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# **Chino Parcel Delivery**

## **NOISE IMPACT ANALYSIS**

### **CITY OF CHINO**

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## **TABLE OF CONTENTS**

<b>TABLE OF CONTENTS .....</b>	<b>III</b>
<b>APPENDICES .....</b>	<b>IV</b>
<b>LIST OF EXHIBITS .....</b>	<b>V</b>
<b>LIST OF TABLES .....</b>	<b>V</b>
<b>LIST OF ABBREVIATED TERMS.....</b>	<b>VI</b>
 <b>EXECUTIVE SUMMARY .....</b>	 <b>1</b>
Off-Site Traffic Noise Analysis.....	1
Operational Noise Analysis .....	1
Construction Noise Analysis .....	2
Construction Vibration Analysis.....	2
<b>1 INTRODUCTION.....</b>	<b>5</b>
1.1 Site Location.....	5
1.2 Project Description.....	5
<b>2 FUNDAMENTALS .....</b>	<b>9</b>
2.1 Range of Noise .....	9
2.2 Noise Descriptors .....	10
2.3 Sound Propagation.....	10
2.4 Noise Control .....	11
2.5 Noise Barrier Attenuation.....	12
2.6 Land Use Compatibility With Noise .....	12
2.7 Community Response to Noise .....	12
2.8 Exposure to High Noise Levels .....	13
2.9 Vibration .....	13
<b>3 REGULATORY SETTING.....</b>	<b>17</b>
3.1 State of California Noise Requirements.....	17
3.2 State of California Building Standards .....	17
3.3 City of Chino General Plan Noise Element.....	17
3.4 Operational Noise Standards .....	19
3.5 Construction Noise Standards .....	20
3.6 Vibration Standards .....	22
3.7 Chino Airport Overlay Zone .....	23
<b>4 SIGNIFICANCE CRITERIA.....</b>	<b>25</b>
4.1 Noise-Sensitive Receivers .....	25
4.2 Non-Noise-Sensitive Receivers .....	26
4.3 Significance Criteria Summary .....	27
<b>5 EXISTING NOISE LEVEL MEASUREMENTS .....</b>	<b>31</b>
5.1 Measurement Procedure and Criteria .....	31
5.2 Noise Measurement Locations .....	31
5.3 Noise Measurement Results .....	32

<b>6</b>	<b>METHODS AND PROCEDURES .....</b>	<b>37</b>
6.1	FHWA Traffic Noise Prediction Model .....	37
6.2	Off-Site Traffic Noise Prediction Model Inputs .....	37
6.3	Construction Vibration Assessment Methodology .....	46
<b>7</b>	<b>OFF-SITE TRANSPORTATION NOISE IMPACTS .....</b>	<b>47</b>
7.1	Traffic Noise Contours .....	47
7.2	Existing Condition Project Traffic Noise Level Contributions.....	56
7.3	Opening Year 2020 Project Traffic Noise Level Contributions.....	58
7.4	Horizon Year 2040 Project Traffic Noise Level Contributions.....	60
<b>8</b>	<b>RECEIVER LOCATIONS .....</b>	<b>63</b>
<b>9</b>	<b>OPERATIONAL IMPACTS .....</b>	<b>65</b>
9.1	Reference Noise Levels .....	65
9.2	Operational Noise Levels .....	68
9.3	Operational Noise Level Compliance .....	70
9.4	Project Operational Noise Contribution .....	70
9.5	Operational Vibration Impacts.....	72
<b>10</b>	<b>CONSTRUCTION IMPACTS.....</b>	<b>73</b>
10.1	Construction Noise Levels.....	73
10.2	Construction Reference Noise Levels .....	73
10.3	Daytime Construction Noise Analysis .....	76
10.4	Nighttime Concrete Pour Noise Analysis .....	81
10.5	Construction Noise Thresholds of Significance.....	82
10.6	Construction Vibration Impacts .....	82
<b>11</b>	<b>REFERENCES.....</b>	<b>85</b>
<b>12</b>	<b>CERTIFICATION.....</b>	<b>87</b>

## **APPENDICES**

**APPENDIX 3.1: CITY OF CHINO MUNICIPAL CODE**  
**APPENDIX 3.2: CITY OF ONTARIO MUNICIPAL CODE**  
**APPENDIX 5.1: STUDY AREA PHOTOS**  
**APPENDIX 5.2: NOISE LEVEL MEASUREMENT WORKSHEETS**  
**APPENDIX 7.1: OFF-SITE TRAFFIC NOISE LEVEL CONTOURS**  
**APPENDIX 9.1: OPERATIONAL NOISE LEVEL CALCULATIONS**



## LIST OF EXHIBITS

EXHIBIT 1-A: LOCATION MAP .....	6
EXHIBIT 1-B: SITE PLAN .....	7
EXHIBIT 2-A: TYPICAL NOISE LEVELS .....	9
EXHIBIT 2-B: NOISE LEVEL INCREASE PERCEPTION .....	13
EXHIBIT 2-C: TYPICAL LEVELS OF GROUND-BORNE VIBRATION .....	15
EXHIBIT 3-B: CHINO AIRPORT LONG-TERM NOISE CONTOURS .....	24
EXHIBIT 5-A: NOISE MEASUREMENT LOCATIONS .....	35
EXHIBIT 8-A: RECEIVER LOCATIONS .....	64
EXHIBIT 9-A: OPERATIONAL NOISE SOURCE AND RECEIVER LOCATIONS .....	67
EXHIBIT 10-A: CONSTRUCTION ACTIVITY AND RECEIVER LOCATIONS .....	75

## LIST OF TABLES

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS .....	3
TABLE 3-1: OPERATIONAL NOISE STANDARDS .....	20
TABLE 3-2: CONSTRUCTION NOISE STANDARDS .....	22
TABLE 3-3: VIBRATION STANDARDS .....	23
TABLE 4-1: SIGNIFICANCE OF NOISE IMPACTS AT NOISE-SENSITIVE RECEIVERS .....	26
TABLE 4-2: SIGNIFICANCE CRITERIA SUMMARY .....	29
TABLE 5-1: 24-HOUR AMBIENT NOISE LEVEL MEASUREMENTS .....	34
TABLE 6-1: OFF-SITE ROADWAY PARAMETERS .....	39
TABLE 6-2: AVERAGE DAILY TRAFFIC VOLUMES .....	40
TABLE 6-3: TIME OF DAY VEHICLE SPLITS .....	41
TABLE 6-4: WITHOUT PROJECT CONDITIONS VEHICLE MIX .....	41
TABLE 6-5: EXISTING WITH PROJECT CONDITIONS VEHICLE MIX .....	42
TABLE 6-6: OPENING YEAR 2020 WITH PROJECT CONDITIONS VEHICLE MIX .....	43
TABLE 6-7: HORIZON YEAR 2040 WITHOUT LIMONITE EXT. WITH PROJECT VEHICLE MIX .....	44
TABLE 6-8: HORIZON YEAR 2040 WITH LIMONITE EXT. WITH PROJECT VEHICLE MIX .....	45
TABLE 6-9: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT .....	46
TABLE 7-1: EXISTING WITHOUT PROJECT CONDITIONS NOISE CONTOURS .....	48
TABLE 7-2: EXISTING WITH PROJECT CONDITIONS NOISE CONTOURS .....	49
TABLE 7-3: OPENING YEAR 2020 WITHOUT PROJECT CONDITIONS NOISE CONTOURS .....	50
TABLE 7-4: OPENING YEAR 2020 WITH PROJECT CONDITIONS NOISE CONTOURS .....	51
TABLE 7-5: HORIZON YEAR 2040 WITHOUT PROJECT WITHOUT LIMONITE EXT. CONDITIONS .....	52
TABLE 7-6: HORIZON YEAR 2040 WITH PROJECT WITHOUT LIMONITE EXT. CONDITIONS .....	53
TABLE 7-7: HORIZON YEAR 2040 WITHOUT PROJECT WITH LIMONITE EXT. CONDITIONS .....	54
TABLE 7-8: HORIZON YEAR 2040 WITH PROJECT WITH LIMONITE EXT. CONDITIONS .....	55
TABLE 7-9: EXISTING CONDITION OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS .....	57
TABLE 7-10: OPENING YEAR OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS .....	59
TABLE 7-11: HORIZON YEAR 2040 WITHOUT LIMONITE EXT. PROJECT TRAFFIC NOISE IMPACTS .....	61
TABLE 7-12: HORIZON YEAR 2040 WITH LIMONITE EXT. PROJECT TRAFFIC NOISE IMPACTS .....	62
TABLE 9-1: REFERENCE NOISE LEVEL MEASUREMENTS .....	65
TABLE 9-2: UNMITIGATED PROJECT OPERATIONAL NOISE LEVELS .....	69
TABLE 9-3: UNMITIGATED OPERATIONAL NOISE LEVEL COMPLIANCE .....	70

TABLE 9-4: DAYTIME OPERATIONAL NOISE LEVEL CONTRIBUTIONS .....	71
TABLE 9-5: NIGHTTIME OPERATIONAL NOISE LEVEL CONTRIBUTIONS .....	72
TABLE 10-1: CONSTRUCTION REFERENCE NOISE LEVELS.....	74
TABLE 10-2: DEMOLITION ACTIVITY NOISE LEVELS.....	76
TABLE 10-3: GRADING ACTIVITY NOISE LEVELS .....	77
TABLE 10-4: BUILDING CONSTRUCTION ACTIVITY NOISE LEVELS .....	78
TABLE 10-5: ARCHITECTURAL ACTIVITY NOISE LEVELS .....	79
TABLE 10-6: PAVING ACTIVITY NOISE LEVELS.....	80
TABLE 10-7: UNMITIGATED DAYTIME CONSTRUCTION ACTIVITY NOISE LEVEL SUMMARY .....	80
TABLE 10-8: NIGHTTIME CONCRETE POUR EQUIPMENT NOISE LEVELS .....	81
TABLE 10-9: UNMITIGATED CONSTRUCTION ACTIVITY NOISE LEVEL COMPLIANCE.....	82
TABLE 10-10: UNMITIGATED CONSTRUCTION EQUIPMENT VIBRATION LEVELS .....	84

## **LIST OF ABBREVIATED TERMS**

(1)	Reference
ADT	Average Daily Traffic
ANSI	American National Standards Institute
Calveno	California Vehicle Noise
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
dBA	A-weighted decibels
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
INCE	Institute of Noise Control Engineering
$L_{eq}$	Equivalent continuous (average) sound level
$L_{max}$	Maximum level measured over the time interval
$L_{min}$	Minimum level measured over the time interval
mph	Miles per hour
PPV	Peak Particle Velocity
Project	Chino Parcel Delivery
REMEL	Reference Energy Mean Emission Level
RMS	Root-mean-square
VdB	Vibration Decibels

## EXECUTIVE SUMMARY

Urban Crossroads, Inc. has prepared this noise study to determine the noise exposure and the necessary noise mitigation measures, if any, for the proposed Chino Parcel Delivery development ("Project"). The Project site is located on the southwest corner of Flight Avenue and Merrill Avenue in the City of Chino. The total Project development is proposed to consist of a parcel delivery facility within a single building with up to 476,285 square feet of building space, with a total building area of 502,814 square feet including ancillary buildings. This study has been prepared consistent with applicable City of Chino noise standards, and significance criteria based on guidance provided by Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1) In addition, since some of the sensitive receivers are located in the adjacent jurisdictions of the City of Ontario and City of Eastvale, appropriate standards and thresholds from each jurisdiction are used in this analysis where applicable.

### OFF-SITE TRAFFIC NOISE ANALYSIS

Traffic generated by the operation of the proposed Project will influence the traffic noise levels in surrounding off-site areas. To quantify the traffic noise increases on the surrounding off-site areas, the changes in traffic noise levels on 39 roadway segments surrounding the Project site were calculated based on the change in the average daily traffic (ADT) volumes. The traffic noise levels provided in this analysis are based on the traffic forecasts found in *Chino Parcel Delivery Traffic Impact Analysis* prepared by Urban Crossroads, Inc. (2) To assess the off-site noise level impacts associated with the proposed Project, noise contour boundaries were developed for Existing, Opening Year 2020, Horizon Year 2040 Without Limonite Extension, and Horizon Year 2040 With Limonite Extension conditions. The analysis shows that the unmitigated Project-related traffic noise level increases under all traffic scenarios will be *less than significant*.

### OPERATIONAL NOISE ANALYSIS

Using reference noise levels to represent the potential noise sources within Chino Parcel Delivery site, this analysis estimates the Project-related operational (stationary-source) noise levels at the nearby noise-sensitive receiver locations. The Project-related operational noise sources are expected to include switcher trailer loading/unloading, truck idling, backup alarms, parking lot vehicle movements (switchers, trucks, and autos), trailer maintenance activities, and truck fuel pump activity.

### OPERATIONAL NOISE LEVEL COMPLIANCE

The analysis shows that the unmitigated Project-related operational noise levels will satisfy the City of Chino and City of Ontario exterior noise level standards at the closest noise-sensitive receiver locations in the Project study area. Therefore, operational noise impacts are considered *less than significant*.

## OPERATIONAL NOISE LEVEL CONTRIBUTIONS

Further, this analysis demonstrates that the Project-related noise level increases to the existing noise environment at all receiver locations would be less than the Federal Interagency Committee on Noise (FICON) guidance for noise level increases, and thus would be *less than significant* during daytime and nighttime hours. Therefore, the operational noise level impacts associated with the proposed Project activities, such as the switcher trailer loading/unloading, truck idling, backup alarms, parking lot vehicle movements (switchers, trucks, and autos), trailer maintenance activities, and truck fuel pump activity will be *less than significant*.

## CONSTRUCTION NOISE ANALYSIS

Using sample reference noise levels to represent the planned construction activities of Chino Parcel Delivery site, this analysis estimates the Project-related construction noise levels at nearby sensitive receiver locations. The Project-related short-term construction noise levels are expected to approach 50.2 dBA  $L_{eq}$  during daytime Project construction, and up to 41.0 dBA  $L_{eq}$  during nighttime concrete pours. The analysis demonstrates that the unmitigated construction noise levels satisfy the City of Chino construction noise level threshold of 65 dBA  $L_{eq}$  at the nearby sensitive receiver locations. Therefore, Project construction noise levels are considered a *less than significant* impact.

The construction noise analysis presents a conservative approach with the highest noise-level-producing equipment for each stage of Project construction operating at the closest point from primary construction activity to the nearby sensitive receiver locations. This scenario is unlikely to occur during typical construction activities and likely overstates the construction noise levels which will be experienced at each receiver location.

## CONSTRUCTION VIBRATION ANALYSIS

At distances ranging from 1,467 to 2,805 feet from Project construction activity, construction vibration velocity levels are expected to approach 0.0001 in/sec RMS. Based on the City of Chino Municipal Code vibration level standard of 0.05 in/sec RMS, the proposed Project construction activities will satisfy the vibration standard at all receiver locations during Project construction. Therefore, the Project-related vibration impacts will be *less than significant* during the construction activities at the Project site.

Further, the Project-related construction vibration levels do not represent levels capable of causing building damage to nearby residential homes. The FTA identifies construction vibration levels capable of building damage ranging from 0.12 to 0.5 in/sec PPV. (3) The peak Project-construction vibration levels are shown to approach 0.0002 in/sec PPV, and will remain below the FTA vibration levels for building damage at the residential homes near the Project site. Further, the impacts at the site of the closest sensitive receivers are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter.

## CONSTRUCTION NOISE AND VIBRATION ABATEMENT MEASURES

Though construction noise is temporary, intermittent and of short duration, and will not present any long-term impacts, the following abatement measures would reduce the noise and vibration levels produced by the construction equipment to the nearby noise-sensitive residential land uses:

- Prior to approval of grading plans and/or issuance of building permits, plans shall include a note indicating that Project construction activities shall comply with the City of Chino Municipal Code requirements.
- During all Project site construction, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project site.
- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receivers nearest the Project site during all Project construction (i.e., to the center).
- The contractor shall design delivery routes to minimize the exposure of sensitive land uses or residential dwellings to delivery truck-related noise.

## SUMMARY OF CEQA SIGNIFICANCE FINDINGS

The results of this Chino Parcel Delivery Noise Impact Analysis are summarized below based on the significance criteria in Section 4 of this report consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1). Table ES-1 shows the findings of significance for each potential noise and/or vibration impact under CEQA before and after any required mitigation measures described below.

**TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS**

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Off-Site Traffic Noise	7	<i>Less Than Significant</i>	<i>n/a</i>
On-Site Aircraft Noise	3	<i>Less Than Significant</i>	<i>n/a</i>
Operational Noise	9	<i>Less Than Significant</i>	<i>n/a</i>
Operational Vibration		<i>Less Than Significant</i>	<i>n/a</i>
Construction Noise	10	<i>Less Than Significant</i>	<i>n/a</i>
Construction Vibration		<i>Less Than Significant</i>	<i>n/a</i>

"n/a" = No mitigation required since the impact will be less than significant.

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# 1 INTRODUCTION

This noise analysis has been completed to determine the noise impacts associated with the development of the proposed Chino Parcel Delivery (“Project”). This noise study briefly describes the proposed Project, provides information regarding noise fundamentals, describes the local regulatory setting, provides the study methods and procedures for traffic noise analysis, and evaluates the future exterior noise environment. In addition, this study includes an analysis of the potential Project-related long-term operational noise and short-term construction noise and vibration impacts.

## 1.1 SITE LOCATION

The proposed Chino Parcel Delivery Project is located on the southwest corner of Flight Avenue and Merrill Avenue in the City of Chino, as shown on Exhibit 1-A. Interstate 15 (I-15) is located approximately four miles east of the Project site, and Chino Airport is located immediately west of the Project site. Existing land uses in the Project study area include existing agricultural uses north and southeast of the Project site; and the Watson Industrial Park east across Flight Avenue.

## 1.2 PROJECT DESCRIPTION

The total Project development is proposed to consist of a parcel delivery facility within a single building with up to 476,285 square feet of building space, with a total building area of 502,814 square feet including ancillary buildings, as shown on Exhibit 1-B. The Project is anticipated to be developed in a single phase with a projected Project Opening Year of 2020. The on-site Project-related noise sources are expected to include: switcher trailer loading/unloading, truck idling, backup alarms, parking lot vehicle movements (switchers, trucks, and autos), trailer maintenance activities, and truck fuel pump activity. This noise analysis is intended to describe noise level impacts associated with the expected typical operational activities at the Project site. On-site trailer movements will be largely done by switcher trucks, also known as “yard goats” or “dogs,” which are semi-tractors intended to move semi-trailers within a cargo yard.

Per the *Chino Parcel Delivery Traffic Impact Analysis* prepared by Urban Crossroads, Inc. the Project is expected to generate a net total of approximately 3,905 trip-ends per day (actual vehicles). (2) The Project trip generation includes 1,263 truck trip-ends per day from the proposed Project site. This noise study relies on the Project trips (as opposed to the passenger car equivalents) to accurately account for the effect of individual truck trips on the study area roadway network.

