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April 15, 2021

Ms. Tina Andersen T&B Planning, Inc. 3200 El Camino Real, Suite 100 Irvine, CA 92602

SUBJECT: BRIDGE POINT RANCHO CUCAMONGA HIGH-CUBE SORT FULFILLMENT CENTER SUPPLEMENTAL OFF-SITE TRAFFIC NOISE ASSESSMENT

Dear Ms. Tina Andersen:

Urban Crossroads, Inc. is pleased to provide the following Supplemental Off-Site Traffic Noise Assessment (Supplemental Noise Assessment) for the Bridge Point Rancho Cucamonga Project. On January 22, 2021, Urban Crossroads prepared a comprehensive Noise Impact Analysis for the Bridge Point Rancho Cucamonga Project. In addition to an analysis of off-site traffic noise levels, the Noise Impact Analysis evaluated the potential Project-related long-term stationary-source operational noise and short-term construction noise and vibration impacts. The Project proposed and analyzed in the January 22, 2021 report is 90% occupancy by High-Cube Fulfillment Center (Non-Sort) Warehouse uses, and 10% occupancy by a High-Cube Cold Storage Warehouse uses.

A High-Cube Fulfillment Center (Sort) Warehouse is not proposed as part of the project, and the site plan as currently proposed does not support this on-site use. Nevertheless, for the purpose of providing a conservative analysis, this supplemental memorandum analyzes the potential off-site traffic noise level impacts associated with an increase in net trip generation that could occur if the proposed buildings operated as 90% High-Cube Fulfillment Center (Sort) Warehouse and 10% High-Cube Cold Storage Warehouse uses (together referred to in this memorandum as the "Sort Use").

The Sort Use is only expected to affect the vehicle trip rate (primarily automobile), which is analyzed in this memorandum, and the indoor operation of the buildings (i.e., sortation from manual methods or automation) which would not have outdoor noise impacts. Since there would be a minimal change in the number of truck trips with the Sort Use (an increase of 6 truck trip ends per day), the Sort Use is not expected to alter the potential long-term outdoor stationary-source operational noise source activities that will include outdoor loading dock activity, truck movements, roof-top air conditioning units, and trash enclosure activity. In addition, the Sort Use will not alter the short-term construction noise and vibration impacts, since the same two buildings would be constructed in both scenarios. Therefore, this supplemental memorandum is focused on analyzing the off-site traffic noise impacts from a Sort Use. The following off-site traffic noise levels are based on an estimate of trips that could occur if the proposed buildings operated as the Sort Use consistent with the *Bridge Point Rancho Cucamonga High-Cube Fulfillment Center Traffic Memo* prepared by Urban Crossroads, Inc..

PROJECT DESCRIPTION

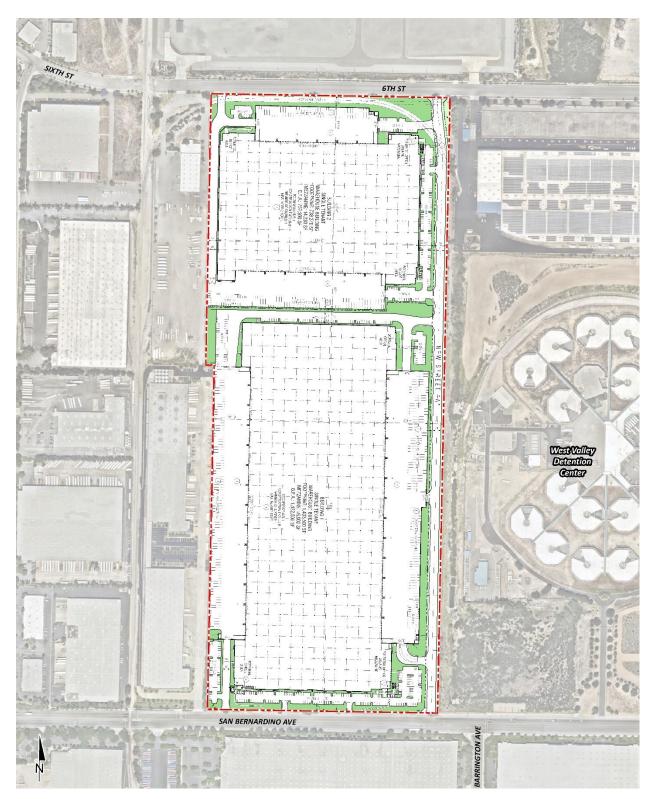
The Project site is located north of 4th Street and west of Etiwanda Avenue at 12322 and 12434 4th Street in the City of Rancho Cucamonga as shown on Exhibit A. The Project site is located approximately 3 miles northeast of the Ontario International Airport (ONT) and roughly 0.5 miles east of Interstate 15. The preliminary site plan for the proposed Project is shown on Exhibit B. For purposes of analysis in this Supplemental Noise Assessment, it is anticipated the proposed building would consist of the following uses:



EXHIBIT A: LOCATION MAP



EXHIBIT B: SITE PLAN





- 1,957,500 square feet of High-Cube Fulfillment Center (Sort) Warehouse (90% of the total square footage of Building 1 and Building 2)
- 217,500 square feet of High-Cube Cold Storage Warehouse (10% of the total square footage of Building 1 and Building 2)

The proposed buildings would replace existing uses on-site, which consist of 1,431,000 square feet of High-Cube Transload Short-Term Storage Warehouse (Without Cold Storage) use and 23,240 square feet of Free-Standing Discount Store use.

OFF-SITE TRAFFIC NOISE PREDICTION MODEL INPUTS

Table 1 presents the roadway parameters used to assess the off-site dBA CNEL transportation noise impacts if the buildings are used as a High-Cube Fulfillment Center (Sort) Warehouse instead of a High-Cube Fulfillment Center (Non-Sort) Warehouse. Table 1 identifies the 8-study area roadway segments, the distance from the centerline to adjacent land use based on the functional roadway classifications per the City of Rancho Cucamonga General Plan, and the posted vehicle speeds. Since the off-site traffic noise levels are significantly influenced by the number of heavy trucks in the vehicle mix, and the Sort Use would have a minimal change in the number of heavy trucks and no change in the distribution of heavy trucks, it is expected that no additional roadways segments would be impacted if the building were used as a Sort Use facility. In addition, these inputs are consistent with the off-site traffic noise prediction model inputs outlined in the *Bridge Point Rancho Cucamonga Noise Impact Analysis* prepared by Urban Crossroads, Inc. for the Project on January 22, 2021.

The ADT volumes used in this study area presented on Table 2 are based on an estimate of trips that could occur if the proposed buildings operated as the Sort Use consistent with the *Bridge Point Rancho Cucamonga High-Cube Fulfillment Center Traffic Memo* prepared by Urban Crossroads, Inc. for the following traffic scenarios under both Without Sort Use and With Sort Use: Existing (2020), Opening Year Cumulative (OYC) (2022) including with and without the potential 6th Street extension, and Horizon Year (2040). Since the proposed buildings would replace existing uses, the net change in trips between the existing uses and the proposed use has been used to assess the off-site traffic noise levels. The ADT volumes vary for each roadway segment based on the existing traffic volumes and the combination of Sort Use traffic distributions. This analysis relies on a comparative evaluation of the off-site traffic noise impacts, without and with ADT (actual vehicles) traffic volumes from an estimate of trips that could occur if the proposed buildings operated as the Sort Use consistent with the *Bridge Point Rancho Cucamonga High-Cube Fulfillment Center Traffic Memo* prepared by Urban Crossroads, Inc..



ID	Roadway	Segment	Receiving Land Use ¹	Distance from Centerline to Receiving Land Use (Feet) ²	Vehicle Speed (mph) ³
1	Etiwanda Av.	s/o Foothill Bl.	Sensitive	50'	50
2	Etiwanda Av.	s/o Whittram Av.	Non-Sensitive	50'	50
3	Etiwanda Av.	s/o San Bernardino Av.	Non-Sensitive	60'	50
4	Foothill Bl.	w/o Etiwanda Av.	Non-Sensitive	60'	50
5	6th St.	w/o Etiwanda Av.	Non-Sensitive	44'	40
6	4th St.	e/o I-15 NB Ramps	Non-Sensitive	60'	55
7	4th St.	w/o Etiwanda Av.	Sensitive	60'	55
8	Street A	s/o Dwy. 8	Sensitive	30'	40

TABLE 1: OFF-SITE ROADWAY PARAMETERS

¹ Noise sensitive uses limited to noise sensitive residential land uses and the West Valley Detention Center.

 $^{\rm 2}$ Distance to receiving land use is based upon the right-of-way distances.

³ Bridge Point Rancho Cucamonga Noise Impact Analysis, Urban Crossroads, Inc.

TABLE 2: AVERAGE DAILY TRAFFIC VOLUMES

			Average Daily Traffic Volumes ¹							
ID	Roadway	Segment	Existin	g 2020	Openin Cumulati 2022 Wit Street Co	ve (OYC) hout 6th	Opening Year Cumulative (OYC) 2022 with 6th Street Connection		Horizon Y 204	• •
			Without Sort Use	With Sort Use	Without Sort Use	With Sort Use	Without Sort Use	With Sort Use	Without Sort Use	With Sort Use
1	Etiwanda Av.	s/o Foothill Bl.	13,077	15,062	16,469	18,455	16,469	18,455	27,232	29,218
2	Etiwanda Av.	s/o Whittram Av.	17,260	19,245	21,789	23,775	21,789	23,775	37,211	39,197
3	Etiwanda Av.	s/o San Bernardino Av.	19,731	22,230	24,076	26,574	30,447	32,945	25,271	27,770
4	Foothill Bl.	w/o Etiwanda Av.	27,934	29,429	32,898	34,393	32,898	33,902	51,539	52,543
5	6th St.	w/o Etiwanda Av.	337	2,366	350	2,380	350	2,380	5,543	7,573
6	4th St.	e/o I-15 NB Ramps	17,250	22,302	19,899	24,951	19,899	23,478	22,189	25,768
7	4th St.	w/o Etiwanda Av.	17,800	20,756	20,471	23,428	26,219	29,175	22,831	25,787
8	Street A	s/o Dwy. 8	n/a	4,485	n/a	4,485	n/a	3,012	n/a	3,012

¹ Based on an estimate of trips that could occur if the proposed buildings operated as the Sort Use.



To quantify the off-site noise levels, the truck trips from the Sort Use were added to the heavy truck category in the FHWA noise prediction model. The addition of the Sort Use 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. Table 3 provides the time of day (daytime, evening, and nighttime) vehicle splits. The daily Sort Use truck tripends were assigned to the individual off-site study area roadway segments based on an estimate of trips that could occur if the proposed buildings operated as the Sort Use consistent with the *Bridge Point Rancho Cucamonga High-Cube Fulfillment Center Traffic Memo* prepared by Urban Crossroads, Inc. Using the truck trips in combination with the trip distribution, Urban Crossroads, Inc. calculated the number of additional truck trips and vehicle mix percentages for each of the study area roadway segments for the Sort Use. Table 4 shows the traffic flow by vehicle type (vehicle mix) used for all without Sort Use traffic scenarios, and Tables 5 to 7 show the vehicle mixes used for the with Sort Use traffic scenarios.

		Time of Day Splits ¹		Total of Time of
Vehicle Type	Daytime	Evening	Nighttime	Day Splits
Autos	77.50%	12.90%	9.60%	100.00%
Medium Trucks	84.80%	4.90%	10.30%	100.00%
Heavy Trucks	86.50%	2.70%	10.80%	100.00%

¹ Typical Southern California vehicle mix.

"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 4: WITHOUT SORT USE VEHICLE MIX

Cleasification		Total % Traffic Flow		Total
Classification	Autos	Medium Trucks	Heavy Trucks	Total
All Segments	85.80%	3.57%	10.63%	100.00%

Based on an existing 24-hour count taken at Etiwanda Avenue and San Bernardino Avenue. (Bridge Point Rancho Cucamonga Traffic Analysis, Urban Crossroads, Inc.). Values rounded to the nearest one-hundredth.

Due to the added truck trips, the increase in traffic volumes and the distributions of trucks on the study area road segments, the percentage of autos, medium trucks and heavy trucks will vary for each of the traffic scenarios. This explains why the existing and future traffic volumes and vehicle mixes vary between seemingly identical study area roadway segments.



				With So	ort Use ¹	
ID	Roadway	Segment	Autos	Medium Trucks	Heavy Trucks	Total ²
1	Etiwanda Av.	s/o Foothill Bl.	87.53%	3.15%	9.33%	100.00%
2	Etiwanda Av.	s/o Whittram Av.	87.15%	3.24%	9.61%	100.00%
3	Etiwanda Av.	s/o San Bernardino Av.	87.20%	3.23%	9.58%	100.00%
4	Foothill Bl.	w/o Etiwanda Av.	86.45%	3.41%	10.14%	100.00%
5	6th St.	w/o Etiwanda Av.	95.19%	1.35%	3.46%	100.00%
6	4th St.	e/o I-15 NB Ramps	88.38%	2.95%	8.67%	100.00%
7	4th St.	w/o Etiwanda Av.	87.77%	3.08%	9.15%	100.00%
8	Street A	s/o Dwy. 8	98.53%	0.45%	1.03%	100.00%

TABLE 5: EXISTING (2020) WITH SORT USE VEHICLE MIX

¹ Based on an estimate of trips that could occur if the proposed buildings operated as the Sort Use.

² Total of vehicle mix percentage values rounded to the nearest one-hundredth.

TABLE 6: OYC (2022) WITH SORT USE VEHICLE MIX

				With So	ort Use ¹	
ID	Roadway	Segment	Autos	Medium Trucks	Heavy Trucks	Total ²
1	Etiwanda Av.	s/o Foothill Bl.	87.21%	3.22%	9.57%	100.00%
2	Etiwanda Av.	s/o Whittram Av.	86.89%	3.30%	9.81%	100.00%
3	Etiwanda Av.	s/o San Bernardino Av.	86.97%	3.28%	9.75%	100.00%
4	Foothill Bl.	w/o Etiwanda Av.	86.35%	3.43%	10.21%	100.00%
5	6th St.	w/o Etiwanda Av.	95.14%	1.37%	3.50%	100.00%
6	4th St.	e/o I-15 NB Ramps	88.10%	3.02%	8.88%	100.00%
7	4th St.	w/o Etiwanda Av.	87.55%	3.13%	9.32%	100.00%
8	Street A	s/o Dwy. 8	98.53%	0.45%	1.03%	100.00%

¹ Based on an estimate of trips that could occur if the proposed buildings operated as the Sort Use.

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



				With So	ort Use ¹	
ID	Roadway	Segment	Autos	Medium Trucks	Heavy Trucks	Total ²
1	Etiwanda Av.	s/o Foothill Bl.	87.21%	3.22%	9.57%	100.00%
2	Etiwanda Av.	s/o Whittram Av.	86.89%	3.30%	9.81%	100.00%
3	Etiwanda Av.	s/o San Bernardino Av.	86.74%	3.34%	9.92%	100.00%
4	Foothill Bl.	w/o Etiwanda Av.	86.16%	3.48%	10.36%	100.00%
5	6th St.	w/o Etiwanda Av.	95.14%	1.37%	3.50%	100.00%
6	4th St.	e/o I-15 NB Ramps	87.36%	3.21%	9.44%	100.00%
7	4th St.	w/o Etiwanda Av.	87.20%	3.22%	9.58%	100.00%
8	Street A	s/o Dwy. 8	97.80%	0.67%	1.53%	100.00%

TABLE 7: OYC (2022) WITH SORT USE WITH 6TH STREET VEHICLE MIX

¹ Based on an estimate of trips that could occur if the proposed buildings operated as the Sort Use.

² Total of vehicle mix percentage values rounded to the nearest one-hundredth.

				With Sort Use ¹				
ID	Roadway	Segment	Autos	Medium Trucks	Heavy Trucks	Total ²		
1	Etiwanda Av.	s/o Foothill Bl.	86.69%	3.35%	9.96%	100.00%		
2	Etiwanda Av.	s/o Whittram Av.	86.46%	3.41%	10.13%	100.00%		
3	Etiwanda Av.	s/o San Bernardino Av.	86.92%	3.30%	9.79%	100.00%		
4	Foothill Bl.	w/o Etiwanda Av.	86.03%	3.51%	10.46%	100.00%		
5	6th St.	w/o Etiwanda Av.	88.73%	2.88%	8.39%	100.00%		
6	4th St.	e/o I-15 NB Ramps	87.22%	3.24%	9.54%	100.00%		
7	4th St.	w/o Etiwanda Av.	87.39%	3.17%	9.44%	100.00%		
8	Street A	s/o Dwy. 8	97.80%	0.67%	1.53%	100.00%		

TABLE 8: HORIZON YEAR (2040) WITH SORT USE VEHICLE MIX

¹ Based on an estimate of trips that could occur if the proposed buildings operated as the Sort Use.

² Total of vehicle mix percentage values rounded to the nearest one-hundredth.

OFF-SITE TRAFFIC NOISE IMPACTS

To assess the off-site traffic CNEL noise level impacts associated with the proposed buildings operating with High-Cube Fulfillment Center (Sort) Warehouse and High-Cube Cold Storage Warehouse uses, noise contours were developed based on an estimate of trips that could occur if the proposed buildings operated as the Sort Use consistent with the *Bridge Point Rancho Cucamonga High-Cube Fulfillment Center Traffic Memo* prepared by Urban Crossroads, Inc.. Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway.



TRAFFIC NOISE CONTOURS

Noise contours were used to assess the Sort Use's incremental 24-hour dBA CNEL traffic-related noise impacts at land uses adjacent to roadways conveying Sort Use traffic. 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 CNEL 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 9 through 16 present a summary of the exterior dBA CNEL traffic noise level without barrier attenuation. Roadway segments are analyzed without and with Sort Use conditions in each of the following timeframes: Existing (2020), Opening Year Cumulative (2022), Opening Year Cumulative (2022) with the 6th Street Connection, and Horizon Year (2040). Appendix A includes a summary of the dBA CNEL traffic noise level contours for each of the traffic scenarios.

ID	Road	Segment	Receiving Land Use ¹	CNEL at Receiving Land Use (dBA) ²		nce to Co enterline 65 dBA CNEL	
1	Etiwanda Av.	s/o Foothill Bl.	Sensitive	74.8	105	225	485
2	Etiwanda Av.	s/o Whittram Av.	Non-Sensitive	76.0	126	271	584
3	Etiwanda Av.	s/o San Bernardino Av.	Non-Sensitive	76.0	150	323	697
4	Foothill Bl.	w/o Etiwanda Av.	Non-Sensitive	77.5	189	408	879
5	6th St.	w/o Etiwanda Av.	Non-Sensitive	58.4	RW	RW	RW
6	4th St.	e/o I-15 NB Ramps	Non-Sensitive	76.1	154	332	715
7	4th St.	w/o Etiwanda Av.	Sensitive	76.3	157	339	730
8	Street A	s/o Dwy. 8	Sensitive	n/a	n/a	n/a	n/a

TABLE 9: EXISTING WITHOUT SORT USE NOISE CONTOURS

¹Noise sensitive uses limited to noise sensitive residential land uses and the West Valley Detention Center.

² The CNEL is calculated at the boundary of the right-of-way of the receiving adjacent land use.

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



	D Road Segment Lai		Receiving	CNEL at Receiving	Distance to Contour from Centerline (Feet)		
ID		Land Use ¹	Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	
1	Etiwanda Av.	s/o Foothill Bl.	Sensitive	75.0	107	231	499
2	Etiwanda Av.	s/o Whittram Av.	Non-Sensitive	76.1	128	277	596
3	Etiwanda Av.	s/o San Bernardino Av.	Non-Sensitive	76.1	154	332	715
4	Foothill Bl.	w/o Etiwanda Av.	Non-Sensitive	77.6	191	412	888
5	6th St.	w/o Etiwanda Av.	Non-Sensitive	63.3	RW	RW	73
6	4th St.	e/o I-15 NB Ramps	Non-Sensitive	76.6	165	356	768
7	4th St.	w/o Etiwanda Av.	Sensitive	76.5	162	348	751
8	Street A	s/o Dwy. 8	Sensitive	65.0	RW	30	64

TABLE 10: EXISTING WITH SORT USE NOISE CONTOURS

¹Noise sensitive uses limited to noise sensitive residential land uses and the West Valley Detention Center.

² The CNEL is calculated at the boundary of the right-of-way of the receiving adjacent land use.

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

TABLE 11: OYC (2022) WITHOUT SORT USE AND WITHOUT 6TH ST. CONNECTION NOISE CONTOURS

ID	Road	Segment	Receiving Land Use ¹	CNEL at Receiving Land Use (dBA) ²		nce to Co enterline 65 dBA CNEL	
1	Etiwanda Av.	s/o Foothill Bl.	Sensitive	75.8	122	263	566
2	Etiwanda Av.	s/o Whittram Av.	Non-Sensitive	77.0	147	317	682
3	Etiwanda Av.	s/o San Bernardino Av.	Non-Sensitive	76.8	171	369	796
4	Foothill Bl.	w/o Etiwanda Av.	Non-Sensitive	78.2	211	455	980
5	6th St.	w/o Etiwanda Av.	Non-Sensitive	58.5	RW	RW	RW
6	4th St.	e/o I-15 NB Ramps	Non-Sensitive	76.8	169	365	786
7	4th St.	w/o Etiwanda Av.	Sensitive	76.9	173	372	801
8	Street A	s/o Dwy. 8	Sensitive	n/a	n/a	n/a	n/a

¹Noise sensitive uses limited to noise sensitive residential land uses and the West Valley Detention Center.

² The CNEL is calculated at the boundary of the right-of-way of the receiving adjacent land use.

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



	Road		Receiving	CNEL at Receiving	Distance to Contour from Centerline (Feet)			
ID		Segment	Land Use ¹	Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	
1	Etiwanda Av.	s/o Foothill Bl.	Sensitive	75.9	125	268	578	
2	Etiwanda Av.	s/o Whittram Av.	Non-Sensitive	77.1	149	322	693	
3	Etiwanda Av.	s/o San Bernardino Av.	Non-Sensitive	77.0	175	377	813	
4	Foothill Bl.	w/o Etiwanda Av.	Non-Sensitive	78.3	213	459	989	
5	6th St.	w/o Etiwanda Av.	Non-Sensitive	63.4	RW	RW	74	
6	4th St.	e/o I-15 NB Ramps	Non-Sensitive	77.2	180	388	837	
7	4th St.	w/o Etiwanda Av.	Sensitive	77.0	177	381	821	
8	Street A	s/o Dwy. 8	Sensitive	65.0	RW	30	64	

TABLE 12: OYC (2022) WITH SORT USE AND WITHOUT 6TH ST. CONNECTION NOISE CONTOURS

¹Noise sensitive uses limited to noise sensitive residential land uses and the West Valley Detention Center.

 $^{\rm 2}$ The CNEL is calculated at the boundary of the right-of-way of the receiving adjacent land use.

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

ID	Road	Segment	Receiving Land Use ¹	CNEL at Receiving Land Use (dBA) ²		nce to Co enterline 65 dBA CNEL	
1	Etiwanda Av.	s/o Foothill Bl.	Sensitive	75.8	122	263	566
2	Etiwanda Av.	s/o Whittram Av.	Non-Sensitive	77.0	147	317	682
3	Etiwanda Av.	s/o San Bernardino Av.	Non-Sensitive	77.9	200	432	930
4	Foothill Bl.	w/o Etiwanda Av.	Non-Sensitive	78.2	211	455	980
5	6th St.	w/o Etiwanda Av.	Non-Sensitive	58.5	RW	RW	RW
6	4th St.	e/o I-15 NB Ramps	Non-Sensitive	76.8	169	365	786
7	4th St.	w/o Etiwanda Av.	Sensitive	78.0	204	439	945
8	Street A	s/o Dwy. 8	Sensitive	n/a	n/a	n/a	n/a

¹Noise sensitive uses limited to noise sensitive residential land uses and the West Valley Detention Center.

² The CNEL is calculated at the boundary of the right-of-way of the receiving adjacent land use.

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



	Road		Receiving	CNEL at Receiving	Distance to Contour from Centerline (Feet)			
ID		Segment	Land Use ¹	Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	
1	Etiwanda Av.	s/o Foothill Bl.	Sensitive	75.9	125	268	578	
2	Etiwanda Av.	s/o Whittram Av.	Non-Sensitive	77.1	149	322	693	
3	Etiwanda Av.	s/o San Bernardino Av.	Non-Sensitive	78.0	204	439	946	
4	Foothill Bl.	w/o Etiwanda Av.	Non-Sensitive	78.2	213	458	986	
5	6th St.	w/o Etiwanda Av.	Non-Sensitive	63.4	RW	RW	74	
6	4th St.	e/o I-15 NB Ramps	Non-Sensitive	77.1	178	384	828	
7	4th St.	w/o Etiwanda Av.	Sensitive	78.1	207	447	963	
8	Street A	s/o Dwy. 8	Sensitive	63.9	RW	RW	54	

TABLE 14: OYC (2022) WITH SORT USE WITH 6TH ST. CONNECTION NOISE CONTOURS

¹Noise sensitive uses limited to noise sensitive residential land uses and the West Valley Detention Center.

 2 The CNEL is calculated at the boundary of the right-of-way of the receiving adjacent land use.

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

TABLE 15: HORIZON YEAR (2040) WITHOUT SORT USE NOISE CONTOURS

ID	Road	Segment	Receiving	CNEL at Receiving	Distance to Contour from Centerline (Feet) 70 65 60			
			Land Use ¹	Land Use (dBA) ²	dBA CNEL	dBA CNEL	dBA CNEL	
1	Etiwanda Av.	s/o Foothill Bl.	Sensitive	78.0	170	367	791	
2	Etiwanda Av.	s/o Whittram Av.	Non-Sensitive	79.4	210	452	974	
3	Etiwanda Av.	s/o San Bernardino Av.	Non-Sensitive	77.1	177	381	822	
4	Foothill Bl.	w/o Etiwanda Av.	Non-Sensitive	80.1	285	613	1322	
5	6th St.	w/o Etiwanda Av.	Non-Sensitive	70.5	48	103	221	
6	4th St.	e/o I-15 NB Ramps	Non-Sensitive	77.2	182	392	845	
7	4th St.	w/o Etiwanda Av.	Sensitive	77.4	186	400	862	
8	Street A	s/o Dwy. 8	Sensitive	n/a	n/a	n/a	n/a	

¹Noise sensitive uses limited to noise sensitive residential land uses and the West Valley Detention Center.

² The CNEL is calculated at the boundary of the right-of-way of the receiving adjacent land use.

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



			Receiving	CNEL at Receiving	Distance to Contour from Centerline (Feet)			
ID	Road	Segment	Land Use ¹	Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	
1	Etiwanda Av.	s/o Foothill Bl.	Sensitive	78.1	173	372	802	
2	Etiwanda Av.	s/o Whittram Av.	Non-Sensitive	79.4	212	457	984	
3	Etiwanda Av.	s/o San Bernardino Av.	Non-Sensitive	77.2	181	389	839	
4	Foothill Bl.	w/o Etiwanda Av.	Non-Sensitive	80.2	286	616	1327	
5	6th St.	w/o Etiwanda Av.	Non-Sensitive	71.1	52	111	240	
6	4th St.	e/o I-15 NB Ramps	Non-Sensitive	77.5	191	411	885	
7	4th St.	w/o Etiwanda Av.	Sensitive	77.5	190	409	881	
8	Street A	s/o Dwy. 8	Sensitive	63.9	RW	RW	54	

TABLE 16: HORIZON YEAR (2040) WITH SORT USE NOISE CONTOURS

¹Noise sensitive uses limited to noise sensitive residential land uses and the West Valley Detention Center.

² The CNEL is calculated at the boundary of the right-of-way of the receiving adjacent land use.

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

EXISTING TRAFFIC NOISE LEVEL INCREASES

An analysis of existing traffic noise levels plus traffic noise generated if the buildings are used as a High-Cube Fulfillment Center (Sort) Warehouse has been included in this report to fully analyze all the existing traffic scenarios identified based on an estimate of trips that could occur if the proposed buildings operated as the Sort Use consistent with the *Bridge Point Rancho Cucamonga High-Cube Fulfillment Center Traffic Memo* prepared by Urban Crossroads, Inc.. This condition is provided solely for informational purposes and will not occur, since the Sort Use would not be fully developed and occupied under Existing conditions.

Table 9 shows the Existing (2020) without Project conditions CNEL noise levels. The Existing (2020) without Project exterior noise levels are expected to range from 58.4 to 77.5 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 10 shows the Existing (2020) with Sort Use conditions will range from 63.3 to 77.6 dBA CNEL. Table 17 shows that the Sort Use off-site traffic noise level impacts will range from 0.1 to 4.9 dBA CNEL. Based on the significance criteria for off-site traffic noise, land uses adjacent to the study area roadway segments would experience *less than significant* noise level impacts due to unmitigated Sort Use -related traffic noise levels.



OYC (2022) WITHOUT 6TH ST. CONNECTION SORT USE TRAFFIC NOISE LEVEL INCREASES

Table 11 presents the Opening Year Cumulative (2022) without Project and without the 6th Street connection conditions CNEL noise levels. The Opening Year (2022) without Project and without the 6th Street connection exterior noise levels are expected to range from 58.5 to 78.2 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 12 shows that the Opening Year Cumulative (2022) with Sort Use but without the 6th Street connection conditions will range from 63.4 to 78.3 dBA CNEL. Table 18 shows that the Sort Use off-site traffic noise level increases will range from 0.1 to 4.9 dBA CNEL. Based on the significance criteria for off-site traffic noise, land uses adjacent to the study area roadway segments would experience *less than significant* noise level impacts due to unmitigated Sort Use related traffic noise levels.

OYC (2022) WITH 6TH ST. CONNECTION SORT USE TRAFFIC NOISE LEVEL INCREASES

Table 13 presents the Opening Year Cumulative (2022) without Project with 6th Street connection conditions CNEL noise levels. The Opening Year (2022) without Project with 6th Street connection exterior noise levels is expected to range from 58.5 to 78.2 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 14 shows that the Opening Year Cumulative (2022) with Sort Use with 6th Street connection conditions will range from 63.4 to 78.2 dBA CNEL. Table 19 shows that the Sort Use off-site traffic noise level increases will range from 0.0 to 4.9 dBA CNEL. Based on the significance criteria for off-site traffic noise, land uses adjacent to the study area roadway segments would experience *less than significant* noise level impacts due to unmitigated Sort Use related traffic noise levels.

HORIZON YEAR (2040) SORT USE TRAFFIC NOISE LEVEL INCREASES

Table 15 presents the Horizon Year (2040) without Project conditions CNEL noise levels. The Horizon Year (2040) without Project exterior noise levels are expected to range from 70.5 to 80.1 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 16 shows that the Horizon Year (2040) with Sort Use conditions will range from 71.1 to 80.2 dBA CNEL. Table 20 shows that the Sort Use off-site traffic noise level increases will range from 0.0 to 0.6 dBA CNEL. Based on the significance criteria for off-site traffic noise, land uses adjacent to the study area roadway segments would experience *less than significant* noise level impacts due to unmitigated Sort Use related traffic noise levels.



ID	Road	Segment	Receiving		L at Recei nd Use (dB	Incremental Noise Level Increase Threshold ³		
10		Jeginent	Land Use ¹	Without Sort Use	With Sort Use	Project Addition	Limit	Exceeded?
1	Etiwanda Av.	s/o Foothill Bl.	Sensitive	74.8	75.0	0.2	1.5	No
2	Etiwanda Av.	s/o Whittram Av.	Non-Sensitive	76.0	76.1	0.1	3.0	No
3	Etiwanda Av.	s/o San Bernardino Av.	Non-Sensitive	76.0	76.1	0.1	3.0	No
4	Foothill Bl.	w/o Etiwanda Av.	Non-Sensitive	77.5	77.6	0.1	3.0	No
5	6th St.	w/o Etiwanda Av.	Non-Sensitive	58.4	63.3	4.9	5.0	No
6	4th St.	e/o I-15 NB Ramps	Non-Sensitive	76.1	76.6	0.5	3.0	No
7	4th St.	w/o Etiwanda Av.	Sensitive	76.3	76.5	0.2	1.5	No

TABLE 17: EXISTING WITH SORT USE TRAFFIC NOISE LEVEL INCREASES

¹Noise sensitive uses limited to noise sensitive residential land uses and the West Valley Detention Center.

