

July 17, 2020

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# SUBJECT: IDI RIDER 2 AND 4 HIGH CUBE WAREHOUSES AND PERRIS VALLEY STORM DRAIN CHANNEL IMPROVEMENT PROJECT FOCUSED OFF-SITE ANALYSIS NOISE MEMO (WITH I-215 FREEWAY/PLACENTIA AVENUE INTERCHANGE)

Dear Mr. John Condas:

Urban Crossroads, Inc. is pleased to provide the following Focused Off-Site Analysis Noise Memo for the IDI Rider 2 and 4 High Cube Warehouses and Perris Valley Storm Drain Channel Improvement Project with I-215 Freeway/Placentia Avenue Interchange (Project). Traffic generated by the operation of the proposed Project will influence the traffic noise levels in surrounding off-site areas. To quantify the off-site traffic noise increases on the surrounding off-site areas, the changes in traffic noise levels on 20 roadway segments surrounding the Project site were calculated based on the change in the average daily traffic (ADT) volumes. The traffic noise levels provided in this analysis are based on the traffic forecasts found in the *IDI Rider 2 and 4 High Cube Warehouses and Perris Valley Storm Drain Channel Improvement Project Focused Traffic Assessment (With I-215 Freeway/Placentia Avenue Interchange)* prepared by Urban Crossroads, Inc. (1) To assess the off-site noise level impacts associated with the proposed Project, noise contour boundaries were developed for Existing, Existing with Project, and Existing plus Ambient plus Cumulative (EAC) with Project conditions.

## **PVCC SP EIR THRESHOLDS**

As identified in the PVCC SP EIR, sensitive receivers are areas where humans are participating in activities that may be subject to the stress of significant interference from noise and often include residential dwellings, mobile homes, hotels, motels, hospitals, nursing homes, educational facilities, and libraries. Other receivers include office and industrial buildings, which are not considered as sensitive as single-family homes, but are still protected by City of Perris land use compatibility standards, as discussed below.

Noise level increases at nearest receiver locations resulting from the Project are evaluated based on the PVCC SP EIR Thresholds described below at nearest sensitive receiver locations. Further, CEQA requires that consideration be given to the magnitude of the increase, the existing ambient noise levels, and the location of noise-sensitive receivers to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes *that there is no single noise increase that renders the noise impact significant.* (2)

According to the PVCC SP EIR, there is no official "industry standard" of determining significance of noise impacts. However, typically, a jurisdiction will identify either 3 dBA or 5 dBA increase as being the threshold because these levels represent varying levels of perceived noise increases. The PVCC SP EIR indicates that a 5 dBA noise level increase is considered discernable to most people in an exterior environment when the resulting noise levels are below 60 dBA. Further, it identifies a 3 dBA increase threshold when the noise levels already exceed 60 dBA. In addition, according to the PVCC SP EIR, an increase of 5 dBA or more above without Project noise levels is considered a significant impact at all other sensitive land uses. (3)

# OFF-SITE TRAFFIC NOISE SIGNIFICANCE CRITERIA SUMMARY

Noise impacts shall be considered significant if any of the following conditions shown in Table A occur as a direct result of the proposed development.

Analysia	Receiving	Condition(c)	Significa	nce Criteria	
Analysis	Land Use	Condition(s)	Daytime	Nighttime	
Off Cite	Noise-	if resulting noise level is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase		
Off-Site	Sensitive <sup>1</sup>	if resulting noise level is > 60 dBA CNEL	≥ 3 dBA CNEL Project increase		

## TABLE A: SIGNIFICANCE CRITERIA SUMMARY

<sup>1</sup> Source: PVCC SP EIR, Page 4.9-20.

## FHWA TRAFFIC NOISE PREDICTION MODEL

The expected roadway noise level increases from vehicular traffic were calculated by Urban Crossroads, Inc. using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model FHWA-RD-77-108. (4) The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. (5) Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period. Research conducted by Caltrans has shown that the use of soft site conditions is appropriate for the application of the FHWA traffic noise prediction model used in this analysis. (6)



## **OFF-SITE TRAFFIC NOISE PREDICTION MODEL INPUTS**

Table B presents the roadway parameters used to assess the Project's off-site transportation noise impacts. Table B identifies the 20 study area roadway segments, the distance from the centerline to adjacent land use based on the functional roadway classifications according to the City of Perris *General Plan Circulation Element*, and the posted vehicle speeds. The ADT volumes used in this study are presented on Table C were obtained from the *Focused Traffic Assessment* for the following traffic conditions: Existing, Existing with Project, and Existing plus Ambient plus Cumulative (EAC) with Project.

This noise study relies on the net Project trips to accurately account for the effect of individual passenger cars and truck trips on the study area roadway network. Consistent with the traffic study, the off-site traffic noise analysis maintains a peak hour to average daily traffic (peak-to-daily) relationship of approximately 6.83%. Table D provides the time of day (daytime, evening, and nighttime) vehicle splits.

To quantify the off-site noise levels, the Project related truck trips were added to the heavy truck category in the FHWA noise prediction model. The addition of the Project related truck trips increases the percentage of heavy trucks in the vehicle mix. This approach recognizes that the FHWA noise prediction model is significantly influenced by the number of heavy trucks in the vehicle mix.

The daily Project automobile and truck trip-ends were assigned to the individual off-site study area roadway segments based on the Project automobile and truck trip distribution percentages documented in the *Focused Traffic Assessment*. Using the Project truck trips in combination with the Project trip distribution, Urban Crossroads, Inc. calculated the number of additional Project truck trips and vehicle mix percentages for each of the study area roadway segments. Table E shows the traffic flow by vehicle type (vehicle mix) used in the without Project traffic scenarios, and Tables F and G show the vehicle mixes used for the with Project traffic scenarios.



ID	Roadway	Segment	Adjacent Planned Land Use (Existing if Different) <sup>1</sup>	Distance from Centerline to Nearest Adjacent Land Use (Feet) <sup>2</sup>	Posted Speed Limit (mph)
1	Indian Av.	s/o Morgan St.	LI/T	47'	45
2	Indian Av.	s/o Rider St.	LI/BPO/NCR	47'	45
3	Perris Bl.	n/o Ramona Exwy.	С	64'	45
4	Perris Bl.	s/o Ramona Exwy.	C/LI	64'	45
5	Perris Bl.	s/o Morgan St.	LI/T/PF	64'	45
6	Perris Bl.	s/o Rider St.	LI/C/BPO/R	64'	45
7	Perris Bl.	s/o Placentia Av.	CC/LI/MFR	64'	45
8	Redlands Av.	n/o Morgan St.	LI/BPO	47'	45
9	Redlands Av.	s/o Rider St.	LI	47'	45
10	Redlands Av.	s/o Placentia Av.	R/NC/OS	47'	45
11	Ramona Exwy.	w/o Perris Bl.	С	92'	55
12	Ramona Exwy.	e/o Perris Bl.	C/MFR	92'	55
13	Morgan St.	e/o Indian Av.	LI	47'	45
14	Morgan St.	e/o Perris Bl.	LI	47'	45
15	Rider St.	e/o Perris Bl.	LI/BPO/R	47'	45
16	Rider St.	e/o Redlands Av.	LI/NCR	47'	45
17	Placentia Av.	w/o I-215 Frontage Rd.	BPO	64'	45
18	Placentia Av.	w/o Indian Av.	BPO/NCR	64'	45
19	Placentia Av.	e/o Indian Av.	LI/C	64'	45
20	Placentia Av.	e/o Perris Bl.	LI/R/OS/CC/MFR	64'	45

#### TABLE B: OFF-SITE ROADWAY PARAMETERS

<sup>1</sup> Sources: Perris Valley Commerce Center Land Use Plan and Nearmap aerial imagery.

<sup>2</sup> Distance to adjacent land use is based upon the right-of-way distances for each functional roadway classification provided in the General Plan Circulation Element.

"LI"= Light Industrial; "T"= Trail; "BPO"= Business Professional Office; "C"= Commercial; "PF"= Public/Semi-Public Facility; "CC"= Community Commercial; "MFR"= Multi-Family Residential; "R"= Residential; "NC"= Neighborhood Commercial; "OS"= Open Space; "NCR"= Non-Conforming Residential



			Avera	ige Daily T	raffic Volu	Imes <sup>1</sup>
ID	Roadway	Segment		ting 19)	EA plus Cumulative (EAC) 2021	
			Without With Project Project		Without Project	With Project
1	Indian Av.	s/o Morgan St.	9,546	10,168	11,111	11,733
2	Indian Av.	s/o Rider St.	6,166	6,788	9,538	10,160
3	Perris Bl.	n/o Ramona Exwy.	28,620	28,816	32,436	32,632
4	Perris Bl.	s/o Ramona Exwy.	23,801	24,257	28,926	29,382
5	Perris Bl.	s/o Morgan St.	25,211	25,341	30,224	30,354
6	Perris Bl.	s/o Rider St.	26,860	27,055	31,054	31,250
7	Perris Bl.	s/o Placentia Av.	27,269	27,334	41,041	41,106
8	Redlands Av.	n/o Morgan St.	1,134	1,460	4,846	5,172
9	Redlands Av.	s/o Rider St.	3,783	4,109	5,668	5 <i>,</i> 994
10	Redlands Av.	s/o Placentia Av.	5,779	5,844	11,020	11,085
11	Ramona Exwy.	w/o Perris Bl.	39,737	40,129	49,645	50,037
12	Ramona Exwy.	e/o Perris Bl.	35,380	35,510	44,198	44,328
13	Morgan St.	e/o Indian Av.	1,791	2,413	2,020	2,642
14	Morgan St.	e/o Perris Bl.	1,433	2,381	2,070	3,018
15	Rider St.	e/o Perris Bl.	12,064	12,390	16,372	16,698
16	Rider St.	e/o Redlands Av.	14,944	15,401	16,565	17,021
17	Placentia Av.	w/o I-215 Frontage Rd.	11,455	11,455	45,859	45 <i>,</i> 859
18	Placentia Av.	w/o Indian Av.	15	1,028	37,339	38,352
19	Placentia Av.	e/o Indian Av.	2,231	2,622	32,879	33,270
20	Placentia Av.	e/o Perris Bl.	5,998	6,259	21,594	21,855

## TABLE C: AVERAGE DAILY TRAFFIC VOLUMES

<sup>1</sup> Source: Project Traffic Impact Analysis, Urban Crossroads, Inc.

## TABLE D: TIME OF DAY VEHICLE SPLITS

Vahiele Ture		Time of Day Splits <sup>1</sup>				
Vehicle Type	Daytime	Evening	Nighttime	Day Splits		
Autos	68.17%	12.26%	19.57%	100.00%		
Medium Trucks	69.75%	8.81%	21.44%	100.00%		
Heavy Trucks	58.32%	5.05%	36.63%	100.00%		

<sup>1</sup> Based on existing ADT counts by vehicle type taken on 5/24/2018 on Perris Boulevard north of Rider Street (Project Traffic Impact Analysis, Urban Crossroads, Inc.). All values rounded to the nearest one-hundredth.

"Daytime" = 7:00 a.m. to 7:00 p.m.; "Evening" = 7:00 p.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.



## TABLE E: WITHOUT PROJECT CONDITIONS VEHICLE MIX

Classification	Тс	otal Daily % Traffic Flo	W <sup>1</sup>	Total
Classification	Autos	Medium Trucks	Heavy Trucks	Total
All Segments	91.21%	6.78%	2.01%	100.00%

<sup>1</sup> Based on existing ADT counts by vehicle type taken on 5/24/2018 on Perris Boulevard north of Rider Street (Project Traffic Impact Analysis, Urban Crossroads, Inc.). All values rounded to the nearest one-hundredth.

				With P	roject <sup>1</sup>	
ID	Roadway	Segment	Autos	Medium Trucks	Heavy Trucks	Total <sup>2</sup>
1	Indian Av.	s/o Morgan St.	85.63%	7.41%	6.96%	100.00%
2	Indian Av.	s/o Rider St.	82.85%	7.72%	9.43%	100.00%
3	Perris Bl.	n/o Ramona Exwy.	91.27%	6.73%	2.00%	100.00%
4	Perris Bl.	s/o Ramona Exwy.	91.37%	6.65%	1.98%	100.00%
5	Perris Bl.	s/o Morgan St.	91.25%	6.75%	2.00%	100.00%
6	Perris Bl.	s/o Rider St.	91.27%	6.73%	2.00%	100.00%
7	Perris Bl.	s/o Placentia Av.	91.23%	6.76%	2.01%	100.00%
8	Redlands Av.	n/o Morgan St.	93.17%	5.27%	1.56%	100.00%
9	Redlands Av.	s/o Rider St.	91.90%	6.24%	1.85%	100.00%
10	Redlands Av.	s/o Placentia Av.	91.30%	6.71%	1.99%	100.00%
11	Ramona Exwy.	w/o Perris Bl.	91.29%	6.71%	1.99%	100.00%
12	Ramona Exwy.	e/o Perris Bl.	91.24%	6.76%	2.01%	100.00%
13	Morgan St.	e/o Indian Av.	67.69%	9.43%	22.88%	100.00%
14	Morgan St.	e/o Perris Bl.	68.58%	8.53%	22.89%	100.00%
15	Rider St.	e/o Perris Bl.	91.44%	6.60%	1.96%	100.00%
16	Rider St.	e/o Redlands Av.	91.47%	6.58%	1.95%	100.00%
17	Placentia Av.	w/o I-215 Frontage Rd.	91.21%	6.78%	2.01%	100.00%
18	Placentia Av.	w/o Indian Av.	39.36%	10.41%	50.23%	100.00%
19	Placentia Av.	e/o Indian Av.	92.52%	5.77%	1.71%	100.00%
20	Placentia Av.	e/o Perris Bl.	91.57%	6.50%	1.93%	100.00%

#### TABLE F: EXISTING WITH PROJECT CONDITIONS VEHICLE MIX

<sup>1</sup> Source: Project Traffic Impact Analysis, Urban Crossroads, Inc.

 $^{\rm 2}$  Total of vehicle mix percentage values rounded to the nearest one-hundredth.



				With P	roject <sup>1</sup>	
ID	Roadway	Segment	Autos	Medium Trucks	Heavy Trucks	Total <sup>2</sup>
1	Indian Av.	s/o Morgan St.	86.37%	7.32%	6.30%	100.00%
2	Indian Av.	s/o Rider St.	85.62%	7.41%	6.97%	100.00%
3	Perris Bl.	n/o Ramona Exwy.	91.26%	6.74%	2.00%	100.00%
4	Perris Bl.	s/o Ramona Exwy.	91.34%	6.68%	1.98%	100.00%
5	Perris Bl.	s/o Morgan St.	91.24%	6.75%	2.00%	100.00%
6	Perris Bl.	s/o Rider St.	91.26%	6.74%	2.00%	100.00%
7	Perris Bl.	s/o Placentia Av.	91.22%	6.77%	2.01%	100.00%
8	Redlands Av.	n/o Morgan St.	91.76%	6.35%	1.89%	100.00%
9	Redlands Av.	s/o Rider St.	91.68%	6.41%	1.90%	100.00%
10	Redlands Av.	s/o Placentia Av.	91.26%	6.74%	2.00%	100.00%
11	Ramona Exwy.	w/o Perris Bl.	91.27%	6.73%	2.00%	100.00%
12	Ramona Exwy.	e/o Perris Bl.	91.23%	6.76%	2.01%	100.00%
13	Morgan St.	e/o Indian Av.	69.73%	9.20%	21.07%	100.00%
14	Morgan St.	e/o Perris Bl.	73.36%	8.16%	18.48%	100.00%
15	Rider St.	e/o Perris Bl.	91.38%	6.65%	1.97%	100.00%
16	Rider St.	e/o Redlands Av.	91.44%	6.60%	1.96%	100.00%
17	Placentia Av.	w/o I-215 Frontage Rd.	91.21%	6.78%	2.01%	100.00%
18	Placentia Av.	w/o Indian Av.	89.82%	6.88%	3.31%	100.00%
19	Placentia Av.	e/o Indian Av.	91.31%	6.70%	1.99%	100.00%
20	Placentia Av.	e/o Perris Bl.	91.31%	6.70%	1.99%	100.00%

#### TABLE G: EXISTING PLUS AMBIENT PLUS CUMULATIVE WITH PROJECT VEHICLE MIX

<sup>1</sup> Source: Project Traffic Impact Analysis, Urban Crossroads, Inc.

<sup>2</sup> Total of vehicle mix percentage values rounded to the nearest one-hundredth.

# **OFF-SITE TRANSPORTATION NOISE IMPACTS**

To assess the off-site transportation CNEL noise level impacts associated with the proposed Project, noise contours were developed based on the *IDI Rider 2 and 4 High Cube Warehouses and Perris Valley Storm Drain Channel Improvement Project Focused Traffic Assessment (With I-215 Freeway/Placentia Avenue Interchange)*. (1) Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise contours were developed for the following traffic scenarios:

• <u>Existing Without / With Project</u>: This scenario refers to the existing present-day noise conditions, without and with the proposed Project. This condition is provided solely for analytical purposes and will not occur, since the Project will not be fully developed and occupied under Existing conditions.

• <u>Existing plus Ambient plus Cumulative (EAC) With Project</u>: This scenario refers to the exterior background noise conditions with the proposed Project plus ambient growth. This scenario corresponds to future conditions, and includes all cumulative projects identified in the *Traffic Impact Analysis*.

## **TRAFFIC NOISE CONTOURS**

Noise contours were used to assess the Project's incremental traffic-related noise impacts at land uses adjacent to roadways conveying Project traffic based on the PVCC SP EIR significance criteria shown in Table A. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the Project study area.

Tables H through J present a summary of the exterior traffic noise levels, without barrier attenuation, for the 20 study area roadway segments analyzed for Existing, Existing with Project, and Existing plus Ambient plus Cumulative (EAC) with Project conditions. Appendix A includes a summary of the traffic noise level contours for each of the traffic scenarios.

## **EXISTING PROJECT-RELATED TRAFFIC NOISE LEVEL CONTRIBUTIONS AND IMPACTS**

An analysis of existing off-site traffic noise levels has been included in this report based on the traffic volumes identified in the *IDI Rider 2 and 4 High Cube Warehouses and Perris Valley Storm Drain Channel Improvement Project Focused Traffic Assessment (With I-215 Freeway/Placentia Avenue Interchange)* prepared by Urban Crossroads, Inc. Consistent with other environmental reports prepared for the City of Perris, this analysis evaluates the off-site traffic noise impacts by comparing the Existing traffic volumes to the Existing with Project traffic volumes.

Table H presents the Existing without Project conditions CNEL noise levels. The Existing without Project exterior noise levels are expected to range from 63.0 to 76.1 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table I shows that the Existing with Project conditions will range from 63.4 to 76.1 dBA CNEL. As shown on Table K the Project is expected to generate existing off-site traffic noise level increases ranging from 0.0 dBA CNEL to up to 9.2 dBA CNEL.



		Segment	Adjacent	CNEL at Nearest		Distance to Contour from Centerline (Feet)		
ID	Road	Segment	Existing Land Use <sup>1</sup>	Adjacent Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	
1	Indian Av.	s/o Morgan St.	LI/T	72.2	66	142	306	
2	Indian Av.	s/o Rider St.	LI/BPO/NCR	70.3	49	106	229	
3	Perris Bl.	n/o Ramona Exwy.	С	75.5	149	321	692	
4	Perris Bl.	s/o Ramona Exwy.	C/LI	74.7	132	284	612	
5	Perris Bl.	s/o Morgan St.	LI/T/PF	75.0	137	295	636	
6	Perris Bl.	s/o Rider St.	LI/C/BPO/R	75.2	143	308	663	
7	Perris Bl.	s/o Placentia Av.	CC/LI/MFR	75.3	144	311	670	
8	Redlands Av.	n/o Morgan St.	LI/BPO	63.0	RW	RW	74	
9	Redlands Av.	s/o Rider St.	LI	68.2	RW	77	165	
10	Redlands Av.	s/o Placentia Av.	R/NC/OS	70.0	47	102	219	
11	Ramona Exwy.	w/o Perris Bl.	С	76.1	234	504	1086	
12	Ramona Exwy.	e/o Perris Bl.	C/MFR	75.6	216	466	1005	
13	Morgan St.	e/o Indian Av.	LI	64.9	RW	47	100	
14	Morgan St.	e/o Perris Bl.	LI	64.0	RW	RW	86	
15	Rider St.	e/o Perris Bl.	LI/BPO/R	73.2	77	166	358	
16	Rider St.	e/o Redlands Av.	LI/NCR	74.2	89	192	413	
17	Placentia Av.	w/o I-215 Frontage Rd.	BPO	71.5	81	174	376	
18	Placentia Av.	w/o Indian Av.	BPO/NCR	_3	_3	_3	_3	
19	Placentia Av.	e/o Indian Av.	LI/C	_3	_3	_3	_3	
20	Placentia Av.	e/o Perris Bl.	LI/R/OS/CC/MFR	68.7	RW	113	244	

#### TABLE H: EXISTING WITHOUT PROJECT NOISE CONTOURS

<sup>1</sup> Perris Valley Commerce Center Land Use Plan and Nearmap aerial imagery.

<sup>2</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.

"RW" = Location of the respective noise contour falls within the right-of-way of the road.

<sup>3</sup> The I-215 Freeway and Placentia Avenue interchange is anticipated to be completed and operational in 2021.

"RW" = Location of the respective noise contour falls within the right-of-way of the road. "Ll"= Light Industrial; "T"= Trail; "BPO"= Business Professional Office; "C"= Commercial; "PF"= Public/Semi-Public Facility; "CC"= Community Commercial; "MFR"= Multi-Family Residential; "R"= Residential; "NC"= Neighborhood Commercial; "OS"= Open Space; "NCR"= Non-Conforming Residential



	Pood	Segment	Adjacent	CNEL at Nearest	Distance to Contour from Centerline (Feet)		
ID	Road	Segment	Existing Land Use <sup>1</sup>	Adjacent Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Indian Av.	s/o Morgan St.	LI/T	75.4	108	232	499
2	Indian Av.	s/o Rider St.	LI/BPO/NCR	74.6	95	205	441
3	Perris Bl.	n/o Ramona Exwy.	С	75.5	149	322	693
4	Perris Bl.	s/o Ramona Exwy.	C/LI	74.7	132	285	615
5	Perris Bl.	s/o Morgan St.	LI/T/PF 75		137	295	637
6	Perris Bl.	s/o Rider St.	LI/C/BPO/R	75.2	143	308	664
7	Perris Bl.	s/o Placentia Av.	CC/LI/MFR	75.3	144	311	670
8	Redlands Av.	n/o Morgan St.	LI/BPO	63.4	RW	RW	79
9	Redlands Av.	s/o Rider St.	LI	68.3	RW	78	168
10	Redlands Av.	s/o Placentia Av.	R/NC/OS	70.0	47	102	220
11	Ramona Exwy.	w/o Perris Bl.	С	76.1	234	505	1088
12	Ramona Exwy.	e/o Perris Bl.	C/MFR	75.6	217	467	1006
13	Morgan St.	e/o Indian Av.	LI	73.2	77	167	359
14	Morgan St.	e/o Perris Bl.	LI	73.2	76	164	354
15	Rider St.	e/o Perris Bl.	LI/BPO/R	73.3	78	167	360
16	Rider St.	e/o Redlands Av.	LI/NCR	74.2	90	193	416
17	Placentia Av.	w/o I-215 Frontage Rd.	BPO	71.5	81	174	376
18	Placentia Av.	w/o Indian Av.	BPO/NCR	_3	_3	_3	_3
19	Placentia Av.	e/o Indian Av.	LI/C	_3	_3	_3	_3
20	Placentia Av.	e/o Perris Bl.	LI/R/OS/CC/MFR	68.8	RW	114	247

#### TABLE I: EXISTING WITH PROJECT NOISE CONTOURS

<sup>1</sup> Perris Valley Commerce Center Land Use Plan and Nearmap aerial imagery.

<sup>2</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.

"RW" = Location of the respective noise contour falls within the right-of-way of the road.

<sup>3</sup> The I-215 Freeway and Placentia Avenue interchange is anticipated to be completed and operational in 2021.

"RW" = Location of the respective noise contour falls within the right-of-way of the road. "LI"= Light Industrial; "T"= Trail; "BPO"= Business Professional Office; "C"= Commercial; "PF"= Public/Semi-Public Facility; "CC"= Community Commercial; "MFR"= Multi-Family Residential; "R"= Residential; "NC"= Neighborhood Commercial; "OS"= Open Space; "NCR"= Non-Conforming Residential.



	Deed	Segment	Adjacent	CNEL at Nearest		Distance to Contour from Centerline (Feet)		
ID	Road	Segment	Existing Land Use <sup>1</sup>	Adjacent Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	
1	Indian Av.	s/o Morgan St.	LI/T	75.7	113	244	525	
2	Indian Av.	s/o Rider St.	LI/BPO/NCR	75.4	108	232	499	
3	Perris Bl.	n/o Ramona Exwy.	С	76.1	162	350	753	
4	Perris Bl.	s/o Ramona Exwy.	C/LI	75.6	151	325	699	
5	Perris Bl.	s/o Morgan St.	LI/T/PF	75.8	155	333	718	
6	Perris Bl.	s/o Rider St.	LI/C/BPO/R 75.9		158	340	732	
7	Perris Bl.	s/o Placentia Av.	CC/LI/MFR	77.1	190	409	880	
8	Redlands Av.	n/o Morgan St.	LI/BPO	69.4	RW	92	198	
9	Redlands Av.	s/o Rider St.	LI	70.0	47	102	219	
10	Redlands Av.	s/o Placentia Av.	R/NC/OS	72.8	73	157	338	
11	Ramona Exwy.	w/o Perris Bl.	С	77.1	272	586	1262	
12	Ramona Exwy.	e/o Perris Bl.	C/MFR	76.5	251	541	1166	
13	Morgan St.	e/o Indian Av.	LI	73.3	78	169	363	
14	Morgan St.	e/o Perris Bl.	LI	73.4	79	170	367	
15	Rider St.	e/o Perris Bl.	LI/BPO/R	74.6	95	205	441	
16	Rider St.	e/o Redlands Av.	LI/NCR	74.6	96	207	445	
17	Placentia Av.	w/o I-215 Frontage Rd.	BPO	77.6	204	440	947	
18	Placentia Av.	w/o Indian Av.	BPO/NCR	77.7	210	452	974	
19	Placentia Av.	e/o Indian Av.	LI/C	76.1	164	353	761	
20	Placentia Av.	e/o Perris Bl.	LI/R/OS/CC/MFR	74.3	124	267	575	

## TABLE J: EXISTING PLUS AMBIENT PLUS CUMULATIVE WITH PROJECT NOISE CONTOURS

<sup>1</sup> Perris Valley Commerce Center Land Use Plan and Nearmap aerial imagery.

<sup>2</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use. "RW" = Location of the respective noise contour falls within the right-of-way of the road. "LI"= Light Industrial; "T"= Trail; "BPO"= Business Professional Office; "C"= Commercial; "PF"= Public/Semi-Public Facility; "CC"= Community Commercial; "MFR"= Multi-Family Residential; "R"= Residential; "NC"= Neighborhood Commercial; "OS"= Open Space; "NCR"= Non-Conforming Residential.



Based on the 5 dBA CNEL increase significance criteria when noise levels at noise-sensitive land uses are below 60 dBA CNEL or the 3 dBA CNEL increase criteria when the noise levels already exceed 60 dBA CNEL, one of the 20 study area roadway segments are shown to experience *potentially significant* offsite traffic noise level increases due to the proposed Project truck trip distribution under Existing with Project conditions. The existing noise-sensitive land uses on this segment is described below.

 Non-conforming, existing noise-sensitive uses (non-conforming residences) on Indian Avenue south of Rider Street (Segment #2). A review of the Project study area indicates that the seven existing residences adjacent to this segment do not conform to the underlying business professional land use designation of the PVCC SP and City of Perris Zoning Map. Therefore, these residences are considered an existing nonconforming use. Even though these existing non-conforming residences likely will ultimately be developed with land uses that are consistent with the underlying business professional office land use designation of the PVCC SP and City of Perris Zoning Map, for purposes of analysis they are considered sensitive noise receivers until such time they are unoccupied or no longer exist.

The Off-Site Traffic Noise Mitigation Section describes the off-site traffic noise mitigation measures considered in this analysis. All other roadway segments would not experience noise level increases under Existing with Project conditions that would exceed the established thresholds of significance.

ID	Road	Segment	CNEL at Adjacent Land Use (dBA) <sup>1</sup>			Noise- Sensitive Land	Incremental Noise Level Increase Threshold <sup>3</sup>	
			Existing Ambient	Existing +Project	Project Increase	Use? <sup>2</sup>	Limit	Exceeded?
1	Indian Av.	s/o Morgan St.	72.2	75.4	3.2	No	n/a	No
2	Indian Av.	s/o Rider St.	70.3	74.6	4.3	Yes	3.0	Yes
3	Perris Bl.	n/o Ramona Exwy.	75.5	75.5	0.0	No	n/a	No
4	Perris Bl.	s/o Ramona Exwy.	74.7	74.7	0.0	No	n/a	No
5	Perris Bl.	s/o Morgan St.	75.0	75.0	0.0	No	n/a	No
6	Perris Bl.	s/o Rider St.	75.2	75.2	0.0	Yes	3.0	No
7	Perris Bl.	s/o Placentia Av.	75.3	75.3	0.0	Yes	3.0	No
8	Redlands Av.	n/o Morgan St.	63.0	63.4	0.4	No	n/a	No
9	Redlands Av.	s/o Rider St.	68.2	68.3	0.1	No	n/a	No
10	Redlands Av.	s/o Placentia Av.	70.0	70.0	0.0	Yes	3.0	No
11	Ramona Exwy.	w/o Perris Bl.	76.1	76.1	0.0	No	n/a	No
12	Ramona Exwy.	e/o Perris Bl.	75.6	75.6	0.0	Yes	3.0	No
13	Morgan St.	e/o Indian Av.	64.9	73.2	8.3	No	n/a	No
14	Morgan St.	e/o Perris Bl.	64.0	73.2	9.2	No	n/a	No
15	Rider St.	e/o Perris Bl.	73.2	73.3	0.1	Yes	3.0	No
16	Rider St.	e/o Redlands Av.	74.2	74.2	0.0	Yes	3.0	No

#### TABLE K: EXISTING CONDITION WITH PROJECT TRAFFIC NOISE IMPACTS



ID	Road	Road Segment	CNEL at Adjacent Land Use (dBA) <sup>1</sup>			Noise- Sensitive Land	Incremental Noise Level Increase Threshold <sup>3</sup>	
			Existing Existir Ambient +Proje		Project Increase	Use? <sup>2</sup>	Limit	Exceeded?
17	Placentia Av.	w/o I-215 Frontage Rd.	71.5	71.5	0.0	No	n/a	No
18	Placentia Av.	w/o Indian Av.	_4	_4	_4	Yes	3.0	No
19	Placentia Av.	e/o Indian Av.	_4	_4	_4	No	n/a	No
20	Placentia Av.	e/o Perris Bl.	68.7	68.8	0.1	Yes	3.0	No

<sup>1</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the nearest adjacent land use.

