

Noise Measurement Field Data

Project:	Google Caribbean	Job Number:	
Site No.:	#1	Date:	10/17/2018
Analyst:	Noemi Wyss	Time:	2:43 PM
Location:	380-384 W. Caribbean		

Noise Sources: Cars on Caribbean drive

Comments:

Results (dBA):

Leq:	Lmin:	Lmax:	Peak:
67.2	38.5	81.1	95.6

Equipment	
Sound Level Meter:	SoundPro DL
Calibrator:	QC-10
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	72
Wind (mph):	10
Sky:	Clear
Bar. Pressure:	30
Humidity:	41%

Photo:



Noise Measurement Field Data

Project:	Google Caribbean	Job Number:	
Site No.:	#2	Date:	10/17/2018
Analyst:	Noemi Wyss	Time:	3:02 PM
Location:	Borregas Avenue and East Caribbean Drive		

Noise Sources: parking lot, trucks and cars on Caribbean and Borregas

Comments:

Results (dBA):

Leq:	Lmin:	Lmax:	Peak:
57.5	43.5	72.2	87.9

Equipment	
Sound Level Meter:	SoundPro DL
Calibrator:	QC-10
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	72
Wind (mph):	10
Sky:	Clear
Bar. Pressure:	30
Humidity:	41%

Photo:



Noise Measurement Field Data

Project:	Google Caribbean	Job Number:	
Site No.:	#3	Date:	10/17/2018
Analyst:	Noemi Wyss	Time:	3:22 PM
Location:	Caspain Court		

Noise Sources: parking lot, cars, people talking on phones, planes

Comments:

Results (dBA):

Leq:	Lmin:	Lmax:	Peak:
52.1	47.7	62.9	98.2

Equipment	
Sound Level Meter:	SoundPro DL
Calibrator:	QC-10
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	72
Wind (mph):	10
Sky:	Clear
Bar. Pressure:	30
Humidity:	41%

Photo:



Noise Measurement Field Data

Project:	Google Caribbean	Job Number:	
Site No.:	#4	Date:	10/17/2018
Analyst:	Noemi Wyss	Time:	3:39 PM
Location:	Bordeaux and Mathilda		
Noise Sources:	cars on streets, parking lot, crosswalk beeps		
Comments:			
Results (dBA):			
	Leq:	Lmin:	Lmax:
	63.4	49.7	82.6
			Peak:
			97.9

Equipment	
Sound Level Meter:	SoundPro DL
Calibrator:	QC-10
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	72
Wind (mph):	10
Sky:	Clear
Bar. Pressure:	30
Humidity:	41%

Photo:



FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Google Caribbean
Project Number:
Scenario: Existing
Ldn/CNEL: Ldn

