8	50.3	48.9
10:31:12 PM	No	51.6	58.4	53.9	48.6
10:32:12 PM	No	53.3	62.4	56.5	49.1
10:33:12 PM	No	56	67.8	58	48.8
10:34:12 PM	No	50.4	55.3	53	48.5
10:35:12 PM	No	56.1	67.6	58.7	50.3
		55.1			

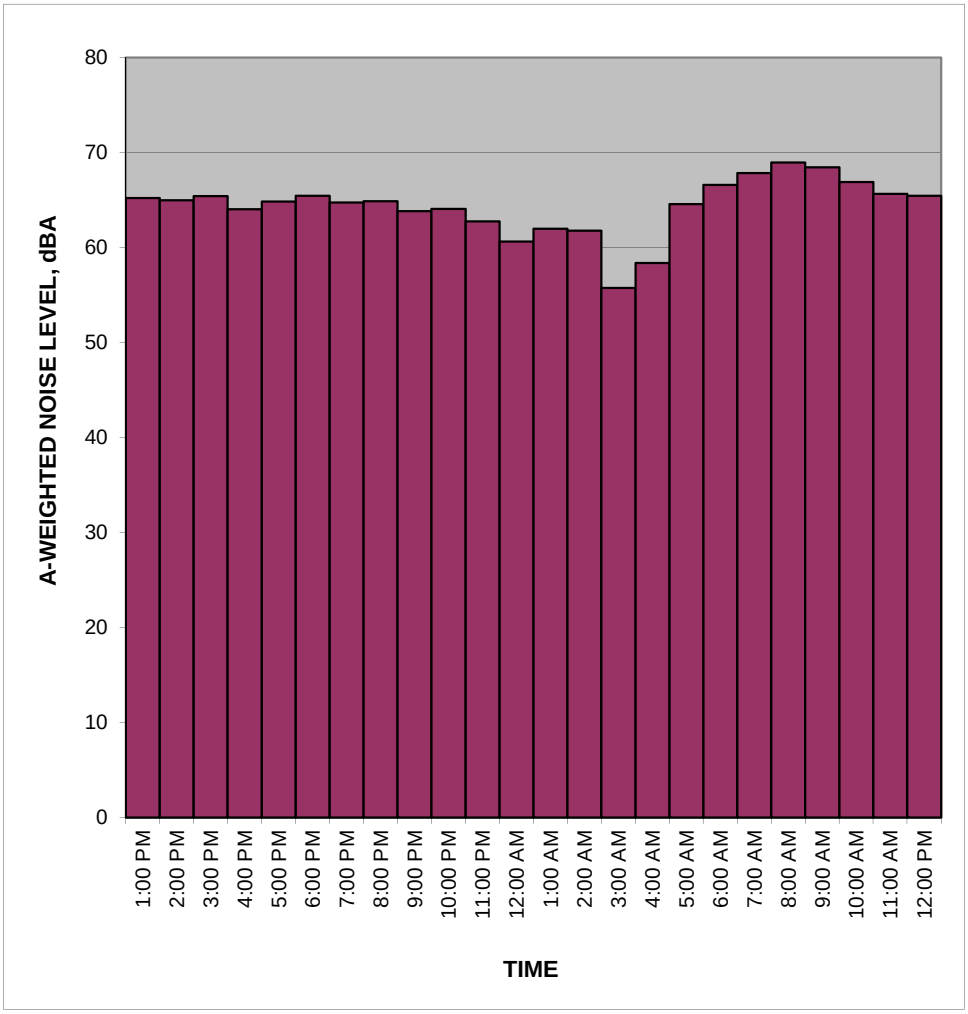
Measured Ambient Noise Levels

AES
Acoustical Engineering Services

Project: Robertson Lane Hotel
Location: P1 - Project Site
Sources: Traffic Volumes