<sup>2</sup> "Yes" = Existing, noise-sensitive land uses adjacent to the study area roadway segment.

<sup>3</sup> Does the Project create an incremental noise level increase exceeding the significance criteria (Table A)?

<sup>4</sup> The I-215 Freeway and Placentia Avenue interchange is anticipated to be completed and operational in 2021.

"LI"= Light Industrial; "T"= Trail; "BPO"= Business Professional Office; "C"= Commercial; "PF"= Public/Semi-Public Facility; "CC"= Community Commercial; "MFR"= Multi-Family Residential; "R"= Residential; "NC"= Neighborhood Commercial; "OS"= Open Space; "NCR"= Non-Conforming Residential.

#### EAC WITH PROJECT TRAFFIC NOISE LEVEL CONTRIBUTIONS AND IMPACTS

Table L presents a comparison of the Existing and the Existing plus Ambient plus Cumulative (EAC) with Project CNEL noise levels. Table L presents a comparison of the cumulative off-site traffic impact based on the difference between the Existing and the EAC plus Project traffic volumes. This comparison is used by the City of Perris to describe the cumulative off-site traffic noise impacts. Table L shows that the cumulative off-site traffic noise impacts will range from 0.4 dBA CNEL to 9.4 dBA CNEL.

Based on the 5 dBA CNEL increase significance criteria when noise levels at noise-sensitive land uses are below 60 dBA CNEL or the 3 dBA CNEL increase criteria when the noise levels already exceed 60 dBA CNEL, two of the 20 study area roadway segments are shown to experience *potentially significant* offsite traffic noise level increases due to the proposed Project truck trip distribution under EAC with Project conditions. The noise-sensitive land uses on these two segments are described below.

- Non-conforming, existing noise-sensitive uses (non-conforming residences) on Indian Avenue south of Rider Street (Segment #2). A review of the Project study area indicates that the seven existing residences adjacent to this segment do not conform to the underlying business professional land use designation of the PVCC SP and City of Perris Zoning Map. Therefore, these residences are considered an existing nonconforming use. Even though these existing non-conforming residences likely will ultimately be developed with land uses that are consistent with the underlying business professional office land use designation of the PVCC SP and City of Perris Zoning Map, for purposes of analysis they are considered sensitive noise receivers until such time they are unoccupied or no longer exist.
- Residential uses on Placentia Avenue east of Perris Boulevard (Segment #20). This area is largely developed with residential tract homes located north and south of the Placentia Avenue. Consistent with the City of Perris exterior noise requirements, these homes benefit from exterior noise barriers needed to reduce the future long-range General Plan buildout traffic condition on Placentia Avenue. While



exterior noise mitigation is provided for these existing noise sensitive residential land uses adjacent to Placentia Avenue, the residents may perceive a Project related traffic noise level increase exceeding the PVCC SP EIR noise criteria.

The Off-Site Traffic Noise Mitigation Section below describes the off-site traffic noise mitigation measures considered in this analysis. All other roadway segments would not experience noise level increases under EAC with Project conditions that would exceed the established thresholds of significance.

ID	Road	Segment		EL at Adjac nd Use (dB/		Noise- Sensitive Land		l Noise Level Threshold <sup>3</sup>
			Existing Ambient	EAPC	Project Increase	Use? <sup>2</sup>	Limit	Exceeded?
1	Indian Av.	s/o Morgan St.	72.2	75.7	3.5	No	n/a	No
2	Indian Av.	s/o Rider St.	70.3	75.4	5.1	Yes	3.0	Yes
3	Perris Bl.	n/o Ramona Exwy.	75.5	76.1	0.6	No	n/a	No
4	Perris Bl.	s/o Ramona Exwy.	74.7	75.6	0.9	No	n/a	No
5	Perris Bl.	s/o Morgan St.	75.0	75.8	0.8	No	n/a	No
6	Perris Bl.	s/o Rider St.	75.2	75.9	0.7	Yes	3.0	No
7	Perris Bl.	s/o Placentia Av.	75.3	77.1	1.8	Yes	3.0	No
8	Redlands Av.	n/o Morgan St.	63.0	69.4	6.4	No	n/a	No
9	Redlands Av.	s/o Rider St.	68.2	70.0	1.8	No	n/a	No
10	Redlands Av.	s/o Placentia Av.	70.0	72.8	2.8	Yes	3.0	No
11	Ramona Exwy.	w/o Perris Bl.	76.1	77.1	1.0	No	n/a	No
12	Ramona Exwy.	e/o Perris Bl.	75.6	76.5	0.9	Yes	3.0	No
13	Morgan St.	e/o Indian Av.	64.9	73.3	8.4	No	n/a	No
14	Morgan St.	e/o Perris Bl.	64.0	73.4	9.4	No	n/a	No
15	Rider St.	e/o Perris Bl.	73.2	74.6	1.4	Yes	3.0	No
16	Rider St.	e/o Redlands Av.	74.2	74.6	0.4	Yes	3.0	No
17	Placentia Av.	w/o I-215 Frontage Rd.	71.5	77.6	6.1	No	n/a	No
18	Placentia Av.	w/o Indian Av.	-4	_4	_4	Yes	3.0	No
19	Placentia Av.	e/o Indian Av.	-4	-4	-4	No	n/a	No
20	Placentia Av.	e/o Perris Bl.	68.7	74.3	5.6	Yes	3.0	Yes

#### TABLE L: EAC WITH PROJECT TRAFFIC NOISE IMPACTS

<sup>1</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the nearest adjacent land use.

<sup>2</sup> "Yes" = Existing, noise-sensitive land uses adjacent to the study area roadway segment.

<sup>3</sup> Does the Project create an incremental noise level increase exceeding the significance criteria (Table A)?

<sup>4</sup> The I-215 Freeway and Placentia Avenue interchange is anticipated to be completed and operational in 2021.

"LI"= Light Industrial; "T"= Trail; "BPO"= Business Professional Office; "C"= Commercial; "PF"= Public/Semi-Public Facility; "CC"= Community

Commercial; "MFR"= Multi-Family Residential; "R"= Residential; "NC"= Neighborhood Commercial; "OS"= Open Space



# **OFF-SITE TRAFFIC NOISE MITIGATION**

To reduce the *potentially significant* Project traffic noise level increases on study area roadway segments for Existing plus Project and EAC plus Project conditions, potential noise mitigation measures are identified in this analysis. Potential mitigation measures discussed below include rubberized asphalt hot mix pavement and off-site noise barriers for existing non-conforming residential use adjacent to impacted roadway segments.

## **RUBBERIZED ASPHALT**

Due to the potential noise attenuation benefits, rubberized asphalt is considered as a mitigation measure for the Project-related roadway improvements associated with Project construction. To reduce traffic noise levels at the noise source, Caltrans research has shown that rubberized asphalt can provide noise attenuation of approximately 4 dBA for automobile traffic noise levels. (7) Changing the pavement type of a roadway has been shown to reduce the amount of tire/pavement noise produced at the source under both near-term and long-term conditions. Traffic noise is generated primarily by the interaction of the tires and pavement, the engine, and exhaust systems. For automobiles noise, as much as 75 to 90-percent of traffic noise is generated by the interaction of the tires and pavement, especially when traveling at higher and constant speeds. (8) According to research conducted by Caltrans (7) and the Canadian Ministry of Transportation and Highways (9) a 4 dBA reduction in tire/pavement noise is attainable using rubberized asphalt under typical operating conditions.

The effectiveness of reducing traffic noise levels is higher on roadways with low percentages of heavy trucks, since the heavy truck engine and exhaust noise is not affected by rubberized alternative pavement due to the truck engine and exhaust stack height above the pavement itself. (7) Per Caltrans guidance a truck stack height is modeled using a height of 11.5 feet above the road. (10) (11) With the primary off-site traffic noise source consisting of heavy trucks with a stack height of 11.5 feet off the ground, the tire/pavement noise reduction benefits associated rubberized asphalt will be primarily limited to autos.

While the off-site Project-related traffic noise level increases would theoretically be reduced with the 4 dBA reduction provided by rubberized asphalt, the reduction would not provide reliable benefits for the noise levels generated by heavy truck traffic. This is, as previously stated, due to the noise source height difference between automobiles and trucks. While rubberized asphalt will provide some noise reduction, this noise study recognizes that this is only effective for tire-on-pavement noise at higher speeds and would not reduce truck-related off-site traffic noise levels associated with truck engine and exhaust stacks to less than significant impacts. Since the use of rubberized asphalt would not lower the off-site traffic noise levels below a level of significance, rubberized asphalt is not proposed as mitigation for the Project and the off-site Project-related traffic noise level increases at adjacent land uses would remain *significant*.



## **OFF-SITE NOISE BARRIERS**

Since existing and future noise-sensitive receiving land uses are located adjacent to the impacted roadway segments in the Project study area, off-site noise barriers were considered in this analysis as a potential traffic noise mitigation measure to reduce the impacts. Off-site noise barriers are estimated to provide a *readily perceptible* 5 dBA reduction which, according to the FHWA, is *simple* to attain when blocking the line-of-sight from the noise source to the receiver. (10)

As previously discussed, Caltrans guidance in the Highway Design Manual, Section 1102.3(3), indicates that for design purposes, *the noise barrier should intercept the line of sight from the exhaust stack of a truck to the receptor*, and an 11.5-foot-high truck stack height is assumed to represent the truck engine and exhaust noise source. (11) Therefore, any exterior noise barriers at receiving noise sensitive land uses experiencing Project-related traffic noise level increases would need to be high enough and long enough to block the line-of-sight from the noise source (at 11.5 feet high per Caltrans) to the receiver (at 5 feet high per FHWA guidance) in order to provide a 5 dBA reduction per FHWA guidance. (11) Exterior noise mitigation in the form of noise barriers is not anticipated to provide the FHWA attainable reduction of 5 dBA required to reduce the off-site traffic noise level increases and would also require potential openings for driveway access to individual residential lots fronting the road. As such, off-site noise barriers would not be feasible and would not lower the off-site traffic noise levels below a level of significance, and therefore, noise barriers are not proposed as mitigation for the Project.

## SIGNIFICANT OFF-SITE TRAFFIC NOISE IMPACTS

Both rubberized asphalt and off-site noise barriers are considered as potential noise mitigation measures to reduce the *potentially significant* Project-related off-site traffic noise level increases shown on Tables J and K. However, neither form of mitigation would eliminate the off-site traffic noise level increases at the adjacent land uses to the impacted roadway segments. Therefore, the Project-related off-site traffic noise level increases at adjacent noise-sensitive land are considered a *significant and unavoidable* impact. If you have any questions, please contact me directly at (949) 336-5979.

Respectfully submitted,

URBAN CROSSROADS, INC.

Bill Lawson, P.E., INCE Principal



# REFERENCES

- 1. **Urban Crossroads, Inc.** *IDI Rider 2 and 4 High Cube Warehouse and Perris Valley Storm Drain Channel Improvement Project Focused Traffic Assessment (With I-215 Freeway/Placentia Avenue Interchange).* May 2020.
- 2. California Court of Appeal. Gray v. County of Madera, F053661. 167 Cal.App.4th 1099; Cal.Rptr.3d, October 2008.
- 3. City of Perris. Perris Valley Commerce Center Specific Plan Environmental Impact Report. July 2011.
- 4. U.S. Department of Transportation, Federal Highway Administration. FHWA Highway Traffic Noise Prediction Model. December 1978. FHWA-RD-77-108.
- 5. California Department of Transportation Environmental Program, Office of Environmental Engineering. Use of California Vehicle Noise Reference Energy Mean Emission Levels (Calveno REMELs) in FHWA Highway Traffic Noise Prediction. September 1995. TAN 95-03.
- 6. California Department of Transportation. *Traffic Noise Attenuation as a Function of Ground and Vegetation Final Report.* June 1995. FHWA/CA/TL-95/23.
- 7. California Department of Transportation Environmental Program. *I-80 Davis OGAC Pavement Noise Study.* September 2001.
- 8. —. Technical Noise Supplement A Technical Supplement to the Traffic Noise Analysis Protocol. Sacramento, CA : s.n., September 2013.
- 9. Canadian Ministry of Transportation and Highways, Highway Environment Branch. Open-Graded Asphalt 'Quiet Pavement' Assessment of Traffic Noise Reduction Performance. November 1995.
- 10. U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning, Noise and Air Quality Branch. *Highway Traffic Noise Analysis and Abatement Policy and Guidance*. December 2011.
- 11. California Department of Transportation. *Highway Design Manual, Chapter 1100 Highway Traffic Noise Abatement*. November 2017.



APPENDIX A:

**OFF-SITE TRAFFIC NOISE CONTOURS AT RIGHT-OF-WAY** 



	FHV	VA-RD-77-108	HIG	HWAY	NOISE PI	REDICTI		DEL			
	e: Existing (20 e: Indian Av. t: s/o Morgan	,					Name: F umber: 1		3uildings 2	and 4 N	lo
SITE S	PECIFIC IN	IPUT DATA				N	OISE N	IODE	L INPUT	S	
Highway Data					Site Con	ditions (	'Hard =	10, Sc	oft = 15)		
Average Daily T Peak Hour F Peak Ho	( )	9,546 vehicle 6.83% 652 vehicle				edium Tru eavy Truc	icks (2 A		15		
Veh	icle Speed:	45 mph		ŀ	Vehicle	Miy					
Near/Far Lan	e Distance:	50 feet		-		icleType		Dav	Evenina	Niaht	Daily
Site Data					VCI			68.2%		19.6%	
Par	ier Height:	0.0 feet			М	edium Tri	ucks:	69.8%	8.8%	21.4%	6.78%
Barrier Type (0-Wa		0.0				Heavy Tri	ucks:	58.3%	5.1%	36.6%	2.01%
Centerline Dist	to Barrier:	47.0 feet		ŀ	Noise Se	ource Ele	vations	in fe	et)		
Centerline Dist. to	o Observer:	47.0 feet		F		Autos		000			
Barrier Distance to	o Observer:	0.0 feet			Mediu	m Trucks		97			
Observer Height (A	bove Pad): d Elevation:	5.0 feet				vy Trucks		004	Grade Adj	iustmen	t: 0.0
	d Elevation:	0.0 feet		F	Lano Ea	uivalent	Dictor	o (in	faat		
	oad Grade:	0.0 feet 0.0%		ŀ	LaneLy	Autos			leelj		
л	Left View:				Madiu	m Trucks					
	Right View:	-90.0 degree 90.0 degree				vy Trucks					
FHWA Noise Model	Calculation	s									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresn	el	Barrier Atte	en Be	rm Atten
Autos:	68.46	-4.09		1.3	33	-1.20		-4.63	0.0	000	0.00
Medium Trucks:	79.45	-15.38		1.3	37	-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	84.25	-20.66		1.3	36	-1.20		-5.46	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barri	er atter	nuation)						
VehicleType I	eq Peak Hou			Leq E	vening	Leq I	Vight		Ldn		NEL
Autos:	64	.5	63.7		62.3		59.5		66.8	3	67.
Medium Trucks:	64		63.5		60.6		59.7		66.8	-	67.
Heavy Trucks:	63		62.3		57.7		61.5		67.9	-	68.
Vehicle Noise:	68	1.9	68.0		65.3		65.1		72.0	)	72.
Centerline Distance	e to Noise Co	ontour (in feet	)					r			
			L	70	dBA	65 0		6	60 dBA		5 dBA
			Ldn:		64		137		295		635
		C	NEL:		66		142		306		660

	FHWA	-RD-77-108 HIG	HWAY	NOISE PR	EDICTION		L			
Scenario: Road Name: Road Segment:					Project Na Job Num		ler Building: 559	s 2 and	4 No	
SITE SF	ECIFIC INPU	UT DATA			NO	SE MO	DEL INPU	JTS		
Highway Data				Site Cond	ditions (Ha	ard = 10	, Soft = 15)			
Average Daily Tr	affic (Adt): 28	3,620 vehicles				Au	tos: 15			
Peak Hour Pe	ercentage: 6	5.83%		Med	dium Truck	s (2 Axl	es): 15			
Peak Hou	ır Volume: 1,	955 vehicles		Hea	avy Trucks	(3+ Axl	es): 15			
Vehid	cle Speed:	45 mph	-	Vehicle N	lix					
Near/Far Lane	Distance:	80 feet	F		cleType	Da	y Evenir	g Nig	ht	Daily
Site Data					Aut	os: 68	.2% 12.3	• •	.6%	91.219
Darri	er Heiaht:	0.0 feet		Me	dium Truc		.8% 8.8		.4%	6.789
Barrier Type (0-Wal		0.0		н	leavy Truc	ks: 58	.3% 5.1	% 36	.6%	2.019
Centerline Dist.		64.0 feet	-	N 0	urce Eleva		- f 41			
Centerline Dist. to	Observer:	64.0 feet	-	Noise 30	Autos:		,			
Barrier Distance to	Observer:	0.0 feet		Madium	n Trucks:	0.00				
Observer Height (Al	oove Pad):	5.0 feet			y Trucks:	8.004		Adjustn	nent:	0.0
Pad	Elevation:	0.0 feet						, laja oli i	10/112	0.0
	Elevation:	0.0 feet		Lane Equ	ivalent Di		· /			
Ro		0.0%			Autos:	50.21				
		-90.0 degrees			n Trucks:	50.03				
F	Right View:	90.0 degrees		Heavy	y Trucks:	50.05	J			
FHWA Noise Model										
VehicleType			stance	Finite I		Fresnel	Barrier		Bern	n Atten
Autos:	68.46	0.67	-0.1	-	-1.20		70	0.000		0.00
Medium Trucks:	79.45	-10.61	-0.1		-1.20		88	0.000		0.00
Heavy Trucks:	84.25	-15.89	-0.1	11	-1.20	-5.	31	0.000		0.00
Unmitigated Noise L				,						
	eq Peak Hour	Leq Day	Leq E	vening	Leq Nig		Ldn		CN	IEL
Autos:	67.8	67.0		65.6		62.8		70.1		70.
Medium Trucks:	67.5	66.8		63.9		63.0		0.0		70.
Heavy Trucks: Vehicle Noise:	67.1	65.6 71.3		61.0 68.6		64.8 68.4		71.2 75.3		71.
				00.0		00.4	'	5.5		75.
Centerline Distance	to Noise Cont	tour (in feet)	70	dBA	65 dB/		60 dBA		55	1BA
		Ldn:	70	ава 144	00 aB/	309		666	50 (	1,435
		Lun.		144		209	0	000		1,435

Tuesday, April 7, 2020

FH	WA-RD-77-108	HIGH	IWAY N	NOISE PR	EDICT		EL			
Scenario: Existing (2 Road Name: Indian Av. Road Segment: s/o Rider S	,					Name: Ri umber: 11		Buildings 2 a	nd 4 No	
SITE SPECIFIC II	NPUT DATA							L INPUTS		
Highway Data				Site Con	ditions	(Hard = 1	0, So	ft = 15)		
Average Daily Traffic (Adt):	6,166 vehicle	es				A	utos:	15		
Peak Hour Percentage:	6.83%			Med	dium Tru	icks (2 Ax	(les):	15		
Peak Hour Volume:	421 vehicle	s		Hea	avy Truc	:ks (3+ Ax	(les):	15		
Vehicle Speed:	45 mph		-	Vehicle N	liv					
Near/Far Lane Distance:	50 feet		F		cleType	D	ay	Evening	Night	Daily
Site Data				VCIII			8.2%	•	19.6%	
Barrier Height:	0.0 feet			Me	dium Ti	ucks: 6	9.8%	8.8%	21.4%	6.78%
Barrier Type (0-Wall, 1-Berm):	0.0 1001			H	leavy Ti	ucks: 5	8.3%	5.1%	36.6%	2.01%
Centerline Dist. to Barrier:	47.0 feet		L							
Centerline Dist. to Observer:	47.0 feet		4	Noise So		evations		et)		
Barrier Distance to Observer:	0.0 feet				Auto					
Observer Height (Above Pad):	5.0 feet				n Truck					
Pad Elevation:	0.0 feet			Heav	y Truck	s: 8.00	)4	Grade Adju	stment:	0.0
Road Elevation:	0.0 feet			Lane Equ	iivalent	Distance	(in f	eet)		
Road Grade:	0.0%		F		Auto			,		
Left View:	-90.0 degree	es		Mediur	n Truck	s: 39.89	91			
Right View:	90.0 degree			Heav	y Truck	s: 39.91	13			
FHWA Noise Model Calculation	IS									
VehicleType REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresne	1	Barrier Atter	n Berr	n Atten
Autos: 68.46	-5.99		1.3	3	-1.20	-4	4.63	0.00	0	0.00
Medium Trucks: 79.45	-17.28		1.3	7	-1.20	-4	4.87	0.00	0	0.00
Heavy Trucks: 84.25	-22.55		1.3	6	-1.20	-{	5.46	0.00	0	0.00
Unmitigated Noise Levels (with				í				,		
VehicleType Leq Peak Ho			Leq E	vening	Leq	Night		Ldn	C٨	IEL
	2.6	61.8		60.4		57.6		64.9		65.3
	2.3	61.6		58.7		57.8		64.9		65.
	1.9	60.4		55.8		59.6		66.0		66.2
Vehicle Noise: 6	7.0	66.1		63.4		63.2		70.1		70.3
Centerline Distance to Noise C	ontour (in feet	)								
			70 (	dBA	65	dBA	6	0 dBA	55 (	dBA
		Ldn: NEL :		47 49		102 106		220 229		475 493

	FHV	VA-RD-77-108	HIGHW	AY N	IOISE PF	REDICT		DEL			
Road Nam	io: Existing (20 ne: Perris Bl. nt: s/o Ramona	,					Name: R umber: 1		Buildings 2	and 4 No	D
SITE	SPECIFIC IN	PUT DATA							L INPUTS	3	
Highway Data				5	Site Con	ditions	(Hard = 1	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	23,801 vehicle	es				A	utos:	15		
Peak Hour	Percentage:	6.83%			Me	dium Tri	ucks (2 A	xles):	15		
Peak H	lour Volume:	1,626 vehicles	6		He	avy Tru	cks (3+ A	xles):	15		
Ve	hicle Speed:	45 mph		,	Vehicle I	Niv					
Near/Far La	ne Distance:	80 feet				icleType		Day	Evening	Night	Daily
Site Data					Ven			58.2%		•	91.219
Ba	rrier Height:	0.0 feet			Me	edium Ti	rucks: 6	<u>.</u> 9.8%	8.8%	21.4%	6.78%
Barrier Type (0-W		0.0			ŀ	leavy Ti	rucks: 5	58.3%	5.1%	36.6%	2.01%
Centerline Di		64.0 feet							0		
Centerline Dist.	to Observer:	64.0 feet		^	Noise Sc		evations		eet)		
Barrier Distance		0.0 feet				Auto					
Observer Height		5.0 feet				m Truck			Oursels Aut		
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.0	04	Grade Adj	usiment.	0.0
Roi	ad Elevation:	0.0 feet		L	Lane Equ	uivalent	Distance	e (in :	feet)		
	Road Grade:	0.0%				Auto	s: 50.2	10			
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 50.0	33			
	Right View:	90.0 degree	es		Heav	y Truck	s: 50.0	50			
FHWA Noise Mod	el Calculations	;									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresne	e/	Barrier Atte	en Ber	m Atten
Autos:	68.46	-0.13		-0.13	3	-1.20	-	4.70	0.0	00	0.00
Medium Trucks:	79.45	-11.41		-0.11	1	-1.20	-	4.88	0.0	00	0.00
Heavy Trucks:	84.25	-16.69		-0.11	1	-1.20	-	5.31	0.0	00	0.00
Unmitigated Noise	e Levels (witho	out Topo and	barrier	atteni	uation)						
		r Leg Day	' L	eq Ev	vening	Leq	Night		Ldn	CI	VEL
VehicleType	Leq Peak Hou	209 209					00.0		69.3		69.
VehicleType Autos:	Leq Peak Hou 67		66.2		64.8		62.0				
Autos: Medium Trucks:	67 66	.0 .7	66.0		63.1		62.2		69.2		
Autos: Medium Trucks: Heavy Trucks:	67 66 66	0 7 3	66.0 64.8		63.1 60.2		62.2 64.0		70.4		70.
Autos: Medium Trucks:	67 66	0 7 3	66.0		63.1		62.2				70.
Autos: Medium Trucks: Heavy Trucks:	67. 66. 66. 71.	0 7 3 4	66.0 64.8 70.5		63.1 60.2 67.8		62.2 64.0 67.6		70.4 74.5		70. 74.
Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	67. 66. 66. 71.	0 7 3 4 ntour (in feet,	66.0 64.8 70.5	70 a	63.1 60.2 67.8		62.2 64.0 67.6 dBA		70.4 74.5 60 dBA		70.5 74.7 dBA
Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	67. 66. 66. 71.	0 7 3 4 <i>ntour (in feet</i> )	66.0 64.8 70.5	70 a	63.1 60.2 67.8		62.2 64.0 67.6		70.4 74.5		69.5 70.5 74.7 dBA 1,269 1.318

	FH\	WA-RD-77-108	HIGHW	AY N	IOISE PR	REDICTIC	N MOD	EL			
Road Nam	io: Existing (20 ne: Perris Bl. nt: s/o Morgar	,					lame: Ri mber: 11		uildings 2	and 4 N	0
SITE	SPECIFIC IN	NPUT DATA				NC	DISE M	ODEL	INPUTS	3	
Highway Data				5	Site Con	ditions (H	lard = 1	0, Sof	t = 15)		
	Percentage:	25,211 vehicl 6.83%				dium Truc	ks (2 Ax	,	15 15		
	lour Volume:	1,722 vehicle	s		Hea	avy Truck	s (3+ Ax	(les):	15		
	hicle Speed:	45 mph		١	/ehicle N	<i>lix</i>					
Near/Far La	ne Distance:	80 feet			Vehi	cleType	D	ay I	Evening	Night	Daily
Site Data						AL	itos: 6	8.2%	12.3%	19.6%	91.21%
Ba	rrier Heiaht:	0.0 feet			Me	edium Tru	cks: 6	9.8%	8.8%	21.4%	6.78%
Barrier Type (0-W	/all, 1-Berm):	0.0			H	leavy Tru	cks: 5	8.3%	5.1%	36.6%	2.01%
Centerline Di		64.0 feet		1	Voise So	urce Elev	ations/	(in fee	t)		
Centerline Dist.		64.0 feet				Autos:	0.00	00			
Barrier Distance		0.0 feet			Mediur	n Trucks:	2.29	97			
Observer Height	(Above Pad): ad Elevation:	5.0 feet			Heav	y Trucks:	8.00	)4 (	Grade Adj	ustment	0.0
	ad Elevation: ad Elevation:	0.0 feet 0.0 feet		,	ano Equ	ivalent E	Victoria	(in fo	ofi		
	Road Grade:	0.0 feet		-	une Lqu	Autos:			00		
	Left View:	-90.0 degre			Modiur	n Trucks:					
	Right View:	90.0 degre				y Trucks:					
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distar	псе	Finite	Road	Fresne	I B	arrier Atte	en Bei	rm Atten
Autos:	68.46	0.12		-0.13	3	-1.20	-4	4.70	0.0	00	0.000
Medium Trucks:	79.45	-11.16		-0.1	1	-1.20	-4	4.88	0.0	00	0.000
Heavy Trucks:	84.25	-16.44		-0.1	1	-1.20	-	5.31	0.0	00	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	atten	uation)						
VehicleType	Leq Peak Hou			eq E∖	/ening	Leq N	•	1	dn		NEL
Autos:		7.3	66.5		65.0		62.3		69.5		69.9
Medium Trucks:		7.0	66.3		63.3		62.4		69.5		69.8
Heavy Trucks:		6.5	65.0		60.4		64.3		70.7		70.8
Vehicle Noise:		1.7	70.7		68.1		67.8		74.7	,	75.0
Centerline Distant	ce to Noise C	ontour (in feet	)	70 c	IRA I	65 dl	84	60	dBA	55	dBA
			Ldn:	100	132	05 U	284	00	612	55	1.319
		~	NEL:		132		284 295		636		1,319
		C	V.L.		13/		290		030		1,370

	FHV	/A-RD-77-108	HIGH	WAY NO	DISE PRE	EDICT	ION MO	DDEL			
Road Nam	o: Existing (20 e: Perris Bl. nt: s/o Placenti	,			F			Rider E 11559	Buildings 2	and 4 No	D
SITE	SPECIFIC IN	PUT DATA				N	OISE	MODE		5	
Highway Data				S	ite Cond	itions	(Hard	= 10, Sc	oft = 15)		
Peak H	Percentage: our Volume:	27,269 vehicle 6.83% 1,862 vehicles						Autos: Axles): Axles):	15		
	hicle Speed:	45 mph		V	ehicle Mi	x					
Near/Far Lar	ne Distance:	80 feet			Vehic	leType	9	Day	Evening	Night	Daily
Site Data							Autos:	68.2%	12.3%	19.6%	91.219
Bar	rier Heiaht:	0.0 feet			Med	dium T	rucks:	69.8%	8.8%	21.4%	6.78
Barrier Type (0-W	all, 1-Berm):	0.0			He	eavy T	rucks:	58.3%	5.1%	36.6%	2.019
Centerline Dis		64.0 feet		N	oise Sou	rce El	levatio	ns (in fe	eet)		
Centerline Dist. Barrier Distance Observer Height (J	to Observer:	64.0 feet 0.0 feet 5.0 feet 0.0 feet			Medium Heavy		s: 2	.000 .297 .004	Grade Adj	iustment.	0.0
	d Elevation:	0.0 feet		L	ane Equi	valen	t Distar	ice (in	feet)		
	Road Grade:	0.0%				Auto		).210			
	Left View: Right View:	-90.0 degree 90.0 degree			Medium Heavy		s: 50	).033 ).050			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite R		Fres		Barrier Atte		m Atten
Autos:	68.46	0.46		-0.13		-1.20		-4.70		000	0.00
Medium Trucks:	79.45	-10.82		-0.11		-1.20		-4.88		000	0.00
Heavy Trucks:	84.25	-16.10		-0.11		-1.20		-5.31	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and I	barrie	r attenu	ation)						
VehicleType	Leq Peak Hou	r Leq Day		Leg Eve	ening	Leq	Night		Ldn	CI	VEL
Autos:	67		6.8		65.4		62		69.9		70
Medium Trucks:	67		6.6		63.7		62		69.8		70
Heavy Trucks:	66		65.4		60.8		64		71.0		71
Vehicle Noise:	72	.0	71.1		68.4		68	.2	75.1		75
Centerline Distanc	e to Noise Co	ntour (in feet)									
			L	70 dl		65	dBA		60 dBA		dBA
		1	Ldn: IEL:		139		29 31	-	645 670		1,39 1,44