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

# Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
							Medium Trucks	Heavy Trucks	Ldn at 100 Feet	Distance to Contour			
									70 Ldn	65 Ldn	60 Ldn	55 Ldn	
1	Caribbean Drive	4	18	10,205	45	0	2.0%	1.0%	62.8	-	-	-	-
2	Caribbean Drive	4	18	14,480	45	0	2.0%	1.0%	64.3	-	-	-	-
3	Caribbean Drive	4	18	17,530	45	0	2.0%	1.0%	65.1	-	-	-	-
4	Caribbean Drive	4	18	19,250	45	0	2.0%	1.0%	65.5	-	-	-	-
5	Caribbean Drive	6	18	28,730	45	0	2.0%	1.0%	67.4	-	-	-	-
6	Bordeaux Drive	2	1	1,670	30	0	2.0%	1.0%	51.6	-	-	-	-
7	Bordeaux Drive	2	14	3,390	30	0	2.0%	1.0%	54.7	-	-	-	-
8	Borregas Avenue	2	1	3,696	35	0	2.0%	1.0%	55.8	-	-	-	-
9	Borregas Avenue	2	1	3,950	35	0	2.0%	1.0%	56.1	-	-	-	-
10	Borregas Avenue	2	1	2,920	35	0	2.0%	1.0%	54.8	-	-	-	-
11	Java Drive	4	45	3,850	45	0	2.0%	1.0%	58.7	-	-	-	-
12	Java Drive	4	45	7,360	45	0	2.0%	1.0%	61.6	-	-	-	-
13	Java Drive	4	45	7,710	45	0	2.0%	1.0%	61.8	-	-	-	-
14	Java Drive	4	45	8,380	45	0	2.0%	1.0%	62.1	-	-	-	-
15	Geneva Drive	2	1	1,110	30	0	2.0%	1.0%	49.8	-	-	-	-
16	Crossman Avenue	4	14	4,700	45	0	2.0%	1.0%	59.4	-	-	-	-
17	Fair Oaks Avenue	4	45	15,340	45	0	2.0%	1.0%	64.8	-	-	-	-
18	Fair Oaks Avenue	4	14	37,250	45	0	2.0%	1.0%	68.4	-	-	-	-
19	Fair Oaks Avenue	5	13	34,750	30	0	2.0%	1.0%	65.0	-	-	-	-
20	Fair Oaks Avenue	5	13	27,610	30	0	2.0%	1.0%	64.0	-	-	-	-
21	Fair Oaks Avenue	6	22	16,110	35	0	2.0%	1.0%	62.6	-	-	-	-
22	Lawrence Expressway	8	18	36,810	50	0	2.0%	1.0%	69.9	-	-	-	-
23	Lawrence Expressway	8	18	32,340	50	0	2.0%	1.0%	69.3	-	-	-	-
24	Tasman Drive	4	35	23,050	40	0	2.0%	1.0%	65.3	-	-	-	-
25	Tasman Drive	4	35	11,750	40	0	2.0%	1.0%	62.4	-	-	-	-
26	Great America Parkway	6	20	20,840	40	0	2.0%	1.0%	64.9	-	-	-	-
27	Great America Parkway	6	25	25,740	40	0	2.0%	1.0%	65.9	-	-	-	-
28	Mathilda Avenue	6	20	27,720	40	0	2.0%	1.0%	66.2	-	-	-	-
29	Sunnyvale-Saratoga Road	6	25	34,290	40	0	2.0%	1.0%	67.1	-	-	-	-

¹ Distance is from the centerline of the roadway segment to the receptor location.
 "-" = contour is located within the roadway right-of-way.

FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Google Caribbean
Project Number:
Scenario: Existing Plus Project
Ldn/CNEL: Ldn