Date: 5/5 to 5/6/2014

TIME	HNL, dB(A)
1:00 PM	65.2
2:00 PM	65.0
3:00 PM	65.4
4:00 PM	64.0
5:00 PM	64.8
6:00 PM	65.5
7:00 PM	64.7
8:00 PM	64.9
9:00 PM	63.8
10:00 PM	64.1
11:00 PM	62.8
12:00 AM	60.6
1:00 AM	62.0
2:00 AM	61.8
3:00 AM	55.8
4:00 AM	58.4
5:00 AM	64.6
6:00 AM	66.6
7:00 AM	67.8
8:00 AM	68.9
9:00 AM	68.4
10:00 AM	66.9
11:00 AM	65.6
12:00 PM	65.4
CNEL, dB(A):	**70.2**



NOTES:

Appendix B

Noise Calculations

Robertson Lane Hotel
Octave spectra of the sources in dB(A) - Level 9 - Speakers

Name	Lw	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
	dB(A)		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
Level9_Speakers-B	117.	SoundSystem	98.3	103.4	105.9	106.3	109.5	110.7	110.5	108.4	
Level9_Speakers-C	117.	SoundSystem	98.3	103.4	105.9	106.3	109.5	110.7	110.5	108.4	
Level9_Speakers-D	117.	SoundSystem	98.3	103.4	105.9	106.3	109.5	110.7	110.5	108.4	
Level9_Speakers-A	117.	SoundSystem	98.3	103.4	105.9	106.3	109.5	110.7	110.5	108.4	

Robertson Lane Hotel
Octave spectra of the sources in dB(A) - Level 9 - People

Name	Lw	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
	dB(A)		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
Level9_People-A(450/2)	95.3	People (Raised Voice)	48.5	58.5	75.0	90.4	91.6	87.8	82.6	72.5	
Level9_People-B(450/2)	95.3	People (Raised Voice)	48.5	58.5	75.0	90.4	91.6	87.8	82.6	72.5	
Level9_People-C(270)	96.1	People (Raised Voice)	49.3	59.3	75.8	91.2	92.4	88.6	83.4	73.3	
Level9_People-D(209)	95.0	People (Raised Voice)	48.2	58.2	74.7	90.1	91.3	87.5	82.3	72.2	

Robertson Lane Hotel
Octave spectra of the sources in dB(A) - Level 4 - Speakers

Name	Lw	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
	dB(A)		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
Level4-Speakers-A	107.	SoundSystem(1)	73.8	83.9	91.4	96.8	100.0	101.2	101.0	98.9	
Level4-Speakers-B	107.	SoundSystem(1)	73.8	83.9	91.4	96.8	100.0	101.2	101.0	98.9	

Robertson Lane Hotel
Octave spectra of the sources in dB(A) - Level 4 - People

Name	Lw	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
	dB(A)		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
Level4-People-A(500)	98.8	People (Raised Voice)	52.0	62.0	78.5	93.9	95.1	91.3	86.1	76.0	
Level4-People-B(316)	96.8	People (Raised Voice)	50.0	60.0	76.5	91.9	93.1	89.3	84.1	74.0	

Robertson Lane Hotel
Octave spectra of the sources in dB(A) - Level 3 - Speakers

Name	Lw	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
	dB(A)		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
Level3-Speakers	104.	SoundSystem	85.3	90.4	92.9	93.3	96.5	97.7	97.5	95.4	

Robertson Lane Hotel
Octave spectra of the sources in dB(A) - Level 3 - People

Name	Lw	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
	dB(A)		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
Level3-People(64)	89.8	People (Raised Voice)	43.0	53.0	69.5	84.9	86.1	82.3	77.1	67.0	