EXHIBIT 1-A: LOCATION MAP

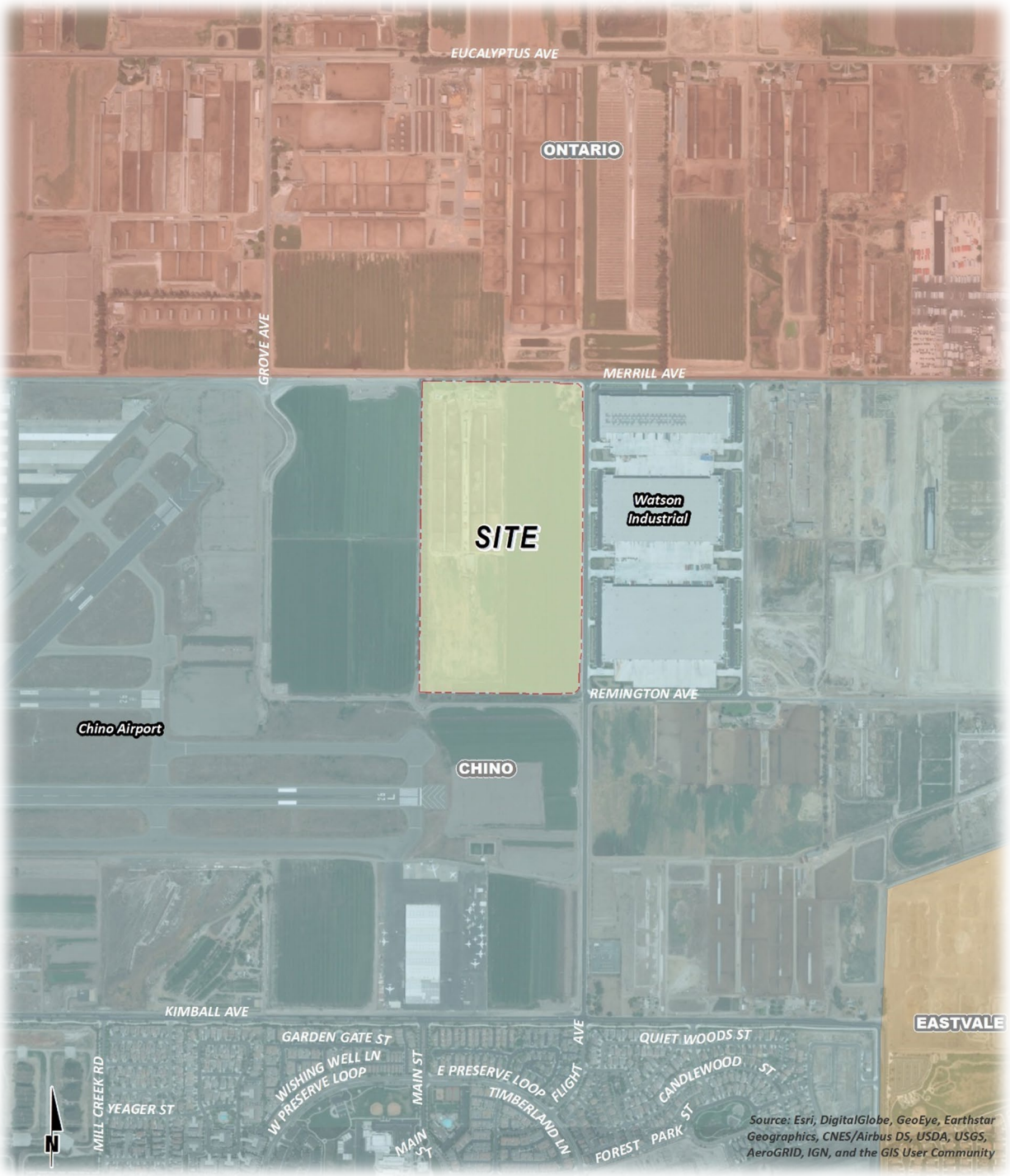
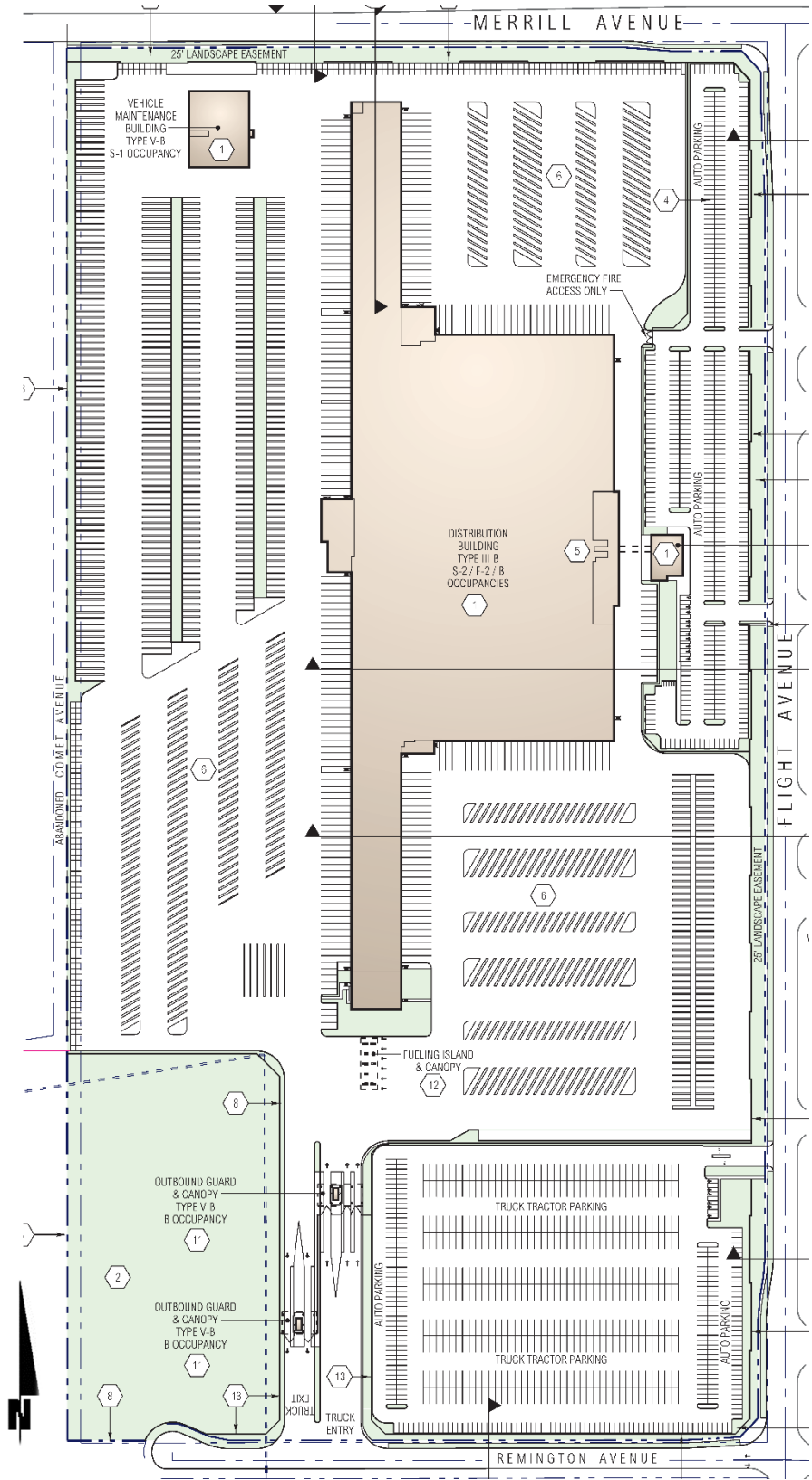




EXHIBIT 1-B: SITE PLAN



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## 2 FUNDAMENTALS

Noise has been simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. Exhibit 2-A presents a summary of the typical noise levels and their subjective loudness and effects that are described in more detail below.

**EXHIBIT 2-A: TYPICAL NOISE LEVELS**

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	SPEECH INTERFERENCE
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80		
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70	LOUD	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	SLEEP DISTURBANCE
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

Source: Environmental Protection Agency Office of Noise Abatement and Control, *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety* (EPA/ONAC 550/9-74-004) March 1974.

### 2.1 RANGE OF NOISE

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. (4) The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA

at approximately 100 feet, which can cause serious discomfort. (5) Another important aspect of noise is the duration of the sound and the way it is described and distributed in time.

## 2.2 NOISE DESCRIPTORS

Environmental noise descriptors are generally based on averages, rather than instantaneous, noise levels. The most commonly used figure is the equivalent level ( $L_{eq}$ ). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level ( $L_{eq}$ ) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period and is commonly used to describe the “average” noise levels within the environment.

To describe the time-varying character of environmental noise, the statistical or percentile noise descriptors  $L_{50}$ ,  $L_{25}$ ,  $L_8$  and  $L_2$ , are commonly used. The percentile noise descriptors are the noise levels equaled or exceeded during 50 percent, 25 percent, 8 percent, and 2 percent of a stated time. Sound levels associated with the  $L_2$  and  $L_8$  typically describe transient or short-term events, while levels associated with the  $L_{50}$  describe the steady state (or median) noise conditions. While the  $L_{50}$  describes the median noise levels occurring 50 percent of the time, the  $L_{eq}$  accounts for the total energy (average) observed for the entire hour. Therefore, the  $L_{eq}$  noise descriptor is generally higher than the  $L_{50}$  noise level.

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of 5 decibels to dBA  $L_{eq}$  sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA  $L_{eq}$  sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise sensitive time periods during the evening and night hours when sound appears louder. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The City of Chino relies on the 24-hour CNEL level to assess land use compatibility with transportation related noise sources.

## 2.3 SOUND PROPAGATION

When sound propagates over a distance, it changes in level and frequency content. The way noise reduces with distance depends on the following factors.

### 2.3.1 GEOMETRIC SPREADING

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to

as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. (4)

### **2.3.2 GROUND ABSORPTION**

The propagation path of noise from a highway to a receptor is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 ft. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receptor such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source. (6)

### **2.3.3 ATMOSPHERIC EFFECTS**

Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects. (4)

### **2.3.4 SHIELDING**

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an “out of sight, out of mind” effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line-of-sight to nearby resident. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide and dense enough to completely obstruct the line-of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The FHWA does not consider the planting of vegetation to be a noise abatement measure. (6)

## **2.4 NOISE CONTROL**

Noise control is the process of obtaining an acceptable noise environment for an observation point or receptor by controlling the noise source, transmission path, receptor, or all three. This concept is known as the source-path-receptor concept. In general, noise control measures can be applied to these three elements.

## 2.5 NOISE BARRIER ATTENUATION

Effective noise barriers can reduce noise levels by 10 to 15 dBA, cutting the loudness of traffic noise in half. A noise barrier is most effective when placed close to the noise source or receptor. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the path of the noise source. (6)

## 2.6 LAND USE COMPATIBILITY WITH NOISE

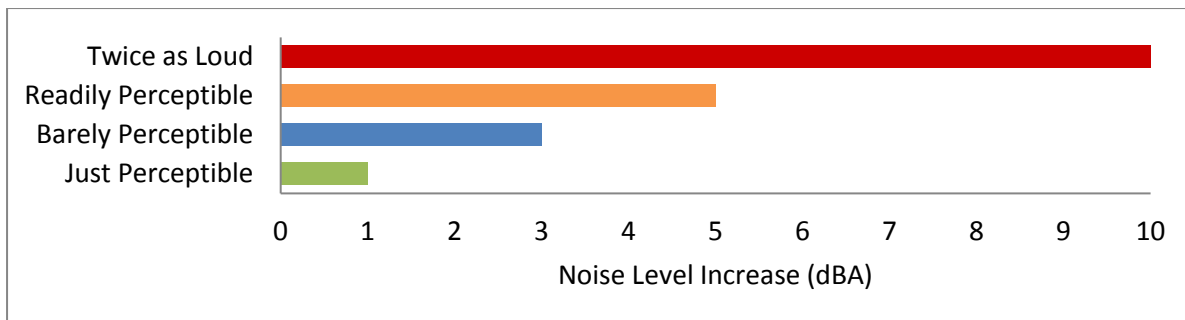
Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The FHWA encourages State and Local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized. (7)

## 2.7 COMMUNITY RESPONSE TO NOISE

Community responses to noise may range from registering a complaint by telephone or letter, to initiating court action, depending upon everyone's susceptibility to noise and personal attitudes about noise. Several factors are related to the level of community annoyance including:

- Fear associated with noise producing activities;
- Socio-economic status and educational level;
- Perception that those affected are being unfairly treated;
- Attitudes regarding the usefulness of the noise-producing activity;
- Belief that the noise source can be controlled.

Approximately ten percent of the population has a very low tolerance for noise and will object to any noise not of their making. Consequently, even in the quietest environment, some complaints will occur. Another twenty-five percent of the population will not complain even in very severe noise environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment. (8) Surveys have shown that about ten percent of the people exposed to traffic noise of 60 dBA will report being highly annoyed with the noise, and each increase of one dBA is associated with approximately two percent more people being highly annoyed. When traffic noise exceeds 60 dBA or aircraft noise exceeds 55 dBA, people may begin to complain. (8) Despite this variability in behavior on an individual level, the population can be expected to exhibit the following responses to changes in noise levels as shown on Exhibit 2-B. An increase or decrease of 1 dBA cannot be perceived except in carefully controlled laboratory experiments, a change of 3 dBA are considered *barely perceptible*, and changes of 5 dBA are considered *readily perceptible*. (6)

**EXHIBIT 2-B: NOISE LEVEL INCREASE PERCEPTION**

## 2.8 EXPOSURE TO HIGH NOISE LEVELS

The Occupational Safety and Health Administration (OSHA) sets legal limits on noise exposure in the workplace. The permissible exposure limit (PEL) for a worker over an eight-hour day is 90 dBA. The OSHA standard uses a 5 dBA exchange rate. This means that when the noise level is increased by 5 dBA, the amount of time a person can be exposed to a certain noise level to receive the same dose is cut in half. The National Institute for Occupational Safety and Health (NIOSH) has recommended that all worker exposures to noise should be controlled below a level equivalent to 85 dBA for eight hours to minimize occupational noise induced hearing loss. NIOSH also recommends a 3 dBA exchange rate so that every increase by 3 dBA doubles the amount of the noise and halves the recommended amount of exposure time. (9)

OSHA has implemented requirements to protect all workers in general industry (e.g. the manufacturing and the service sectors) for employers to implement a Hearing Conservation Program where workers are exposed to a time weighted average noise level of 85 dBA or higher over an eight-hour work shift. Hearing Conservation Programs require employers to measure noise levels, provide free annual hearing exams and free hearing protection, provide training, and conduct evaluations of the adequacy of the hearing protectors in use unless changes to tools, equipment and schedules are made so that they are less noisy and worker exposure to noise is less than the 85 dBA. This noise study does not evaluate the noise exposure of workers within a project or construction site based on CEQA requirements, and instead, evaluates Project-related operational and construction noise levels at the nearby sensitive receiver locations in the Project study area. Further, periodic exposure to high noise levels in short duration, such as Project construction, is typically considered an annoyance and not impactful to human health. It would take several years of exposure to high noise levels to result in hearing impairment. (10)

## 2.9 VIBRATION

Per the Federal Transit Administration (FTA) *Transit Noise Impact and Vibration Assessment* (3), vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions.

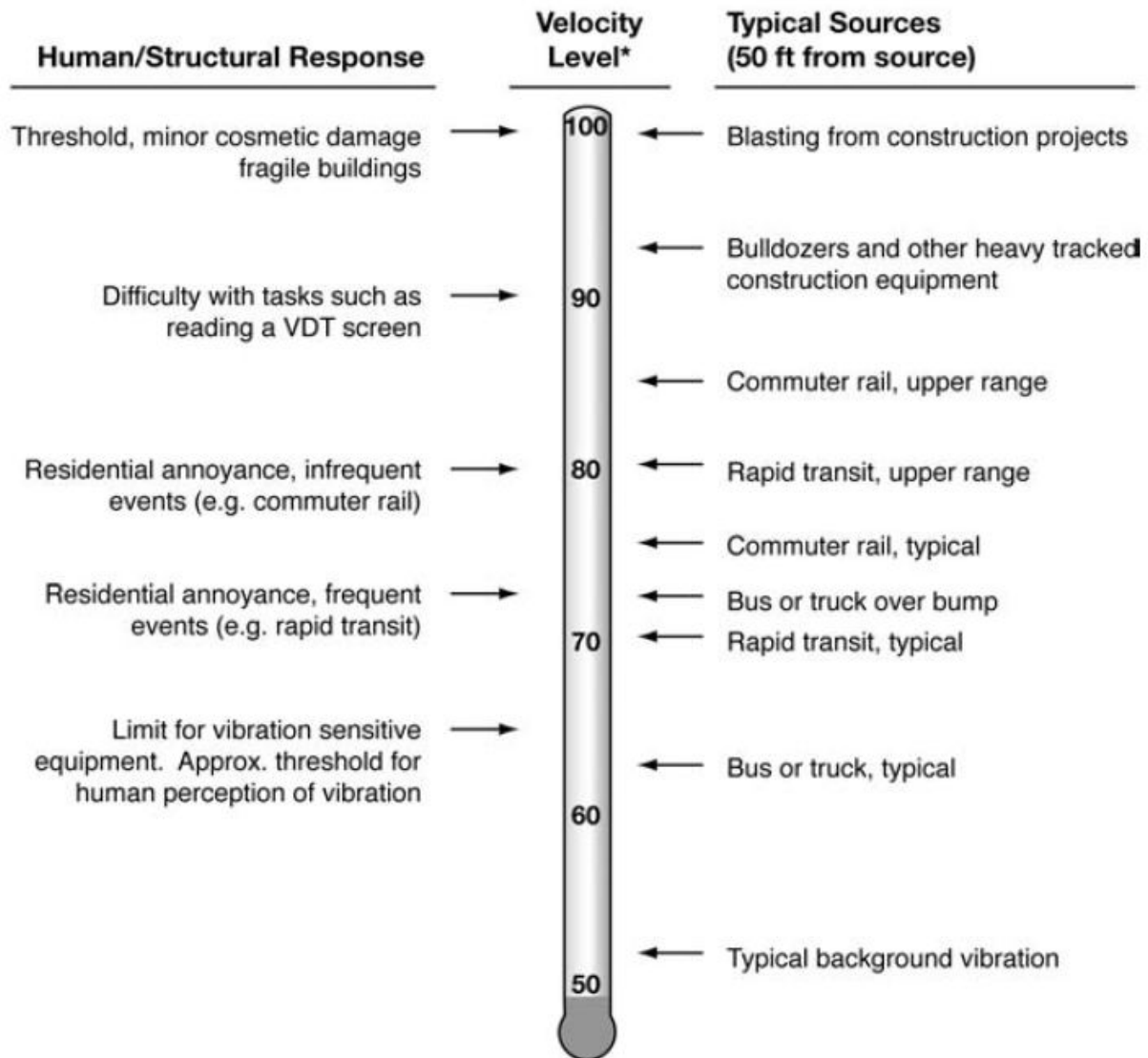
As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings, but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. Decibel notation (VdB) is commonly used to measure RMS. Decibel notation (VdB) serves to reduce the range of numbers used to describe human response to vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment.

The background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Exhibit 2-C illustrates common vibration sources and the human and structural response to ground-borne vibration.



## EXHIBIT 2-C: TYPICAL LEVELS OF GROUND-BORNE VIBRATION



\* RMS Vibration Velocity Level in VdB relative to  $10^{-6}$  inches/second

Source: Federal Transit Administration (FTA) Transit Noise Impact and Vibration Assessment.

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### 3 REGULATORY SETTING

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic activity generally produces an average sound level that remains constant with time. Air and rail traffic, and commercial and industrial activities are also major sources of noise in some areas. Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

#### 3.1 STATE OF CALIFORNIA NOISE REQUIREMENTS

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared per guidelines adopted by the Governor's Office of Planning and Research. (11) The purpose of the Noise Element is to *limit the exposure of the community to excessive noise levels*. In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

#### 3.2 STATE OF CALIFORNIA BUILDING STANDARDS

The 2016 State of California's Green Building Standards Code contains mandatory measures for non-residential building construction in Section 5.507 on Environmental Comfort. (12) These noise standards are applied to new construction in California for controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when non-residential structures are developed in areas where the exterior noise levels exceed 65 dBA CNEL, such as within a noise contour of an airport, freeway, railroad, and other areas where noise contours are not readily available. If the development falls within an airport or freeway 65 dBA CNEL noise contour, the combined sound transmission class (STC) rating of the wall and roof-ceiling assemblies must be at least 50. For those developments in areas where noise contours are not readily available, and the noise level exceeds 65 dBA  $L_{eq}$  for any hour of operation, a wall and roof-ceiling combined STC rating of 45, and exterior windows with a minimum STC rating of 40 are required (Section 5.507.4.1).

#### 3.3 CITY OF CHINO GENERAL PLAN NOISE ELEMENT

The City of Chino has adopted a Noise Element of the General Plan (13) to minimize problems from intrusive sound and to ensure that development does not expose people to unacceptable noise levels. The Noise Element specifies the maximum exterior and interior noise levels for new developments impacted by transportation noise sources such as arterial roads, freeways, airports, and railroads. In addition, the Noise Element identifies noise policies designed to

protect, create, and maintain an environment free from noise that may jeopardize the health or welfare of sensitive receivers, or degrade quality of life. To protect Chino residents from unacceptable noise levels, the Noise Element contains the following three objectives:

- N-1.1. *Ensure appropriate exterior and interior noise levels for existing and new land uses;*
- N-1.2 *Reduce noise impacts from transportation;*
- N-1.3 *Control sources of construction noise.*

The noise policies specified in the City of Chino Noise Element provide the guidelines necessary to satisfy these objectives. To ensure the appropriate exterior and interior noise levels for existing and new land uses (N-1.1), Table N-3 of the City of Chino General Plan Noise Element, identifies a maximum allowable exterior noise level of 65 dBA CNEL and an interior noise level limit of 45 dBA CNEL for new residential developments impacted by transportation noise sources such as arterial roads, freeways, airports, railroads, and warehousing uses. For industrial land uses, such as manufacturing and warehousing, the City of Chino has established an interior noise level standard of 65 dBA CNEL. The Noise Element also provides several policies to reduce noise impacts from transportation (N-1.2) that includes the use of street and right-of-way design, roadway alignment, noise barriers, and pavement surface treatments. To control sources of construction noise (N-1.3), the Noise Element requires a noise monitoring plan and limits all construction activity near noise-sensitive land uses to the daylight hours of 7:00 a.m. to 7:00 p.m. In addition, several construction noise control measures are prescribed to minimize the construction noise impacts.