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

#	Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	Ldn at 100 Feet	70 Ldn	65 Ldn	60 Ldn	55 Ldn
1	Caribbean Drive	Mathilda Ave / Parking Garage Dwy and Borregas Ave / Caribbean Dr	4	18	12185	45	0	2.0%	1.0%	63.5	-	71	225	712
2	Caribbean Drive	Borregas Ave / Caribbean Dr and Geneva Dr / Caribbean Dr	4	18	16870	45	0	2.0%	1.0%	64.9	-	99	312	986
3	Caribbean Drive	Geneva Dr / Caribbean Dr and Caribbean Dr / Twin Creeks-Commercial Dwy	4	18	21720	45	0	2.0%	1.0%	66.0	-	127	402	1,270
4	Caribbean Drive	Caribbean Dr / Twin Creeks-Commercial Dwy and Caribbean Dr / Moffett Park Dr-Baylands Park	4	18	23440	45	0	2.0%	1.0%	66.4	-	137	433	1,370
5	Caribbean Drive	s/o Intersection 24: Caribbean Dr / Moffett Park Dr-Baylands Park	6	18	32950	45	0	2.0%	1.0%	68.0	-	201	637	2,014
6	Bordeaux Drive	Mathilda Ave / 1st Ave-Bordeaux Dr and Bordeaux Dr / Java Dr	2	1	2140	30	0	2.0%	1.0%	52.7	-	-	-	58
7	Bordeaux Drive	s/o Intersection 14: Bordeaux Dr / Java Dr	2	14	5900	30	0	2.0%	1.0%	57.1	-	-	51	162
8	Borregas Avenue	Borregas Ave / Caribbean Dr and Borregas Ave / Caspian Ct-Caspian Dr	2	1	4106	35	0	2.0%	1.0%	56.3	-	-	42	134
9	Borregas Avenue	Borregas Ave / Caspian Ct-Caspian Dr and Borregas Ave / Java Dr	2	1	4470	35	0	2.0%	1.0%	56.6	-	-	46	146
10	Borregas Avenue	s/o Intersection 15: Borregas Ave / Java Dr	2	1	3550	35	0	2.0%	1.0%	55.6	-	-	37	116
11	Java Drive	w/o and Bordeaux Dr / Java Dr	4	45	5660	45	0	2.0%	1.0%	60.4	-	-	110	348
12	Java Drive	Bordeaux Dr / Java Dr and Borregas Ave / Java Dr	4	45	10270	45	0	2.0%	1.0%	63.0	-	-	200	632
13	Java Drive	Borregas Ave / Java Dr and Geneva Dr / Java	4	45	10180	45	0	2.0%	1.0%	63.0	-	-	198	627
14	Java Drive	e/o and Geneva Dr / Java	4	45	12160	45	0	2.0%	1.0%	63.7	-	75	237	749
15	Geneva Drive	Geneva Dr / Java and Geneva Dr / Caribbean Dr	2	1	2820	30	0	2.0%	1.0%	53.8	-	-	-	77
16	Crossman Avenue	n/o and Crossman Ave-SR 237 WB On-Ramp / Moffett Park Dr	4	14	7720	45	0	2.0%	1.0%	61.5	-	-	142	449