² The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

ID	Road	Segment	Receiving		L at Recei d Use (dB	Incremental Noise Level Increase Threshold ³		
		Jegment	Land Use ¹	Without Sort Use	With Sort Use	Project Addition	Limit	Exceeded?
1	Etiwanda Av.	s/o Foothill Bl.	Sensitive	75.8	75.9	0.1	1.5	No
2	Etiwanda Av.	s/o Whittram Av.	Non-Sensitive	77.0	77.1	0.1	3.0	No
3	Etiwanda Av.	s/o San Bernardino Av.	Non-Sensitive	76.8	77.0	0.2	3.0	No
4	Foothill Bl.	w/o Etiwanda Av.	Non-Sensitive	78.2	78.3	0.1	3.0	No
5	6th St.	w/o Etiwanda Av.	Non-Sensitive	58.5	63.4	4.9	5.0	No
6	4th St.	e/o I-15 NB Ramps	Non-Sensitive	76.8	77.2	0.4	3.0	No
7	4th St.	w/o Etiwanda Av.	Sensitive	76.9	77.0	0.1	1.5	No

TABLE 18: OYC (2022) WITH SORT USE WITHOUT 6TH ST. CONNECTION TRAFFIC NOISE LEVEL INCREASES

¹Noise sensitive uses limited to noise sensitive residential land uses and the West Valley Detention Center.

² The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

ID	Road	Segment	Receiving		L at Recei d Use (dB	Incremental Noise Level Increase Threshold ³		
		Jegment	Land Use ¹	Without Sort Use	With Sort Use	Project Addition	Limit	Exceeded?
1	Etiwanda Av.	s/o Foothill Bl.	Sensitive	75.8	75.9	0.1	1.5	No
2	Etiwanda Av.	s/o Whittram Av.	Non-Sensitive	77.0	77.1	0.1	3.0	No
3	Etiwanda Av.	s/o San Bernardino Av.	Non-Sensitive	77.9	78.0	0.1	3.0	No
4	Foothill Bl.	w/o Etiwanda Av.	Non-Sensitive	78.2	78.2	0.0	3.0	No
5	6th St.	w/o Etiwanda Av.	Non-Sensitive	58.5	63.4	4.9	5.0	No
6	4th St.	e/o I-15 NB Ramps	Non-Sensitive	76.8	77.1	0.3	3.0	No
7	4th St.	w/o Etiwanda Av.	Sensitive	78.0	78.1	0.1	1.5	No

TABLE 19: OYC (2022) WITH SORT USE WITH 6TH ST. CONNECTION TRAFFIC NOISE LEVEL INCREASES

¹Noise sensitive uses limited to noise sensitive residential land uses and the West Valley Detention Center.

² The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

ID	Road	Segment	Receiving		L at Recei d Use (dB	Incremental Noise Level Increase Threshold ³		
		Jegment	Land Use ¹	Without Sort Use	With Sort Use	Project Addition	Limit	Exceeded?
1	Etiwanda Av.	s/o Foothill Bl.	Sensitive	78.0	78.1	0.1	1.5	No
2	Etiwanda Av.	s/o Whittram Av.	Non-Sensitive	79.4	79.4	0.0	3.0	No
3	Etiwanda Av.	s/o San Bernardino Av.	Non-Sensitive	77.1	77.2	0.1	3.0	No
4	Foothill Bl.	w/o Etiwanda Av.	Non-Sensitive	80.1	80.2	0.1	3.0	No
5	6th St.	w/o Etiwanda Av.	Non-Sensitive	70.5	71.1	0.6	3.0	No
6	4th St.	e/o I-15 NB Ramps	Non-Sensitive	77.2	77.5	0.3	3.0	No
7	4th St.	w/o Etiwanda Av.	Sensitive	77.4	77.5	0.1	1.5	No

TABLE 20: HORIZON YEAR (2040) WITH SORT USE TRAFFIC NOISE LEVEL INCREASES

¹Noise sensitive uses limited to noise sensitive residential land uses and the West Valley Detention Center.

² The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

CONCLUSIONS

Traffic generated by the operation of the buildings with High-Cube Fulfillment Center (Sort) Warehouse and High-Cube Cold Storage Warehouse uses 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 8 study-area roadway segments were calculated using the transportation related twenty-four-hour community noise equivalent levels (CNEL) based on the change in the average daily traffic (ADT) volumes. The traffic noise levels provided in this analysis are based on an estimate of trips that could occur if the proposed buildings operated as the Sort Use consistent with the *Bridge Point Rancho Cucamonga High-Cube Fulfillment Center Traffic Memo* prepared by Urban Crossroads, Inc.. To assess the off-site noise level impacts associated with operation of the buildings with High-Cube Fulfillment Center (Sort) Warehouse and High-Cube Cold Storage Warehouse uses, noise contour boundaries were developed for Existing (2020), Opening Year Cumulative (2022), Opening Year Cumulative (2022) with the 6th Street Connection, and Horizon Year (2040). The analysis shows that the Sort Use-related traffic noise level increases under all traffic scenarios are considered to have *less than significant* impacts at receiving land uses adjacent to the study area roadway segments. If you have any questions, please contact me directly at (949) 584-3148.

Respectfully submitted,

URBAN CROSSROADS, INC.

Bill Lawson, P.E., INCE Principal





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APPENDIX A

OFF-SITE TRAFFIC NOISE CONTOURS



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	FHWA-I	RD-77-108	HIG	HWAY I	NOISE PF	REDICT	ION MOI	DEL					
Scenario: Existing Road Name: Etiwand Road Segment: s/o Foo	la Av.				Project Name: BridgePoint Job Number: 13349								
SITE SPECIFIC	INPU	T DATA							L INPUTS	3	-		
Highway Data					Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (Ad	t): 13,	077 vehicl	es				,	Autos:	15				
Peak Hour Percentag	e: 10.	14%			Me	dium Tr	ucks (2 A	xles):	15				
Peak Hour Volum	e: 1,3	26 vehicle	s		He	avy Tru	cks (3+ A	xles):	15				
Vehicle Spee	d:	50 mph		ŀ	Vehicle I	Mix							
Near/Far Lane Distanc	e:	50 feet		ŀ		icleType		Dav	Evening	Night	Daily		
Site Data					10/1			77.5%	•	9.6%			
Barrier Heigh	et.	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	3.57%		
Barrier Type (0-Wall, 1-Bern		0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	10.63%		
Centerline Dist. to Barrie	·	0.0 feet		-	Noine Or			. <i>(i.e. f.</i>	- 41				
Centerline Dist. to Observe	er: 5	0.0 feet		ŀ	Noise So	Auto		000	et)				
Barrier Distance to Observe	er:	0.0 feet			Madiu	n Truck		297					
Observer Height (Above Pad): 5.0 feet						v Truck		004	Grade Adj	ustment	. 0 0		
Pad Elevatio	n:	0.0 feet			Tieav	y much	3. 0.0	104	Orade Auj	usunoni	0.0		
Road Elevatio	n:	0.0 feet			Lane Equ	uivalen	t Distanc	e (in f	eet)				
Road Grad	e: 0.	0%			Autos: 43.589								
Left Vie		0.0 degre	es		Medium Trucks: 43.386								
Right Vie	<i>N:</i> 9	0.0 degre	es		Heav	y Truck	s: 43.4	105					
FHWA Noise Model Calculat	ions										-		
VehicleType REMEL	Tra	affic Flow	Di	istance	Finite	Road	Fresn	el	Barrier Atte	en Ber	m Atten		
	.20	-1.73		0.7	-	-1.20		-4.65	0.0		0.00		
	.00	-15.54		0.8		-1.20		-4.87	0.0		0.000		
Heavy Trucks: 85	.38	-10.80		0.8	32	-1.20		-5.43	0.0	00	0.00		
Unmitigated Noise Levels (v													
VehicleType Leq Peak		Leq Day		Leq E	vening	Leq	Night		Ldn		NEL		
Autos:	68.1		66.1		64.3		58.3		66.9		67.5		
Medium Trucks:	65.1		63.5		57.1		55.6		64.1		64.		
Heavy Trucks:	74.2		72.7		63.7		64.9		73.3		73.4		
Vehicle Noise:	75.5		74.0		67.5		66.2		74.6)	74.8		
Centerline Distance to Noise	e Conto	ur (in feet)										
			[70	dBA	65	dBA	6	0 dBA	55	dBA		
			Ldn: NEL:		101 105		218 225		469 485		1,010 1.045		

	FHW	A-RD-77-108 H	IGHWA	Y NOISE	PREDIC	FION MC	DEL			
	o: Existing (202					t Name:		Point		
	e: Etiwanda Av				Job	Number:	13349			
Road Segmer	nt: s/o San Berr	ardino Av.								
	SPECIFIC IN	PUT DATA						LINPUT	5	
Highway Data				Site C	onditions	s (Hard =	10, So	oft = 15)		
Average Daily	Traffic (Adt):	9,731 vehicles					Autos:	15		
Peak Hour	Percentage:	10.14%			Medium T					
Peak H	our Volume:	2,001 vehicles			Heavy Tri	ıcks (3+	Axles):	15		
	hicle Speed:	50 mph		Vehic	le Mix					
Near/Far La	ne Distance:	73 feet		1	ehicleTyp	е	Day	Evening	Night	Daily
Site Data						Autos:	77.5%	12.9%	9.6%	85.80%
Bai	rier Height:	0.0 feet			Medium	Trucks:	84.8%	4.9%	10.3%	3.57%
Barrier Type (0-W	•	0.0			Heavy	Trucks:	86.5%	2.7%	10.8%	10.639
Centerline Dis	. ,	60.0 feet								
Centerline Dist.		60.0 feet		Noise	Source E			eet)		
Barrier Distance	to Observer:	0.0 feet			Aut		000			
Observer Height (Above Pad):	5.0 feet			dium Truc		297	Crada Adi	untmont	
Pa	d Elevation:	0.0 feet		п	eavy Truc	KS: 8	004	Grade Adj	usimeni.	0.0
Roa	ad Elevation:	0.0 feet		Lane	Equivaler	nt Distan	ce (in i	feet)		
F	Road Grade:	0.0%			Aut	os: 47	.883			
	Left View:	-90.0 degrees		Me	dium Truc	ks: 47	.698			
	Right View:	90.0 degrees		Н	eavy Truc	ks: 47	.716			
FHWA Noise Mode	el Calculations									
VehicleType	REMEL	Traffic Flow	Distand	e Fir	ite Road	Fres	nel	Barrier Atte	en Ber	m Atten
Autos:	70.20	0.05		0.18	-1.20		-4.69	0.0	00	0.00
Medium Trucks:	81.00	-13.76		0.20	-1.20		-4.88	0.0	00	0.00
Heavy Trucks:	85.38	-9.02		0.20	-1.20		-5.34	0.0	00	0.00
Unmitigated Noise	Levels (witho	ut Topo and ba	arrier at	tenuatio	n)					
	Leq Peak Hour			q Evening		Night		Ldn		VEL
Autos:	69.1		7.3		5.5	59.		68.1		68.
Medium Trucks:	66.2		1.7		3.3	56.		65.2		65.
Heavy Trucks:	75.4		3.9		1.8	66.		74.4		74.
Vehicle Noise:	76.	7 75	5.1	6	3.6	67.	3	75.8	5	76.
Centerline Distanc	e to Noise Cor	ntour (in feet)								
				70 dBA		i dBA		60 dBA		dBA
			dn:		15	313 323		674		1,451
		CNE			50			697		1.501

Friday, March 19, 2021

	- FHV	VA-RD-77-108	HIGH	WATI	NOISE PR	EDICI		EL			
Scenario: E							Name: Bi		Point		
Road Name: E						Job N	umber: 13	3349			
Road Segment: s	/o Whittrar	n Av.									
	CIFIC IN	PUT DATA								;	
Highway Data					Site Con	ditions		· ·	,		
Average Daily Trafi	. ,	17,260 vehicle	es					utos:	15		
Peak Hour Perc	centage:	10.14%					ıcks (2 Ax		15		
Peak Hour	Volume:	1,750 vehicles	5		He	avy Truc	cks (3+ Ax	(les):	15		
	Speed:	50 mph		-	Vehicle I	<i>lix</i>					
Near/Far Lane D	listance:	50 feet		-	Vehi	cleType	D	ay	Evening	Night	Daily
Site Data							Autos: 7	7.5%	12.9%	9.6%	85.80
Barrier	Heiaht:	0.0 feet			Me	edium Ti	ucks: 8	4.8%	4.9%	10.3%	3.57
Barrier Type (0-Wall,		0.0			F	leavy Ti	ucks: 8	6.5%	2.7%	10.8%	10.63
Centerline Dist. to		50.0 feet		+	Noise So		ovations	(in fo	of		
Centerline Dist. to O	bserver:	50.0 feet		-	Noise 30	Auto:			el)		
Barrier Distance to O	bserver:	0.0 feet				n Truck	. 0.00				
Observer Height (Abo	ve Pad):	5.0 feet							Grade Adju	ictmont	
Pad E	levation:	0.0 feet			Heav	y Truck	s: 8.00	J4	Graue Auju	isunen.	0.0
Road E	levation:	0.0 feet		Γ	Lane Equ	ivalent	Distance	e (in f	eet)		
Road	d Grade:	0.0%		Γ		Auto	s: 43.58	39			
Le	eft View:	-90.0 degree	es		Mediur	n Truck	s: 43.38	36			
Rig	ht View:	90.0 degree	es		Heav	y Truck	5: 43.40	05			
FHWA Noise Model Ca	lculations	5		-							
VehicleType R	EMEL	Traffic Flow	Dis	tance	Finite	Road	Fresne	1	Barrier Atte	n Ber	m Atter
Autos:	70.20	-0.53		0.7	'9	-1.20	-4	4.65	0.0	00	0.0
Medium Trucks:	81.00	-14.34		0.8	32	-1.20	-4	4.87	0.0	00	0.0
Heavy Trucks:	85.38	-9.60		0.8	32	-1.20	-	5.43	0.0	00	0.0
Unmitigated Noise Le											
	Peak Hou			Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	69		67.3		65.5		59.5		68.1		68
Medium Trucks:	66	-	64.7		58.4		56.8		65.3		65
Heavy Trucks:	75		73.9		64.9		66.1		74.5		74
Vehicle Noise:	76	.8	75.2		68.7		67.4		75.8		76
Centerline Distance to	Noise Co	ntour (in feet))								
			L	70	dBA	65	dBA	6	0 dBA	55	dBA
			Ldn:		122		262		564		1.21
			VEL:		122		202		584		1,25

FHWA-RD-77-10	8 HIGHWA	T NOISE P	REDICTION	MODEL			
Scenario: Existing (2020) Road Name: Foothill Bl. Road Segment: w/o Etiwanda Av.			Project Na Job Numi				
SITE SPECIFIC INPUT DATA					EL INPUT	5	
Highway Data		Site Con	ditions (Ha		,		
Average Daily Traffic (Adt): 27,934 vehic	les			Auto			
Peak Hour Percentage: 10.14%			dium Truck				
Peak Hour Volume: 2,833 vehicl	es	He	avy Trucks	(3+ Axles): 15		
Vehicle Speed: 50 mph		Vehicle	Mix				
Near/Far Lane Distance: 73 feet		Veh	icleType	Day	Evening	Night	Daily
Site Data			Auto	s: 77.5	% 12.9%	9.6%	85.80
Barrier Height: 0.0 feet		М	edium Truck	s: 84.8	% 4.9%	10.3%	3.57
Barrier Type (0-Wall, 1-Berm): 0.0			Heavy Truck	s: 86.5	% 2.7%	10.8%	10.63
Centerline Dist. to Barrier: 60.0 feet		Noise Se	ource Eleva	tions (in	feet)		
Centerline Dist. to Observer: 60.0 feet			Autos:	0.000	,		
Barrier Distance to Observer: 0.0 feet		Mediu	m Trucks:	2.297			
Observer Height (Above Pad): 5.0 feet			v Trucks:	8.004	Grade Adj	iustment	: 0.0
Pad Elevation: 0.0 feet							
Road Elevation: 0.0 feet		Lane Eq	uivalent Dis		i feet)		
Road Grade: 0.0%		14-15-	Autos:	47.883			
Left View: -90.0 degro Right View: 90.0 degro			m Trucks: /y Trucks:	47.698 47.716			
FHWA Noise Model Calculations							
VehicleType REMEL Traffic Flow	Distanc	e Finite	Road F	resnel	Barrier Atte	en Ber	m Atte
Autos: 70.20 1.5	6	0.18	-1.20	-4.69	0.0	000	0.0
Medium Trucks: 81.00 -12.2	5	0.20	-1.20	-4.88	3 0.0	000	0.0
Heavy Trucks: 85.38 -7.5	1	0.20	-1.20	-5.34	\$ 0.0	000	0.0
Unmitigated Noise Levels (without Topo and		,					
VehicleType Leq Peak Hour Leq Da		q Evening	Leq Nig		Ldn		NEL
Autos: 70.7	68.8	67.0		61.0	69.6		70
Medium Trucks: 67.8	66.2	59.8		58.3	66.7		67
Heavy Trucks: 76.9	75.4	66.4		67.6	76.0		76
Vehicle Noise: 78.2	76.7	70.1		68.9	77.3	3	77
Centerline Distance to Noise Contour (in fee	,						
	1 7	70 dBA	65 dBA		60 dBA	55	dBA
	Ldn: CNEL:	183 189		394 408	849 879		1,83 1,89

FHWA-RD-77-108	HIGHWA	Y NOISE P	REDICTIO	N MODEL			
Scenario: Existing (2020)			Project N	ame: Brid	gePoint		
Road Name: 6th St.			Job Nur	nber: 133	19		
Road Segment: w/o Etiwanda Av.							
SITE SPECIFIC INPUT DATA		011 0			DEL INPUT	S	
Highway Data		Site Cor	ditions (H	,	,		
Average Daily Traffic (Adt): 337 vehicle	s			Auto			
Peak Hour Percentage: 10.14%			edium Truc				
Peak Hour Volume: 34 vehicles	5	He	avy Truck	s (3+ Axle	s): 15		
Vehicle Speed: 40 mph		Vehicle	Mix				
Near/Far Lane Distance: 50 feet		Veh	icleType	Day	Evening	Night	Daily
Site Data			Au	tos: 77.	5% 12.9%	9.6%	85.80
Barrier Height: 0.0 feet		M	edium Tru	cks: 84.	3% 4.9%	10.3%	3.579
Barrier Type (0-Wall, 1-Berm): 0.0			Heavy Tru	cks: 86.	5% 2.7%	10.8%	10.63
Centerline Dist. to Barrier: 44.0 feet		Noise S	ource Elev	ations (ir	feet)		
Centerline Dist. to Observer: 44.0 feet			Autos:	0.000			
Barrier Distance to Observer: 0.0 feet		Mediu	m Trucks:	2.297			
Observer Height (Above Pad): 5.0 feet		Hea	vv Trucks:	8.004	Grade Ad	justment:	0.0
Pad Elevation: 0.0 feet		-					
Road Elevation: 0.0 feet		Lane Eq	uivalent D		n teet)		
Road Grade: 0.0%			Autos:	36.551			
Left View: -90.0 degree			m Trucks:	36.308			
Right View: 90.0 degree	S	пеа	vy Trucks:	36.332			
FHWA Noise Model Calculations						1	
VehicleType REMEL Traffic Flow	Distand		Road	Fresnel	Barrier Att		n Atten
Autos: 66.51 -16.66		1.94	-1.20	-4.6		000	0.00
Medium Trucks: 77.72 -30.47		1.98	-1.20	-4.8		000	0.00
Heavy Trucks: 82.99 -25.73		1.98	-1.20	-5.5	0 0.0	000	0.00
Unmitigated Noise Levels (without Topo and		,					
VehicleType Leq Peak Hour Leq Day		q Evening	Leq Ni	•	Ldn	CN	
	48.6 46.5	46.9 40.1		40.8 38.6	49.4		50
				38.6 48.8		-	47.
	56.6	47.5		48.8	57.		57
	57.6	50.6		49.8	58.	۷	58
Centerline Distance to Noise Contour (in feet)		70 dBA	65 dF	24	60 dBA	55 (
	Ldn:	70 dBA 7	65 dE	15	60 GBA 33		јва 7
	Lan: IEL:	7		15 16	33		74
67	VLL.	(10	34		14

FHWA-RD-77-108	HIGHWA	Y NOISE P	REDICTIO	ON MOI	DEL			
Scenario: Existing (2020) Road Name: 4th St. Road Segment: w/o Etiwanda Av.			Project I Job Nu			Point		
SITE SPECIFIC INPUT DATA			N	DISE N	IODE	L INPUT	5	
Highway Data		Site Con	ditions (l	Hard =	10, So	ft = 15)		
Average Daily Traffic (Adt): 17,800 vehicle:	6				Autos:	15		
Peak Hour Percentage: 10.14%		Me	dium Tru	cks (2 A	xles):	15		
Peak Hour Volume: 1,805 vehicles		He	avy Truck	ks (3+ A	xles):	15		
Vehicle Speed: 55 mph		Vehicle	Miy					
Near/Far Lane Distance: 73 feet			icleType		Dav	Evening	Night	Daily
Site Data		ven			77.5%	•		85.80%
		M	edium Tru		84.8%		10.3%	3.57%
Barrier Height: 0.0 feet Barrier Type (0-Wall. 1-Berm): 0.0			Heavy Tru		86.5%			10.639
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 60.0 feet							10.070	10.007
Centerline Dist. to Barrier: 60.0 feet		Noise Se	ource Ele	vations	s (in fe	et)		
Barrier Distance to Observer: 0.0 feet			Autos.		000			
Observer Height (Above Pad): 5.0 feet			m Trucks.		297			
Pad Elevation: 0.0 feet		Hear	/y Trucks.	8.0	004	Grade Adj	iustment.	0.0
Road Elevation: 0.0 feet		Lane Eq	uivalent l	Distanc	e (in f	ieet)		
Road Grade: 0.0%		,	Autos.	47.8	383	,		
Left View: -90.0 degree	5	Mediu	m Trucks.	47.6	598			
Right View: 90.0 degree	5	Hear	/y Trucks.	47.7	716			
FHWA Noise Model Calculations		1						
VehicleType REMEL Traffic Flow	Distanc		Road	Fresn	-	Barrier Atte		m Atten
Autos: 71.78 -0.81		0.18	-1.20		-4.69		000	0.00
Medium Trucks: 82.40 -14.62		0.20	-1.20		-4.88		000	0.00
Heavy Trucks: 86.40 -9.88		0.20	-1.20		-5.34	0.0	000	0.00
Unmitigated Noise Levels (without Topo and L			r.					
VehicleType Leq Peak Hour Leq Day		g Evening	Leq N			Ldn		VEL
	8.0	66.2		60.2		68.8		69.
	5.2	58.9		57.3		65.8		66.
	4.0 5.4	65.0 69.1		66.3		74.6		74.
	5.4	69.1		67.6		76.0)	76.
Centerline Distance to Noise Contour (in feet)		70 - 10 4	05 -			0 -10 4		104
,		70 dBA	65 d		6	0 dBA		dBA
	.dn: EL:	152 157		327		704		1,518
Ch	EL.			339		730		1,572

Friday, March 19, 2021

Occupation Existing (2	000)			Due is at A	a mark David	Delint		
Scenario: Existing (2 Road Name: 4th St.	020)				ame: Brid nber: 1334			
Road Segment: e/o I-15 N	Pampe			JOD IVUI	ilbel. 155	19		
,								
SITE SPECIFIC I	NPUT DATA					DEL INPUTS	6	
Highway Data			Site Con	ditions (H	ard = 10,	Soft = 15)		
Average Daily Traffic (Adt):	17,250 vehicles				Auto			
Peak Hour Percentage:	10.14%				ks (2 Axle	, .		
Peak Hour Volume:	1,749 vehicles		Hea	avy Truck	s (3+ Axle	s): 15		
Vehicle Speed:	55 mph	-	Vehicle N	lix				
Near/Far Lane Distance:	73 feet	-		cleType	Dav	Evening	Niaht	Dailv
Site Data					tos: 77.		9.6%	
Barrier Height:	0.0 feet		Me	dium Tru			10.3%	3.57
Barrier Type (0-Wall, 1-Berm):	0.0 feet			leavv Tru			10.8%	
Centerline Dist. to Barrier:	60.0 feet							
Centerline Dist. to Observer:	60.0 feet	_	Noise So		ations (in	feet)		
Barrier Distance to Observer:	0.0 feet			Autos:	0.000			
Observer Height (Above Pad):	5.0 feet			n Trucks:	2.297			
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.004	Grade Adj	ustment.	0.0
Road Elevation:	0.0 feet		Lane Equ	uivalent D	istance (i	n feet)		
Road Grade:	0.0%			Autos:	47.883			
Left View:	-90.0 degrees		Mediur	n Trucks:	47.698			
Right View:	90.0 degrees			y Trucks:	47.716			
	00.0 009.000							
FHWA Noise Model Calculation	ıs							
VehicleType REMEL		listance	Finite		Fresnel	Barrier Atte	en Ber	m Atter
Autos: 71.78		0.1	-	-1.20	-4.6		00	0.00
Medium Trucks: 82.40		0.2		-1.20	-4.8		00	0.00
Heavy Trucks: 86.40	-10.02	0.2	0	-1.20	-5.3	4 0.0	00	0.00
Unmitigated Noise Levels (with	nout Topo and bar	rier atter	nuation)					
VehicleType Leg Peak Ho			vening	Leg Ni	aht	Ldn	CI	VEL
	9.8 67.9		66.1		60.0	68.7		69
Medium Trucks: 6	6.7 65.1		58.7		57.2	65.6		65
Heavy Trucks: 7	5.4 73.9)	64.9		66.1	74.5		74
	6.9 75.3	3	69.0		67.5	75.9		76
	ontour (in foot)							
Centerline Distance to Noise C						60 dBA	55	dBA
Centerline Distance to Noise C	ontour (mileet)	70	dBA	65 dE	A	60 dBA		UDA
Centerline Distance to Noise C	Ldn.		dBA 149	65 dE	320	690 690	55	идя 1,48

	FHV	VA-RD-77-108	HIGHWA	AY NOIS	E PREDICT	ION MODE	iL		
	rio: Existing (20	20)				Name: Bri	0		
	ne: Street A ent: s/o Dwy. 8				JOD N	umber: 13	349		
	SPECIFIC IN	PUT DATA					DEL INPUTS	3	
Highway Data				Site	Conditions	(Hard = 10	, Soft = 15)		
Average Daily	Traffic (Adt):	1 vehicle	es			Au	tos: 15		
Peak Hou	r Percentage:	10.14%			Medium Tr	ucks (2 Axl	es): 15		
Peak I	Hour Volume:	0 vehicles	6		Heavy Tru	cks (3+ Axl	es): 15		
Ve	ehicle Speed:	40 mph		Vehi	le Mix				
Near/Far La	ane Distance:	11 feet			/ehicleType	Da	y Evening	Night	Daily
Site Data							.5% 12.9%	9.6%	
Ba	rrier Heiaht:	0.0 feet			Medium T	rucks: 84	.8% 4.9%	10.3%	3.57%
Barrier Type (0-V		0.0			Heavy T	rucks: 86	.5% 2.7%	10.8%	10.63%
	ist. to Barrier:	30.0 feet							
Centerline Dist.		30.0 feet		NOIS	e Source E		,		
Barrier Distance		0.0 feet			Auto	0.000			
Observer Height	(Above Pad):	5.0 feet			dium Truck				
•	ad Elevation:	0.0 feet		F	leavy Truck	s: 8.004	4 Grade Adj	ustment:	0.0
Ro	ad Elevation:	0.0 feet		Lane	Equivalen	Distance	(in feet)		
	Road Grade:	0.0%			Auto	s: 29.91	2		
	Left View:	-90.0 degree	s	Me	dium Truck	s: 29.61	5		
	Right View:	90.0 degree	es	ŀ	leavy Truck	s: 29.64	4		
FHWA Noise Mod	lel Calculation	s		1					
VehicleType	REMEL	Traffic Flow	Distan	ce Fi	nite Road	Fresnel	Barrier Atte	en Berm	Atten
Autos:	66.51	-41.93		3.24	-1.20	-4	.49 0.0	00	0.000
Medium Trucks	77.72	-55.74		3.31	-1.20	-4	.86 0.0	00	0.000
Heavy Trucks	82.99	-51.00		3.30	-1.20	-5	.77 0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier a	ttenuatio	on)				
	Lea Peak Hou			eq Evenin		Night	Ldn	CN	
VehicleType			24.7	2	2.9	16.8	25.5		26.1
Autos									
Autos: Medium Trucks:	24	.1	22.5		6.2	14.6	23.1		23.3
Autos: Medium Trucks: Heavy Trucks:	24 34	.1 .1	32.6	2	3.6	24.8	33.2		33.3
Autos: Medium Trucks:	24 34	.1 .1		2					
Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	24 34 35	.1 .1 .2	32.6 33.6	2	3.6 6.7	24.8 25.8	33.2 34.2	! !	33.3 34.4
Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	24 34 35	.1 .1 .2 ontour (in feet,	32.6 33.6	2	3.6 6.7 65	24.8 25.8 dBA	33.2 34.2 60 dBA		33.3 34.4 BA
Autos: Medium Trucks: Heavy Trucks:	24 34 35	.1 .1 .2 ontour (in feet,	32.6 33.6	2	3.6 6.7	24.8 25.8	33.2 34.2	! !	33.3 34.4

FHWA-F	RD-77-108 HIGH	IWAY I	NOISE PR	EDICTIO	ON MOE	DEL		
Scenario: Existing + Proje Road Name: Etiwanda Av. Road Segment: s/o Foothill Bl.	ct			Project I Job Nu	<i>lame:</i> E mber: 1		Point	
SITE SPECIFIC INPU	T DATA						INPUTS	1
Highway Data			Site Cond	litions (l	Hard = 1	10, Soi	ft = 15)	
Average Daily Traffic (Adt): 15,0)62 vehicles				A	utos:	15	
Peak Hour Percentage: 10.	14%		Mec	lium True	cks (2 A	xles):	15	
Peak Hour Volume: 1,5	27 vehicles		Hea	vy Truck	ks (3+ A	xles):	15	
Vehicle Speed:	50 mph		Vehicle N	liv				
Near/Far Lane Distance:	50 feet	F		cleType		Dav	Evening	Night Dail
Site Data						77.5%	12.9%	9.6% 87.53
Barrier Height:	0.0 feet		Me	dium Tru	icks: 8	34.8%	4.9%	10.3% 3.15
•	0.0		н	leavy Tru	icks: {	36.5%	2.7%	10.8% 9.33
	0.0 feet	-	Noise So	urco Elo	vations	(in for	of	
Centerline Dist. to Observer: 5	0.0 feet	H	140136 301	Autos			eij	
Barrier Distance to Observer:	0.0 feet		Modium	n Trucks				
Observer Height (Above Pad):	5.0 feet			/ Trucks:			Grade Adii	ustment: 0.0
Pad Elevation:	0.0 feet	L						
Road Elevation:	0.0 feet		Lane Equ	ivalent l	Distanc	e (in fe	eet)	
Road Grade: 0.	0%			Autos:		89		
Left View: -9	0.0 degrees			n Trucks:				
Right View: 9	0.0 degrees		Heavy	/ Trucks:	43.4	05		
FHWA Noise Model Calculations		I.						
VehicleType REMEL Tra	ffic Flow Dis	tance	Finite I	Road	Fresne	el E	Barrier Atte	n Berm Atte
Autos: 70.20	-1.03	0.7	-	-1.20		4.65	0.0	
Medium Trucks: 81.00	-15.48	0.8	-	-1.20		4.87	0.0	
Heavy Trucks: 85.38	-10.76	8.0	2	-1.20	-	5.43	0.0	00 0.0
Unmitigated Noise Levels (without								
VehicleType Leq Peak Hour	Leq Day	Leq E	vening	Leq N	•		Ldn	CNEL
Autos: 68.8	66.8		65.0		59.0		67.6	6
Medium Trucks: 65.1	63.6		57.2		55.7		64.1	64
Heavy Trucks: 74.2	72.8		63.7		65.0		73.3	
Vehicle Noise: 75.7	74.1		67.8		66.3		74.7	7
Centerline Distance to Noise Conto	ur (in feet)	70	dBA				0.404	CC -10 1
	Ldn:	70		65 d		60	0 dBA	55 dBA
	CNEL:		104		223		481	1,0
	CIVEL:		107		231		499	1,0