	FH\	NA-RD-77-108	HIGHW	/ay n	OISE PR	REDICTI	ON MODE	L		
	o: Existing (20 e: Perris Bl. t: s/o Rider S	,					Name: Ric umber: 11	ler Buildings 2 559	and 4 N	0
SITE	SPECIFIC IN	IPUT DATA						DEL INPUT	S	
Highway Data				S	ite Con	ditions (	'Hard = 10	, Soft = 15)		
Average Daily	Traffic (Adt):	26,860 vehicle	es				Au	tos: 15		
Peak Hour	Percentage:	6.83%			Med	dium Tru	icks (2 Axl	es): 15		
Peak H	our Volume:	1,835 vehicle	5		Hea	avy Truc	ks (3+ Axl	es): 15		
Vel	nicle Speed:	45 mph		14	ehicle N	11.v				
Near/Far Lar	ne Distance:	80 feet				cleType	Da	y Evening	Night	Daily
Site Data					veni			.2% 12.3%	19.6%	
		0.0 feet			Me	dium Tr		.8% 8.8%		
Barrier Type (0-W	rier Height:	0.0 reet				leavy Tr		.3% 5.1%	36.6%	
Centerline Dis		0.0 64.0 feet								-
Centerline Dist.		64.0 feet		Ν	loise So		evations (i	,		
Barrier Distance t		0.0 feet				Autos				
Observer Height (		5.0 feet				n Trucks				
	d Elevation:	0.0 feet			Heav	y Trucks	8.004	4 Grade Ac	ljustment	: 0.0
	d Elevation:	0.0 feet		L	ane Eau	iivalent	Distance	(in feet)		
	Road Grade:	0.0%		-		Autos		,		
	Left View:	-90.0 degree	25		Mediur	n Trucks				
	Right View:	90.0 degree			Heav	y Trucks	50.05	D		
FHWA Noise Mode	I Calculation	s								
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresnel	Barrier At	ten Ber	m Atter
Autos:	68.46	0.40		-0.13	5	-1.20	-4.	70 0.	000	0.00
Medium Trucks:	79.45	-10.89		-0.11		-1.20	-4.	88 0.	000	0.00
Heavy Trucks:	84.25	-16.16		-0.11		-1.20	-5.	31 0.	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barrier	attenu	uation)					
	Leq Peak Hou			.eq Ev	ening	Leq I	•	Ldn		NEL
Autos:	67		66.7		65.3		62.6	69.		70
Medium Trucks:	67	.3	66.6		63.6		62.7	69.	8	70
Heavy Trucks:	66		65.3		60.7		64.5	71.		71
Vehicle Noise:	72	2.0	71.0		68.4		68.1	75.	0	75
Centerline Distanc	e to Noise Co	ontour (in feet	)							
			ட	70 d		65 0		60 dBA		dBA
			Ldn: NEL:		138 143		296 308	638 663		1,37

	FHW	/A-RD-77-108	HIGHV	VAY NC	DISE PR	REDICTI	ON MOE	DEL			
	o: Existing (20 e: Redlands Av t: n/o Morgan	<i>i</i> .					Name: F umber: 1		Buildings 2	and 4 N	D
SITE S	PECIFIC IN	PUT DATA				N	OISE M	ODE		s	
Highway Data				Si	te Cond	ditions (	Hard = 1	10, So	ft = 15)		
Average Daily 1	raffic (Adt):	1,134 vehicle	s				A	lutos:	15		
Peak Hour I	Percentage:	6.83%			Мес	dium Tru	icks (2 A	xles):	15		
Peak Ho	our Volume:	77 vehicles	6		Hea	avy Truc	ks (3+ A	xles):	15		
Vet	nicle Speed:	45 mph		Ve	hicle N	<i>Ni</i> v					
Near/Far Lan	e Distance:	50 feet				cleType	1	Day	Evening	Night	Daily
Site Data								58.2%	•		91.21%
Par	rier Height:	0.0 feet			Ме	dium Tr	ucks: (	59.8%	8.8%	21.4%	
Barrier Type (0-Wa	•	0.0			h	leavy Tr	ucks:	58.3%	5.1%	36.6%	2.01%
Centerline Dis		47.0 feet									
Centerline Dist. t		47.0 feet		No	oise So		evations		et)		
Barrier Distance t		0.0 feet				Autos					
Observer Height ()	Above Pad);	5.0 feet				n Trucks			Our de Au		
<b>U</b> (	d Elevation:	0.0 feet			Heav	y Trucks	8.0	04	Grade Ad	justment	0.0
Roa	d Elevation:	0.0 feet		La	ne Equ	iivalent	Distanc	e (in f	eet)		
F	oad Grade:	0.0%				Autos	: 40.1	12			
	Left View:	-90.0 degree	s		Mediun	n Trucks	: 39.8	91			
	Right View:	90.0 degree	s		Heav	y Trucks	: 39.9	13			
FHWA Noise Mode	I Calculations										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresne	e/	Barrier Att	en Ber	m Atten
Autos:	68.46	-13.35		1.33		-1.20	-	4.63	0.0	000	0.000
Medium Trucks:	79.45	-24.63		1.37		-1.20	-	4.87	0.0	000	0.000
Heavy Trucks:	84.25	-29.91		1.36		-1.20	-	5.46	0.0	000	0.000
Unmitigated Noise	Levels (witho	ut Topo and	barrier	attenua	ation)						
	Leq Peak Houi			Leq Eve		Leq I	•		Ldn		VEL
Autos:	55.		54.4		53.0		50.3		57.		57.9
Medium Trucks:	55.		54.3		51.3		50.4		57.		57.8
Heavy Trucks:	54.		53.0		48.4		52.3		58.		58.8
Vehicle Noise:	59.		58.7		56.1		55.9		62.	7	63.0
Centerline Distanc	e to Noise Co	ntour (in feet)								-	
				70 dE		65 c		6	0 dBA 71		dBA
			Ldn: VEL:		15 16		33 34		71		154 159

	FHV	VA-RD-77-108 HI	GHWAY	NOISE PI	REDICTIO	N MODEL		
	o: Existing (20 e: Redlands A nt: s/o Rider St	v.				ame: Rider aber: 11559	Buildings 2	and 4 No
SITES	SPECIFIC IN	PUT DATA			NO	ISE MODI	EL INPUT	5
Highway Data				Site Con	ditions (H	ard = 10, S	oft = 15)	
Average Daily	Traffic (Adt): Percentage:	3,783 vehicles 6.83%		Ma	dium Truc	Autos (s (2 Axles)		
	our Volume:	258 vehicles				(3+ Axles)		
	nicle Speed:	45 mph		10	avy mucho	(0 · Axico)	. 10	
Near/Far Lar				Vehicle I	Mix			
Near/Far Lar	ie Distance:	50 feet		Veh	icleType	Day	Evening	Night Daily
Site Data					Aut	os: 68.2	6 12.3%	19.6% 91.21%
Bar	rier Height:	0.0 feet		М	edium Truc	ks: 69.8	6 8.8%	21.4% 6.78%
Barrier Type (0-Wa		0.0		1	Heavy Truc	ks: 58.3	6 5.1%	36.6% 2.01%
Centerline Dis	t. to Barrier:	47.0 feet		Noise Se	urce Flev	ations (in i	(oot)	
Centerline Dist. t	to Observer:	47.0 feet		110/30 00	Autos:	0.000	001)	
Barrier Distance t	o Observer:	0.0 feet		Madiu	m Trucks:	2.297		
Observer Height (/	Above Pad):	5.0 feet			vy Trucks:	2.297	Grade Adi	ustment: 0.0
Pa	d Elevation:	0.0 feet		neat	ly mucks.	0.004	Orade Auj	usunent. 0.0
Roa	d Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)	
F	Road Grade:	0.0%			Autos:	40.112		
	Left View:	-90.0 degrees		Mediu	m Trucks:	39.891		
	Right View:	90.0 degrees		Heav	y Trucks:	39.913		
FHWA Noise Mode								
VehicleType	REMEL		Distance			Fresnel	Barrier Atte	
Autos:	68.46	-8.12	1.3		-1.20	-4.63		
Medium Trucks:	79.45	-19.40	1.3	•••	-1.20	-4.87		
Heavy Trucks:	84.25	-24.68	1.3	36	-1.20	-5.46	0.0	00.00
Unmitigated Noise				,				
	Leq Peak Hou		-	Evening	Leq Nig		Ldn	CNEL
Autos:	60			58.2		55.5	62.7	
Medium Trucks:	60		-	56.6		55.6	62.7	
Heavy Trucks:	59		-	53.7		57.5	63.9	
Vehicle Noise:	64		0	61.3		61.1	67.9	) 68.
Centerline Distanc	e to Noise Co	ntour (in feet)	70		65 dB		60 dBA	55 dBA
		1.4		dBA	65 dB			
		Ldr		34		74	159	
		CNEL		36		77	165	356

	FHV	/A-RD-77-108 H	IGHWA	Y NOISE PI	REDICT	ION MO	DEL			
Road Nam	<i>io:</i> Existing (20 ne: Ramona Ex nt: w/o Perris E	wy.				Name: lumber:		3uildings 2	and 4 No	D
SITE	SPECIFIC IN	PUT DATA			N	OISE	NODE	L INPUT	5	
Highway Data				Site Con	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	39,737 vehicles					Autos:	15		
Peak Hour	Percentage:	6.83%		Me	dium Tr	ucks (2 )	Axles):	15		
Peak H	lour Volume:	2,714 vehicles		He	avy Tru	cks (3+ )	Axles):	15		
	hicle Speed:	55 mph		Vehicle	Mix					
Near/Far La	ne Distance:	102 feet			icleTvpe	•	Dav	Evening	Night	Daily
Site Data						Autos:	68.2%	12.3%	19.6%	91.219
Ba	rrier Heiaht:	0.0 feet	-	М	edium T	rucks:	69.8%	8.8%	21.4%	6.78%
Barrier Type (0-W		0.0		1	Heavy T	rucks:	58.3%	5.1%	36.6%	2.019
Centerline Di		92.0 feet		Noise So	urco El	lovation	e (in fr	of		
Centerline Dist.	to Observer:	92.0 feet		140/36 30	Auto		000	el)		
Barrier Distance	to Observer:	0.0 feet		Modiu	m Truck		297			
Observer Height (	(Above Pad):	5.0 feet			y Truck		004	Grade Ad	iustment	0.0
P	ad Elevation:	0.0 feet								0.0
	ad Elevation:	0.0 feet		Lane Eq				feet)		
	Road Grade:	0.0%			Auto		733			
	Left View:	-90.0 degrees			m Truck		618			
	Right View:	90.0 degrees		Heav	ry Truck	S. 76.	629			
FHWA Noise Mod	el Calculations	1								
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresr	nel	Barrier Atte	en Ber	m Atten
Autos:	71.78	1.23	-2	2.89	-1.20		-4.76	0.0	000	0.00
Medium Trucks:	82.40	-10.06	-2	2.88	-1.20		-4.88	0.0	000	0.00
Heavy Trucks:	86.40	-15.33	-2	2.88	-1.20		-5.18	0.0	000	0.00
Unmitigated Noise	e Levels (with	out Topo and ba	arrier att	enuation)						
VehicleType	Leq Peak Hou	r Leq Day	Leq	Evening	Leq	Night		Ldn	CI	VEL
Autos:	68		8.1	66.7		63.9		71.2		71.
Medium Trucks:	68		7.6	64.6		63.		70.8		71.
Heavy Trucks:	67		5.5	60.9		64.		71.2		71.
Vehicle Noise:	72	.9 72	2.0	69.4		68.9	9	75.8	3	76.
Centerline Distand	ce to Noise Co	ntour (in feet)								
				0 dBA	65	dBA		60 dBA		dBA
			dn:	225		484		1.043		2.247
		CNE		223		504		1.086		2.339

Tuesday, April 7, 2020

	FHV	VA-RD-77-108	HIGH	IWAY N		EDICT	ON MODE	:L			
	: Existing (20							ler Buildings	2 and	4 No	
Road Name Road Segmen	e: Redlands A t: s/o Placenti					JOD N	umber: 11	559			
SITE S	PECIFIC IN	PUT DATA						DEL INPU	TS		
Highway Data				1	Site Con	ditions	(Hard = 10	, Soft = 15)			
Average Daily T	raffic (Adt):	5,779 vehicle	es				Au	tos: 15			
Peak Hour F	Percentage:	6.83%			Me	dium Tru	icks (2 Axl	es): 15			
Peak Ho	our Volume:	395 vehicle	s		He	avy Truc	:ks (3+ Axl	es): 15			
Veh	icle Speed:	45 mph		1	Vehicle N	lix					
Near/Far Lan	e Distance:	50 feet		F		cleType	Da	y Evening	Nic	aht	Daily
Site Data							Autos: 68	.2% 12.3%	6 19	.6%	91.21%
Barr	rier Height:	0.0 feet			Me	dium Ti	ucks: 69	.8% 8.8%	6 21	.4%	6.78%
Barrier Type (0-Wa		0.0			F	leavy Ti	ucks: 58	.3% 5.1%	6 36	6.6%	2.01%
Centerline Dist		47.0 feet		H	N-: 0-		evations (	··· 6 4)			
Centerline Dist. to	o Observer:	47.0 feet		4	Noise So	Auto:		,			
Barrier Distance to	o Observer:	0.0 feet			Madiu	Auto: n Truck					
Observer Height (A	bove Pad):	5.0 feet				y Truck			diustr	nent <sup>.</sup>	0.0
Pa	d Elevation:	0.0 feet			Tieav	y much	5. 0.00	4 0/2007	lajasa	nom.	0.0
Road	d Elevation:	0.0 feet		1	Lane Equ	iivalent	Distance	(in feet)			
R	oad Grade:	0.0%				Auto	s: 40.11	2			
	Left View:	-90.0 degre	es		Mediur	n Truck	s: 39.89	1			
	Right View:	90.0 degre	es		Heav	y Truck	s: 39.91	3			
FHWA Noise Model	Calculation:	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresnel	Barrier A	Atten	Bern	n Atten
Autos:	68.46	-6.27		1.3	3	-1.20	-4	.63 (	0.000		0.00
Medium Trucks:	79.45	-17.56		1.3	7	-1.20	-4	.87 (	0.000		0.000
Heavy Trucks:	84.25	-22.84		1.3	6	-1.20	-5	.46 (	0.000		0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er atten	uation)						
	Leq Peak Hou			Leq Ev	vening	Leq	Night	Ldn		CN	
Autos:	62		61.5		60.1		57.3		4.6		65.0
Medium Trucks:	62		61.4		58.4		57.5		4.6		64.9
Heavy Trucks:	61		60.1		55.5		59.3		5.8		65.9
Vehicle Noise:	66	.8	65.8		63.2		62.9	69	9.8		70.0
Centerline Distance	e to Noise Co	ontour (in feet	)	= -							
				70 0			dBA	60 dBA		55 a	IBA
			L	700		001					100
			Ldn: NEL:	,00	45 47	001	98 102	2	11 19		455 472

		VA-RD-77-108		AT NOISE									
	o: Existing (20						r Buildings 2 a	ind 4 No					
	e: Ramona E				Job N	lumber: 1158	59						
Road Segmer	nt: e/o Perris E	6I.											
	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)									
Highway Data				Site C	onditions	(Hard = 10,	Soft = 15)						
Average Daily	Traffic (Adt):	35,380 vehicle	s			Auto							
Peak Hour	Percentage:	6.83%				ucks (2 Axle	, .						
Peak H	our Volume:	2,416 vehicles	6		Heavy Tru	cks (3+ Axle	s): 15						
Vei	hicle Speed:	55 mph		Vehic	le Mix								
Near/Far Lar	ne Distance:	102 feet			ehicleType	Day	Evening	Night Daily					
Site Data						Autos: 68.2	2% 12.3%	19.6% 91.21					
Bai	rier Height:	0.0 feet			Medium T	rucks: 69.8	3% 8.8%	21.4% 6.78					
Barrier Type (0-W		0.0			Heavy T	rucks: 58.3	3% 5.1%	36.6% 2.019					
Centerline Dis		92.0 feet		Maina	0	firm - fir	f= = 4)						
Centerline Dist.	to Observer:	92.0 feet		NOISE	Source El	evations (in	reet)						
Barrier Distance	to Observer:	0.0 feet			Auto dium Truck								
Observer Height (J	Above Pad):	5.0 feet			eavy Truck		Grada Adiu	stment: 0.0					
Pa	ad Elevation:	0.0 feet		п	eavy muck	5. 0.004	Grade Adju	Sument. 0.0					
Roa	ad Elevation:	0.0 feet		Lane	Equivalen	t Distance (i	n feet)						
F	Road Grade:	0.0%			Auto	s: 76.733							
	Left View:	-90.0 degree	s	Me	dium Truck	s: 76.618							
	Right View:	90.0 degree	es	н	eavy Truck	s: 76.629							
FHWA Noise Mode	el Calculation	s											
VehicleType	REMEL	Traffic Flow	Distan	ce Fir	ite Road	Fresnel	Barrier Atte	n Berm Atten					
Autos:	71.78	0.72		-2.89	-1.20	-4.7	6 0.00	0.00					
Medium Trucks:	82.40	-10.56		-2.88	-1.20	-4.8	8 0.00	0.00					
Heavy Trucks:	86.40	-15.84		-2.88	-1.20	-5.1	8 0.00	00.00					
	Levels (with	out Topo and	barrier a	ttenuatio	n)								
Unmitigated Noise		r Leg Day	Le	eq Evening	y Leq	Night	Ldn	CNEL					
	Leq Peak Hou			6	3.2	63.4	70.7	71					
VehicleType Autos:	Leq Peak Hou 68		67.6	-									
VehicleType	68 67	.4 .8	67.1	6	4.1	63.2	70.3						
VehicleType Autos: Medium Trucks: Heavy Trucks:	- 68 67 66	.4 .8 .5	67.1 65.0	6	4.1 ).4	64.2	70.7	70					
VehicleType Autos: Medium Trucks:	68 67	.4 .8 .5	67.1	6	4.1			70					
Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	68 67 66 72	.4 .8 .5 .4	67.1 65.0 71.5	6 6 6	4.1 0.4 3.9	64.2 68.4	70.7 75.3	70 75					
VehicleType Autos: Medium Trucks: Heavy Trucks:	68 67 66 72	.4 .8 .5 .4 entour (in feet)	67.1 65.0 71.5	6 6 6 70 dBA	4.1 0.4 3.9 65	64.2 68.4 dBA	70.7 75.3 60 dBA	70. 75. 55 dBA					
VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	68 67 66 72	.4 .8 .5 .4 ntour (in feet)	67.1 65.0 71.5	6 6 6 70 dBA 2	4.1 0.4 3.9	64.2 68.4	70.7 75.3	70. 70. 75. 55 dBA 2.079 2.16					

	FHWA-R	D-77-108 HI	GHWAY	NOISE PI	REDICTIO	N MODEL		
Scenario: Existir Road Name: Morga Road Segment: e/o Inc	n St.					ame: Rider hber: 11559	Buildings 2	and 4 No
SITE SPECIFI	C INPUT	DATA			NO	ISE MOD	EL INPUTS	3
Highway Data				Site Con	ditions (H	ard = 10, S	oft = 15)	
Average Daily Traffic (A	dt): 1,79	1 vehicles				Autos	: 15	
Peak Hour Percenta	ge: 6.8	3%		Me	dium Truck	s (2 Axles)	: 15	
Peak Hour Volur	ne: 12	2 vehicles		He	avy Trucks	(3+ Axles)	: 15	
Vehicle Spe	ed: 4	5 mph		Vehicle	Mix			
Near/Far Lane Distan	ce: 5	) feet			icleType	Dav	Evening	Night Daily
Site Data				Ven	Aut		•	19.6% 91.21°
				M	edium Truc			21.4% 6.78
Barrier Heig		.0 feet			Heavy Truc			36.6% 2.019
Barrier Type (0-Wall, 1-Ber Centerline Dist. to Barr	,	.0 feet						2.01
Centerline Dist. to Observ		.0 feet		Noise So	ource Elev	ations (in a	feet)	
Barrier Distance to Observ		.0 feet			Autos:	0.000		
Observer Height (Above Pa		0 feet		Mediu	m Trucks:	2.297		
Pad Elevati	· ·	.0 feet		Heav	y Trucks:	8.004	Grade Adj	ustment: 0.0
Road Elevati	•••••••••••••••••••••••••••••••••••••••	.0 feet		Lane Eq	uivalent D	istance (in	feet)	
Road Gra	•••••••••••••••••••••••••••••••••••••••				Autos:	40.112		
Left Vi		.0 degrees		Mediu	m Trucks:	39.891		
Right Vi		.0 degrees		Heav	y Trucks:	39.913		
FHWA Noise Model Calcula	ations							
VehicleType REME	L Trafi	fic Flow L	Distance	Finite	Road	Fresnel	Barrier Atte	en Berm Atten
	8.46	-11.36	1.	33	-1.20	-4.63	0.0	0.00
	9.45	-22.65		37	-1.20	-4.87		
Heavy Trucks: 8	4.25	-27.92	1.	.36	-1.20	-5.46	0.0	0.00
Unmitigated Noise Levels			1	,				
VehicleType Leq Peal		Leq Day		Evening	Leq Nig		Ldn	CNEL
Autos:	57.2	56.		55.0		52.3	59.5	
Medium Trucks:	57.0	56.	-	53.3		52.4	59.5	
Heavy Trucks:	56.5	55.		50.4		54.2	60.7	
Vehicle Noise:	61.7	60.	/	58.1		57.8	64.7	64
Centerline Distance to Nois	se Contou	r (in feet)	7/	) dBA	65 dB	4	60 dBA	55 dBA
		Ldr		ливд 21	00 UD	45	97	20
		CNEL		21		45 47	97 100	20
		CNEL		22		47	100	21

FHWA-RD-77-108 HIG		NUISE Pr							
Scenario: Existing (2019)		Project Name: Rider Buildings 2 and 4 No							
Road Name: Rider St.			Job Num	ber: 1155	9				
Road Segment: e/o Perris BI.									
SITE SPECIFIC INPUT DATA			-		EL INPUT	5			
Highway Data		Site Con	ditions (Ha	rd = 10, 3	Soft = 15)				
Average Daily Traffic (Adt): 12,064 vehicles				Auto	s: 15				
Peak Hour Percentage: 6.83%			dium Truck		,				
Peak Hour Volume: 824 vehicles		He	avy Trucks	(3+ Axles	;): 15				
Vehicle Speed: 45 mph		Vehicle I	<i>lix</i>						
Near/Far Lane Distance: 50 feet		Vehi	cleType	Day	Evening	Night	Daily		
Site Data			Aut	os: 68.2	% 12.3%	19.6%	91.21		
Barrier Height: 0.0 feet		Me	edium Truc	ks: 69.8	% 8.8%	21.4%	6.78		
Barrier Type (0-Wall, 1-Berm): 0.0		ŀ	leavy Truc	ks: 58.3	% 5.1%	36.6%	2.01		
Centerline Dist. to Barrier: 47.0 feet		Noise So	urce Eleva	tions (in	feet)				
Centerline Dist. to Observer: 47.0 feet			Autos:	0.000	,				
Barrier Distance to Observer: 0.0 feet		Mediur	n Trucks:	2.297					
Observer Height (Above Pad): 5.0 feet			y Trucks:	8.004	Grade Ad	iustment	: 0.0		
Pad Elevation: 0.0 feet					-				
Road Elevation: 0.0 feet		Lane Equ	ivalent Di		n feet)				
Road Grade: 0.0%			Autos:	40.112					
Left View: -90.0 degrees			n Trucks:	39.891					
Right View: 90.0 degrees		Heav	y Trucks:	39.913					
FHWA Noise Model Calculations		1							
VehicleType REMEL Traffic Flow D	listance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos: 68.46 -3.08	1	.33	-1.20	-4.6	3 0.0	000	0.00		
Medium Trucks: 79.45 -14.37	1	.37	-1.20	-4.8	7 0.0	000	0.00		
Heavy Trucks: 84.25 -19.64	1	.36	-1.20	-5.4	5 0.0	000	0.00		
Unmitigated Noise Levels (without Topo and barr	rier atte	enuation)							
VehicleType Leq Peak Hour Leq Day	Leq	Evening	Leq Nig	ht	Ldn	C	NEL		
Autos: 65.5 64.7		63.3		60.5	67.8		68		
Medium Trucks: 65.3 64.6		61.6		60.7	67.8		68		
Heavy Trucks: 64.8 63.3		58.7		62.5	69.0		69		
Vehicle Noise: 70.0 69.0	)	66.3		66.1	73.0	)	73		
Centerline Distance to Noise Contour (in feet)									
		) dBA	65 dB/		60 dBA		dBA		
Ldn		74		160	345		74		
CNEL	:	77		166	358		77		

	FHW	/A-RD-77-108	HIGHW	AY N	OISE PR	REDICTI	ON MOI	DEL			
Scenario: E Road Name: N Road Segment: e	lorgan St.	,					Name: F umber: 1		Buildings 2 a	and 4 No	)
	CIFIC IN	PUT DATA							EL INPUTS	1	
Highway Data				S	Site Con	ditions	(Hard = :	10, S	oft = 15)		
Average Daily Trafi	fic (Adt):	1,433 vehicle	s				A	Autos.	15		
Peak Hour Perc	centage:	6.83%			Med	dium Tru	icks (2 A	xles)	: 15		
Peak Hour	Volume:	98 vehicles			Hea	avy Truc	:ks (3+ A	xles)	: 15		
Vehicle	Speed:	45 mph		V	/ehicle N	<i>Ni</i> v					
Near/Far Lane D	istance:	50 feet				cleType		Dav	Evening	Night	Daily
Site Data					1011			58.29	•	19.6%	
Barrier	Height:	0.0 feet			Me	edium Tr	ucks:	69.8%	6 8.8%	21.4%	6.78%
Barrier Type (0-Wall, 1		0.0			H	leavy Tr	ucks:	58.3%	6 5.1%	36.6%	2.01%
Centerline Dist. to		47.0 feet		-							
Centerline Dist. to O		47.0 feet		N	loise So				eet)		
Barrier Distance to O	bserver:	0.0 feet				Autos					
Observer Height (Abo	ve Pad):	5.0 feet				n Truck			Grade Adjı	otmont	0.0
Pad E	levation:	0.0 feet			Heav	y Trucks	s: 8.0	04	Grade Auju	isuneni.	0.0
Road E	levation:	0.0 feet		L	ane Equ	ıivalent	Distanc	e (in	feet)		
Road	d Grade:	0.0%				Autos	s: 40.1	12			
Le	eft View:	-90.0 degree	s		Mediur	n Trucks	s: 39.8	891			
Rig	ht View:	90.0 degree	s		Heav	y Truck:	s: 39.9	913			
FHWA Noise Model Ca	alculations	:									
VehicleType R	EMEL	Traffic Flow	Distar	ice	Finite	Road	Fresn	e/	Barrier Atte	n Ben	m Atten
Autos:	68.46	-12.33		1.33	3	-1.20		4.63	0.00	00	0.00
Medium Trucks:	79.45	-23.62		1.37	7	-1.20		4.87	0.00	00	0.00
Heavy Trucks:	84.25	-28.89		1.36	6	-1.20		-5.46	0.00	00	0.00
Unmitigated Noise Lev			arrier a	ttenu	uation)						
	Peak Hour			eq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	56.		5.5		54.0		51.3		58.5		58.
Medium Trucks:	56.		5.3		52.3		51.4		58.5		58.
Heavy Trucks:	55.	-	54.0		49.4		53.3		59.7		59.
Vehicle Noise:	60.	7 5	59.7		57.1		56.9		63.7		64.
Centerline Distance to	Noise Col	ntour (in feet)									
				70 d		65 (	dBA		60 dBA	55	dBA
		1	.dn:		18		39		83		179
			IEL :		19		40		86		186

	FHV	/A-RD-77-108	HIGHW	AY NO	DISE PF	REDICT	ON MOD	EL			
Road Nam	io: Existing (20 ne: Rider St. nt: e/o Redland	,					Name: R umber: 1		Buildings 2 :	and 4 No	0
	SPECIFIC IN	PUT DATA							L INPUTS	;	
Highway Data				S	ite Con	ditions	(Hard = 1	0, Sc	oft = 15)		
Average Daily	Traffic (Adt):	14,944 vehicle	es				A	utos:	15		
Peak Hour	Percentage:	6.83%			Mee	dium Tri	icks (2 A	kles):	15		
Peak H	lour Volume:	1,021 vehicles	6		Hea	avy Truc	cks (3+ A	xles):	15		
Ve	hicle Speed:	45 mph		14	ehicle N	Niv					
Near/Far La	ne Distance:	50 feet				cleType	[	Day	Evening	Night	Daily
Site Data								8.2%	•	19.6%	
Ba	rrier Height:	0.0 feet			Me	dium Ti	ucks: 6	9.8%	8.8%	21.4%	6.78%
Barrier Type (0-W		0.0			H	leavy Ti	ucks: 5	8.3%	5.1%	36.6%	2.01%
Centerline Di		47.0 feet							0		
Centerline Dist.	to Observer:	47.0 feet		N	oise So		evations		eet)		
Barrier Distance	to Observer:	0.0 feet				Auto					
Observer Height	Above Pad):	5.0 feet				n Truck			Oursels Add		
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.0	04	Grade Adji	ustment.	0.0
Roi	ad Elevation:	0.0 feet		Li	ane Equ	iivalent	Distance	e (in :	feet)		
	Road Grade:	0.0%				Auto	s: 40.1	12			
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 39.8	91			
	Right View:	90.0 degree	es		Heav	y Truck	s: 39.9	13			
FHWA Noise Mod	el Calculations	;									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresne	e/	Barrier Atte	n Ber	m Atten
Autos:	68.46	-2.15		1.33		-1.20	-	4.63	0.0	00	0.00
Medium Trucks:	79.45	-13.44		1.37		-1.20	-	4.87	0.0	00	0.00
	04.05	-18.71		1.36		-1.20	-	5.46	0.0	00	0.00
Heavy Trucks:	84.25										
		out Topo and	barrier a	ttenu	ation)						
				e <b>ttenu</b> eq Eve		Leq	Night		Ldn	CI	VEL
Unmitigated Noise VehicleType Autos:	e Levels (witho Leq Peak Hou 66	r Leq Day .4	, Le 65.6		ening 64.2	Leq	61.5		68.7		69.
Unmitigated Noise VehicleType Autos: Medium Trucks:	e Levels (witho Leq Peak Hou 66	r Leq Day 4 2	65.6 65.5		ening 64.2 62.5	Leq	61.5 61.6		68.7 68.7		69. 69.
Unmitigated Noise VehicleType Autos:	e Levels (witho Leq Peak Hou 66	r Leq Day 4 2	, Le 65.6		ening 64.2	Leq	61.5		68.7		69. 69. 70.
Unmitigated Noise VehicleType Autos: Medium Trucks:	e Levels (witho Leq Peak Hou 66	r Leq Day 4 2 7	65.6 65.5		ening 64.2 62.5	Leq	61.5 61.6		68.7 68.7		69. 69. 70.
Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	e Levels (witho Leq Peak Hou 66 66 65 70	r Leq Day 4 2 7 9	65.6 65.5 64.2 69.9	eq Eve	ening 64.2 62.5 59.6 67.3		61.5 61.6 63.5 67.0		68.7 68.7 69.9 73.9		69. 69. 70. 74.
Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	e Levels (witho Leq Peak Hou 66 66 65 70	r Leq Day 4 2 7 9 ntour (in feet,	65.6 65.5 64.2 69.9		ening 64.2 62.5 59.6 67.3 BA		61.5 61.6 63.5 67.0		68.7 68.7 69.9 73.9 73.9		69. 69. 70. 74. dBA
Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	e Levels (witho Leq Peak Hou 66 66 65 70	r Leq Day 4 2 7 9 ntour (in feet,	65.6 65.5 64.2 69.9	eq Eve	ening 64.2 62.5 59.6 67.3		61.5 61.6 63.5 67.0		68.7 68.7 69.9 73.9		69.1 69.0 70.0 74.2