Robertson Lane Hotel
Octave spectra of the sources in dB(A) - Level 1- Speakers

Name	Lw	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
	dB(A)		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
Level1-Speakers-A	99.0	SoundSystem	80.3	85.4	87.9	88.3	91.5	92.7	92.5	90.4	
Level1-Speakers-B	99.0	SoundSystem	80.3	85.4	87.9	88.3	91.5	92.7	92.5	90.4	
Level1-Speakers-C	99.0	SoundSystem	80.3	85.4	87.9	88.3	91.5	92.7	92.5	90.4	
Level1-Speakers-D	99.0	SoundSystem	80.3	85.4	87.9	88.3	91.5	92.7	92.5	90.4	

Robertson Lane Hotel
Octave spectra of the sources in dB(A) - Level 1- People

Name	Lw	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
	dB(A)		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
Level1-PeopleA(25)	85.9	People (Raised Voice)	39.1	49.1	65.6	81.0	82.2	78.4	73.2	63.1	
Level1-PeopleB(30)	86.6	People (Raised Voice)	39.8	49.8	66.3	81.7	82.9	79.1	73.9	63.8	
Level1-PeopleC(32)	86.8	People (Raised Voice)	40.0	50.0	66.5	81.9	83.1	79.3	74.1	64.0	
Level1-PeopleD(32)	86.8	People (Raised Voice)	40.0	50.0	66.5	81.9	83.1	79.3	74.1	64.0	

Robertson Lane Hotel
Assessed contibution level - Level 9 - Speakers

Source	Leq,d dB(A)	Leq,n dB(A)	
Receiver R1	Leq,d 57.9	dB(A)	Leq,n 37.9 dB(A)
Level8_Speakers-B	55.5	35.5	
Level8_Speakers-C	42.9	22.9	
Level8_Speakers-D	52.3	32.3	
Level8_Speakers-A	48.9	28.9	
Receiver R2	Leq,d 47.3	dB(A)	Leq,n 27.3 dB(A)
Level8_Speakers-B	41.8	21.8	
Level8_Speakers-C	40.8	20.8	
Level8_Speakers-D	43.6	23.6	
Level8_Speakers-A	36.2	16.2	
Receiver R3	Leq,d 55.5	dB(A)	Leq,n 35.5 dB(A)
Level8_Speakers-B	41.5	21.5	
Level8_Speakers-C	51.4	31.4	
Level8_Speakers-D	49.4	29.4	
Level8_Speakers-A	50.5	30.5	
Receiver R4	Leq,d 55.8	dB(A)	Leq,n 35.8 dB(A)
Level8_Speakers-B	42.4	22.4	
Level8_Speakers-C	52.4	32.4	
Level8_Speakers-D	50.2	30.2	
Level8_Speakers-A	49.0	29.0	
Receiver R5	Leq,d 54.2	dB(A)	Leq,n 34.2 dB(A)
Level8_Speakers-B	43.2	23.2	
Level8_Speakers-C	48.5	28.5	
Level8_Speakers-D	42.3	22.3	
Level8_Speakers-A	51.8	31.8	

Robertson Lane Hotel
Assessed contibution level - Level 9 - People

9

Source	Leq,d dB(A)	Leq,n dB(A)
Receiver R1	Leq,d 36.9 dB(A)	Leq,n 36.9 dB(A)
Level9_People-A(450/2)	30.8	30.8
Level9_People-B(450/2)	34.0	34.0
Level8_People-C(270)	20.8	20.8
Level8_People-D(209)	30.4	30.4
Receiver R2	Leq,d 25.9 dB(A)	Leq,n 25.9 dB(A)
Level9_People-A(450/2)	18.9	18.9
Level9_People-B(450/2)	19.8	19.8
Level8_People-C(270)	19.4	19.4
Level8_People-D(209)	21.3	21.3
Receiver R3	Leq,d 34.6 dB(A)	Leq,n 34.6 dB(A)
Level9_People-A(450/2)	28.8	28.8
Level9_People-B(450/2)	20.2	20.2
Level8_People-C(270)	31.4	31.4
Level8_People-D(209)	27.9	27.9
Receiver R4	Leq,d 34.8 dB(A)	Leq,n 34.8 dB(A)
Level9_People-A(450/2)	25.8	25.8
Level9_People-B(450/2)	21.1	21.1
Level8_People-C(270)	32.7	32.7
Level8_People-D(209)	28.4	28.4
Receiver R5	Leq,d 32.9 dB(A)	Leq,n 32.9 dB(A)
Level9_People-A(450/2)	28.5	28.5
Level9_People-B(450/2)	27.1	27.1
Level8_People-C(270)	27.9	27.9
Level8_People-D(209)	20.0	20.0