		RD-77-108 HIG								
	Existing + Proj	ect				t Name:		Point		
Road Name: Road Segment:	Etiwanda Av. s/o San Bernar	dino Av.			JOD I	lumber:	13349			
SITE SI	PECIFIC INPU	T DATA			1	NOISE	NODE		5	
Highway Data				Site Con	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily Tr	affic (Adt): 22	230 vehicles					Autos:	15		
Peak Hour Pe	ercentage: 10	.14%		Me	dium Ti	rucks (2)	Axles):	15		
Peak Hou	ır Volume: 2,2	254 vehicles		He	avy Tru	icks (3+)	Axles):	15		
Vehi	cle Speed:	50 mph		Vehicle I	Nix					
Near/Far Lane	Distance:	73 feet			cleType	e	Dav	Evening	Night	Daily
Site Data						Autos:	77.5%		9.6%	
	er Height:	0.0 feet		Me	edium 1		84.8%		10.3%	3.23%
Barrier Type (0-Wal		0.0		ŀ	leavy 1	rucks:	86.5%	2.7%	10.8%	9.58%
Centerline Dist.	. ,	60.0 feet			_					
Centerline Dist. to		60.0 feet		Noise So				eet)		
Barrier Distance to	Observer:	0.0 feet		Mediur	Auto		000 297			
Observer Height (Al	oove Pad):	5.0 feet			y Truck		297 004	Grade Adj	ustment	0.0
Pad	Elevation:	0.0 feet							astinent	0.0
Road	Elevation:	0.0 feet		Lane Equ				feet)		
Ro		.0%			Auto		883			
		90.0 degrees		Mediur			698			
F	Right View:	90.0 degrees		Heav	y Truck	(S: 47.	716			
FHWA Noise Model	Calculations									
VehicleType			istance	Finite		Fresr	-	Barrier Atte		m Atten
Autos:	70.20	0.64	0.1		-1.20		-4.69	0.0		0.00
Medium Trucks:	81.00	-13.68	0.2		-1.20		-4.88	0.0		0.00
Heavy Trucks:	85.38	-8.95	0.2	20	-1.20		-5.34	0.0	00	0.00
Unmitigated Noise L	evels (without	Topo and barr	rier attei	nuation)						
	eq Peak Hour	Leq Day		ening	Leq	Night		Ldn		VEL
Autos:	69.8	67.9		66.1		60.0		68.7		69.
Medium Trucks:	66.3	64.8		58.4		56.9		65.3		65.
Heavy Trucks: Vehicle Noise:	75.4	73.9		64.9		66.2		74.5		74.
	76.9	75.3	•	69.0		67.	0	75.9	,	76.
Centerline Distance	to Noise Conto	our (in feet)							-	
				dBA	65	dBA		60 dBA		dBA
		Ldn: CNEL:		149		320		690		1,487
				154		332		715		1.540

Friday, March 19, 2021

Scenario: Ex	victing + D	roject				Project	Name: B	ridae	Point		
Road Name: El							warne: в umber: 1		rom		
Road Segment: s/						JUD IV	unibel. I	5549			
				-							
SITE SPE	CIFIC IN	PUT DATA		5	to Con		Hard = 1			5	
	- (40.045	_	31	le com	11110115		utos:	,		-
Average Daily Traffi	. ,	19,245 vehicle: 10.14%	6		Max	diuma Tra	н Icks (2 A.				
Peak Hour Perc Peak Hour V	•	1.951 vehicles					:ks (3+ A				
Vehicle		50 mph					NS (3+ A.	xies).	15		
Near/Far Lane Di		50 feet		Ve	ehicle N						
Neal/Fai Laile Di	stance.	50 leel			Vehi	cleType	L	Day	Evening	Night	Daily
Site Data								77.5%			87.15
Barrier	Height:	0.0 feet				dium Ti		34.8%		10.3%	
Barrier Type (0-Wall, 1	-Berm):	0.0			h	leavy Ti	ucks: 8	36.5%	2.7%	10.8%	9.61
Centerline Dist. to	Barrier:	50.0 feet		N	nise So	urce Fl	evations	(in fe	pet)		
Centerline Dist. to Ot	bserver:	50.0 feet				Auto					
Barrier Distance to Ot	bserver:	0.0 feet			Madium	n Truck	. 0.0				
Observer Height (Abov	ve Pad):	5.0 feet		Heavy Trucks: 8.004 Grade Adjustment: 0.0							. 0.0
Pad Ele	evation:	0.0 feet						-		uounom	. 0.0
Road Ele	evation:	0.0 feet		Lá	ane Equ	ivalent	Distance		feet)		
Road	Grade:	0.0%				Autos		89			
Le	ft View:	-90.0 degree	6		Mediun	n Trucks	s: 43.3	86			
Rigi	ht View:	90.0 degree	6		Heav	y Trucks	5: 43.4	05			
FHWA Noise Model Ca	lculations	;									
VehicleType RI	EMEL	Traffic Flow	Distan	се	Finite	Road	Fresne	e/	Barrier Atte	en Ber	m Atter
Autos:	70.20	0.01		0.79		-1.20	-	4.65	0.0	00	0.00
Medium Trucks:	81.00	-14.29		0.82		-1.20	-	4.87	0.0	00	0.00
Heavy Trucks:	85.38	-9.56		0.82		-1.20	-	5.43	0.0	00	0.00
Unmitigated Noise Lev	els (witho	out Topo and b	arrier a	ttenu	ation)						
VehicleType Leq	Peak Hou	r Leq Day	Le	eq Eve	ening	Leq	Night		Ldn		NEL
Autos:	69.	8 6	7.8		66.1		60.0		68.6		69
Medium Trucks:	66.		4.8		58.4		56.9		65.3		65
Heavy Trucks:	75.		4.0		64.9		66.2		74.5		74
Vehicle Noise:	76.	9 7	5.3		68.9		67.5		75.9	-	76
	Noise Co	ntour (in feet)									
Centerline Distance to						05	dBA	6	0 dBA	55	dBA
Centerline Distance to				70 dE	3A	00 0	IBA	C C	IU UDA	00	UDA
Centerline Distance to		L	.dn:	70 dE	124	65 (267		575	00	1,24

	FHV	VA-RD-77-108	HIGHWA	IY NC	DISE PR	EDICT					
Scena	rio: Existing + F	Project				Project	Name:	Bridgel	Point		
Road Nar	ne: Foothill Bl.					Job N	umber:	13349			
Road Segme	<i>ent:</i> w/o Etiwano	da Av.									
SITE	SPECIFIC IN	IPUT DATA								s	
Highway Data				Si	ite Cond	ditions	(Hard =	10, So	oft = 15)		
Average Daily	Traffic (Adt):	29,429 vehicle	es					Autos:	15		
Peak Hou	r Percentage:	10.14%			Med	dium Tru	ıcks (2 /	Axles):	15		
	Hour Volume:	2,984 vehicle	S		Hea	avy Truc	:ks (3+)	Axles):	15		
	ehicle Speed:	50 mph		Ve	ehicle N	lix					
Near/Far La	ane Distance:	73 feet			Vehi	cleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	86.45%
Ra	rrier Height:	0.0 feet			Me	dium Tr	ucks:	84.8%	4.9%	10.3%	3.41%
Barrier Type (0-V		0.0			н	leavy Tr	ucks:	86.5%	2.7%	10.8%	10.14%
Centerline D	ist. to Barrier:	60.0 feet		No	oise So	urco El	ovation	s (in fo	of)		
Centerline Dist.	to Observer:	60.0 feet		/10	0130 00	Autos		000			
Barrier Distance	to Observer:	0.0 feet			Madium	n Trucks		297			
Observer Height	(Above Pad):	5.0 feet				y Trucks		207	Grade Ad	iustment	0.0
F	ad Elevation:	0.0 feet			Tieav	y mucks	s. 0.	004	0/000 / 10	aounom	0.0
Ro	ad Elevation:	0.0 feet		La	ane Equ	iivalent	Distan	ce (in f	feet)		
	Road Grade:	0.0%				Autos	s: 47.	883			
	Left View:	-90.0 degree	es		Mediun	n Trucks	s: 47.	698			
	Right View:	90.0 degree	es		Heavy	y Trucks	s: 47.	716			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite I	Road	Fresr	el	Barrier Att	en Ber	m Atten
Autos:	70.20	1.82		0.18		-1.20		-4.69	0.0	000	0.00
Medium Trucks	81.00	-12.22		0.20		-1.20		-4.88	0.0	000	0.000
Lisser Tourslas	85.38	-7.49		0.20		-1.20		-5.34	0.0	000	0.00
Heavy Trucks:	00.00										
		out Topo and	barrier a	tenu	ation)						
Unmitigated Nois VehicleType	e Levels (with Leq Peak Hou	ir Leq Day	/ Le	t enu q Eve	ening	Leq	Night		Ldn		VEL
Unmitigated Nois VehicleType Autos:	e Levels (with Leq Peak Hou 71	Ir Leq Day	69.0		ening 67.3	Leq	61.2		69.8	3	70.
Unmitigated Nois VehicleType Autos: Medium Trucks:	e Levels (with Leq Peak Hou 71 67	Ir Leq Day .0 .8	69.0 66.2		ening 67.3 59.9	Leq	61.2 58.3	3	69.8 66.8	3	70. 67.
Unmitigated Nois VehicleType Autos: Medium Trucks Heavy Trucks	e Levels (with Leq Peak Hou 71 67 76	.0 .8 .9	69.0 66.2 75.4		ening 67.3 59.9 66.4	Leq	61.2 58.3 67.6	3	69.8 66.8 76.0	3 3 0	70. 67. 76.
Unmitigated Nois VehicleType Autos: Medium Trucks:	e Levels (with Leq Peak Hou 71 67 76	.0 .8 .9	69.0 66.2		ening 67.3 59.9	Leq	61.2 58.3	3	69.8 66.8	3 3 0	70. 67. 76.
Unmitigated Nois VehicleType Autos: Medium Trucks. Heavy Trucks:	e Levels (with Leg Peak Hou 71 67 76 78	<i>Ir Leq Day</i> .0 .8 .9 .3	/ Le 69.0 66.2 75.4 76.7	q Eve	ening 67.3 59.9 66.4 70.3		61.2 58.3 67.6 68.9	3	69.8 66.8 76.0 77.3	3 3 0 3	70. 67. 76. 77.
Unmitigated Nois VehicleType Autos. Medium Trucks. Heavy Trucks. Vehicle Noise.	e Levels (with Leg Peak Hou 71 67 76 78	<i>Ir Leq Day</i> .0 .8 .9 .3	2 Le 69.0 66.2 75.4 76.7		ening 67.3 59.9 66.4 70.3 3A		61.2 58.3 67.6 68.9	3	69.8 66.8 76.0 77.3	3 3 3 3 55	70.4 67.0 76.7 77.0 dBA
Unmitigated Nois VehicleType Autos. Medium Trucks. Heavy Trucks. Vehicle Noise.	e Levels (with Leg Peak Hou 71 67 76 78	Ir Leq Day .0 .8 .9 .3 Dontour (in feet	/ Le 69.0 66.2 75.4 76.7	q Eve	ening 67.3 59.9 66.4 70.3		61.2 58.3 67.6 68.9	3	69.8 66.8 76.0 77.3	3 3 3 3 3 55	70.5 67.0 76.1 77.6

FHWA	-RD-77-108 HIGH	I YAWI	NOISE PF	EDICTIO		EL	
Scenario: Existing + Pro Road Name: 6th St. Road Segment: w/o Etiwanda					<i>lame:</i> Br mber: 13	idgePoint 349	
SITE SPECIFIC INP	UT DATA			N	DISE MO	DEL INPUT	rs
Highway Data			Site Con	ditions (l	Hard = 10	0, Soft = 15)	
Average Daily Traffic (Adt):	2,366 vehicles				AL	<i>itos:</i> 15	
Peak Hour Percentage: 1	0.14%		Med	dium True	cks (2 Ax	<i>les):</i> 15	
Peak Hour Volume:	240 vehicles		Hea	avy Truck	(3+ Ax	<i>les):</i> 15	
Vehicle Speed:	40 mph	-	Vehicle N	lix			
Near/Far Lane Distance:	50 feet		Vehi	cleType	D	ay Evening	Night Da
Site Data				A	utos: 7	7.5% 12.9%	9.6% 95.1
Barrier Height:	0.0 feet		Me	dium Tru	icks: 84	4.8% 4.9%	10.3% 1.3
Barrier Type (0-Wall, 1-Berm):	0.0		F	leavy Tru	icks: 86	6.5% 2.7%	10.8% 3.4
Centerline Dist. to Barrier:	44.0 feet	-	Noise So	urco Elo	vations	(in foot)	
Centerline Dist. to Observer:	44.0 feet	H	Noise 30	Autos		,	
Barrier Distance to Observer:	0.0 feet		Mediur	n Trucks:			
Observer Height (Above Pad):	5.0 feet			y Trucks:			djustment: 0.0
Pad Elevation:	0.0 feet						
Road Elevation:	0.0 feet	-	Lane Equ			. ,	
	0.0%			Autos:			
	-90.0 degrees			n Trucks.			
Right View:	90.0 degrees		Heav	y Trucks:	36.33	2	
FHWA Noise Model Calculations			-			1	-
		stance	Finite		Fresnel		
Autos: 66.51 Medium Trucks: 77.72	-7.74 -26.21	1.9		-1.20 -1.20			.000 0.
Heavy Trucks: 77.72 Heavy Trucks: 82.99	-26.21	1.9		-1.20			.000 0.
	-22.14	1.8	10	-1.20	-0	0.50 0	.000 0.
·							
Unmitigated Noise Levels (withou				1	6 - h 4	l sha	01/5/
Unmitigated Noise Levels (withou VehicleType Leq Peak Hour	Leq Day		vening	Leq N		Ldn	CNEL
Unmitigated Noise Levels (withou VehicleType Leq Peak Hour Autos: 59.5	Leq Day 57.6		vening 55.8	Leq N	49.7	58	.4
Unmitigated Noise Levels (withou VehicleType Leq Peak Hour Autos: 59.5 Medium Trucks: 52.3	Leq Day 57.6 50.7		vening 55.8 44.4	Leq N	49.7 42.8	58 51	.4 .3
Unmitigated Noise Levels (withou VehicleType Leq Peak Hour Autos: 59.5	Leq Day 57.6		vening 55.8	Leq N	49.7	58	.4 .3 .7 (
Unmitigated Noise Levels (withou VehicleType Leq Peak Hour Autos: 59.5 Medium Trucks: 52.3 Heavy Trucks: 61.6 Vehicle Noise: 64.0	Leq Day 57.6 50.7 60.1 62.4		55.8 44.4 51.1	Leq N	49.7 42.8 52.4	58 51 60	.4 .3 .7 (
Unnitigated Noise Levels (withou VehicleType Leq Peak Hour Autos: 59.5 Medium Trucks: 52.3 Heavy Trucks: 61.6	Leq Day 57.6 50.7 60.1 62.4	Leq E	55.8 44.4 51.1	Leq N 65 d	49.7 42.8 52.4 54.6	58 51 60	.4 .3 .7 (
Unmitigated Noise Levels (withou VehicleType Leq Peak Hour Autos: 59.5 Medium Trucks: 52.3 Heavy Trucks: 61.6 Vehicle Noise: 64.0	Leq Day 57.6 50.7 60.1 62.4	Leq E	vening 55.8 44.4 51.1 57.3		49.7 42.8 52.4 54.6	58 51 60 63	4 4 4 .3 4 .7 0 .0 0 55 dBA

Scenario	: Existing + Proje	ict			Project	Name: E	Bridge	Point		
Road Name		GL				umber: 1		POIN		
	: w/o Etiwanda A	v			300 N	umber.	5545			
	PECIFIC INPU								,	
SILE 3 Highway Data	PECIFIC INPU	IDATA		Site Con					5	
		TCO		one oom	intionis	-		15		
Average Daily T	())	756 vehicles 14%		Ma	diuma Ta	ıcks (2 A	Autos:			
Peak Hour F		05 vehicles				cks (3+ A	/			
	,					:KS (3+ A	ixies).	15		
Ven Near/Far Lan		55 mph 73 feet		Vehicle N	lix					
Nedi/Fai Lan	e Distance.	73 leel		Vehi	cleType		Day	Evening	Night	Daily
Site Data							77.5%	12.9%	9.6%	87.779
Barr	ier Height:	0.0 feet			dium T		84.8%		10.3%	3.089
Barrier Type (0-Wa	II, 1-Berm):	0.0		H	leavy Ti	ucks:	86.5%	2.7%	10.8%	9.15%
Centerline Dist	to Barrier: 6	0.0 feet	-	Noise So	urco El	ovations	in fa	oof)		
Centerline Dist. to	Observer: 6	0.0 feet	-	10130 00	Auto		000			
Barrier Distance to	Observer:	0.0 feet		Mediur			297			
Observer Height (A	bove Pad):	5.0 feet			y Truck		004	Grade Adj	ustment	0.0
Pa	d Elevation:	0.0 feet							uounom	0.0
Road	d Elevation:	0.0 feet		Lane Equ	iivalent	Distanc	e (in i	feet)		
R	oad Grade: 0	0%			Auto	s: 47.8	383			
	Left View: -9	0.0 degrees		Mediun						
	Right View: 9	0.0 degrees		Heav	y Truck	s: 47.7	716			
FHWA Noise Model	Calculations		I.							
VehicleType		affic Flow Dis	stance	Finite	Road	Fresn	el	Barrier Atte	en Ber	m Atten
Autos:	71.78	-0.04	0.1	8	-1.20		-4.69	0.0	00	0.00
Medium Trucks:	82.40	-14.60	0.2	0	-1.20		-4.88	0.0	00	0.00
Heavy Trucks:	86.40	-9.86	0.2	0	-1.20		-5.34	0.0	00	0.00
Unmitigated Noise				í "						
	eq Peak Hour	Leq Day	Leq E	vening	Leq	Night		Ldn		VEL
Autos:	70.7	68.8		67.0		60.9		69.6		70.
Medium Trucks:	66.8	65.2		58.9		57.3		65.8		66.
Heavy Trucks:	75.5	74.1		65.0		66.3		74.6		74.
Vehicle Noise:	77.2	75.6		69.5		67.8		76.2	2	76.
Centerline Distance	to Noise Conto	ur (in feet)								
			70	dBA	65	dBA	6	60 dBA		dBA
		Ldn:		156		336		723		1,558
		CNEL		162		348		751		1.617

Friday, March 19, 2021

Scenario: Existing + Road Name: 4th St. Road Segment: e/o I-15 N					ame: Bridg nber: 1334			
SITE SPECIFIC	NPUT DATA					EL INPUT	s	
Highway Data			Site Co.	nditions (H	lard = 10, S	Soft = 15)		
Average Daily Traffic (Adt):	22,302 vehicle	s			Autos	s: 15		
Peak Hour Percentage:	10.14%		М	edium Truc	ks (2 Axles): 15		
Peak Hour Volume:	2,261 vehicles		н	eavy Truck	s (3+ Axles): 15		
Vehicle Speed:	55 mph		Vehicle	Mix				
Near/Far Lane Distance:	73 feet			hicleType	Dav	Evening	Night	Daily
Site Data					tos: 77.5	•	9.6%	
	0.0.6-1		٨	Adium Tru			10.3%	
Barrier Height:				Heavy Tru			10.8%	
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:				moury ma	00.0		10.070	0.07
Centerline Dist. to Barrier: Centerline Dist. to Observer:			Noise S	ource Elev	ations (in	feet)		
Barrier Distance to Observer:				Autos:	0.000			
			Media	um Trucks:	2.297			
Observer Height (Above Pad): Pad Elevation:			Hea	vy Trucks:	8.004	Grade Ad	iustment	0.0
Road Elevation:	0.0 1000		Lano Er	quivalent D	listanco (ir	foot		
Road Elevation: Road Grade:	0.0 1001		Lane Lu	Autos:	47.883	rieey		
Left View	0.070		Madi	im Trucks:				
Right View:	00.0 409.00			ivy Trucks:				
FHWA Noise Model Calculatio	ns							
VehicleType REMEL	Traffic Flow	Distanc	e Finite	e Road	Fresnel	Barrier Att	en Ber	m Atter
Autos: 71.7	8 0.30		0.18	-1.20	-4.69	9 0.0	000	0.00
Medium Trucks: 82.4	0 -14.46		0.20	-1.20	-4.88	3 0.0	000	0.00
Heavy Trucks: 86.4	0 -9.78		0.20	-1.20	-5.34	4 0.0	000	0.00
Unmitigated Noise Levels (wit								
VehicleType Leq Peak H			q Evening	Leq Ni	J .	Ldn		VEL
		39.1	67.3	-	61.3	69.9		70
		35.4	59.0	-	57.5	65.9		66
		74.1	65.		66.3	74.7		74
		75.7	69.	7	67.9	76.4	1	76
Centerline Distance to Noise	Contour (in feet)							
			70 dBA	65 dE	3A	60 dBA	55	dBA
		_dn: IEL:	159		343 356	739 768		1,593 1.654

FH\	WA-RD-77-108	HIGHW.	AY NO	DISE PR	REDICT		۱L			
io: Existing + F ne: Street A nt: s/o Dwy. 8	Project							Point		
SPECIFIC IN	IPUT DATA				N	OISE MO	DE		5	
			Si	ite Cond	ditions	(Hard = 10	, So	ft = 15)		
Traffic (Adt):	4,485 vehicle	es				Au	tos:	15		
Percentage:	10.14%			Med	dium Tri	icks (2 Axl	es):	15		
lour Volume:	455 vehicle	s		Hea	avy Tru	ks (3+ Axl	es):	15		
hicle Speed:	40 mph		14	ohiclo I	Niv					
ne Distance:	11 feet					Da	21/	Evening	Night	Daily
-			-	Venn						
				Me						0.45%
										1.03%
. ,									10.070	1.00%
			N	oise So	urce El	evations (in fe	et)		
						0.000				
				Mediun	n Truck	s: 2.29	7			
,				Heav	y Truck	s: 8.004	4	Grade Adj	ustment	0.0
			Lá	ane Eau	iivalent	Distance	(in f	eet)		
								,		
		29		Mediun	n Truck	29.61	5			
Right View:				Heav	y Truck					
el Calculation	s									
	-									
REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresnel	1	Barrier Atte	en Ber	m Atten
REMEL 66.51		Distar	nce 3.24		Road -1.20		.49		en Ber	
	-4.81	Distar				-4		0.0		0.000
66.51	-4.81 -28.25	Distar	3.24		-1.20	-4. -4.	49	0.0 0.0	000	0.000
66.51 77.72 82.99	-4.81 -28.25		3.24 3.31 3.30		-1.20 -1.20	-4. -4.	49 86	0.0 0.0	000	0.000
66.51 77.72 82.99	-4.81 -28.25 -24.63 out Topo and	barrier a	3.24 3.31 3.30	ation) ening	-1.20 -1.20 -1.20	-4. -4.	49 86	0.0 0.0 0.0	000 000 000 Ci	0.000 0.000 0.000
66.51 77.72 82.99 e Levels (with Leq Peak Hou	-4.81 -28.25 -24.63 out Topo and ur Leq Day	barrier a	3.24 3.31 3.30	ation)	-1.20 -1.20 -1.20	-4. -4. -5.	49 86	0.0 0.0 0.0 <i>Ldn</i> 62.6	000 000 000 C/	0.000 0.000 0.000 VEL 63.2
66.51 77.72 82.99 e Levels (with Leq Peak Hou 63	-4.81 -28.25 -24.63 out Topo and ar Leq Day 3.7	barrier a	3.24 3.31 3.30	ation) ening	-1.20 -1.20 -1.20	-4. -4. -5. Night	49 86	0.0 0.0 0.0	000 000 000 C/	0.000 0.000 0.000 VEL 63.2
66.51 77.72 82.99 e Levels (with Leq Peak Hou 63 51	-4.81 -28.25 -24.63 out Topo and Ir Leq Day 3.7 1.6	barrier a	3.24 3.31 3.30	ening 60.0	-1.20 -1.20 -1.20	-4. -4. -5. Night 54.0	49 86	0.0 0.0 0.0 <i>Ldn</i> 62.6	000 000 000 C/	0.000 0.000 0.000 VEL 63.2 50.8
66.51 77.72 82.99 e Levels (with Leq Peak Hou 63 51 60	-4.81 -28.25 -24.63 out Topo and <i>Ir</i> Leq Day 3.7 1.6 0.5	<i>barrier a</i> / Le 61.8 50.0	3.24 3.31 3.30	ening 60.0 43.6	-1.20 -1.20 -1.20	-4. -4. -5. Night 54.0 42.1	49 86	0.0 0.0 0.0 <i>Ldn</i> 62.6 50.6	000 000 000 C 3 3 3	0.000 0.000 0.000 VEL 63.2 50.8 59.7
66.51 77.72 82.99 e Levels (with Leg Peak Hou 63 51 60 65	-4.81 -28.25 -24.63 out Topo and <i>Ir</i> Leq Day 3.7 1.6 0.5	barrier a 61.8 50.0 59.0 63.8	3.24 3.31 3.30	ening 60.0 43.6 50.0	-1.20 -1.20 -1.20	-4. -4. -5. Night 54.0 42.1 51.2	49 86	0.0 0.0 0.0 <i>Ldn</i> 62.6 50.6 59.6	000 000 000 C 3 3 3	0.000
66.51 77.72 82.99 e Levels (with Leg Peak Hou 63 51 60 65	-4.81 -28.25 -24.63 out Topo and <i>ur Leq Day</i> 3.7 1.6 0.5 5.6	barrier a 61.8 50.0 59.0 63.8	3.24 3.31 3.30	ation) ening 60.0 43.6 50.0 60.5	-1.20 -1.20 -1.20 <i>Leq</i>	-4. -4. -5. Night 54.0 42.1 51.2	.49 .86 .77	0.0 0.0 0.0 <i>Ldn</i> 62.6 50.6 59.6	000 000 000 000 CI 3 3 5 5	0.000 0.000 0.000 VEL 63.2 50.8 59.7 65.0
66.51 77.72 82.99 e Levels (with Leg Peak Hou 63 51 60 65	-4.81 -28.25 -24.63 out Topo and rr Leq Day 3.7 1.6 5.5 5.6 ontour (in feet	barrier a 61.8 50.0 59.0 63.8	3.24 3.31 3.30 attenu eq Eve	ation) ening 60.0 43.6 50.0 60.5	-1.20 -1.20 -1.20 <i>Leq</i>	-4. -4. -5. Night 54.0 42.1 51.2 56.0	.49 .86 .77	0.0 0.0 0.0 <u>Ldn</u> 62.6 50.6 59.6 64.5	000 000 000 3 3 5 5 55	0.000 0.000 0.000 VEL 63.2 50.8 59.7 65.0
	o: Existing + 1 e: Street A ft: sio Dwy. 8 SPECIFIC IP Traffic (Adt): Percentage: our Volume: hicle Speed: ne Distance: rrier Height: fti Hearm): st. to Barrier: to Observer: Above Pad): ad Elevation: ad Elevation: ad Elevation: Read Grade: Left View: Right View:	b: Existing + Project e: Street A e: Street A ft: s/o Dwy. 8 SPECIFIC INPUT DATA Traffic (Adt): 4.485 vehicle Percentage: 10.14% our Volume: 455 vehicle hicle Speed: 40 mph ne Distance: 11 feet rrier Height: 0.0 feet (al), 1-Berm): 0.0 st. to Barrier: 30.0 feet to Observer: 0.0 feet de Elevation: 0.0 feet ad Elevation: 0.0 feet de Elevation: 0.0 feet cad Grade: 0.90.0 degree Left View: 90.0 degree et actulations 0.0	o: Existing + Project e: Street A rt: slo Dwy. 8 SPECIFIC INPUT DATA SPECIFIC INPUT DATA Parcentage: 10.14% Our Volume: 455 vehicles Parcentage: 10.14% Our Volume: 455 vehicles hicle Speed: 40 mph ne Distance: 11 feet Trier Height: 0.0 feet tall, 1-Berm): 0.0 st. to Barrier: 30.0 feet to Observer: 0.0 feet do Deserver: 0.0 feet dad Elevation: 0.0 feet Rad Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees	o: Existing + Project e: Street A rt: slo Dwy. 8 SPECIFIC INPUT DATA SPECIFIC INPUT DATA SPECIFIC INPUT DATA SPECIFIC INPUT DATA SPECIFIC 10.14% Our Volume: 455 vehicles hicle Speed: 40 mph ver Velume: 455 vehicles hicle Speed: 40 mph ver Height: 0.0 feet all, 1-Berm): 0.0 st to Barrier: 30.0 feet to Observer: 0.0 feet Above Padj: 5.0 feet ad Elevation: 0.0 feet Acad Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees	o: Existing + Project e: Street A rt: slo Dwy, 8 SPECIFIC INPUT DATA Sife Conv Traffic (Adt): 4,485 vehicles Percentage: 10,14% Met our Volume: 455 vehicles Hei Noise So to Distance: 11 feet Trier Height: 0.0 feet All, 1-Berm): 0.0 to Distance: 30.0 feet to Observer: 30.0 feet to Observer: 30.0 feet Above Padj: 5.0 feet dellevation: 0.0 feet dellevation: 0.0 feet Above Padj: 5.0 feet Heav Mediur Heav Heav Mediur Heav Mediur Heav Mediur Heav Mediur Heav Medi	o: Existing + Project Project e: Street A Job N SPECIFIC INPUT DATA Site Conditions : Traffic (Adt): 4,485 vehicles Percentage: 10,14% Medium Tra thicle Speed: 40 mph ne Distance: 11 feet Vehicle Mix riter Height: 0.0 feet Medium Tra blow Padi; 455 vehicles Traffic (Adt): 4,56 vehicles Medium Tra Vehicle Mix Vehicle Mix Vehicle Mix Vehicle Mix Noise Source El Medium Tracks Autor to Deserver: 30,0 feet Autor 16 Deserver: 30,0 feet Adtor 25,0 feet Adtor Adtor Left View: -90,0 degrees Right View: 90,0 degrees Medium Tracks Medium T	o: Existing + Project Project Name: Bri e: Street A Job Number: 13: str sio Dwy. 8 SPECIFIC INPUT DATA NOISE MO Site Conditions (Hard = 10 Traffic (Adt): 4,485 vehicles Percentage: 10.14% Our Volume: 455 vehicles hicle Speed: 40 mph ne Distance: 11 feet Vehicle Mix Trier Height: 0.0 feet Autos: 77 Trier Height: 0.0 feet Autos: 77 Medium Trucks: 24 Autos: 77 Medium Trucks: 84 Heavy Trucks: 229 Medium Trucks: 29.61 Autos: 70 Medium Trucks: 29.61 Autos: 70 Medium Trucks: 29.61 Medium Trucks: 29.61 Heavy Trucks: 29.64	bit Existing + Project Project Name: Bridgef e: Street A Job Number: 13349 tt: slo Day. 8 Sife Conditions (Hard = 10, So SPECIFIC INPUT DATA Sife Conditions (Hard = 10, So Traffic (Ad): 4,485 vehicles Percentage: 10,14% Our Volume: 455 vehicles hicle Speed: 40 mph ne Distance: 11 feet Vehicle Mix Vehicle Mix rter Height: 0.0 feet Alto Server: 30.0 feet Above Pad): 5.0 feet Ad Elevation: 0.0 feet Add Elevation: 0.0 feet Ad Elevation: 0.0 feet Aded Grade: 0.00* Left View: -90.0 degrees Right View: 90.0 degrees	Description Project Name: BridgePoint Job Number: 13349 e: Street A sto Days 8 Job Number: 13349 SPECIFIC INPUT DATA NOISE MODEL INPUT: Site Conditions (Hard = 10, Soft = 15) Traffic (Adt): 4,485 vehicles Percentage: 10,14% Our Volume: 455 vehicles hicle Speed: 40 mph reir Height: 0.0 feet All, 1-Berm): 0.0 to Deserver: 30.0 feet Above Padj: 5.0 feet Adderstron: 0.0 feet Adderstron: 0.0 feet Addrestron: 0.0 feet Addres: 2.297 Heavy Trucks: 8.0.94 Grade Add Grade Add Elevation: 0.0 feet Addres: 2.912 Medium Trucks: 29.615 Heavy Trucks: 29.644	e: Street Å Job Number: 13349 ht: slo Days.8 SPECIFIC INPUT DATA NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15) Traffic (Adt): 4,485 vehicles Percentage: 10.14% our Volume: 455 vehicles hicle Speed: 40 mph ne Distance: 11 feet Vehicle Mix rier Height: 0.0 feet Autos: 77.5% 12.9% 9.6% Medium Trucks: 84.8% 4.9% 10.3% Heavy Trucks: 86.5% 2.7% 10.8% Autos: 0.00 Heavy Trucks: 86.5% 2.7% 10.8% Noise Source Elevations (in feet) Autos: 2.997 Medium Trucks: 2.297 Heavy Trucks: 80.04 Grade Adjustment ad Elevation: 0.0 feet Autos: 29.912 Medium Trucks: 29.615 Heavy Trucks: 29.615 Heavy Trucks: 29.64