	FHWA	-RD-77-108 H	IGHWAY	NOISE PR	REDICTIO	N MODEL		
Scenario: Exist Road Name: Place Road Segment: w/o l	entia Av.	,				ame: Rider hber: 11559	Buildings 2	and 4 No
SITE SPECIE	IC INPL	JT DATA			NO	ISE MODI	EL INPUT	5
Highway Data				Site Con	ditions (H	ard = 10, S	oft = 15)	
Average Daily Traffic ()	Adt): 11	,455 vehicles				Autos	: 15	
Peak Hour Percent	age: 6	.83%		Me	dium Truci	ks (2 Axles)	: 15	
Peak Hour Volu	ime: 1	782 vehicles		He	avy Trucks	(3+ Axles)	: 15	
Vehicle Sp	eed:	45 mph		Vehicle I	Mise			
Near/Far Lane Dista	nce:	80 feet			icleType	Dav	Evening	Night Dail
Site Data				veni	Au		-	19.6% 91.2
					edium Truc			21.4% 6.7
Barrier Hei		0.0 feet			Heavy Truc			36.6% 2.0
Barrier Type (0-Wall, 1-Be	'	0.0		,	leavy IIuc	na. 00.0	0 0.170	30.070 2.0
Centerline Dist. to Ba		64.0 feet		Noise So	ource Elev	ations (in f	eet)	
Centerline Dist. to Obse		64.0 feet			Autos:	0.000		
Barrier Distance to Obse		0.0 feet		Mediur	m Trucks:	2.297		
Observer Height (Above F	'	5.0 feet		Heav	y Trucks:	8.004	Grade Adj	ustment: 0.0
Pad Eleva Road Eleva		0.0 feet		Lano Equ	uivalont D	istance (in	foot)	
Road Eleva Road Gr		0.0 feet		Lane Ly	Autos:	50.210	leelj	
Left V	0			Madiu	m Trucks:	50.033		
Right V		90.0 degrees 90.0 degrees			y Trucks:	50.055		
FHWA Noise Model Calcu	lations							
VehicleType REM	EL Tr	raffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Berm Atte
Autos:	68.46	-3.30	-0.	.13	-1.20	-4.70	0.0	0.0 0.0
Medium Trucks:	79.45	-14.59	-0.	.11	-1.20	-4.88	0.0	0.0 0.0
Heavy Trucks:	84.25	-19.86	-0.	.11	-1.20	-5.31	0.0	0.0 0.0
Unmitigated Noise Levels			-	,				
,	ak Hour	Leq Day		Evening	Leq Ni		Ldn	CNEL
Autos:	63.8	63		61.6		58.9	66.1	-
Medium Trucks:	63.6	62		59.9		59.0	66.1	-
Heavy Trucks:	63.1	61		57.0		60.8	67.3	
Vehicle Noise:	68.3	67	.3	64.7		64.4	71.3	3 7
Centerline Distance to No	ise Conte	our (in feet)	7(	) dBA	65 dB	4	60 dBA	55 dBA
		Lo		706A 78	00 UD	168	362	
		CNE		78 81		108	362	
		GIVE		61		1/4	376	8

Occurring Eviation (2010)			Duciest	/ D	idea Duile		and A M	
Scenario: Existing (2019) Road Name: Placentia Av.				Name: H mber: 1	tider Build	lings 2	and 4 N	C
Road Name: Placenua Av. Road Segment: e/o Indian Av.			JOD INU	mber: 1	1009			
		1						
SITE SPECIFIC INPUT DATA Highway Data		Site Con			ODEL II		5	
		Sile Con	uitions (i			,		
Average Daily Traffic (Adt): 2,231 vehicles		140	dium Tru			15 15		
Peak Hour Percentage: 6.83% Peak Hour Volume: 152 vehicles			avy Truci		'	15		
Vehicle Speed: 45 mph				(S (3+ A	xies).	15		
Near/Far Lane Distance: 80 feet		Vehicle I						
		Veh	icleType			ening	Night	Daily
Site Data						2.3%	19.6%	
Barrier Height: 0.0 feet			edium Tru		69.8%	8.8%	21.4%	
Barrier Type (0-Wall, 1-Berm): 0.0		F	leavy Tru	icks: 5	58.3%	5.1%	36.6%	2.01
Centerline Dist. to Barrier: 64.0 feet		Noise So	urce Ele	vations	(in feet)			
Centerline Dist. to Observer: 64.0 feet			Autos.	0.0	00			
Barrier Distance to Observer: 0.0 feet		Mediur	n Trucks	2.2	97			
Observer Height (Above Pad): 5.0 feet		Heav	y Trucks	8.0	04 Gra	ade Adj	iustment	0.0
Pad Elevation: 0.0 feet		Lane Eq	inclose	Distance	a lin faaf			
Road Elevation: 0.0 feet Road Grade: 0.0%		Lane Equ	Autos		. ,			
0.075		Madiu	Autos. n Trucks					
			v Trucks					
Right View: 90.0 degrees		neav	y mucks	50.0	50			
FHWA Noise Model Calculations								
VehicleType REMEL Traffic Flow L	Distance	Finite	Road	Fresne	el Bar	rier Atte	en Ber	m Atten
Autos: 68.46 -10.41	-0	.13	-1.20	-	4.70	0.0	000	0.00
Medium Trucks: 79.45 -21.70	-	.11	-1.20		4.88		000	0.00
Heavy Trucks: 84.25 -26.97	-0	.11	-1.20	-	5.31	0.0	000	0.00
Unmitigated Noise Levels (without Topo and bar	rier atte	enuation)						
VehicleType Leq Peak Hour Leq Day	Leq	Evening	Leq N	light	Ldi	า	C	NEL
Autos: 56.7 55.9	Э	54.5		51.8		59.0	)	59
Medium Trucks: 56.4 55.3		52.8		51.9		59.0		59
Heavy Trucks: 56.0 54.5		49.9		53.7		60.2		60
Vehicle Noise: 61.2 60.2	2	57.5		57.3		64.2	2	64
Centerline Distance to Noise Contour (in feet)								-
	70	) dBA	65 d	BA	60 d	BA	55	dBA
Ldn	e -	26		56		122		26
CNEL		27		59		126		27

	FHW	/A-RD-77-108 I	IIGHW/	AY I	NOISE PF	REDICTI		DEL			
<i>Scenario:</i> Existi <i>Road Name:</i> Place <i>Road Segment:</i> w/o In	ntia Av	<i>.</i>					Name: F umber: 1		Buildings 2	and 4 N	0
SITE SPECIF	IC IN	PUT DATA							EL INPUTS	3	
Highway Data					Site Con	ditions (	Hard =	10, S	oft = 15)		
Average Daily Traffic (A	dt):	15 vehicles	5					Autos	15		
Peak Hour Percenta	ige:	6.83%				dium Tru		,			
Peak Hour Volu	me:	1 vehicles			He	avy Truc	:ks (3+ A	(xles)	: 15		
Vehicle Spe	ed:	45 mph		ŀ	Vehicle N	Nix					
Near/Far Lane Distar	nce:	80 feet		ŀ		cleType		Day	Evening	Night	Daily
Site Data							utos:	68.29	6 12.3%	19.6%	91.21
Barrier Heig	aht:	0.0 feet			Me	edium Tr	ucks:	69.8%	6 8.8%	21.4%	6.78
Barrier Type (0-Wall, 1-Be		0.0			F	łeavy Tr	ucks:	58.3%	6 5.1%	36.6%	2.01
Centerline Dist. to Bar	rier:	64.0 feet		H	Noise So	urce El	avations	in f	oof)		
Centerline Dist. to Obser	ver:	64.0 feet		H	110/30 00	Autos		000			
Barrier Distance to Obser	ver:	0.0 feet			Mediur	n Trucks		97			
Observer Height (Above P	ad):	5.0 feet				y Trucks		004	Grade Adj	ustment	0.0
Pad Elevat	ion:	0.0 feet									
Road Elevat		0.0 feet		-	Lane Equ				feet)		
Road Gra		0.0%				Autos					
Left V		-90.0 degrees				n Trucks					
Right Vi	ew:	90.0 degrees	5		Heav	y Trucks	s: 50.0	J50			
FHWA Noise Model Calcul	ations										
VehicleType REME	EL	Traffic Flow	Distan	се	Finite		Fresn	-	Barrier Atte	en Bei	m Atter
	68.46	-32.24		-0.1		-1.20		-4.70	0.0		0.00
	79.45	-43.53		-0.1		-1.20		-4.88	0.0		0.00
Heavy Trucks:	84.25	-48.80		-0.1	11	-1.20		-5.31	0.0	00	0.00
Unmitigated Noise Levels	(witho	ut Topo and b	arrier a	tten	nuation)						
VehicleType Leq Pea				eq E	vening	Leq I			Ldn		NEL
Autos:	34.		4.1		32.7		29.9		37.2		37
Medium Trucks:	34.		3.9		30.9		30.0		37.1		37
Heavy Trucks:	34.		2.7		28.1		31.9		38.3		38
	39.	3 3	8.4		35.7		35.5		42.3	1	42
Vehicle Noise:	00.										
Vehicle Noise: Centerline Distance to Noi		ntour (in feet)						r			
				70	dBA	65 0			60 dBA	55	dBA
			dn:	70	<i>dBA</i> 1	65 0	1BA 2 2		60 dBA 4 4	55	dBA 1

	FHW	A-RD-77-108	HIGHW	AY NOISE	PREDICT		DEL			
Road Nam	io: Existing (20 ne: Placentia Av nt: e/o Perris Bl	. Í				t Name: F lumber: 1		Buildings 2	and 4 N	0
	SPECIFIC IN	PUT DATA						L INPUTS	6	
Highway Data				Site Co	onditions	(Hard = 1	10, So	ft = 15)		
Average Daily	Traffic (Adt):	5,998 vehicle	s			A	lutos:	15		
Peak Hour	Percentage:	6.83%				ucks (2 A		15		
Peak H	lour Volume:	410 vehicles	6	ŀ	leavy Tru	cks (3+ A	xles):	15		
Ve	hicle Speed:	45 mph		Vehicle	Mix					
Near/Far La	ne Distance:	80 feet			hicleType	e 1	Day	Evening	Night	Daily
Site Data						Autos: (	, 58.2%	12.3%	19.6%	91.21%
Ba	rrier Height:	0.0 feet			Medium T	rucks: (	59.8%	8.8%	21.4%	6.78%
Barrier Type (0-W	•	0.0			Heavy T	rucks:	58.3%	5.1%	36.6%	2.01%
Centerline Di		64.0 feet		Malaa		levations	() - K-	- 41		
Centerline Dist.	to Observer:	64.0 feet		Noise	Auto			et)		
Barrier Distance	to Observer:	0.0 feet		14-1	Auto um Truck					
Observer Height	Above Pad):	5.0 feet						Grade Adj	votroont	
P	ad Elevation:	0.0 feet		не	avy Truck	S: 8.0	04	Grade Auj	usuneni	. 0.0
Roi	ad Elevation:	0.0 feet		Lane E	quivalen	t Distanc	e (in f	eet)		
	Road Grade:	0.0%			Auto	s: 50.2	10			
	Left View:	-90.0 degree	s	Med	um Truck	s: 50.0	33			
	Right View:	90.0 degree	s	He	avy Truck	s: 50.0	50			
FHWA Noise Mod	el Calculations									
VehicleType	REMEL	Traffic Flow	Dista	nce Fini	e Road	Fresne	e/	Barrier Atte	en Ber	m Atten
Autos:	68.46	-6.11		-0.13	-1.20	-	4.70	0.0	00	0.000
Medium Trucks:	79.45	-17.40		-0.11	-1.20	-	4.88	0.0	00	0.000
Heavy Trucks:	84.25	-22.67		-0.11	-1.20		5.31	0.0	00	0.000
Unmitigated Noise					1					
VehicleType	Leq Peak Hour			eq Evening		Night		Ldn		NEL
Autos:	61.	-	60.2	58	-	56.0		63.3		63.7
Medium Trucks:	60.		60.0	57 54		56.2 58.0		63.3		63.5
Heavy Trucks: Vehicle Noise:	60.	-	58.8 64.5		-			64.5		64.6
	65.			61	ö	61.6		68.5		68.7
Centerline Distand	ce to Noise Col	ntour (in feet)		70 - 10 4		-/0.4		0 -10 4		-10.4
				70 dBA		dBA	6	i0 dBA	55	dBA
			L al a .							500
			Ldn: VEL:	5	1	109		235		506 526

	FH\	VA-RD-77-108	HIGH	IWAY N	OISE PF	REDICTIO	N MODE	iL.					
	o: Existing + F e: Indian Av. t: s/o Morgan						ame: Rio nber: 11	ler Buildings : 559	2 and 4	No			
SITE S	SPECIFIC IN	IPUT DATA			NOISE MODEL INPUTS								
Highway Data				5	Site Con	ditions (H	ard = 10	, Soft = 15)					
	Percentage: our Volume: nicle Speed:	10,168 vehicle 6.83% 694 vehicle 45 mph		١		dium Truc avy Truck: <b>Mix</b>	ks (2 Axl	,					
Near/Far Lar	le Distance:	50 feet			Vehi	icleType	Dá	ay Evening	Night	Daily			
Barrier Type (0-Wa	. ,	<b>0.0 feet</b> 0.0				Au edium Truc Heavy Truc	cks: 69	12.3% 12.3% 1.8% 8.8% 1.3% 5.1%	21.4	% 7.41%			
		47.0 feet		1	loise So	urce Elev	ations (	in feet)					
Barrier Distance t Observer Height (/ Pa Roa	Centerline Dist. to Barrier:         47.0           Centerline Dist. to Observer:         47.0           Barrier Distance to Observer:         0.0           bserver Height (Above Pad):         0.0           Road Elevation:         0.0           Road Elevation:         0.0           Left View:         -90.0			L	Heav ane Equ	Autos: m Trucks: y Trucks: <b>uivalent D</b> Autos: m Trucks:	0.00 2.29 8.00 <i>istance</i> 40.11 39.89	7 4 Grade A (in feet) 2	djustme	nt: 0.0			
FHWA Noise Mode	Right View:	90.0 degree				y Trucks:	39.91	-					
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresnel	Barrier A	tten B	erm Atten			
Autos: Medium Trucks: Heavy Trucks:	68.46 79.45 84.25	-4.09 -14.72 -14.99		1.33 1.33 1.36	7	-1.20 -1.20 -1.20	-4	.87 0	.000 .000 .000	0.000			
Unmitigated Noise	Levels (with	out Topo and	barrie	er atten	uation)								
	Leg Peak Hou			Leg Ev	<u> </u>	Leg Ni	ght	Ldn		CNEL			
Autos:	64		63.7		62.3		59.5	66		67.3			
Medium Trucks:	64	.9	64.2		61.2		60.3	67	.4	67.			
Heavy Trucks:	69	.4	67.9		63.3		67.2	73	.6	73.			
Vehicle Noise:	71	.7	70.5		67.1		68.6	75	.2	75.4			
Centerline Distanc	e to Noise Co	ontour (in feet,	)										
				70 c	IBA 🛛	65 dE	A	60 dBA	1	55 dBA			
			Ldn:		105		225	48	6	1,046			
		Ci	NEL:		108		232	49	9	1,076			

	FHWA-	RD-77-108 HIG	HWAY	NOISE PF	REDICTI		DEL			
Scenario: Ex		ect						Buildings 2	and 4 No	2
Road Name: Pe					Job Ni	imber: '	11559			
Road Segment: n/o	Ramona Ex	wy.								
SITE SPEC	IFIC INPU	T DATA						L INPUT	5	
Highway Data				Site Con	ditions (	Hard =	10, So	ft = 15)		
Average Daily Traffic	(Adt): 28,	816 vehicles				,	Autos:	15		
Peak Hour Perce	ntage: 6.	83%		Me	dium Tru	cks (2 A	(xles)	15		
Peak Hour Ve	olume: 1,9	68 vehicles		He	avy Truc	ks (3+ A	(xles)	15		
Vehicle 3		45 mph		Vehicle I	<i>lix</i>					
Near/Far Lane Dis	tance:	80 feet		Vehi	cleType		Day	Evening	Night	Daily
Site Data					A	utos:	68.2%	12.3%	19.6%	91.27
Barrier H	loiaht:	0.0 feet		Me	edium Tr	ucks:	69.8%	8.8%	21.4%	
Barrier Type (0-Wall, 1-		0.0		ŀ	leavy Tr	ucks:	58.3%	5.1%	36.6%	2.009
Centerline Dist. to E	,	64.0 feet								
Centerline Dist. to Ob		64.0 feet		Noise So				et)		
Barrier Distance to Ob	server:	0.0 feet			Autos		000			
Observer Height (Above	Pad):	5.0 feet			n Trucks		297	Grade Ad	ivetment	
Pad Ele	vation:	0.0 feet		Heav	y Trucks	: 8.0	004	Grade Auj	usuneni	0.0
Road Ele	vation:	0.0 feet		Lane Equ	ıivalent	Distanc	e (in f	eet)		
Road	Grade: 0.	.0%			Autos	: 50.1	210			
Lef	t View: -9	0.0 degrees		Mediur	n Trucks	: 50.0	033			
Right	t View: 9	0.0 degrees		Heav	y Trucks	: 50.0	050			
FHWA Noise Model Cal				1						
			istance			Fresn	-	Barrier Atte		m Atten
Autos:	68.46	0.71	-0.		-1.20		-4.70		000	0.00
Medium Trucks:	79.45	-10.61	-0.		-1.20		-4.88		000	0.00
Heavy Trucks:	84.25	-15.89	-0.	11	-1.20		-5.31	0.0	000	0.00
Unmitigated Noise Leve	ls (without	Topo and bar	rier atte	nuation)						
	Peak Hour	Leq Day		Evening	Leq I			Ldn		VEL
Autos:	67.8	67.0		65.6		62.9		70.1		70
Medium Trucks:	67.5	66.8	-	63.9		63.0		70.0		70.
Heavy Trucks:	67.1	65.6		61.0		64.8		71.2		71.
Vehicle Noise:	72.3	71.3	3	68.6		68.4		75.3	3	75.
Centerline Distance to I	loise Conto	ur (in feet)								
				) dBA	65 c		6	i0 dBA		dBA
		Ldn		144		310		667		1,43
		CNEL	1	149		322		693		1,493

Tuesday, April 7, 2020

	NA-RD-77-108 H	IGHWAY	NOISE PI						
Scenario: Existing + I Road Name: Indian Av. Road Segment: s/o Rider S					Name: R umber: 1		uildings 2 a	ind 4 No	)
SITE SPECIFIC I	IPUT DATA						INPUTS		
Highway Data			Site Con	ditions	(Hard = 1	0, Sof	t = 15)		
Average Daily Traffic (Adt):	6,788 vehicles				A	utos:	15		
Peak Hour Percentage:	6.83%				ucks (2 A)	/	15		
Peak Hour Volume:	464 vehicles		He	avy Truc	cks (3+ A)	des):	15		
Vehicle Speed:	45 mph		Vehicle	Mix					
Near/Far Lane Distance:	50 feet		Veh	icleType	E	ay I	Evening	Night	Daily
Site Data				1	Autos: 6	8.2%	12.3%	19.6%	82.85
Barrier Height:	0.0 feet		М	edium Ti		9.8%	8.8%	21.4%	7.72%
Barrier Type (0-Wall, 1-Berm):	0.0		1	Heavy Ti	rucks: 5	8.3%	5.1%	36.6%	9.43%
Centerline Dist. to Barrier:	47.0 feet		Noise Sr	urce El	evations	(in for	uf)		
Centerline Dist. to Observer:	47.0 feet		110136 00	Auto:			.9		
Barrier Distance to Observer:	0.0 feet		Mediu	m Truck					
Observer Height (Above Pad):	5.0 feet			vy Truck			Grade Adju	stment:	0.0
Pad Elevation:	0.0 feet								
Road Elevation:	0.0 feet		Lane Eq		Distance		et)		
Road Grade:	0.0%			Auto					
Left View:	-90.0 degrees			m Truck					
Right View:	90.0 degrees		nea	y Truck	5. 39.9	15			
FHWA Noise Model Calculation	s								
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road	Fresne	I E	Barrier Atte	n Berr	n Atten
Autos: 68.46			.33	-1.20		4.63	0.00		0.00
Medium Trucks: 79.45			.37	-1.20		4.87	0.00		0.00
Heavy Trucks: 84.25	-15.43	1	.36	-1.20	-	5.46	0.00	00	0.00
Unmitigated Noise Levels (with	out Topo and ba	rrier att	enuation)						
VehicleType Leq Peak Ho		,	Evening		Night		Ldn	CN	IEL
	2.6 61		60.4		57.6		64.9		65.
		.6	59.7		58.7		65.8		66.
		.5	62.9		66.7		73.2		73.
Vehicle Noise: 70	0.8 69	1.5	66.0		67.8		74.4		74.
Centerline Distance to Noise C	ontour (in feet)								
		7	0 dBA	65	dBA	60	) dBA	55	dBA
	La CNE	in:	93 95		200 205		430 441		926 95(

	FHW	A-RD-77-108	HIGHW	AY NOISE I	PREDICT		DEL					
Scenario: Road Name: Road Segment:		,			Project Name: Rider Buildings 2 and 4 No Job Number: 11559							
	ECIFIC IN	PUT DATA						L INPUTS	3			
Highway Data				Site Co	nditions	(Hard = 1	10, So	ft = 15)				
Average Daily Tra	affic (Adt):	24,257 vehicle	s			A	lutos:	15				
Peak Hour Pe	ercentage:	6.83%				ucks (2 A		15				
Peak Hou		1,657 vehicles		H	eavy Tru	cks (3+ A	xles):	15				
	le Speed:	45 mph		Vehicle	Mix							
Near/Far Lane	Distance:	80 feet		Ve	hicleType	e [	Day	Evening	Night	Daily		
Site Data						Autos: 6	58.2%	12.3%	19.6%	91.379		
Barrie	er Heiaht:	0.0 feet			/ledium 1	rucks: 0	59.8%	8.8%	21.4%	6.65		
Barrier Type (0-Wall		0.0			Heavy 7	rucks: 8	58.3%	5.1%	36.6%	1.989		
Centerline Dist.		64.0 feet		Noiso	Courco E	levations	(in fo	nof)				
Centerline Dist. to	Observer:	64.0 feet		NUISE	Auto			eij				
Barrier Distance to	Observer:	0.0 feet		Medi	um Truck							
Observer Height (Ab	ove Pad):	5.0 feet			avy Truck			Grade Adj	ustment	0.0		
Pad	Elevation:	0.0 feet			·		- -					
	Elevation:	0.0 feet		Lane E		t Distance		eet)				
	ad Grade:	0.0%			Auto							
	Left View:	-90.0 degree			um Truck							
R	ight View:	90.0 degree	s	Hea	avy Truck	s: 50.0	150					
FHWA Noise Model	Calculations											
VehicleType	REMEL	Traffic Flow	Distan	ce Finit	e Road	Fresne	e/	Barrier Atte	en Ber	m Atten		
Autos:	68.46	-0.04		-0.13	-1.20		4.70	0.0		0.00		
Medium Trucks:	79.45	-11.41		-0.11	-1.20		4.88	0.0		0.00		
Heavy Trucks:	84.25	-16.69		-0.11	-1.20	-	5.31	0.0	00	0.00		
Unmitigated Noise L			barrier a	ttenuation)	1	,						
	eq Peak Hour			q Evening		Night		Ldn		NEL		
Autos:	67.		66.3	64.	-	62.1		69.4		69		
Medium Trucks:	66.	-	66.0	63.		62.2		69.2		69		
Heavy Trucks:	66.	-	64.8	60.		64.0		70.4		70		
Vehicle Noise:	71.	5	70.5	67.	9	67.6		74.5	)	74		
A 4 11 BL 4	to Noise Col	ntour (in feet)										
Centerline Distance				70 dBA		dBA	6	0 dBA	55	dBA		
Centerline Distance								• •=••				
Centerline Distance			Ldn:	127 132	,	275		592		1,27		

	FH\	WA-RD-77-108	BHIGH	WAY N	IOISE P	REDICTIO		EL				
Scenario Road Name Road Segmen		,					Vame: R mber: 1		uildings 2	and 4 N	0	
SITE S	PECIFIC IN	IPUT DATA			NOISE MODEL INPUTS							
Highway Data					Site Cor	nditions (I	Hard = 1	0, So	ft = 15)			
	Percentage: our Volume:	25,341 vehicl 6.83% 1,731 vehicle				edium Tru eavy Truci	cks (2 A	,	15 15 15			
	icle Speed:	45 mph			Vehicle	Mix						
Near/Far Lan	e Distance:	80 feet		F	VehicleType Day Evening Night Day							
Site Data						A	utos: 6	.2%	12.3%	19.6%	91.25%	
Ban	rier Height:	0.0 feet			М	ledium Tru	icks: 6	69.8%	8.8%	21.4%	6.75%	
Barrier Type (0-Wa		0.0				Heavy Tru	icks: 5	58.3%	5.1%	36.6%	2.00%	
Centerline Dis	t. to Barrier:	64.0 feet		5	Noise S	ource Ele	vations	(in fe	et)			
Centerline Dist. t	o Observer:	64.0 feet		F		Autos						
Barrier Distance t	o Observer:	0.0 feet			Mediu	m Trucks						
Observer Height (A	Above Pad):	5.0 feet				vy Trucks			Grade Ad	ustmen	t: 0.0	
Pa	d Elevation:	0.0 feet		-								
Road Elevation: 0.0 feet				1	Lane Eq	uivalent			eet)			
F	oad Grade:	0.0%				Autos.						
	Left View: Right View:	-90.0 degre 90.0 degre				m Trucks. vy Trucks.						
	•	•	65		nea	vy mucho.	. 00.0	00				
FHWA Noise Mode VehicleType	REMEL	s Traffic Flow	Die	tance	Einite	Road	Fresne		Barrier Atte	an Ro	rm Atten	
Autos	68.46			-0.1		-1.20		4.70			0.00	
Medium Trucks:	79.45			-0.1	-	-1.20		4.88	0.0		0.00	
Heavy Trucks:	84.25			-0.1		-1.20		4.00 5.31	0.0		0.00	
Unmitigated Noise	Levels (with	out Topo and	barrie	er atten	uation)							
VehicleType	Leq Peak Hou	ur Leq Da	V	Leq E	vening	Leq N	light		Ldn	C	NEL	
Autos:	67	7.3	66.5		65.0		62.3		69.5	5	69.	
Medium Trucks:	67	7.0	66.3		63.3		62.4		69.5	5	69.	
Heavy Trucks:	66	3.5	65.0		60.4		64.3		70.7	7	70.	
Vehicle Noise:	71	1.7	70.7		68.1		67.9		74.7	7	75.	
Centerline Distance	e to Noise C	ontour (in feel	9									
			L	70 (	dBA	65 d		6	0 dBA	55	i dBA	
		-	Ldn:		132		284		613		1,320	
		С	NEL:		137		295		637		1,371	

	FHW	A-RD-77-108 HI	GHWAY	NOISE PR							
	Existing + Pr	oject		Project Name: Rider Buildings 2 and 4 No Job Number: 11559							
Road Name:					Job N	lumber:	11559				
Road Segment:	s/o Placentia	Av.									
	ECIFIC INI	PUT DATA						L INPUT	5		
Highway Data				Site Con	ditions	(Hard =	: 10, Sc	oft = 15)			
Average Daily Tr	affic (Adt):	27,334 vehicles					Autos:	15			
Peak Hour Pe	ercentage:	6.83%		Me	dium Tri	ucks (2	Axles):	15			
Peak Hou	r Volume:	1,867 vehicles		He	avy Truc	cks (3+	Axles):	15			
	le Speed:	45 mph		Vehicle I	<i>lix</i>						
Near/Far Lane	Distance:	80 feet			cleType		Day	Evening	Night	Daily	
Site Data						Autos:	68.2%	12.3%	19.6%	91.239	
Barrie	er Height:	0.0 feet		Me	edium Ti	rucks:	69.8%	8.8%	21.4%	6.769	
Barrier Type (0-Wall		0.0		F	leavy T	rucks:	58.3%	5.1%	36.6%	2.019	
Centerline Dist.	. ,	64.0 feet		Noise So	uree El	overtien	o (in fe	of			
Centerline Dist. to	Observer:	64.0 feet		NOISe 30				el)			
Barrier Distance to	Observer:	0.0 feet		14	Auto n Truck		.000 .297				
Observer Height (At	ove Pad):	5.0 feet			y Truck		.297	Grade Ad	ustment	0.0	
Pad	Elevation:	0.0 feet		Ticav	y much	3. 0	.004	0/000/10	uounoni	0.0	
Road Elevation: 0.0 feet				Lane Equ	ıivalent	t Distan	ce (in i	feet)			
Ro	Road Grade: 0.0%				Auto	s: 50	.210				
	Left View:	-90.0 degrees			n Truck		.033				
R	light View:	90.0 degrees		Heav	y Truck	s: 50	.050				
FHWA Noise Model				1							
VehicleType			Distance			Fres	-	Barrier Atte		m Atten	
Autos:	68.46	0.48	-	.13	-1.20		-4.70	0.0		0.00	
Medium Trucks:	79.45	-10.82		.11	-1.20		-4.88	0.0		0.00	
Heavy Trucks:	84.25	-16.10	-0	.11	-1.20		-5.31	0.0	00	0.00	
Unmitigated Noise L			-				-				
	eq Peak Hour			Evening	Leq	Night		Ldn		VEL	
Autos:	67.			65.4		62.		69.9		70.	
Medium Trucks:	67.3			63.7		62.		69.8		70.	
Heavy Trucks:	66.			60.8		64.	-	71.0		71.	
Vehicle Noise:	72.0		1	68.4		68.	2	75.1		75.	
Centerline Distance	to Noise Cor	ntour (in feet)		1							
				0 dBA	65	dBA		0 dBA		dBA	
		Ldr		139		300		645		1,390	
		CNEL		144		311		670		1.444	