17	Fair Oaks Avenue	n/o and Java Dr-Fair Oaks Ave / Fair Oaks Wy-Kensington Pl	4	45	20120	45	0	2.0%	1.0%	65.9	-	124	392	1,239
18	Fair Oaks Avenue	b/w Intersection 18: and Intersection 19: Fair Oaks Ave / Ahwanee Ave	4	14	41940	45	0	2.0%	1.0%	68.9	77	244	771	2,438
19	Fair Oaks Avenue	Fair Oaks Ave / Ahwanee Ave and Fair Oaks Ave / Caliente Dr	5	13	39190	30	0	2.0%	1.0%	65.5	-	112	353	1,117
20	Fair Oaks Avenue	Fair Oaks Ave / Caliente Dr and Fair Oaks Ave / Wolfe Road	5	13	31660	30	0	2.0%	1.0%	64.6	-	90	285	903
21	Fair Oaks Avenue	s/o and Fair Oaks Ave / Wolfe Road	6	22	19130	35	0	2.0%	1.0%	63.3	-	68	216	682
22	Lawrence Expressway	n/o and Lawrence Expy / Persian Dr-Elko Dr	8	18	43910	50	0	2.0%	1.0%	70.6	116	367	1,160	3,667
23	Lawrence Expressway	s/o and Lawrence Expy / Persian Dr-Elko Dr	8	18	39410	50	0	2.0%	1.0%	70.2	104	329	1,041	3,291
24	Tasman Drive	Tasman Dr e/o Intersection 26: Great America Pkwy / Tasman Dr	4	35	56070	40	0	2.0%	1.0%	69.1	82	259	821	2,595
25	Tasman Drive	Tasman Dr w/o Intersection 26: Great America Pkwy / Tasman Dr	4	35	28730	40	0	2.0%	1.0%	66.2	-	133	420	1,330
26	Great America Parkway	n/o Intersection 26: Great America Pkwy / Tasman Dr	6	20	27170	40	0	2.0%	1.0%	66.1	-	128	406	1,283
27	Great America Parkway	s/o Intersection 26: Great America Pkwy / Tasman Dr	6	25	47310	40	0	2.0%	1.0%	68.5	72	226	715	2,261
28	Mathilda Avenue	n/o Intersection 27: Mathilda Ave / Sunnyvale-Saratoga Rd-Talisman Dr	6	20	34720	40	0	2.0%	1.0%	67.1	-	164	518	1,639
29	Sunnyvale-Saratoga Road	S/o Intersection 27: Mathilda Ave / Sunnyvale-Saratoga Rd-Talisman Dr	6	25	42840	40	0	2.0%	1.0%	68.1	-	205	648	2,048

¹ Distance is from the centerline of the roadway segment to the receptor location.

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FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Google Caribbean
Project Number:
Scenario: Opening Year Background
Ldn/CNEL: Ldn

Assumed 24-Hour Traffic Distribution:
 Total ADT Volumes 77.70% 12.70% 9.60%
 Medium-Duty Trucks 87.43% 5.05% 7.52%
 Heavy-Duty Trucks 89.10% 2.84% 8.06%

