

APPENDIX NOI – NOISE ANALYSIS

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Existing Conditions

Project Number: 1A

Project Name: El Camino Real/Chestnut Avenue Area Plan Update

Background Information

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

Source of Traffic Volumes: Kimley Horn 2017

Community Noise Descriptor: L_{dn} : CNEL: x

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%

Analysis Condition Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
						Medium Trucks	Heavy Trucks	CNEL at 100 Feet	70 CNEL	65 CNEL	60 CNEL	55 CNEL
El Camino Real												
Hickey Boulevard to McLellan Drive	6	7	24,084	40	0.5	1.8%	0.1%	63.5	-	80	172	371
McLellan Drive to Arroyo Drive	6	7	20,277	40	0.5	1.8%	0.1%	62.8	-	71	154	331
Arroyo Drive to Chestnut Avenue	6	7	22,500	40	0.5	1.8%	0.1%	63.2	-	76	165	355
Chestnut Avenue to Orange Avenue	6	7	30,951	40	0.5	1.8%	0.1%	64.6	-	95	204	439
Mission Road												
Grand Avenue to Oak Avenue	4	0	5,940	30	0.5	1.8%	0.1%	54.1	-	-	-	87
Oak Avenue to Chestnut Avenue	4	0	6,966	30	0.5	1.8%	0.1%	54.8	-	-	45	96
Chestnut Avenue/ Westborough Boulevard												
Grand Avenue to Mission Road	4	0	12,609	30	0.5	1.8%	0.1%	57.3	-	-	66	143
Mission Road to El Camino Real	4	7	19,332	45	0.5	1.8%	0.1%	63.7	-	82	176	380
El Camino Real to Junipero Serra Boulevard	4	7	24,615	45	0.5	1.8%	0.1%	64.7	-	96	207	447

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Existing Plus Project Conditions

Project Number: 1B

Project Name: El Camino Real/Chestnut Avenue Area Plan Update

Background Information

Model Description:

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

Source of Traffic Volumes:

Kimley Horn 2017

Community Noise Descriptor:

L_{dn} : _____ CNEL: _____ x

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%

Analysis Condition Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
						Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour 70 CNEL	65 CNEL	60 CNEL	55 CNEL
El Camino Real												
Hickey Boulevard to McLellan Drive	6	7	27,468	40	0.5	1.8%	0.1%	64.1	-	87	188	405
McLellan Drive to Arroyo Drive	6	7	23,058	40	0.5	1.8%	0.1%	63.4	-	78	167	361
Arroyo Drive to Chestnut Avenue	6	7	24,498	40	0.5	1.8%	0.1%	63.6	-	81	174	375
Chestnut Avenue to Orange Avenue	6	7	32,652	40	0.5	1.8%	0.1%	64.9	-	98	211	455
Mission Road												
Grand Avenue to Oak Avenue	4	0	7,614	30	0.5	1.8%	0.1%	55.1	-	-	47	102
Oak Avenue to Chestnut Avenue	4	0	8,199	30	0.5	1.8%	0.1%	55.5	-	-	50	107
Chestnut Avenue/ Westborough Boulevard												
Grand Avenue to Mission Road	4	0	12,933	30	0.5	1.8%	0.1%	57.5	-	-	68	146
Mission Road to El Camino Real	4	7	21,339	45	0.5	1.8%	0.1%	64.1	-	87	188	406
El Camino Real to Junipero Serra Boulevard	4	7	26,028	45	0.5	1.8%	0.1%	65.0	-	100	215	464

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Cumulative No Project Conditions

Project Number: 2A

Project Name: El Camino Real/Chestnut Avenue Area Plan Update

Background Information

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

Source of Traffic Volumes: Kimley Horn 2017

Community Noise Descriptor: L_{dn} : _____ CNEL: x

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%

Analysis Condition Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
						Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour 70 CNEL	65 CNEL	60 CNEL	55 CNEL
El Camino Real												
Hickey Boulevard to McLellan Drive	6	7	34,038	40	0.5	1.8%	0.1%	65.0	-	101	217	468
McLellan Drive to Arroyo Drive	6	7	28,440	40	0.5	1.8%	0.1%	64.3	-	89	193	415
Arroyo Drive to Chestnut Avenue	6	7	32,310	40	0.5	1.8%	0.1%	64.8	-	97	210	452
Chestnut Avenue to Orange Avenue	6	7	43,740	40	0.5	1.8%	0.1%	66.1	-	119	257	553
Mission Road												
Grand Avenue to Oak Avenue	4	0	8,586	30	0.5	1.8%	0.1%	55.7	-	-	51	111
Oak Avenue to Chestnut Avenue	4	0	9,207	30	0.5	1.8%	0.1%	56.0	-	-	54	116
Chestnut Avenue/ Westborough Boulevard												
Grand Avenue to Mission Road	4	0	17,820	30	0.5	1.8%	0.1%	58.8	-	-	84	180
Mission Road to El Camino Real	4	7	27,315	45	0.5	1.8%	0.1%	65.2	48	103	222	479
El Camino Real to Junipero Serra Boulevard	4	7	34,785	45	0.5	1.8%	0.1%	66.3	56	121	261	562

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Cumulative Plus Project Conditions

Project Number: 2B

Project Name: El Camino Real/Chestnut Avenue Area Plan Update

Background Information

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Analysis Condition Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
						Medium Trucks	Heavy Trucks	CNEL at 100 Feet	70 CNEL	65 CNEL	60 CNEL	55 CNEL
El Camino Real												
Hickey Boulevard to McLellan Drive	6	7	37,422	40	0.5	1.8%	0.1%	65.5	-	107	231	498
McLellan Drive to Arroyo Drive	6	7	31,221	40	0.5	1.8%	0.1%	64.7	-	95	205	441
Arroyo Drive to Chestnut Avenue	6	7	34,308	40	0.5	1.8%	0.1%	65.1	-	101	218	470
Chestnut Avenue to Orange Avenue	6	7	45,441	40	0.5	1.8%	0.1%	66.3	-	122	263	567
Mission Road												
Grand Avenue to Oak Avenue	4	0	10,260	30	0.5	1.8%	0.1%	56.4	-	-	58	125
Oak Avenue to Chestnut Avenue	4	0	10,440	30	0.5	1.8%	0.1%	56.5	-	-	59	126
Chestnut Avenue/ Westborough Boulevard												
Grand Avenue to Mission Road	4	0	18,144	30	0.5	1.8%	0.1%	58.9	-	-	85	183
Mission Road to El Camino Real	4	7	29,322	45	0.5	1.8%	0.1%	65.5	50	108	233	502
El Camino Real to Junipero Serra Boulevard	4	7	36,198	45	0.5	1.8%	0.1%	66.4	58	124	268	578