The City of Chino General Plan Noise Element does not identify criteria to assess the impacts associated with exterior off-site transportation-related noise impacts at non-noise-sensitive uses, such as industrial, and therefore, the Office of Planning and Research (OPR) land use/noise compatibility criteria, found in Figure 2 of the *General Plan Guidelines, Appendix C: Noise Element Guidelines* criteria can be used to assess potential impacts at adjacent land uses. The *normally acceptable* exterior noise level for non-noise-sensitive land use, such as industrial use, is 70 dBA CNEL. Noise levels greater than 70 dBA CNEL are considered *conditionally acceptable* per the *Land Use Compatibility Criteria*. (14)

#### **ADJACENT JURISDICTIONS**

The City of Chino residential exterior noise level standard for transportation noise sources of 65 dBA CNEL is generally consistent with the adjacent jurisdictional guidelines of the City of Ontario and City of Eastvale, as indicated in The Ontario Plan Safety Section on Noise Hazards (Table LU-7) and Table N-3 of the City of Eastvale General Plan Noise Element, respectively, which identify exterior noise levels ranging from 60 to 70 dBA CNEL as acceptable for residential uses, but do not identify specific exterior transportation noise level standards. As such, this noise study relies on the 65 dBA CNEL City of Chino residential exterior noise level standard for transportation noise sources when evaluating Project-related off-site traffic noise level increases at noise-sensitive land uses. (15) (16) In addition, the guidelines of the City of Ontario and City of Eastvale, as indicated in The Ontario Plan Safety Section on Noise Hazards (Table LU-7) and Table N-3 of the City of Eastvale General Plan Noise Element, respectively, also identify 70 dBA CNEL as *normally acceptable* for industrial uses. (15) (16)

### 3.4 OPERATIONAL NOISE STANDARDS

To analyze noise impacts originating from a designated fixed location or private property such as the Chino Parcel Delivery Project, stationary-source (operational) noise such as the expected switcher trailer loading/unloading, truck idling, backup alarms, parking lot vehicle movements (switchers, trucks, and autos), trailer maintenance activities, and truck fuel pump activity are typically evaluated against standards established under a City's Municipal Code. Although the Project site is located within the City of Chino, sensitive receivers are also located in the adjacent City of Ontario. Therefore, to accurately describe the potential operational noise levels, this analysis presents the appropriate operational noise standards for each of the noise-sensitive receivers located within the cities of Chino and Ontario.

#### 3.4.1 CITY OF CHINO OPERATIONAL NOISE STANDARDS

The City of Chino Noise Ordinance included in the Municipal Code (Chapter 9.40) establishes the maximum permissible noise level that may intrude into a neighbor's property. The Noise Ordinance (Section 9.40.040) establishes the exterior noise level criteria for residential properties affected by stationary noise sources. While the Municipal Code identifies noise zones for commercial (Zone II), manufacturing and industrial properties (Zone III), it only establishes exterior noise standards for residential property (Section 9.40.030). For residential properties (Noise Zone 1), the exterior noise level shall not exceed 55 dBA during daytime hours (7:00 a.m. to 10:00 p.m.) and shall not exceed 50 dBA during the nighttime hours (10:00 p.m. to 7:00 a.m.) for more than 30 minutes in any hour. (17) These standards shall apply for a cumulative period of 30 minutes in any hour, as well as plus 5 dBA cannot be exceeded for a cumulative period of more than 15 minutes in any hour, or the standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour, or the standard plus 15 dBA for a cumulative period of more than 1 minute in any hour, or the standard plus 20 dBA for any period of time. The City of Chino Municipal Code operational noise level standards are shown on Table 3-1 and included in Appendix 3.1.

#### 3.4.2 CITY OF ONTARIO OPERATIONAL NOISE STANDARDS

The City of Ontario Municipal Code, Title 5, Chapter 29 noise standards are included in Appendix 3.2 for those sensitive receiver locations within the City of Ontario. Section 5-29.04(a) identifies the acceptable daytime and nighttime ambient exterior noise standards for each land use type. For Manufacturing and Industrial land uses (Noise Zone V), such as the Project, ambient exterior noise levels may not exceed 70 dBA  $L_{eq}$ . For residential land uses (Noise Zone I), exterior noise levels may not exceed 65 dBA  $L_{eq}$  during the daytime hours (7:00 a.m. to 10:00 p.m.), and may not exceed 45 dBA  $L_{eq}$  during the nighttime hours (10:00 p.m. to 7:00 a.m.). (18) These standards shall apply for a cumulative period of 15 minutes in any hour, as well as plus 20 dBA for any period of time. The maximum acceptable Project-related operational noise levels received at off-site land uses in the City of Ontario are identified on Table 3-1 and provided in Appendix 3.2.

**TABLE 3-1: OPERATIONAL NOISE STANDARDS**

City	Land Use	Time Period	Exterior Noise Levels (dBA) <sup>3</sup>					
			L <sub>eq</sub> (E. Avg.)	L <sub>50</sub> (30 mins)	L <sub>25</sub> (15 mins)	L <sub>8</sub> (5 mins)	L <sub>2</sub> (1 min)	L <sub>max</sub> (Anytime)
Chino <sup>1</sup>	Residential	Daytime	-	55	60	65	70	75
		Nighttime	-	50	55	60	65	70
Ontario <sup>2</sup>	Residential	Daytime	65	-	65	-	-	85
		Nighttime	45	-	45	-	-	65
	Commercial	Daytime	65	-	65	-	-	85
		Nighttime	60	-	60	-	-	80
	Industrial	Anytime	70	-	70	-	-	90

<sup>1</sup> Source: Section 9.40.040 of the City of Chino Municipal Code (Appendix 3.1).

<sup>2</sup> Source: Section 5-29.04 of the City of Ontario Municipal Code (Appendix 3.2).

<sup>3</sup> L<sub>eq</sub> represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. The percent noise level is the level exceeded "n" percent of the time during the measurement period. L<sub>25</sub> is the noise level exceeded 25% of the time.

"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.; "E. Avg." = logarithmic (energy) average

### 3.5 CONSTRUCTION NOISE STANDARDS

To analyze noise impacts originating from the construction of the Chino Parcel Delivery, noise from construction activities are typically evaluated against standards established under a City's Municipal Code. The Municipal Code noise standards for construction are described below for the City of Chino and City of Ontario to determine the potential noise impacts at receivers within each jurisdiction. The construction-related noise standards for each City are summarized in Table 3-2 below.

#### 3.5.1 CITY OF CHINO CONSTRUCTION NOISE STANDARDS

The City of Chino has set restrictions to control noise impacts associated with construction activities throughout the City. Section 9.40.060(D) of the City's Noise Ordinance indicates that noise sources associated with construction, repair, remodeling, or grading of any real property, are exempt from the provisions of the noise ordinance, provided the construction activities take place between the hours of 7:00 a.m. and 8:00 p.m. Monday through Saturday, with no construction allowed on Sundays and Federal holidays (Section 15.44.030), and provided the noise levels exceeding 65 dBA L<sub>50</sub> when measured on residential property do not endanger the public health, welfare and safety. (18) If construction activities occur outside of the permitted hours, then construction activity is required to be in compliance with the City's Municipal Code.

#### 3.5.2 CITY OF ONTARIO CONSTRUCTION NOISE STANDARDS

The City of Ontario has set restrictions to control noise impacts associated with construction activity that occurs within the City of Ontario boundaries. Section 5-29.09 of the Municipal Code states: *No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the*

*vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m.* (18) While the City establishes limits to the hours during which construction activity may take place, it does not identify specific noise level limits for construction noise levels at potentially affected receiver locations.

### **3.5.3 NUMERICAL CONSTRUCTION NOISE STANDARD USED IN THIS ANALYSIS**

Although construction noise may not pose a health risk or damage human hearing, it has the potential to adversely affect people's quality of life. Noise annoys, awakens, angers, and frustrates noise-sensitive individuals. It disrupts communication and affects performance capabilities. Noise is one of the biological stressors associated with everyday life. Thus, the numerous effects of noise combine to detract from the quality of people's lives and the environment. (19) In addition, acceptance of temporary construction noise varies with the individual. For this reason, and to present a conservative evaluation of construction noise effects in this report, the numerical noise standard of 65 dBA (with higher noise level allowances for short bursts of louder noise) established in the City of Chino Municipal Code, Section 9.40.060(D) *Special Provisions*, is used in this analysis to determine the significance of construction noise on noise-sensitive receivers.

The reference construction noise limit of 65 dBA  $L_{eq}$  provides an acceptable numerical threshold for determining the relative significance of Project construction noise levels at nearby residential receivers. The construction noise standards are shown on Table 3-2. Note that pursuant to the City of Chino Municipal Code, Section 9.40.060(D), the noise limit of 65 dBA is the noise standard for a cumulative period of more than thirty minutes in any hour ( $L_{50}$ ). In addition, the Municipal Code allows for short bursts or periods of increased construction-related noise as follows:

- 70 dBA for a cumulative period of no more than fifteen minutes in any hour ( $L_{25}$ );
- 75 dBA for a cumulative period of no more than five minutes in any hour ( $L_8$ );
- 80 dBA for a cumulative period of more than one minute in any hour ( $L_2$ );
- Noise levels greater than 85 dBA experienced at a sensitive receiver for any period ( $L_{max}$ ).

For the purposes of this analysis, the 65 dBA  $L_{eq}$  threshold is used to represent a single numerical average threshold to assess the potential construction noise level impacts at nearby sensitive receivers. While the  $L_{50}$  describes the median noise levels occurring 50 percent of the time, the  $L_{eq}$  accounts for the total energy (average) observed for the entire hour during construction activities.

**TABLE 3-2: CONSTRUCTION NOISE STANDARDS**

City	Permitted Hours of Construction Activity	Construction Noise Level Standards				
		L <sub>50</sub> (30 mins)	L <sub>25</sub> (15 mins)	L <sub>8</sub> (5 mins)	L <sub>2</sub> (1 min)	L <sub>max</sub> (Anytime)
Chino <sup>1</sup>	7:00 a.m. to 8:00 p.m. Monday through Saturday; not allowed on Sundays or Federal Holidays.	65	70	75	80	85
Ontario <sup>2</sup>	7:00 a.m. to 6:00 p.m. any weekday, or on Saturday or Sunday from 9:00 a.m. to 6:00 p.m.	n/a	n/a	n/a	n/a	n/a

<sup>1</sup> Source: Section 9.40.060 of the City of Chino Municipal Code (Appendix 3.1).

<sup>2</sup> Source: Section 5-29.09 of the City of Ontario Municipal Code (Appendix 3.2).

"n/a" = Municipal Code does not identify maximum acceptable construction source noise levels.

### 3.6 VIBRATION STANDARDS

To analyze vibration impacts originating from the operation and construction of the Chino Parcel Delivery, vibration-generating activities are typically evaluated against standards established under a City's Municipal Code. The City of Chino Municipal Code vibration level standards are used in this analysis to assess potential impacts at nearby sensitive receiver locations. Since the City of Ontario and neighboring City of Eastvale jurisdictions do not identify specific vibration level standards, the City of Chino vibration standards are used to assess potential impacts from Project operational truck trips on off-site study area roadway segments. The vibration standards are summarized on Table 3-3.

#### 3.6.1 OPERATIONAL-SOURCE VIBRATION STANDARDS

City of Chino Noise Ordinance Section 9.40.110 - *Vibration*, states in pertinent part: *it is unlawful for any person to create, maintain or cause any ground vibration which is perceptible without instruments at any point on any affected property adjoining the property on which the vibration source is located. For the purpose of this chapter, the perception threshold shall be presumed to be more than 0.05 inches per second (root mean square—RMS) vertical velocity.* (17)

#### 3.6.2 CONSTRUCTION-SOURCE VIBRATION STANDARDS

The City of Chino Noise Ordinance Section 9.40.060(D) states that vibration created by construction activities is exempt from provisions of the Ordinance, if any construction-source vibration does not endanger the public health, welfare, and safety. Therefore, to determine if the vibration levels due to construction will endanger the public health, welfare, and safety of nearby sensitive receiver locations, the operational vibration level standard of 0.05 inches per second (RMS) is used.



TABLE 3-3: VIBRATION STANDARDS

City	Root-Mean-Square Velocity (in/sec)
Chino <sup>1</sup>	0.05
Ontario, Eastvale <sup>2</sup>	n/a

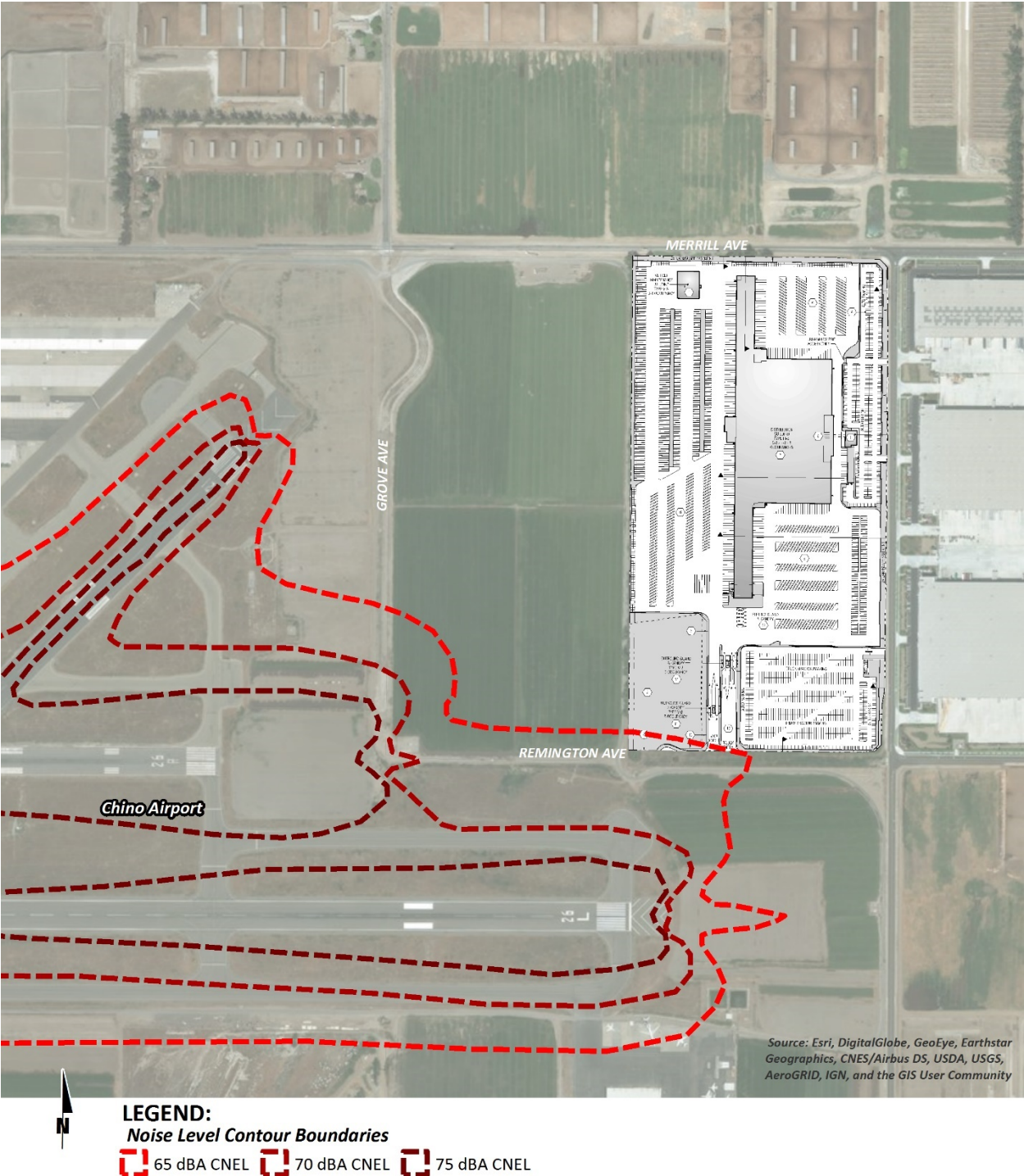
<sup>1</sup> Source: Section 9.40.110 of the City of Chino Municipal Code.

<sup>2</sup> "n/a" = The City of Ontario City of Eastvale do not identify specific vibration level standards.

### 3.7 CHINO AIRPORT OVERLAY ZONE

The City of Chino Municipal Code, Section 20.09.050, includes the *airport overlay district* noise compatibility standards for land uses located within the noise level contours of Chino Airport. Table 20.09-2 establishes the *Community Noise Compatibility Standards* for land uses depending on the exterior noise environment due to Chino Airport aircraft overflight noise levels. As shown on Exhibit 3-B, the planned water detention basin and part of the Project's southern driveway are partially located within the 65 dBA CNEL noise level contour of Chino Airport which, according to Table 20.09-2 of the Municipal Code, is considered *normally acceptable* for manufacturing and warehouse/distribution use such as the Project. Per the Municipal Code land use compatibility standards, the *specified land use is satisfactory* and no noise mitigation is required. (17)

EXHIBIT 3-B: CHINO AIRPORT LONG-TERM NOISE CONTOURS



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

## 4 SIGNIFICANCE CRITERIA

The following significance criteria are based on currently adopted guidance provided by Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1) For the purposes of this report, impacts would be potentially significant if the Project results in or causes:

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

While the CEQA Guidelines and the City of Chino General Plan Guidelines provide direction on noise compatibility and establish noise standards by land use type that are sufficient to assess the significance of noise impacts under CEQA Guideline A, they do not define the levels at which increases are considered substantial for use under Guidelines B, C, and D. CEQA Guidelines E and F apply to nearby public and private airports, if any, and the Project's land use compatibility. Based on the Chino Airport noise level contours previously shown on Exhibit 3-B, the Project use represents *normally satisfactory* land use. The Project site is also not located in the vicinity of a private airstrip. As such, the Project site would not be exposed to excessive noise levels from airport operations, and therefore, impacts are considered *less than significant*, and no further noise analysis is conducted in relation to Guidelines E and F.

### 4.1 NOISE-SENSITIVE RECEIVERS

Noise level increases resulting from the Project are evaluated based on the Appendix G CEQA Guidelines described above at the closest sensitive receiver locations. Under CEQA, consideration must be given to the magnitude of the increase, the existing ambient noise levels, and the location of noise-sensitive receivers to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes *that there is no single noise increase that renders the noise impact significant*. (20) Unfortunately, there is no completely satisfactory way to measure the subjective effects of noise or of the corresponding human reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an

important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted—the so-called *ambient* environment.

In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will typically be judged. The Federal Interagency Committee on Noise (FICON) (21) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (i.e., CNEL), energy average noise level ( $L_{eq}$ ), and median noise level ( $L_{50}$ ).

For example, if the ambient noise environment is quiet (<60 dBA) and the new noise source greatly increases the noise levels, an impact may occur if the noise criteria may be exceeded. Therefore, for this analysis, FICON identifies a *readily perceptible* 5 dBA or greater project-related noise level increase is considered a significant impact when the noise criteria for a given land use is exceeded. Per FICON, in areas where the without project noise levels range from 60 to 65 dBA, a 3 dBA *barely perceptible* noise level increase appears to be appropriate for most people. When the without project noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if the noise criteria for a given land use is exceeded, since it likely contributes to an existing noise exposure exceedance. Table 4-1 below provides a summary of the potential noise impact significance criteria, based on guidance from FICON.

**TABLE 4-1: SIGNIFICANCE OF NOISE IMPACTS AT NOISE-SENSITIVE RECEIVERS**

Without Project Noise Level	Potential Significant Impact
< 60 dBA	5 dBA or more
60 - 65 dBA	3 dBA or more
> 65 dBA	1.5 dBA or more

Federal Interagency Committee on Noise (FICON), 1992.