#	Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	Ldn at 100 Feet	70 Ldn	65 Ldn	60 Ldn	55 Ldn
1	Caribbean Drive	Mathilda Ave / Parking Garage Dwy and Borre	4	18	12185	45	0	2.0%	1.0%	63.5	-	71	225	712
2	Caribbean Drive	Borregas Ave / Caribbean Dr and Geneva Dr /	4	18	16870	45	0	2.0%	1.0%	64.9	-	99	312	986
3	Caribbean Drive	Geneva Dr / Caribbean Dr and Caribbean Dr /	4	18	21720	45	0	2.0%	1.0%	66.0	-	127	402	1,270
4	Caribbean Drive	Caribbean Dr / Twin Creeks-Commercial Dwy	4	18	23440	45	0	2.0%	1.0%	66.4	-	137	433	1,370
5	Caribbean Drive	s/o Intersection 24: Caribbean Dr / Moffett Parl	6	18	32950	45	0	2.0%	1.0%	68.0	-	201	637	2,014
6	Bordeaux Drive	Mathilda Ave / 1st Ave-Bordeaux Dr and Borde	2	1	2140	30	0	2.0%	1.0%	52.7	-	-	-	58
7	Bordeaux Drive	s/o Intersection 14: Bordeaux Dr / Java Dr	2	14	5900	30	0	2.0%	1.0%	57.1	-	-	51	162
8	Borregas Avenue	Borregas Ave / Caribbean Dr and Borregas Av	2	1	4106	35	0	2.0%	1.0%	56.3	-	-	42	134
9	Borregas Avenue	Borregas Ave / Caspian Ct-Caspian Dr and Bc	2	1	4470	35	0	2.0%	1.0%	56.6	-	-	46	146
10	Borregas Avenue	s/o Intersection 15: Borregas Ave / Java Dr	2	1	3550	35	0	2.0%	1.0%	55.6	-	-	37	116
11	Java Drive	w/o and Bordeaux Dr / Java Dr	4	45	5660	45	0	2.0%	1.0%	60.4	-	-	110	348
12	Java Drive	Bordeaux Dr / Java Dr and Borregas Ave / Jav	4	45	10270	45	0	2.0%	1.0%	63.0	-	-	200	632
13	Java Drive	Borregas Ave / Java Dr and Geneva Dr / Java	4	45	10180	45	0	2.0%	1.0%	63.0	-	-	198	627
14	Java Drive	e/o and Geneva Dr / Java	4	45	12160	45	0	2.0%	1.0%	63.7	-	75	237	749
15	Geneva Drive	Geneva Dr / Java and Geneva Dr / Caribbean	2	1	2820	30	0	2.0%	1.0%	53.8	-	-	-	77
16	Crossman Avenue	n/o and Crossman Ave-SR 237 WB On-Ramp	4	14	7720	45	0	2.0%	1.0%	61.5	-	-	142	449
17	Fair Oaks Avenue	n/o and Java Dr-Fair Oaks Ave / Fair Oaks Wy	4	45	20120	45	0	2.0%	1.0%	65.9	-	124	392	1,239
18	Fair Oaks Avenue	b/w Intersection 18: and Intersection 19: Fair (	4	14	41940	45	0	2.0%	1.0%	68.9	77	244	771	2,438
19	Fair Oaks Avenue	Fair Oaks Ave / Ahwanee Ave and Fair Oaks /	5	13	39190	30	0	2.0%	1.0%	65.5	-	112	353	1,117
20	Fair Oaks Avenue	Fair Oaks Ave / Caliente Dr and Fair Oaks Ave	5	13	31660	30	0	2.0%	1.0%	64.6	-	90	285	903
21	Fair Oaks Avenue	s/o and Fair Oaks Ave / Wolfe Road	6	22	19130	35	0	2.0%	1.0%	63.3	-	68	216	682
22	Lawrence Expressway	n/o and Lawrence Expy / Persian Dr-Elko Dr	8	18	43910	50	0	2.0%	1.0%	70.6	116	367	1,160	3,667
23	Lawrence Expressway	s/o and Lawrence Expy / Persian Dr-Elko Dr	8	18	39410	50	0	2.0%	1.0%	70.2	104	329	1,041	3,291
24	Tasman Drive	Tasman Dr e/o Intersection 26: Great America	4	35	56070	40	0	2.0%	1.0%	69.1	82	259	821	2,595
25	Tasman Drive	Tasman Dr w/o Intersection 26: Great America	4	35	28730	40	0	2.0%	1.0%	66.2	-	133	420	1,330
26	Great America Parkway	n/o Intersection 26: Great America Pkwy / Tas	6	20	27170	40	0	2.0%	1.0%	66.1	-	128	406	1,283
27	Great America Parkway	s/o Intersection 26: Great America Pkwy / Tas	6	25	47310	40	0	2.0%	1.0%	68.5	72	226	715	2,261
28	Mathilda Avenue	n/o Intersection 27: Mathilda Ave / Sunnyvale-	6	20	34720	40	0	2.0%	1.0%	67.1	-	164	518	1,639
29	Sunnyvale-Saratoga Road	S/o Intersection 27: Mathilda Ave / Sunnyvale-	6	25	42840	40	0	2.0%	1.0%	68.1	-	205	648	2,048

¹ Distance is from the centerline of the roadway segment to the receptor location.
 "-" = contour is located within the roadway right-of-way.

FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Google Caribbean
Project Number:
Scenario: Opening Year Plus Project
Ldn/CNEL: Ldn

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

#	Roadway	Segment	Median Lanes	ADT Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	Ldn at 100 Feet	70 Ldn	65 Ldn	60 Ldn	55 Ldn
1	Caribbean Drive	Mathilda Ave / Parking Garage Dwy and Borregas Ave / Caribbean Dr	4	18	17189	45	0	2.0%	1.0%	65.0	-	100	318	1,005
2	Caribbean Drive	Borregas Ave / Caribbean Dr and Geneva Dr / Caribbean Dr	4	18	20748	45	0	2.0%	1.0%	65.8	-	121	384	1,213
3	Caribbean Drive	Geneva Dr / Caribbean Dr and Caribbean Dr / Twin Creeks-Commercial Dwy	4	18	25186	45	0	2.0%	1.0%	66.7	-	147	466	1,472
4	Caribbean Drive	Caribbean Dr / Twin Creeks-Commercial Dwy and Caribbean Dr / Moffett Park C	4	18	26906	45	0	2.0%	1.0%	67.0	-	157	497	1,573
5	Caribbean Drive	s/o Intersection 24: Caribbean Dr / Moffett Park Dr-Baylands Park	6	18	36416	45	0	2.0%	1.0%	68.5	70	223	704	2,226
6	Bordeaux Drive	Mathilda Ave / 1st Ave-Bordeaux Dr and Bordeaux Dr / Java Dr	2	1	2266	30	0	2.0%	1.0%	52.9	-	-	-	62
7	Bordeaux Drive	s/o Intersection 14: Bordeaux Dr / Java Dr	2	14	5910	30	0	2.0%	1.0%	57.1	-	-	51	162
8	Borregas Avenue	Borregas Ave / Caribbean Dr and Borregas Ave / Caspian Ct-Caspian Dr	2	1	6501	35	0	2.0%	1.0%	58.3	-	-	67	212
9	Borregas Avenue	Borregas Ave / Caspian Ct-Caspian Dr and Borregas Ave / Java Dr	2	1	6911	35	0	2.0%	1.0%	58.5	-	-	71	225
10	Borregas Avenue	s/o Intersection 15: Borregas Ave / Java Dr	2	1	4766	35	0	2.0%	1.0%	56.9	-	-	49	155
11	Java Drive	w/o and Bordeaux Dr / Java Dr	4	45	6594	45	0	2.0%	1.0%	61.1	-	-	128	406
12	Java Drive	Bordeaux Dr / Java Dr and Borregas Ave / Java Dr	4	45	11245	45	0	2.0%	1.0%	63.4	-	69	219	692
13	Java Drive	Borregas Ave / Java Dr and Geneva Dr / Java	4	45	10743	45	0	2.0%	1.0%	63.2	-	-	209	661
14	Java Drive	e/o and Geneva Dr / Java	4	45	12793	45	0	2.0%	1.0%	64.0	-	79	249	788
15	Geneva Drive	Geneva Dr / Java and Geneva Dr / Caribbean Dr	2	1	2910	30	0	2.0%	1.0%	54.0	-	-	-	79
16	Crossman Avenue	n/o and Crossman Ave-SR 237 WB On-Ramp / Moffett Park Dr	4	14	7911	45	0	2.0%	1.0%	61.6	-	-	145	460
17	Fair Oaks Avenue	n/o and Java Dr-Fair Oaks Ave / Fair Oaks Wy-Kensington Pl	4	45	20894	45	0	2.0%	1.0%	66.1	-	129	407	1,286
18	Fair Oaks Avenue	b/w Intersection 18: and Intersection 19: Fair Oaks Ave / Ahwanee Ave	4	14	42352	45	0	2.0%	1.0%	68.9	78	246	779	2,462
19	Fair Oaks Avenue	Fair Oaks Ave / Ahwanee Ave and Fair Oaks Ave / Caliente Dr	5	13	39602	30	0	2.0%	1.0%	65.5	-	113	357	1,129
20	Fair Oaks Avenue	Fair Oaks Ave / Caliente Dr and Fair Oaks Ave / Wolfe Road	5	13	31971	30	0	2.0%	1.0%	64.6	-	91	288	912
21	Fair Oaks Avenue	s/o and Fair Oaks Ave / Wolfe Road	6	22	19381	35	0	2.0%	1.0%	63.4	-	69	218	691
22	Lawrence Expressway	n/o and Lawrence Expy / Persian Dr-Elko Dr	8	18	46120	50	0	2.0%	1.0%	70.9	122	385	1,218	3,851
23	Lawrence Expressway	s/o and Lawrence Expy / Persian Dr-Elko Dr	8	18	41620	50	0	2.0%	1.0%	70.4	110	348	1,099	3,476
24	Tasman Drive	Tasman Dr e/o Intersection 26: Great America Pkwy / Tasman Dr	4	35	56231	40	0	2.0%	1.0%	69.2	82	260	823	2,602
25	Tasman Drive	Tasman Dr w/o Intersection 26: Great America Pkwy / Tasman Dr	4	35	29122	40	0	2.0%	1.0%	66.3	-	135	426	1,348
26	Great America Parkway	n/o Intersection 26: Great America Pkwy / Tasman Dr	6	20	27170	40	0	2.0%	1.0%	66.1	-	128	406	1,283
27	Great America Parkway	s/o Intersection 26: Great America Pkwy / Tasman Dr	6	25	47541	40	0	2.0%	1.0%	68.6	72	227	719	2,273
28	Mathilda Avenue	n/o Intersection 27: Mathilda Ave / Sunnyvale-Saratoga Rd-Talisman Dr	6	20	35373	40	0	2.0%	1.0%	67.2	-	167	528	1,670
29	Sunnyvale-Saratoga Roa	S/o Intersection 27: Mathilda Ave / Sunnyvale-Saratoga Rd-Talisman Dr	6	25	43493	40	0	2.0%	1.0%	68.2	-	208	657	2,079