Tuesday, April 7, 2020

	FH\	VA-RD-77-108	HIGH	IWAY N	NOISE PR	REDICTI		DEL			
Road Nam	io: Existing + F e: Perris Bl. nt: s/o Rider S						Name: R lumber: 1		Buildings 2 a	nd 4 No	)
	SPECIFIC IN	IPUT DATA							L INPUTS		
Highway Data				4	Site Con	ditions	(Hard = 1	10, Se	oft = 15)		
Average Daily	Traffic (Adt):	27,055 vehicle	s				A	utos:	15		
Peak Hour	Percentage:	6.83%			Med	dium Tru	ucks (2 A.	xles).	15		
Peak H	our Volume:	1,848 vehicles	6		Hea	avy Truc	cks (3+ A.	xles).	15		
Ve	hicle Speed:	45 mph			Vehicle N	Niv	-				
Near/Far La	ne Distance:	80 feet		H		icleType		Day	Evening	Night	Daily
Site Data					1011			58.2%	•	19.6%	
Ba	wier Height	0.0 feet			Μe	edium Tr		59.8%		21.4%	6.73%
вал Barrier Type (0-W	rier Height:	0.0 reet			F	leavy Tr	rucks: 5	58.3%	5.1%	36.6%	2.00%
Centerline Dis		0.0 64.0 feet									
Centerline Dist.		64.0 feet		1	Noise So				eet)		
Barrier Distance		0.0 feet				Autos					
Observer Height (		5.0 feet				n Trucks					
Pa	0.0 feet			Heav	y Trucks	s: 8.0	04	Grade Adju	stment:	0.0	
	ad Elevation:	0.0 feet		7	Lane Equ	uivalent	Distance	e (in	feet)		
	Road Grade:	0.0%		-		Auto					
	Left View:	-90.0 degree	s		Mediur	n Trucks	s: 50.0	33			
	Right View:	90.0 degree			Heav	y Truck	s: 50.0	50			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresne	e/	Barrier Atter	n Berr	n Atten
Autos:	68.46	0.43		-0.1	3	-1.20	-	4.70	0.00	00	0.00
Medium Trucks:	79.45	-10.89		-0.1	1	-1.20	-	4.88	0.00	00	0.00
Heavy Trucks:	84.25	-16.16		-0.1	1	-1.20	-	5.31	0.00	00	0.000
Unmitigated Noise					í						
	Leq Peak Hou			Leg E	vening	Leq	Night		Ldn	CN	IEL
Autos:	67		66.8		65.3		62.6		69.8		70.:
Medium Trucks:	67		66.6		63.6		62.7		69.8		70.0
Heavy Trucks:	66		65.3		60.7		64.5		71.0		71.
Vehicle Noise:			71.0		68.4		68.1		75.0		75.2
Centerline Distand	e to Noise Co	ontour (in feet)		70.	dBA	65	dBA		60 dBA	55	dBA
			Ldn:	700	ава 138	00 0	ава 297		640	55	ава 1,378
			VEL:		138		308		664 664		1,378

	FHV	VA-RD-77-108	HIGH	IWAY N	NOISE PF	REDICTI	ON MOD	EL			
	o: Existing + F e: Redlands A nt: n/o Morgan	w.					Name: R umber: 1		3uildings 2	and 4 N	o
SITE	SPECIFIC IN	IPUT DATA				N	OISE M	ODE		S	
Highway Data				1	Site Con	ditions	(Hard = 1	0, Sc	oft = 15)		
Average Daily	Traffic (Adt):	1,460 vehicle	es				A	utos:	15		
Peak Hour	Percentage:	6.83%			Me	dium Tru	icks (2 A)	(les):	15		
Peak H	our Volume:	100 vehicles	s		He	avy Truc	cks (3+ A)	(les):	15		
Ve	hicle Speed:	45 mph		-	Vehicle I	Aise					
Near/Far La	ne Distance:	50 feet		H		icleType	Г	Day	Evening	Night	Daily
Site Data					Veni			ay 8.2%		19.6%	
					M	ر edium Ti		9.8%		21.4%	
	rier Height:	0.0 feet				leavy Ti		8.3%		36.6%	
Barrier Type (0-W		0.0			'	leavy II	<i>uchs.</i> a	0.07	5 3.170	30.070	1.507
Centerline Dis		47.0 feet		1	Noise So	urce El	evations	(in fe	eet)		
Centerline Dist.		47.0 feet				Autos	s: 0.0	00			
Barrier Distance		0.0 feet			Mediur	n Truck	s: 2.2	97			
Observer Height (	,	5.0 feet			Heav	y Truck	s: 8.00	04	Grade Adj	justmen	: 0.0
	ad Elevation:	0.0 feet		H			Distance		64		
	ad Elevation:	0.0 feet		-	Lane Equ		Distance		reet)		
ŀ	Road Grade:	0.0%				Auto: n Truck:					
	Left View:	-90.0 degree				m Truck: v Truck:					
		90.0 degree	es				s: 39.9	13			
	Right View:	50.0 degree			11041	<i>y 1100</i>					
FHWA Noise Mode					, iour	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
FHWA Noise Mode VehicleType			Disi	tance	Finite	-	Fresne	1	Barrier Atte	en Be	rm Atten
	el Calculation	s		tance 1.3	Finite	-		1 4.63		en Be	
VehicleType	el Calculation: REMEL	s Traffic Flow -12.16			Finite	, Road	-		0.0		0.00
VehicleType Autos:	el Calculation REMEL 68.46	s Traffic Flow -12.16		1.3	Finite	Road -1.20	-	4.63	0.0 0.0	000	0.00 0.00
VehicleType Autos: Medium Trucks: Heavy Trucks:	el Calculations REMEL 68.46 79.45 84.25	s <i>Traffic Flow</i> -12.16 -24.63 -29.91		1.3 1.3 1.3	Finite 3 7 6	Road -1.20 -1.20	-	4.63 4.87	0.0 0.0	000	0.00 0.00
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise	el Calculations REMEL 68.46 79.45 84.25	s Traffic Flow -12.16 -24.63 -29.91 out Topo and	barrie	1.3 1.3 1.3 er atten	Finite 3 7 6	Road -1.20 -1.20 -1.20	  Night	4.63 4.87	0.0 0.0 0.0	000 000 000 C	0.00 0.00 0.00
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos:	Calculations REMEL 68.46 79.45 84.25 Clevels (without Leg Peak Hout 56	s <u>Traffic Flow</u> -12.16 -24.63 -29.91 out Topo and ur Leq Day 4.4	<i>barrie</i> / 55.6	1.3 1.3 1.3 er atten	Finite Fi	Road -1.20 -1.20 -1.20		4.63 4.87	0.0 0.0 0.0 <i>Ldn</i> 58.7	000 000 000 000 C	0.00 0.00 0.00 NEL 59.
VehicleType Autos: Medium Trucks: Heavy Trucks: <b>Unmitigated Noise</b> VehicleType	El Calculation REMEL 68.46 79.45 84.25 Levels (with Leg Peak Hou	s <u>Traffic Flow</u> -12.16 -24.63 -29.91 out Topo and ur Leq Day 4.4	barrie	1.3 1.3 1.3 er atten	Finite 3 7 6 wation) vening	Road -1.20 -1.20 -1.20	  Night	4.63 4.87	0.0 0.0 0.0	000 000 000 000 C	0.00 0.00 0.00 NEL 59.
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos:	Calculations REMEL 68.46 79.45 84.25 Clevels (without Leg Peak Hout 56	s Traffic Flow -12.16 -24.63 -29.91 out Topo and ir Leq Day 4.4 5.0	<i>barrie</i> / 55.6	1.3 1.3 1.3 er atten	Finite Fi	Road -1.20 -1.20 -1.20		4.63 4.87	0.0 0.0 0.0 <i>Ldn</i> 58.7	000 000 000 000 7 5	0.00 0.00 0.00 NEL 59. 57.
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	el Calculations REMEL 68.46 79.45 84.25 e Levels (with Leg Peak Hou 56 55	s Traffic Flow -12.16 -24.63 -29.91 out Topo and ir Leq Day .4 .0 .5	<i>barrie</i> ⁄ 55.6 54.3	1.3 1.3 1.3 er atten	<i>Finite</i> 3 7 6 <i>vening</i> 54.2 51.3	Road -1.20 -1.20 -1.20		4.63 4.87	0.0 0.0 0.0 <i>Ldn</i> 58.7 57.5	000 000 000 7 7 7	0.00 0.00 0.00 NEL 59. 57. 58.
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	A Calculation: REMEL 68.46 79.45 84.25 6 Levels (with Leq Peak Hou 56 55 54 60	s Traffic Flow -12.16 -24.63 -29.91 out Topo and rr Leq Day .4 .0 .5 .2	barrie 55.6 54.3 53.0 59.2	1.3 1.3 1.3 er atten Leg Et	Finite 3 7 6 uation 54.2 51.3 48.4 56.7	Road -1.20 -1.20 -1.20 Leg	Night 51.5 50.4 52.3 56.2	4.63 4.87 5.46	0.0 0.0 0.0 58.7 57.5 58.7 63.1	000 000 000 7 7 7 1	0.00 0.00 0.00 <u>NEL</u> 59. 57. 58. 63.
VehicleType Autos: Medium Trucks: Heavy Trucks: Unnitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	A Calculation: REMEL 68.46 79.45 84.25 6 Levels (with Leq Peak Hou 56 55 54 60	s Traffic Flow -12.16 -24.63 -29.91 out Topo and r Leq Day 4.4 .0 .5 .2 ontour (in feet	barrie 55.6 54.3 53.0 59.2	1.3 1.3 1.3 er atten Leg Et	<i>Finite</i> 3 7 6 <i>vening</i> 54.2 51.3 48.4 56.7 <i>dBA</i>	Road -1.20 -1.20 -1.20 Leg	Night 51.5 50.4 52.3 56.2	4.63 4.87 5.46	0.0 0.0 0.0 58.7 57.5 58.7 63.1	000 000 000 7 5 7 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0.000 0.000 0.000 NEL 59: 57:4 63:4 63:4
VehicleType Autos: Medium Trucks: Heavy Trucks: Unnitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	A Calculation: REMEL 68.46 79.45 84.25 6 Levels (with Leq Peak Hou 56 55 54 60	s Traffic Flow -12.16 -24.63 -29.91 out Topo and ir Leg Day 1.4 .0 .5 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2	barrie 55.6 54.3 53.0 59.2	1.3 1.3 1.3 er atten Leg Et	Finite 3 7 6 uation 54.2 51.3 48.4 56.7	Road -1.20 -1.20 -1.20 Leg	Night 51.5 50.4 52.3 56.2	4.63 4.87 5.46	0.0 0.0 0.0 58.7 57.5 58.7 63.1	000 000 7 7 7 1 5 7	0.000 0.000 0.000 NEL 59. 57.8 58.8 63.4

	FHWA	-RD-77-108	HIG	HWAY	NOISE	PREDIC	TION MO	DEL				
<i>Scenario:</i> Existin <i>Road Name:</i> Redlar <i>Road Segment:</i> s/o Rid	ds Av.	ject			Project Name: Rider Buildings 2 and 4 No Job Number: 11559							
SITE SPECIFI	C INPL	UT DATA					NOISE	MOD	L INPUT	s		
Highway Data					Site Co	onditions	s (Hard =	: 10, S	oft = 15)			
Average Daily Traffic (Ac Peak Hour Percentag Peak Hour Volun	ie: 6	l,109 vehicle 3.83% 281 vehicle:				Aedium T Heavy Tri			: 15			
Vehicle Spee	d:	45 mph			Vehicl	o Mix						
Near/Far Lane Distant	e:	50 feet			VehicleType Day Evening Night Dail							
Site Data						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Autos:	68.29		19.69		
Barrier Heig		0.0 feet				Medium	Trucks:	69.8%	6 8.8%	21.49	6 6.249	
Barrier Type (0-Wall, 1-Berr		0.0				Heavy	Trucks:	58.3%	6 5.1%	36.6%	6 1.85%	
Centerline Dist. to Barri	er:	47.0 feet			Noise	Source E	levatio	s (in f	eet)			
Centerline Dist. to Observ	er:	47.0 feet			110100	Aut		.000	000			
Barrier Distance to Observ	er:	0.0 feet			Med	ium Truc		297				
Observer Height (Above Pa	·	5.0 feet				avy Truc		.004	Grade Ad	justmer	nt: 0.0	
Pad Elevation		0.0 feet			Long	quivaler	t Distar	aa (in	faati			
Road Elevatio Road Grad		0.0 feet			Lane	quivalei Aut		.112	leel)			
		0.0%				Aut ium Truc		.112				
Left Vie Right Vie		90.0 degree 90.0 degree				avy Truc		.913				
FHWA Noise Model Calcula	tions											
VehicleType REME		raffic Flow	Di	istance	Fini	te Road	Fres	nel	Barrier Att	en Be	erm Atten	
Autos: 6	3.46	-7.72		1.3	33	-1.20	)	-4.63	0.0	000	0.00	
Medium Trucks: 7	9.45	-19.40		1.3	37	-1.20	)	-4.87	0.0	000	0.00	
Heavy Trucks: 8	1.25	-24.68		1.3	36	-1.20	)	-5.46	0.0	000	0.00	
Unmitigated Noise Levels (	vithou	t Topo and	barr	ier atte	nuation	)						
VehicleType Leq Peak	Hour	Leq Day	/	Leq E	Evening	Leo	q Night		Ldn	(	ONEL	
Autos:	60.9		60.1		58	.6	55	9	63.	-	63.	
Medium Trucks:	60.2		59.5		56	.6	55	6	62.	7	63.	
Heavy Trucks:	59.7		58.3		53	.7	57	5	63.9	9	64.	
Vehicle Noise:	65.1		64.1		61	.5	61	2	68.	1	68.	
Centerline Distance to Nois	e Cont	our (in feet,	)									
					dBA	65	5 dBA		60 dBA	5	5 dBA	
			Ldn:		3	5	7	5	162	_	349	
		Ci	NEL:		3	6	7	3	168		363	

		RD-77-108 HIG	TWVAT	NOISE PR							
	Existing + Proje	ect						uildings 2	and 4 No	C	
	Ramona Exwy.				Job Ni	imber: '	11559				
Road Segment: \											
	ECIFIC INPU	T DATA							5		
Highway Data				Site Cond	ditions (	Hard =	10, So	,			
Average Daily Tra		129 vehicles					Autos:	15			
Peak Hour Per		83%		Medium Trucks (2 Axles): 15							
Peak Hour		41 vehicles		Heavy Trucks (3+ Axles): 15							
		55 mph		Vehicle N	lix						
Near/Far Lane I	Distance: 1	02 feet		Vehi	cleType		Day	Evening	Night	Daily	
Site Data					A	utos:	68.2%	12.3%	19.6%	91.29	
Barrie	r Height:	0.0 feet			dium Tr		69.8%		21.4%	6.719	
Barrier Type (0-Wall,	1-Berm):	0.0		H	leavy Tr	ucks:	58.3%	5.1%	36.6%	1.999	
Centerline Dist. to	o Barrier: 9	2.0 feet	ŀ	Noise So	urce Ele	vations	s (in fe	et)			
Centerline Dist. to C		2.0 feet	-		Autos		000				
Barrier Distance to C		0.0 feet		Mediun	n Trucks		297				
Observer Height (Abo	,	5.0 feet		Heav	y Trucks	: 8.0	004	Grade Adj	ustment.	0.0	
		0.0 feet	-			Distant	- / 4	41			
		0.0 feet	-	Lane Equ				eet)			
		0%		Ma dia m	Autos						
		0.0 degrees			n Trucks y Trucks						
Rig	ght View: 9	0.0 degrees		neav	y mucks	. 70.0	529				
FHWA Noise Model C	alculations		1								
VehicleType F	REMEL Tra	affic Flow Di	istance	Finite	Road	Fresn	el .	Barrier Atte	en Ber	m Atten	
Autos:	71.78	1.27	-2.8	39	-1.20		-4.76	0.0	00	0.00	
Medium Trucks:	82.40	-10.06	-2.8		-1.20		-4.88	0.0		0.00	
Heavy Trucks:	86.40	-15.33	-2.8	88	-1.20		-5.18	0.0	00	0.00	
Unmitigated Noise Le	vels (without	Topo and barr	ier atter	nuation)							
VehicleType Leo	q Peak Hour	Leq Day	Leq E	vening	Leq I	Vight		Ldn	CI	VEL	
Autos:	69.0	68.2		66.7		64.0	)	71.2	2	71.	
Medium Trucks:	68.3	67.6		64.6		63.7		70.8	3	71	
Heavy Trucks:	67.0	65.5		60.9		64.7		71.2	2	71	
Vehicle Noise:	72.9	72.0		69.5		68.9		75.8	3	76	
Centerline Distance to	o Noise Conto	ur (in feet)									
			70	dBA	65 0	IBA	6	0 dBA	55	dBA	
		Ldn:		225		485		1,045		2,25	
		CNEL:		234		505		1.088		2.34	

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL Project Name: Rider Buildings 2 and 4 No Job Number: 11559 Scenario: Existing + Project Road Name: Redlands Av. Road Segment: s/o Placentia Av. SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15) Highway Data Average Daily Traffic (Adt): Peak Hour Percentage: Autos: 15 5 844 vehicles 6.83% Medium Trucks (2 Axles): 15 Peak Hour Volume: 399 vehicles Heavy Trucks (3+ Axles): 15 Vehicle Speed: 45 mph Vehicle Mix Near/Far Lane Distance: 50 feet Day Evening Night Daily VehicleType 
 Autos:
 68.2%
 12.3%
 19.6%
 91.30%

 Medium Trucks:
 69.8%
 8.8%
 21.4%
 6.71%
 Site Data Barrier Height: Barrier Type (0-Wall, 1-Berm): 0.0 feet Heavy Trucks: 58.3% 5.1% 36.6% 1.99% 0.0 Centerline Dist. to Barrier: 47.0 feet Noise Source Elevations (in feet) Centerline Dist. to Observer: 47.0 feet Autos: 0.000 Medium Trucks: 2.297 Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Heavy Trucks: 8.004 Grade Adjustment: 0.0 Pad Elevation: 0.0 feet Road Elevation: Road Grade: 0.0 feet 0.0% Lane Equivalent Distance (in feet) 
 Autos:
 40.112

 Medium Trucks:
 39.891

 Heavy Trucks:
 39.913
 Left View: -90.0 degrees 90.0 degrees Right View: FHWA Noise Model Calculations 
 IEL
 Traffic Flow
 Distance
 Finite Road
 Fresnel
 Barrier Atten
 Berm Atten

 68.46
 -6.22
 1.33
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 1.00</td VehicleType REMEL Autos: 68. Medium Trucks: 79. -4.63 -6.22 -1.20 0.000 0.000 79.45 -17.56 1.37 -1.20 -4.87 0.000 0.000 Heavy Trucks: 84.25 -22.84 1.36 -1.20 -5.46 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) CNEL VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn

61.4 60.1	58.4 55.5	57.5 59.3	64.6	64.9
	55.5	50.2		
		59.5	65.8	65.9
65.8	63.2	62.9	69.8	70.0
(in feet)	70 dBA	65 dBA	60 dRA	55 dBA
l dn:				456
CNEL:	40	102	220	473
	(in feet) Ldn:	(in feet) 70 dBA Ldn: 46	(in feet) 70 dBA 65 dBA Ldn: 46 98	(in feet) 70 dBA 65 dBA 60 dBA Ldn: 46 98 212

sullulings z a	and 4 No						
NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)							
ft = 15)							
15							
15							
15							
Vehicle Mix							
Evening	Night [	Daily					
12.3%	19.6% 9	1.24					
8.8%	21.4%	6.76					
5.1%	36.6%	2.01					
et)							
Grade Adii	ustment: 0.	0					
'eet)							
Barrier Atte							
0.0		0.0					
0.0		0.0					
0.0	00	0.0					
	0.15						
Ldn	CNEL						
70.7		71					
70.3		70					
70.7		70					
75.3		75					
0 -10 4	65 × 10						
966		2,08					
i0 dBA	966	966					

Tuesday, April 7, 2020

	FHW	/A-RD-77-108 H	IGHWAY	NOISE I	PREDICTIO	N MODEL					
Scenario: Road Name: Road Segment:						ame: Rider nber: 11559	Buildings 2	and 4 No			
SITE SP	ECIFIC INI	PUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Co	nditions (H	ard = 10, S	oft = 15)				
Average Daily Tra	ffic (Adt):	2,413 vehicles				Autos	: 15				
Peak Hour Pe	centage:	6.83%		N	ledium Truc	ks (2 Axles)	: 15				
Peak Hour	Volume:	165 vehicles		E	leavy Truck	s (3+ Axles)	: 15				
Vehici	e Speed:	45 mph		Vehicle	Mix						
Near/Far Lane	Distance:	50 feet			hicleType	Dav	Evening	Night Daily			
Site Data				ve		tos: 68.2	•	19.6% 67.69%			
				- ,	Au Medium Truc			21.4% 9.43%			
	r Height:	0.0 feet		,	Heavy True			36.6% 22.88%			
Barrier Type (0-Wall,	,	0.0			neavy nat	M3. 00.0	0.170	00.070 22.007			
Centerline Dist. t		47.0 feet		Noise S	Source Elev	ations (in a	feet)				
Centerline Dist. to (		47.0 feet			Autos:	0.000					
Barrier Distance to (		0.0 feet		Medi	um Trucks:	2.297					
Observer Height (Ab	Elevation:	5.0 feet 0.0 feet		Hea	avy Trucks:	8.004	Grade Adj	ustment: 0.0			
	Elevation:	0.0 feet		Lano F	quivalent D	istanco (in	foot)				
	d Grade:	0.0%		Lano L	Autos:	40.112	1000				
	eft View:	-90.0 degrees		Modi	um Trucks:	39.891					
	ght View:	90.0 degrees			avy Trucks:	39.913					
FHWA Noise Model C	alculations										
VehicleType	REMEL	Traffic Flow	Distance	e Finit	e Road	Fresnel	Barrier Atte	en Berm Atten			
Autos:	68.46	-11.36	1	.33	-1.20	-4.63	0.0	0.00			
Medium Trucks:	79.45	-19.92	1	.37	-1.20	-4.87	0.0	00.0 0.00			
Heavy Trucks:	84.25	-16.07	1	.36	-1.20	-5.46	0.0	00.00			
Unmitigated Noise Le	evels (witho	ut Topo and ba	arrier atte	enuation	)						
VehicleType Le	q Peak Hour	<ul> <li>Leq Day</li> </ul>	Leq	Evening	Leq Ni	ght	Ldn	CNEL			
Autos:	57.		5.4	55.	-	52.3	59.5				
Medium Trucks:	59.		9.0	56.	-	55.1	62.2				
Heavy Trucks:	68.		5.9	62.	-	66.1	72.5				
Vehicle Noise:	69.3		7.8	63.	8	66.6	73.1	73.			
Centerline Distance t	o Noise Coi	ntour (in feet)	7	0 dBA	65 dE	4	60 dBA	55 dBA			
			dn:								
		CNE		76		163 167	352 359				
		CIVE		1	r	107	309	113			

Occurring Enterting & Bealant	Project Names Didas Duildings 0 and 4 Na							
Scenario: Existing + Project Road Name: Rider St.	Project Name: Rider Buildings 2 and 4 No Job Number: 11559							
Road Name: Rider St. Road Segment: e/o Perris Bl.	JOD NUMBER. 11559							
SITE SPECIFIC INPUT DATA	NOISE MODEL INPUTS							
Highway Data	Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt): 12,390 vehicles	Autos: 15							
Peak Hour Percentage: 6.83%	Medium Trucks (2 Axles): 15							
Peak Hour Volume: 846 vehicles	Heavy Trucks (3+ Axles): 15							
Vehicle Speed: 45 mph	Vehicle Mix							
Near/Far Lane Distance: 50 feet	Venicle Mix Vehicle Type Day Evening Night Daily							
Site Data	Autos: 68.2% 12.3% 19.6% 91.44							
	Medium Trucks: 69.8% 8.8% 21.4% 6.60							
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0	Heavy Trucks: 58.3% 5.1% 36.6% 1.96							
Centerline Dist. to Barrier: 47.0 feet								
Centerline Dist. to Observer: 47.0 feet	Noise Source Elevations (in feet)							
Barrier Distance to Observer: 0.0 feet	Autos: 0.000							
Observer Height (Above Pad): 5.0 feet	Medium Trucks: 2.297							
Pad Elevation: 0.0 feet	Heavy Trucks: 8.004 Grade Adjustment: 0.0							
Road Elevation: 0.0 feet	Lane Equivalent Distance (in feet)							
Road Grade: 0.0%	Autos: 40.112							
Left View: -90.0 degrees	Medium Trucks: 39.891							
Right View: 90.0 degrees	Heavy Trucks: 39.913							
FHWA Noise Model Calculations								
VehicleType REMEL Traffic Flow Distan								
Autos: 68.46 -2.95	1.33 -1.20 -4.63 0.000 0.0							
Medium Trucks: 79.45 -14.37	1.37 -1.20 -4.87 0.000 0.0							
Heavy Trucks: 84.25 -19.64	1.36 -1.20 -5.46 0.000 0.0							
Inmitigated Noise Levels (without Topo and barrier a								
	q Evening Leq Night Ldn CNEL							
Autos: 65.6 64.8	63.4 60.7 67.9 68							
Medium Trucks: 65.3 64.6 Heavy Trucks: 64.8 63.3	61.6 60.7 67.8 68 58.7 62.5 69.0 69							
Heavy Trucks:         64.8         63.3           Vehicle Noise:         70.0         69.1	<u>58.7</u> 62.5 69.0 68 66.4 66.2 73.0 73							
	00.4 00.2 10.0 10							
Centerline Distance to Noise Contour (in feet)	70 dBA 65 dBA 60 dBA 55 dBA							
Ldn:	70 dBA 65 dBA 60 dBA 55 dBA 75 161 347 74							
	10 101 347 74							

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Scenario: Existing +	Project			Project	Name <sup>,</sup> Di	der Buildings 2	and A M	0
Road Name: Morgan St.					umber: 11			0
Road Segment: e/o Perris I	BI.							
SITE SPECIFIC II	NPUT DATA			N	IOISE MO	DEL INPUT	s	
Highway Data			Site Co	nditions	(Hard = 10	), Soft = 15)		
Average Daily Traffic (Adt):	2,381 vehicle	s			AL	<i>itos:</i> 15		
Peak Hour Percentage:	6.83%		٨	ledium Tri	ucks (2 Ax	<i>les):</i> 15		
Peak Hour Volume:	163 vehicles		F	leavy Tru	cks (3+ Ax	<i>les):</i> 15		
Vehicle Speed:	45 mph		Vehicle	Mix				
Near/Far Lane Distance:	50 feet			hicleType	Di	ay Evening	Night	Daily
Site Data					Autos: 68	3.2% 12.3%	19.6%	68.58
Barrier Height:	0.0 feet		1	Aedium T	rucks: 69	9.8% 8.8%	21.4%	8.53%
Barrier Type (0-Wall, 1-Berm):	0.0			Heavy T	rucks: 58	3.3% 5.1%	36.6%	22.899
Centerline Dist. to Barrier:	47.0 feet		Noiso	Courco El	evations (	in foot)		
Centerline Dist. to Observer:	47.0 feet		NUISE	Auto		,		
Barrier Distance to Observer:	0.0 feet		Mod	um Truck				
Observer Height (Above Pad):	5.0 feet			avy Truck			iustment	· 0.0
Pad Elevation:	0.0 feet						aoanona	. 0.0
Road Elevation:	0.0 feet		Lane E		Distance	. ,		
Road Grade:	0.0%			Auto		-		
Left View:	-90.0 degree			um Truck				
Right View:	90.0 degree	s	He	avy Truck	s: 39.91	3		
FHWA Noise Model Calculation	s							
VehicleType REMEL	Traffic Flow	Distan	ce Finit	e Road	Fresnel	Barrier Att	en Ber	m Atten
Autos: 68.46	-11.36		1.33	-1.20	-4	.63 0.0	000	0.00
Medium Trucks: 79.45	-20.42		1.37	-1.20	-4	.87 0.0	000	0.00
Heavy Trucks: 84.25	-16.13		1.36	-1.20	-5	.46 0.0	000	0.00
Unmitigated Noise Levels (with	out Topo and I	barrier a	tenuation					
VehicleType Leq Peak Ho			q Evening		Night	Ldn		NEL
		56.4	55.		52.3	59.		59.
		58.5	55.		54.6	61.		62.
		6.8	62		66.0	72.		72.
Vehicle Noise: 69	9.1 (	67.7	63	7	66.5	73.0	D	73.
Centerline Distance to Noise C	ontour (in feet)							
			70 dBA		dBA	60 dBA		dBA
		_dn: IEL:	7		161 164	347 354		747 763