	FHW	A-RD-77-108	HIGH	NAY N	OISE PF	REDICT		DEL			
Scenario: OY Road Name: Etiv Road Segment: s/o	vanda Av						Name: E umber: 1		Point		
SITE SPEC	IFIC INF	PUT DATA				N	IOISE N	IODE	L INPUTS	3	
Highway Data				S	ite Con	ditions	(Hard =	10, Sc	ft = 15)		
Average Daily Traffic	(Adt): 1	16,469 vehicle	s					Autos:	15		
Peak Hour Perce	ntage: 1	10.14%			Me	dium Tri	ucks (2 A	(xles):	15		
Peak Hour Vo	olume: 1	1,670 vehicles	6		He	avy Truc	cks (3+ A	(xles):	15		
Vehicle S	Speed:	50 mph		v	ehicle l	Mix					
Near/Far Lane Dis	tance:	50 feet		-		icleType		Dav	Evening	Night	Daily
Site Data								77.5%	•	9.6%	
Barrier H	oiaht.	0.0 feet			Me	edium Ti	rucks:	84.8%	4.9%	10.3%	
Barrier Type (0-Wall, 1-L	•	0.0			ŀ	leavy Ti		86.5%			10.63%
Centerline Dist. to E		50.0 feet									
Centerline Dist. to Obs		50.0 feet		^	loise Sc		evations		et)		
Barrier Distance to Obs		0.0 feet				Auto n Truck		000			
Observer Height (Above	Pad);	5.0 feet						297	Our de Adi		
Pad Ele	vation:	0.0 feet			Heav	y Truck	5: 8.0	004	Grade Adj	usuneni	. 0.0
Road Eler	vation:	0.0 feet		L	ane Eq	uivalent	Distanc	e (in t	eet)		
Road (Grade:	0.0%				Auto	s: 43.5	589			
Left	View:	-90.0 degree	s		Mediur	n Truck	s: 43.3	386			
Right	View:	90.0 degree	es		Heav	y Truck	s: 43.4	405			
FHWA Noise Model Calo	ulations										
VehicleType RE	MEL	Traffic Flow	Dist	ance	Finite	Road	Fresn	el	Barrier Atte	en Ber	m Atten
Autos:	70.20	-0.73		0.79		-1.20		-4.65	0.0		0.00
Medium Trucks:	81.00	-14.54		0.82		-1.20		-4.87	0.0		0.000
Heavy Trucks:	85.38	-9.80		0.82	2	-1.20		-5.43	0.0	00	0.000
Unmitigated Noise Leve	ls (witho			r attenu	uation)						
	eak Hour			Leq Ev		Leq	Night		Ldn		NEL
Autos:	69.1		67.1		65.3		59.3		67.9		68.
Medium Trucks:	66.1		64.5		58.1		56.6		65.1		65.3
Heavy Trucks:	75.2		73.7		64.7		65.9		74.3		74.4
Vehicle Noise:	76.5	5	75.0		68.5		67.2		75.6	i	75.8
Centerline Distance to N	loise Cor	ntour (in feet)						r			
				70 d		65	dBA	6	0 dBA	55	dBA
			Ldn:		118		254		547		1,178
			VEL		122		263		566		1.219

	FHV	/A-RD-77-108	HIGHWA	Y NOISE	PREDIC		DEL			
Scenar	io: OYC 2022				Projec	t Name:	Bridge	Point		
Road Nam	e: Etiwanda Av	<i>I</i> .			Job I	Number:	13349			
Road Segme	nt: s/o San Ber	nardino Av.								
	SPECIFIC IN	PUT DATA							5	
Highway Data				Site Co	nditions	s (Hard =	10, So	oft = 15)		
Average Daily	Traffic (Adt):	24,076 vehicle	:S				Autos:	15		
Peak Hour	Percentage:	10.14%		N	ledium T	rucks (2 /	Axles):	15		
Peak H	lour Volume:	2,441 vehicles	5	F	leavy Tru	ıcks (3+ i	Axles):	15		
Ve	hicle Speed:	50 mph		Vehicle	Mix					-
Near/Far La	ne Distance:	73 feet			hicleTyp	е	Dav	Evening	Night	Dailv
Site Data						Autos:	77.5%		9.6%	85.80%
	rrier Height:	0.0 feet		1	Medium 1	Trucks:	84.8%	4.9%	10.3%	3.57%
Barrier Type (0-W		0.0			Heavy	Trucks:	86.5%			10.639
Centerline Di	. ,	60.0 feet								
Centerline Dist		60.0 feet		Noise		levation		eet)		
Barrier Distance		0.0 feet			Auto		000			
Observer Height		5.0 feet			um Truc		297			
	ad Elevation:	0.0 feet		He	avy Truc	ks: 8.	004	Grade Adj	ustment:	0.0
	ad Elevation:	0.0 feet		Lane E	quivaler	t Distan	ce (in	feet)		
	Road Grade:	0.0%			Auto	os: 47.	883			
	Left View:	-90.0 degree	s	Medi	um Truc	ks: 47.	698			
	Right View:	90.0 degree	:S	He	avy Truc	ks: 47.	716			
FHWA Noise Mod	el Calculations	;		1						
VehicleType	REMEL	Traffic Flow	Distan	ce Finit	e Road	Fresr	nel	Barrier Atte	en Ber	m Atten
Autos:	70.20	0.92		0.18	-1.20		-4.69	0.0	00	0.00
Medium Trucks:	81.00	-12.89		0.20	-1.20		-4.88	0.0	00	0.00
Heavy Trucks:	85.38	-8.15		0.20	-1.20		-5.34	0.0	00	0.00
Unmitigated Nois							1			
VehicleType	Leq Peak Hou			q Evening		Night		Ldn		VEL
Autos:	70.		68.1	66.		60.3		68.9		69.
Medium Trucks:	67.		65.5	59.	-	57.0	-	66.1		66.
Heavy Trucks:	76.		74.7	65.		67.0		75.3		75.
Vehicle Noise:	77.	-	76.0	69.	5	68.3	2	76.6	5	76.
Centerline Distan	ce to Noise Co	ntour (in feet)		70 dBA	64	dBA		0 dBA	55	dBA
			Ldn:			357		769		-
			Lan: VEL:	16 17		357		769		1,657 1,714

	HWA-RD-7	7-108 HIGHV	VAY NOISE P	REDICTION			
Scenario: OYC 20				Project Na			
Road Name: Etiwand				Job Num	ber: 13349)	
Road Segment: s/o Whit	tram AV.						
SITE SPECIFIC	INPUT DA	ATA				EL INPUTS	1
Highway Data			Site Col	nditions (Ha		· · · ·	
Average Daily Traffic (Adt		/ehicles			Autos		
Peak Hour Percentage				edium Truck			
Peak Hour Volume	1		He	eavy Trucks	(3+ Axles)	: 15	
Vehicle Speed			Vehicle	Mix			
Near/Far Lane Distance	e: 50 fe	et	Vel	nicleType	Day	Evening	Night Daily
Site Data				Aut	os: 77.59	% 12.9%	9.6% 85.80
Barrier Heigh	t: 0.0 f	eet	N	ledium Truc	ks: 84.89	% 4.9%	10.3% 3.57
Barrier Type (0-Wall, 1-Berm): 0.0			Heavy Truc	ks: 86.5	% 2.7%	10.8% 10.63
Centerline Dist. to Barrie	r: 50.0 f	eet	Noise S	ource Eleva	ations (in i	foot)	
Centerline Dist. to Observe	r: 50.0 f	eet	Noise o	Autos:	0.000	001	
Barrier Distance to Observe	r: 0.0 f	eet	Modiu	im Trucks:	2.297		
Observer Height (Above Pad): 5.0 f	eet		vy Trucks:	8.004	Grade Adi	ustment: 0.0
Pad Elevation	n: 0.0 f	eet					
Road Elevation	n: 0.0 f	eet	Lane Eq	uivalent Di		feet)	
Road Grade	e: 0.0%			Autos:	43.589		
Left View		degrees		ım Trucks:	43.386		
Right Viev	v: 90.0 d	legrees	Hea	vy Trucks:	43.405		
FHWA Noise Model Calculat							
VehicleType REMEL	Traffic F				Fresnel	Barrier Atte	
Autos: 70		0.48	0.79	-1.20	-4.65		
Medium Trucks: 81		13.33	0.82	-1.20	-4.87		
Heavy Trucks: 85	.38	-8.59	0.82	-1.20	-5.43	0.0	0.0
Unmitigated Noise Levels (w	ithout Topo	and barrier	attenuation)				
VehicleType Leq Peak			Leq Evening	Leq Nig		Ldn	CNEL
Autos:	70.3	68.3	66.6		60.5	69.1	69
Medium Trucks:	67.3	65.7	59.4		57.8	66.3	
Heavy Trucks:	76.4	74.9	65.9		67.1	75.5	
Vehicle Noise:	77.8	76.2	69.7	7	68.4	76.8	77
	Contour (in	n feet)		I.	-		
Centerline Distance to Noise	Contour (ii						55 dBA
Centerline Distance to Noise	Contour (II		70 dBA	65 dB/		60 dBA	
Centerline Distance to Noise	Contour (n	Ldn: CNEL:	70 dBA 142 147		4 306 317	659 682	55 0BA 1,42 1.46

	FHV	VA-RD-77-108	HIGHW	AY NO	DISE PF	REDICT		EL			
Road Nar	rio: OYC 2022 ne: Foothill Bl. ent: w/o Etiwand	da Av.					Name: B umber: 13		Point		
SITE	SPECIFIC IN	IPUT DATA				N	IOISE M	ODE		5	
Highway Data				S	ite Con	ditions	(Hard = 1	0, So	oft = 15)		
Average Daily	Traffic (Adt):	32,898 vehicle	es				А	utos:	15		
Peak Hou	Percentage:	10.14%			Me	dium Tri	ucks (2 A)	des):	15		
Peak I	Hour Volume:	3,336 vehicles	s		Hei	avy Tru	cks (3+ A)	des):	15		
Ve	ehicle Speed:	50 mph		14	ehicle N	liv					
Near/Far La	ane Distance:	73 feet				cleType		Day	Evening	Night	Daily
Site Data					veni			7.5%	-		85.80%
					14	, dium Ti		4.8%		9.0%	
	rrier Height:	0.0 feet				leavy Ti		4.0% 6.5%			10.63%
Barrier Type (0-V		0.0			,	icavy II	uchs. c	0.370	2.170	10.070	10.03 /
	ist. to Barrier:	60.0 feet		N	oise So	urce El	evations	(in fe	eet)		
Centerline Dist.		60.0 feet				Auto	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: 8.0	04	Grade Adj	ustment.	0.0
	ad Elevation:	0.0 feet			ono Eau	incologi	Distance	lind	[a a f]		
Ro	ad Elevation:	0.0 feet		-	апе Еці	Auto			eel)		
	Road Grade:	0.0%			Madium	n Truck					
	Left View:	-90.0 degree				n Truck y Truck					
	Right View:	90.0 degree	es		Heav	у ттиск	s: 47.7	16			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresne	1	Barrier Atte	en Ber	m Atten
Autos:	70.20	2.27		0.18		-1.20	-	4.69	0.0	00	0.000
Medium Trucks	81.00	-11.54		0.20		-1.20	-	4.88	0.0	00	0.000
Heavy Trucks	85.38	-6.80		0.20		-1.20	-	5.34	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier a	attenu	ation)						VEL
VehicleType	Leq Peak Hou	ir Leq Day	′ L	attenu eq Eve	ening	Leq	Night		Ldn		
VehicleType Autos:	Leq Peak Hou 71	r Leq Day .5	69.5		ening 67.7	Leq	61.7		70.3	5	70.9
VehicleType Autos: Medium Trucks:	Leq Peak Hou 71 68	r Leq Day .5 .5	69.5 66.9		ening 67.7 60.5	Leq	61.7 59.0		70.3 67.5	5	70.9 67.7
VehicleType Autos:	Leq Peak Hou 71 68	r Leq Day .5 .5	69.5		ening 67.7	Leq	61.7		70.3	5	70.9 67.7
VehicleType Autos: Medium Trucks:	Leq Peak Hou 71 68 77	r Leq Day .5 .5 .6	69.5 66.9		ening 67.7 60.5	Leq	61.7 59.0		70.3 67.5	5	70.9 67.7 76.8
VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	Leq Peak Hou 71 68 77 78	Leq Day .5 .5 .6 .9	69.5 66.9 76.1 77.4	eq Eve	ening 67.7 60.5 67.1 70.8		61.7 59.0 68.3 69.6		70.3 67.5 76.7 78.0) 	70.9 67.7 76.8 78.2
VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	Leq Peak Hou 71 68 77 78	r Leq Day .5 .5 .6 .9 Dontour (in feet,	2 L 69.5 66.9 76.1 77.4		ening 67.7 60.5 67.1 70.8 BA		61.7 59.0 68.3 69.6 dBA	6	70.3 67.5 76.7 78.0) 	70.9 67.7 76.8 78.2 dBA
Autos: Medium Trucks: Heavy Trucks:	Leq Peak Hou 71 68 77 78	r Leq Day .5 .5 .6 .9 ontour (in feet,	69.5 66.9 76.1 77.4	eq Eve	ening 67.7 60.5 67.1 70.8		61.7 59.0 68.3 69.6	6	70.3 67.5 76.7 78.0) 	70.9 67.7 76.8 78.2

FHV	A-RD-77-108 HIG	HWAY N	NOISE PR	EDICTIO	on Moi	DEL			
Scenario: OYC 2022 Road Name: 6th St. Road Segment: w/o Etiwand	la Av.			Project I Job Nu	Vame: E mber: 1		Point		
SITE SPECIFIC IN	PUT DATA						L INPUTS	5	
Highway Data			Site Cond	ditions (Hard =	10, So	ft = 15)		
Average Daily Traffic (Adt):	350 vehicles				A	Autos:	15		
Peak Hour Percentage:	10.14%			dium Tru			15		
Peak Hour Volume:	35 vehicles		Hea	avy Truci	ks (3+ A	xles):	15		
Vehicle Speed:	40 mph		Vehicle N	lix					
Near/Far Lane Distance:	50 feet	F		cleType		Dav	Evening	Night	Daily
Site Data						77.5%	12.9%	9.6%	
Barrier Height:	0.0 feet		Me	dium Tru	icks:	84.8%	4.9%	10.3%	3.57%
Barrier Type (0-Wall, 1-Berm):	0.0		h	leavy Tru	icks:	86.5%	2.7%	10.8%	10.63%
Centerline Dist. to Barrier:	44.0 feet	H	N 0-			6. 6.	- 41		
Centerline Dist. to Observer:	44.0 feet	-	Noise So	Autos			et)		
Barrier Distance to Observer:	0.0 feet		Modium	Autos. n Trucks.					
Observer Height (Above Pad):	5.0 feet			v Trucks			Grade Adj	ustment	. 0 0
Pad Elevation:	0.0 feet	L				-		asunom	. 0.0
Road Elevation:	0.0 feet	1	Lane Equ				eet)		
Road Grade:	0.0%			Autos					
Left View:	-90.0 degrees			n Trucks					
Right View:	90.0 degrees		Heav	y Trucks	36.3	332			
FHWA Noise Model Calculations									
VehicleType REMEL		stance	Finite		Fresne		Barrier Atte		m Atten
Autos: 66.51	-16.49	1.9		-1.20		4.61	0.0		0.00
Medium Trucks: 77.72	-30.30	1.9	-	-1.20		4.87	0.0		0.00
Heavy Trucks: 82.99	-25.56	1.9	8	-1.20		-5.50	0.0	000	0.00
Unmitigated Noise Levels (with									
VehicleType Leq Peak Hou		Leq E	vening	Leq N	•		Ldn		NEL
Autos: 50			47.0		41.0		49.6		50.
Medium Trucks: 48			40.3		38.7		47.2	-	47.
Heavy Trucks: 58 Vehicle Noise: 59			47.7		48.9		57.3		57.
			50.8		49.9		58.3))	58.
Centerline Distance to Noise Co	ntour (in feet)	70	-04	05.1	0.4	-	0 -10 4		-10.4
	Ldn:	/0 (dBA	65 d		6	0 dBA		dBA
	Lan: CNEL:		7		16		34		73
	UNEL!		8		16		35		76

Scenario	OYC 2022			ļ	Project N	lame: R	ridaeF	Point		
Road Name:						mber: 1		onne		
Road Segment:		N.			000 / 10		5010			
SITE SP	ECIFIC INPU	T DATA			NC	DISE M	ODE		5	
Highway Data				Site Cond	itions (F	lard = 1	0, So	ft = 15)		
Average Daily Tra	ffic (Adt): 20,	471 vehicles				A	utos:	15		
Peak Hour Pe	rcentage: 10.	14%		Med	ium Truc	ks (2 A	des):	15		
Peak Hou	r Volume: 2,0	76 vehicles		Hea	vy Truck	s (3+ A)	des):	15		
Vehic	le Speed:	55 mph	-	Vehicle M	iv					
Near/Far Lane	Distance:	73 feet	-		leType	1	Dav	Evening	Night	Daily
Site Data				Venie			7.5%	12.9%	9.6%	
	r Hoinhti	0.0 feet		Med	dium Tru		4.8%		10.3%	3.57%
Barrier Type (0-Wall.		0.0 feet			eavy Tru		6.5%			10.639
Centerline Dist.	,	0.0 feet							10.070	10.007
Centerline Dist. to		0.0 feet		Noise Sou	irce Ele			et)		
Barrier Distance to		0.0 feet			Autos:					
Observer Height (Ab		5.0 feet		Medium						
• (,	0.0 feet		Heavy	Trucks:	8.0	04	Grade Adj	ustment:	0.0
		0.0 feet		Lane Equi	valent L	Distance	e (in f	eet)		
		.0%	-		Autos:			,		
		0.0 degrees		Medium	Trucks:	47.6	98			
R		0.0 degrees		Heavy	Trucks:	47.7	16			
FHWA Noise Model C	Calculations									
VehicleType	REMEL Tra	affic Flow Dis	stance	Finite F	load	Fresne	1	Barrier Atte	en Ber	m Atten
Autos:	71.78	-0.20	0.1		-1.20		4.69	0.0		0.00
Medium Trucks:	82.40	-14.01	0.2		-1.20		4.88	0.0		0.00
Heavy Trucks:	86.40	-9.27	0.2	0	-1.20	-	5.34	0.0	00	0.00
Unmitigated Noise L										
	q Peak Hour	Leq Day	Leq E	vening	Leq N	•		Ldn		VEL
Autos:	70.6	68.6		66.8		60.8		69.4		70.
Medium Trucks:	67.4	65.8		59.5		57.9		66.4		66.
Heavy Trucks: Vehicle Noise:	76.1	74.6		65.6 69.7		66.9 68.2		75.2		75. 76
				69.7		68.2		/6./		76.
Centerline Distance t	o Noise Conto	ur (in feet)	70	-10.4	<u> </u>	24		0 -10 4		-104
		1 -1	70	dBA	65 dl		6	0 dBA		dBA
		Ldn: CNEL:		167		359		773		1,666
		CNEL:		173		372		801		1,726

Friday, March 19, 2021

	FHV	VA-RD-77-108	HIGH	WAYN	NOISE PR	EDICTIC	N MO	DEL			
Scenario Road Name Road Segmen		Ramps				Project N Job Nu			Point		
	SPECIFIC IN	PUT DATA							L INPUT	S	
Highway Data					Site Cond	ditions (H	lard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	19,899 vehicle	s					Autos:	15		
Peak Hour I	Percentage:	10.14%				dium Truc					
Peak He	our Volume:	2,018 vehicles	6		Hea	avy Truck	s (3+ A	Axles):	15		
Vel	nicle Speed:	55 mph		5	Vehicle N	lix					
Near/Far Lar	ne Distance:	73 feet		-	Vehi	cleType		Day	Evening	Night	Daily
Site Data						AL	tos:	77.5%	12.9%	9.6%	85.80
Bar	rier Height:	0.0 feet			Me	dium Tru	cks:	84.8%	4.9%	10.3%	3.57
Barrier Type (0-Wa	all, 1-Berm):	0.0			H	leavy Tru	cks:	86.5%	2.7%	10.8%	10.63
Centerline Dis		60.0 feet		1	Noise So	urce Ele	ation:	s (in fe	eet)		
Centerline Dist. t		60.0 feet				Autos:	0.0	000			
Barrier Distance t		0.0 feet			Mediun	n Trucks:	2.3	297			
Observer Height (/	,	5.0 feet			Heav	v Trucks:	8.0	004	Grade Ad	justment	: 0.0
	d Elevation:	0.0 feet									
	d Elevation:	0.0 feet		4	Lane Equ				'eet)		
F	Road Grade:	0.0%				Autos:		883			
	Left View: Right View:	-90.0 degree 90.0 degree				n Trucks: v Trucks:	47.	698 716			
FHWA Noise Mode	•	•	.5			,					
VehicleType	REMEL	s Traffic Flow	Dist	tance	Finite	Road	Fresn	el	Barrier Att	en Rei	rm Atter
Autos	71.78	-0.33	2.01	0.1		-1.20		-4.69		000	0.0
Medium Trucks:	82.40	-14.13		0.2	0	-1.20		-4.88		000	0.00
Heavy Trucks:	86.40	-9.39		0.2	0	-1.20		-5.34	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barrie	r atten	uation)						
VehicleType	Leq Peak Hou	r Leq Day		Leq E	vening	Leq N	ight		Ldn	C	NEL
Autos:	70	.4	68.5		66.7		60.7	,	69.3	3	69
Medium Trucks:	67	.3	65.7		59.3		57.8	3	66.3	3	66
Heavy Trucks:	76	.0	74.5		65.5		66.7	,	75.	1	75
Vehicle Noise:	77	.5	75.9		69.6		68.1		76.	5	76
Centerline Distanc	e to Noise Co	ontour (in feet)									
				70 0	dBA	65 dI	BA	-	60 dBA		dBA
			Ldn: VEL:		163 169		352 365		759 786		1,63 1.69

	FHW	/A-RD-77-108	HIGHWA	Y NOISE P	REDICTI	ON MODEL		
Scenario Road Name Road Segment						Name: Bridg umber: 1334		
	PECIFIC IN	PUT DATA					EL INPUTS	5
Highway Data				Site Cor	nditions (Hard = 10,	Soft = 15)	
Average Daily T	. ,	1 vehicle	es			Auto		
Peak Hour F	•	10.14%				cks (2 Axles	/	
	our Volume:	0 vehicles	6	He	eavy Truc	ks (3+ Axles	s): 15	
	icle Speed:	40 mph		Vehicle	Mix			
Near/Far Lan	e Distance:	11 feet		Veł	nicleType	Day	Evening	Night Daily
Site Data					A	utos: 77.5	5% 12.9%	9.6% 85.80%
Barr	rier Heiaht:	0.0 feet		M	ledium Tr	ucks: 84.8	3% 4.9%	10.3% 3.57%
Barrier Type (0-Wa		0.0			Heavy Tr	ucks: 86.5	5% 2.7%	10.8% 10.63%
Centerline Dist		30.0 feet		Noiso S	ourco Ek	evations (in	foot	
Centerline Dist. to	o Observer:	30.0 feet		NUISE 3	Autos		leelj	
Barrier Distance to	o Observer:	0.0 feet		Madii	m Trucks	. 0.000		
Observer Height (A	Above Pad):	5.0 feet			vy Trucks		Grade Adi	ustment: 0.0
Pa	d Elevation:	0.0 feet						
	d Elevation:	0.0 feet		Lane Eq		Distance (i	n feet)	
R	oad Grade:	0.0%			Autos			
	Left View:	-90.0 degree			m Trucks	- 20.010		
	Right View:	90.0 degree	es	Hea	vy Trucks	29.644		
FHWA Noise Model	Calculations	1						
VehicleType	REMEL	Traffic Flow	Distand	e Finite	Road	Fresnel	Barrier Atte	n Berm Atten
Autos:	66.51	-41.93		3.24	-1.20	-4.4	9 0.0	0.00
Medium Trucks:	77.72	-55.74		3.31	-1.20	-4.8	6 0.0	00 0.00
Heavy Trucks:	82.99	-51.00		3.30	-1.20	-5.7	7 0.0	00 0.00
Unmitigated Noise				,				
	Leq Peak Hou			q Evening	Leq I	•	Ldn	CNEL
Autos:	26.	-	24.7	22.9		16.8	25.5	26.
Medium Trucks:	24.	-	22.5	16.2		14.6	23.1	
Heavy Trucks:	34.		32.6	23.6		24.8	33.2	
Vehicle Noise:	35.	2	33.6	26.7		25.8	34.2	34.4
Centerline Distance	e to Noise Co	ntour (in feet,			1			
Centerline Distance	e to Noise Co			70 dBA	65 0		60 dBA	55 dBA
Centerline Distance	e to Noise Co			70 dBA 0 0		IBA 0	60 dBA 1 1	55 dBA 1 1

	FHWA	A-RD-77-108	HIGH	IWAY N	IOISE PR	REDICT		DEL			
Scenario: OY Road Name: Etiv Road Segment: s/o	vanda Av.						Name: E lumber: 1		Point		
SITE SPEC	IFIC INP	UT DATA				N	IOISE N	IODE	L INPUTS	6	
Highway Data					Site Con	ditions	(Hard =	10, So	ft = 15)		
Average Daily Traffic	(Adt): 18	8,455 vehicle	s					Autos:	15		
Peak Hour Percei	ntage: 1	0.14%			Me	dium Tr	ucks (2 A	xles):	15		
Peak Hour Vo	lume: 1	,871 vehicles	6		He	avy Tru	cks (3+ A	xles):	15		
Vehicle S	peed:	50 mph		-	Vehicle I	Mix					
Near/Far Lane Dis	tance:	50 feet		F		icleType		Dav	Evening	Night	Daily
Site Data								77.5%	•	9.6%	
Barrier H	eiaht:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	3.22%
Barrier Type (0-Wall, 1-E	•	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	9.57%
Centerline Dist. to B	,	50.0 feet		-	Noise So	urco El	ovations	(in fo	unf)		
Centerline Dist. to Obs	erver:	50.0 feet		-	10/36 30	Auto			ey		
Barrier Distance to Obs	erver:	0.0 feet			Mediu	n Truck					
Observer Height (Above	Pad):	5.0 feet				v Truck			Grade Adj	istment	0.0
Pad Elev	vation:	0.0 feet								Journorm	0.0
Road Elev	vation:	0.0 feet		1	Lane Equ				'eet)		
Road 0		0.0%				Auto					
		-90.0 degree	s			n Truck					
Right	View:	90.0 degree	es		Heav	y Truck	s: 43.4	05			
FHWA Noise Model Calc	ulations										
		raffic Flow	Dis	tance	Finite		Fresn		Barrier Atte		m Atten
Autos:	70.20	-0.17		0.7	-	-1.20		4.65	0.0		0.00
Medium Trucks:	81.00	-14.49		0.8	-	-1.20		4.87	0.0		0.00
Heavy Trucks:	85.38	-9.77		0.8	2	-1.20		-5.43	0.0	00	0.00
Unmitigated Noise Leve											
	eak Hour	Leq Day		Leg Ei		Leq	Night		Ldn		IEL
Autos:	69.6		67.7		65.9		59.8		68.5		69.
Medium Trucks:	66.1		64.6		58.2		56.7		65.1		65.
Heavy Trucks:	75.2		73.7		64.7		66.0		74.3		74.
Vehicle Noise:	76.7		75.1		68.8		67.3		75.7		75.
Centerline Distance to N	loise Con	tour (in feet)									
			L	70 0		65	dBA	6	0 dBA	55	dBA
			Ldn: VEL:		120		259		558		1,203
					125		268		578		1.246

	FH\	VA-RD-77-108	B HIGHW	AY N	OISE PR	REDICT	ION MO	DEL			
Scenar	io: OYCP 2022	2				Projec	t Name: I	Bridge	Point		
Road Nam	e: Etiwanda A	v.				Job N	lumber:	13349			
Road Segme	nt: s/o San Be	rnardino Av.									
	SPECIFIC IN	IPUT DATA							L INPUTS	5	
Highway Data				S	ite Cond	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	26,574 vehicl	es					Autos:	15		
Peak Hour	Percentage:	10.14%			Med	dium Tr	rucks (2 A	Axles):	15		
Peak H	lour Volume:	2,695 vehicle	s		Hea	avy Tru	cks (3+ A	Axles):	15		
	hicle Speed:	50 mph		v	ehicle N	<i>lix</i>					
Near/Far La	ne Distance:	73 feet		-		cleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	86.97%
Ba	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	3.28%
Barrier Type (0-W		0.0			h	leavy T	rucks:	86.5%	2.7%	10.8%	9.75%
Centerline Di	. ,	60.0 feet		-							
Centerline Dist.		60.0 feet		N	loise So		levation		eet)		
Barrier Distance		0.0 feet				Auto		000			
Observer Height	Above Pad);	5.0 feet			Mediun			297	Our de Ad		
	ad Elevation:	0.0 feet			Heav	y Truck	(S.' 8.)	004	Grade Adj	ustment.	0.0
Roa	ad Elevation:	0.0 feet		L	ane Equ	ıivalen	t Distand	ce (in i	feet)		
	Road Grade:	0.0%				Auto	s: 47.	883			
	Left View:	-90.0 degre	es		Mediun	n Truck	s: 47.	698			
	Right View:	90.0 degre	es		Heav	y Truck	is: 47.	716			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresn	el	Barrier Atte	en Ber	m Atten
Autos:	70.20	1.40		0.18	:	-1.20		-4.69	0.0	00	0.00
Medium Trucks:	81.00	-12.83		0.20		-1.20		-4.88	0.0		0.00
Heavy Trucks:	85.38	-8.10)	0.20)	-1.20		-5.34	0.0	00	0.00
Unmitigated Noise										1	
VehicleType	Leq Peak Hou			eq Ev		Leq	Night		Ldn		VEL
Autos:	70		68.6		66.9		60.8		69.4		70.
Medium Trucks:	67		65.6		59.2		57.7		66.2		66.
Heavy Trucks:	76		74.8		65.8		67.0		75.4		75.
Vehicle Noise:	77	.7	76.1		69.8		68.3	8	76.7	·	77.
Centerline Distant	ce to Noise Co	ontour (in feel	t)				10.4				10.4
			🖵	70 d		65	dBA		0 dBA		dBA
			Ldn:		169		364		785		1,691
			NEL		175		377		813		1.751