## 4.2 NON-NOISE-SENSITIVE RECEIVERS

Since the City of Chino General Plan Noise Element does not identify criteria to assess the impacts associated with exterior off-site transportation-related noise impacts at the non-noise-sensitive land uses, the OPR land use/noise compatibility criteria, found in Figure 2 of the *General Plan Guidelines, Appendix C: Noise Element Guidelines* is used to determine potential impacts at adjacent land uses. The *normally acceptable* exterior noise level for non-noise-sensitive land use, such as industrial use, is 70 dBA CNEL. Noise levels greater than 70 dBA CNEL are considered *conditionally acceptable* per the *Land Use Compatibility Criteria*. (14) The City of Chino does not identify stationary-source exterior noise level standards for non-noise-sensitive land uses.

This is consistent with the adjacent jurisdictional guidelines of the City of Ontario and City of Eastvale, as indicated in The Ontario Plan Safety Section on Noise Hazards (Table LU-7) and Table N-3 of the City of Eastvale General Plan Noise Element, respectively, which also identify 70 dBA CNEL as *normally acceptable* for industrial uses. (15) (16)

To determine if Project-related traffic noise level increases are significant at off-site non-noise-sensitive land uses, a *readily perceptible* 5 dBA and *barely perceptible* 3 dBA criteria are used. When the without Project noise levels at the non-noise-sensitive land uses are below the *normally acceptable* 70 dBA CNEL compatibility criteria, a *readily perceptible* 5 dBA or greater noise level increase is considered a significant impact. When the without Project noise levels are greater than the *normally acceptable* 70 dBA CNEL land use compatibility criteria, a *barely perceptible* 3 dBA or greater noise level increase is considered a significant impact since the noise level criteria is already exceeded. The noise level increases used to determine significant impacts for non-noise-sensitive land uses is generally consistent with the FICON noise level increase thresholds for noise-sensitive land uses but instead rely on the OPR land use/noise compatibility criteria, found in Figure 2 of the *General Plan Guidelines, Appendix C: Noise Element Guidelines* *normally acceptable* 70 dBA CNEL exterior noise level criteria.

### 4.3 SIGNIFICANCE CRITERIA SUMMARY

Noise impacts shall be considered significant if any of the following occur as a direct result of the proposed development. Table 4-2 shows the significance criteria summary matrix.

#### OFF-SITE TRAFFIC NOISE

- When the noise levels at existing and future noise-sensitive land uses (e.g. residential, etc.):
  - are less than 60 dBA CNEL and the Project creates a *readily perceptible* 5 dBA CNEL or greater Project-related noise level increase; or
  - range from 60 to 65 dBA CNEL and the Project creates a *barely perceptible* 3 dBA CNEL or greater Project-related noise level increase; or
  - already exceed 65 dBA CNEL, and the Project creates a community noise level impact of greater than 1.5 dBA CNEL (FICON, 1992).
- When the noise levels at existing and future non-noise-sensitive land uses (e.g. industrial, etc.):
  - are less than the OPR General Plan Guidelines, Figure 2, *normally acceptable* 70 dBA CNEL and the Project creates a *readily perceptible* 5 dBA CNEL or greater Project-related noise level increase; or
  - are greater than the OPR General Plan Guidelines, Figure 2, *normally acceptable* 70 dBA CNEL and the Project creates a *barely perceptible* 3 dBA CNEL or greater Project-related noise level increase.

#### OPERATIONAL NOISE

- If Project-related operational (stationary-source) noise levels:
  - exceed the exterior 55 dBA L<sub>50</sub> daytime or 50 dBA L<sub>50</sub> nighttime noise level standards for sensitive residential land uses in the City of Chino. These standards shall not be exceeded for a cumulative period of 30 minutes (L<sub>50</sub>), or plus 5 dBA cannot be exceeded for a

cumulative period of more than 15 minutes ( $L_{25}$ ) in any hour, or the standard plus 10 dBA for a cumulative period of more than 5 minutes ( $L_5$ ) in any hour, or the standard plus 15 dBA for a cumulative period of more than 1 minute ( $L_1$ ) in any hour, or the standard plus 20 dBA at any time ( $L_{max}$ ) (Section 9.40.040 of the City of Chino Municipal Code); or

- exceed the exterior daytime (65 dBA  $L_{eq}$ , 65 dBA  $L_{25}$ , or 85 dBA  $L_{max}$ ) or nighttime (45 dBA  $L_{eq}$ , 45 dBA  $L_{25}$ , or 65 dBA  $L_{max}$ ) noise level standards at nearby sensitive residential land uses within the City of Ontario (Section 5-29.04 of the City of Ontario Municipal Code).
- If the existing ambient noise levels at the nearby noise-sensitive receivers near the Project site:
  - are less than 60 dBA  $L_{eq}$  and the Project creates a *readily perceptible* 5 dBA  $L_{eq}$  or greater Project-related noise level increase; or
  - range from 60 to 65 dBA  $L_{eq}$  and the Project creates a *barely perceptible* 3 dBA  $L_{eq}$  or greater Project-related noise level increase; or
  - already exceed 65 dBA  $L_{eq}$ , and the Project creates a community noise level impact of greater than 1.5 dBA  $L_{eq}$  (FICON, 1992).
- If long-term Project-generated operational vibration levels exceed the vibration standard of 0.05 inch/sec RMS at noise-sensitive receiver locations (City of Chino Municipal Code, Section 9.40.110).

#### CONSTRUCTION NOISE AND VIBRATION

- If Project-related construction activities:
  - occur at any time other than the permitted hours of 7:00 a.m. to 8:00 p.m. Monday through Friday, with no activity allowed on Sundays or Federal Holidays and exceed the Municipal Code noise level standards (City of Chino Municipal Code, Section 9.40.060(D)); or
  - create noise levels during the permitted hours at sensitive residential receivers in the which exceed the construction noise level limit of 65 dBA  $L_{eq}$  at nearby sensitive receiver locations (City of Chino Municipal Code, Section 9.40.060(D)).
- If short-term Project-generated construction source vibration levels could exceed the vibration standard of 0.05 inch/sec RMS at noise-sensitive receiver locations (City of Chino Municipal Code, Section 9.40.110).

TABLE 4-2: SIGNIFICANCE CRITERIA SUMMARY

Analysis	Receiving Land Use	Jurisdiction	Condition(s)	Significance Criteria	
				Daytime	Nighttime
Off-Site	Noise-Sensitive <sup>1</sup>	All	If ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase	
			If ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase	
			If ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase	
	Non-Noise-Sensitive <sup>2</sup>		if ambient is < 70 dBA CNEL	≥ 5 dBA CNEL Project increase	
			if ambient is > 70 dBA CNEL	≥ 3 dBA CNEL Project increase	
Operational	Noise-Sensitive	Chino <sup>3</sup>	≥ 30 Minutes L <sub>50</sub>	55	50
			≥ 15 Minutes L <sub>25</sub>	60	55
			≥ 5 Minutes L <sub>8</sub>	65	60
			≥ 1 Minute L <sub>2</sub>	70	65
			Anytime L <sub>max</sub>	75	70
		Ontario <sup>4</sup>	Hourly L <sub>eq</sub>	65	45
			≥ 15 Minutes L <sub>25</sub>	65	45
			Anytime L <sub>max</sub>	85	65
		All <sup>1</sup>	if ambient is < 60 dBA L <sub>eq</sub>	≥ 5 dBA L <sub>eq</sub> Project increase	
			if ambient is 60 - 65 dBA L <sub>eq</sub>	≥ 3 dBA L <sub>eq</sub> Project increase	
			if ambient is > 65 dBA L <sub>eq</sub>	≥ 1.5 dBA L <sub>eq</sub> Project increase	
		All	Vibration Level Threshold <sup>5</sup>	0.05 in/sec RMS	
		Construction	Noise-Sensitive	Chino <sup>6</sup>	Permitted hours of 7:00 a.m. to 8:00 p.m. Monday through Saturday; not allowed on Sundays or Federal Holidays.
All	Noise Level Threshold <sup>7</sup>			65 dBA L <sub>eq</sub>	
	Vibration Level Threshold <sup>5</sup>			0.05 in/sec RMS	

<sup>1</sup> Source: FICON, 1992.<sup>2</sup> Based on the land use compatibility criteria found in the Office of Planning and Research General Plan Guidelines, Figure 2.<sup>3</sup> Source: Section 9.40.040 of the City of Chino Municipal Code (Appendix 3.1).<sup>4</sup> Source: Section 5-29.04 of the City of Ontario Municipal Code (Appendix 3.2).<sup>5</sup> Source: Section 9.40.110 of the City of Chino Municipal Code. The City of Ontario does not identify specific vibration level standards.<sup>6</sup> Source: Section 9.40.060 of the City of Chino Municipal Code (Appendix 3.1).<sup>7</sup> Source: Chino (Municipal Code, Section 9.40.060(D) Special Provisions). Construction noise level limit within the permitted hours.

"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.; "n/a" = No nighttime construction activity is permitted, so no nighttime construction noise level limits are identified; "RMS" = root-mean-square

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## 5 EXISTING NOISE LEVEL MEASUREMENTS

To assess the existing noise level environment, 11 individual 24-hour noise level measurements were taken at sensitive receiver locations in the Project study area. The receiver locations were selected to describe and document the existing noise environment within the Project study area. Exhibit 5-A provides the boundaries of the Project study area and the noise level measurement locations. To fully describe the existing noise conditions, noise level measurements were collected by Urban Crossroads, Inc. on Wednesday, February 21<sup>st</sup>, 2018 at the closest sensitive receiver locations, and are supplemented by additional measurements collected on Wednesday, February 15<sup>th</sup>, 2017 on study-area off-site roadway segments. Appendix 5.1 includes study area photos.

### 5.1 MEASUREMENT PROCEDURE AND CRITERIA

To describe the existing noise environment, the hourly noise levels were measured during typical weekday conditions over a 24-hour period. By collecting individual hourly noise level measurements, it is possible to describe the daytime and nighttime hourly noise levels and calculate the 24-hour CNEL. The long-term noise readings were recorded using Piccolo Type 2 integrating sound level meter and dataloggers. The Piccolo sound level meters were calibrated using a Larson-Davis calibrator, Model CAL 150. All noise meters were programmed in "slow" mode to record noise levels in "A" weighted form. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. (22)

### 5.2 NOISE MEASUREMENT LOCATIONS

The long-term noise level measurements were positioned as close to the nearest sensitive receiver locations as possible to assess the existing ambient hourly noise levels surrounding the Project site. Both Caltrans and the FTA recognize that it is not reasonable to collect noise level measurements that can fully represent any part of a private yard, patio, deck, or balcony normally used for human activity when estimating impacts for new development projects. This is demonstrated in the Caltrans general site location guidelines which indicate that, *sites must be free of noise contamination by sources other than sources of interest. Avoid sites located near sources such as barking dogs, lawnmowers, pool pumps, and air conditioners unless it is the express intent of the analyst to measure these sources.* (4) Further, FTA guidance states, *that it is not necessary nor recommended that existing noise exposure be determined by measuring at every noise-sensitive location in the project area. Rather, the recommended approach is to characterize the noise environment for clusters of sites based on measurements or estimates at representative locations in the community.* (3)

Based on recommendations of Caltrans and the FTA, it is not necessary to collect measurements at each individual building or residence, because each receiver measurement represents a group of buildings that share acoustical equivalence. (3) In other words, the area represented by the receiver shares similar shielding, terrain, and geometric relationship to the reference noise

source. Receivers represent a location of noise sensitive areas and are used to estimate the future noise level impacts. Collecting reference ambient noise level measurements at the nearby sensitive receiver locations allows for a comparison of the before and after Project noise levels and is necessary to assess potential noise impacts due to the Project's contribution to the ambient noise levels.

### 5.3 NOISE MEASUREMENT RESULTS

The noise measurements presented below focus on the average or equivalent sound levels ( $L_{eq}$ ). The equivalent sound level ( $L_{eq}$ ) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. Table 5-1 identifies the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location. Appendix 5.2 provides a summary of the existing hourly ambient noise levels described below:

- Location L1 represents the noise levels northwest of the Project site on Euclid Avenue adjacent to existing residential homes. The noise level measurements collected show an overall 24-hour exterior noise level of 77.7 dBA CNEL. The hourly noise levels measured at location L1 ranged from 69.8 to 73.9 dBA  $L_{eq}$  during the daytime hours and from 65.2 to 74.8 dBA  $L_{eq}$  during the nighttime hours. The energy (logarithmic) average daytime noise level was calculated at 72.7 dBA  $L_{eq}$  with an average nighttime noise level of 70.7 dBA  $L_{eq}$ .
- Location L2 represents the noise levels northwest of the Project site on the northeast corner of Grove Avenue and Merrill Avenue. The noise level measurements collected show an overall 24-hour exterior noise level of 73.9 dBA CNEL. The hourly noise levels measured at location L2 ranged from 62.1 to 71.7 dBA  $L_{eq}$  during the daytime hours and from 61.0 to 70.0 dBA  $L_{eq}$  during the nighttime hours. The energy (logarithmic) average daytime noise level was calculated at 69.2 dBA  $L_{eq}$  with an average nighttime noise level of 66.9 dBA  $L_{eq}$ .
- Location L3 represents the noise levels north of the Project site on Merrill Avenue adjacent to existing agricultural use. The 24-hour CNEL indicates that the overall exterior noise level is 69.6 dBA CNEL. At location L3 the background ambient noise levels ranged from 58.4 to 67.5 dBA  $L_{eq}$  during the daytime hours to levels of 55.0 to 67.8 dBA  $L_{eq}$  during the nighttime hours. The energy (logarithmic) average daytime noise level was calculated at 64.7 dBA  $L_{eq}$  with an average nighttime noise level of 62.7 dBA  $L_{eq}$ .
- Location L4 represents the noise levels east of the Project site on Merrill Avenue near existing residential homes on agricultural land use. The noise level measurements collected show an overall 24-hour exterior noise level of 72.6 dBA CNEL. The hourly noise levels measured at location L4 ranged from 63.7 to 71.7 dBA  $L_{eq}$  during the daytime hours and from 58.9 to 70.1 dBA  $L_{eq}$  during the nighttime hours. The energy (logarithmic) average daytime noise level was calculated at 69.2 dBA  $L_{eq}$  with an average nighttime noise level of 65.2 dBA  $L_{eq}$ .
- Location L5 represents the noise levels east of the Project site on Merrill Avenue adjacent to an existing residential home on agricultural land use. The noise level measurements collected show an overall 24-hour exterior noise level of 74.4 dBA CNEL. The hourly noise levels measured at location L5 ranged from 63.7 to 70.6 dBA  $L_{eq}$  during the daytime hours and from 62.9 to 71.8 dBA  $L_{eq}$  during the nighttime hours. The energy (logarithmic) average daytime noise level was calculated at 68.6 dBA  $L_{eq}$  with an average nighttime noise level of 67.6 dBA  $L_{eq}$ .

- Location L6 represents the noise levels east of the Project site on Archibald Avenue adjacent to future residential homes. The noise level measurements collected show an overall 24-hour exterior noise level of 70.9 dBA CNEL. The hourly noise levels measured at location L6 ranged from 63.9 to 68.8 dBA  $L_{eq}$  during the daytime hours and from 57.5 to 68.9 dBA  $L_{eq}$  during the nighttime hours. The energy (logarithmic) average daytime noise level was calculated at 66.0 dBA  $L_{eq}$  with an average nighttime noise level of 63.8 dBA  $L_{eq}$ .
- Location L7 represents the noise levels south of the Project site on Remington Avenue near Chino Airport. The noise level measurements collected show an overall 24-hour exterior noise level of 62.5 dBA CNEL. The hourly noise levels measured at location L7 ranged from 52.5 to 64.8 dBA  $L_{eq}$  during the daytime hours and from 44.8 to 59.0 dBA  $L_{eq}$  during the nighttime hours. The energy (logarithmic) average daytime noise level was calculated at 60.9 dBA  $L_{eq}$  with an average nighttime noise level of 53.1 dBA  $L_{eq}$ .
- Location L8 represents the noise levels east of the Project site on Remington Avenue near an existing residential home and industrial warehouse. The noise level measurements collected show an overall 24-hour exterior noise level of 61.9 dBA CNEL. The hourly noise levels measured at location L8 ranged from 51.3 to 62.5 dBA  $L_{eq}$  during the daytime hours and from 47.4 to 59.7 dBA  $L_{eq}$  during the nighttime hours. The energy (logarithmic) average daytime noise level was calculated at 58.7 dBA  $L_{eq}$  with an average nighttime noise level of 54.2 dBA  $L_{eq}$ .
- Location L9 represents the noise levels east of the Project site on Limonite Avenue adjacent to existing residential homes west of Harrison Avenue. The noise level measurements collected show an overall 24-hour exterior noise level of 74.4 dBA CNEL. The hourly noise levels measured at location L9 ranged from 66.9 to 70.9 dBA  $L_{eq}$  during the daytime hours and from 61.6 to 71.2 dBA  $L_{eq}$  during the nighttime hours. The energy (logarithmic) average daytime noise level was calculated at 68.9 dBA  $L_{eq}$  with an average nighttime noise level of 67.5 dBA  $L_{eq}$ .
- Location L10 represents the noise levels south of the Project site on Kimball Avenue adjacent to existing residential homes. The noise level measurements collected show an overall 24-hour exterior noise level of 79.2 dBA CNEL. The hourly noise levels measured at location L10 ranged from 69.1 to 75.8 dBA  $L_{eq}$  during the daytime hours and from 65.9 to 77.8 dBA  $L_{eq}$  during the nighttime hours. The energy (logarithmic) average daytime noise level was calculated at 74.3 dBA  $L_{eq}$  with an average nighttime noise level of 72.2 dBA  $L_{eq}$ .
- Location L11 represents the noise levels southwest of the Project site adjacent to future residential homes at the southwest corner of Rincon Meadows Avenue and Kimball Avenue. The 24-hour CNEL indicates that the overall exterior noise level is 66.1 dBA CNEL. At location L11 the background ambient noise levels ranged from 59.9 to 65.1 dBA  $L_{eq}$  during the daytime hours to levels of 47.7 to 63.8 dBA  $L_{eq}$  during the nighttime hours. The energy (logarithmic) average daytime noise level was calculated at 62.5 dBA  $L_{eq}$  with an average nighttime noise level of 58.5 dBA  $L_{eq}$ .

Table 5-1 provides the (energy average) noise levels used to describe the daytime and nighttime ambient conditions. These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. Appendix 5.2 provides summary worksheets of the noise levels for each hour as well as the minimum, maximum,  $L_1$ ,  $L_2$ ,  $L_5$ ,  $L_8$ ,  $L_{25}$ ,  $L_{50}$ ,  $L_{90}$ ,  $L_{95}$ , and  $L_{99}$  percentile noise levels observed during the daytime and nighttime periods.

The background ambient noise levels in the Project study area are dominated by the transportation-related noise associated with the arterial roadway network and Chino Airport. The 24-hour existing noise level measurements shown on Table 5-1 present the existing ambient noise conditions.