	FHV	VA-RD-77-108	HIGHV	VAY N	IOISE PF	REDICT	ON MODE	-		
Road Nam	io: Existing + P e: Rider St. nt: e/o Redland	,					Name: Ride umber: 115	er Buildings 2 59	and 4 N	0
SITE	SPECIFIC IN	IPUT DATA				N	OISE MO	DEL INPUT	s	
Highway Data				5	Site Con	ditions	(Hard = 10,	Soft = 15)		
Average Daily	Traffic (Adt):	15,401 vehicle	es				Auto	os: 15		
Peak Hour	Percentage:	6.83%			Me	dium Tri	icks (2 Axle	s): 15		
Peak H	lour Volume:	1,052 vehicles	6		He	avy Tru	cks (3+ Axle	s): 15		
Ve	hicle Speed:	45 mph			Vehicle I	Niv				
Near/Far La	ne Distance:	50 feet		-		icleType	Da	/ Evening	Night	Daily
Site Data					1011		Autos: 68.	•	19.6%	
Ba	rier Height:	0.0 feet			Me	edium Ti	ucks: 69.		21.4%	
Barrier Type (0-W	•	0.0 1001			F	leavy T	ucks: 58.	3% 5.1%	36.6%	1.95%
Centerline Dis		47.0 feet								
Centerline Dist.		47.0 feet		^	Voise So		evations (ir	n feet)		
Barrier Distance		0.0 feet				Auto				
Observer Height (		5.0 feet				n Truck				
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.004	Grade Ad	justmen	2 0.0
	ad Elevation:	0.0 feet		L	ane Equ	uivalent	Distance (	in feet)		
	Road Grade:	0.0%				Auto	s: 40.112	-		
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 39.891			
	Right View:	90.0 degree	es		Heav	y Truck	s: 39.913			
FHWA Noise Mode	el Calculation	s								
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresnel	Barrier Att	en Be	rm Atten
		Traffic Flow -2.01	Dista	ance 1.33		Road -1.20	Fresnel -4.0		en Be	
VehicleType	REMEL		Dista		3			53 0.0		0.000
VehicleType Autos:	REMEL 68.46	-2.01	Dista	1.33	3 7	-1.20	-4.0	53 0.0 37 0.0	000	0.000
VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 68.46 79.45 84.25	-2.01 -13.44 -18.71		1.33 1.37 1.36	3 7 6	-1.20 -1.20	-4.0 -4.8	53 0.0 37 0.0	000	0.000
VehicleType Autos: Medium Trucks: Heavy Trucks: <b>Jnmitigated Noise</b>	REMEL 68.46 79.45 84.25	-2.01 -13.44 -18.71 Dut Topo and	barrier	1.33 1.37 1.36 atten	3 7 6	-1.20 -1.20 -1.20	-4.0 -4.8	53 0.0 37 0.0	000 000 000	0.000
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos:	REMEL 68.46 79.45 84.25 2 Levels (without Leg Peak Hout 66	-2.01 -13.44 -18.71 <b>Dut Topo and</b> r Leq Day .6	barrier 1 65.8	1.33 1.37 1.36 atten	3 7 6 <i>uation)</i> <i>vening</i> 64.4	-1.20 -1.20 -1.20	-4.6 -4.8 -5.4 Night 61.6	53 0.0 37 0.0 46 0.0 <u>Ldn</u> 68.9	000 000 000 000 C	0.000 0.000 0.000 NEL 69.3
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	REMEL 68.46 79.45 84.25 2 Levels (without Leg Peak Hout 66 66	-2.01 -13.44 -18.71 <b>out Topo and</b> rr Leq Day .6 .2	barrier 65.8 65.5	1.33 1.37 1.36 atten	3 7 6 <i>uation)</i> <i>/ening</i> 64.4 62.5	-1.20 -1.20 -1.20 <i>Leq</i>	-4.6 -4.8 -5.4 Night 61.6 61.6	53 0.0 57 0.0 16 0.0 Ldn 68.9 68.1	000 000 000 000 C 9 7	0.000 0.000 0.000 NEL 69.3 69.0
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 68.46 79.45 84.25 2 Levels (with Leq Peak Hou 66 66 65	-2.01 -13.44 -18.71 <b>out Topo and</b> rr Leq Day .6 .2 .7	barrier 65.8 65.5 64.2	1.33 1.37 1.36 atten	3 7 6 <i>vening</i> 64.4 62.5 59.6	-1.20 -1.20 -1.20 <i>Leq</i>	-4.6 -4.8 -5.4 Night 61.6 61.6 63.5	53 0.0 87 0.0 16 0.0 Ldn 68.3 68.3 69.3	000 000 000 000 000 000 000 000 000 00	0.000 0.000 0.000 NEL 69.3 69.0 70.0
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	REMEL 68.46 79.45 84.25 2 Levels (without Leg Peak Hout 66 66	-2.01 -13.44 -18.71 <b>out Topo and</b> rr Leq Day .6 .2 .7	barrier 65.8 65.5	1.33 1.37 1.36 atten	3 7 6 <i>uation)</i> <i>/ening</i> 64.4 62.5	-1.20 -1.20 -1.20 <i>Leq</i>	-4.6 -4.8 -5.4 Night 61.6 61.6	53 0.0 57 0.0 16 0.0 Ldn 68.9 68.1	000 000 000 000 000 000 000 000 000 00	0.000 0.000 0.000 NEL 69.3 69.0 70.0
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	REMEL         68.46           79.45         84.25           2 Levels (without Leg Peak Hout 66         66           66         65           70         70	-2.01 -13.44 -18.71 <b>Dut Topo and</b> r Leq Day .6 .2 .2 .9	barrier 65.8 65.5 64.2 70.0	1.33 1.37 1.36 <i>atteni</i> Leg Ev	3 7 6 <i>vening</i> 64.4 62.5 59.6 67.3	-1.20 -1.20 -1.20 <i>Leq</i>	-4.( -4.{ -5.4 Night 61.6 61.6 63.5 67.1	33 0.1 37 0.1 46 0.1 <u>Ldn</u> 68. 68. 69. 74.	000 000 000 9 7 9 0	0.000 0.000 NEL 69.3 69.0 70.0 74.2
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	REMEL         68.46           79.45         84.25           2 Levels (without Leg Peak Hout 66         66           66         65           70         70	-2.01 -13.44 -18.71 <b>Dut Topo and</b> r Leq Day .6 .2 .7 .9 mtour (in feet	barrier 65.8 65.5 64.2 70.0	1.33 1.37 1.36 atten	3 7 6 <i>vening</i> 64.4 62.5 59.6 67.3 <i>IBA</i>	-1.20 -1.20 -1.20 <i>Leq</i>	-4.( -4.{ -5.4 Night 61.6 63.5 67.1	33 0.1 37 0.1 16 0.1 <u>Ldn</u> 68. 68. 68. 69. 74.1 60 dBA	000 000 000 9 7 9 0 0 55	0.000 0.000 NEL 69.3 69.0 70.0 74.2
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL         68.46           79.45         84.25           2 Levels (without Leg Peak Hout 66         66           66         65           70         70	-2.01 -13.44 -18.71 <b>Dut Topo and</b> r Leq Day .6 .2 .7 .9 <b>Dutour (in feet</b>	barrier 65.8 65.5 64.2 70.0	1.33 1.37 1.36 <i>atteni</i> Leg Ev	3 7 6 <i>vening</i> 64.4 62.5 59.6 67.3	-1.20 -1.20 -1.20 <i>Leq</i>	-4.( -4.{ -5.4 Night 61.6 61.6 63.5 67.1	33 0.1 37 0.1 46 0.1 <u>Ldn</u> 68. 68. 69. 74.	000 000 000 9 7 9 0 0 55	0.000 0.000 NEL 69.3 69.0 70.0 74.2

Scenario: Existing + Project						
Road Name: Placentia Av. Road Segment: w/o I-215 Frontage Rd.				ame: Rider aber: 11559	Buildings 2	and 4 No
SITE SPECIFIC INPUT DATA			NO	SE MODE	EL INPUTS	5
Highway Data		Site Cond	ditions (Ha	ard = 10, S	oft = 15)	
Average Daily Traffic (Adt): 11,455 vehicles				Autos	: 15	
Peak Hour Percentage: 6.83%		Med	dium Truck	(s (2 Axles)	: 15	
Peak Hour Volume: 782 vehicles		Hea	avy Trucks	(3+ Axles)	: 15	
Vehicle Speed: 45 mph		Vehicle M	li.v.			
Near/Far Lane Distance: 80 feet			cleType	Dav	Evening	Night Dail
Site Data		venio	Aut		•	19.6% 91.2
		Ma	dium Truc			21.4% 6.78
Barrier Height: 0.0 feet			leavy Truc			36.6% 2.01
Barrier Type (0-Wall, 1-Berm): 0.0			icavy inac	NG. 00.07	0 0.170	00.070 2.0
Centerline Dist. to Barrier: 64.0 feet Centerline Dist. to Observer: 64.0 feet		Noise So	urce Eleva	ations (in f	eet)	
01.0			Autos:	0.000		
Barrier Distance to Observer: 0.0 feet		Mediun	n Trucks:	2.297		
Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet		Heavy	y Trucks:	8.004	Grade Adj	ustment: 0.0
Road Elevation: 0.0 feet		Lano Equ	uvalent Di	stance (in	foot)	
Road Grade: 0.0%		Lune Lyu	Autos:	50.210	leely	
Left View: -90.0 degrees		Madium	n Trucks:	50.033		
Right View: 90.0 degrees			y Trucks:	50.050		
FHWA Noise Model Calculations						
VehicleType REMEL Traffic Flow	Distance	e Finite I	Road	Fresnel	Barrier Atte	en Berm Atte
Autos: 68.46 -3.30	-0	.13	-1.20	-4.70	0.0	0.0 0.0
Medium Trucks: 79.45 -14.59	-C	.11	-1.20	-4.88	0.0	0.0 0.0
Heavy Trucks: 84.25 -19.86		.11	-1.20	-5.31	0.0	0.0 0.0
Unmitigated Noise Levels (without Topo and b		<i>,</i>				r
VehicleType Leq Peak Hour Leq Day		Evening	Leq Nig		Ldn	CNEL
	3.0	61.6		58.9	66.1	-
	2.9	59.9		59.0	66.1	-
	1.6	57.0		60.8	67.3	
	7.3	64.7		64.4	71.3	3 7
Centerline Distance to Noise Contour (in feet)	7	0 dBA	65 dB	Δ	60 dBA	55 dBA
	dn:	78	55 UD.	168	362	
CN/		81		174	376	
CN		01			570	0

FHWA-RD-77-108 HI	GHWAY	NOISE PF		IODEL			
Scenario: Existing + Project Road Name: Placentia Av. Road Segment: e/o Indian Av.			Project Nam Job Numbe		Buildings 2	and 4 No	)
SITE SPECIFIC INPUT DATA			NOIS			s	
Highway Data		Site Con	ditions (Hard	l = 10, Se	oft = 15)		
Average Daily Traffic (Adt): 2,622 vehicles				Autos:			
Peak Hour Percentage: 6.83%			dium Trucks (				
Peak Hour Volume: 179 vehicles		He	avy Trucks (3	+ Axles):	15		
Vehicle Speed: 45 mph		Vehicle I	<i>lix</i>				
Near/Far Lane Distance: 80 feet		Vehi	cleType	Day	Evening	Night	Daily
Site Data			Autos.	68.2%	12.3%	19.6%	92.52
Barrier Height: 0.0 feet		Me	edium Trucks.	69.8%	8.8%	21.4%	5.779
Barrier Type (0-Wall, 1-Berm): 0.0		ŀ	leavy Trucks.	58.3%	5.1%	36.6%	1.719
Centerline Dist. to Barrier: 64.0 feet		Noise So	urce Elevati	ons (in f	eet)		
Centerline Dist. to Observer: 64.0 feet			Autos:	0.000			
Barrier Distance to Observer: 0.0 feet		Mediur	n Trucks:	2.297			
Observer Height (Above Pad): 5.0 feet		Heav	y Trucks:	8.004	Grade Ad	iustment.	0.0
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet		Lano Equ	ivalent Dist	nco (in	foot		
0.0 1001		Lane Ly		50.210	leey		
Road Grade: 0.0% Left View: -90.0 degrees		Madius		50.033			
Right View: 90.0 degrees				50.050			
FHWA Noise Model Calculations							
	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 68.46 -9.64	-0	.13	-1.20	-4.70	0.0	000	0.00
Medium Trucks: 79.45 -21.70	-0	.11	-1.20	-4.88	0.0	000	0.00
Heavy Trucks: 84.25 -26.97	-0	.11	-1.20	-5.31	0.0	000	0.00
Unmitigated Noise Levels (without Topo and bar		,					
VehicleType Leq Peak Hour Leq Day		Evening	Leq Night		Ldn		VEL
Autos: 57.5 56.	-	55.3		2.5	59.8		60
Medium Trucks: 56.4 55.	-	52.8	-	1.9	59.0	-	59
Heavy Trucks: 56.0 54.	-	49.9	-	3.7	60.2		60
Vehicle Noise: 61.5 60.	5	57.9	5	7.5	64.4	+	64
Centerline Distance to Noise Contour (in feet)	-						10.4
		0 dBA	65 dBA		60 dBA		dBA
Ldr CNEL		27 28		59	126 131		27:
CNEL		-28		61	131		28

Tuesday, April 7, 2020

	FHV	VA-RD-77-108	HIGHWA	AY N	IOISE PR	EDICT		EL			
Scenario: E: Road Name: Pl Road Segment: w	lacentia A	v.					Name: R umber: 1		Buildings 2	and 4 I	No
SITE SPE	CIFIC IN	PUT DATA							L INPUTS	3	
Highway Data				3	Site Cond	ditions	(Hard = 1	10, Sc	oft = 15)		
Average Daily Traffi	ic (Adt):	1,028 vehicle	s				A	utos:	15		
Peak Hour Perc	entage:	6.83%			Med	dium Tru	icks (2 A	xles):	15		
Peak Hour \	/olume:	70 vehicles	5		Hea	avy Truc	:ks (3+ A)	xles):	15		
Vehicle	Speed:	45 mph			Vehicle N	liv					
Near/Far Lane Di	istance:	80 feet		H		cleType	Γ	Day	Evening	Night	Daily
Site Data								58.2%	•	19.69	
Barrier	Heiaht <sup>.</sup>	0.0 feet			Me	dium Ti	ucks: 6	9.8%	8.8%	21.49	6 10.41%
Barrier Type (0-Wall, 1		0.0			H	leavy Ti	ucks: 5	58.3%	5.1%	36.69	6 50.23%
Centerline Dist. to		64.0 feet		-	N-: 0-			6 m #	41		
Centerline Dist. to Ot	bserver:	64.0 feet			Noise So				eet)		
Barrier Distance to Ot	bserver:	0.0 feet			1 4 m ali	Auto: n Truck:					
Observer Height (Abov	e Pad):	5.0 feet							Grade Adj	unterno	* 0.0
Pad El	evation:	0.0 feet			Heav	y Truck	s: 8.0	04	Graue Auj	usuner	11. 0.0
Road El	evation:	0.0 feet		1	Lane Equ	iivalent	Distance	e (in :	feet)		
Road	Grade:	0.0%				Auto:	s: 50.2	10			
Le	ft View:	-90.0 degree	s		Mediun	n Truck	s: 50.0	33			
Rigi	ht View:	90.0 degree	s		Heav	y Truck	s: 50.0	50			
- HWA Noise Model Ca	Iculation	5									
VehicleType RI	EMEL	Traffic Flow	Distan	ice	Finite I	Road	-				
						louu	Fresne	2/	Barrier Atte	en Be	erm Atten
Autos:	68.46	-17.42		-0.1		-1.20		4.70	Barrier Atte 0.0		
Autos: Medium Trucks:	68.46 79.45	-17.42 -23.20		-0.1 -0.1	3		-			00	0.000
		=			3 1	-1.20	-	4.70	0.0	00	0.000
Medium Trucks: Heavy Trucks:	79.45 84.25	-23.20 -16.36		-0.1 -0.1	3 1 1	-1.20 -1.20	-	4.70 4.88	0.0	00	0.000
Medium Trucks: Heavy Trucks: Jnmitigated Noise Lev	79.45 84.25	-23.20 -16.36 out Topo and	barrier a	-0.1 -0.1	3 1 1	-1.20 -1.20 -1.20	-	4.70 4.88	0.0	00	0.000
Medium Trucks: Heavy Trucks: Jnmitigated Noise Lev VehicleType Leq Autos:	79.45 84.25 <b>rels (with</b> Peak Hou 49	-23.20 -16.36 out Topo and r Leq Day .7	barrier a	-0.1 -0.1	3 1 1 <i>uation)</i> <i>vening</i> 47.5	-1.20 -1.20 -1.20	- - Night 44.7	4.70 4.88	0.0 0.0 0.0 <i>Ldn</i> 52.0		0.000 0.000 0.000 <u>CNEL</u> 52.4
Medium Trucks: Heavy Trucks: Unmitigated Noise Lev VehicleType Leq Autos: Medium Trucks:	79.45 84.25 <b>rels (with</b> Peak Hou 49 54	-23.20 -16.36 out Topo and r Leq Day .7 .9	barrier a Le 48.9 54.2	-0.1 -0.1	3 1 1 <i>uation)</i> <i>vening</i> 47.5 51.3	-1.20 -1.20 -1.20		4.70 4.88	0.0 0.0 0.0 <i>Ldn</i> 52.0 57.5		0.000 0.000 0.000 CNEL 52.4 57.7
Medium Trucks: Heavy Trucks: Jnmitigated Noise Lev VehicleType Leq Autos: Medium Trucks: Heavy Trucks:	79.45 84.25 Peak Hou 49 54 66	-23.20 -16.36 <b>Dut Topo and</b> r Leq Day .7 .9 .6	barrier a Le 48.9 54.2 65.1	-0.1 -0.1	3 1 1 <i>uation)</i> <i>vening</i> 47.5 51.3 60.5	-1.20 -1.20 -1.20	Night 44.7 50.4 64.3	4.70 4.88	0.0 0.0 0.0 <i>Ldn</i> 52.0 57.5 70.8	00	0.000 0.000 0.000 CNEL 52.4 57.7 70.9
Medium Trucks: Heavy Trucks: Unmitigated Noise Lev VehicleType Leq Autos: Medium Trucks:	79.45 84.25 <b>rels (with</b> Peak Hou 49 54	-23.20 -16.36 <b>Dut Topo and</b> r Leq Day .7 .9 .6	barrier a Le 48.9 54.2	-0.1 -0.1	3 1 1 <i>uation)</i> <i>vening</i> 47.5 51.3	-1.20 -1.20 -1.20		4.70 4.88	0.0 0.0 0.0 <i>Ldn</i> 52.0 57.5	00	0.000 0.000 0.000 CNEL 52.4 57.7 70.9
Medium Trucks: Heavy Trucks: Unmitigated Noise Lev VehicleType Leq Autos: Medium Trucks: Heavy Trucks:	79.45 84.25 <b>rels (with</b> Peak Hou 49 54 66 66	-23.20 -16.36 <b>out Topo and</b> r Leq Day .7 .9 .6 .9	barrier a Le 48.9 54.2 65.1 65.5	-0.1 -0.1 eq Ev	3 1 1 <i>vening</i> 47.5 51.3 60.5 61.2	-1.20 -1.20 -1.20 <i>Leq</i>	Night 44.7 50.4 64.3 64.5	4.70 4.88 5.31	0.0 0.0 0.0 52.0 57.5 70.8 71.0		0.000 0.000 0.000 CNEL 52.4 57.7 70.9 71.7
Medium Trucks: Heavy Trucks: Unmitigated Noise Lev VehicleType Leg Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	79.45 84.25 <b>rels (with</b> Peak Hou 49 54 66 66	-23.20 -16.36 out Topo and r Leq Day .7 .9 .6 .9 .9 mtour (in feet)	barrier a Le 48.9 54.2 65.1 65.5	-0.1 -0.1	3 1 1 <i>weining</i> 47.5 51.3 60.5 61.2 <i>dBA</i>	-1.20 -1.20 -1.20 <i>Leq</i>	Night 44.7 50.4 64.3 64.5	4.70 4.88 5.31	0.0 0.0 0.0 52.0 57.5 70.8 71.0		0.000 0.000 0.000 CNEL 52.4 57.7 70.5 71.1
Medium Trucks: Heavy Trucks: Unmitigated Noise Lev VehicleType Leg Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	79.45 84.25 <b>rels (with</b> Peak Hou 49 54 66 66	-23.20 -16.36 but Topo and r Leq Day 7. 9. .6. .9 ontour (in feet)	barrier a Le 48.9 54.2 65.1 65.5	-0.1 -0.1 eq Ev	3 1 1 <i>vening</i> 47.5 51.3 60.5 61.2	-1.20 -1.20 -1.20 <i>Leq</i>	Night 44.7 50.4 64.3 64.5	4.70 4.88 5.31	0.0 0.0 0.0 52.0 57.5 70.8 71.0		0.000 0.000 0.000 CNEL 52.4 57.7 70.9 71.1

	FHW	/A-RD-77-108	HIGHW	AY NO	OISE PF	REDICT		EL			
Road Nam	io: Existing + P ne: Placentia Av nt: e/o Perris B	<i>i</i> .					Name: R umber: 1		3uildings 2	and 4 N	0
SITE	SPECIFIC IN	PUT DATA							L INPUTS	3	
Highway Data				S	ite Con	ditions	(Hard = 1	0, Sc	ft = 15)		
Average Daily	Traffic (Adt):	6,259 vehicle	s				A	utos:	15		
Peak Hour	Percentage:	6.83%			Me	dium Tri	ucks (2 A	kles):	15		
Peak H	lour Volume:	427 vehicles	6		He	avy Tru	cks (3+ A	xles):	15		
Ve	hicle Speed:	45 mph		V	ehicle I	Niv					
Near/Far La	ne Distance:	80 feet				icleType	1	Day	Evening	Night	Daily
Site Data					1011			8.2%	•		91.57%
Bai	rrier Height:	0.0 feet			Me	edium Ti	rucks: 6	9.8%	8.8%	21.4%	6.50%
Barrier Type (0-W		0.0			F	leavy T	rucks: 5	8.3%	5.1%	36.6%	1.93%
Centerline Di		64.0 feet					evations	(in \$1	- 41		
Centerline Dist.	to Observer:	64.0 feet		N	oise So	Auto			et)		
Barrier Distance	to Observer:	0.0 feet			1 4 m all 1 m	Auto n Truck					
Observer Height (	Above Pad):	5.0 feet				y Truck			Grade Adj	ustment	
Pa	ad Elevation:	0.0 feet			neav	y muck	5. 0.0	04	Grade Auj	usument	. 0.0
Roa	ad Elevation:	0.0 feet		L	ane Equ	uivalent	Distance	e (in t	'eet)		
1	Road Grade:	0.0%				Auto	s: 50.2	10			
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 50.0	33			
	Right View:	90.0 degree	es		Heav	y Truck	s: 50.0	50			
FHWA Noise Mode	el Calculations	;									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresne	e/	Barrier Atte	en Ber	m Atten
Autos:	68.46	-5.91		-0.13		-1.20	-	4.70	0.0	00	0.000
Medium Trucks:	79.45	-17.40		-0.11		-1.20	-	4.88	0.0	00	0.000
Heavy Trucks:	84.25	-22.67		-0.11		-1.20	-	5.31	0.0	00	0.000
Unmitigated Noise	e Levels (witho	out Topo and	barrier	attenu	uation)						
	Leq Peak Hou			eq Eve	•	Leq	Night		Ldn		NEL
Autos:	61.		60.4		59.0		56.2		63.5		63.9
Medium Trucks:	60.	-	60.0		57.1		56.2		63.3		63.5
Heavy Trucks:	60.	-	58.8		54.2		58.0		64.5		64.6
Vehicle Noise:	65.	5	64.6		61.9		61.7		68.5	5	68.8
		ntour lin foot									
Centerline Distand	ce to Noise Co	ntour (in leet,	1		1						
Centerline Distand	ce to Noise Co			70 dl		65	dBA	6	i0 dBA	55	dBA
Centerline Distand	ce to Noise Co		Ldn: VEL:	70 dl	BA 51 53	65	dBA 110 114	e	0 dBA 237 247	55	dBA 511 531

	FHV	VA-RD-77-108	HIG	HWAY	NOISE F	PREDICT		DEL			
Scenario: EA Road Name: Ind Road Segment: s/o	ian Àv.	,					t Name: I Number: '		3uildings 2	and 4 N	10
SITE SPEC	IFIC IN	IPUT DATA				1	NOISE	IODE	L INPUTS	3	
Highway Data					Site Co	nditions	(Hard =	10, Sc	oft = 15)		
Average Daily Traffic Peak Hour Perce Peak Hour Vo	ntage:	11,733 vehicle 6.83% 801 vehicle					rucks (2 Å Icks (3+ Å		15		
Vehicle S	Speed:	45 mph			Vehicle	Mix					
Near/Far Lane Dis	tance:	50 feet				hicleType	•	Dav	Evening	Niaht	Daily
Site Data					*0			68.2%	•	19.6%	
Barrier H	oiaht.	0.0 feet			/	Aedium 1	rucks:	69.8%	8.8%	21.49	5 7.32%
Barrier Type (0-Wall, 1-		0.0				Heavy 7	rucks:	58.3%	5.1%	36.6%	6.30%
Centerline Dist. to E	arrier:	47.0 feet			Noise S	Source E	levation	in fe	et)		
Centerline Dist. to Obs	server:	47.0 feet				Auto		000			
Barrier Distance to Obs	server:	0.0 feet			Medi	um Truck		97			
Observer Height (Above Pad Ele		5.0 feet 0.0 feet				avy Truck		004	Grade Adj	ustmen	t: 0.0
Road Ele		0.0 feet			Lane F	quivalen	t Distand	e (in	feet)		
Road (		0.0%			Lano L	Auto					
	View:	-90.0 degree	~~		Madi	um Truck					
	View:	90.0 degree				avy Truck					
FHWA Noise Model Cald	ulation	s									
	MEL	Traffic Flow	Di	istance	Finit	e Road	Fresn	el	Barrier Atte	en Be	rm Atten
Autos:	68.46	-3.44		1.3	33	-1.20		-4.63	0.0	00	0.00
Medium Trucks:	79.45	-14.15		1.0	37	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	84.25	-14.80		1.3	36	-1.20		-5.46	0.0	00	0.000
Unmitigated Noise Leve	ls (with	out Topo and	barr	ier attei	nuation)						
	eak Hou				vening		Night		Ldn		NEL
Autos:	65		64.4		62.	-	60.2		67.4		67.8
Medium Trucks:	65		64.8		61.	-	60.9		68.0		68.3
Heavy Trucks:	69		68.1		63.	•	67.4		73.8		73.9
Vehicle Noise:	72	.0	70.9		67.	6	68.9		75.5	i	75.1
Centerline Distance to N	loise Co	ontour (in feet	)					r			
					dBA		dBA	6	60 dBA	5	5 dBA
			Ldn:		110		237		511		1,100
		C	NEL:		113	3	244		525		1,131

	FHV	A-RD-77-108	HIGHW	AY NO	DISE PF	REDICT	ION MOI	DEL			
	io: EAPC (202	1)							uildings 2	and 4 No	D
	e: Perris Bl. nt: n/o Ramona	a Exwy.				Job N	lumber: 1	1559			
SITE	SPECIFIC IN	PUT DATA				ľ	IOISE N	ODEL	INPUTS	6	
Highway Data				S	ite Con	ditions	(Hard =	10, Sof	ft = 15)		
Average Daily	Traffic (Adt):	32,632 vehicle	s					Autos:	15		
Peak Hour	Percentage:	6.83%					ucks (2 A		15		
	our Volume:	2,229 vehicles			Hea	avy Tru	cks (3+ A	xles):	15		
	hicle Speed:	45 mph		V	ehicle N	lix					
Near/Far La	ne Distance:	80 feet			Vehi	cleType		Day	Evening	Night	Daily
Site Data							Autos:	68.2%	12.3%	19.6%	91.269
Bai	rrier Height:	0.0 feet			Me	edium T	rucks:	69.8%	8.8%	21.4%	6.749
Barrier Type (0-W		0.0			H	leavy T	rucks:	58.3%	5.1%	36.6%	2.00%
Centerline Dis	st. to Barrier:	64.0 feet		N	oise So	urce E	levations	(in fee	et)		
Centerline Dist.		64.0 feet				Auto			.,		
Barrier Distance		0.0 feet			Mediur	n Truck					
Observer Height (	,	5.0 feet				y Truck			Grade Adj	ustment.	0.0
	ad Elevation:	0.0 feet		-							
	ad Elevation:	0.0 feet		L	ane Equ		t Distanc		eet)		
1	Road Grade:	0.0%				Auto					
	Left View:	-90.0 degree			Mediur						
	Right View:	90.0 degree	s		Heav	y Truck	s: 50.0	150			
FHWA Noise Mode	el Calculations	;									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresn	e/ E	Barrier Atte	en Ber	m Atten
Autos:	68.46	1.25		-0.13		-1.20		4.70	0.0		0.00
Medium Trucks:	79.45	-10.07		-0.11		-1.20		-4.88	0.0		0.00
Heavy Trucks:	84.25	-15.34		-0.11		-1.20		-5.31	0.0	00	0.00
Unmitigated Noise			-								
VehicleType	Leq Peak Hou			eq Eve		Leq	Night		Ldn		VEL
Autos:	68		67.6		66.1		63.4		70.6		71.
Medium Trucks:	68		67.4		64.4		63.5		70.6		70.
Heavy Trucks:	67		6.1		61.5		65.4		71.8		71.
Vehicle Noise:	72		71.8		69.2		69.0		75.8		76.
Centerline Distand	e to Noise Co	ntour (in feet)	-	70 dl	DA I	65	dBA	El	) dBA	FE	dBA
		,	.dn:	70 al	BA 156	00	ава 337	00	725	55	ава 1.562
		CN	IEL:		162		350		753		1,6