Robertson Lane Hotel
Assessed contibution level - Level 4 - Speakers

Source	Leq,d dB(A)	Leq,n dB(A)
Receiver R1	Leq,d 48.9 dB(A)	Leq,n 38.9 dB(A)
Level4-Speakers-A	45.7	35.7
Level4-Speakers-B	46.1	36.1
Receiver R2	Leq,d 34.0 dB(A)	Leq,n 24.0 dB(A)
Level4-Speakers-A	29.8	19.8
Level4-Speakers-B	31.9	21.9
Receiver R3	Leq,d 31.8 dB(A)	Leq,n 21.8 dB(A)
Level4-Speakers-A	27.0	17.0
Level4-Speakers-B	30.0	20.0
Receiver R4	Leq,d 33.0 dB(A)	Leq,n 23.0 dB(A)
Level4-Speakers-A	29.1	19.1
Level4-Speakers-B	30.7	20.7
Receiver R5	Leq,d 35.1 dB(A)	Leq,n 25.1 dB(A)
Level4-Speakers-A	33.5	23.5
Level4-Speakers-B	30.1	20.1

Robertson Lane Hotel
Assessed contibution level - Level 4 - People

Source	Leq,d dB(A)	Leq,n dB(A)	
Receiver R1	Leq,d 42.1	dB(A)	Leq,n 42.1 dB(A)
Level4-People-A(500)	40.1	40.1	
Level4-People-B(316)	37.7	37.7	
Receiver R2	Leq,d 27.7	dB(A)	Leq,n 27.7 dB(A)
Level4-People-A(500)	24.8	24.8	
Level4-People-B(316)	24.5	24.5	
Receiver R3	Leq,d 27.3	dB(A)	Leq,n 27.3 dB(A)
Level4-People-A(500)	24.2	24.2	
Level4-People-B(316)	24.4	24.4	
Receiver R4	Leq,d 26.5	dB(A)	Leq,n 26.5 dB(A)
Level4-People-A(500)	23.2	23.2	
Level4-People-B(316)	23.7	23.7	
Receiver R5	Leq,d 35.2	dB(A)	Leq,n 35.2 dB(A)
Level4-People-A(500)	34.8	34.8	
Level4-People-B(316)	25.2	25.2	

Robertson Lane Hotel
Assessed contibution level - Level 3 - Speakers

Source	Leq,d dB(A)	Leq,n dB(A)			
Receiver R1	Leq,d 31.5		dB(A)	Leq,n 11.5	dB(A)
Level3-Speakers	31.5	11.5			
Receiver R2	Leq,d 32.6		dB(A)	Leq,n 12.6	dB(A)
Level3-Speakers	32.6	12.6			
Receiver R3	Leq,d 44.4		dB(A)	Leq,n 24.4	dB(A)
Level3-Speakers	44.4	24.4			
Receiver R4	Leq,d 47.3		dB(A)	Leq,n 27.3	dB(A)
Level3-Speakers	47.3	27.3			
Receiver R5	Leq,d 27.8		dB(A)	Leq,n 7.8	dB(A)
Level3-Speakers	27.8	7.8			