Friday, March 19, 2021

Scenario: OYCE	> 2022					Project	Name: E	Rridae	Point		
Road Name: Etiwa							umber: 1		FOIL		
Road Segment: s/o W		-				00071		00.0			
SITE SPECIF				1				IODE			
Highway Data					Site Cond						
Average Daily Traffic (A	(dt):	23,775 vehicle	s					Autos:	15		
Peak Hour Percenta	ige:	10.14%			Med	dium Tr	ucks (2 A	xles):	15		
Peak Hour Volu	me:	2,411 vehicles	6		Hea	avy Tru	cks (3+ A	xles):	15		
Vehicle Spe	ed:	50 mph		ŀ	Vehicle N	liv					
Near/Far Lane Distar	nce:	50 feet		F		cleTvpe		Dav	Evening	Niaht	Dailv
Site Data					1011			77.5%	•	9.6%	
Barrier Hei	a la é c	0.0 feet			Me	dium T		84.8%		10.3%	
Barrier Type (0-Wall, 1-Be		0.0 teet			h	leavy T	rucks:	86.5%	2.7%	10.8%	
Centerline Dist. to Bar		50.0 feet		Ļ							
Centerline Dist. to Obser		50.0 feet		H	Noise So				eet)		
Barrier Distance to Obser		0.0 feet				Auto	. 0.0				
Observer Height (Above P		5.0 feet			Mediun			97	Our de Adi		
Pad Eleval	tion:	0.0 feet			Heav	y Truck	s: 8.0	104	Grade Adji	usimeni	: 0.0
Road Eleval	tion:	0.0 feet			Lane Equ	iivalent	Distanc	e (in	feet)		
Road Gra	ade:	0.0%				Auto	s: 43.5	689			
Left V	iew:	-90.0 degree	s		Mediun	n Truck	s: 43.3	86			
Right V	iew:	90.0 degree	es		Heav	y Truck	s: 43.4	05			
FHWA Noise Model Calcul	ations	1									
VehicleType REM		Traffic Flow	Dista	ance	Finite	Road	Fresn	e/	Barrier Atte	en Ber	m Atter
Autos:	70.20	0.92		0.7	'9	-1.20		4.65	0.0	00	0.0
Medium Trucks:	81.00	-13.29		0.8	32	-1.20		4.87	0.0	00	0.0
Heavy Trucks:	85.38	-8.56		0.8	32	-1.20		-5.43	0.0	00	0.0
Unmitigated Noise Levels	(witho	ut Topo and	barrier	atter	nuation)						
VehicleType Leq Pea	k Hou	r Leq Day	· 1	Leq E	vening	Leq	Night		Ldn		NEL
Autos:	70.		68.8		67.0		60.9	-	69.6		70
	67.	3	65.8		59.4		57.9		66.3		66
Medium Trucks:	76.		75.0		65.9		67.2		75.5		75
Heavy Trucks:	10.				69.9		68.5		76.9		77
	77.	9	76.3								
Heavy Trucks:	77.	-									
Heavy Trucks: Vehicle Noise:	77.	-		70	dBA	65	dBA	(60 dBA	55	dBA
Heavy Trucks: Vehicle Noise:	77.	- ntour (in feet)		70	dBA 144	65	<i>dBA</i> 311	(60 dBA 669	55	dBA 1,44

	FH)	WA-RD-77-108	HIGHW	AY N	IOISE PF	REDICT	ION MOD	EL			
Road Nan	rio: OYCP 202 ne: Foothill Bl. ent: w/o Etiwan	-					Name: Bi umber: 13		Point		
SITE	SPECIFIC IN	IPUT DATA				N	OISE M	ODE		5	
Highway Data				5	Site Con	ditions	(Hard = 1	0, Sc	oft = 15)		
Average Daily	Traffic (Adt):	34,393 vehicle	es				A	utos:	15		
Peak Hour	Percentage:	10.14%			Me	dium Tri	ucks (2 Ax	les):	15		
Peak H	our Volume:	3,487 vehicle	s		He	avy Tru	cks (3+ A)	les):	15		
Ve	ehicle Speed:	50 mph		1	/ehicle I	liv					
Near/Far La	ane Distance:	73 feet				cleType	6	ay	Evening	Night	Daily
Site Data				_	veni			ay 7.5%			86.35%
					14	, edium Ti		1.5% 4.8%		10.3%	
	rrier Height:	0.0 feet				leavy Ti		4.0% 6.5%			10.21%
Barrier Type (0-V	. ,	0.0			,	ieavy ii	<i>uchs.</i> 0	0.57	2.170	10.070	10.2170
	ist. to Barrier:	60.0 feet		٨	Voise So	urce El	evations	(in fe	eet)		
Centerline Dist.		60.0 feet				Auto	s: 0.00	00			
Barrier Distance		0.0 feet			Mediur	n Truck	s: 2.29	97			
Observer Height	·	5.0 feet			Heav	y Truck	s: 8.00)4	Grade Adj	ustment	: 0.0
	ad Elevation: ad Elevation:	0.0 feet		,	ano Equ	ivalon	Distance	lin	foot		
	Road Grade:	0.0 feet 0.0%		-	ane Ly	Auto			leelj		
	Left View:				Modiu	n Truck					
	Right View:	-90.0 degree 90.0 degree				y Truck					
	ragin view.	90.0 degree	55		ncuv	y mack	5. 41.1	10			
FHWA Noise Mod	el Calculation										
VehicleType	REMEL	Traffic Flow	Distar		Finite		Fresne		Barrier Atte		m Atten
VehicleType Autos:	REMEL 70.20	Traffic Flow 2.49		0.18	В	-1.20	-4	1.69	0.0	00	0.000
VehicleType	REMEL 70.20 81.00	Traffic Flow 2.49 -11.51		0.18	3 D	-1.20 -1.20		4.69 4.88	0.0	100	0.000
VehicleType Autos:	REMEL 70.20 81.00	Traffic Flow 2.49 -11.51		0.18	3 D	-1.20		1.69	0.0	00	0.000
VehicleType Autos: Medium Trucks:	REMEL 70.20 81.00 85.38	Traffic Flow 2.49 -11.51 -6.78		0.18	B D D	-1.20 -1.20		4.69 4.88	0.0	100	0.000
VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 70.20 81.00 85.38 e Levels (with Leg Peak Hou	Traffic Flow 2.49 -11.51 -6.78 out Topo and Ir Leq Day	barrier a	0.18 0.20 0.20	B D D uation) vening	-1.20 -1.20 -1.20		4.69 4.88	0.0 0.0 0.0	00 00 00 <i>C</i>	0.000 0.000 0.000 NEL
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos:	REMEL 70.20 81.00 85.38 e Levels (with Leg Peak Hou 71	Traffic Flow 2.49 -11.51 -6.78 out Topo and Ir Leq Day	barrier a	0.18 0.20 0.20	B D D uation)	-1.20 -1.20 -1.20	 -4	4.69 4.88	0.0 0.0 0.0 <i>Ldn</i> 70.5	00 00 00 <i>C</i>	0.000 0.000 0.000 NEL 71.1
Vehicle Type Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois Vehicle Type	REMEL 70.20 81.00 85.38 e Levels (with Leg Peak Hou 71	Traffic Flow 2.49 -11.51 -6.78 out Topo and ur Leq Day 1.7	barrier a	0.18 0.20 0.20	B D D uation) vening	-1.20 -1.20 -1.20		4.69 4.88	0.0 0.0 0.0	00 00 00 <i>C</i>	0.000 0.000 0.000 NEL 71.1
Vehicle Type Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois Vehicle Type Autos:	REMEL 70.20 81.00 85.38 e Levels (with Leq Peak Hot 71 68 77	Traffic Flow 2.49 -11.51 -6.78 out Topo and ur Leq Day 1.7 3.5 7.6	barrier a / Lo 69.7	0.18 0.20 0.20	8 0 0 0 <i>uation)</i> <i>rening</i> 67.9	-1.20 -1.20 -1.20		4.69 4.88	0.0 0.0 0.0 <i>Ldn</i> 70.5	00 00 00 00 C	0.000 0.000 0.000 NEL 71.1 67.7 76.8
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks:	REMEL 70.20 81.00 85.38 e Levels (with Leq Peak Hot 71 68 77	Traffic Flow 2.49 -11.51 -6.78 out Topo and ur Leq Day 1.7 3.5	barrier a / L 69.7 66.9	0.18 0.20 0.20	B D D Uation) Vening 67.9 60.6	-1.20 -1.20 -1.20		4.69 4.88	0.0 0.0 0.0 <i>Ldn</i> 70.5 67.5	00 00 00 C	0.000 0.000 0.000
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 70.20 81.00 85.38 e Levels (with Leq Peak Hot 71 66 77 75	Traffic Flow 2.49 -11.51 -6.78 out Topo and ur Leq Day 1.7 3.5 7.6 0.0	barrier a / L0 69.7 66.9 76.1 77.4	0.18 0.20 0.20	B D D Unition) Vening 67.9 60.6 67.1	-1.20 -1.20 -1.20		4.69 4.88	0.0 0.0 0.0 <i>Ldn</i> 70.5 67.5 76.7	00 00 00 C	0.000 0.000 0.000 NEL 71.1 67.7 76.8
Vehicle Type Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois Vehicle Type Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	REMEL 70.20 81.00 85.38 e Levels (with Leq Peak Hot 71 66 77 75	Traffic Flow 2.49 -11.51 -6.78 out Topo and ur Leq Day 1.7 3.5 7.6 0.0	barrier a / L0 69.7 66.9 76.1 77.4	0.18 0.20 0.20	B () () () () () () () () () ()	-1.20 -1.20 -1.20 <i>Leq</i>		4.69 4.88 5.34	0.0 0.0 0.0 <i>Ldn</i> 70.5 67.5 76.7	00 100 100 100 100	0.000 0.000 0.000 NEL 71.1 67.7 76.8
Vehicle Type Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois Vehicle Type Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	REMEL 70.20 81.00 85.38 e Levels (with Leq Peak Hot 71 66 77 75	Traffic Flow 2.49 -11.51 -6.78 out Topo and <i>u</i> Leq Day 1.7 3.5 7.6 0.0 Dontour (in feet)	barrier a / L0 69.7 66.9 76.1 77.4	0.18 0.20 0.20 attenu eq Ev	B () () () () () () () () () ()	-1.20 -1.20 -1.20 <i>Leq</i>		4.69 4.88 5.34	0.0 0.0 0.0 70.5 76.7 78.0	00 100 100 100 100	0.000 0.000 0.000 NEL 71.1 67.7 76.8 78.3

	FHW	/A-RD-77-108	HIGHWA	Y NOISE I	PREDICT		DEL			
Scenario Road Name Road Segment						Name: B lumber: 1		oint		
SITE S	PECIFIC IN	PUT DATA			1	IOISE M	ODEL	INPUTS	6	
Highway Data				Site Co	nditions	(Hard = 1	10, Sof	it = 15)		
Average Daily T	raffic (Adt):	2,380 vehicle	s			A	utos:	15		
Peak Hour F	Percentage:	10.14%		M	ledium Tr	ucks (2 A	xles):	15		
Peak Ho	ur Volume:	241 vehicles	;	H	leavy Tru	cks (3+ A	xles):	15		
Veh	icle Speed:	40 mph		Vehicle	Mix					
Near/Far Lan	e Distance:	50 feet			hicleType		Dav	Evenina	Niaht	Daily
Site Data							77.5%	12.9%	J .	95.149
Barr	ier Heiaht:	0.0 feet		1	Medium T	rucks: 8	34.8%	4.9%	10.3%	1.379
Barrier Type (0-Wa		0.0			Heavy T	rucks: 8	36.5%	2.7%	10.8%	3.50%
Centerline Dist		44.0 feet								
Centerline Dist. to	Observer:	44.0 feet		Noise 3	Auto	levations		et)		
Barrier Distance to	Observer:	0.0 feet		14-15	Auto um Truck					
Observer Height (A	bove Pad):	5.0 feet			um Truck avy Truck			Grade Adji	interent: (
Pad	Elevation:	0.0 feet		пес	avy muck	S. 0.0	04 (Siaue Auji		1.0
Road	d Elevation:	0.0 feet		Lane E	quivalen	t Distanc	e (in fe	et)		
R	oad Grade:	0.0%			Auto	s: 36.5	51			
	Left View:	-90.0 degree	s	Medi	um Truck	s: 36.3	808			
	Right View:	90.0 degree	s	Hea	avy Truck	s: 36.3	32			
FHWA Noise Model	Calculations			1						
VehicleType	REMEL	Traffic Flow	Distan	ce Finit	e Road	Fresne	el E	arrier Atte	n Berm	Atten
Autos:	66.51	-7.72		1.94	-1.20	-	4.61	0.0	00	0.00
Medium Trucks:	77.72	-26.15		1.98	-1.20		4.87	0.0		0.00
Heavy Trucks:	82.99	-22.06		1.98	-1.20	-	5.50	0.0	00	0.00
Unmitigated Noise	Levels (witho	ut Topo and	barrier a	ttenuation)					
	eq Peak Hou	1.7		q Evening		Night		Ldn	CNE	
Autos:	59.	-	57.6	55.	-	49.8		58.4		59.
Medium Trucks:	52.	-	50.8	44.		42.9		51.3		51.
Heavy Trucks:	61.		60.2	51.		52.4		60.8		60.
Vehicle Noise:	64.	1	62.4	57.	3	54.6		63.1		63.
Centerline Distance	to Noise Co	ntour (in feet)								
				70 dBA		dBA	60	dBA	55 dl	
			Ldn: JEL:	15 16		33 34		70 74		152 159

	FHV	/A-RD-77-108	HIGH	HWAY N	OISE PR	EDICT	ON MC	DEL			
Scenario Road Name Road Segment						Project Job N	Name: umber:		Point		
SITE S	PECIFIC IN	PUT DATA				N	OISE	MODE	L INPUT	s	
Highway Data				5	Site Cond	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily T	raffic (Adt):	23.428 vehicle	es					Autos:	15		
Peak Hour P	ercentage:	10.14%			Мес	dium Tru	icks (2	Axles):	15		
Peak Ho	ur Volume:	2,376 vehicles	5		Hea	avy Truc	:ks (3+)	Axles):	15		
Veh	icle Speed:	55 mph			/ehicle N	liv					
Near/Far Lane	e Distance:	73 feet		,		cleType		Day	Evening	Night	Daily
Site Data					veni		utos:	77.5%		9.6%	
					Me	dium Ti		84.8%		10.3%	
	ier Height:	0.0 feet				leavy Ti				10.8%	
Barrier Type (0-Wa	. ,	0.0 60.0 feet								10.070	0.02
Centerline Dist Centerline Dist. to		60.0 feet		٨	loise So	urce El	evation	s (in fe	eet)		
Barrier Distance to		0.0 feet				Autos	s: 0.	000			
Observer Height (A		5.0 feet			Mediun	n Truck	s: 2.	297			
	d Elevation:	0.0 feet			Heav	y Truck	s: 8.	004	Grade Ad	justment.	0.0
	d Elevation:	0.0 feet		1	ane Equ	iivalent	Distan	ce (in i	feet)		
	oad Grade:	0.0%				Auto		.883			
10	Left View:	-90.0 degree	20		Mediun	n Truck		.698			
	Right View:	90.0 degree				y Truck		.716			
FHWA Noise Model	Calculation										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite		Fresi		Barrier Att		m Atten
Autos:	71.78	0.47		0.18		-1.20		-4.69		000	0.00
Medium Trucks:	82.40	-13.99		0.20		-1.20		-4.88		000	0.00
Heavy Trucks:	86.40	-9.26		0.20)	-1.20		-5.34	0.0	000	0.00
Unmitigated Noise										1	
	.eq Peak Hou			Leq Ev		Leq	Night		Ldn		VEL
Autos:	71	-	69.3		67.5		61.	-	70.		70.
Medium Trucks:	67		65.8		59.5		57.	-	66.4		66.
Heavy Trucks:	76		74.7		65.6		66.	•	75.	-	75
Vehicle Noise:	77	-	76.2		70.1		68.	4	76.	8	77.
Centerline Distance	e to Noise Co	ntour (in feet,)	70 -	0.4		10.4		0 -10 4		-0.4
			L	70 d		65	dBA	-	0 dBA		dBA
			Ldn: NEL:		170		367		791		1,704
			VEL:		177		381		821		1.769

F	HWA-RI	D-77-108	HIGH	WAY I	NOISE PI	REDICTI		DEL				
Scenario: OYCP 20)22					Project	Vame: E	Bridge	Point			
Road Name: 4th St.						Job Ni	imber: 1	3349				
Road Segment: e/o I-15 I	NB Ram	ps										
SITE SPECIFIC	INPUT	DATA							L INPUT	s		
Highway Data					Site Con	ditions (Hard =	10, So	oft = 15)			
Average Daily Traffic (Adt)	24,95	51 vehicle	s					Autos:				
Peak Hour Percentage	10.14	4%				dium Tru						
Peak Hour Volume	2,53) vehicles	;		He	avy Truc	ks (3+ A	xles):	15			
Vehicle Speed	5	5 mph		ŀ	Vehicle I	Mix						
Near/Far Lane Distance	73	3 feet		ł		icleType		Dav	Evening	Nig	ht	Daily
Site Data						A	utos:	77.5%	12.9%	9	.6%	88.10%
Barrier Height	· 0	.0 feet			M	edium Tri	ucks:	84.8%	4.9%	10	.3%	3.02%
Barrier Type (0-Wall, 1-Berm)		.0			1	leavy Tr	ucks:	86.5%	2.7%	10	.8%	8.88%
Centerline Dist. to Barrier		.0 feet		ŀ	Noise So	urce Fle	vations	: (in fi	pet)			
Centerline Dist. to Observer	: 60	.0 feet		H		Autos		000				
Barrier Distance to Observer	: 0	.0 feet			Mediu	n Trucks	. 0.0	97				
Observer Height (Above Pad)	: 5	.0 feet				v Trucks		04	Grade Ad	liustr	ent [.]	0.0
Pad Elevation	: 0	.0 feet								.,		
Road Elevation	: 0	.0 feet			Lane Eq				feet)			
Road Grade	0.0	%				Autos						
Left View		.0 degree	:S			m Trucks						
Right View	90	.0 degree	!S		Heav	y Trucks	: 47.7	716				
FHWA Noise Model Calculation	ons											
VehicleType REMEL	Trafi	fic Flow	Dis	tance	Finite	Road	Fresn	-	Barrier At	ten	Bern	n Atten
Autos: 71.	-	0.77		0.1		-1.20		-4.69		.000		0.00
Medium Trucks: 82.4		-13.88		0.2		-1.20		-4.88		.000		0.00
Heavy Trucks: 86.4	10	-9.19		0.2	20	-1.20		-5.34	0.	.000		0.00
Unmitigated Noise Levels (wi	thout T	opo and	barrie	er atter	nuation)							
VehicleType Leq Peak H		Leq Day		Leq E	vening	Leq I			Ldn		CN	
	71.5		69.6		67.8		61.8		70			71.
	67.5		66.0		59.6		58.1		66			66.
	76.2		74.7		65.7		66.9		75	-		75.4
Vehicle Noise:	77.9		76.3		70.3		68.5		76	.9		77.:
Centerline Distance to Noise	Contou	r (in feet)								1		
Centenine Distance to Noise								1 1	50 dBA		55 a	IBA
Centenine Distance to Noise			L	70	dBA	65 a						
Centenine Distance to Noise			Ldn:	70	ава 174 180	65 0	374		80: 83			1,735

	FH	NA-RD-77-108	HIGHV	VAY N	IOISE PR	EDICTI		ΞL			
	io: OYCP 202	2					Name: Br		Point		
	ne: Street A nt: s/o Dwy. 8					JOD IN	umber: 13	349			
	SPECIFIC IN	IPUT DATA								5	
Highway Data				S	Site Cond	litions	Hard = 10), Sc	oft = 15)		
Average Daily	Traffic (Adt):	4,485 vehicle	es				AL	itos:	15		
Peak Hour	Percentage:	10.14%			Med	lium Tru	icks (2 Ax	les):	15		
Peak H	lour Volume:	455 vehicle	s		Hea	avy Truc	ks (3+ Ax	les):	15		
Ve	hicle Speed:	40 mph		1	/ehicle N	lix					
Near/Far La	ne Distance:	11 feet		F		cleTvpe	D	av	Evening	Niaht	Dailv
Site Data						A	utos: 7	7.5%	-	9.6%	98.539
Ba	rrier Height:	0.0 feet			Me	dium Tr	ucks: 84	4.8%	4.9%	10.3%	0.45
Barrier Type (0-W		0.0			н	leavy Tr	ucks: 86	6.5%	2.7%	10.8%	1.039
Centerline Di	. ,	30.0 feet			Voiso So	urco El	evations (in fe	ootl		
Centerline Dist.	to Observer:	30.0 feet			10136 30	Autos			eel)		
Barrier Distance	to Observer:	0.0 feet			Madissa	n Trucks	0.00				
Observer Height	(Above Pad):	5.0 feet				/ Trucks			Grade Ad	iustment	0.0
P	ad Elevation:	0.0 feet			Heav	V Trucks	8.00	4	Graue Auj	usuneni	0.0
Ro	ad Elevation:	0.0 feet		L	ane Equ	ivalent	Distance	(in i	feet)		
	Road Grade:	0.0%				Autos	: 29.91	2			
	Left View:	-90.0 degree	es		Mediun	n Trucks	29.61	5			
	Right View:	90.0 degree	es		Heavy	/ Trucks	29.64	4			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite I		Fresnel		Barrier Atte	en Ber	m Atten
VehicleType Autos:	66.51	-4.81		3.24	4	-1.20	-4	.49	0.0	000	0.00
VehicleType	66.51 77.72	-4.81 -28.25		3.24	4	-1.20 -1.20	-4		0.0	000	0.00
VehicleType Autos:	66.51 77.72	-4.81		3.24	4	-1.20	-4 -4	.49	0.0	000	0.00
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise	66.51 77.72 82.99	-4.81 -28.25 -24.63		3.24 3.31 3.30	4 1 D	-1.20 -1.20	-4 -4	.49 .86	0.0	000 000 000	0.00 0.00 0.00
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType	66.51 77.72 82.99 e Levels (with Leg Peak Hou	-4.81 -28.25 -24.63 out Topo and Ir Leq Day	barrier	3.24 3.31 3.30	4 1 D uation) Vening	-1.20 -1.20	-4 -4 -5 Vight	.49 .86	0.0 0.0 0.0	000 000 000 Ci	0.00 0.00 0.00 VEL
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos:	66.51 77.72 82.99 e Levels (with Leq Peak Hot 63	-4.81 -28.25 -24.63 out Topo and Ir Leq Day 3.7	<i>barrier</i> / 61.8	3.24 3.31 3.30 attent	4 1 0 <i>uation)</i> <i>vening</i> 60.0	-1.20 -1.20 -1.20	-4 -4 -5 Vight 54.0	.49 .86	0.0 0.0 0.0 <i>Ldn</i> 62.6	000 000 000 C/	0.00 0.00 0.00 VEL 63
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noiss VehicleType Autos: Medium Trucks:	66.51 77.72 82.99 e Levels (with Leq Peak Hou 63 51	-4.81 -28.25 -24.63 out Topo and Ir Leq Day 3.7 .6	<i>barrier</i> / 61.8 50.0	3.24 3.31 3.30 attent	4 1 0 <i>vening</i> 60.0 43.6	-1.20 -1.20 -1.20	-4 -4 -5 Vight 54.0 42.1	.49 .86	0.0 0.0 0.0 <i>Ldn</i> 62.6 50.6	000 000 000 C/	0.00 0.00 0.00 <u>VEL</u> 63. 50.
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noiss VehicleType Autos: Medium Trucks: Heavy Trucks:	66.51 77.72 82.99 e Levels (with Leq Peak Hou 63 51 60	-4.81 -28.25 -24.63 out Topo and Ir Leq Day 3.7 .6 0.5	barrier 61.8 50.0 59.0	3.24 3.31 3.30 attent	4 1 0 <i>vening</i> 60.0 43.6 50.0	-1.20 -1.20 -1.20	-4 -4 -5 Vight 54.0 42.1 51.2	.49 .86	0.0 0.0 0.0 <i>Ldn</i> 62.6 50.6 59.6	000 000 000 C 3 3 3	0.00 0.00 0.00 VEL 63. 50. 59.
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noiss VehicleType Autos: Medium Trucks:	66.51 77.72 82.99 e Levels (with Leq Peak Hou 63 51 60	-4.81 -28.25 -24.63 out Topo and Ir Leq Day 3.7 .6 0.5	<i>barrier</i> / 61.8 50.0	3.24 3.31 3.30 attent	4 1 0 <i>vening</i> 60.0 43.6	-1.20 -1.20 -1.20	-4 -4 -5 Vight 54.0 42.1	.49 .86	0.0 0.0 0.0 <i>Ldn</i> 62.6 50.6	000 000 000 C 3 3 3	0.00 0.00 0.00 VEL 63 50 59
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	66.51 77.72 82.99 e Levels (with Leq Peak Hot 63 51 60 65	-4.81 -28.25 -24.63 out Topo and <i>Ir</i> Leq Day .7 .6 .5 .6	barrier / L 61.8 50.0 59.0 63.8	3.24 3.31 3.30 attenu Leg Ev	4 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	-1.20 -1.20 -1.20 Leg I	-4 -4 -5 -5 -5 -5 -5 -5 -5 -5 -5 -0	1.49 1.86 5.77	0.0 0.0 <i>Ldn</i> 62.6 50.6 59.6 64.5	000 000 000 000 CI 3 3 5 5	0.00 0.00 0.00 VEL 63. 50. 59. 65.
VehicleType Autos: Medium Trucks: Heavy Trucks: VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	66.51 77.72 82.99 e Levels (with Leq Peak Hot 63 51 60 65	-4.81 -28.25 -24.63 out Topo and rr Leq Day .7 .6 .5 .6 .5 .6 .6 .5	barrier /l 61.8 50.0 59.0 63.8)	3.24 3.31 3.30 attent	4 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	-1.20 -1.20 -1.20	-4 -4 -5 54.0 42.1 51.2 56.0	1.49 1.86 5.77	0.0 0.0 0.0 0.0 50.0 59.0 64.5 50 dBA	000 000 000 3 3 5 5 5 55	0.00 0.00 0.00 VEL 63. 50. 59. 65. dBA
VehicleType Autos: Medium Trucks: Heavy Trucks: Unnitigated Noiss VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	66.51 77.72 82.99 e Levels (with Leq Peak Hot 63 51 60 65	-4.81 -28.25 -24.63 out Topo and ir Leq Day 5.7 6.6 5.5 6.6 Dontour (in feet	barrier / L 61.8 50.0 59.0 63.8	3.24 3.31 3.30 attenu Leg Ev	4 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	-1.20 -1.20 -1.20 Leg I	-4 -4 -5 -5 -5 -5 -5 -5 -5 -5 -5 -0	1.49 1.86 5.77	0.0 0.0 <i>Ldn</i> 62.6 50.6 59.6 64.5	000 000 000 3 3 5 5 55	63. 50. 59. 65.

	FHWA	-RD-77-108	HIGH	WAY N		REDICT		DEL			
Scenario: O Road Name: Et Road Segment: s/	iwanda Av.						Name: E lumber: 1		Point		
SITE SPE	CIFIC INP	UT DATA							L INPUTS	3	
Highway Data				5	Site Con	ditions	(Hard =	10, So	ft = 15)		
Average Daily Traffi	c (Adt): 16	5,469 vehicle	s					Autos:	15		
Peak Hour Perce	entage: 10	0.14%			Me	dium Tr	ucks (2 A	xles):	15		
Peak Hour V	<i>olume:</i> 1,	670 vehicles			He	avy Tru	cks (3+ A	xles):	15		
Vehicle	Speed:	50 mph			/ehicle I	Aix					
Near/Far Lane Di	stance:	50 feet		H		cleType		Dav	Evening	Night	Daily
Site Data								77.5%	•	9.6%	
Barrier I	Heiaht:	0.0 feet			Me	dium T	rucks:	84.8%	4.9%	10.3%	3.57%
Barrier Type (0-Wall, 1-		0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	10.63%
Centerline Dist. to	,	50.0 feet			loico Sa	urco El	evations	(in fo	nof)		
Centerline Dist. to Ob	server:	50.0 feet		-	10/36 30	Auto			ey		
Barrier Distance to Ob	server:	0.0 feet			Mediu	n Truck					
Observer Height (Abov	e Pad):	5.0 feet				y Truck			Grade Adj	ustment	0.0
Pad Ele	evation:	0.0 feet								aounom	0.0
Road Ele	evation:	0.0 feet		L	ane Equ		t Distanc		'eet)		
		0.0%				Auto					
		-90.0 degree	!S			n Truck					
Righ	nt View:	90.0 degree	!S		Heav	y Truck	s: 43.4	05			
FHWA Noise Model Ca	culations										
VehicleType RI	EMEL T	raffic Flow	Dist	ance	Finite	Road	Fresn	e/	Barrier Atte	en Ber	m Atten
Autos:	70.20	-0.73		0.79	-	-1.20		4.65	0.0		0.00
Medium Trucks:	81.00	-14.54		0.82	-	-1.20		4.87	0.0		0.00
Heavy Trucks:	85.38	-9.80		0.82	2	-1.20		-5.43	0.0	00	0.00
Unmitigated Noise Lev	els (withou			r atten	uation)						
	Peak Hour	Leq Day		Leq Ev		Leq	Night		Ldn		VEL
Autos:	69.1		67.1		65.3		59.3		67.9		68.
Medium Trucks:	66.1		64.5		58.1		56.6		65.1		65.
Heavy Trucks:	75.2		73.7		64.7		65.9		74.3		74.
Vehicle Noise:	76.5		75.0		68.5		67.2		75.6		75.
Centerline Distance to	Noise Cont	tour (in feet)									
			L	70 a		65	dBA	6	0 dBA	55	dBA
			Ldn:		118		254		547		1,178
			IEL:		122		263		566		1.219

	FHW	A-RD-77-108 HI	GHWAY	NOISE PF	REDICT	ION MO	DEL			
	: OYC 2022 w					Name: I		Point		
	e: Etiwanda Av.				Job N	lumber:	13349			
Road Segmen	t: s/o San Bern	ardino Av.								
	PECIFIC INF	PUT DATA						L INPUT	5	
Highway Data				Site Con	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily 1	raffic (Adt): 3	30,447 vehicles					Autos:	15		
Peak Hour F	Percentage: 1	10.14%				ucks (2 A				
		3,087 vehicles		Hei	avy Tru	cks (3+ A	Axles):	15		
	icle Speed:	50 mph		Vehicle N	Aix					
Near/Far Lan	e Distance:	73 feet		Vehi	icleType	9	Day	Evening	Night	Daily
Site Data			-			Autos:	77.5%	12.9%	9.6%	85.80%
Bari	rier Height:	0.0 feet		Me	edium T	rucks:	84.8%	4.9%	10.3%	3.57%
Barrier Type (0-Wa		0.0		F	leavy T	rucks:	86.5%	2.7%	10.8%	10.63%
Centerline Dis	. ,	60.0 feet		Noise So	uree E	lovation	n (in fe	at l		
Centerline Dist. to	o Observer:	60.0 feet		Noise So	Auto		5 (<i>IN 1</i> 6 200	eet)		
Barrier Distance t	o Observer:	0.0 feet		Madius	Auto m Truck		297			
Observer Height (A	Above Pad):	5.0 feet			y Truck		297 D04	Grade Adj	ustment	0.0
Pa	d Elevation:	0.0 feet		Ticav	y much	3. 0.	004	Oracic Auj	usument	0.0
Roa	d Elevation:	0.0 feet		Lane Equ	ıivalen	t Distand	ce (in i	feet)		
R	oad Grade:	0.0%			Auto	s: 47.	883			
	Left View:	-90.0 degrees			m Truck					
	Right View:	90.0 degrees		Heav	y Truck	s: 47.	716			
FHWA Noise Mode		i.								
VehicleType			Distance			Fresn	-	Barrier Atte		m Atten
Autos:	70.20	1.94	•.	.18	-1.20		-4.69	0.0		0.00
Medium Trucks:	81.00	-11.87		.20	-1.20		-4.88	0.0		0.00
Heavy Trucks:	85.38	-7.13	0.	.20	-1.20		-5.34	0.0	00	0.00
Unmitigated Noise										
	Leq Peak Hour			Evening	Leq	Night		Ldn		VEL
Autos:	71.1		-	67.4		61.3		70.0		70.
Medium Trucks:	68.1			60.2		58.7		67.1		67.
Heavy Trucks: Vehicle Noise:	77.2			66.7 70.5		68.0		76.3		76.
			U	70.5		09.2	-	77.6)	11.
Centerline Distance	e to Noise Cor	ntour (in feet)	70			10.4		0 -0 4		-104
		Ldr) dBA	65	dBA		60 dBA		dBA
		Lar CNEI		194 200		417 432		899		1,938
								930		2.005