Tuesday, April 7, 2020

FH	WA-RD-77-108 HI	GHWAY	NOISE PR	REDICTI	on Mode	L		
Scenario: EAPC (20 Road Name: Indian Av. Road Segment: s/o Rider	,				Name: Rio umber: 11	der Buildings 2 559	and 4 No	1
SITE SPECIFIC I	NPUT DATA			N	OISE MO	DEL INPUTS	6	
Highway Data			Site Con	ditions (	'Hard = 10	), Soft = 15)		
Average Daily Traffic (Adt):	10,160 vehicles				Au	tos: 15		
Peak Hour Percentage:	6.83%		Me	dium Tru	icks (2 Axi	les): 15		
Peak Hour Volume:	694 vehicles		He	avy Truc	ks (3+ Axi	les): 15		
Vehicle Speed:	45 mph		Vehicle I	Mix				
Near/Far Lane Distance:	50 feet			icleType	Di	ay Evening	Night	Daily
Site Data					utos: 68	3.2% 12.3%	19.6%	85.62%
Barrier Height:	0.0 feet		Me	edium Tr	ucks: 69	9.8% 8.8%	21.4%	7.41%
Barrier Type (0-Wall, 1-Berm):	0.0		ŀ	leavy Tr	ucks: 58	3.3% 5.1%	36.6%	6.97%
Centerline Dist. to Barrier:	47.0 feet		Noise Or			f 4)		
Centerline Dist. to Observer:	47.0 feet		Noise So	Autos	evations (	,		
Barrier Distance to Observer:	0.0 feet		Marthur	Autos m Trucks		-		
Observer Height (Above Pad):	5.0 feet						ustment	0.0
Pad Elevation:	0.0 feet		neav	ry Trucks	. 0.00	4 Grade Auj	usument.	0.0
Road Elevation:	0.0 feet		Lane Equ	uivalent	Distance	(in feet)		
Road Grade:	0.0%			Autos	: 40.11	2		
Left View:	-90.0 degrees		Mediur	m Trucks	: 39.89	1		
Right View:	90.0 degrees		Heav	y Trucks	: 39.91	3		
FHWA Noise Model Calculation	าร							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Berr	n Atten
Autos: 68.4	6 -4.10	1.	33	-1.20	-4	.63 0.0	00	0.00
Medium Trucks: 79.4	5 -14.73	1.	37	-1.20	-4	.87 0.0	00	0.00
Heavy Trucks: 84.2	5 -14.99	1.	36	-1.20	-5	.46 0.0	00	0.000
Unmitigated Noise Levels (with	hout Topo and ba	rrier atte	nuation)					
VehicleType Leq Peak Ho	ur Leq Day	Leq I	Evening	Leq I	Vight	Ldn	CN	IEL
Autos: 6	4.5 63	.7	62.3		59.5	66.8		67.2
Medium Trucks: 6	4.9 64	.2	61.2		60.3	67.4		67.3
	9.4 67		63.3		67.2	73.6		73.
	1.7 70	.5	67.1		68.6	75.2		75.4
Vehicle Noise: 7								
Vehicle Noise: 7 Centerline Distance to Noise C	ontour (in feet)							
	contour (in feet)	70	) dBA	65 d		60 dBA	55 0	dBA
	<b>contour (in feet)</b> Ld		0 dBA 105 108	65 d	IBA 225 232	60 dBA 486	55 0	dBA 1,046 1,075

	FHW	/A-RD-77-108	HIGHV	VAY N	OISE PF	REDICTI		DEL			
Road Nam	io: EAPC (2021 ne: Perris Bl. nt: s/o Ramona	,					Vame: F Imber: 1		Buildings 2	and 4 No	0
SITE	SPECIFIC IN	PUT DATA				N	OISE M	ODE	L INPUT	5	
Highway Data				S	Site Con	ditions (	Hard = 1	10, So	ft = 15)		
Average Daily	Traffic (Adt):	29,382 vehicle	s				A	lutos:	15		
Peak Hour	Percentage:	6.83%			Me	dium Tru	cks (2 A	xles):	15		
Peak H	lour Volume:	2,007 vehicles	6		He	avy Truc	ks (3+ A	xles):	15		
Ve	hicle Speed:	45 mph			/ehicle I	Also .					
Near/Far La	ne Distance:	80 feet		-		icleType		Day	Evening	Night	Daily
Site Data					VCIII			58.2%			91.34%
					M	n dium Tr		59.8%		21.4%	6.68%
	rrier Height:	0.0 feet				leavy Tr		58.3%		36.6%	1.98%
Barrier Type (0-W		0.0				loary in		50.070	0.170	00.070	1.00%
Centerline Di		64.0 feet		٨	loise So	urce Ele	vations	(in fe	et)		
Centerline Dist.		64.0 feet 0.0 feet				Autos	: 0.0	00			
Barrier Distance					Mediur	n Trucks	: 2.2	97			
Observer Height		5.0 feet			Heav	y Trucks	: 8.0	04	Grade Adj	iustment.	0.0
	ad Elevation: ad Elevation:	0.0 feet			one Fai	uivalent	Distanc	o (in 1	in atl		
	ad Elevation: Road Grade:	0.0 feet 0.0%		-	ane Ly	Autos			eeŋ		
	Left View:	-90.0 degree			Modiu	n Trucks					
		•				v Trucks					
	Right View:	90.0 degree	s		neav	y mucks	. 50.0	150			
FHWA Noise Mode	el Calculations	5									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresne	e/	Barrier Atte	en Ber	m Atten
Autos:	68.46	0.79		-0.13	3	-1.20	-	4.70	0.0	000	0.000
Medium Trucks:	79.45	-10.57		-0.11	I	-1.20	-	4.88	0.0	000	0.000
Heavy Trucks:	84.25	-15.84		-0.11	I	-1.20	-	5.31	0.0	000	0.000
Unmitigated Noise	e Levels (witho	out Topo and	barrier	attenu	uation)						
VehicleType	Leq Peak Hou	r Leq Day	· 1	Leq Ev	ening	Leq I	light		Ldn	CI	VEL
Autos:	67.	.9	67.1		65.7		63.0		70.2	2	70.6
			66.9		63.9		63.0		70.1	I	70.4
Medium Trucks:	67.	.6	00.0		00.0		03.0				
Medium Trucks: Heavy Trucks:	67.	.1	65.6		61.0		64.9		71.3		
Medium Trucks:		.1							71.3 75.3		
Medium Trucks: Heavy Trucks: Vehicle Noise:	67. 72.	.1 .3	65.6 71.4		61.0		64.9				
Medium Trucks: Heavy Trucks: Vehicle Noise:	67. 72.	1 3 ntour (in feet)	65.6 71.4	70 d	61.0 68.7	65 c	64.9 68.5	6	75.3 0 dBA	55	71.4 75.6 dBA
Medium Trucks: Heavy Trucks:	67. 72.	1 3 ntour (in feet)	65.6 71.4	70 d	61.0 68.7	65 c	64.9 68.5	6	75.3	55	75.6

	FHV	VA-RD-77-108 H	IIGHWAY	NOISE PI	REDICTIO	N MODEL		
	o: EAPC (202 e: Perris Bl. at: s/o Morgan	,				ame: Rider nber: 11559	Buildings 2 a	and 4 No
SITE S	SPECIFIC IN	IPUT DATA			NO	ISE MOD	EL INPUTS	;
Highway Data				Site Con	ditions (H	ard = 10, S	oft = 15)	
Peak H	Traffic (Adt): Percentage: our Volume: hicle Speed:	30,354 vehicles 6.83% 2,073 vehicles				Autos ks (2 Axles) s (3+ Axles)	: 15	
Near/Far Lar		45 mph		Vehicle I	Mix			
Nedi/Fdi Ldi	le Distance.	80 feet		Veh	icleType	Day	Evening	Night Daily
Site Data Bar	rier Height:	0.0 feet			edium Truc		% 8.8%	19.6% 91.24% 21.4% 6.75%
Barrier Type (0-W	. ,	0.0			Heavy Truc	cks: 58.3	% 5.1%	36.6% 2.00%
Centerline Dis		64.0 feet		Noise So	ource Elev	ations (in	feet)	
Centerline Dist.		64.0 feet			Autos:	0.000		
Barrier Distance t		0.0 feet		Mediu	m Trucks:	2.297		
Observer Height (J	,	5.0 feet		Heav	vy Trucks:	8.004	Grade Adji	ustment: 0.0
	d Elevation:	0.0 feet						
	d Elevation:	0.0 feet		Lane Eq		istance (in	feet)	
F	Road Grade:	0.0%			Autos:	50.210		
	Left View: Right View:	-90.0 degrees 90.0 degrees			m Trucks: vy Trucks:	50.033 50.050		
FHWA Noise Mode	Calculation	s						
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	n Berm Atten
Autos:	68.46	0.93	-0	.13	-1.20	-4.70	0.0	
Medium Trucks:	79.45	-10.38	-0	.11	-1.20	-4.88	0.0	00 0.000
Heavy Trucks:	84.25	-15.65	-0	.11	-1.20	-5.31	0.0	00 0.000
Unmitigated Noise	Levels (with	out Topo and b	arrier atte	enuation)				
VehicleType	Leq Peak Hou	ir Leq Day	Leq	Evening	Leq Ni	ght	Ldn	CNEL
Autos:	68	.1 6	7.3	65.8		63.1	70.3	70.7
Medium Trucks:	67	.8 6	7.1	64.1		63.2	70.3	70.6
Heavy Trucks:	67	.3 6	5.8	61.2		65.0	71.5	71.6
Vehicle Noise:	72	.5 7	1.5	68.9		68.6	75.5	75.8
Centerline Distanc	e to Noise Co	ontour (in feet)						
			70	) dBA	65 dE	A	60 dBA	55 dBA
		L	dn:	149		321	691	1,490
		CNI	EL:	155		333	718	1,547

	FHW/	A-RD-77-108 HIG	HWAY	NOISE PR	REDICTION	MODEL			
Scenario. Road Name. Road Segment:						me: Ride ber: 1155	r Buildings 2 9	and 4 N	0
SITE SI	PECIFIC INP	UT DATA			NO	SE MOD	EL INPUT	s	
Highway Data				Site Cond	ditions (Ha	ard = 10,	Soft = 15)		
	ercentage: ur Volume: 2 cle Speed:	1,106 vehicles 6.83% 8,808 vehicles 45 mph 80 feet			dium Truck avy Trucks <b>flix</b>		s): 15		
Neal/Fal Lane	e Distance.	80 leet		Vehi	cleType	Day	Evening	Night	Daily
Site Data					Aut	os: 68.2	% 12.3%	19.6%	91.229
Barri	ier Height:	0.0 feet		Me	dium Truc			21.4%	
Barrier Type (0-Wai	ll, 1-Berm):	0.0		h	leavy Truc	ks: 58.3	5.1%	36.6%	2.019
Centerline Dist.	to Barrier:	64.0 feet	F	Noise So	urce Eleva	ations (in	feet)		
Roaa Ro FHWA Noise Model VehicleType Autos:	Observer: bove Pad): I Elevation: I Elevation: Dad Grade: Left View: Right View: Calculations REMEL 1 68.46	2.25	istance -0.1	Heav Lane Equ Medium Heav Finite	-1.20	50.210 50.033 50.050 Fresnel -4.7	Barrier Att	en Ber	m Atten 0.00
Medium Trucks:	79.45	-9.05	-0.1	11	-1.20	-4.8	8 0.0	000	0.00
Heavy Trucks:	84.25	-14.32	-0.1	11	-1.20	-5.3	1 0.0	000	0.00
Unmitigated Noise I	Levels (withou	It Topo and barr	ier atter	nuation)					
VehicleType L	eq Peak Hour	Leq Day	Leq E	vening	Leq Nig	ıht	Ldn	C	NEL
Autos:	69.4	68.6		67.1		64.4	71.	6	72.
Medium Trucks:	69.1			65.4		64.5	71.		71.
Heavy Trucks:	68.6			62.5		66.4	72.		72.
Vehicle Noise:	73.8	72.9		70.2		70.0	76.	В	77.
Centerline Distance	to Noise Con	tour (in feet)							
				dBA	65 dB,		60 dBA		dBA
		Ldn:		183		393	847		1,826
		CNEL:		190		409	880		1,896

Tuesday, April 7, 2020

		VA-RD-77-108	mon	MATI							
	: EAPC (2021	1)							Buildings 2 a	and 4 No	)
Road Name						Job N	umber: 1	1559			
Road Segment	: s/o Rider St										
	PECIFIC IN	PUT DATA							L INPUTS		
Highway Data					Site Con	ditions	(Hard = :	10, Se	oft = 15)		
Average Daily T	raffic (Adt):	31,250 vehicle	s				A	Autos:	15		
Peak Hour F	Percentage:	6.83%			Med	dium Tru	ıcks (2 A	xles).	15		
Peak Ho	ur Volume:	2,134 vehicles			Hea	avy Truc	:ks (3+ A	xles).	15		
Veh	icle Speed:	45 mph		-	Vehicle N	lix					
Near/Far Lan	e Distance:	80 feet				cleType		Dav	Evening	Night	Daily
Site Data								68.2%	•	19.6%	91.26%
Barr	ier Height:	0.0 feet			Me	dium Ti	ucks:	69.8%	6 8.8%	21.4%	6.74%
Barrier Type (0-Wa	•	0.0			H	leavy Tr	ucks:	58.3%	5.1%	36.6%	2.00%
Centerline Dist		64.0 feet		L							
Centerline Dist. to		64.0 feet		-	Noise So				eet)		
Barrier Distance to	Observer:	0.0 feet				Autos					
Observer Height (A	bove Pad):	5.0 feet				n Trucks			0		0.0
	d Elevation:	0.0 feet			Heav	y Trucks	s: 8.0	104	Grade Adjı	istment:	0.0
Road	d Elevation:	0.0 feet			Lane Equ	iivalent	Distanc	e (in	feet)		
R	oad Grade:	0.0%				Autos	s: 50.2	210			
	Left View:	-90.0 degree	s		Mediur	n Trucks	s: 50.0	)33			
	Right View:	90.0 degree	s		Heav	y Trucks	s: 50.0	050			
FHWA Noise Model	Calculations	5									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fresne	e/	Barrier Atte	n Ben	m Atten
Autos:	68.46	1.06		-0.1	3	-1.20		-4.70	0.00	00	0.000
Medium Trucks:	79.45	-10.26		-0.1	1	-1.20		-4.88	0.00	00	0.000
Heavy Trucks:	84.25	-15.53		-0.1	1	-1.20		-5.31	0.0	00	0.00
Unmitigated Noise			oarrie	r atten	nuation)			-			
	.eq Peak Hou			Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	68		67.4		66.0		63.2		70.5		70.9
Medium Trucks:	67.		67.2		64.2		63.3		70.4		70.1
Heavy Trucks:	67.		65.9		61.3		65.2		71.6		71.
Vehicle Noise:	72.	.6 7	1.7		69.0		68.8		75.6		75.9
Centerline Distance	e to Noise Co	ntour (in feet)							1		
			_ L	70	dBA	65 (	dBA	1	60 dBA	55	dBA
		L	.dn:		152		327		704		1,517
			IEL:		158		340		732		1.576

	FHW	A-RD-77-108	HIGH	WAY N	IOISE PF	REDICTI	ON MOI	DEL			
Road Nam	o: EAPC (2021 e: Redlands Av nt: n/o Morgan \$	,					Name: F umber: 1		3uildings 2	and 4 No	0
SITES	SPECIFIC INI	PUT DATA				N	OISE N	IODE		s	
Highway Data				S	Site Con	ditions	'Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	5,172 vehicle	s					Autos:	15		
Peak Hour	Percentage:	6.83%			Me	dium Tru	icks (2 A	xles):	15		
Peak H	our Volume:	353 vehicles	6		He	avy Truc	ks (3+ A	xles):	15		
Vei	hicle Speed:	45 mph		-	Vehicle I	Aise					
Near/Far Lar	ne Distance:	50 feet		- H		icleType		Day	Evening	Night	Daily
Site Data								68.2%	•		91.76%
		0.0 feet			Me	edium Tr		69.8%		21.4%	
	rier Height:	0.0 feet				leavy Tr		58.3%		36.6%	1.89%
Barrier Type (0-W Centerline Dis		0.0 47.0 feet		L							
Centerline Dist.		47.0 feet 47.0 feet		Λ	Voise So	urce El	evations	in fe	et)		
Barrier Distance		0.0 feet				Autos	: 0.0	00			
Observer Height (		5.0 feet			Mediur	n Trucks	: 2.2	97			
• •	d Elevation:	0.0 feet			Heav	y Trucks	: 8.0	04	Grade Ad	iustment.	0.0
	id Elevation: id Elevation:	0.0 feet		1	ane Equ	uivalent	Distanc	e (in f	eet)		
	Road Grade:	0.0%		F	-410 241	Autos			000		
1	Left View:	-90.0 degree	ae a		Mediur	n Trucks					
	Right View:	90.0 degree				y Trucks					
FHWA Noise Mode	l Calculations										
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fresn	e/	Barrier Att	en Ber	m Atten
Autos:	68.46	-6.73		1.33	3	-1.20		4.63	0.0	000	0.00
Medium Trucks:	79.45	-18.33		1.37	7	-1.20		4.87	0.0	000	0.00
Heavy Trucks:	84.25	-23.60		1.36	6	-1.20		-5.46	0.0	000	0.00
Unmitigated Noise	Levels (witho	ut Topo and	barrie	r atten	uation)						
VehicleType	Leq Peak Hour			Leq Ev	/ening	Leq	Vight		Ldn		VEL
Autos:	61.9		61.1		59.6		56.9		64.1		64.
Medium Trucks:	61.3		60.6		57.6		56.7		63.8		64.
Heavy Trucks:	60.8	-	59.3		54.7		58.6		65.0		65.
Vehicle Noise:	66.	1	65.2		62.5		62.2		69.1	1	69.4
Centerline Distanc	e to Noise Cor	ntour (in feet)									
			L	70 a		65 0		6	0 dBA		dBA
			Ldn: VEL:		41 43		88 92		190 198		410 426

	FHV	VA-RD-77-108 H	IGHWAY	NOISE P	REDICTIO	N MODEL		
	o: EAPC (202 e: Redlands A nt: s/o Rider St	v.				ame: Rider nber: 1155	Buildings 2 9	and 4 No
SITE S	SPECIFIC IN	PUT DATA			NO	ISE MOD	EL INPUTS	3
Highway Data				Site Con	ditions (H	ard = 10, S	Soft = 15)	
Average Daily	( )	5,994 vehicles				Autos		
	Percentage:	6.83%				ks (2 Axles	-	
	our Volume:	409 vehicles		He	avy Truck	s (3+ Axles	): 15	
	nicle Speed:	45 mph		Vehicle	Mix			
Near/Far Lar	ne Distance:	50 feet		Veh	icleType	Day	Evening	Night Daily
Site Data					Au	tos: 68.2	% 12.3%	19.6% 91.68%
Bar	rier Heiaht:	0.0 feet		М	edium Truc	cks: 69.8	% 8.8%	21.4% 6.41%
Barrier Type (0-Wa		0.0			Heavy Truc	cks: 58.3	% 5.1%	36.6% 1.90%
Centerline Dis	. ,	47.0 feet		Noise O			641	
Centerline Dist. t	to Observer:	47.0 feet		Noise Se		ations (in	reet)	
Barrier Distance t	o Observer:	0.0 feet			Autos:	0.000		
Observer Height ()	Above Pad):	5.0 feet			m Trucks:	2.297	Our de Adi	
	d Elevation:	0.0 feet		Hear	vy Trucks:	8.004	Grade Adj	ustment: 0.0
Roa	d Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	i feet)	
F	Road Grade:	0.0%			Autos:	40.112		
	Left View:	-90.0 degrees		Mediu	m Trucks:	39.891		
	Right View:	90.0 degrees		Hear	vy Trucks:	39.913		
FHWA Noise Mode	l Calculations	5						
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Berm Atten
Autos:	68.46	-6.09	1	.33	-1.20	-4.63	3 0.0	000.000
Medium Trucks:	79.45	-17.65	1	.37	-1.20	-4.87	7 0.0	00 0.000
Heavy Trucks:	84.25	-22.92	1	.36	-1.20	-5.46	5 0.0	0.000
Unmitigated Noise			1	,				
	Leq Peak Hou			Evening	Leq Ni		Ldn	CNEL
Autos:	62			60.3		57.5	64.8	
Medium Trucks:	62			58.3		57.4	64.5	
Heavy Trucks:	61		0.0	55.4		59.2	65.7	
Vehicle Noise:	66	.8 65	i.8	63.2		62.9	69.8	70.0
Centerline Distanc	e to Noise Co	ontour (in feet)		) dBA	65 dE	4	60 dBA	EE dBA
		Lo			oo dE			55 dBA
		CNE		45		98	211	454
		CNE	L.	47		102	219	472

	FH\	NA-RD-77-108	HIGH	NAY NO	DISE PI	REDICT	ION MO	DEL					
Scenario	: EAPC (202	1)				Projec	t Name:	Rider I	3uildings 2	and 4 No	c		
Road Name	: Ramona E	kwy.				Job N	lumber:	11559					
Road Segment	t: w/o Perris B	BI.											
SITE S	PECIFIC IN	IPUT DATA								5			
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily T	raffic (Adt):	50,037 vehicle	es					Autos:	15				
Peak Hour F	Percentage:	6.83%			Me	dium Tr	ucks (2 )	Axles):	15				
Peak Ho	our Volume:	3,417 vehicle	S		He	avy Tru	cks (3+ )	Axles):	15				
	icle Speed:	55 mph		V	ehicle l	Mix							
Near/Far Lan	e Distance:	102 feet			Veh	icleType	9	Day	Evening	Night	Daily		
Site Data							Autos:	68.2%	12.3%	19.6%	91.279		
Barr	ier Height:	0.0 feet			M	edium T	rucks:	69.8%	8.8%	21.4%	6.73%		
Barrier Type (0-Wa		0.0			1	Heavy T	rucks:	58.3%	5.1%	36.6%	2.00%		
Centerline Dist	. ,	92.0 feet						- (- *	41				
Centerline Dist. to		92.0 feet		N	oise Sc		levation		eet)				
Barrier Distance to	o Observer:	0.0 feet				Auto		000					
Observer Height (A	bove Pad):	5.0 feet				m Truck		297	Grade Ad	ustmont			
Pad	d Elevation:	0.0 feet			Heav	ry Truck	S. 8.	004	Grade Auj	usuneni	0.0		
Road	d Elevation:	0.0 feet		Li	ane Eq	uivalen	t Distan	ce (in i	feet)				
R	oad Grade:	0.0%				Auto	s: 76.	733					
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 76.	618					
	Right View:	90.0 degree	es		Heav	ry Truck	s: 76.	629					
FHWA Noise Model	Calculation												
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresr	nel	Barrier Atte	en Ber	m Atten		
Autos:	71.78			-2.89		-1.20		-4.76		000	0.00		
Medium Trucks:	82.40			-2.88		-1.20		-4.88		000	0.00		
Heavy Trucks:	86.40	-14.37		-2.88		-1.20		-5.18	0.0	000	0.00		
Unmitigated Noise			barriei	r attenu	ation)								
	.eq Peak Hou			Leq Eve	•	Leq	Night		Ldn		VEL		
Autos:	69		69.1		67.7		64.9	-	72.2	-	72.		
Medium Trucks:	69		68.5		65.6		64.		71.7		72.		
Heavy Trucks:	67		66.5		61.9		65.		72.1		72.		
Vehicle Noise:	73	3.9	72.9		70.4		69.9	9	76.8	3	77.		
Centerline Distance	e to Noise Co	ontour (in feet	)					_					
				70 dE		65	dBA		60 dBA		dBA		
			Ldn:		261		563		1,212		2,611		
			NEL:		272		586		1,262		2,718		

Tuesday, April 7, 2020

	IWA-RD-77-108	monv	IAT NO							
Scenario: EAPC (20 Road Name: Redlands						Name: I umber: `		Buildings 2	and 4 No	D
Road Segment: s/o Place					JUD IN	uniber.	11559			
÷						0105.1				
SITE SPECIFIC	NPUT DATA		Si	te Con				EL INPUTS oft = 15)	•	
Average Daily Traffic (Adt):	11.085 vehicle	9					Autos.	,		
Peak Hour Percentage:	6.83%			Me	dium Tru					
Peak Hour Volume:	757 vehicles			Hea	avy Truc	ks (3+ A	Axles)	15		
Vehicle Speed:	45 mph		14	ehicle N		-	-			
Near/Far Lane Distance:	50 feet		Ve		leType		Dav	Evening	Night	Daily
Site Data				V CIII			68.2%	•	19.6%	
Barrier Height:	0.0 feet			Ме	dium Tr		69.8%		21.4%	6.74
Barrier Type (0-Wall, 1-Berm):	0.0			H	leavy Tr	ucks:	58.39	6 5.1%	36.6%	2.00
Centerline Dist. to Barrier:	47.0 feet									
Centerline Dist. to Observer:	47.0 feet		N	oise So	urce Ele			eet)		
Barrier Distance to Observer:	0.0 feet				Autos		000			
Observer Height (Above Pad):	5.0 feet				n Trucks		297 204	Grade Adj	unter ont	0.0
Pad Elevation:	0.0 feet			Heav	y Trucks	. 8.0	JU4	Grade Auj	usuneni.	0.0
Road Elevation:	0.0 feet		Lá	ane Equ	iivalent	Distand	e (in	feet)		
Road Grade:	0.0%				Autos	: 40.	112			
Left View:	-90.0 degree				n Trucks					
Right View:	90.0 degree	s		Heav	y Trucks	39.	913			
FHWA Noise Model Calculatio	ns									
VehicleType REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresn	el	Barrier Atte	en Ben	m Atter
Autos: 68.4	• • • • • •		1.33		-1.20		-4.63	0.0		0.00
Medium Trucks: 79.4			1.37		-1.20		-4.87	0.0		0.00
Heavy Trucks: 84.2	5 -20.03		1.36		-1.20		-5.46	0.0	00	0.00
Unmitigated Noise Levels (wit	hout Topo and I	barrier	attenu	ation)						
VehicleType Leq Peak H			.eq Eve		Leq I			Ldn		VEL
		54.3		62.9		60.2	-	67.4		67
		64.2		61.2		60.3		67.4		67
		32.9		58.3		62.1		68.6		68
Vehicle Noise:	9.6	68.6		66.0		65.7	,	72.6		72
Centerline Distance to Noise	Contour (in feet)						r			
			70 dE		65 c			60 dBA	55	dBA
	1	.dn:		70		151		325		70
		IEL :		73		157		338		72

	FHV	VA-RD-77-108	HIGHW	IAY N	IOISE PF	REDICT		EL.			
	o: EAPC (202 e: Ramona E) nt: e/o Perris E	wy.					Name: Ric umber: 11		uildings 2 a	and 4 No	0
	SPECIFIC IN	IPUT DATA					IOISE MO			5	
Highway Data				5	Site Con	ditions	(Hard = 10	, Sof	ť = 15)		
Average Daily	Traffic (Adt):	44,328 vehicle	es				Au	tos:	15		
Peak Hour	Percentage:	6.83%			Me	dium Tr	ucks (2 Axl	es):	15		
Peak H	our Volume:	3,028 vehicle	s		He	avy Tru	cks (3+ Axl	es):	15		
Vei	hicle Speed:	55 mph			Vehicle I	Mix					
Near/Far Lar	ne Distance:	102 feet		H		icleType	Da	av l	Evening	Night	Daily
Site Data								3.2%	12.3%	19.6%	
Bar	rier Height:	0.0 feet			Me	edium T	rucks: 69	.8%	8.8%	21.4%	6.76%
Barrier Type (0-W		0.0			ŀ	leavy T	rucks: 58	8.3%	5.1%	36.6%	2.019
Centerline Dis		92.0 feet		,	Noise Sa	urco Fl	evations (	in for	af)		
Centerline Dist.	to Observer:	92.0 feet		<u>'</u>	10/36 30	Auto			50		
Barrier Distance	to Observer:	0.0 feet			Modiu	n Truck					
Observer Height (	Above Pad):	5.0 feet				y Truck			Grade Adji	istment	0.0
Pa	ad Elevation:	0.0 feet			near	y mack	3. 0.00-	· ·	onddo maji		0.0
Roa	ad Elevation:	0.0 feet		L	Lane Equ	uivalent	Distance	(in fe	eet)		
F	Road Grade:	0.0%				Auto	s: 76.73	3			
	Left View:	-90.0 degre	es			n Truck					
	Right View:	90.0 degre	es		Heav	ry Truck	s: 76.62	9			
		•									
FHWA Noise Mode	el Calculation	5									
FHWA Noise Mode VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresnel	E	Barrier Atte	en Ber	m Atten
		-		nce -2.8		Road -1.20		.76	Barrier Atte 0.0		
VehicleType	REMEL	Traffic Flow 1.70			9		-4			00	0.00
VehicleType Autos:	REMEL 71.78	Traffic Flow 1.70		-2.8	9 8	-1.20	-4. -4.	.76	0.0	00 00	0.00
VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 71.78 82.40 86.40	Traffic Flow 1.70 -9.60 -14.87		-2.89 -2.88 -2.88	9 8 8	-1.20 -1.20	-4. -4.	.76 .88	0.0 0.0	00 00 00	0.00 0.00 0.00
VehicleType Autos: Medium Trucks: Heavy Trucks: <b>Unmitigated Noise</b> VehicleType	REMEL 71.78 82.40 86.40 E Levels (with Leg Peak Hou	Traffic Flow           1.70           -9.60           -14.87           out Topo and           ir         Leq Day	barrier	-2.89 -2.88 -2.88 atten	9 8 8 <b>uation)</b> vening	-1.20 -1.20 -1.20	-4. -4. -5. Night	.76 .88 .18	0.0 0.0 0.0	00 00 00 <i>CI</i>	0.00 0.00 0.00 VEL
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos:	REMEL 71.78 82.40 86.40 E Levels (with Leq Peak Hou 69	Traffic Flow           1.70           -9.60           -14.87           out Topo and           ir         Leq Day           1.4	barrier / L 68.6	-2.89 -2.88 -2.88 atten	9 8 8 <i>uation)</i> <i>vening</i> 67.2	-1.20 -1.20 -1.20	-4. -4. -5. Night 64.4	.76 .88 .18	0.0 0.0 0.0 <i>Ldn</i> 71.7	00 00 00 <i>CI</i>	0.00 0.00 0.00 VEL 72.
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	REMEL 71.78 82.40 86.40 E Levels (with Leg Peak Hou 69 68	Traffic Flow           1.70           -9.60           -14.87           out Topo and           rr         Leq Day           1.4           3.7	barrier / L 68.6 68.0	-2.89 -2.88 -2.88 atten	9 8 8 <i>uation)</i> <i>vening</i> 67.2 65.1	-1.20 -1.20 -1.20	-4. -4. -5. Night 64.4 64.1	.76 .88 .18	0.0 0.0 0.0 <i>Ldn</i> 71.7 71.2	00 00 00 <i>CI</i>	0.00 0.00 0.00 VEL 72. 71.
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 71.78 82.40 86.40 2 Levels (with Leq Peak Hou 69 68 68 67	Traffic Flow           1.70           -9.60           -14.87           out Topo and           r           Leq Day           1.4           1.7           .4	barrier / L 68.6 68.0 66.0	-2.89 -2.88 -2.88 atten	9 8 8 <i>vening</i> 67.2 65.1 61.4	-1.20 -1.20 -1.20	-4. -4. -5. Night 64.4 64.1 65.2	.76 .88 .18	0.0 0.0 0.0 <i>Ldn</i> 71.7 71.2 71.6	00 00 00 <i>CI</i>	0.00 0.00 0.00 VEL 72. 71. 71.
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	REMEL 71.78 82.40 86.40 E Levels (with Leg Peak Hou 69 68	Traffic Flow           1.70           -9.60           -14.87           out Topo and           r           Leq Day           1.4           1.7           .4	barrier / L 68.6 68.0	-2.89 -2.88 -2.88 atten	9 8 8 <i>uation)</i> <i>vening</i> 67.2 65.1	-1.20 -1.20 -1.20	-4. -4. -5. Night 64.4 64.1	.76 .88 .18	0.0 0.0 0.0 <i>Ldn</i> 71.7 71.2	00 00 00 <i>CI</i>	0.00 0.00 0.00 VEL 72. 71. 71.
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL           71.78           82.40           86.40           2 Levels (with           Leq Peak Hot           69           68           67           73	Traffic Flow           1.70           -9.60           -14.87           Out Topo and           rr         Leq Day           1.4           .7           .4           .4	barrier 68.6 68.0 66.0 72.4	-2.88 -2.88 -2.88 atten .eq Ev	9 8 8 <i>uation)</i> 67.2 65.1 61.4 69.9	-1.20 -1.20 -1.20 <i>Leq</i>	-4. -4. -5. Night 64.4 64.1 65.2 69.4	.76 .88 .18	0.0 0.0 0.0 71.7 71.2 71.6 76.3	00 00 00 <i>CI</i>	0.00 0.00 0.00 VEL 72. 71. 71. 71. 76.
VehicleType Autos: Medium Trucks: Heavy Trucks: Unnitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	REMEL           71.78           82.40           86.40           2 Levels (with           Leq Peak Hot           69           68           67           73	Traffic Flow           1.70           -9.60           -14.87           Out Topo and           rr         Leq Day           1.4           .7           .4           .4	barrier / L 68.6 68.0 66.0 72.4	-2.89 -2.88 -2.88 atten	9 8 8 <u><i>vening</i></u> 67.2 65.1 61.4 69.9	-1.20 -1.20 -1.20 <i>Leq</i>	-4. -4. -5. Night 64.4 64.1 65.2 69.4 dBA	.76 .88 .18	0.0 0.0 0.0 71.7 71.2 71.6 76.3	00 00 00 <i>CI</i>	0.00 0.00 VEL 72. 71. 71. 76. dBA
VehicleType Autos: Medium Trucks: Heavy Trucks: Unnitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	REMEL           71.78           82.40           86.40           2 Levels (with           Leq Peak Hot           69           68           67           73	Traffic Flow           1.70         -9.60           -14.87         -14.87           out Topo and         rr           1.70         -14.87           0.11         -14.87           1.70         -14.87           1.71         -14.87           1.4	barrier 68.6 68.0 66.0 72.4	-2.88 -2.88 -2.88 atten .eq Ev	9 8 8 <i>uation)</i> 67.2 65.1 61.4 69.9	-1.20 -1.20 -1.20 <i>Leq</i>	-4. -4. -5. Night 64.4 64.1 65.2 69.4	.76 .88 .18	0.0 0.0 0.0 71.7 71.2 71.6 76.3	00 00 00 <i>CI</i>	0.00 0.00 0.00 VEL 72. 71. 71. 76.