¹ Distance is from the centerline of the roadway segment to the receptor location.

"-" = contour is located within the roadway right-of-way.

FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Google Caribbean
Project Number:
Scenario: Horizon Year
Ldn/CNEL: Ldn

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

#	Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	Ldn at 100 Feet	70 Ldn	65 Ldn	60 Ldn	55 Ldn
1	Caribbean Drive	Mathilda Ave / Parking Garage Dwy and Borre	4	18	14015	45	0	2.0%	1.0%	64.1	-	82	259	819
2	Caribbean Drive	Borregas Ave / Caribbean Dr and Geneva Dr /	4	18	19490	45	0	2.0%	1.0%	65.6	-	114	360	1,139
3	Caribbean Drive	Geneva Dr / Caribbean Dr and Caribbean Dr /	4	18	24920	45	0	2.0%	1.0%	66.6	-	146	461	1,457
4	Caribbean Drive	Caribbean Dr / Twin Creeks-Commercial Dwy	4	18	26940	45	0	2.0%	1.0%	67.0	-	157	498	1,575
5	Caribbean Drive	s/o Intersection 24: Caribbean Dr / Moffett Parl	6	18	38450	45	0	2.0%	1.0%	68.7	74	235	743	2,351
6	Bordeaux Drive	Mathilda Ave / 1st Ave-Bordeaux Dr and Borde	2	1	2440	30	0	2.0%	1.0%	53.2	-	-	-	66
7	Bordeaux Drive	s/o Intersection 14: Bordeaux Dr / Java Dr	2	14	6580	30	0	2.0%	1.0%	57.6	-	-	57	180
8	Borregas Avenue	Borregas Ave / Caribbean Dr and Borregas Av	2	1	4792	35	0	2.0%	1.0%	56.9	-	-	49	156
9	Borregas Avenue	Borregas Ave / Caspian Ct-Caspian Dr and Bc	2	1	5220	35	0	2.0%	1.0%	57.3	-	-	54	170
10	Borregas Avenue	s/o Intersection 15: Borregas Ave / Java Dr	2	1	4110	35	0	2.0%	1.0%	56.3	-	-	42	134
11	Java Drive	w/o and Bordeaux Dr / Java Dr	4	45	6420	45	0	2.0%	1.0%	61.0	-	-	125	395
12	Java Drive	Bordeaux Dr / Java Dr and Borregas Ave / Jav	4	45	11680	45	0	2.0%	1.0%	63.6	-	72	227	719
13	Java Drive	Borregas Ave / Java Dr and Geneva Dr / Java	4	45	11620	45	0	2.0%	1.0%	63.5	-	72	226	715
14	Java Drive	e/o and Geneva Dr / Java	4	45	13790	45	0	2.0%	1.0%	64.3	-	85	268	849
15	Geneva Drive	Geneva Dr / Java and Geneva Dr / Caribbean	2	1	3050	30	0	2.0%	1.0%	54.2	-	-	-	83
16	Crossman Avenue	n/o and Crossman Ave-SR 237 WB On-Ramp	4	14	8620	45	0	2.0%	1.0%	62.0	-	-	158	501
17	Fair Oaks Avenue	n/o and Java Dr-Fair Oaks Ave / Fair Oaks Wy	4	45	23080	45	0	2.0%	1.0%	66.5	-	142	449	1,421
18	Fair Oaks Avenue	b/w Intersection 18: and Intersection 19: Fair (	4	14	49190	45	0	2.0%	1.0%	69.6	90	286	904	2,860
19	Fair Oaks Avenue	Fair Oaks Ave / Ahwanee Ave and Fair Oaks /	5	13	45990	30	0	2.0%	1.0%	66.2	-	131	415	1,311
20	Fair Oaks Avenue	Fair Oaks Ave / Caliente Dr and Fair Oaks Ave	5	13	37190	30	0	2.0%	1.0%	65.3	-	106	335	1,060
21	Fair Oaks Avenue	s/o and Fair Oaks Ave / Wolfe Road	6	22	22580	35	0	2.0%	1.0%	64.1	-	80	255	805
22	Lawrence Expressway	n/o and Lawrence Expy / Persian Dr-Elko Dr	8	18	51630	50	0	2.0%	1.0%	71.3	136	431	1,363	4,311
23	Lawrence Expressway	s/o and Lawrence Expy / Persian Dr-Elko Dr	8	18	46220	50	0	2.0%	1.0%	70.9	122	386	1,221	3,860
24	Tasman Drive	Tasman Dr e/o Intersection 26: Great America	4	35	60640	40	0	2.0%	1.0%	69.5	89	281	887	2,806
25	Tasman Drive	Tasman Dr w/o Intersection 26: Great America	4	35	31210	40	0	2.0%	1.0%	66.6	-	144	457	1,444
26	Great America Parkway	n/o Intersection 26: Great America Pkwy / Tas	6	20	31310	40	0	2.0%	1.0%	66.7	-	148	467	1,478
27	Great America Parkway	s/o Intersection 26: Great America Pkwy / Tas	6	25	52540	40	0	2.0%	1.0%	69.0	79	251	794	2,511
28	Mathilda Avenue	n/o Intersection 27: Mathilda Ave / Sunnyvale-	6	20	40010	40	0	2.0%	1.0%	67.8	-	189	597	1,889
29	Sunnyvale-Saratoga Road	S/o Intersection 27: Mathilda Ave / Sunnyvale-	6	25	49380	40	0	2.0%	1.0%	68.7	75	236	746	2,360

¹ Distance is from the centerline of the roadway segment to the receptor location.
 "-" = contour is located within the roadway right-of-way.

FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Google Caribbean
Project Number:
Scenario: Horizon Year Plus Project
Ldn/CNEL: Ldn