**TABLE 5-1: 24-HOUR AMBIENT NOISE LEVEL MEASUREMENTS**

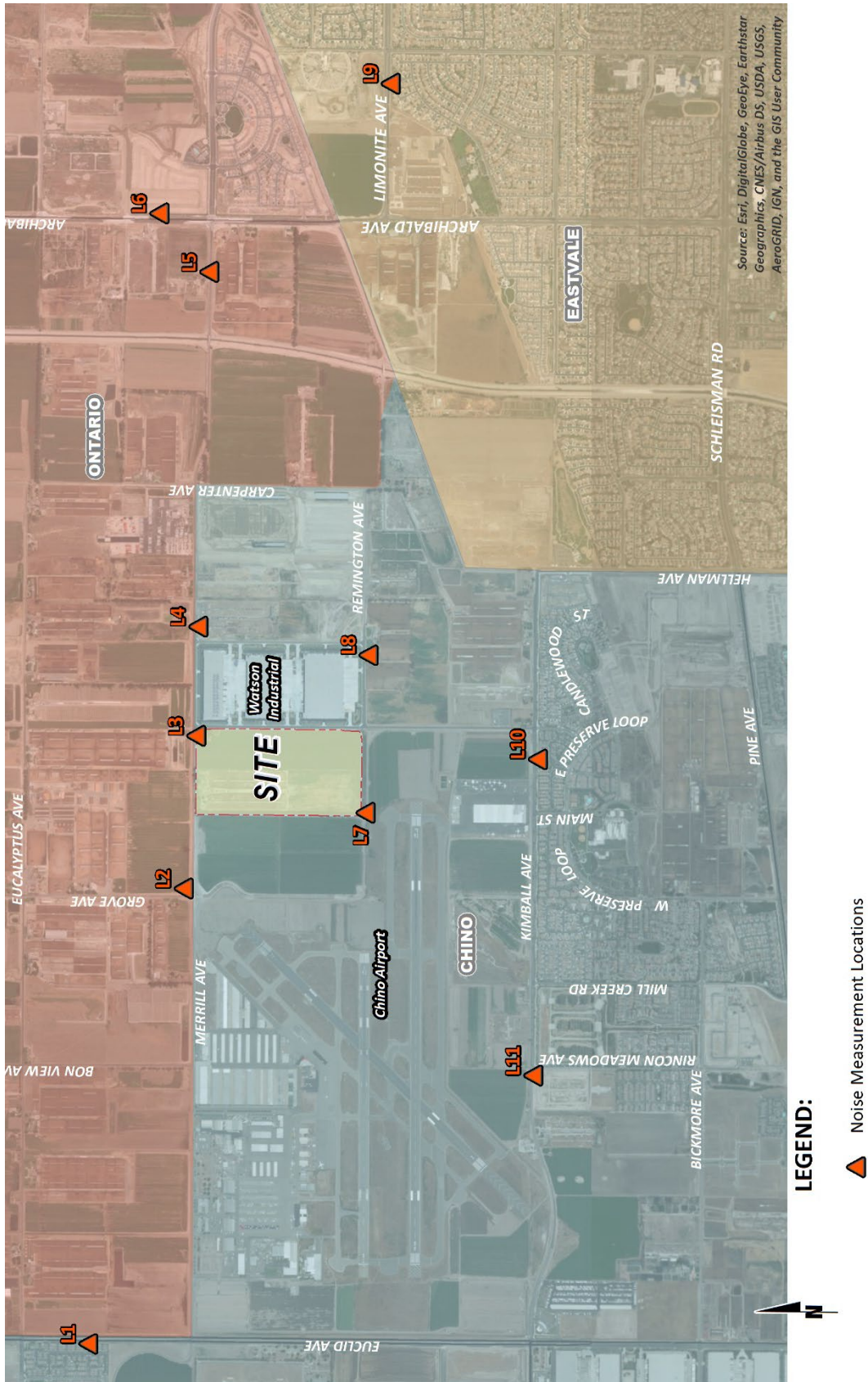
Location <sup>1</sup>	Distance to Project Boundary (Feet)	Description	Energy Average Hourly Noise Level (dBA Leq) <sup>2</sup>		CNEL
			Daytime	Nighttime	
L1	8,400'	Located northwest of the Project site on Euclid Avenue adjacent to existing residential homes.	72.7	70.7	77.7
L2	1,180'	Located northwest of the Project site on the northeast corner of Grove Avenue and Merrill Avenue.	69.2	66.9	73.9
L3	10'	Located north of the Project site on Merrill Avenue adjacent to existing agricultural use.	64.7	62.7	69.6
L4	1,600'	Located east of the Project site on Merrill Avenue near existing residential homes.	69.2	65.2	72.6
L5	7,100'	Located east of the Project site on Merrill Avenue adjacent to an existing residential home on agricultural land use.	68.6	67.6	74.4
L6	8,050'	Located east of the Project site on Archibald Avenue adjacent to future residential homes.	66.0	63.8	70.9
L7	0'	Located south of the Project site on Remington Avenue near Chino Airport.	60.9	53.1	62.5
L8	1,200'	Located east of the Project site on Remington Avenue near an existing residential home and industrial warehouse.	58.7	54.2	61.9
L9	10,100'	Located east of the Project site on Limonite Avenue adjacent to existing residential homes west of Harrison Avenue.	68.9	67.5	74.4
L10	2,700'	Located south of the Project site adjacent to existing residential homes south of Kimball Avenue.	74.3	72.2	79.2
L11	4,850'	Located southwest of the Project site adjacent to future residential homes at the southwest corner of Rincon Meadows Avenue and Kimball Avenue.	62.5	58.5	66.1

<sup>1</sup> See Exhibit 5-A for the noise level measurement locations.

<sup>2</sup> Energy (logarithmic) average hourly levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2.

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

EXHIBIT 5-A: NOISE MEASUREMENT LOCATIONS



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## 6 METHODS AND PROCEDURES

The following section outlines the methods and procedures used to model and analyze the future traffic noise environment.

### 6.1 FHWA TRAFFIC NOISE PREDICTION MODEL

The estimated roadway noise impacts from vehicular traffic were calculated using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model- FHWA-RD-77-108. (23) The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. (24) Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period.

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

Table 6-1 presents the roadway parameters used to assess the Project's off-site transportation noise impacts. Table 6-1 identifies the 39 study area roadway segments, the distance from the centerline to adjacent land use based on the functional roadway classifications per the City of Chino, Ontario, and Eastvale General Plan Circulation Elements, and the posted vehicle speeds. The ADT volumes used in this study are presented on Table 6-2 are based on the *Chino Parcel Delivery Traffic Impact Analysis* prepared by Urban Crossroads, Inc., for the following traffic scenarios: Existing, Opening Year 2020, Horizon Year 2040 Without Limonite Extension, and Horizon Year 2040 With Limonite Extension conditions. (2) For this analysis, soft site conditions are used to analyze the traffic noise impacts within the Project study area. Soft site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. Caltrans' research has shown that the use of soft site conditions is appropriate for the application of the FHWA traffic noise prediction model as used in this off-site traffic noise analysis. (25)

Per the *Chino Parcel Delivery Traffic Impact Analysis* prepared by Urban Crossroads, Inc. the Project is expected to generate a net total of approximately 3,905 trip-ends per day (actual vehicles). (2) The Project trip generation includes 1,263 truck trip-ends per day from the proposed Project.

This noise study relies on the net Project trips (as opposed to the passenger car equivalents) to accurately account for the effect of individual truck trips on the study area roadway network. To quantify the off-site noise levels, the Project-related truck trips were added to the heavy truck category in the FHWA noise prediction model. The addition of the Project-related truck trips increases the percentage of heavy trucks in the vehicle mix. This approach recognizes that the FHWA noise prediction model is significantly influenced by the number of heavy trucks in the vehicle mix. The 1,263 daily Project truck trip-ends were assigned to the individual off-site study area roadway segments based on the Project truck trip distribution percentages documented in the *Traffic Impact Analysis*. Using the Project truck trips in combination with the Project trip distribution, Urban Crossroads, Inc. calculated the number of additional Project truck trips and vehicle mix percentages for each of the study area roadway segments. Table 6-4 shows the traffic flow by vehicle type (vehicle mix) used for all without Project traffic scenarios, and Tables 6-5 to 6-8 show the vehicle mixes used for the with Project traffic scenarios.



TABLE 6-1: OFF-SITE ROADWAY PARAMETERS

ID	Roadway	Segment	Adjacent Planned (Existing) Land Use <sup>1</sup>	Distance from Centerline to Nearest Adjacent Land Use (Feet) <sup>2</sup>	Posted Vehicle Speed (mph)
1	Euclid Av.	s/o SR-60	Commercial	80'	55
2	Euclid Av.	s/o Walnut Av.	Residential	80'	55
3	Euclid Av.	s/o Riverside Dr.	Residential	103'	55
4	Euclid Av.	s/o Chino Av.	Residential	103'	55
5	Euclid Av.	s/o Schaefer Av.	Commercial	103'	55
6	Euclid Av.	s/o Edison Av.	Business Park	103'	55
7	Euclid Av.	s/o Eucalyptus Av.	Residential	103'	55
8	Euclid Av.	s/o Merrill Av.	Public	103'	55
9	Euclid Av.	s/o Kimball Av.	Office Commercial	103'	55
10	Euclid Av.	s/o Bickmore Av.	Regional Commercial	103'	55
11	Euclid Av.	s/o Pine Av.	Urban Reserve	103'	55
12	Flight Av.	n/o Merrill Av.	Business Park (Ag.)	44'	50
13	Hellman Av.	s/o Kimball Av.	Residential	49'	45
14	Hellman Av.	s/o Pine Av.	Residential	49'	45
15	Archibald Av.	n/o Riverside Dr.	Residential	74'	50
16	Archibald Av.	s/o Riverside Dr.	Residential	74'	55
17	Archibald Av.	s/o Chino Av.	Residential	74'	55
18	Archibald Av.	s/o Schaefer Av.	Residential	74'	55
19	Archibald Av.	s/o Ontario Ranch Rd.	Residential	74'	55
20	Archibald Av.	s/o Eucalyptus Av.	Residential	74'	55
21	Archibald Av.	s/o Merrill Av.	Residential	74'	55
22	Archibald Av.	s/o Limonite Av.	Commercial	76'	55
23	Merrill Av.	e/o Euclid Av.	Commercial	44'	50
24	Merrill Av.	e/o Bon View Av.	Public	44'	50
25	Merrill Av.	e/o Flight Av.	Business Park	44'	50
26	Merrill Av.	e/o Hellman Av.	Industrial	44'	50
27	Kimball Av.	w/o Euclid Av.	Urban Reserve	44'	50
28	Kimball Av.	e/o Euclid Av.	Public	49'	50
29	Kimball Av.	e/o Rincon Meadows Av.	Residential	49'	50
30	Kimball Av.	e/o Mill Creek Av.	Residential	49'	50
31	Kimball Av.	e/o Main St.	Residential	49'	50
32	Kimball Av.	e/o Flight Av.	Residential	49'	50
33	Kimball Av.	e/o Meadow Valley Av.	Residential	49'	50
34	Limonite Av.	e/o Hellman Av.	Industrial	76'	50
35	Limonite Av.	e/o Archibald Av.	Commercial	76'	50
36	Limonite Av.	e/o Harrison Av.	Residential	76'	50
37	Limonite Av.	e/o Sumner Av.	Residential	76'	50
38	Limonite Av.	e/o Scholar Wy.	Residential	76'	50
39	Limonite Av.	e/o Hamner Av.	Commercial	76'	45

<sup>1</sup> Sources: The Ontario Plan Exhibit LU-01, City of Chino General Plan Land Use Element Figure LU-2, and the City of Eastvale Land Use Map.

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

"Ag." = Agricultural use

TABLE 6-2: AVERAGE DAILY TRAFFIC VOLUMES

ID	Roadway Segment	Average Daily Traffic Volumes <sup>1</sup>							
		Existing		Opening Year Cumulative 2020		Horizon Year 2040 Without Limonite Ext.		Horizon Year 2040 With Limonite Ext.	
		Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project
1	Euclid Av. s/o SR-60	29,078	29,530	43,999	44,451	52,933	53,385	62,621	63,073
2	Euclid Av. s/o Walnut Av.	24,535	25,040	39,654	40,159	51,163	51,668	51,015	51,520
3	Euclid Av. s/o Riverside Dr.	23,677	24,261	40,585	41,169	57,769	58,353	57,621	58,205
4	Euclid Av. s/o Chino Av.	26,721	27,358	44,918	45,555	61,345	61,982	61,195	61,832
5	Euclid Av. s/o Schaefer Av.	24,077	24,767	43,100	43,790	61,768	62,458	61,620	62,310
6	Euclid Av. s/o Edison Av.	23,493	24,433	43,567	44,507	49,141	50,081	48,993	49,933
7	Euclid Av. s/o Eucalyptus Av.	25,450	26,522	47,089	48,161	51,606	52,678	51,606	52,678
8	Euclid Av. s/o Merrill Av.	24,821	25,206	40,892	41,277	55,163	55,548	55,163	55,548
9	Euclid Av. s/o Kimball Av.	15,311	15,729	26,834	27,252	38,203	38,621	38,203	38,621
10	Euclid Av. s/o Bickmore Av.	14,579	14,997	27,142	27,560	37,567	37,985	37,567	37,985
11	Euclid Av. s/o Pine Av.	34,983	35,401	48,894	49,312	58,751	59,169	58,751	59,169
12	Flight Av. n/o Merrill Av.	n/a	n/a	n/a	n/a	1,726	1,779	1,726	1,779
13	Hellman Av. s/o Kimball Av.	12,439	12,915	11,196	11,672	17,423	17,899	23,263	23,554
14	Hellman Av. s/o Pine Av.	10,242	10,533	12,437	12,728	15,480	15,771	15,480	15,771
15	Archibald Av. n/o Riverside Dr.	23,322	23,914	39,195	39,787	34,689	35,281	34,689	35,281
16	Archibald Av. s/o Riverside Dr.	22,555	23,226	37,307	37,978	41,695	42,366	41,695	42,366
17	Archibald Av. s/o Chino Av.	17,211	17,882	32,796	33,467	40,465	41,136	40,465	41,136
18	Archibald Av. s/o Schaefer Av.	17,669	18,340	33,604	34,275	37,907	38,578	37,907	38,578
19	Archibald Av. s/o Ontario Ranch Rd.	21,720	22,391	42,346	43,017	45,993	46,664	45,993	46,664
20	Archibald Av. s/o Eucalyptus Av.	21,708	22,416	42,625	43,333	47,042	47,750	47,042	47,750
21	Archibald Av. s/o Merrill Av.	23,013	23,803	38,767	39,557	41,018	41,808	47,826	48,457
22	Archibald Av. s/o Limonite Av.	19,580	19,630	33,607	33,657	54,648	54,698	45,650	45,885
23	Merrill Av. e/o Euclid Av.	7,180	8,636	22,019	23,475	29,091	30,547	29,091	30,547
24	Merrill Av. e/o Bon View Av.	6,759	8,215	21,573	23,029	21,352	22,808	21,352	22,808
25	Merrill Av. e/o Flight Av.	7,393	8,944	23,864	25,415	37,100	38,651	25,622	27,014
26	Merrill Av. e/o Hellman Av.	7,598	9,096	22,682	24,180	37,434	38,932	24,044	25,383
27	Kimball Av. w/o Euclid Av.	17,383	17,589	28,338	28,544	22,414	22,620	22,414	22,620
28	Kimball Av. e/o Euclid Av.	17,509	17,747	24,968	25,206	27,108	27,346	27,108	27,346
29	Kimball Av. e/o Rincon Meadows Av.	16,524	16,788	21,674	21,938	26,854	27,118	28,110	28,374
30	Kimball Av. e/o Mill Creek Av.	14,728	15,019	21,850	22,141	28,895	29,186	33,993	34,284
31	Kimball Av. e/o Main St.	13,263	13,580	18,571	18,888	41,127	41,444	46,287	46,604
32	Kimball Av. e/o Flight Av.	12,691	13,167	23,864	24,340	26,102	26,578	24,649	25,283
33	Kimball Av. e/o Meadow Valley Av.	12,439	12,915	12,352	12,828	16,931	17,407	24,249	24,883
34	Limonite Av. e/o Hellman Av.	n/a	n/a	n/a	n/a	11,505	11,505	29,088	29,431
35	Limonite Av. e/o Archibald Av.	16,364	17,103	30,987	31,726	47,078	47,817	47,350	48,089
36	Limonite Av. e/o Harrison Av.	18,321	19,060	37,001	37,740	50,831	51,570	50,831	51,570
37	Limonite Av. e/o Sumner Av.	19,706	20,445	39,318	40,057	50,145	50,884	50,145	50,884
38	Limonite Av. e/o Scholar Wy.	22,773	23,512	41,812	42,551	50,321	51,060	50,321	51,060
39	Limonite Av. e/o Hamner Av.	27,647	28,280	46,434	47,067	54,492	55,125	54,492	55,125

<sup>1</sup> Source: Chino Parcel Delivery Traffic Impact Analysis, Urban Crossroads, Inc., February 2018.

"n/a" = Roadway segment does not have an ADT volume because it does not exist under the given scenario.

**TABLE 6-3: TIME OF DAY VEHICLE SPLITS**

Vehicle Type	Time of Day Splits <sup>1</sup>			Total of Time of Day Splits
	Daytime	Evening	Nighttime	
Autos	73.47%	8.67%	17.86%	100.00%
Medium Trucks	80.06%	5.72%	14.22%	100.00%
Heavy Trucks	76.19%	4.15%	19.66%	100.00%

<sup>1</sup> Based on existing 24-hour classification counts by vehicle type taken on 5/3/2017 at Merrill Avenue west of Flight Avenue (Chino Parcel Delivery Traffic Impact Analysis, Urban Crossroads, Inc., February 2018). Vehicle mix percentage values rounded to the nearest one-hundredth.

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

**TABLE 6-4: WITHOUT PROJECT CONDITIONS VEHICLE MIX**

Classification	Total % Traffic Flow <sup>1</sup>			Total
	Autos	Medium Trucks	Heavy Trucks	
All Segments	83.44%	8.26%	8.30%	100.00%

<sup>1</sup> Based on existing 24-hour classification counts by vehicle type taken on 5/3/2017 at Merrill Avenue west of Flight Avenue (Chino Parcel Delivery Traffic Impact Analysis, Urban Crossroads, Inc., February 2018). Vehicle mix percentage values rounded to the nearest one-hundredth.

**TABLE 6-5: EXISTING WITH PROJECT CONDITIONS VEHICLE MIX**

ID	Roadway	Segment	With Project <sup>1</sup>			
			Autos	Medium Trucks	Heavy Trucks	Total <sup>2</sup>
1	Euclid Av.	s/o SR-60	82.97%	8.58%	8.45%	100.00%
2	Euclid Av.	s/o Walnut Av.	82.92%	8.62%	8.46%	100.00%
3	Euclid Av.	s/o Riverside Dr.	82.96%	8.61%	8.44%	100.00%
4	Euclid Av.	s/o Chino Av.	83.04%	8.55%	8.41%	100.00%
5	Euclid Av.	s/o Schaefer Av.	83.04%	8.56%	8.40%	100.00%
6	Euclid Av.	s/o Edison Av.	83.04%	8.58%	8.38%	100.00%
7	Euclid Av.	s/o Eucalyptus Av.	83.16%	8.51%	8.33%	100.00%
8	Euclid Av.	s/o Merrill Av.	82.69%	8.75%	8.56%	100.00%
9	Euclid Av.	s/o Kimball Av.	83.07%	8.54%	8.39%	100.00%
10	Euclid Av.	s/o Bickmore Av.	83.05%	8.55%	8.40%	100.00%
11	Euclid Av.	s/o Pine Av.	83.28%	8.38%	8.34%	100.00%
12	Flight Av.	n/o Merrill Av.	99.69%	0.15%	0.15%	100.00%
13	Hellman Av.	s/o Kimball Av.	84.05%	7.96%	7.99%	100.00%
14	Hellman Av.	s/o Pine Av.	83.90%	8.03%	8.07%	100.00%
15	Archibald Av.	n/o Riverside Dr.	82.37%	8.97%	8.66%	100.00%
16	Archibald Av.	s/o Riverside Dr.	82.39%	8.96%	8.65%	100.00%
17	Archibald Av.	s/o Chino Av.	82.08%	9.17%	8.75%	100.00%
18	Archibald Av.	s/o Schaefer Av.	82.12%	9.15%	8.74%	100.00%
19	Archibald Av.	s/o Ontario Ranch Rd.	82.36%	8.99%	8.66%	100.00%
20	Archibald Av.	s/o Eucalyptus Av.	82.22%	9.07%	8.71%	100.00%
21	Archibald Av.	s/o Merrill Av.	82.45%	8.94%	8.62%	100.00%
22	Archibald Av.	s/o Limonite Av.	83.23%	8.40%	8.38%	100.00%
23	Merrill Av.	e/o Euclid Av.	80.38%	10.47%	9.15%	100.00%
24	Merrill Av.	e/o Bon View Av.	80.23%	10.58%	9.19%	100.00%
25	Merrill Av.	e/o Flight Av.	77.84%	12.05%	10.11%	100.00%
26	Merrill Av.	e/o Hellman Av.	77.83%	12.03%	10.13%	100.00%
27	Kimball Av.	w/o Euclid Av.	82.91%	8.61%	8.48%	100.00%
28	Kimball Av.	e/o Euclid Av.	83.66%	8.15%	8.19%	100.00%
29	Kimball Av.	e/o Rincon Meadows Av.	83.70%	8.13%	8.17%	100.00%
30	Kimball Av.	e/o Mill Creek Av.	83.76%	8.10%	8.14%	100.00%
31	Kimball Av.	e/o Main St.	83.83%	8.07%	8.11%	100.00%
32	Kimball Av.	e/o Flight Av.	84.04%	7.96%	8.00%	100.00%
33	Kimball Av.	e/o Meadow Valley Av.	84.05%	7.96%	7.99%	100.00%
34	Limonite Av.	e/o Hellman Av.	83.44%	8.26%	8.30%	100.00%
35	Limonite Av.	e/o Archibald Av.	82.31%	9.04%	8.65%	100.00%
36	Limonite Av.	e/o Harrison Av.	82.42%	8.96%	8.61%	100.00%
37	Limonite Av.	e/o Sumner Av.	82.49%	8.92%	8.59%	100.00%
38	Limonite Av.	e/o Scholar Wy.	82.62%	8.83%	8.55%	100.00%
39	Limonite Av.	e/o Hamner Av.	82.69%	8.76%	8.54%	100.00%

<sup>1</sup> Source: Chino Parcel Delivery Traffic Impact Analysis, Urban Crossroads, Inc., February 2018.<sup>2</sup> Total of vehicle mix percentage values rounded to the nearest one-hundredth.