Friday, March 19, 2021

	WA-RD-77-108 HIG	MWAT N						
Scenario: OYC 2022				roject Name:		Point		
Road Name: Etiwanda				Job Number:	13349			
Road Segment: s/o Whittra	am Av.							
SITE SPECIFIC I	NPUT DATA					L INPUTS	5	
Highway Data		5	Site Condit	ions (Hard =		,		
Average Daily Traffic (Adt):	21,789 vehicles				Autos:			
Peak Hour Percentage:	10.14%			m Trucks (2)	/			
Peak Hour Volume:	2,209 vehicles		Heavy	y Trucks (3+)	Axles):	15		
Vehicle Speed:	50 mph	V	Vehicle Mix	r				
Near/Far Lane Distance:	50 feet		Vehicle	Туре	Day	Evening	Night	Daily
Site Data				Autos:	77.5%	12.9%	9.6%	85.80
Barrier Height:	0.0 feet		Medi	um Trucks:	84.8%	4.9%	10.3%	3.57
Barrier Type (0-Wall, 1-Berm):	0.0		Hea	avy Trucks:	86.5%	2.7%	10.8%	10.63
Centerline Dist. to Barrier:	50.0 feet		Voice Sour	ce Elevation	e (in fi	nof)		
Centerline Dist. to Observer:	50.0 feet	~			000	el)		
Barrier Distance to Observer:	0.0 feet				000 297			
Observer Height (Above Pad):	5.0 feet		Medium 1		297	Grade Adji	of mont	0.0
Pad Elevation:	0.0 feet		Heavy 1	TUCKS: 8.	004	Grade Auji	Journeriu.	0.0
Road Elevation:	0.0 feet	L	ane Equiv	alent Distan	ce (in i	feet)		
Road Grade:	0.0%			Autos: 43.	589			
Left View:	-90.0 degrees		Medium 1	Trucks: 43.	386			
Right View:	90.0 degrees		Heavy 1	Trucks: 43.	405			
FHWA Noise Model Calculation	าร							
VehicleType REMEL		istance	Finite Ro			Barrier Atte	n Ben	m Attei
Autos: 70.20	0.48	0.79	9 -	1.20	-4.65	0.0	00	0.0
Medium Trucks: 81.00		0.82	_	1.20	-4.87	0.0	00	0.0
Heavy Trucks: 85.38	-8.59	0.82	2 -	1.20	-5.43	0.0	00	0.0
Unmitigated Noise Levels (with		-	,					
VehicleType Leq Peak Ho		Leq Ev		Leq Night		Ldn	CI	IEL
	0.3 68.3		66.6	60.5	-	69.1		69
	7.3 65.7		59.4	57.8	-	66.3		66
	6.4 74.9		65.9	67.1	-	75.5		75
Vehicle Noise: 7	7.8 76.2		69.7	68.4	1	76.8		77
Centerline Distance to Noise C	ontour (in feet)							
		70 d		65 dBA		60 dBA	55	dBA
	Ldn: CNEL:		142 147	306 317		659 682		1,42 1.46

	FHW	4-RD-77-108 HIG	GHWAY N	NOISE PR	REDICTI		EL			
Road Nan	rio: OYC 2022 w ne: Foothill Bl. ent: w/o Etiwanda					Name: B umber: 1		Point		
SITE	SPECIFIC INP	UT DATA			N	OISE M	ODE	L INPUT	5	
Highway Data				Site Con	ditions (Hard = 1	0, So	ft = 15)		
Average Daily	Traffic (Adt): 3	2,898 vehicles				A	utos:	15		
Peak Hour	Percentage: 1	0.14%		Me	dium Tru	cks (2 A	des):	15		
Peak H	Hour Volume: 3	,336 vehicles		He	avy Truc	ks (3+ A	(les):	15		
Ve	hicle Speed:	50 mph	-	Vehicle I	Mix					
Near/Far La	ane Distance:	73 feet	-		icleType	1	Dav	Evening	Night	Daily
Site Data				10.11			7.5%	12.9%		85.80%
Ba	rrier Heiaht:	0.0 feet		M	edium Tr	ucks: 8	4.8%	4.9%	10.3%	3.57%
Barrier Type (0-V		0.0		ŀ	leavy Tr	ucks: 8	6.5%	2.7%	10.8%	10.63%
	ist. to Barrier:	60.0 feet	-	N 0-			(in \$-	-41		
Centerline Dist.	to Observer:	60.0 feet	2	Noise So	Autos			et)		
Barrier Distance	to Observer:	0.0 feet			Autos m Trucks	. 0.0				
Observer Height	(Above Pad):	5.0 feet						Grade Adj	ustmont	0.0
P	ad Elevation:	0.0 feet		Heav	ry Trucks	: 8.0	J4	Graue Auj	usuneni	0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent	Distance	e (in f	eet)		
	Road Grade:	0.0%			Autos	: 47.8	83			
	Left View:	-90.0 degrees		Mediui	m Trucks	47.6	98			
	Right View:	90.0 degrees		Heav	y Trucks	47.7	16			
FHWA Noise Mod	el Calculations		- 1							
VehicleType	REMEL	Traffic Flow D	Distance	Finite	Road	Fresne	/ /	Barrier Atte	en Ber	m Atten
Autos:	70.20	2.27	0.1	8	-1.20	-	4.69	0.0	00	0.000
Medium Trucks:	81.00	-11.54	0.2	0	-1.20	-	4.88	0.0	00	0.000
Heavy Trucks:	85.38	-6.80	0.2	0	-1.20	-	5.34	0.0	00	0.000
Unmitigated Nois										
VehicleType	Leq Peak Hour		,	vening	Leq I	•		Ldn		VEL
Autos:			-	67.7		61.7		70.3		70.9
Medium Trucks:				60.5		59.0		67.5		67.7
Heavy Trucks:				67.1		68.3		76.7		76.8
Vehicle Noise:			ł	70.8		69.6		78.0)	78.2
Centerline Distan	ce to Noise Con	tour (in feet)	70	-10.4		0.4	_	0 -10 4		-10.4
		l da		dBA	65 c		6	0 dBA	55	dBA
		Ldn. CNEL		204		440		947		2,040
		CNEL	-	211		455		980		2,111

FHWA-RI	0-77-108 HIGH	IWAY N	IOISE PR	EDICTIO	N MOD	ΞL		
Scenario: OYC 2022 w/ ext						idgePoint		
Road Name: 6th St.				Job Nur	nber: 13	349		
Road Segment: w/o Etiwanda Av.								
SITE SPECIFIC INPUT	DATA					DEL INPUT	5	
Highway Data			Site Cond	litions (H), Soft = 15)		
	0 vehicles					<i>itos:</i> 15		
Peak Hour Percentage: 10.14				lium Truc				
	vehicles		Hea	vy Truck	s (3+ Ax	<i>les):</i> 15		
) mph	1	Vehicle M	lix				
Near/Far Lane Distance: 50) feet		Vehic	cleType	D	ay Evening	Night	Daily
Site Data				Au	tos: 7	7.5% 12.9%	9.6%	85.80
Barrier Height: 0	0 feet		Me	dium Truo	cks: 84	4.8% 4.9%	10.3%	3.57
Barrier Type (0-Wall, 1-Berm): 0.	0		н	eavy Tru	cks: 86	6.5% 2.7%	10.8%	10.63
Centerline Dist. to Barrier: 44	0 feet		Voise So	urce Elev	ations	(in feet)		
Centerline Dist. to Observer: 44	0 feet	f		Autos:	0.00	,		
Barrier Distance to Observer: 0.	0 feet		Mediun	1 Trucks:	2.29			
Observer Height (Above Pad): 5	0 feet			/ Trucks:	8.00		ustment:	0.0
	0 feet	_						
	0 feet	1	ane Equ	ivalent D				
Road Grade: 0.0	-			Autos:	36.55	-		
	0 degrees			1 Trucks:	36.30			
Right View: 90.	0 degrees		Heavy	/ Trucks:	36.33	2		
FHWA Noise Model Calculations								
		tance	Finite I		Fresnel			n Atter
Autos: 66.51	-16.49	1.9		-1.20			000	0.00
Medium Trucks: 77.72	-30.30	1.9	-	-1.20			000	0.00
Heavy Trucks: 82.99	-25.56	1.9	-	-1.20	-5	6.50 0.0	000	0.00
Unmitigated Noise Levels (without To								
VehicleType Leq Peak Hour	Leq Day	Leq E		Leq Ni	-	Ldn	CN	
Autos: 50.8	48.8		47.0		41.0	49.6		50
Medium Trucks: 48.2	46.6		40.3		38.7	47.2	-	47
Heavy Trucks: 58.2 Vehicle Noise: 59.3	56.7		47.7		48.9	57.3		57
	57.7		50.8		49.9	58.3)	58
Centerline Distance to Noise Contour	r (in feet)	70	04	05.15		CO -/DA	55	0.4
	Ldn:	70 0		65 dE		60 dBA	55 a	
	CNEL:		7		16	34		7
	CNEL!		8		16	35		7

Scenario: C)YC 2022 w/ e	xt.			Project	Name:	Bridge	Point		
Road Name: 4	th St.					lumber:				
Road Segment: w	/o Etiwanda A	V.								
SITE SPE	CIFIC INPU	T DATA			N	IOISE I	NODE		5	
Highway Data				Site Cond	litions	(Hard =	10, Sc	oft = 15)		
Average Daily Traf	fic (Adt): 26,5	219 vehicles					Autos:	15		
Peak Hour Perc	centage: 10.	14%		Med	lium Tr	ucks (2)	Axles):	15		
Peak Hour	Volume: 2,6	59 vehicles		Hea	vy Tru	cks (3+)	Axles):	15		
Vehicle	Speed:	55 mph		Vehicle M	ix					
Near/Far Lane D	listance:	73 feet	F		leTvpe		Dav	Evening	Night	Daily
Site Data						Autos:	77.5%		9.6%	
	Height:	0.0 feet		Me	dium T		84.8%		10.3%	
Barrier Type (0-Wall,		0.0		н	eavy T	rucks:	86.5%			10.639
Centerline Dist. to	,	0.0 feet	-							
Centerline Dist. to O		0.0 feet	4	Noise So				eet)		
Barrier Distance to O		0.0 feet			Auto		000			
Observer Height (Abo		5.0 feet		Medium			297			
• •	,	0.0 feet		Heavy	Truck	s: 8.	004	Grade Adj	ustment	0.0
		0.0 feet		Lane Equ	ivalen	t Distan	ce (in i	feet)		
Road	d Grade: 0.	0%			Auto	s: 47.	883			
Le	eft View: -9	0.0 degrees		Medium	Truck	s: 47.	698			
Rig	ht View: 9	0.0 degrees		Heavy	Truck	s: 47.	716			
FHWA Noise Model Ca										
			stance	Finite F		Fresr	-	Barrier Atte		m Atten
Autos:	71.78	0.87	0.1	-	-1.20		-4.69		000	0.00
Medium Trucks:	82.40	-12.94	0.2		-1.20		-4.88		000	0.00
Heavy Trucks:	86.40	-8.20	0.2	0	-1.20		-5.34	0.0	000	0.00
Unmitigated Noise Le										
	Peak Hour	Leq Day	Leq E	vening	Leq	Night		Ldn		VEL
Autos:	71.6	69.7		67.9		61.9		70.5		71.
Medium Trucks:	68.5	66.9		60.5		59.0	-	67.5		67.
Heavy Trucks:	77.2	75.7		66.7		67.9		76.3		76.
Vehicle Noise:	78.7	77.1		70.8		69.3	3	77.7	7	78.
Centerline Distance to	Noise Conto	ur (in feet)								
			70 (dBA	65	dBA		60 dBA		dBA
		Ldn:		196		423		912		1,965
		CNEL:		204		439	1	945		2,036

Fł	IWA-RD-77-108 I	IIGHWA	T NOISE PH	REDICTIO	NMODEL		
Scenario: OYC 202	2 w/ ext.				ame: Bridg		
Road Name: 4th St.				Job Nun	nber: 1334	9	
Road Segment: e/o I-15 N	B Ramps						
SITE SPECIFIC	NPUT DATA		011 0			EL INPUTS	
Highway Data			Site Con	aitions (H	ard = 10, S	,	
Average Daily Traffic (Adt):	19,899 vehicles	6			Autos		
Peak Hour Percentage:	10.14%		-		ks (2 Axles)		
Peak Hour Volume:	2,018 vehicles		He	avy Trucks	(3+ Axles): 15	
Vehicle Speed:	55 mph		Vehicle I	Nix			
Near/Far Lane Distance:	73 feet		Veh	icleType	Day	Evening	Night Daily
Site Data				Aut	os: 77.5	% 12.9%	9.6% 85.80
Barrier Height:	0.0 feet		Me	edium Truc	ks: 84.8	% 4.9%	10.3% 3.57
Barrier Type (0-Wall, 1-Berm):	0.0		F	leavy Truc	ks: 86.5	% 2.7%	10.8% 10.63
Centerline Dist. to Barrier:	60.0 feet		Noise Sc	urce Elev	ations (in	foot)	
Centerline Dist. to Observer:	60.0 feet		NUISE SU	Autos:	0.000	leel)	
Barrier Distance to Observer:	0.0 feet		Madiu	n Trucks:	2.297		
Observer Height (Above Pad):	5.0 feet			v Trucks:	8.004	Grade Adiu	istment: 0.0
Pad Elevation:	0.0 feet		neav	y mucks.	0.004	Orade Adje	Stinent. 0.0
Road Elevation:	0.0 feet		Lane Equ	uivalent D	istance (in	feet)	
Road Grade:	0.0%			Autos:	47.883		
Left View:	-90.0 degrees	6	Mediur	n Trucks:	47.698		
Right View:	90.0 degrees	6	Heav	y Trucks:	47.716		
FHWA Noise Model Calculatio	ns		-				
VehicleType REMEL	Traffic Flow	Distanc	e Finite		Fresnel	Barrier Atte	n Berm Atter
Autos: 71.7	B -0.33		0.18	-1.20	-4.69	9 0.00	0.0 0.0
Medium Trucks: 82.4	0 -14.13		0.20	-1.20	-4.88	3 0.00	0.0 0.0
Heavy Trucks: 86.4	0 -9.39		0.20	-1.20	-5.34	¢ 0.00	0.0
Unmitigated Noise Levels (wit			,				
VehicleType Leq Peak H			Evening	Leq Nig		Ldn	CNEL
		8.5	66.7		60.7	69.3	69
		5.7	59.3		57.8	66.3	
		4.5	65.5		66.7	75.1	
Vehicle Noise:	7.5 7	5.9	69.6		68.1	76.5	76
Centerline Distance to Noise	Contour (in feet)						
			'0 dBA	65 dB		60 dBA	55 dBA
	L	.dn:	163		352	759	1,63
		EL:	169		365	786	1.69

	FHW	/A-RD-77-108	HIGH	WAY N	OISE PF	REDICT	ION MOD	DEL			
Road Nan	rio: OYC 2022 v ne: Street A ent: s/o Dwy. 8	v/ ext.					Name: E lumber: 1		Point		
SITE	SPECIFIC IN	PUT DATA							L INPUT	5	
Highway Data		S	ite Con	ditions	(Hard =	10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	1 vehicle	es				A	lutos:	15		
Peak Hour	Percentage:	10.14%			Me	dium Tri	ucks (2 A	xles):	15		
Peak I	lour Volume:	0 vehicle	5		He	avy Tru	cks (3+ A	xles):	15		
Ve	ehicle Speed:	40 mph		V	ehicle l	Mix					
Near/Far La	ane Distance:	11 feet				icleType		Day	Evening	Night	Daily
Site Data								77.5%	-		85.80%
					M			34.8%		10.3%	
	rrier Height:	0.0 feet				leavy Ti		36.5%			10.63%
Barrier Type (0-V	van, 1-вегт): ist. to Barrier:	0.0 30.0 feet								10.070	10.0070
Centerline Dist.		30.0 feet		N	loise Sc	ource El	levations	(in fe	eet)		
Barrier Distance		0.0 feet				Auto	s: 0.0	00			
Observer Height		5.0 feet			Mediui	m Truck	s: 2.2	97			
•	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.0	04	Grade Adj	iustment	: 0.0
-	ad Elevation:	0.0 feet		L	ane Eq	uivalent	t Distanc	e (in i	feet)		
	Road Grade:	0.0%		-		Auto					
	Left View:	-90.0 degree	be be		Mediu	m Truck					
	Right View:	90.0 degree				y Truck					
FHWA Noise Mod	el Calculations	:									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresne	e/	Barrier Atte	en Ber	m Atten
Autos:	66.51	-41.93		3.24		-1.20		4.49	0.0	000	0.000
Medium Trucks:	77.72	-55.74		3.31		-1.20	-	4.86	0.0	000	0.000
Heavy Trucks:	82.99	-51.00		3.30	1	-1.20		5.77	0.0	000	0.000
Unmitigated Nois	e Levels (witho	out Topo and	barrie	er attenu	uation)						
VehicleType	Leq Peak Hou	r Leq Day	'	Leq Ev	ening	Leq	Night		Ldn		NEL
Autos:	26.	.6	24.7		22.9		16.8		25.5	5	26.1
Medium Trucks:	24.	.1	22.5		16.2		14.6		23.1	I	23.3
Heavy Trucks:			32.6		23.6		24.8		33.2		33.3
Vehicle Noise:			33.6		26.7		25.8		34.2	2	34.4
Centerline Distan	ce to Noise Co	ntour (in feet)								
			L	70 d		65	dBA	6	60 dBA		dBA
			Ldn:		0		0		1		1
		C	NEL:		0		0		1		1

	FHWA	A-RD-77-108	HIGH	IWAY N	IOISE PR	REDICT		DEL			
Scenario: OY Road Name: Etiv Road Segment: s/o	vanda Av.						Name: E umber: 1		Point		
SITE SPEC	IFIC INP	UT DATA							L INPUTS	;	
Highway Data				5	Site Con	ditions	(Hard =	10, So	ft = 15)		
Average Daily Traffic	(Adt): 18	8,455 vehicle	es					Autos:	15		
Peak Hour Perce	ntage: 1	0.14%			Me	dium Tri	ucks (2 A	xles):	15		
Peak Hour Vo	lume: 1	,871 vehicle	s		He	avy Tru	cks (3+ A	xles):	15		
Vehicle S	peed:	50 mph		1	Vehicle I	Mix					
Near/Far Lane Dis	tance:	50 feet		E E		icleType		Dav	Evening	Night	Daily
Site Data					1011			77.5%	•	9.6%	
Barrier H	eiaht:	0.0 feet			Me	edium Ti	rucks:	84.8%	4.9%	10.3%	3.229
Barrier Type (0-Wall, 1-L	•	0.0			F	leavy Ti	rucks:	86.5%	2.7%	10.8%	9.57%
Centerline Dist. to E	,	50.0 feet			Noise So	urco El	ovations	(in fo	of		
Centerline Dist. to Obs	erver:	50.0 feet		<i>'</i>	10/36 30	Auto:			elj		
Barrier Distance to Obs	erver:	0.0 feet			Mediu	n Truck					
Observer Height (Above	Pad):	5.0 feet				y Truck			Grade Adji	istment	0.0
Pad Ele	vation:	0.0 feet								Journorm	0.0
Road Ele	vation:	0.0 feet		L	Lane Equ				eet)		
Road (0.0%				Auto					
		-90.0 degree	es			n Truck					
Right	View:	90.0 degree	es		Heav	y Truck	s: 43.4	05			
FHWA Noise Model Calo	ulations										
VehicleType RE	MEL T	raffic Flow	Dis	tance	Finite	Road	Fresn	e/	Barrier Atte	n Ber	m Atten
Autos:	70.20	-0.17		0.79	-	-1.20		4.65	0.0		0.00
Medium Trucks:	81.00	-14.49		0.82	-	-1.20		4.87	0.0	00	0.00
Heavy Trucks:	85.38	-9.77		0.82	2	-1.20		-5.43	0.0	00	0.00
Unmitigated Noise Leve	ls (withou	t Topo and	barrie	er atten	uation)						
	eak Hour	Leq Day		Leg Ev		Leq	Night		Ldn		VEL
Autos:	69.6		67.7		65.9		59.8		68.5		69.
Medium Trucks:	66.1		64.6		58.2		56.7		65.1		65.
Heavy Trucks:	75.2		73.7		64.7		66.0		74.3		74.
Vehicle Noise:	76.7		75.1		68.8		67.3		75.7		75.
Centerline Distance to N	loise Com	tour (in feet)								
			L	70 c		65	dBA	6	0 dBA	55	dBA
			Ldn:		120		259		558		1.203
			NEL:		120		268		578		1.246

		A-RD-77-108 H			-						
	: OYCP 2022 \	v/ ext.					Name:		Point		
	e: Etiwanda Av. t: s/o San Bern	ardino Av				Job N	umber:	13349			
	PECIFIC INP			1		N	IOISE I			5	
Highway Data	Lou lo lui	UT DATA		Sit	e Condit					•	-
Average Daily	Traffic (Adt): 3	2.945 vehicles						Autos:	15		
Peak Hour I	() -	0.14%			Mediu	m Tn	ucks (2 /				
		.341 vehicles					cks (3+)				
	icle Speed:	50 mph		16-	hicle Mix			,	-		
Near/Far Lar	e Distance:	73 feet		ve	Vehicle			Dav	Evening	Night	Daily
Site Data					venicie		Autos:	77.5%		9.6%	
					Madi			84.8%		9.0%	3.349
	rier Height:	0.0 feet						86.5%		10.3%	9.929
Barrier Type (0-Wa	. ,	0.0			1100	10 y 11	ucho.	00.370	2.170	10.070	5.527
Centerline Dis		60.0 feet		No	ise Sour	ce El	evation	s (in fe	eet)		
Centerline Dist. t Barrier Distance t		60.0 feet 0.0 feet				Auto	s: 0.	000			
Observer Height ()		5.0 feet		1	Medium 1	Truck	s: 2.	297			
	d Elevation:	0.0 feet			Heavy	Truck	s: 8.	004	Grade Adj	ustment.	0.0
	d Elevation:	0.0 feet		La	ne Equiv	alent	Distan	e (in i	feet)		-
		0.0%				Auto		883			
		-90.0 degrees			Medium						
	Right View:	90.0 degrees			Heavy	Truck	s: 47.	716			
FHWA Noise Mode	I Calculations										
VehicleType		Traffic Flow	Distan	се	Finite Ro	ad	Fresr	el	Barrier Atte	en Ber	m Atten
Autos:	70.20	2.33		0.18	-	1.20		-4.69	0.0	00	0.00
Medium Trucks:	81.00	-11.82		0.20	-	1.20		-4.88	0.0	00	0.00
Heavy Trucks:	85.38	-7.09		0.20	-	1.20		-5.34	0.0	00	0.00
Unmitigated Noise											
	Leq Peak Hour	Leq Day		q Ever		Leq	Night		Ldn		VEL
Autos:	71.5		9.5		67.8		61.7		70.4		71.
Medium Trucks:	68.2		5.6		60.3		58.7		67.2		67.
Heavy Trucks: Vehicle Noise:	77.3		5.8 7.1		66.8 70.7		68.0		76.4		76.
					70.7		69.3	`	11.1		78.
Centerline Distanc	e to Noise Con	tour (in feet)		70 dB,		65	dD A		O dBA	57	d D A
			dn:	ru aBi		05	dBA	-	60 dBA		dBA
		CNE			197 204		424 439		914 946		1,969

	WA-RD-77-108 I	- Contraction of the second se		-			
Scenario: OYCP 20			1		me: Bridge		
Road Name: Etiwanda				Job Num	ber: 13349)	
Road Segment: s/o Whittr	am Av.						
SITE SPECIFIC I	NPUT DATA		011 0			EL INPUTS	1
Highway Data			Site Cond	itions (Ha	-	,	
Average Daily Traffic (Adt):	23,775 vehicles	3			Autos		
Peak Hour Percentage:	10.14%				s (2 Axles)		
Peak Hour Volume:	2,411 vehicles		Hea	vy Trucks	(3+ Axles)	: 15	
Vehicle Speed:	50 mph		Vehicle M	ix			
Near/Far Lane Distance:	50 feet		Vehic	leType	Day	Evening	Night Daily
Site Data				Auto	os: 77.5%	6 12.9%	9.6% 86.89
Barrier Height:	0.0 feet		Med	dium Truck	ks: 84.8%	6 4.9%	10.3% 3.30
Barrier Type (0-Wall, 1-Berm):	0.0		He	eavy Truck	ks: 86.5%	6 2.7%	10.8% 9.81
Centerline Dist. to Barrier:	50.0 feet		Noise Sou	irce Eleva	tions (in f	eet)	
Centerline Dist. to Observer:	50.0 feet			Autos:	0.000	000	
Barrier Distance to Observer:	0.0 feet		Madium	Trucks:	2.297		
Observer Height (Above Pad):	5.0 feet			Trucks:	8.004	Grade Adi	ustment: 0.0
Pad Elevation:	0.0 feet						
Road Elevation:	0.0 feet		Lane Equ			feet)	
Road Grade:	0.0%			Autos:	43.589		
Left View:	-90.0 degrees	5		Trucks:	43.386		
Right View:	90.0 degrees	3	Heavy	Trucks:	43.405		
FHWA Noise Model Calculatio	ns		1				
VehicleType REMEL	Traffic Flow	Distance	e Finite F	Road I	Fresnel	Barrier Atte	n Berm Atter
Autos: 70.2	0.92	().79	-1.20	-4.65	0.0	0.0
Medium Trucks: 81.0	-13.29	0).82	-1.20	-4.87	0.0	0.0
Heavy Trucks: 85.3	-8.56	0).82	-1.20	-5.43	0.0	0.0
Unmitigated Noise Levels (wit	hout Topo and b	arrier att	enuation)				
VehicleType Leq Peak Ho		,	Evening	Leq Nig		Ldn	CNEL
		8.8	67.0		60.9	69.6	70
		5.8	59.4		57.9	66.3	
		5.0	65.9		67.2	75.5	
Vehicle Noise: 7	7.9 7	6.3	69.9		68.5	76.9	77
Centerline Distance to Noise (contour (in feet)	T					
			0 dBA	65 dBA		60 dBA	55 dBA
	1	dn:	144		311	669	1.44
	CN		149		322	693	1,49

	FH\	NA-RD-77-108	HIGHW	AY NO	DISE PR	EDICT		EL			
	io: OYCP 202	2 w/ ext.					Name: B				
	ne: Foothill Bl.					Job N	lumber: 1	3349			
Road Segme	nt: w/o Etiwan	da Av.									
SITE	SPECIFIC IN	IPUT DATA							L INPUT	5	
Highway Data				Si	ite Conc	litions	(Hard = 1	10, Se	oft = 15)		
Average Daily	Traffic (Adt):	33,902 vehicle	es				A	utos:	15		
Peak Hour	Percentage:	10.14%					ucks (2 A				
Peak H	lour Volume:	3,438 vehicle	5		Hea	ivy Tru	cks (3+ A	xles):	15		
	hicle Speed:	50 mph		V	ehicle M	lix					
Near/Far La	ne Distance:	73 feet		Ē		leType		Day	Evening	Night	Daily
Site Data								7.5%			86.16%
Ba	rrier Height:	0.0 feet			Me	dium T	rucks: 8	34.8%	4.9%	10.3%	3.48%
Barrier Type (0-V		0.0			н	eavy T	rucks: 8	36.5%	2.7%	10.8%	10.36%
	ist. to Barrier:	60.0 feet			aiaa C-		evations	(in f	n of l		
Centerline Dist.	to Observer:	60.0 feet		N	0158 50	Auto			eet)		
Barrier Distance	to Observer:	0.0 feet					0.0				
Observer Height	(Above Pad):	5.0 feet			Medium				Grade Adj	ustmont	0.0
P	ad Elevation:	0.0 feet			Heavy	/ Truck	s: 8.0	04	Graue Auj	usuneni	0.0
Ro	ad Elevation:	0.0 feet		Lá	ane Equ	ivalen	t Distance	e (in	feet)		
	Road Grade:	0.0%				Auto	s: 47.8	83			
	Left View:	-90.0 degre	es		Medium	n Truck	s: 47.6	98			
	Right View:	90.0 degree	es		Heavy	/ Truck	s: 47.7	16			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distan	се	Finite F	Road	Fresne	e/	Barrier Atte	en Ber	m Atten
Autos:	70.20	2.42		0.18		-1.20	-	4.69	0.0	00	0.000
Medium Trucks:	81.00	-11.51		0.20		-1.20	-	4.88	0.0	00	0.000
Heavy Trucks:	85.38	-6.78		0.20		-1.20	-	5.34	0.0	00	0.00
Unmitigated Nois											
VehicleType	Leg Peak Hou			eq Eve	•	Leq	Night		Ldn		VEL
Autos:	71		69.6		67.9		61.8		70.4		71.1
		1.5	66.9		60.6		59.0		67.5		67.7
Medium Trucks:									76.7		76.8
Heavy Trucks:	77	.6	76.1		67.1		68.3				
Heavy Trucks: Vehicle Noise:	77	.6).0	77.4		67.1 70.9		68.3 69.6		78.0		78.2
Heavy Trucks:	77	.6).0	77.4	70	70.9		69.6		78.0)	
Heavy Trucks: Vehicle Noise:	77	7.6 0.0 ontour (in feet	77.4	70 dE	70.9 BA	65	69.6 dBA	(78.0)	78.2 dBA
Heavy Trucks: Vehicle Noise:	77	7.6 0.0 ontour (in feet	77.4	70 dE	70.9	65	69.6		78.0)	

	FHW	/A-RD-77-108	HIGHWA	Y NOISE	PREDICT		DEL			
Scenario: Road Name: Road Segment:						Name: B lumber: 1		Point		
SITE SP	ECIFIC IN	PUT DATA			N	IOISE M	ODEL	. INPUTS	3	
Highway Data				Site Co	onditions	(Hard = 1	10, Sof	ft = 15)		
Average Daily Tra	ffic (Adt):	2,380 vehicle	es			A	utos:	15		
Peak Hour Pe	rcentage:	10.14%		٨	Aedium Tr	ucks (2 A.	xles):	15		
Peak Hour	Volume:	241 vehicle	5	1	leavy Tru	cks (3+ A.	xles):	15		
	e Speed:	40 mph		Vehicl	e Mix					
Near/Far Lane	Distance:	50 feet			ehicleType	e [Day	Evening	Night	Daily
Site Data							77.5%	12.9%	9.6%	95.14%
Barrie	r Heiaht:	0.0 feet			Medium T	rucks: 8	34.8%	4.9%	10.3%	1.379
Barrier Type (0-Wall,		0.0			Heavy T	rucks: 8	36.5%	2.7%	10.8%	3.50%
Centerline Dist. t	,	44.0 feet		Noico	Source El	ovations	(in for	of)		
Centerline Dist. to (Observer:	44.0 feet		NOISE	Auto			50		
Barrier Distance to (Observer:	0.0 feet		Med	ium Truck					
Observer Height (Ab	ove Pad):	5.0 feet			avy Truck			Grade Adj	ustment	0.0
Pad I	Elevation:	0.0 feet			· ·		-			
	Elevation:	0.0 feet		Lane E	quivalent			eet)		
	d Grade:	0.0%			Auto					
	eft View:	-90.0 degre			ium Truck					
RI	ght View:	90.0 degre	es	пе	avy Truck	s: 36.3	32			
FHWA Noise Model C										
	REMEL	Traffic Flow	Distan		te Road	Fresne		Barrier Atte		m Atten
Autos: Medium Trucks:	66.51 77.72	-7.72 -26.15		1.94 1.98	-1.20 -1.20		4.61	0.0		0.00
Heavy Trucks:	82.99	-20.15		1.98	-1.20		4.87	0.0		0.00
-						-	0.00	0.0	00	0.00
Unmitigated Noise Le	q Peak Hou			t tenuation q Evening		Night		Ldn	CI	VEL
Autos	59.		57.6	9 E VOIIIII 55		49.8		58.4		59
Medium Trucks:	52.	-	50.8	44		42.9		51.3		51.
Heavy Trucks:	61.	7	60.2	51	.2	52.4		60.8		60.
Vehicle Noise:	64.	1	62.4	57	.3	54.6		63.1		63.
Centerline Distance t	o Noise Co	ntour (in feet)							
Centerline Distance t	o Noise Co	ntour (in feet		70 dBA	65	dBA	60) dBA	55	dBA
Centerline Distance t	o Noise Co			70 dBA 1		dBA 33	60	0 dBA 70	55	dBA 152 159