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

#	Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	Ldn at 100 Feet	70 Ldn	65 Ldn	60 Ldn	55 Ldn
1	Caribbean Drive	Mathilda Ave / Parking Garage Dwy and Borre	4	18	19019	45	0	2.0%	1.0%	65.5	-	111	352	1,112
2	Caribbean Drive	Borregas Ave / Caribbean Dr and Geneva Dr /	4	18	23368	45	0	2.0%	1.0%	66.4	-	137	432	1,366
3	Caribbean Drive	Geneva Dr / Caribbean Dr and Caribbean Dr /	4	18	28386	45	0	2.0%	1.0%	67.2	-	166	525	1,660
4	Caribbean Drive	Caribbean Dr / Twin Creeks-Commercial Dwy	4	18	30406	45	0	2.0%	1.0%	67.5	56	178	562	1,778
5	Caribbean Drive	s/o Intersection 24: Caribbean Dr / Moffett Parl	6	18	41916	45	0	2.0%	1.0%	69.1	81	256	810	2,563
6	Bordeaux Drive	Mathilda Ave / 1st Ave-Bordeaux Dr and Borde	2	1	2568	30	0	2.0%	1.0%	53.4	-	-	-	70
7	Bordeaux Drive	s/o Intersection 14: Bordeaux Dr / Java Dr	2	14	6590	30	0	2.0%	1.0%	57.6	-	-	57	180
8	Borregas Avenue	Borregas Ave / Caribbean Dr and Borregas Av	2	1	7187	35	0	2.0%	1.0%	58.7	-	-	74	234
9	Borregas Avenue	Borregas Ave / Caspian Ct-Caspian Dr and Bc	2	1	7661	35	0	2.0%	1.0%	59.0	-	-	79	250
10	Borregas Avenue	s/o Intersection 15: Borregas Ave / Java Dr	2	1	5326	35	0	2.0%	1.0%	57.4	-	-	55	174
11	Java Drive	w/o and Bordeaux Dr / Java Dr	4	45	7354	45	0	2.0%	1.0%	61.6	-	-	143	453
12	Java Drive	Bordeaux Dr / Java Dr and Borregas Ave / Jav	4	45	12655	45	0	2.0%	1.0%	63.9	-	78	246	779
13	Java Drive	Borregas Ave / Java Dr and Geneva Dr / Java	4	45	12183	45	0	2.0%	1.0%	63.8	-	75	237	750
14	Java Drive	e/o and Geneva Dr / Java	4	45	14423	45	0	2.0%	1.0%	64.5	-	89	281	888
15	Geneva Drive	Geneva Dr / Java and Geneva Dr / Caribbean	2	1	3140	30	0	2.0%	1.0%	54.3	-	-	-	85
16	Crossman Avenue	n/o and Crossman Ave-SR 237 WB On-Ramp	4	14	8811	45	0	2.0%	1.0%	62.1	-	51	162	512
17	Fair Oaks Avenue	n/o and Java Dr-Fair Oaks Ave / Fair Oaks Wy	4	45	23854	45	0	2.0%	1.0%	66.7	-	147	464	1,469
18	Fair Oaks Avenue	b/w Intersection 18: and Intersection 19: Fair (	4	14	49602	45	0	2.0%	1.0%	69.6	91	288	912	2,884
19	Fair Oaks Avenue	Fair Oaks Ave / Ahwanee Ave and Fair Oaks /	5	13	46402	30	0	2.0%	1.0%	66.2	-	132	418	1,323
20	Fair Oaks Avenue	Fair Oaks Ave / Caliente Dr and Fair Oaks Ave	5	13	37501	30	0	2.0%	1.0%	65.3	-	107	338	1,069
21	Fair Oaks Avenue	s/o and Fair Oaks Ave / Wolfe Road	6	22	22831	35	0	2.0%	1.0%	64.1	-	81	257	814
22	Lawrence Expressway	n/o and Lawrence Expy / Persian Dr-Elko Dr	8	18	53840	50	0	2.0%	1.0%	71.5	142	450	1,422	4,496
23	Lawrence Expressway	s/o and Lawrence Expy / Persian Dr-Elko Dr	8	18	48430	50	0	2.0%	1.0%	71.1	128	404	1,279	4,044
24	Tasman Drive	Tasman Dr e/o Intersection 26: Great America	4	35	60801	40	0	2.0%	1.0%	69.5	89	281	890	2,814
25	Tasman Drive	Tasman Dr w/o Intersection 26: Great America	4	35	31602	40	0	2.0%	1.0%	66.7	-	146	463	1,463
26	Great America Parkway	n/o Intersection 26: Great America Pkwy / Tas	6	20	31310	40	0	2.0%	1.0%	66.7	-	148	467	1,478
27	Great America Parkway	s/o Intersection 26: Great America Pkwy / Tas	6	25	52771	40	0	2.0%	1.0%	69.0	80	252	798	2,523
28	Mathilda Avenue	n/o Intersection 27: Mathilda Ave / Sunnyvale-	6	20	40663	40	0	2.0%	1.0%	67.8	-	192	607	1,920
29	Sunnyvale-Saratoga Road	S/o Intersection 27: Mathilda Ave / Sunnyvale-	6	25	50033	40	0	2.0%	1.0%	68.8	76	239	756	2,392

¹ Distance is from the centerline of the roadway segment to the receptor location.
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