**TABLE 6-6: OPENING YEAR 2020 WITH PROJECT CONDITIONS VEHICLE MIX**

ID	Roadway	Segment	With Project <sup>1</sup>			
			Autos	Medium Trucks	Heavy Trucks	Total <sup>2</sup>
1	Euclid Av.	s/o SR-60	83.13%	8.47%	8.40%	100.00%
2	Euclid Av.	s/o Walnut Av.	83.12%	8.48%	8.40%	100.00%
3	Euclid Av.	s/o Riverside Dr.	83.16%	8.46%	8.38%	100.00%
4	Euclid Av.	s/o Chino Av.	83.20%	8.43%	8.36%	100.00%
5	Euclid Av.	s/o Schaefer Av.	83.21%	8.43%	8.36%	100.00%
6	Euclid Av.	s/o Edison Av.	83.22%	8.44%	8.34%	100.00%
7	Euclid Av.	s/o Eucalyptus Av.	83.28%	8.40%	8.32%	100.00%
8	Euclid Av.	s/o Merrill Av.	82.98%	8.56%	8.46%	100.00%
9	Euclid Av.	s/o Kimball Av.	83.23%	8.42%	8.35%	100.00%
10	Euclid Av.	s/o Bickmore Av.	83.23%	8.42%	8.35%	100.00%
11	Euclid Av.	s/o Pine Av.	83.32%	8.35%	8.33%	100.00%
12	Flight Av.	n/o Merrill Av.	99.69%	0.15%	0.15%	100.00%
13	Hellman Av.	s/o Kimball Av.	84.11%	7.92%	7.96%	100.00%
14	Hellman Av.	s/o Pine Av.	83.82%	8.07%	8.11%	100.00%
15	Archibald Av.	n/o Riverside Dr.	82.80%	8.69%	8.52%	100.00%
16	Archibald Av.	s/o Riverside Dr.	82.80%	8.69%	8.51%	100.00%
17	Archibald Av.	s/o Chino Av.	82.71%	8.75%	8.54%	100.00%
18	Archibald Av.	s/o Schaefer Av.	82.73%	8.73%	8.53%	100.00%
19	Archibald Av.	s/o Ontario Ranch Rd.	82.88%	8.64%	8.49%	100.00%
20	Archibald Av.	s/o Eucalyptus Av.	82.81%	8.68%	8.51%	100.00%
21	Archibald Av.	s/o Merrill Av.	82.84%	8.67%	8.49%	100.00%
22	Archibald Av.	s/o Limonite Av.	83.32%	8.34%	8.34%	100.00%
23	Merrill Av.	e/o Euclid Av.	82.32%	9.07%	8.61%	100.00%
24	Merrill Av.	e/o Bon View Av.	82.29%	9.09%	8.62%	100.00%
25	Merrill Av.	e/o Flight Av.	81.47%	9.59%	8.94%	100.00%
26	Merrill Av.	e/o Hellman Av.	81.33%	9.68%	8.99%	100.00%
27	Kimball Av.	w/o Euclid Av.	83.11%	8.47%	8.41%	100.00%
28	Kimball Av.	e/o Euclid Av.	83.60%	8.18%	8.22%	100.00%
29	Kimball Av.	e/o Rincon Meadows Av.	83.64%	8.16%	8.20%	100.00%
30	Kimball Av.	e/o Mill Creek Av.	83.66%	8.15%	8.19%	100.00%
31	Kimball Av.	e/o Main St.	83.72%	8.12%	8.16%	100.00%
32	Kimball Av.	e/o Flight Av.	83.76%	8.10%	8.14%	100.00%
33	Kimball Av.	e/o Meadow Valley Av.	84.05%	7.95%	7.99%	100.00%
34	Limonite Av.	e/o Hellman Av.	83.44%	8.26%	8.30%	100.00%
35	Limonite Av.	e/o Archibald Av.	82.83%	8.68%	8.49%	100.00%
36	Limonite Av.	e/o Harrison Av.	82.93%	8.62%	8.46%	100.00%
37	Limonite Av.	e/o Sumner Av.	82.96%	8.59%	8.45%	100.00%
38	Limonite Av.	e/o Scholar Wy.	82.98%	8.57%	8.44%	100.00%
39	Limonite Av.	e/o Hamner Av.	82.99%	8.56%	8.45%	100.00%

<sup>1</sup> Source: Chino Parcel Delivery Traffic Impact Analysis, Urban Crossroads, Inc., February 2018.<sup>2</sup> Total of vehicle mix percentage values rounded to the nearest one-hundredth.

**TABLE 6-7: HORIZON YEAR 2040 WITHOUT LIMONITE EXT. WITH PROJECT VEHICLE MIX**

ID	Roadway	Segment	With Project <sup>1</sup>			
			Autos	Medium Trucks	Heavy Trucks	Total <sup>2</sup>
1	Euclid Av.	s/o SR-60	83.18%	8.44%	8.38%	100.00%
2	Euclid Av.	s/o Walnut Av.	83.19%	8.43%	8.38%	100.00%
3	Euclid Av.	s/o Riverside Dr.	83.24%	8.40%	8.36%	100.00%
4	Euclid Av.	s/o Chino Av.	83.26%	8.39%	8.35%	100.00%
5	Euclid Av.	s/o Schaefer Av.	83.28%	8.38%	8.34%	100.00%
6	Euclid Av.	s/o Edison Av.	83.25%	8.42%	8.34%	100.00%
7	Euclid Av.	s/o Eucalyptus Av.	83.30%	8.39%	8.32%	100.00%
8	Euclid Av.	s/o Merrill Av.	83.10%	8.48%	8.42%	100.00%
9	Euclid Av.	s/o Kimball Av.	83.29%	8.37%	8.34%	100.00%
10	Euclid Av.	s/o Bickmore Av.	83.29%	8.37%	8.34%	100.00%
11	Euclid Av.	s/o Pine Av.	83.34%	8.33%	8.32%	100.00%
12	Flight Av.	n/o Merrill Av.	83.93%	8.01%	8.05%	100.00%
13	Hellman Av.	s/o Kimball Av.	83.88%	8.04%	8.08%	100.00%
14	Hellman Av.	s/o Pine Av.	83.75%	8.11%	8.15%	100.00%
15	Archibald Av.	n/o Riverside Dr.	82.71%	8.74%	8.55%	100.00%
16	Archibald Av.	s/o Riverside Dr.	82.87%	8.64%	8.49%	100.00%
17	Archibald Av.	s/o Chino Av.	82.85%	8.66%	8.50%	100.00%
18	Archibald Av.	s/o Schaefer Av.	82.81%	8.68%	8.51%	100.00%
19	Archibald Av.	s/o Ontario Ranch Rd.	82.92%	8.61%	8.47%	100.00%
20	Archibald Av.	s/o Eucalyptus Av.	82.87%	8.64%	8.49%	100.00%
21	Archibald Av.	s/o Merrill Av.	82.87%	8.64%	8.48%	100.00%
22	Archibald Av.	s/o Limonite Av.	83.36%	8.31%	8.33%	100.00%
23	Merrill Av.	e/o Euclid Av.	82.58%	8.88%	8.54%	100.00%
24	Merrill Av.	e/o Bon View Av.	82.28%	9.10%	8.62%	100.00%
25	Merrill Av.	e/o Flight Av.	82.14%	9.14%	8.72%	100.00%
26	Merrill Av.	e/o Hellman Av.	82.13%	9.14%	8.73%	100.00%
27	Kimball Av.	w/o Euclid Av.	83.03%	8.53%	8.44%	100.00%
28	Kimball Av.	e/o Euclid Av.	83.58%	8.19%	8.23%	100.00%
29	Kimball Av.	e/o Rincon Meadows Av.	83.60%	8.18%	8.22%	100.00%
30	Kimball Av.	e/o Mill Creek Av.	83.60%	8.18%	8.22%	100.00%
31	Kimball Av.	e/o Main St.	83.57%	8.20%	8.24%	100.00%
32	Kimball Av.	e/o Flight Av.	83.74%	8.11%	8.15%	100.00%
33	Kimball Av.	e/o Meadow Valley Av.	83.89%	8.03%	8.07%	100.00%
34	Limonite Av.	e/o Hellman Av.	83.44%	8.26%	8.30%	100.00%
35	Limonite Av.	e/o Archibald Av.	83.03%	8.54%	8.42%	100.00%
36	Limonite Av.	e/o Harrison Av.	83.06%	8.52%	8.42%	100.00%
37	Limonite Av.	e/o Sumner Av.	83.06%	8.52%	8.42%	100.00%
38	Limonite Av.	e/o Scholar Wy.	83.06%	8.52%	8.42%	100.00%
39	Limonite Av.	e/o Hamner Av.	83.06%	8.52%	8.42%	100.00%

<sup>1</sup> Source: Chino Parcel Delivery Traffic Impact Analysis, Urban Crossroads, Inc., February 2018.<sup>2</sup> Total of vehicle mix percentage values rounded to the nearest one-hundredth.

**TABLE 6-8: HORIZON YEAR 2040 WITH LIMONITE EXT. WITH PROJECT VEHICLE MIX**

ID	Roadway	Segment	With Project <sup>1</sup>			
			Autos	Medium Trucks	Heavy Trucks	Total <sup>2</sup>
1	Euclid Av.	s/o SR-60	83.22%	8.41%	8.37%	100.00%
2	Euclid Av.	s/o Walnut Av.	83.19%	8.44%	8.38%	100.00%
3	Euclid Av.	s/o Riverside Dr.	83.24%	8.40%	8.36%	100.00%
4	Euclid Av.	s/o Chino Av.	83.26%	8.39%	8.35%	100.00%
5	Euclid Av.	s/o Schaefer Av.	83.28%	8.38%	8.34%	100.00%
6	Euclid Av.	s/o Edison Av.	83.25%	8.42%	8.34%	100.00%
7	Euclid Av.	s/o Eucalyptus Av.	83.30%	8.39%	8.32%	100.00%
8	Euclid Av.	s/o Merrill Av.	83.10%	8.48%	8.42%	100.00%
9	Euclid Av.	s/o Kimball Av.	83.29%	8.37%	8.34%	100.00%
10	Euclid Av.	s/o Bickmore Av.	83.29%	8.37%	8.34%	100.00%
11	Euclid Av.	s/o Pine Av.	83.34%	8.33%	8.32%	100.00%
12	Flight Av.	n/o Merrill Av.	83.93%	8.01%	8.05%	100.00%
13	Hellman Av.	s/o Kimball Av.	83.64%	8.16%	8.20%	100.00%
14	Hellman Av.	s/o Pine Av.	83.75%	8.11%	8.15%	100.00%
15	Archibald Av.	n/o Riverside Dr.	82.71%	8.74%	8.55%	100.00%
16	Archibald Av.	s/o Riverside Dr.	82.87%	8.64%	8.49%	100.00%
17	Archibald Av.	s/o Chino Av.	82.85%	8.66%	8.50%	100.00%
18	Archibald Av.	s/o Schaefer Av.	82.81%	8.68%	8.51%	100.00%
19	Archibald Av.	s/o Ontario Ranch Rd.	82.92%	8.61%	8.47%	100.00%
20	Archibald Av.	s/o Eucalyptus Av.	82.87%	8.64%	8.49%	100.00%
21	Archibald Av.	s/o Merrill Av.	82.90%	8.62%	8.48%	100.00%
22	Archibald Av.	s/o Limonite Av.	83.42%	8.29%	8.30%	100.00%
23	Merrill Av.	e/o Euclid Av.	82.58%	8.88%	8.54%	100.00%
24	Merrill Av.	e/o Bon View Av.	82.28%	9.10%	8.62%	100.00%
25	Merrill Av.	e/o Flight Av.	81.49%	9.56%	8.95%	100.00%
26	Merrill Av.	e/o Hellman Av.	81.33%	9.66%	9.01%	100.00%
27	Kimball Av.	w/o Euclid Av.	83.03%	8.53%	8.44%	100.00%
28	Kimball Av.	e/o Euclid Av.	83.58%	8.19%	8.23%	100.00%
29	Kimball Av.	e/o Rincon Meadows Av.	83.59%	8.18%	8.22%	100.00%
30	Kimball Av.	e/o Mill Creek Av.	83.58%	8.19%	8.23%	100.00%
31	Kimball Av.	e/o Main St.	83.55%	8.20%	8.24%	100.00%
32	Kimball Av.	e/o Flight Av.	83.86%	8.05%	8.09%	100.00%
33	Kimball Av.	e/o Meadow Valley Av.	83.86%	8.05%	8.09%	100.00%
34	Limonite Av.	e/o Hellman Av.	83.63%	8.16%	8.20%	100.00%
35	Limonite Av.	e/o Archibald Av.	83.04%	8.54%	8.42%	100.00%
36	Limonite Av.	e/o Harrison Av.	83.06%	8.52%	8.42%	100.00%
37	Limonite Av.	e/o Sumner Av.	83.06%	8.52%	8.42%	100.00%
38	Limonite Av.	e/o Scholar Wy.	83.06%	8.52%	8.42%	100.00%
39	Limonite Av.	e/o Hamner Av.	83.06%	8.52%	8.42%	100.00%

<sup>1</sup> Source: Chino Parcel Delivery Traffic Impact Analysis, Urban Crossroads, Inc., February 2018.<sup>2</sup> Total of vehicle mix percentage values rounded to the nearest one-hundredth.

### 6.3 CONSTRUCTION VIBRATION ASSESSMENT METHODOLOGY

This analysis focuses on the potential ground-borne vibration associated with vehicular traffic and construction activities. Ground-borne vibration levels from automobile traffic are generally overshadowed by vibration generated by heavy trucks that roll over the same uneven roadway surfaces. However, due to the rapid drop-off rate of ground-borne vibration and the short duration of the associated events, vehicular traffic-induced ground-borne vibration is rarely perceptible beyond the roadway right-of-way, and rarely results in vibration levels that cause damage to buildings in the vicinity.

However, while vehicular traffic is rarely perceptible, construction has the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and equipment used. Ground vibration levels associated with several types of construction equipment are summarized on Table 6-9. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the human response (annoyance) using the following vibration assessment methods defined by the FTA. To describe the human response (annoyance) associated with vibration impacts the FTA provides the following equation:  $PPV_{\text{equip}} = PPV_{\text{ref}} \times (25/D)^{1.5}$

**TABLE 6-9: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT**

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.



## 7 OFF-SITE TRANSPORTATION NOISE IMPACTS

To assess the off-site transportation CNEL noise level impacts associated with development of the proposed Project, noise contours were developed based on *Chino Parcel Delivery Traffic Impact Analysis*. (2) Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise contours were developed for the following traffic scenarios:

- Existing Conditions Without / With Project: This scenario refers to the existing present-day noise conditions without and with the proposed Project.
- Opening Year 2020 Without / With the Project: This scenario refers to Opening Year noise conditions without and with the proposed Project. This scenario includes all cumulative projects identified in the Traffic Impact Analysis.
- Horizon Year 2040 Without / With Project Without Limonite Avenue Extension: This scenario below refers to the background noise conditions at future Year 2040 without and with the proposed Project plus ambient growth without the Limonite Avenue extension. This scenario corresponds to Year 2040 conditions, and includes all cumulative projects identified in the *Traffic Impact Analysis*.
- Horizon Year 2040 Without / With Project With Limonite Avenue Extension: This scenario below refers to the background noise conditions at future Year 2040 without and with the proposed Project plus ambient growth with the Limonite Avenue extension. This scenario corresponds to Year 2040 conditions, and includes all cumulative projects identified in the *Traffic Impact Analysis*.

### 7.1 TRAFFIC NOISE CONTOURS

Noise contours were used to assess the Project's incremental traffic-related noise impacts at land uses adjacent to roadways conveying Project traffic. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the Project study area. Tables 7-1 and 7-8 present a summary of the exterior traffic noise levels, without barrier attenuation, for the 39 study area roadway segments analyzed from the without Project to the with Project conditions under Existing, Opening Year 2020, Horizon Year 2040 Without Limonite Extension, and Horizon Year 2040 With Limonite Extension traffic conditions. Appendix 7.1 includes a summary of the traffic noise level contours for each of the traffic scenarios.

TABLE 7-1: EXISTING WITHOUT PROJECT CONDITIONS NOISE CONTOURS

ID	Road	Segment	Adjacent Planned (Existing) Land Use <sup>1</sup>	CNEL at Nearest Adjacent Land Use (dBA) <sup>2</sup>	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Euclid Av.	s/o SR-60	Commercial	78.5	295	635	1369
2	Euclid Av.	s/o Walnut Av.	Residential	77.8	263	567	1222
3	Euclid Av.	s/o Riverside Dr.	Residential	76.3	269	580	1250
4	Euclid Av.	s/o Chino Av.	Residential	76.8	292	629	1355
5	Euclid Av.	s/o Schaefer Av.	Commercial	76.3	272	587	1264
6	Euclid Av.	s/o Edison Av.	Business Park	76.2	268	577	1244
7	Euclid Av.	s/o Eucalyptus Av.	Residential	76.6	283	609	1312
8	Euclid Av.	s/o Merrill Av.	Public	76.5	278	599	1290
9	Euclid Av.	s/o Kimball Av.	Office Commercial	74.4	201	434	935
10	Euclid Av.	s/o Bickmore Av.	Regional Commercial	74.2	195	420	905
11	Euclid Av.	s/o Pine Av.	Urban Reserve	78.0	349	753	1622
12	Flight Av.	n/o Merrill Av.	Business Park (Ag.)	n/a	n/a	n/a	n/a
13	Hellman Av.	s/o Kimball Av.	Residential	75.0	106	228	491
14	Hellman Av.	s/o Pine Av.	Residential	74.2	93	200	431
15	Archibald Av.	n/o Riverside Dr.	Residential	76.5	202	434	936
16	Archibald Av.	s/o Riverside Dr.	Residential	77.2	223	480	1033
17	Archibald Av.	s/o Chino Av.	Residential	76.0	186	400	863
18	Archibald Av.	s/o Schaefer Av.	Residential	76.1	189	407	878
19	Archibald Av.	s/o Ontario Ranch Rd.	Residential	77.0	217	468	1007
20	Archibald Av.	s/o Eucalyptus Av.	Residential	77.0	217	467	1007
21	Archibald Av.	s/o Merrill Av.	Residential	77.3	226	486	1047
22	Archibald Av.	s/o Limonite Av.	Commercial	75.7	184	396	852
23	Merrill Av.	e/o Euclid Av.	Commercial	73.7	78	169	363
24	Merrill Av.	e/o Bon View Av.	Public	73.5	75	162	349
25	Merrill Av.	e/o Flight Av.	Business Park	73.9	80	172	370
26	Merrill Av.	e/o Hellman Av.	Industrial	74.0	81	175	377
27	Kimball Av.	w/o Euclid Av.	Urban Reserve	77.6	141	304	655
28	Kimball Av.	e/o Euclid Av.	Public	77.4	152	326	703
29	Kimball Av.	e/o Rincon Meadows Av.	Residential	77.1	146	314	677
30	Kimball Av.	e/o Mill Creek Av.	Residential	76.6	135	291	627
31	Kimball Av.	e/o Main St.	Residential	76.1	126	271	584
32	Kimball Av.	e/o Flight Av.	Residential	76.0	122	263	567
33	Kimball Av.	e/o Meadow Valley Av.	Residential	75.9	121	260	560
34	Limonite Av.	e/o Hellman Av.	Industrial	n/a	n/a	n/a	n/a
35	Limonite Av.	e/o Archibald Av.	Commercial	74.2	144	311	670
36	Limonite Av.	e/o Harrison Av.	Residential	74.7	156	335	723
37	Limonite Av.	e/o Sumner Av.	Residential	75.0	163	352	759
38	Limonite Av.	e/o Scholar Wy.	Residential	75.6	180	388	835
39	Limonite Av.	e/o Hamner Av.	Commercial	75.6	180	387	834

<sup>1</sup> Sources: The Ontario Plan Exhibit LU-01, City of Chino General Plan Land Use Element Figure LU-2, and the City of Eastvale Land Use Map.

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

"RW" = Location of the respective noise contour falls within the right-of-way of the road; "n/a" = Roadway segment does not exist in the given scenario.