Robertson Lane Hotel
Assessed contibution level - Level 3 - People

Source	Leq,d dB(A)	Leq,n dB(A)	
Receiver R1	Leq,d 19.6	dB(A)	Leq,n 19.6 dB(A)
Level3-People(64)	19.6	19.6	
Receiver R2	Leq,d 17.9	dB(A)	Leq,n 17.9 dB(A)
Level3-People(64)	17.9	17.9	
Receiver R3	Leq,d 28.2	dB(A)	Leq,n 28.2 dB(A)
Level3-People(64)	28.2	28.2	
Receiver R4	Leq,d 31.1	dB(A)	Leq,n 31.1 dB(A)
Level3-People(64)	31.1	31.1	
Receiver R5	Leq,d 17.9	dB(A)	Leq,n 17.9 dB(A)
Level3-People(64)	17.9	17.9	

Robertson Lane Hotel
Assessed contibution level - Level 1- Speakers

Source	Leq,d dB(A)	Leq,n dB(A)	
Receiver R1	Leq,d 59.5	dB(A)	Leq,n 44.5 dB(A)
Level1-Speakers-A	56.9	41.9	
Level1-Speakers-B	56.0	41.0	
Level1-Speakers-C	32.9	17.9	
Level1-Speakers-D	26.2	11.2	
Receiver R2	Leq,d 23.2	dB(A)	Leq,n 8.2 dB(A)
Level1-Speakers-A	18.6	3.6	
Level1-Speakers-B	15.9	0.9	
Level1-Speakers-C	16.8	1.8	
Level1-Speakers-D	17.2	2.2	
Receiver R3	Leq,d 36.0	dB(A)	Leq,n 21.0 dB(A)
Level1-Speakers-A	16.9	1.9	
Level1-Speakers-B	16.9	1.9	
Level1-Speakers-C	20.1	5.1	
Level1-Speakers-D	35.8	20.8	
Receiver R4	Leq,d 40.8	dB(A)	Leq,n 25.8 dB(A)
Level1-Speakers-A	20.2	5.2	
Level1-Speakers-B	19.9	4.9	
Level1-Speakers-C	22.4	7.4	
Level1-Speakers-D	40.6	25.6	
Receiver R5	Leq,d 28.0	dB(A)	Leq,n 13.0 dB(A)
Level1-Speakers-A	20.8	5.8	
Level1-Speakers-B	19.2	4.2	
Level1-Speakers-C	18.6	3.6	
Level1-Speakers-D	25.6	10.6	

Robertson Lane Hotel
Assessed contibution level - Level 1- People

Source	Leq,d dB(A)	Leq,n dB(A)	
Receiver R1	Leq,d 46.6	dB(A)	Leq,n 46.6 dB(A)
Level1-PeopleA(25)	43.4	43.4	
Level1-PeopleB(30)	43.8	43.8	
Level1-PeopleC(32)	14.6	14.6	
Level1-PeopleD(32)	20.1	20.1	
Receiver R2	Leq,d 10.4	dB(A)	Leq,n 10.4 dB(A)
Level1-PeopleA(25)	3.9	3.9	
Level1-PeopleB(30)	3.6	3.6	
Level1-PeopleC(32)	5.5	5.5	
Level1-PeopleD(32)	4.3	4.3	
Receiver R3	Leq,d 22.6	dB(A)	Leq,n 22.6 dB(A)
Level1-PeopleA(25)	4.2	4.2	
Level1-PeopleB(30)	4.9	4.9	
Level1-PeopleC(32)	22.4	22.4	
Level1-PeopleD(32)	6.8	6.8	
Receiver R4	Leq,d 30.6	dB(A)	Leq,n 30.6 dB(A)
Level1-PeopleA(25)	7.7	7.7	
Level1-PeopleB(30)	8.1	8.1	
Level1-PeopleC(32)	30.5	30.5	
Level1-PeopleD(32)	10.2	10.2	
Receiver R5	Leq,d 14.8	dB(A)	Leq,n 14.8 dB(A)
Level1-PeopleA(25)	6.9	6.9	
Level1-PeopleB(30)	7.1	7.1	
Level1-PeopleC(32)	11.9	11.9	
Level1-PeopleD(32)	6.4	6.4	