F	HWA-RD-7	7-108 HIG	HWAY	NOISE PR	REDICTIO			
Scenario: EAPC (2 Road Name: Morgan Road Segment: e/o India	St.					ame: Rider hber: 11559	Buildings 2	and 4 No
SITE SPECIFIC	INPUT D	ATA			NO	ISE MODE	EL INPUTS	3
Highway Data				Site Con	ditions (H	ard = 10, S	oft = 15)	
Average Daily Traffic (Adt	2,642	vehicles				Autos	: 15	
Peak Hour Percentage	6.83%			Me	dium Truck	ks (2 Axles)	: 15	
Peak Hour Volume	: 180 v	ehicles		He	avy Trucks	(3+ Axles)	: 15	
Vehicle Speed	: 45 m	nph		Vehicle I	Mise			
Near/Far Lane Distance	: 50 fe	et			icleType	Dav	Evening	Night Daily
Site Data				ven	Aut		•	19.6% 69.73%
					edium Truc			21.4% 9.20%
Barrier Heigh		feet			leavv Truc			36.6% 21.079
Barrier Type (0-Wall, 1-Berm				,	heavy muc	KS. 00.07	0 0.170	30.0% 21.075
Centerline Dist. to Barrie				Noise Sc	ource Elev	ations (in f	eet)	
Centerline Dist. to Observe					Autos:	0.000		
Barrier Distance to Observe				Mediu	m Trucks:	2.297		
Observer Height (Above Pad				Heav	y Trucks:	8.004	Grade Adj	ustment: 0.0
Pad Elevation	0.01			1 F			f 41	
Road Elevation	0.01	feet		Lane Eq		istance (in	reet)	
Road Grade	0.070				Autos:	40.112		
Left View		degrees			m Trucks:	39.891		
Right View	. 90.0	degrees		Heav	y Trucks:	39.913		
FHWA Noise Model Calculati	ons							
VehicleType REMEL	Traffic I	Flow Di	istance	Finite	Road	Fresnel	Barrier Atte	en Berm Atten
Autos: 68.	46 -	10.84	1.3	33	-1.20	-4.63	0.0	0.00
Medium Trucks: 79.	45 -	19.64	1.3	37	-1.20	-4.87	0.0	0.00
Heavy Trucks: 84.	25 -	16.04	1.3	36	-1.20	-5.46	0.0	00.00
Unmitigated Noise Levels (w				,		1		
VehicleType Leq Peak I		eq Day	Leq E	vening	Leq Nig		Ldn	CNEL
Autos:	57.8	57.0		55.5		52.8	60.0	
Medium Trucks:	60.0	59.3		56.3		55.4	62.5	
Heavy Trucks:	68.4	66.9		62.3		66.1	72.6	
Vehicle Noise:	69.3	68.0		63.9		66.7	73.2	. 73.
Centerline Distance to Noise	Contour (i	n feet)	70	dBA	65 dB		60 dBA	55 dBA
		Lata	70	-	05 dB			
		Ldn: CNEL:		77		165	356	767
		CNEL!		78		169	363	783

FHWA-RD-77-108 HIG	HWAY	NOISE PR	REDICTION	MODEL			
Scenario: EAPC (2021)			Project Nan	ne: Rider	Buildings 2	and 4 No	c
Road Name: Rider St.			Job Numb	er: 11559			
Road Segment: e/o Perris Bl.							
SITE SPECIFIC INPUT DATA					L INPUT	5	
Highway Data		Site Con	ditions (Har	d = 10, S	oft = 15)		
Average Daily Traffic (Adt): 16,698 vehicles				Autos.	15		
Peak Hour Percentage: 6.83%			dium Trucks	· /			
Peak Hour Volume: 1,140 vehicles		He	avy Trucks (	3+ Axles).	15		
Vehicle Speed: 45 mph		Vehicle I	<i>lix</i>				
Near/Far Lane Distance: 50 feet		Vehi	cleType	Day	Evening	Night	Daily
Site Data			Auto	68.2%	12.3%	19.6%	91.389
Barrier Height: 0.0 feet		Me	edium Truck	s: 69.8%	8.8%	21.4%	6.65
Barrier Type (0-Wall, 1-Berm): 0.0		ŀ	leavy Truck	s: 58.3%	5.1%	36.6%	1.979
Centerline Dist. to Barrier: 47.0 feet		Noise So	urce Elevat	ions (in f	eet)		
Centerline Dist. to Observer: 47.0 feet			Autos:	0.000			
Barrier Distance to Observer: 0.0 feet		Mediur	n Trucks:	2.297			
Observer Height (Above Pad): 5.0 feet			y Trucks:	8.004	Grade Ad	iustment.	0.0
Pad Elevation: 0.0 feet							
Road Elevation: 0.0 feet		Lane Equ	ivalent Dis		feet)		
Road Grade: 0.0%			Autos:	40.112			
Left View: -90.0 degrees			n Trucks:	39.891			
Right View: 90.0 degrees		Heav	y Trucks:	39.913			
FHWA Noise Model Calculations							
	listance			resnel	Barrier Atte		m Atten
Autos: 68.46 -1.66		.33	-1.20	-4.63		000	0.00
Medium Trucks: 79.45 -13.04		.37	-1.20	-4.87		000	0.00
Heavy Trucks: 84.25 -18.31	1	.36	-1.20	-5.46	0.0	000	0.00
Unmitigated Noise Levels (without Topo and bar	rier atte	enuation)					
VehicleType Leq Peak Hour Leq Day		Evening	Leq Nigh		Ldn		VEL
Autos: 66.9 66.1		64.7		62.0	69.2		69
Medium Trucks: 66.6 65.9		62.9		62.0	69.1		69
Heavy Trucks: 66.1 64.6		60.0		63.9	70.3		70
Vehicle Noise: 71.3 70.4		67.7		67.5	74.3	3	74
Centerline Distance to Noise Contour (in feet)							
		) dBA	65 dBA		60 dBA		dBA
Ldn		91		197	424		91
CNEL		95		205	441		950

Tuesday, April 7, 2020

	WA-RD-77-108	- Convi		or r						
Scenario: EAPC (20) Road Name: Morgan St						Name: F umber: 1		Buildings 2 a	ind 4 No	)
Road Segment: e/o Perris	BI.									
SITE SPECIFIC I	NPUT DATA							L INPUTS		
Highway Data	yer ge Data verage Daily Traffic (Adt): 3,018 vehicles Peak Hour Percentage: 6.83% Peak Hour Volume: 206 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 50 feet					Hard = 1	10, Se	oft = 15)		
Average Daily Traffic (Adt):	3,018 vehicle	s				A	utos:			
Peak Hour Percentage:	6.83%			Me	dium Tru	icks (2 A	xles).	15		
Peak Hour Volume:	206 vehicles			He	avy Truc	:ks (3+ A	xles).	15		
Vehicle Speed:	45 mph		Vel	hicle N	Nix					
Near/Far Lane Distance:	50 feet				cleType	L	Day	Evening	Night	Daily
Site Data					A	utos: 6	, 58.2%		19.6%	73.36
Barrier Height:	0.0 feet			Me	edium Tr	ucks: (	59.8%	6 8.8%	21.4%	8.16
Barrier Type (0-Wall, 1-Berm):	0.0			F	leavy Tr	ucks:	58.3%	5.1%	36.6%	18.489
Centerline Dist. to Barrier:	47.0 feet		Noi	100 50	urco Ek	evations	(in f	ooti		
Centerline Dist. to Observer:	47.0 feet		1401	36 30	Autos			eer)		
Barrier Distance to Observer:	0.0 feet			Andiur	n Trucks					
Observer Height (Above Pad):	5.0 feet				y Trucks			Grade Adju	stment	0.0
Pad Elevation:	0.0 feet						-		ounoni.	0.0
Road Elevation:	0.0 feet		Lar	ne Equ	ıivalent	Distanc	e (in	feet)		
Road Grade:	0.0%				Autos					
Left View:	-90.0 degree	s	N	Mediur	n Trucks					
Right View:	90.0 degree	s		Heav	y Trucks	39.9	13			
FHWA Noise Model Calculation	ıs		_							
VehicleType REMEL	Traffic Flow	Distar	ice	Finite	Road	Fresne	e/	Barrier Atte	n Ben	m Atten
Autos: 68.46			1.33		-1.20		4.63	0.00		0.00
Medium Trucks: 79.45			1.37		-1.20		4.87	0.00		0.00
Heavy Trucks: 84.25	-16.03		1.36		-1.20	-	5.46	0.00	00	0.00
Unmitigated Noise Levels (with				- í .						
VehicleType Leq Peak Ho			eq Even		Leq I	•		Ldn	CI	VEL
		57.8		56.3		53.6		60.8		61.
		59.3		56.4		55.5		62.6		62.
	-	56.9		62.3		66.1		72.6		72.
	-	58.0		64.1		66.7		73.2		73.
Centerline Distance to Noise C	ontour (in feet)									
		ட	70 dBA		65 0		1	60 dBA	55	dBA
		dn:		77		167		359		773
		JEL:		79		170		367		790

	FHV	/A-RD-77-108	HIGI	HWAY N	OISE PF	REDICT	ION MOD	EL					
Road Nam	io: EAPC (202 e: Rider St. nt: e/o Redland	,			Project Name: Rider Buildings 2 and 4 No Job Number: 11559								
	SPECIFIC IN	PUT DATA							LINPUTS	3			
Highway Data				5	Site Con	ditions	(Hard = 1	0, So	ft = 15)				
Average Daily	Traffic (Adt):	17,021 vehicle	es				A	utos:	15				
Peak Hour	Percentage:	6.83%			Me	dium Tr	ucks (2 Ax	les):	15				
Peak H	lour Volume:	1,163 vehicles	6		He	avy Tru	cks (3+ Ax	les):	15				
Ve	hicle Speed:	45 mph		1	/ehicle I	Mix							
Near/Far La	ne Distance:	50 feet		F		icleType	D	ay	Evening	Night	Daily		
Site Data								8.2%	•	19.6%			
Bai	rrier Height:	0.0 feet			Me	edium T	rucks: 6	9.8%	8.8%	21.4%	6.60		
Barrier Type (0-W		0.0			ŀ	leavy T	rucks: 5	8.3%	5.1%	36.6%	1.96		
Centerline Di		47.0 feet		L.	laine Ce	uree El	evations	(in fo	of)				
Centerline Dist.	to Observer:	47.0 feet		ť	voise su	Auto			el)				
Barrier Distance	to Observer:	0.0 feet			Madiu	Auto n Truck							
Observer Height (	Above Pad):	5.0 feet				y Truck			Grade Adj	ustment			
Pa	ad Elevation:	0.0 feet			neav	y muck	s. o.uu	14	Grade Auj	usument	. 0.0		
Roa	ad Elevation:	0.0 feet		L	ane Equ	uivalent	Distance	(in f	eet)				
1	Road Grade:	0.0%				Auto	s: 40.11	12					
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 39.89	91					
	Right View:	90.0 degree	es		Heav	y Truck	s: 39.91	13					
FHWA Noise Mode	el Calculations	;											
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresne	I .	Barrier Atte	en Ber	m Atter		
Autos:	68.46	-1.57		1.3	3	-1.20	-4	4.63	0.0	00	0.00		
Medium Trucks:	79.45	-12.99		1.3	7	-1.20	-4	4.87	0.0	00	0.00		
Heavy Trucks:	84.25	-18.26		1.36	6	-1.20	-4	5.46	0.0	00	0.00		
Unmitigated Noise	e Levels (witho	out Topo and	barri	er atten	uation)								
VehicleType	Leq Peak Hou			Leq Ev		Leq	Night		Ldn		NEL		
Autos:	67		66.2		64.8		62.0		69.3		69		
Medium Trucks:	66	-	65.9		63.0		62.1		69.2		69		
Heavy Trucks:	66		64.7		60.1		63.9		70.3		70		
Vehicle Noise:	71		70.4		67.8		67.5		74.4	ļ	74		
Centerline Distanc	e to Noise Co	ntour (in feet,					17.4						
				70 c		65	dBA	6	0 dBA	55	dBA		
			Ldn:		92		199		428		92 95		
			VEL		96		207		445				

	FH\	NA-RD-77-108 H	IGHWAY	' NOISE P	REDICTIO	N MODEL		
	2: EAPC (202 2: Placentia A 2: w/o I-215 F	v.				ame: Rider nber: 11559	Buildings 2 a	and 4 No
SITE S	PECIFIC IN	IPUT DATA			NC	ISE MOD	EL INPUTS	5
Highway Data				Site Cor	nditions (H	lard = 10, S	oft = 15)	
Average Daily T Peak Hour F Peak Ho	( )	45,859 vehicles 6.83% 3,132 vehicles				Autos ks (2 Axles) s (3+ Axles)	: 15	
Veh	icle Speed:	45 mph		Vehicle	Miv			
Near/Far Lan	e Distance:	80 feet			nicleType	Day	Evening	Night Daily
Site Data				Ver		tos: 68.2	•	19.6% 91.21%
Barr	rier Height:	0.0 feet		N	ledium Tru	cks: 69.8	% 8.8%	21.4% 6.78%
Barrier Type (0-Wa		0.0			Heavy Tru	cks: 58.3	% 5.1%	36.6% 2.01%
Centerline Dist	t. to Barrier:	64.0 feet		Noico S	ourco Elos	ations (in )	foot)	
Centerline Dist. to	o Observer:	64.0 feet		NUISE 3	Autos:	0.000	leelj	
Barrier Distance to	o Observer:	0.0 feet		14-16	Autos: m Trucks:	2.297		
Observer Height (A	Above Pad):	5.0 feet			vy Trucks:	8.004	Grade Adi	ustment: 0.0
Pa	d Elevation:	0.0 feet		пеа	vy mucks.	0.004	Orade Auje	asanchie 0.0
Road	d Elevation:	0.0 feet		Lane Eq	uivalent D	)istance (in	feet)	
R	oad Grade:	0.0%			Autos:	50.210		
	Left View:	-90.0 degrees		Mediu	m Trucks:	50.033		
	Right View:	90.0 degrees		Hea	vy Trucks:	50.050		
FHWA Noise Model		-						
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Atte	n Berm Atten
Autos:	68.46	2.72	-0	.13	-1.20	-4.70	0.0	00 0.000
Medium Trucks:	79.45	-8.57	-0	.11	-1.20	-4.88	0.0	00 0.000
Heavy Trucks:	84.25	-13.84	-0	.11	-1.20	-5.31	0.0	00 0.000
Unmitigated Noise								-
	Leq Peak Hou			Evening	Leq N	•	Ldn	CNEL
Autos:	69		9.1	67.6		64.9	72.1	72.5
Medium Trucks:	69		3.9	65.9		65.0	72.1	
Heavy Trucks:	69		7.6	63.0		66.9	73.3	
Vehicle Noise:	74		3.3	70.7		70.4	77.3	77.6
Centerline Distance	e to Noise Co	ontour (in feet)	-	0 -10 4		24	CO -/D A	55 - 10 A
				0 dBA	65 dE		60 dBA	55 dBA
			dn:	197		423	912	1,965
		CNE	:L.'	204		440	947	2,041

	FHV	/A-RD-77-108	HIGHWA	AY NO	ISE PREDIC		ODEL			
Road Nam	o: EAPC (202 e: Placentia Av nt: e/o Indian A	, v.				t Name. Number		3uildings 2	and 4 No	D
SITE	SPECIFIC IN	PUT DATA				NOISE	MODE		S	
Highway Data				Sit	e Conditions	(Hard	= 10, So	oft = 15)		
Average Daily	Traffic (Adt):	33,270 vehicles	s				Autos:	15		
• •	Percentage:	6.83%			Medium T	rucks (2	Axles):	15		
Peak H	our Volume:	2,272 vehicles			Heavy Tri	icks (3+	Axles).	15		
Ve	hicle Speed:	45 mph		Vo	hicle Mix					
Near/Far La	ne Distance:	80 feet		ve	VehicleTyp	•	Day	Evening	Night	Daily
Site Data					venieryp	Autos:	68.2%		19.6%	
					Medium				21.4%	
ваг Barrier Type (0-W	rier Height:	0.0 feet 0.0			Heavy				36.6%	
Centerline Dis	. ,	0.0 64.0 feet								
Centerline Dist.		64.0 feet		No	ise Source E			eet)		
Barrier Distance		0.0 feet			Aut		0.000			
Observer Height (		5.0 feet			Medium Truc		2.297			
	d Elevation:	0.0 feet			Heavy Truc	ks: 8	8.004	Grade Ad	ustment.	0.0
Roa	d Elevation:	0.0 feet		La	ne Equivaler	t Dista	nce (in	feet)		
ŀ	Road Grade:	0.0%			Aut	os: 50	).210			
	Left View:	-90.0 degree	s		Medium Truc	ks: 50	0.033			
	Right View:	90.0 degree	s		Heavy Truc	ks: 50	0.050			
FHWA Noise Mode										
VehicleType	REMEL	Traffic Flow	Distan		Finite Road	Free		Barrier Att		m Atten
Autos:	68.46	1.33		-0.13	-1.20		-4.70		000	0.00
Medium Trucks:	79.45	-10.01		-0.11	-1.20		-4.88		000	0.00
Heavy Trucks:	84.25	-15.29		-0.11	-1.20		-5.31	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and b	arrier a	ttenua	tion)					
	Leq Peak Hou			q Eve	•	Night		Ldn		VEL
Autos:	68		57.7		66.2	63		70.7		71.
Medium Trucks:	68		57.4		64.5	63		70.7		70.
Heavy Trucks:	67		6.2		61.6	65		71.8		72.
Vehicle Noise:	72		'1.9		69.3	69	.0	75.9	9	76.
Centerline Distanc	e to Noise Co	ntour (in feet)		70 dB	A 64	dBA		60 dBA	55	dBA
		,	dn:	, u u D	158	<u>ив</u> я 34		733		1.578
		-	EL:		164	34		761		1,576
		CN			104	33	0	101		1,040

Tuesday, April 7, 2020

	FH\	NA-RD-77-108	HIGH	IWAY N	NOISE PR	REDICT	ION MOD	EL			
	o: EAPC (202 e: Placentia A nt: w/o Indian	.v.					Name: R umber: 1		Buildings 2 a	nd 4 No	)
	SPECIFIC IN	IPUT DATA							L INPUTS		
Highway Data					Site Con	ditions	(Hard = 1	0, Sc	oft = 15)		
Average Daily	Traffic (Adt):	38,352 vehicle	s				A	utos:	15		
Peak Hour I	Percentage:	6.83%			Med	dium Tru	ucks (2 A	(les):	15		
Peak He	our Volume:	2,619 vehicles	6		Hea	avy Truc	cks (3+ A)	(les):	15		
Vel	hicle Speed:	45 mph			Vehicle N	Nix					
Near/Far Lar	ne Distance:	80 feet		F		cleType		Day	Evening	Night	Daily
Site Data								8.2%	•	19.6%	
Bar	rier Height:	0.0 feet			Me	edium Ti	rucks: 6	9.8%	8.8%	21.4%	6.88%
Barrier Type (0-Wa	•	0.0			H	leavy Ti	rucks: 5	8.3%	5.1%	36.6%	3.31%
Centerline Dis		64.0 feet		H	N 0			(in \$	41		
Centerline Dist. t	to Observer:	64.0 feet		4	Noise So	Auto:			eet)		
Barrier Distance t	o Observer:	0.0 feet			Madium	n Truck					
Observer Height (/	Above Pad):	5.0 feet				y Truck			Grade Adju	ctmont.	0.0
Pa	d Elevation:	0.0 feet			neav	y muck	5. 0.0	04	Graue Auju	sunen.	0.0
Roa	d Elevation:	0.0 feet		1	Lane Equ	iivalent	Distance	e (in	feet)		
F	Road Grade:	0.0%				Auto:	s: 50.2	10			
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 50.0	33			
	Right View:	90.0 degree	es		Heav	y Truck	s: 50.0	50			
FHWA Noise Mode	l Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresne	1	Barrier Atter	n Berr	m Atten
Autos:	68.46	1.88		-0.1	3	-1.20	-	4.70	0.00	00	0.000
Medium Trucks:	79.45	-9.28		-0.1	1	-1.20	-	4.88	0.00	00	0.000
Heavy Trucks:	84.25	-12.46		-0.1	1	-1.20	-	5.31	0.00	00	0.00
Unmitigated Noise					,						
	Leq Peak Hou			Leq E	vening	Leq	Night		Ldn	CN	VEL
Autos:	69		68.2		66.8		64.0		71.3		71.
Medium Trucks:	68		68.2		65.2		64.3		71.4		71.
Heavy Trucks:			69.0		64.4		68.2		74.7		74.8
Vehicle Noise:			73.2		70.3		70.7		77.5		77.3
Centerline Distanc	e to Noise Co	ontour (in feet,	1								
oontonnio Biotano											dBA
oontonnio Diotano			L	701	dBA	60	dBA		60 dBA	551	
			Ldn: VEL:	701	203 210	00	437 452	,	942 974	55	2,028

	FHV	VA-RD-77-108	HIGH	WAY N	NOISE PF	REDICT		DEL				
Road Nam	io: EAPC (202 ne: Placentia A nt: e/o Perris E	v.					Name: F umber: 1		Buildings 2	and 4 N	0	
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Con	ditions	(Hard = :	10, S	oft = 15)			
Average Daily Traffic (Adt): 21,855 vehicles					Autos: 15							
Peak Hour Percentage: 6.83%					Medium Trucks (2 Axles): 15							
Peak H	lour Volume:	1,493 vehicle	s		He	avy Tru	cks (3+ A	xles).	15			
Ve	hicle Speed:	45 mph		-	Vehicle I	Niv						
Near/Far Lane Distance: 80 feet						icleType		Day	Evening	Night	Daily	
Site Data								58.2%	•		91.31%	
	0.0 feet			Me	dium T		59.8%		21.4%			
Ba	0.0 feet				leavy T		58.3%		36.6%			
Barrier Type (0-W												
Centerline Dist. to Barrier: 64.0 feet Centerline Dist. to Observer: 64.0 feet					Noise Source Elevations (in feet)							
Barrier Dist. to Observer: 64.0 feet					Autos: 0.000							
					Mediur	n Truck	s: 2.2	97				
Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet					Heav	y Truck	s: 8.0	04	Grade Adj	iustment	: 0.0	
Road Elevation: 0.0 feet					Lane Equivalent Distance (in feet)							
Road Grade: 0.0%					Autos: 50.210							
Left View: -90.0 degrees					Medium Trucks: 50.033							
Right View: 90.0 degrees					Heavy Trucks: 50.050							
	rught mon.	50.0 dogio				,						
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite		Fresne		Barrier Atte		m Atten	
VehicleType Autos:	REMEL 68.46	Traffic Flow -0.49		-0.1	3	-1.20		4.70	0.0	000	0.00	
VehicleType Autos: Medium Trucks:	REMEL 68.46 79.45	Traffic Flow -0.49 -11.84		-0.1 -0.1	3 1	-1.20 -1.20		4.70 4.88	0.0 0.0	000	0.00	
VehicleType Autos:	REMEL 68.46	Traffic Flow -0.49		-0.1	3 1	-1.20		4.70	0.0	000	0.00	
VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 68.46 79.45 84.25	Traffic Flow -0.49 -11.84 -17.11		-0.1 -0.1 -0.1	13 11	-1.20 -1.20		4.70 4.88	0.0 0.0	000	0.00	
VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 68.46 79.45 84.25	Traffic Flow -0.49 -11.84 -17.11 out Topo and	barrie	-0.1 -0.1 -0.1	13 11	-1.20 -1.20 -1.20		4.70 4.88	0.0 0.0	000 000 000	0.00	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos:	REMEL 68.46 79.45 84.25 e Levels (with Leq Peak Hou 66	Traffic Flow           -0.49           -11.84           -17.11           Dut Topo and           r         Leq Day           .6	<i>barrie</i> ⁄ 65.8	-0.1 -0.1 -0.1	3 1 1 inuation) ivening 64.4	-1.20 -1.20 -1.20	Night 61.7	4.70 4.88	0.0 0.0 0.0 <i>Ldn</i> 68.9	000 000 000 C.	0.000 0.000 0.000 NEL 69.3	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	REMEL 68.46 79.45 84.25 e Levels (with Leq Peak Hou 66 66	Traffic Flow           -0.49           -11.84           -17.11           Dut Topo and           r           Leq Day           .6           .3	<i>barrie</i> / 65.8 65.6	-0.1 -0.1 -0.1	3 1 1 <b>nuation)</b> ivening 64.4 62.6	-1.20 -1.20 -1.20	Night 61.7 61.7	4.70 4.88	0.0 0.0 0.0 <i>Ldn</i> 68.9 68.8	000 000 000 C	0.000 0.000 0.000 NEL 69.3 69.3	
VehicleType Autos: Medium Trucks: Heavy Trucks: Junitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 68.46 79.45 84.25 e Levels (with Leg Peak Hou 66 66 65	Traffic Flow         -0.49         -11.84         -17.11           out Topo and         r         Leq Day         -6         .3         .8	<i>barrie</i> 65.8 65.6 64.4	-0.1 -0.1 -0.1	3 1 1 <i>ivening</i> 64.4 62.6 59.8	-1.20 -1.20 -1.20	Night 61.7 63.6	4.70 4.88	0.0 0.0 0.0 <i>Ldn</i> 68.9 68.8 70.0	000 000 000 C.	0.000 0.000 0.000 NEL 69.3 69.3 70.3	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	REMEL 68.46 79.45 84.25 e Levels (with Leq Peak Hou 66 66	Traffic Flow         -0.49         -11.84         -17.11           out Topo and         r         Leq Day         -6         .3         .8	<i>barrie</i> / 65.8 65.6	-0.1 -0.1 -0.1	3 1 1 <b>nuation)</b> ivening 64.4 62.6	-1.20 -1.20 -1.20	Night 61.7 61.7	4.70 4.88	0.0 0.0 0.0 <i>Ldn</i> 68.9 68.8	000 000 000 C.	0.000 0.000 0.000 NEL 69.3 69.3 70.3	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	REMEL 68.46 79.45 84.25 e Levels (with Leq Peak Hou 66 66 65 71	Traffic Flow           -0.49           -11.84           -17.11           Dut Topo and           r         Leq Day           .6           .3           .8           .0	<i>barrie</i> 65.8 65.6 64.4 70.1	-0.1 -0.1 -0.1 er atten Leq E	3 1 1 <i>ivening</i> 64.4 62.6 59.8 67.4	-1.20 -1.20 -1.20 <i>Leq</i>	Night 61.7 61.7 63.6 67.2	4.70 4.88 5.31	0.0 0.0 0.0 68.9 70.0 74.1	000 000 000 C. 3 3	0.000 0.000 0.000 NEL 69.3 69.3 70. 74.3	
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noiss VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 68.46 79.45 84.25 e Levels (with Leq Peak Hou 66 66 65 71	Traffic Flow           -0.49           -11.84           -17.11           Dut Topo and           r         Leq Day           .6           .3           .8           .0	<i>barrie</i> 65.8 65.6 64.4 70.1	-0.1 -0.1 -0.1 er atten Leq E	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-1.20 -1.20 -1.20 <i>Leq</i>	Night 61.7 63.6 67.2 dBA	4.70 4.88 5.31	0.0 0.0 0.0 0.0 68.8 70.0 74.1 60 dBA	000 000 000 C. 3 3 0 1 55	0.000 0.000 0.000 NEL 69.3 69.3 70.7 74.3 dBA	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	REMEL 68.46 79.45 84.25 e Levels (with Leq Peak Hou 66 66 65 71	Traffic Flow           -0.49           -11.84           -17.11           Dut Topo and           r         Leq Day           .6           .3         .8           .0         .0           ontour (in feet)	<i>barrie</i> 65.8 65.6 64.4 70.1	-0.1 -0.1 -0.1 er atten Leq E	3 1 1 <i>ivening</i> 64.4 62.6 59.8 67.4	-1.20 -1.20 -1.20 <i>Leq</i>	Night 61.7 61.7 63.6 67.2	4.70 4.88 5.31	0.0 0.0 0.0 68.9 70.0 74.1	000 000 000 200 200 200 200 200 200 200	0.000 0.000 0.000 NEL 69.3 69.3 70.7 74.3	