TABLE 7-2: EXISTING WITH PROJECT CONDITIONS NOISE CONTOURS

ID	Road	Segment	Adjacent Planned (Existing) Land Use <sup>1</sup>	CNEL at Nearest Adjacent Land Use (dBA) <sup>2</sup>	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Euclid Av.	s/o SR-60	Commercial	78.6	301	649	1399
2	Euclid Av.	s/o Walnut Av.	Residential	77.9	270	582	1255
3	Euclid Av.	s/o Riverside Dr.	Residential	76.4	277	597	1285
4	Euclid Av.	s/o Chino Av.	Residential	77.0	299	645	1389
5	Euclid Av.	s/o Schaefer Av.	Commercial	76.5	280	603	1300
6	Euclid Av.	s/o Edison Av.	Business Park	76.5	277	598	1287
7	Euclid Av.	s/o Eucalyptus Av.	Residential	76.8	292	629	1356
8	Euclid Av.	s/o Merrill Av.	Public	76.7	286	617	1328
9	Euclid Av.	s/o Kimball Av.	Office Commercial	74.5	207	446	960
10	Euclid Av.	s/o Bickmore Av.	Regional Commercial	74.3	200	432	930
11	Euclid Av.	s/o Pine Av.	Urban Reserve	78.0	354	762	1641
12	Flight Av.	n/o Merrill Av.	Business Park (Ag.)	n/a	n/a	n/a	n/a
13	Hellman Av.	s/o Kimball Av.	Residential	75.0	106	229	494
14	Hellman Av.	s/o Pine Av.	Residential	74.2	93	201	433
15	Archibald Av.	n/o Riverside Dr.	Residential	76.8	211	454	978
16	Archibald Av.	s/o Riverside Dr.	Residential	77.5	233	502	1081
17	Archibald Av.	s/o Chino Av.	Residential	76.4	197	425	915
18	Archibald Av.	s/o Schaefer Av.	Residential	76.5	200	431	930
19	Archibald Av.	s/o Ontario Ranch Rd.	Residential	77.3	227	490	1056
20	Archibald Av.	s/o Eucalyptus Av.	Residential	77.3	228	492	1060
21	Archibald Av.	s/o Merrill Av.	Residential	77.6	236	509	1097
22	Archibald Av.	s/o Limonite Av.	Commercial	75.8	185	398	859
23	Merrill Av.	e/o Euclid Av.	Commercial	75.0	95	204	440
24	Merrill Av.	e/o Bon View Av.	Public	74.8	92	198	427
25	Merrill Av.	e/o Flight Av.	Business Park	75.5	103	222	478
26	Merrill Av.	e/o Hellman Av.	Industrial	75.6	104	224	483
27	Kimball Av.	w/o Euclid Av.	Urban Reserve	77.7	144	310	669
28	Kimball Av.	e/o Euclid Av.	Public	77.4	152	327	705
29	Kimball Av.	e/o Rincon Meadows Av.	Residential	77.1	146	315	678
30	Kimball Av.	e/o Mill Creek Av.	Residential	76.6	135	292	629
31	Kimball Av.	e/o Main St.	Residential	76.2	126	272	586
32	Kimball Av.	e/o Flight Av.	Residential	76.0	123	265	571
33	Kimball Av.	e/o Meadow Valley Av.	Residential	75.9	121	261	563
34	Limonite Av.	e/o Hellman Av.	Industrial	n/a	n/a	n/a	n/a
35	Limonite Av.	e/o Archibald Av.	Commercial	74.5	153	329	709
36	Limonite Av.	e/o Harrison Av.	Residential	75.0	164	353	760
37	Limonite Av.	e/o Sumner Av.	Residential	75.3	171	369	795
38	Limonite Av.	e/o Scholar Wy.	Residential	75.9	188	404	870
39	Limonite Av.	e/o Hamner Av.	Commercial	75.8	186	400	862

<sup>1</sup> Sources: The Ontario Plan Exhibit LU-01, City of Chino General Plan Land Use Element Figure LU-2, and the City of Eastvale Land Use Map.

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

"RW" = Location of the respective noise contour falls within the right-of-way of the road; "n/a" = Roadway segment does not exist in the given scenario.

**TABLE 7-3: OPENING YEAR 2020 WITHOUT PROJECT CONDITIONS NOISE CONTOURS**

ID	Road	Segment	Adjacent Planned (Existing) Land Use <sup>1</sup>	CNEL at Nearest Adjacent Land Use (dBA) <sup>2</sup>	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Euclid Av.	s/o SR-60	Commercial	80.3	389	837	1804
2	Euclid Av.	s/o Walnut Av.	Residential	79.8	363	781	1683
3	Euclid Av.	s/o Riverside Dr.	Residential	78.6	386	831	1791
4	Euclid Av.	s/o Chino Av.	Residential	79.0	413	889	1916
5	Euclid Av.	s/o Schaefer Av.	Commercial	78.9	402	865	1864
6	Euclid Av.	s/o Edison Av.	Business Park	78.9	405	872	1878
7	Euclid Av.	s/o Eucalyptus Av.	Residential	79.2	426	918	1978
8	Euclid Av.	s/o Merrill Av.	Public	78.6	388	835	1800
9	Euclid Av.	s/o Kimball Av.	Office Commercial	76.8	293	631	1359
10	Euclid Av.	s/o Bickmore Av.	Regional Commercial	76.9	295	636	1370
11	Euclid Av.	s/o Pine Av.	Urban Reserve	79.4	437	941	2028
12	Flight Av.	n/o Merrill Av.	Business Park (Ag.)	n/a	n/a	n/a	n/a
13	Hellman Av.	s/o Kimball Av.	Residential	74.6	99	212	458
14	Hellman Av.	s/o Pine Av.	Residential	75.0	106	228	491
15	Archibald Av.	n/o Riverside Dr.	Residential	78.8	285	614	1323
16	Archibald Av.	s/o Riverside Dr.	Residential	79.4	311	671	1445
17	Archibald Av.	s/o Chino Av.	Residential	78.8	286	615	1326
18	Archibald Av.	s/o Schaefer Av.	Residential	78.9	290	626	1348
19	Archibald Av.	s/o Ontario Ranch Rd.	Residential	79.9	339	730	1572
20	Archibald Av.	s/o Eucalyptus Av.	Residential	79.9	340	733	1579
21	Archibald Av.	s/o Merrill Av.	Residential	79.5	319	688	1482
22	Archibald Av.	s/o Limonite Av.	Commercial	78.1	263	567	1222
23	Merrill Av.	e/o Euclid Av.	Commercial	78.6	165	356	767
24	Merrill Av.	e/o Bon View Av.	Public	78.5	163	351	756
25	Merrill Av.	e/o Flight Av.	Business Park	79.0	174	375	809
26	Merrill Av.	e/o Hellman Av.	Industrial	78.7	168	363	782
27	Kimball Av.	w/o Euclid Av.	Urban Reserve	79.7	195	421	907
28	Kimball Av.	e/o Euclid Av.	Public	78.9	192	414	891
29	Kimball Av.	e/o Rincon Meadows Av.	Residential	78.3	175	376	811
30	Kimball Av.	e/o Mill Creek Av.	Residential	78.3	176	378	815
31	Kimball Av.	e/o Main St.	Residential	77.6	158	340	731
32	Kimball Av.	e/o Flight Av.	Residential	78.7	186	401	865
33	Kimball Av.	e/o Meadow Valley Av.	Residential	75.8	120	259	557
34	Limonite Av.	e/o Hellman Av.	Industrial	n/a	n/a	n/a	n/a
35	Limonite Av.	e/o Archibald Av.	Commercial	77.0	221	476	1026
36	Limonite Av.	e/o Harrison Av.	Residential	77.7	249	536	1154
37	Limonite Av.	e/o Sumner Av.	Residential	78.0	259	558	1202
38	Limonite Av.	e/o Scholar Wy.	Residential	78.3	270	581	1252
39	Limonite Av.	e/o Hamner Av.	Commercial	77.9	254	547	1178

<sup>1</sup> Sources: The Ontario Plan Exhibit LU-01, City of Chino General Plan Land Use Element Figure LU-2, and the City of Eastvale Land Use Map.

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

"RW" = Location of the respective noise contour falls within the right-of-way of the road; "n/a" = Roadway segment does not exist in the given scenario.

**TABLE 7-4: OPENING YEAR 2020 WITH PROJECT CONDITIONS NOISE CONTOURS**

ID	Road	Segment	Adjacent Planned (Existing) Land Use <sup>1</sup>	CNEL at Nearest Adjacent Land Use (dBA) <sup>2</sup>	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Euclid Av.	s/o SR-60	Commercial	80.4	394	850	1831
2	Euclid Av.	s/o Walnut Av.	Residential	80.0	369	794	1711
3	Euclid Av.	s/o Riverside Dr.	Residential	78.7	392	845	1820
4	Euclid Av.	s/o Chino Av.	Residential	79.1	419	903	1945
5	Euclid Av.	s/o Schaefer Av.	Commercial	79.0	408	879	1894
6	Euclid Av.	s/o Edison Av.	Business Park	79.0	412	888	1913
7	Euclid Av.	s/o Eucalyptus Av.	Residential	79.4	434	934	2013
8	Euclid Av.	s/o Merrill Av.	Public	78.8	395	850	1832
9	Euclid Av.	s/o Kimball Av.	Office Commercial	76.9	297	640	1380
10	Euclid Av.	s/o Bickmore Av.	Regional Commercial	77.0	299	645	1390
11	Euclid Av.	s/o Pine Av.	Urban Reserve	79.5	440	949	2045
12	Flight Av.	n/o Merrill Av.	Business Park (Ag.)	n/a	n/a	n/a	n/a
13	Hellman Av.	s/o Kimball Av.	Residential	74.6	99	214	460
14	Hellman Av.	s/o Pine Av.	Residential	75.0	106	229	492
15	Archibald Av.	n/o Riverside Dr.	Residential	79.0	293	631	1358
16	Archibald Av.	s/o Riverside Dr.	Residential	79.5	320	689	1485
17	Archibald Av.	s/o Chino Av.	Residential	79.0	295	635	1368
18	Archibald Av.	s/o Schaefer Av.	Residential	79.1	299	645	1390
19	Archibald Av.	s/o Ontario Ranch Rd.	Residential	80.1	347	748	1611
20	Archibald Av.	s/o Eucalyptus Av.	Residential	80.1	349	753	1622
21	Archibald Av.	s/o Merrill Av.	Residential	79.7	328	708	1524
22	Archibald Av.	s/o Limonite Av.	Commercial	78.1	264	570	1227
23	Merrill Av.	e/o Euclid Av.	Commercial	79.1	177	381	821
24	Merrill Av.	e/o Bon View Av.	Public	79.0	175	376	811
25	Merrill Av.	e/o Flight Av.	Business Park	79.6	191	411	885
26	Merrill Av.	e/o Hellman Av.	Industrial	79.4	185	399	859
27	Kimball Av.	w/o Euclid Av.	Urban Reserve	79.8	198	427	919
28	Kimball Av.	e/o Euclid Av.	Public	78.9	192	414	892
29	Kimball Av.	e/o Rincon Meadows Av.	Residential	78.3	175	377	812
30	Kimball Av.	e/o Mill Creek Av.	Residential	78.3	176	379	817
31	Kimball Av.	e/o Main St.	Residential	77.6	158	340	733
32	Kimball Av.	e/o Flight Av.	Residential	78.7	187	402	867
33	Kimball Av.	e/o Meadow Valley Av.	Residential	75.9	121	260	560
34	Limonite Av.	e/o Hellman Av.	Industrial	n/a	n/a	n/a	n/a
35	Limonite Av.	e/o Archibald Av.	Commercial	77.2	228	491	1058
36	Limonite Av.	e/o Harrison Av.	Residential	77.9	255	550	1185
37	Limonite Av.	e/o Sumner Av.	Residential	78.1	265	572	1232
38	Limonite Av.	e/o Scholar Wy.	Residential	78.4	276	595	1281
39	Limonite Av.	e/o Hamner Av.	Commercial	78.0	259	558	1202

<sup>1</sup> Sources: The Ontario Plan Exhibit LU-01, City of Chino General Plan Land Use Element Figure LU-2, and the City of Eastvale Land Use Map.

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

"RW" = Location of the respective noise contour falls within the right-of-way of the road; "n/a" = Roadway segment does not exist in the given scenario.

**TABLE 7-5: HORIZON YEAR 2040 WITHOUT PROJECT WITHOUT LIMONITE EXT. CONDITIONS**

ID	Road	Segment	Adjacent Planned (Existing) Land Use <sup>1</sup>	CNEL at Nearest Adjacent Land Use (dBA) <sup>2</sup>	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Euclid Av.	s/o SR-60	Commercial	81.1	440	947	2041
2	Euclid Av.	s/o Walnut Av.	Residential	81.0	430	926	1995
3	Euclid Av.	s/o Riverside Dr.	Residential	80.1	488	1052	2266
4	Euclid Av.	s/o Chino Av.	Residential	80.4	508	1095	2359
5	Euclid Av.	s/o Schaefer Av.	Commercial	80.4	511	1100	2370
6	Euclid Av.	s/o Edison Av.	Business Park	79.4	438	944	2035
7	Euclid Av.	s/o Eucalyptus Av.	Residential	79.6	453	976	2102
8	Euclid Av.	s/o Merrill Av.	Public	79.9	473	1020	2198
9	Euclid Av.	s/o Kimball Av.	Office Commercial	78.3	371	798	1720
10	Euclid Av.	s/o Bickmore Av.	Regional Commercial	78.3	366	790	1701
11	Euclid Av.	s/o Pine Av.	Urban Reserve	80.2	494	1064	2292
12	Flight Av.	n/o Merrill Av.	Business Park (Ag.)	67.6	RW	65	140
13	Hellman Av.	s/o Kimball Av.	Residential	76.5	132	285	615
14	Hellman Av.	s/o Pine Av.	Residential	76.0	122	264	568
15	Archibald Av.	n/o Riverside Dr.	Residential	78.3	263	566	1220
16	Archibald Av.	s/o Riverside Dr.	Residential	79.8	335	722	1556
17	Archibald Av.	s/o Chino Av.	Residential	79.7	329	708	1525
18	Archibald Av.	s/o Schaefer Av.	Residential	79.4	315	678	1460
19	Archibald Av.	s/o Ontario Ranch Rd.	Residential	80.3	358	771	1661
20	Archibald Av.	s/o Eucalyptus Av.	Residential	80.4	363	783	1686
21	Archibald Av.	s/o Merrill Av.	Residential	79.8	332	714	1539
22	Archibald Av.	s/o Limonite Av.	Commercial	80.2	364	784	1690
23	Merrill Av.	e/o Euclid Av.	Commercial	79.8	199	428	923
24	Merrill Av.	e/o Bon View Av.	Public	78.5	162	349	751
25	Merrill Av.	e/o Flight Av.	Business Park	80.9	234	504	1085
26	Merrill Av.	e/o Hellman Av.	Industrial	80.9	235	507	1092
27	Kimball Av.	w/o Euclid Av.	Urban Reserve	78.7	167	360	776
28	Kimball Av.	e/o Euclid Av.	Public	79.3	203	437	941
29	Kimball Av.	e/o Rincon Meadows Av.	Residential	79.2	202	434	935
30	Kimball Av.	e/o Mill Creek Av.	Residential	79.5	212	456	982
31	Kimball Av.	e/o Main St.	Residential	81.1	268	577	1243
32	Kimball Av.	e/o Flight Av.	Residential	79.1	198	426	918
33	Kimball Av.	e/o Meadow Valley Av.	Residential	77.2	148	319	688
34	Limonite Av.	e/o Hellman Av.	Industrial	72.7	114	246	530
35	Limonite Av.	e/o Archibald Av.	Commercial	78.8	292	629	1356
36	Limonite Av.	e/o Harrison Av.	Residential	79.1	307	662	1427
37	Limonite Av.	e/o Sumner Av.	Residential	79.0	305	656	1414
38	Limonite Av.	e/o Scholar Wy.	Residential	79.1	305	658	1417
39	Limonite Av.	e/o Hamner Av.	Commercial	78.5	282	608	1310

<sup>1</sup> Sources: The Ontario Plan Exhibit LU-01, City of Chino General Plan Land Use Element Figure LU-2, and the City of Eastvale Land Use Map.

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

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

**TABLE 7-6: HORIZON YEAR 2040 WITH PROJECT WITHOUT LIMONITE EXT. CONDITIONS**

ID	Road	Segment	Adjacent Planned (Existing) Land Use <sup>1</sup>	CNEL at Nearest Adjacent Land Use (dBA) <sup>2</sup>	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Euclid Av.	s/o SR-60	Commercial	81.2	445	959	2066
2	Euclid Av.	s/o Walnut Av.	Residential	81.0	435	938	2021
3	Euclid Av.	s/o Riverside Dr.	Residential	80.2	494	1064	2292
4	Euclid Av.	s/o Chino Av.	Residential	80.5	514	1107	2385
5	Euclid Av.	s/o Schaefer Av.	Commercial	80.5	516	1112	2396
6	Euclid Av.	s/o Edison Av.	Business Park	79.5	446	960	2069
7	Euclid Av.	s/o Eucalyptus Av.	Residential	79.8	460	992	2136
8	Euclid Av.	s/o Merrill Av.	Public	80.0	480	1034	2227
9	Euclid Av.	s/o Kimball Av.	Office Commercial	78.4	375	807	1738
10	Euclid Av.	s/o Bickmore Av.	Regional Commercial	78.3	370	798	1719
11	Euclid Av.	s/o Pine Av.	Urban Reserve	80.3	497	1071	2308
12	Flight Av.	n/o Merrill Av.	Business Park (Ag.)	67.6	RW	65	141
13	Hellman Av.	s/o Kimball Av.	Residential	76.5	133	286	617
14	Hellman Av.	s/o Pine Av.	Residential	76.0	123	264	569
15	Archibald Av.	n/o Riverside Dr.	Residential	78.4	271	583	1256
16	Archibald Av.	s/o Riverside Dr.	Residential	80.0	344	740	1595
17	Archibald Av.	s/o Chino Av.	Residential	79.9	337	726	1565
18	Archibald Av.	s/o Schaefer Av.	Residential	79.6	323	697	1501
19	Archibald Av.	s/o Ontario Ranch Rd.	Residential	80.4	366	789	1699
20	Archibald Av.	s/o Eucalyptus Av.	Residential	80.5	372	802	1728
21	Archibald Av.	s/o Merrill Av.	Residential	79.9	341	734	1581
22	Archibald Av.	s/o Limonite Av.	Commercial	80.2	365	786	1694
23	Merrill Av.	e/o Euclid Av.	Commercial	80.2	210	452	973
24	Merrill Av.	e/o Bon View Av.	Public	78.9	174	374	806
25	Merrill Av.	e/o Flight Av.	Business Park	81.3	248	535	1152
26	Merrill Av.	e/o Hellman Av.	Industrial	81.3	249	537	1158
27	Kimball Av.	w/o Euclid Av.	Urban Reserve	78.8	170	366	789
28	Kimball Av.	e/o Euclid Av.	Public	79.3	203	437	942
29	Kimball Av.	e/o Rincon Meadows Av.	Residential	79.2	202	435	937
30	Kimball Av.	e/o Mill Creek Av.	Residential	79.5	212	457	984
31	Kimball Av.	e/o Main St.	Residential	81.1	268	577	1244
32	Kimball Av.	e/o Flight Av.	Residential	79.1	198	427	920
33	Kimball Av.	e/o Meadow Valley Av.	Residential	77.2	149	321	691
34	Limonite Av.	e/o Hellman Av.	Industrial	72.7	114	246	530
35	Limonite Av.	e/o Archibald Av.	Commercial	78.9	298	642	1383
36	Limonite Av.	e/o Harrison Av.	Residential	79.2	313	675	1454
37	Limonite Av.	e/o Sumner Av.	Residential	79.2	310	669	1441
38	Limonite Av.	e/o Scholar Wy.	Residential	79.2	311	670	1444
39	Limonite Av.	e/o Hamner Av.	Commercial	78.7	287	619	1333

<sup>1</sup> Sources: The Ontario Plan Exhibit LU-01, City of Chino General Plan Land Use Element Figure LU-2, and the City of Eastvale Land Use Map.