FHWA-RD-77-108	HIGHWA	Y NOISE PI	REDICTIC	N MOI	DEL			
Scenario: OYCP 2022 w/ ext. Road Name: 4th St. Road Segment: w/o Etiwanda Av.			Project N Job Nu			Point		
SITE SPECIFIC INPUT DATA			NC	ISE N	IODE	L INPUT	5	
Highway Data		Site Con	ditions (H	lard =	10, So	oft = 15)		
Average Daily Traffic (Adt): 29,175 vehicle	s				Autos:	15		
Peak Hour Percentage: 10.14%		Me	dium Truc	ks (2 A	xles):	15		
Peak Hour Volume: 2,958 vehicles		He	avy Truck	s (3+ A	xles):	15		
Vehicle Speed: 55 mph		Vehicle	Mise					
Near/Far Lane Distance: 73 feet			icleType		Dav	Evening	Night	Daily
Site Data		ven			Day 77.5%	•	9.6%	
		14	edium Tru		84.8%		10.3%	3.229
Barrier Height: 0.0 feet			Heavy Tru		04.0% 86.5%		10.3%	9.589
Barrier Type (0-Wall, 1-Berm): 0.0			icavy ira	ons.	00.370	2.170	10.070	9.00
Centerline Dist. to Barrier: 60.0 feet		Noise So	ource Ele	ations	s (in fe	eet)		
Centerline Dist. to Observer: 60.0 feet			Autos:	0.0	000			
Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet		Mediu	m Trucks:	2.2	297			
Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet		Heav	y Trucks:	8.0	004	Grade Adj	iustment.	0.0
Road Elevation: 0.0 feet		Lano Ea	uivalent L	lietanc	o (in f	(oot)		
Road Grade: 0.0%		Lune Ly	Autos:			000		
Left View: -90.0 degree	c .	Mediu	m Trucks:					
Right View: 90.0 degree			y Trucks:					
FHWA Noise Model Calculations								
VehicleType REMEL Traffic Flow	Distanc	e Finite	Road	Fresn	el	Barrier Atte	en Ber	m Atten
Autos: 71.78 1.41		0.18	-1.20		-4.69		000	0.00
Medium Trucks: 82.40 -12.92		0.20	-1.20		-4.88		000	0.00
Heavy Trucks: 86.40 -8.18		0.20	-1.20		-5.34	0.0	000	0.00
Unmitigated Noise Levels (without Topo and I								
VehicleType Leq Peak Hour Leq Day		r Evening	Leq N	•		Ldn		VEL
	0.2	68.4		62.4		71.0		71.
	6.9	60.6		59.0		67.5		67.
	5.7	66.7		67.9		76.3		76.
	7.2	71.1		69.4		77.8	5	78.
Centerline Distance to Noise Contour (in feet)		70 -10 4	CF "	24		0 -10 4		104
		70 dBA	65 dl		6	0 dBA		dBA
	.dn: IEL:	200 207		431 447		928		2,000
						963		2.075

Friday, March 19, 2021

Scenario: O	YCP 2023	w/ ext				Project	Name: E	Bridge	Point		
Road Name: 4t							umber: 1				
Road Segment: el	o I-15 NB	Ramps									
	CIFIC IN	PUT DATA								6	
Highway Data				5	Site Cond	ditions (,		
Average Daily Traff	ic (Adt):	23,478 vehicle	s					Autos:			
Peak Hour Perc	•	10.14%					icks (2 A				
Peak Hour \		2,381 vehicles	;		Hea	avy Truc	ks (3+ A	xles):	15		
Vehicle		55 mph		1	Vehicle N	lix					
Near/Far Lane D	istance:	73 feet			Vehic	cleType	1	Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	87.36
Barrier	Heiaht:	0.0 feet			Me	dium Tr	ucks:	84.8%	4.9%	10.3%	3.21
Barrier Type (0-Wall, 1		0.0			н	leavy Tr	ucks:	86.5%	2.7%	10.8%	9.44
Centerline Dist. to	Barrier:	60.0 feet		,	Noise So	urce Fle	vations	(in fe	pet)		
Centerline Dist. to Ol	bserver:	60.0 feet		÷	10.00 00	Autos					
Barrier Distance to Ol	bserver:	0.0 feet			Modium	n Trucks	. 0.0				
Observer Height (Abov	ve Pad):	5.0 feet				v Trucks			Grade Adj	ustment	0.0
Pad El	evation:	0.0 feet						· ·			
Road El	evation:	0.0 feet		L	Lane Equ				feet)		
	Grade:	0.0%				Autos					
	ft View:	-90.0 degree	s			n Trucks					
Rigi	ht View:	90.0 degree	s		Heavy	y Trucks	: 47.7	'16			
FHWA Noise Model Ca	lculation	5									
	EMEL	Traffic Flow	Distar		Finite I		Fresne		Barrier Atte		m Atte
Autos:	71.78	0.47		0.18		-1.20		4.69	0.0		0.0
Medium Trucks:	82.40	-13.88		0.20		-1.20		4.88	0.0		0.0
Heavy Trucks:	86.40	-9.19		0.20	0	-1.20		-5.34	0.0	00	0.0
Unmitigated Noise Lev	els (with	out Topo and	barrier a	atten	uation)						
	Peak Hou			eq Ev	vening	Leq I			Ldn		NEL
Autos:	71	-	69.3		67.5		61.5		70.1		70
Medium Trucks:	67	-	66.0		59.6		58.1		66.5		66
	76		74.7		65.7		66.9		75.3		75
Heavy Trucks:	77	.8	76.2		70.1		68.4		76.9		77
Heavy Trucks: Vehicle Noise:											
		ntour (in feet)									
Vehicle Noise:		,		70 c	dBA	65 c		é	60 dBA	55	dBA
Vehicle Noise:		,	Ldn:	70 c	dBA 172	65 c	<i>IBA</i> 370	e	50 dBA 797	55	<i>dBA</i> 1,71

	- FRI	WA-RD-77-108	HIGHW	AY NO	OISE PF	REDICT		ΞL			
Road Nar	rio: OYCP 202 ne: Street A ent: s/o Dwy. 8	2 w/ ext.					Name: Br umber: 13		Point		
SITE	SPECIFIC IN	IPUT DATA				N	OISE MO	DDE		5	
Highway Data				S	ite Con	ditions	(Hard = 10), So	ft = 15)		
Average Daily	Traffic (Adt):	3,012 vehicle	es				AL	itos:	15		
Peak Hou	Percentage:	10.14%			Me	dium Tri	icks (2 Ax	les):	15		
Peak I	Hour Volume:	305 vehicle	s		Hei	avy Tru	cks (3+ Ax	les):	15		
Ve	ehicle Speed:	40 mph		14	ehicle N	liv					
Near/Far La	ane Distance:	11 feet				cleType	0	ay	Evening	Night	Daily
Site Data					veni			ay 7.5%	•	9.6%	
					M	, dium T		1.8%		10.3%	
	nrrier Height:	0.0 feet				leavy Ti		+.0% 3.5%		10.3%	
Barrier Type (0-V	. ,	0.0			,	icavy II	UCK3. 01	J.J /0	2.1 /0	10.0 /	1.55%
	ist. to Barrier:	30.0 feet		N	loise So	urce El	evations ('in fe	eet)		
Centerline Dist.		30.0 feet				Auto	s: 0.00	0			
Barrier Distance		0.0 feet			Mediur	n Truck	s: 2.29	7			
Observer Height	, ,	5.0 feet			Heav	y Truck	s: 8.00	4	Grade Adj	ustmen	: 0.0
	ad Elevation:	0.0 feet			ana Eau	incologi	Distance	lind	[a a f]		
	ad Elevation:	0.0 feet		L	ane Equ	Auto			eelj		
	Road Grade: Left View:	0.0%			Madium	n Truck					
		-90.0 degree				y Truck	20.01				
	Right View:	90.0 degree	es				s. 29.04	4			
	•										
FHWA Noise Mod	lel Calculation	s									
FHWA Noise Moo VehicleType	lel Calculation REMEL	s Traffic Flow	Distar		Finite	, Road	Fresnel		Barrier Atte	en Be	rm Atten
VehicleType Autos:	REMEL 66.51	Traffic Flow -6.57		nce 3.24		Road -1.20		.49	Barrier Atte 0.0		
VehicleType Autos: Medium Trucks:	REMEL 66.51 77.72	Traffic Flow -6.57 -28.25		3.24 3.31		Road -1.20 -1.20	-4 -4	.49 .86	0.0	100	0.000
VehicleType Autos:	REMEL 66.51 77.72	Traffic Flow -6.57 -28.25		3.24		Road -1.20	-4 -4	.49	0.0	100	0.000
VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 66.51 77.72 82.99 e Levels (with	Traffic Flow -6.57 -28.25 -24.63 out Topo and		3.24 3.31 3.30		Road -1.20 -1.20	-4 -4	.49 .86	0.0	100	0.000
VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 66.51 77.72 82.99	Traffic Flow -6.57 -28.25 -24.63 out Topo and	barrier a	3.24 3.31 3.30	uation)	Road -1.20 -1.20 -1.20	-4 -4	.49 .86	0.0	100 100 100	0.000
Vehicle Type Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois Vehicle Type Autos:	REMEL 66.51 77.72 82.99 e Levels (with Leg Peak Hou 62	Traffic Flow -6.57 -28.25 -24.63 out Topo and Ir Leq Day	barrier a	3.24 3.31 3.30 attenu	uation)	Road -1.20 -1.20 -1.20	-4 -4 -5 Night 52.2	.49 .86	0.0 0.0 0.0 <i>Ldn</i> 60.8	00 00 00 <i>C</i>	0.000 0.000 0.000 NEL 61.4
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks:	REMEL 66.51 77.72 82.99 e Levels (with Leg Peak Hou 62 51	Traffic Flow -6.57 -28.25 -24.63 -2	barrier a / L 60.0 50.0	3.24 3.31 3.30 attenu	<i>iation)</i> ening 58.3 43.6	Road -1.20 -1.20 -1.20	-4 -4 -5 Night 52.2 42.1	.49 .86	0.0 0.0 0.0 <i>Ldn</i> 60.8 50.6	00 00 00 C	0.000 0.000 0.000 NEL 61.4 50.8
Vehicle Type Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois Vehicle Type Autos:	REMEL 66.51 77.72 82.99 e Levels (with Leg Peak Hou 62 51	Traffic Flow -6.57 -28.25 -24.63 -2	barrier a	3.24 3.31 3.30 attenu	uation) ening 58.3	Road -1.20 -1.20 -1.20	-4 -4 -5 Night 52.2	.49 .86	0.0 0.0 0.0 <i>Ldn</i> 60.8	00 00 00 C	0.000 0.000 0.000 NEL 61.4 50.8
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks:	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hot 62 51 60	Traffic Flow -6.57 -28.25 -24.63 out Topo and ur Leq Day 2.0 1.6 0.5	barrier a / L 60.0 50.0	3.24 3.31 3.30 attenu	<i>iation)</i> ening 58.3 43.6	Road -1.20 -1.20 -1.20	-4 -4 -5 Night 52.2 42.1	.49 .86	0.0 0.0 0.0 <i>Ldn</i> 60.8 50.6	00 00 00 C	0.000 0.000 0.000 NEL 61.4 50.8 59.7
Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise	REMEL 66.51 77.72 82.99 e Levels (with Leg Peak Hot 62 51 60 64	Traffic Flow -6.57 -28.25 -24.63 -2	barrier a / L 60.0 50.0 59.0 62.8	3.24 3.31 3.30 attenu eq Eve	<i>iation)</i> <i>ening</i> 58.3 43.6 50.0 59.0	Road -1.20 -1.20 -1.20 <i>Leq</i>	-4 -4 -5 -5 -5 -5 -5 -5 -5 	1.49 1.86 5.77	0.0 0.0 <i>Ldn</i> 60.8 59.6 63.5	000 1000 1000 3 3 5	0.000 0.000 NEL 61.4 50.8 59.7 63.9
Vehicle Type Autos: Medium Trucks. Heavy Trucks Unmitigated Nois Vehicle Type Autos. Medium Trucks. Heavy Trucks. Vehicle Noise	REMEL 66.51 77.72 82.99 e Levels (with Leg Peak Hot 62 51 60 64	Traffic Flow -6.57 -28.25 -24.63 -2	barrier a / L 60.0 50.0 59.0 62.8)	3.24 3.31 3.30 attenu	<i>iation)</i> <i>ening</i> 58.3 43.6 50.0 59.0 <i>BA</i>	Road -1.20 -1.20 -1.20 <i>Leq</i>	-4 -4 -5 -5 -5 -5 -5 -5 -5 -4 -5 -5 	1.49 1.86 5.77	0.0 0.0 0.0 0.0 50.6 59.6 63.5	000 1000 1000 3 3 5	0.000 0.000 0.000 NEL 61.4 50.8 59.7 63.9
VehicleType Autos: Medium Trucks. Heavy Trucks. Unmitigated Nois VehicleType Autos: Medium Trucks. Heavy Trucks.	REMEL 66.51 77.72 82.99 e Levels (with Leg Peak Hot 62 51 60 64	Traffic Flow -6.57 -28.25 -24.63 out Topo and 0.0	barrier a / L 60.0 50.0 59.0 62.8	3.24 3.31 3.30 attenu eq Eve	<i>iation)</i> <i>ening</i> 58.3 43.6 50.0 59.0	Road -1.20 -1.20 -1.20 <i>Leq</i>	-4 -4 -5 -5 -5 -5 -5 -5 -5 	1.49 1.86 5.77	0.0 0.0 <i>Ldn</i> 60.8 59.6 63.5	000 1000 1000 3 3 5	0.000 0.000 0.000 NEL 61.4 50.8 59.7 63.9

	FHV	VA-RD-77-10	8 HIGHW	AY N	OISE PF	REDICTI		DEL			
Scenario: Road Name: Road Segment:	Etiwanda A						Name: E umber: 1		Point		
SITE SF	PECIFIC IN	IPUT DATA							L INPUTS	3	
Highway Data				S	Site Con	ditions	'Hard =	10, Sc	ft = 15)		
Average Daily Tr	affic (Adt):	27,232 vehic	les					Autos:	15		
Peak Hour Pe	ercentage:	10.14%			Med	dium Tru	icks (2 A	xles):	15		
Peak Hou	ır Volume:	2,761 vehicle	es		Hea	avy Truc	ks (3+ A	xles):	15		
Vehic	cle Speed:	50 mph		V	/ehicle N	liv					
Near/Far Lane	Distance:	50 feet		-		cleType		Dav	Evening	Night	Daily
Site Data								77.5%	•	9.6%	
Barri	er Height:	0.0 feet			Me	dium Tr	ucks:	84.8%	4.9%	10.3%	3.57%
Barrier Type (0-Wali		0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	10.63%
Centerline Dist.	. ,	50.0 feet		-	/ 0-			(i f.	- 41		
Centerline Dist. to	Observer:	50.0 feet		N	loise So	Autos			et)		
Barrier Distance to	Observer:	0.0 feet			Madium	Autos n Trucks					
Observer Height (At	bove Pad):	5.0 feet				y Trucks			Grade Adj	uctmont	
Pad	Elevation:	0.0 feet			neav	y mucks	. 0.0	104	Grade Auj	usument	. 0.0
Road	Elevation:	0.0 feet		L	ane Equ	iivalent	Distanc	e (in i	'eet)		
Ro	ad Grade:	0.0%				Autos	: 43.5	589			
	Left View:	-90.0 degre	es		Mediur	n Trucks	: 43.3	86			
F	Right View:	90.0 degre	es		Heav	y Trucks	: 43.4	05			
FHWA Noise Model	Calculation	s		-							
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresn	e/	Barrier Atte	en Ber	m Atten
Autos:	70.20	1.4		0.79		-1.20		4.65	0.0		0.00
Medium Trucks:	81.00	-12.30		0.82	-	-1.20		4.87	0.0		0.00
Heavy Trucks:	85.38	-7.62	2	0.82	2	-1.20		-5.43	0.0	00	0.00
Unmitigated Noise L											
	eq Peak Hou			eq Ev		Leq	•		Ldn		NEL
Autos:	71		69.3		67.5		61.5		70.1		70.
Medium Trucks:	68		66.7		60.3		58.8		67.2		67.
Heavy Trucks:	77		75.9		66.9		68.1		76.5		76.
· · _			77.2		70.6		69.4		77.8		78.0
Vehicle Noise:	78	.7	11.2		10.0						
Vehicle Noise:									-	Г	
· · _			t)	70 d	IBA	65 0		6	0 dBA	55	dBA
Vehicle Noise:		ontour (in fee		70 d		65 0	IBA 355 367	6	0 dBA 765 791	55	dBA 1,648 1,705

	FHV	VA-RD-77-108	HIGHW	AY NO	ISE PR	REDICT	ION MO	DEL			
Scenar	io: HY 2040					Projec	t Name:	Bridge	Point		
Road Nam	e: Etiwanda A	v.				Job I	lumber:	13349			
Road Segme	nt: s/o San Ber	nardino Av.									
	SPECIFIC IN	PUT DATA							L INPUT	5	
Highway Data				Si	te Conc	ditions	(Hard =	10, So	oft = 15)		
Average Daily	Traffic (Adt):	25,271 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10.14%			Med	dium Ti	ucks (2)	Axles):	15		
Peak H	lour Volume:	2,562 vehicle	S		Hea	avy Tru	cks (3+)	Axles):	15		
Ve	hicle Speed:	50 mph		Ve	hicle N	Nix					
Near/Far La	ne Distance:	73 feet		-		cleType		Dav	Evening	Night	Dailv
Site Data							Autos:	77.5%		9.6%	85.80%
	rrier Height:	0.0 feet			Ме	edium 1	rucks:	84.8%	4.9%	10.3%	3.57%
Barrier Type (0-W		0.0			н	leavy 7	rucks:	86.5%			10.639
Centerline Di	. ,	60.0 feet									
Centerline Dist		60.0 feet		No	oise So		levation		eet)		
Barrier Distance		0.0 feet				Auto		000			
Observer Height		5.0 feet			Mediun			297	~		
	ad Elevation:	0.0 feet			Heavy	y Truck	(S. 8.	004	Grade Adj	ustment:	0.0
	ad Elevation:	0.0 feet		La	ne Equ	ıivalen	t Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 47.	883			-
	Left View:	-90.0 degree	es		Mediun	n Truck	s: 47.	698			
	Right View:	90.0 degree	es		Heavy	y Truck	is: 47.	716			
FHWA Noise Mod	el Calculations	5									
VehicleType	REMEL	Traffic Flow	Distan	се	Finite I	Road	Fresr	nel	Barrier Atte	en Ber	m Atten
Autos:	70.20	1.13		0.18		-1.20		-4.69	0.0	00	0.00
Medium Trucks:	81.00	-12.68		0.20		-1.20		-4.88	0.0	00	0.00
Heavy Trucks:	85.38	-7.94		0.20		-1.20		-5.34	0.0	00	0.00
Unmitigated Nois										1	
VehicleType	Leq Peak Hou			eq Eve		Leq	Night		Ldn		VEL
Autos:	70		68.3		66.6		60.		69.2		69.
Medium Trucks:	67		65.8		59.4		57.0	-	66.3		66.
Heavy Trucks: Vehicle Noise:	76		75.0		65.9		67.3		75.5		75.
	77		76.2		69.7		68.4	4	76.8	}	77.
Centerline Distan	ce to Noise Co	ntour (in feet)	70 dB		67	dDA		60 dBA	57	dBA
			Ldn:	i U dB		05	dBA		00 dBA 794		dBA
			Lan: NEL:		171 177		369 381		794 822		1,71 ⁻ 1,77 ⁻

Friday, March 19, 2021

Scenario: HY 204	0					Project	Name: B	ridas	Point		
Road Name: Etiwand	-						lumber: 1		POIN		
Road Segment: s/o Whi		,				300 N	umber. I	5545			
ç				1							
SITE SPECIFIC Highway Data	INPU	IDATA			Site Cond				L INPUTS	>	
Average Daily Traffic (Ad	9. 37 3	211 vehicle	\$					utos:	,		
Peak Hour Percentage	· ·	14%			Med	dium Tri	ucks (2 A	xles):	15		
Peak Hour Volum		73 vehicles					cks (3+ A				
Vehicle Spee	,	50 mph		-			()	,	-		
Near/Far Lane Distance	e: (50 feet		F	Vehicle M				C. contan	A.C 1-4	Dailt
Site Data					venio	cleType		Day	Evening	Night	Daily
								77.5% 34.8%		9.6% 10.3%	
Barrier Heigh		0.0 feet						34.8% 36.5%			3.57 10.63
Barrier Type (0-Wall, 1-Berm	·	0.0			п	leavy II	rucks: 8	50.5%	o ∠.7%	10.8%	10.63
Centerline Dist. to Barrie		0.0 feet			Noise So	urce El	evations	(in fe	eet)		
Centerline Dist. to Observe		0.0 feet				Auto	s: 0.0	00			
Barrier Distance to Observe		0.0 feet			Mediun	n Truck	s: 2.2	97			
Observer Height (Above Pad	/	5.0 feet			Heavy	y Truck	s: 8.0	04	Grade Adj	ustment	: 0.0
Pad Elevatio		0.0 feet		-	Lane Equ	in colored	Distanc	e (in	fact)		
Road Elevatio Road Grad		0.0 feet 0%		-	Lane Lyu	Auto			leelj		
Left View		0% 0.0 dearee:	_		Mediun						
Right View		0.0 degree: 0.0 degree:				y Truck					
rught vici	v. 3	0.0 degree	5			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0. 40.4	.00			
FHWA Noise Model Calculat											
VehicleType REMEL		ffic Flow	Dis	stance	Finite I		Fresne		Barrier Atte		m Atter
	.20	2.81		0.7	-	-1.20		4.65	0.0		0.00
	.00	-11.00		0.8	-	-1.20		4.87	0.0		0.00
Heavy Trucks: 85	.38	-6.26		0.8	2	-1.20	-	5.43	0.0	00	0.00
Unmitigated Noise Levels (w	vithout	Topo and k	oarrie	er atter	nuation)						
VehicleType Leq Peak		Leq Day		Leq E	vening	Leq	Night		Ldn		NEL
Autos:	72.6		0.6		68.9		62.8		71.4		72
Medium Trucks:	69.6		8.1		61.7		60.1		68.6		68
Heavy Trucks:	78.7		7.3		68.2		69.5		77.8		77
Vehicle Noise:	80.1	7	8.5		72.0		70.7		79.1		79
Centerline Distance to Noise	Conto	ur (in feet)									
		-		70	dBA	65	dBA	6	60 dBA	55	dBA
		L	.dn:		203		437		942		2,02

	FHV	VA-RD-77-108	HIGHW	AY NO	DISE PR	EDICT		EL			
Road Nam	<i>io:</i> HY 2040 ne: Foothill Bl. nt: w/o Etiwand	da Av.					Name: Br lumber: 13		Point		
SITE	SPECIFIC IN	IPUT DATA					IOISE M	ODE		s	
Highway Data				S	ite Cond		(Hard = 1			-	
Average Daily	Traffic (Adt):	51,539 vehicle	es				AL	utos:	15		
Peak Hour	Percentage:	10.14%			Med	dium Tr	ucks (2 Ax	les):	15		
Peak H	lour Volume:	5,226 vehicles	S		Hea	avy Tru	cks (3+ Ax	les):	15		
Ve	hicle Speed:	50 mph		V	ehicle N	lix					
Near/Far La	ne Distance:	73 feet		-		cleType	D	ay	Evening	Night	Daily
Site Data								7.5%	•		85.80%
Ba	rrier Height:	0.0 feet			Me	dium T	rucks: 8	4.8%	4.9%	10.3%	3.57%
Barrier Type (0-W		0.0			H	leavy T	rucks: 8	6.5%	2.7%	10.8%	10.63%
Centerline Di	. ,	60.0 feet			laiaa Ca	uree E	evations	lin fe	afl		
Centerline Dist.	to Observer:	60.0 feet		N	oise so	Auto			el)		
Barrier Distance	to Observer:	0.0 feet			Mediun		0.00				
Observer Height	(Above Pad):	5.0 feet							Grade Adj	iustmont	0.0
P	ad Elevation:	0.0 feet			Heavy	y Truck	s: 8.00	14	Grade Auj	usuneni	0.0
Ro	ad Elevation:	0.0 feet		Li	ane Equ	iivalen	t Distance	(in f	feet)		
	Road Grade:	0.0%				Auto	s: 47.88	33			
	Left View:	-90.0 degree	es		Mediun	n Truck	s: 47.69	98			
	Right View:	90.0 degree	es		Heavy	y Truck	s: 47.71	16			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distan	се	Finite I	Road	Fresnel	1	Barrier Atte	en Ber	m Atten
Autos:	70.20	4.22		0.18		-1.20	-4	1.69	0.0	000	0.00
Medium Trucks:	81.00	-9.59		0.20		-1.20		1.88	0.0		0.000
Heavy Trucks:	85.38	-4.85		0.20		-1.20	-5	5.34	0.0	000	0.00
Unmitigated Nois											
VehicleType	Leq Peak Hou			eq Eve	ening	Leq	Night		Ldn		VEL
Autos:	73		71.4		69.7		63.6		72.2		72.
Medium Trucks:	70		68.8		62.5		60.9		69.4		69.0
Heavy Trucks:	79	-	78.0		69.0		70.3		78.6		78.
Vehicle Noise:	80		79.3		72.8		71.5		79.9	1	80.1
Centerline Distan	ce to Noise Co	ontour (in feet,)	70 dl	DA T	65	dBA	-	0 dBA	FF	dBA
			Ldn:	70 al	ва 275	00	ава 593	c	1.277		ава 2.752
			Lan: NEL:		275				1,277		2,752
							613				

	FHV	VA-RD-77-108	HIGHWA	Y NOISE P	REDICT		DEL			
Scenario Road Name Road Segmen		ia Av.				Name: E lumber: 1		Point		
SITE S	SPECIFIC IN	PUT DATA			1	IOISE N	IODE	L INPUTS	3	
Highway Data				Site Cor	nditions	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	5,543 vehicle	s				Autos:	15		
Peak Hour I	Percentage:	10.14%		Me	edium Tr	ucks (2 A	xles):	15		
Peak Ho	our Volume:	562 vehicles		He	eavy Tru	cks (3+ A	xles):	15		
Vel	nicle Speed:	40 mph		Vehicle	Mix					
Near/Far Lar	ne Distance:	50 feet			nicleType		Dav	Evening	Night	Daily
Site Data							77.5%	•	9.6%	
Bar	rier Height:	0.0 feet		N	ledium T	rucks:	84.8%	4.9%	10.3%	3.579
Barrier Type (0-Wa		0.0			Heavy T	rucks:	86.5%	2.7%	10.8%	10.63%
Centerline Dis		44.0 feet		Noine C	ouroo E	levations	lin fe	ati		
Centerline Dist. t	o Observer:	44.0 feet		Noise 3	Auto			el)		
Barrier Distance t	o Observer:	0.0 feet		Madi	m Truck					
Observer Height (/	Above Pad):	5.0 feet			vy Truck		04	Grade Adj	ustment	. 0 0
Pa	d Elevation:	0.0 feet		nea	vy much	3. 0.0	104	Orade Auj	usunon	. 0.0
Roa	d Elevation:	0.0 feet		Lane Eq	uivalen	t Distanc	e (in i	feet)		
F	Road Grade:	0.0%			Auto					
	Left View:	-90.0 degree			m Truck					
	Right View:	90.0 degree	s	Hea	vy Truck	s: 36.3	332			
FHWA Noise Mode	I Calculation:	5		1						
VehicleType	REMEL	Traffic Flow	Distan	ce Finite	Road	Fresn	-	Barrier Atte	en Ber	m Atten
Autos:	66.51	-4.49		1.94	-1.20		-4.61	0.0		0.00
Medium Trucks:	77.72	-18.30		1.98	-1.20		-4.87	0.0		0.00
Heavy Trucks:	82.99	-13.56		1.98	-1.20		-5.50	0.0	00	0.00
Unmitigated Noise	Levels (with	out Topo and	barrier a	ttenuation)						
	Leq Peak Hou	1 1		q Evening		Night		Ldn		NEL
Autos:	62		50.8	59.0		53.0		61.6		62.
Medium Trucks:	60		58.6	52.3		50.7		59.2		59.
Heavy Trucks:	70		58.7	59.7		60.9		69.3		69.
Vehicle Noise:	71	.3	69.7	62.8	1	61.9		70.3		70.
Centerline Distanc	e to Noise Co	ontour (in feet)					r			
			dn:	70 dBA	65	dBA	e	0 dBA	55	dBA
			IEL:	46 48		100 103		215 221		462 477

	FHW	/A-RD-77-108	HIGP	IVVATING	JISE PR	EDICI		DEL			
Scenario:	HY 2040					Project	Name:	Bridge	Point		
Road Name:						Job N	lumber:	13349			
Road Segment:	w/o Etiwand	a Av.									
	PECIFIC IN	PUT DATA							L INPUT:	5	
Highway Data				Si	te Con	ditions	(Hard =	: 10, Sc	oft = 15)		
Average Daily Tr	affic (Adt):	22,831 vehicle	s					Autos:	15		
Peak Hour Pe	ercentage:	10.14%			Mee	dium Tr	ucks (2	Axles):	15		
Peak Hou	ır Volume:	2,315 vehicles			Hei	avy Tru	cks (3+	Axles):	15		
Vehic	cle Speed:	55 mph		V	ehicle N	lix					
Near/Far Lane	Distance:	73 feet		-		cleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	85.80%
Barri	er Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	3.579
Barrier Type (0-Wal		0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	10.639
Centerline Dist.		60.0 feet						- (- 4	41		
Centerline Dist. to	Observer:	60.0 feet		N	Dise So		evation		eet)		
Barrier Distance to	Observer:	0.0 feet			Madis	Auto n Truck		.000			
Observer Height (Al	ove Pad):	5.0 feet				n Truck y Truck		.297 .004	Grade Ad	ustmont	0.0
Pad	Elevation:	0.0 feet			neav	y TTUCK	s. o	.004	Graue Auj	usuneni	0.0
Road	Elevation:	0.0 feet		Lä	ane Equ	iivalen	t Distan	ce (in i	feet)		
Ro	ad Grade:	0.0%				Auto	s: 47	.883			
	Left View:	-90.0 degree	s			n Truck		.698			
F	Right View:	90.0 degree	s		Heav	y Truck	s: 47	.716			
FHWA Noise Model	Calculations										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite		Fres	-	Barrier Atte		m Atten
Autos:	71.78	0.27		0.18		-1.20		-4.69		000	0.00
Medium Trucks:	82.40	-13.54		0.20		-1.20		-4.88		000	0.00
Heavy Trucks:	86.40	-8.80		0.20		-1.20		-5.34	0.0	000	0.00
Unmitigated Noise L					<u> </u>			-			
	eq Peak Hou			Leq Eve		Leq	Night		Ldn		VEL
Autos:	71.		59.1		67.3		61.		69.9		70.
Medium Trucks:	67.		56.3		59.9		58.		66.9		67.
Heavy Trucks:	76.		75.1		66.1		67.	-	75.7		75.
Vehicle Noise:	78.		76.5		70.2		68.	/	77.1		77.
Centerline Distance	to Noise Co	ntour (in feet)		70 "			-10.4	1.	0 -0 4		10.4
			L	70 dE		65	dBA		60 dBA		dBA
			Ldn:		179 186		386 400		832		1,792
			IEL:					1	862		1.856

Scenari	o: HY 2040					Project	Name:	Bridael	Point		
Road Nam	e: 4th St.						umber:				
Road Segmer	nt: e/o I-15 NB	Ramps									
SITE	SPECIFIC IN	PUT DATA				N	IOISE	MODE		s	
Highway Data				1	Site Con	ditions	(Hard =	: 10, So	ft = 15)		
Average Daily	Traffic (Adt):	22,189 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10.14%					ucks (2	,	15		
Peak H	our Volume:	2,250 vehicles	;		Hea	avy Tru	cks (3+ .	Axles):	15		
Vei	hicle Speed:	55 mph		1	Vehicle N	lix					
Near/Far Lai	ne Distance:	73 feet		Ē		cleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	85.80%
Bar	rier Heiaht:	0.0 feet			Me	dium T	rucks:	84.8%	4.9%	10.3%	3.57%
Barrier Type (0-W	all, 1-Berm):	0.0			H	leavy T	rucks:	86.5%	2.7%	10.8%	10.63%
Centerline Dis	st. to Barrier:	60.0 feet		-	Voise So	urco El	evation	e (in fe	of)		
Centerline Dist.	to Observer:	60.0 feet		ŀ.	10.00 00	Auto		000			
Barrier Distance	to Observer:	0.0 feet			Mediur			297			
Observer Height (5.0 feet				y Truck	0	004	Grade Ad	iustment	: 0.0
	d Elevation:	0.0 feet		_							
	d Elevation:	0.0 feet		1	ane Equ				'eet)		
F	Road Grade:	0.0%				Auto	••••••	.883			
	Left View:	-90.0 degree			Mediur			.698			
	Right View:	90.0 degree	:S		Heav	y Truck	s: 47	.716			
FHWA Noise Mode	l Calculations	5									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.15		0.1	-	-1.20		-4.69		000	0.00
Medium Trucks:	82.40	-13.66		0.2	-	-1.20		-4.88		000	0.00
Heavy Trucks:	86.40	-8.92		0.2	0	-1.20		-5.34	0.0	000	0.00
Unmitigated Noise								-			
	Leq Peak Hou			Leg Ei	•	Leq	Night		Ldn		NEL
Autos:	70		68.9		67.2		61.		69.7		70.
Medium Trucks:	67. 76		66.2 75.0		59.8 66.0		58. 67.	-	66.7 75.6		67. 75
Heavy Trucks: Vehicle Noise:	76		76.4		70.1		68	-	75.0	-	75.
					70.1		68.	0	77.0)	11.
Centerline Distanc	e to Noise Co	ontour (in feet)		=0		05	10.4				
			Ldn:	70 0	18A 176	65	dBA 379	-	0 dBA 816		dBA 1.758

	FHV	VA-RD-77-108	HIGH	WAY N		REDICT		DEL				
Road Nar	rio: HY 2040 ne: Street A ent: s/o Dwy. 8						Name: lumber:		Point			
	SPECIFIC IN	IPUT DATA			<u></u>					S		
Highway Data					Site Con	ditions			,			
Average Daily	()	1 vehicle	s					Autos:				
	r Percentage:	10.14%					ucks (2					
	Hour Volume:	0 vehicles			He	avy Tru	cks (3+ .	Axles):	15			
	ehicle Speed:	40 mph			Vehicle I	Nix						
Near/Far La	ane Distance:	11 feet			Veh	icleType		Day	Evening	Nig	ht	Daily
Site Data							Autos:	77.5%	12.9%	9.	6%	85.80%
D.	rrier Height:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.	3%	3.57%
Barrier Type (0-V		0.0			ŀ	leavy T	rucks:	86.5%	b 2.7%	10.	8%	10.63%
Centerline D	ist. to Barrier:	30.0 feet			Noise So	urce Fl	evation	s (in fi	eef)			
Centerline Dist	to Observer:	30.0 feet		- F		Auto		000				
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck		297				
Observer Height	(Above Pad):	5.0 feet				v Truck	u	004	Grade Ad	liustm	ent:	0.0
F	ad Elevation:	0.0 feet								,		
Ro	ad Elevation:	0.0 feet		1	Lane Eq	uivalen	t Distan	ce (in	feet)			
	Road Grade:	0.0%				Auto		912				
	Left View:	-90.0 degree	s			m Truck		615				
	Right View:	90.0 degree	s		Heav	ry Truck	s: 29	644				
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic Flow	Dist	tance		Road	Fresi		Barrier Att		Bern	n Atten
Autos		-41.93		3.2		-1.20		-4.49		000		0.00
Medium Trucks	=			3.3		-1.20		-4.86		000		0.000
Heavy Trucks	82.99	-51.00		3.3	10	-1.20		-5.77	0.0	000		0.000
Unmitigated Nois					,					-		_
VehicleType	Leq Peak Hou			Leq E	vening	Leq	Night		Ldn	_	CN	
Autos Medium Trucks			24.7		22.9 16.2		16. 14	-	25. 23	-		26. 23.
			22.5 32.6		16.2 23.6		14. 24.	-	23.			23.
Heavy Trucks Vehicle Noise			32.0 33.6		23.6		24.	-	33.	_		33.
Centerline Distan	ce to Noise Co	ontour (in feet)										
		, ,		70 (dBA	65	dBA		60 dBA		55 c	
			Ldn:		0		C		1			1
		CN	IEL:		0		C		1			1

Friday, March 19, 2021

	FHW	/A-RD-77-108	HIGHV	VAY N	IOISE PF	REDICT	ION MOI	DEL			
Scenario: HYP : Road Name: Etiwa Road Segment: s/o Fo	nda Av						Name: E umber: 1		Point		
SITE SPECIF	IC IN	PUT DATA				N	IOISE N	IODE	L INPUTS	3	
Highway Data				S	Site Con	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily Traffic (A	Adt):	29,218 vehicle	es					Autos:	15		
Peak Hour Percenta	age:	10.14%			Me	dium Tri	ucks (2 A	xles):	15		
Peak Hour Volu	me:	2,963 vehicle	5		He	avy Truc	cks (3+ A	xles):	15		
Vehicle Spe	eed:	50 mph		L.	/ehicle I	Mix					
Near/Far Lane Distar	nce:	50 feet		-		icleType		Dav	Evening	Night	Daily
Site Data					1011			77.5%	•	9.6%	
Barrier Hei	aht.	0.0 feet			Me	edium Ti	rucks:	84.8%	4.9%	10.3%	3.35%
Barrier Type (0-Wall, 1-Be		0.0			F	leavy Ti	rucks:	86.5%	2.7%	10.8%	9.96%
Centerline Dist. to Bar		50.0 feet		-							
Centerline Dist. to Obser		50.0 feet		^	Voise So				eet)		
Barrier Distance to Obser		0.0 feet				Auto		000			
Observer Height (Above P		5.0 feet				n Truck		297			
Pad Eleval		0.0 feet			Heav	y Truck	s: 8.0	004	Grade Adj	ustment	. 0.0
Road Eleval	tion:	0.0 feet		L	ane Equ	uivalent	Distanc	e (in i	feet)		
Road Gra	ade:	0.0%				Auto	s: 43.5	589			
Left V	ïew:	-90.0 degree	es		Mediur	n Truck	s: 43.3	386			
Right V	iew:	90.0 degree	es		Heav	y Truck	s: 43.4	105			
FHWA Noise Model Calcul	lations	;									
VehicleType REME		Traffic Flow	Dista		Finite		Fresn	-	Barrier Atte		rm Atten
	70.20	1.80		0.79	-	-1.20		-4.65	0.0		0.000
	81.00	-12.33		0.82	-	-1.20		-4.87	0.0		0.000
Heavy Trucks:	85.38	-7.60		0.82	2	-1.20		-5.43	0.0	00	0.000
Unmitigated Noise Levels	(witho	out Topo and	barrier	attenu	uation)						
VehicleType Leq Pea	ak Hou	r Leq Day	· 1	Leq Ev	rening	Leq	Night		Ldn		NEL
Autos:	71.	-	69.6		67.9		61.8		70.4		71.0
Medium Trucks:	68.	-	66.7		60.4		58.8		67.3		67.5
Heavy Trucks:	77.		75.9		66.9		68.1		76.5		76.6
Vehicle Noise:	78.	8	77.2		70.8		69.4		77.8	1	78.1
Centerline Distance to Noi	ise Co	ntour (in feet)								
				70 d	1BA	65	dBA	6	60 dBA	55	dBA
			Ldn: VEL:		167 173		359 372		774 802		1,668

	FHW	A-RD-77-108 H	IIGHWA	Y NOISE F	REDIC		DEL			
Scenar	io: HYP 2040				Projec	t Name:	Bridge	Point		
	e: Etiwanda Av				Job I	Number:	13349			
Road Segmer	nt: s/o San Berr	ardino Av.								
	SPECIFIC INF	PUT DATA						L INPUTS	5	
Highway Data				Site Co.	nditions	; (Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 2	7,770 vehicles	;				Autos:	15		
Peak Hour	Percentage:	10.14%		М	edium T	rucks (2	Axles):	15		
Peak H	our Volume: 2	2,816 vehicles		н	eavy Tru	ıcks (3+ .	Axles):	15		
Ve	hicle Speed:	50 mph		Vehicle	Mix					
Near/Far La	ne Distance:	73 feet			hicleTyp	e	Dav	Evening	Night	Dailv
Site Data						Autos:	77.5%	•	9.6%	86.929
	rier Height:	0.0 feet		٨	ledium 1	Trucks:	84.8%	4.9%	10.3%	3.309
Barrier Type (0-W		0.0			Heavy 1	Trucks:	86.5%		10.8%	9.799
Centerline Dis	. ,	60.0 feet								
Centerline Dist		60.0 feet		Noise S		levation		eet)		
Barrier Distance		0.0 feet			Auto		000			
Observer Height (5.0 feet			Im Truck		297	Our de Ad		
	ad Elevation:	0.0 feet		Hea	vy Truck	(S.' 8.	004	Grade Adj	ustment.	0.0
Roa	ad Elevation:	0.0 feet		Lane Ed	quivalen	t Distan	ce (in i	feet)		
1	Road Grade:	0.0%			Auto	os: 47	.883			
	Left View:	-90.0 degrees		Media	im Truci	ks: 47	.698			
	Right View:	90.0 degrees	5	Hea	vy Truck	ks: 47	.716			
FHWA Noise Mode	el Calculations			1						
VehicleType		Traffic Flow	Distanc	e Finite	e Road	Fresi		Barrier Atte	en Ber	m Atten
Autos:	70.20	1.59		0.18	-1.20		-4.69	0.0		0.00
Medium Trucks:	81.00	-12.62		0.20	-1.20		-4.88	0.0		0.00
Heavy Trucks:	85.38	-7.89		0.20	-1.20		-5.34	0.0	00	0.00
Unmitigated Noise										
	Leq Peak Hour			q Evening		Night	_	Ldn		VEL
Autos:	70.8		8.8	67.0	-	61.		69.6		70.
Medium Trucks:	67.4		5.8	59.5	-	57.	-	66.4		66.
Heavy Trucks:	76.5		5.0	66.0		67.		75.6		75.
Vehicle Noise:	77.9		6.3	70.0	J	68.	5	77.0)	77.
Centerline Distand	e to Noise Cor	ntour (in feet)		70 -10 4		-10.4		0 -0 4		-0.4
		,		70 dBA		dBA		0 dBA		dBA
		L CN	dn:	174 181		376		810 839		1,744 1.807

Friday, March 19, 2021

					NOISE PF						
Scenario: HYP 204	-					Project					
Road Name: Etiwanda						Job N	umber:	13349			
Road Segment: s/o Whitt	ram Av.										
SITE SPECIFIC	INPUT	DATA							L INPUT	S	
Highway Data					Site Con	ditions	(Hard =	10, So	oft = 15)		
Average Daily Traffic (Adt)	39,19	7 vehicle	s					Autos:			
Peak Hour Percentage		%				dium Tru					
Peak Hour Volume		vehicles			He	avy Truc	:ks (3+ A	(xles	15		
Vehicle Speed		mph		F	Vehicle I	Mix					
Near/Far Lane Distance	50	feet		F	Veh	icleTvpe		Dav	Evening	Niaht	Dailv
Site Data						A	utos:	77.5%	•	9.6%	86.46
Barrier Height) feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	3.41
Barrier Type (0-Wall, 1-Berm)					ŀ	leavy Tr	ucks:	86.5%	5 2.7%	10.8%	10.13
Centerline Dist. to Barrier) feet		ŀ							
Centerline Dist. to Observer) feet		H	Noise So				eet)		
Barrier Distance to Observer) feet				Autos		000			
Observer Height (Above Pad)) feet				n Trucks		297	Oursels Art		
Pad Elevation) feet			Heav	y Trucks	5. 8.0	004	Grade Adj	usimeni	. 0.0
Road Elevation	0.0) feet			Lane Eq	uivalent	Distand	e (in	feet)		
Road Grade	0.0%	b				Autos	: 43.	589			
Left View	-90.0) degree	s		Mediui	n Trucks	: 43.	386			
Right View	90.0) degree	s		Heav	y Trucks	s: 43.	405			
FHWA Noise Model Calculation											
VehicleType REMEL		c Flow	Dista		Finite		Fresn		Barrier Atte	en Bei	m Atter
Autos: 70.2		3.07		0.7	-	-1.20		-4.65		000	0.00
Medium Trucks: 81.0		-10.98		8.0		-1.20		-4.87		000	0.00
Heavy Trucks: 85.	38	-6.25		0.8	32	-1.20		-5.43	0.0	000	0.00
Unmitigated Noise Levels (wi								1			
VehicleType Leq Peak H		Leq Day		Leq E	vening	Leq	Night		Ldn		NEL
	72.9 60.6		70.9		69.1 61.7		63.1 60.2		71.7 68.6		72 68
	69.6		58.1 77.3		68.2		60.2		68.6 77.8	-	68 78
					72.1		69.5 70.8	·	77.8		78
Heavy Trucks:	78.8)	/9.4	<u> </u>	79
Heavy Trucks: Vehicle Noise:	80.2		78.6		72.1						
Heavy Trucks:	80.2		78.6	70		65.			50 dB4	55	dBA
Heavy Trucks: Vehicle Noise:	80.2	(in feet)	78.6	70	dBA 205	65 0	1BA 441	(50 dBA 950		<i>dBA</i> 2.04

	FH\	WA-RD-77-108	HIGHW	AY NO	ISE PF	REDICTIO	ON MOD	EL			
Road Nar	rio: HYP 2040 ne: Foothill Bl. ent: w/o Etiwan	da Av.				Project I Job Nu	Name: B Imber: 1		Point		
SITE	SPECIFIC IN	PUT DATA							L INPUTS	5	
Highway Data				Sit	e Con	ditions (Hard = 1	0, So	ft = 15)		
Average Daily	Traffic (Adt):	52,543 vehicle	s				A	utos:	15		
Peak Hou	r Percentage:	10.14%			Me	dium Tru	cks (2 A	kles):	15		
Peak I	Hour Volume:	5,328 vehicles			Hei	avy Truc	ks (3+ A	kles):	15		
Ve	ehicle Speed:	50 mph		Ve	hicle N	Nix					
Near/Far La	ane Distance:	73 feet				cleType	[Day	Evening	Night	Daily
Site Data								7.5%		9.6%	
Ba	rrier Height:	0.0 feet			Me	edium Tri	ucks: 8	4.8%	4.9%	10.3%	3.51%
Barrier Type (0-V		0.0			F	leavy Tri	ucks: 8	86.5%	2.7%	10.8%	10.46%
	ist. to Barrier:	60.0 feet		No	ico So	urce Ele	wations	(in fe	(of)		
Centerline Dist.	to Observer:	60.0 feet		NO	130 30	Autos			ey		
Barrier Distance	to Observer:	0.0 feet			Madium	n Trucks					
Observer Height	(Above Pad):	5.0 feet				v Trucks			Grade Adj	ustment	0.0
F	ad Elevation:	0.0 feet			neav	y mucks	. 0.0	04	Orade Auj	usunem.	0.0
Ro	ad Elevation:	0.0 feet		Lai	ne Equ	uivalent	Distance	e (in f	ieet)		
	Road Grade:	0.0%				Autos	: 47.8	83			
	Left View:	-90.0 degree	s	1	Mediur	n Trucks	: 47.6	98			
	Right View:	90.0 degree	s		Heav	y Trucks	: 47.7	16			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fresne	e/	Barrier Atte	en Ber	m Atten
Autos:		4.32		0.18		-1.20	-	4.69	0.0	00	0.00
Medium Trucks	81.00	-9.57		0.20		-1.20	-	4.88	0.0	00	0.00
Heavy Trucks	85.38	-4.84		0.20		-1.20	-	5.34	0.0	00	0.00
Unmitigated Nois	e Levels (with	out Topo and	barrier a	ttenua	tion)						
VehicleType	Leq Peak Hou			eq Ever		Leq N	•		Ldn		VEL
Autos	73	3.5	71.5		69.8		63.7		72.3		72.
									69.4		69.
Medium Trucks	70		68.9		62.5		61.0				
Heavy Trucks	70 79	9.5	78.1		69.0		70.3		78.6		
	70 79	9.5									
Heavy Trucks Vehicle Noise	70 79 80	9.5).9	78.1 79.3		69.0 72.8		70.3 71.5		78.6 79.9)	80.
Heavy Trucks	70 79 80).5).9 ontour (in feet)	78.1 79.3	70 dB,	69.0 72.8	65 a	70.3 71.5	6	78.6 79.9)	80.: dBA
Heavy Trucks Vehicle Noise	70 79 80	9.5).9 ontour (in feet)	78.1 79.3	70 dB,	69.0 72.8	65 a	70.3 71.5	6	78.6 79.9)	78. 80. dBA 2,763 2,860

	FHV	VA-RD-77-108	HIGHW	AY NO	DISE PF	REDICTI	ON MOI	DEL			
Scenario. Road Name. Road Segment.		da Av.					Name: E umber: 1		Point		
SITE S	PECIFIC IN	IPUT DATA				N	OISE N	IODE	L INPUTS	3	
Highway Data				S	ite Con	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily Ti	raffic (Adt):	7,573 vehicle	es					Autos:	15		
Peak Hour P	ercentage:	10.14%			Me	dium Tru	icks (2 A	xles):	15		
Peak Ho	ur Volume:	768 vehicle	5		He	avy Truc	cks (3+ A	xles):	15		
Vehi	cle Speed:	40 mph		V	ehicle I	liv					
Near/Far Lane	e Distance:	50 feet				cleType		Dav	Evening	Niaht	Daily
Site Data					Von			77.5%	•	9.6%	
	ier Heiaht:	0.0 feet			Me	, edium Tr		84.8%		10.3%	
Barrier Type (0-Wa		0.0 teet				leavy Tr		86.5%		10.8%	
Centerline Dist.		44.0 feet									
Centerline Dist. to		44.0 feet		N	oise So		evations		eet)		
Barrier Distance to		0.0 feet				Autos		000			
Observer Height (A		5.0 feet				n Truck		297			
• (Elevation:	0.0 feet			Heav	y Trucks	s: 8.0	004	Grade Adj	ustment	: 0.0
Road	Elevation:	0.0 feet		La	ane Equ	ıivalent	Distanc	e (in i	feet)		
Ro	oad Grade:	0.0%				Autos	s: 36.5	551			
	Left View:	-90.0 degree	es		Mediur	n Trucks	s: 36.3	308			
ŀ	Right View:	90.0 degree	es		Heav	y Trucks	s: 36.3	332			
FHWA Noise Model	Calculation	s									
VehicleType	REMEL	Traffic Flow	Distan	се	Finite		Fresn	el	Barrier Atte	en Ber	m Atter
Autos:	66.51	-2.99		1.94		-1.20		-4.61	0.0		0.00
Medium Trucks:	77.72	-17.88		1.98		-1.20		-4.87	0.0		0.00
Heavy Trucks:	82.99	-13.24		1.98		-1.20		-5.50	0.0	00	0.00
Unmitigated Noise			barrier a	ttenu	ation)						
VehicleType L	eq Peak Hou			eq Eve		Leq	Night		Ldn		NEL
Autos:	64		62.3		60.5		54.5		63.1		63
Medium Trucks:	60		59.0		52.7		51.1		59.6		59
Heavy Trucks:	70		69.1		60.0		61.3		69.6		69
Vehicle Noise:	71	.8	70.2		63.7		62.4		70.8		71
Centerline Distance	to Noise Co	ontour (in feet)	70 //							
				70 dE		65 (dBA	6	60 dBA	55	dBA
			Ldn:		50		108		232		50 51
			VEL		52		111		240		

		-RD-77-108 H	GHWA	N NO	JISE PR								
Scenario: HYP 2040					Project Name: BridgePoint								
Road Name: 4th St.						Job N	lumber:	13349					
Road Segment: w/o Etiv	wanda	Av.											
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)								
Highway Data				S	ite Con	ditions	(Hard =	= 10, So	oft = 15)				
Average Daily Traffic (Ad	t): 25	5,787 vehicles						Autos:	15				
Peak Hour Percentag	ie: 10	0.14%					rucks (2						
Peak Hour Volum		,615 vehicles			Hei	avy Tru	cks (3+	Axles):	15				
Vehicle Spee		55 mph		V	ehicle N	Nix							
Near/Far Lane Distand	e:	73 feet			Vehi	cleType	9	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%	12.9%	9.6%	87.399		
Barrier Heigl	nt:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	3.179		
Barrier Type (0-Wall, 1-Bern		0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	9.449		
Centerline Dist. to Barri	·	60.0 feet		M	nico Sa		levatior	ne (in f	aat)				
Centerline Dist. to Observe	er:	60.0 feet		14	0136 30	Auto		.000	eel)				
Barrier Distance to Observe	er:	0.0 feet			Mediur	n Truck		.297					
Observer Height (Above Pa	d):	5.0 feet				y Truck		.004	Grade Ad	iustment	0.0		
Pad Elevation	on:	0.0 feet											
Road Elevation		0.0 feet		Li	ane Equ		t Distan		feet)				
Road Grad		0.0%				Auto		.883					
Left Vie		-90.0 degrees				n Truck		.698					
Right Vie	W:	90.0 degrees			Heav	y Truck	(S. 47	.716					
FHWA Noise Model Calcula	tions			_									
VehicleType REMEL	. 7	raffic Flow	Distan	ce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos: 71	1.78	0.88		0.18		-1.20		-4.69	0.0	000	0.00		
	2.40	-13.52		0.20		-1.20		-4.88		000	0.00		
Heavy Trucks: 86	5.40	-8.78		0.20		-1.20		-5.34	0.0	000	0.00		
Unmitigated Noise Levels (v	vithou	t Topo and ba	rrier a	ttenu	ation)								
VehicleType Leq Peak	Hour	Leq Day	Le	q Eve	ening	Leq	Night		Ldn		VEL		
Autos:	71.6	69			67.9		61.		70.5		71.		
Medium Trucks:	67.9	66			60.0		58.		66.9		67.		
Heavy Trucks:	76.6	75			66.1		67.	-	75.		75.		
Vehicle Noise:	78.2	76	.6		70.5		68.	8	77.3	3	77.		
Centerline Distance to Nois	e Cont	tour (in feet)											
				70 dł		65	dBA		60 dBA		dBA		
		Ld			183		394		849		1,828		
		CNE			190		409	`	881		1.897		

Friday, March 19, 2021

	FHWA-R	D-77-108	HIGH	WAY	NOISE PR	REDICTIO	ON MOD	EĽ				
Scenario: HYP 204	40			Project Name: BridgePoint								
Road Name: 4th St.						Job Nu	mber: 13	3349				
Road Segment: e/o I-15	NB Ram	ips										
SITE SPECIFIC INPUT DATA Highway Data					NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)							
* /					Site Con	aitions (i		· ·	,			
Average Daily Traffic (Adt		68 vehicle	s					utos:	15			
Peak Hour Percentage						dium Tru		,	15			
Peak Hour Volume		3 vehicles			Hea	avy Truci	(S (3+ A)	(les):	15			
Vehicle Speed	-	55 mph			Vehicle N	<i>lix</i>						
Near/Far Lane Distance	e: 7	3 feet			Vehi	cleType	E)ay	Evening	Night	Daily	
Site Data						A	utos: 7	7.5%	12.9%	9.6%	87.22	
Barrier Heigh	t: 0	0.0 feet			Me	edium Tru	icks: 8	4.8%	4.9%	10.3%	3.24	
Barrier Type (0-Wall, 1-Berm).0			H	leavy Tru	icks: 8	6.5%	2.7%	10.8%	9.54	
Centerline Dist. to Barrie		0.0 feet		F	Noise So	urce Ele	vations	(in fe	et)			
Centerline Dist. to Observe	r: 60).0 feet		F		Autos						
Barrier Distance to Observe	<i>r:</i> 0).0 feet			Mediur	n Trucks						
Observer Height (Above Pad): E	5.0 feet				v Trucks			Grade Ad	ustment	: 0.0	
Pad Elevation).0 feet		-		· · · ·						
Road Elevation		0.0 feet		-	Lane Equ				eet)			
Road Grade	. 0.0					Autos						
Left Viev).0 degree				n Trucks						
Right Viev	V: 90	0.0 degree	S		Heav	y Trucks	47.7	16				
FHWA Noise Model Calculati												
VehicleType REMEL		fic Flow	Dist	tance	Finite		Fresne		Barrier Atte		m Atte	
Autos: 71.		0.87		0.1	-	-1.20		4.69		000	0.0	
Medium Trucks: 82		-13.43		0.2		-1.20		4.88		000	0.0	
Heavy Trucks: 86	.40	-8.74		0.2	20	-1.20	-	5.34	0.0	000	0.0	
Unmitigated Noise Levels (w			oarrie									
VehicleType Leq Peak I		Leq Day		Leq E	vening	Leq N			Ldn		NEL	
Autos:	71.6		9.7		67.9		61.8		70.5		71	
Medium Trucks:	68.0		6.4		60.0		58.5		67.0		67	
	76.7		5.2		66.1		67.4		75.7		75	
Heavy Trucks:		7	6.7		70.5		68.9		77.3	5	77	
Vehicle Noise:	78.3											
Vehicle Noise:		ır (in feet)										
				70	dBA	65 d		6	0 dBA		dBA	
Vehicle Noise:		1	.dn:	70	dBA 184 191	65 d	BA 396 411	6	0 dBA 853 885		dBA 1,83 1.90	

	FH	WA-RD-77-108	HIGHWA	AY NO	ISE PR	EDICT	ON MODE	L				
Road Nan	rio: HYP 2040 ne: Street A ent: s/o Dwy. 8						Name: Bri umber: 13		Point			
SITE	SPECIFIC IN	NPUT DATA			NOISE MODEL INPUTS							
Highway Data				Sit	te Conc	litions	(Hard = 10	, So	ft = 15)			
Average Daily	Traffic (Adt):	3,012 vehicl	es				Au	tos:	15			
Peak Hour	Percentage:	10.14%			Mea	lium Tru	ıcks (2 Axl	es):	15			
Peak H	our Volume:	305 vehicle	s		Hea	wy Truc	ks (3+ Axl	es):	15			
Ve	ehicle Speed:	40 mph		1/0	hicle M	liv						
Near/Far La	ne Distance:	11 feet		ve		leType	Da	17	Evening	Night	Daily	
Site Data				_	venio			.5%	•	9.6%		
				_	140	ر dium Ti		.3%		10.3%		
	rrier Height:	0.0 feet				aum 11 eavy Ti		.8% .5%		10.3%		
Barrier Type (0-V		0.0			п	eavy II	UCKS. OU	.5%	2.170	10.6%	1.55%	
	ist. to Barrier:	30.0 feet		No	ise So	urce El	evations (in fe	et)			
Centerline Dist.		30.0 feet				Autos	s: 0.00)				
Barrier Distance		0.0 feet			Medium	Truck:	2.29	7				
Observer Height		5.0 feet			Heavy	/ Truck:	s: 8.004	1	Grade Adj	ustment	: 0.0	
	ad Elevation:	0.0 feet		10	-	ivalant	Distance	(in 1	[a a f]			
	ad Elevation:	0.0 feet		Ld	ne Equ	Auto:	Distance		eelj			
	Road Grade:	0.0%			Mediun							
	Left View:	-90.0 degre					20.01	-				
	Right View:	90.0 degre	es		Heavy	/ Truck:	3: 29.64	1				
	el Calculation	s										
FHWA Noise Mod	or ouroundition											
FHWA Noise Mod VehicleType	REMEL	Traffic Flow	Distan	ce	Finite F		Fresnel		Barrier Atte	en Bei	m Atten	
VehicleType Autos:	REMEL 66.51	Traffic Flow		3.24	Finite I	-1.20		49	Barrier Atte 0.0			
VehicleType	REMEL 66.51	Traffic Flow -6.57			Finite I		-4			00	0.000	
VehicleType Autos:	REMEL 66.51 77.72	Traffic Flow -6.57 -28.25		3.24	Finite I	-1.20	-4. -4.	49	0.0	100	0.000	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois	REMEL 66.51 77.72 82.99 e Levels (with	Traffic Flow -6.57 -28.25 -24.63 out Topo and	barrier a	3.24 3.31 3.30 ttenua	ation)	-1.20 -1.20 -1.20	-4. -4. -5.	49 86	0.0 0.0 0.0	100 100 100	0.000	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType	REMEL 66.51 77.72 82.99 e Levels (with Leg Peak Hou	Traffic Flow -6.57 -28.25 -24.63 rout Topo and ur Leq Day	barrier a	3.24 3.31 3.30	ation) ning	-1.20 -1.20 -1.20	-4. -4. -5. Night	49 86	0.0 0.0 0.0	00 00 00 <i>C</i>	0.000 0.000 0.000	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos:	REMEL 66.51 77.72 82.99 e Levels (with Leg Peak Hou 62	Traffic Flow -6.57 -28.25 -24.63 out Topo and ur Leq Day 2.0	barrier a / Le 60.0	3.24 3.31 3.30 ttenua	ning 58.3	-1.20 -1.20 -1.20	-4. -4. -5. Night 52.2	49 86	0.0 0.0 0.0 <i>Ldn</i> 60.8	00 00 00 C	0.000 0.000 0.000 NEL 61.4	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks:	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hou 62 51	Traffic Flow -6.57 -28.25 -24.63 out Topo and ur Leq Day 2.0 1.6	<i>barrier a</i> / <i>Le</i> 60.0 50.0	3.24 3.31 3.30 ttenua	ning 58.3 43.6	-1.20 -1.20 -1.20	-4. -4. -5. Night 52.2 42.1	49 86	0.0 0.0 0.0 <i>Ldn</i> 60.8 50.6	00 00 00 C	0.000 0.000 0.000 NEL 61.4 50.8	
Vehicle Type Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois Vehicle Type Autos: Medium Trucks: Heavy Trucks:	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hot 62 51 60	Traffic Flow -6.57 -28.25 -24.63 cout Topo and ur Leq Day 2.0 1.6 0.5	<i>barrier a</i> / <i>Le</i> 60.0 50.0 59.0	3.24 3.31 3.30 ttenua	ation) ning 58.3 43.6 50.0	-1.20 -1.20 -1.20	-4. -4. -5. Night 52.2 42.1 51.2	49 86	0.0 0.0 0.0 <i>Ldn</i> 60.8 50.6 59.6	00 00 00 C	0.000 0.000 0.000 NEL 61.4 50.8 59.7	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks:	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hot 62 51 60	Traffic Flow -6.57 -28.25 -24.63 out Topo and ur Leq Day 2.0 1.6	<i>barrier a</i> / <i>Le</i> 60.0 50.0	3.24 3.31 3.30 ttenua	ning 58.3 43.6	-1.20 -1.20 -1.20	-4. -4. -5. Night 52.2 42.1	49 86	0.0 0.0 0.0 <i>Ldn</i> 60.8 50.6	00 00 00 C	0.000 0.000 0.000 NEL 61.4 50.8 59.7	
Vehicle Type Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois Vehicle Type Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hot 62 51 60 64	Traffic Flow -6.57 -28.25 -24.63 nout Topo and ur Leq Day 2.0 1.6 0.5 4.5 - -	<i>barrier a</i> 60.0 50.0 59.0 62.8	3.24 3.31 3.30 ttenua	ation) ning 58.3 43.6 50.0 59.0	-1.20 -1.20 -1.20 Leq	-4. -4. -5. Night 52.2 42.1 51.2 55.0	49 86 77	0.0 0.0 <i>Ldn</i> 60.8 59.6 63.5	00 100 100 100 23 3 5 5	0.000 0.000 0.000 NEL 61.4 50.8 59.7 63.9	
Vehicle Type Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois Vehicle Type Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hot 62 51 60 64	Traffic Flow -6.57 -28.25 -24.63 nout Topo and ur Leq Day 2.0 1.6 0.5 4.5 - -	<i>barrier a</i> / <i>Le</i> 60.0 50.0 59.0 62.8	3.24 3.31 3.30 ttenua	ation) ning 58.3 43.6 50.0 59.0	-1.20 -1.20 -1.20 Leq	-4. -4. -5. Night 52.2 42.1 51.2 55.0	49 86 77	0.0 0.0 0.0 0.0 50.6 59.6 63.5	00 100 100 100 23 3 5 5	0.000 0.000 NEL 61.4 50.8 59.7 63.9	
Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hot 62 51 60 64	Traffic Flow -6.57 -28.25 -24.63 out Topo and ur Leq Day 2.0 1.6 0.5 4.5 5	<i>barrier a</i> 60.0 50.0 59.0 62.8	3.24 3.31 3.30 ttenua	ation) ning 58.3 43.6 50.0 59.0	-1.20 -1.20 -1.20 Leq	-4. -4. -5. Night 52.2 42.1 51.2 55.0	49 86 77	0.0 0.0 <i>Ldn</i> 60.8 59.6 63.5	00 100 100 100 23 3 5 5	0.000 0.000 0.000 NEL 61.4 50.8 59.7 63.9	