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

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

**TABLE 7-7: HORIZON YEAR 2040 WITHOUT PROJECT WITH LIMONITE EXT. CONDITIONS**

ID	Road	Segment	Adjacent Planned (Existing) Land Use <sup>1</sup>	CNEL at Nearest Adjacent Land Use (dBA) <sup>2</sup>	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Euclid Av.	s/o SR-60	Commercial	81.8	492	1060	2283
2	Euclid Av.	s/o Walnut Av.	Residential	80.9	429	924	1991
3	Euclid Av.	s/o Riverside Dr.	Residential	80.1	487	1050	2262
4	Euclid Av.	s/o Chino Av.	Residential	80.4	507	1093	2355
5	Euclid Av.	s/o Schaefer Av.	Commercial	80.4	510	1098	2366
6	Euclid Av.	s/o Edison Av.	Business Park	79.4	437	942	2030
7	Euclid Av.	s/o Eucalyptus Av.	Residential	79.6	453	976	2102
8	Euclid Av.	s/o Merrill Av.	Public	79.9	473	1020	2198
9	Euclid Av.	s/o Kimball Av.	Office Commercial	78.3	371	798	1720
10	Euclid Av.	s/o Bickmore Av.	Regional Commercial	78.3	366	790	1701
11	Euclid Av.	s/o Pine Av.	Urban Reserve	80.2	494	1064	2292
12	Flight Av.	n/o Merrill Av.	Business Park (Ag.)	67.6	RW	65	140
13	Hellman Av.	s/o Kimball Av.	Residential	77.7	161	346	745
14	Hellman Av.	s/o Pine Av.	Residential	76.0	122	264	568
15	Archibald Av.	n/o Riverside Dr.	Residential	78.3	263	566	1220
16	Archibald Av.	s/o Riverside Dr.	Residential	79.8	335	722	1556
17	Archibald Av.	s/o Chino Av.	Residential	79.7	329	708	1525
18	Archibald Av.	s/o Schaefer Av.	Residential	79.4	315	678	1460
19	Archibald Av.	s/o Ontario Ranch Rd.	Residential	80.3	358	771	1661
20	Archibald Av.	s/o Eucalyptus Av.	Residential	80.4	363	783	1686
21	Archibald Av.	s/o Merrill Av.	Residential	80.4	367	791	1705
22	Archibald Av.	s/o Limonite Av.	Commercial	79.4	323	696	1499
23	Merrill Av.	e/o Euclid Av.	Commercial	79.8	199	428	923
24	Merrill Av.	e/o Bon View Av.	Public	78.5	162	349	751
25	Merrill Av.	e/o Flight Av.	Business Park	79.3	183	394	848
26	Merrill Av.	e/o Hellman Av.	Industrial	79.0	175	377	813
27	Kimball Av.	w/o Euclid Av.	Urban Reserve	78.7	167	360	776
28	Kimball Av.	e/o Euclid Av.	Public	79.3	203	437	941
29	Kimball Av.	e/o Rincon Meadows Av.	Residential	79.4	208	448	964
30	Kimball Av.	e/o Mill Creek Av.	Residential	80.2	236	508	1094
31	Kimball Av.	e/o Main St.	Residential	81.6	290	624	1345
32	Kimball Av.	e/o Flight Av.	Residential	78.8	190	410	883
33	Kimball Av.	e/o Meadow Valley Av.	Residential	78.8	188	406	874
34	Limonite Av.	e/o Hellman Av.	Industrial	76.7	212	456	983
35	Limonite Av.	e/o Archibald Av.	Commercial	78.8	293	632	1361
36	Limonite Av.	e/o Harrison Av.	Residential	79.1	307	662	1427
37	Limonite Av.	e/o Sumner Av.	Residential	79.0	305	656	1414
38	Limonite Av.	e/o Scholar Wy.	Residential	79.1	305	658	1417
39	Limonite Av.	e/o Hamner Av.	Commercial	78.5	282	608	1310

<sup>1</sup> Sources: The Ontario Plan Exhibit LU-01, City of Chino General Plan Land Use Element Figure LU-2, and the City of Eastvale Land Use Map.

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

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



**TABLE 7-8: HORIZON YEAR 2040 WITH PROJECT WITH LIMONITE EXT. CONDITIONS**

ID	Road	Segment	Adjacent Planned (Existing) Land Use <sup>1</sup>	CNEL at Nearest Adjacent Land Use (dBA) <sup>2</sup>	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Euclid Av.	s/o SR-60	Commercial	81.9	497	1071	2306
2	Euclid Av.	s/o Walnut Av.	Residential	81.0	435	936	2017
3	Euclid Av.	s/o Riverside Dr.	Residential	80.2	493	1062	2288
4	Euclid Av.	s/o Chino Av.	Residential	80.5	513	1105	2381
5	Euclid Av.	s/o Schaefer Av.	Commercial	80.5	515	1110	2392
6	Euclid Av.	s/o Edison Av.	Business Park	79.5	445	958	2065
7	Euclid Av.	s/o Eucalyptus Av.	Residential	79.8	460	992	2136
8	Euclid Av.	s/o Merrill Av.	Public	80.0	480	1034	2227
9	Euclid Av.	s/o Kimball Av.	Office Commercial	78.4	375	807	1738
10	Euclid Av.	s/o Bickmore Av.	Regional Commercial	78.3	370	798	1719
11	Euclid Av.	s/o Pine Av.	Urban Reserve	80.3	497	1071	2308
12	Flight Av.	n/o Merrill Av.	Business Park (Ag.)	67.6	RW	65	141
13	Hellman Av.	s/o Kimball Av.	Residential	77.7	161	347	747
14	Hellman Av.	s/o Pine Av.	Residential	76.0	123	264	569
15	Archibald Av.	n/o Riverside Dr.	Residential	78.4	271	583	1256
16	Archibald Av.	s/o Riverside Dr.	Residential	80.0	344	740	1595
17	Archibald Av.	s/o Chino Av.	Residential	79.9	337	726	1565
18	Archibald Av.	s/o Schaefer Av.	Residential	79.6	323	697	1501
19	Archibald Av.	s/o Ontario Ranch Rd.	Residential	80.4	366	789	1699
20	Archibald Av.	s/o Eucalyptus Av.	Residential	80.5	372	802	1728
21	Archibald Av.	s/o Merrill Av.	Residential	80.6	376	809	1744
22	Archibald Av.	s/o Limonite Av.	Commercial	79.4	324	698	1504
23	Merrill Av.	e/o Euclid Av.	Commercial	80.2	210	452	973
24	Merrill Av.	e/o Bon View Av.	Public	78.9	174	374	806
25	Merrill Av.	e/o Flight Av.	Business Park	79.8	199	428	922
26	Merrill Av.	e/o Hellman Av.	Industrial	79.6	191	412	888
27	Kimball Av.	w/o Euclid Av.	Urban Reserve	78.8	170	366	789
28	Kimball Av.	e/o Euclid Av.	Public	79.3	203	437	942
29	Kimball Av.	e/o Rincon Meadows Av.	Residential	79.4	208	448	966
30	Kimball Av.	e/o Mill Creek Av.	Residential	80.2	236	509	1096
31	Kimball Av.	e/o Main St.	Residential	81.6	290	625	1346
32	Kimball Av.	e/o Flight Av.	Residential	78.9	191	412	887
33	Kimball Av.	e/o Meadow Valley Av.	Residential	78.8	189	407	877
34	Limonite Av.	e/o Hellman Av.	Industrial	76.7	212	457	985
35	Limonite Av.	e/o Archibald Av.	Commercial	78.9	299	644	1388
36	Limonite Av.	e/o Harrison Av.	Residential	79.2	313	675	1454
37	Limonite Av.	e/o Sumner Av.	Residential	79.2	310	669	1441
38	Limonite Av.	e/o Scholar Wy.	Residential	79.2	311	670	1444
39	Limonite Av.	e/o Hamner Av.	Commercial	78.7	287	619	1333

<sup>1</sup> Sources: The Ontario Plan Exhibit LU-01, City of Chino General Plan Land Use Element Figure LU-2, and the City of Eastvale Land Use Map.

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

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

## 7.2 EXISTING CONDITION PROJECT TRAFFIC NOISE LEVEL CONTRIBUTIONS

Table 7-1 presents the Existing without Project conditions CNEL noise levels. The without Project exterior noise levels are expected to range from 73.5 to 78.5 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-2 shows the Existing with Project conditions will range from 74.2 to 78.6 dBA CNEL. As shown on Table 7-9 the Project will generate a noise level increase of up to 1.6 dBA CNEL on the study area roadway segments. Based on the significance criteria in Section 4, the Project-related noise level increases are considered *less than significant* under Existing conditions at the land uses adjacent to roadways conveying Project traffic.

TABLE 7-9: EXISTING CONDITION OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

ID	Road	Segment	Adjacent Planned (Existing) Land Use <sup>1</sup>	CNEL at Adjacent Land Use (dBA) <sup>1</sup>			Noise- Sensitive Land Use?	Threshold Exceeded? <sup>2</sup>
				No Project	With Project	Project Addition		
1	Euclid Av.	s/o SR-60	Commercial	78.5	78.6	0.1	No	No
2	Euclid Av.	s/o Walnut Av.	Residential	77.8	77.9	0.1	Yes	No
3	Euclid Av.	s/o Riverside Dr.	Residential	76.3	76.4	0.1	Yes	No
4	Euclid Av.	s/o Chino Av.	Residential	76.8	77.0	0.2	Yes	No
5	Euclid Av.	s/o Schaefer Av.	Commercial	76.3	76.5	0.2	No	No
6	Euclid Av.	s/o Edison Av.	Business Park	76.2	76.5	0.3	No	No
7	Euclid Av.	s/o Eucalyptus Av.	Residential	76.6	76.8	0.2	Yes	No
8	Euclid Av.	s/o Merrill Av.	Public	76.5	76.7	0.2	No	No
9	Euclid Av.	s/o Kimball Av.	Office Commercial	74.4	74.5	0.1	No	No
10	Euclid Av.	s/o Bickmore Av.	Regional Commercial	74.2	74.3	0.1	No	No
11	Euclid Av.	s/o Pine Av.	Urban Reserve	78.0	78.0	0.0	Yes	No
12	Flight Av.	n/o Merrill Av.	Business Park (Ag.)	n/a	n/a	n/a	n/a	n/a
13	Hellman Av.	s/o Kimball Av.	Residential	75.0	75.0	0.0	Yes	No
14	Hellman Av.	s/o Pine Av.	Residential	74.2	74.2	0.0	Yes	No
15	Archibald Av.	n/o Riverside Dr.	Residential	76.5	76.8	0.3	Yes	No
16	Archibald Av.	s/o Riverside Dr.	Residential	77.2	77.5	0.3	Yes	No
17	Archibald Av.	s/o Chino Av.	Residential	76.0	76.4	0.4	Yes	No
18	Archibald Av.	s/o Schaefer Av.	Residential	76.1	76.5	0.4	Yes	No
19	Archibald Av.	s/o Ontario Ranch Rd.	Residential	77.0	77.3	0.3	Yes	No
20	Archibald Av.	s/o Eucalyptus Av.	Residential	77.0	77.3	0.3	Yes	No
21	Archibald Av.	s/o Merrill Av.	Residential	77.3	77.6	0.3	Yes	No
22	Archibald Av.	s/o Limonite Av.	Commercial	75.7	75.8	0.1	No	No
23	Merrill Av.	e/o Euclid Av.	Commercial	73.7	75.0	1.3	No	No
24	Merrill Av.	e/o Bon View Av.	Public	73.5	74.8	1.3	No	No
25	Merrill Av.	e/o Flight Av.	Business Park	73.9	75.5	1.6	No	No
26	Merrill Av.	e/o Hellman Av.	Industrial	74.0	75.6	1.6	No	No
27	Kimball Av.	w/o Euclid Av.	Urban Reserve	77.6	77.7	0.1	Yes	No
28	Kimball Av.	e/o Euclid Av.	Public	77.4	77.4	0.0	No	No
29	Kimball Av.	e/o Rincon Meadows Av.	Residential	77.1	77.1	0.0	Yes	No
30	Kimball Av.	e/o Mill Creek Av.	Residential	76.6	76.6	0.0	Yes	No
31	Kimball Av.	e/o Main St.	Residential	76.1	76.2	0.1	Yes	No
32	Kimball Av.	e/o Flight Av.	Residential	76.0	76.0	0.0	Yes	No
33	Kimball Av.	e/o Meadow Valley Av.	Residential	75.9	75.9	0.0	Yes	No
34	Limonite Av.	e/o Hellman Av.	Industrial	n/a	n/a	n/a	n/a	n/a
35	Limonite Av.	e/o Archibald Av.	Commercial	74.2	74.5	0.3	No	No
36	Limonite Av.	e/o Harrison Av.	Residential	74.7	75.0	0.3	Yes	No
37	Limonite Av.	e/o Sumner Av.	Residential	75.0	75.3	0.3	Yes	No
38	Limonite Av.	e/o Scholar Wy.	Residential	75.6	75.9	0.3	Yes	No
39	Limonite Av.	e/o Hamner Av.	Commercial	75.6	75.8	0.2	No	No

<sup>1</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.<sup>2</sup> Significance Criteria (Section 4).

"n/a" = Roadway segment does not exist in the given scenario.

### 7.3 OPENING YEAR 2020 PROJECT TRAFFIC NOISE LEVEL CONTRIBUTIONS

Table 7-3 presents the Opening Year 2020 without Project conditions CNEL noise levels. The without Project exterior noise levels are expected to range from 74.6 to 80.3 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-4 shows the Opening Year 2020 with Project conditions will range from 74.6 to 80.4 dBA CNEL. As shown on Table 7-10 the Project will generate a noise level increase of up to 0.7 dBA CNEL on the study area roadway segments. Based on the significance criteria in Section 4, the Project-related noise level increases are considered *less than significant* under Opening Year 2020 conditions at the land uses adjacent to roadways conveying Project traffic.

TABLE 7-10: OPENING YEAR OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

ID	Road	Segment	Adjacent Planned (Existing) Land Use <sup>1</sup>	CNEL at Adjacent Land Use (dBA) <sup>1</sup>			Noise- Sensitive Land Use?	Threshold Exceeded? <sup>2</sup>
				No Project	With Project	Project Addition		
1	Euclid Av.	s/o SR-60	Commercial	80.3	80.4	0.1	No	No
2	Euclid Av.	s/o Walnut Av.	Residential	79.8	80.0	0.2	Yes	No
3	Euclid Av.	s/o Riverside Dr.	Residential	78.6	78.7	0.1	Yes	No
4	Euclid Av.	s/o Chino Av.	Residential	79.0	79.1	0.1	Yes	No
5	Euclid Av.	s/o Schaefer Av.	Commercial	78.9	79.0	0.1	No	No
6	Euclid Av.	s/o Edison Av.	Business Park	78.9	79.0	0.1	No	No
7	Euclid Av.	s/o Eucalyptus Av.	Residential	79.2	79.4	0.2	Yes	No
8	Euclid Av.	s/o Merrill Av.	Public	78.6	78.8	0.2	No	No
9	Euclid Av.	s/o Kimball Av.	Office Commercial	76.8	76.9	0.1	No	No
10	Euclid Av.	s/o Bickmore Av.	Regional Commercial	76.9	77.0	0.1	No	No
11	Euclid Av.	s/o Pine Av.	Urban Reserve	79.4	79.5	0.1	Yes	No
12	Flight Av.	n/o Merrill Av.	Business Park (Ag.)	n/a	n/a	n/a	n/a	n/a
13	Hellman Av.	s/o Kimball Av.	Residential	74.6	74.6	0.0	Yes	No
14	Hellman Av.	s/o Pine Av.	Residential	75.0	75.0	0.0	Yes	No
15	Archibald Av.	n/o Riverside Dr.	Residential	78.8	79.0	0.2	Yes	No
16	Archibald Av.	s/o Riverside Dr.	Residential	79.4	79.5	0.1	Yes	No
17	Archibald Av.	s/o Chino Av.	Residential	78.8	79.0	0.2	Yes	No
18	Archibald Av.	s/o Schaefer Av.	Residential	78.9	79.1	0.2	Yes	No
19	Archibald Av.	s/o Ontario Ranch Rd.	Residential	79.9	80.1	0.2	Yes	No
20	Archibald Av.	s/o Eucalyptus Av.	Residential	79.9	80.1	0.2	Yes	No
21	Archibald Av.	s/o Merrill Av.	Residential	79.5	79.7	0.2	Yes	No
22	Archibald Av.	s/o Limonite Av.	Commercial	78.1	78.1	0.0	No	No
23	Merrill Av.	e/o Euclid Av.	Commercial	78.6	79.1	0.5	No	No
24	Merrill Av.	e/o Bon View Av.	Public	78.5	79.0	0.5	No	No
25	Merrill Av.	e/o Flight Av.	Business Park	79.0	79.6	0.6	No	No
26	Merrill Av.	e/o Hellman Av.	Industrial	78.7	79.4	0.7	No	No
27	Kimball Av.	w/o Euclid Av.	Urban Reserve	79.7	79.8	0.1	Yes	No
28	Kimball Av.	e/o Euclid Av.	Public	78.9	78.9	0.0	No	No
29	Kimball Av.	e/o Rincon Meadows Av.	Residential	78.3	78.3	0.0	Yes	No
30	Kimball Av.	e/o Mill Creek Av.	Residential	78.3	78.3	0.0	Yes	No
31	Kimball Av.	e/o Main St.	Residential	77.6	77.6	0.0	Yes	No
32	Kimball Av.	e/o Flight Av.	Residential	78.7	78.7	0.0	Yes	No
33	Kimball Av.	e/o Meadow Valley Av.	Residential	75.8	75.9	0.1	Yes	No
34	Limonite Av.	e/o Hellman Av.	Industrial	n/a	n/a	n/a	n/a	n/a
35	Limonite Av.	e/o Archibald Av.	Commercial	77.0	77.2	0.2	No	No
36	Limonite Av.	e/o Harrison Av.	Residential	77.7	77.9	0.2	Yes	No
37	Limonite Av.	e/o Sumner Av.	Residential	78.0	78.1	0.1	Yes	No
38	Limonite Av.	e/o Scholar Wy.	Residential	78.3	78.4	0.1	Yes	No
39	Limonite Av.	e/o Hamner Av.	Commercial	77.9	78.0	0.1	No	No

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

<sup>2</sup> Significance Criteria (Section 4).

"n/a" = Roadway segment does not exist in the given scenario.

## 7.4 HORIZON YEAR 2040 PROJECT TRAFFIC NOISE LEVEL CONTRIBUTIONS

The following sections present Horizon Year 2040 off-site traffic noise level conditions without and with the Project, without and with the Limonite Extension.

### 7.4.1 WITHOUT LIMONITE EXTENSION CONDITIONS

Table 7-5 presents the Horizon Year 2040 without Limonite Extension without Project conditions CNEL noise levels. The without Project exterior noise levels are expected to range from 67.6 to 81.1 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-6 shows the Horizon Year 2040 without Limonite Extension with Project conditions will range from 67.6 to 81.3 dBA CNEL. As shown on Table 7-11 the Project will generate a noise level increase of up to 0.4 dBA CNEL on the study area roadway segments. Based on the significance criteria in Section 4, the Project-related noise level increases are considered *less than significant* under Horizon Year 2040 without Limonite Extension conditions at the land uses adjacent to roadways conveying Project traffic.

### 7.4.2 WITH LIMONITE EXTENSION CONDITIONS

Table 7-7 presents the Horizon Year 2040 with Limonite Extension without Project conditions CNEL noise levels. The without Project exterior noise levels are expected to range from 67.6 to 81.8 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-8 shows the Horizon Year 2040 with Limonite Extension with Project conditions will range from 67.6 to 81.9 dBA CNEL. As shown on Table 7-12 the Project will generate a noise level increase of up to 0.6 dBA CNEL on the study area roadway segments. Based on the significance criteria in Section 4, the Project-related noise level increases are considered *less than significant* under Horizon Year 2040 with Limonite Extension conditions at the land uses adjacent to roadways conveying Project traffic.

TABLE 7-11: HORIZON YEAR 2040 WITHOUT LIMONITE EXT. PROJECT TRAFFIC NOISE IMPACTS

ID	Road	Segment	Adjacent Planned (Existing) Land Use <sup>1</sup>	CNEL at Adjacent Land Use (dBA) <sup>1</sup>			Noise- Sensitive Land Use?	Threshold Exceeded? <sup>2</sup>
				No Project	With Project	Project Addition		
1	Euclid Av.	s/o SR-60	Commercial	81.1	81.2	0.1	No	No
2	Euclid Av.	s/o Walnut Av.	Residential	81.0	81.0	0.0	Yes	No
3	Euclid Av.	s/o Riverside Dr.	Residential	80.1	80.2	0.1	Yes	No
4	Euclid Av.	s/o Chino Av.	Residential	80.4	80.5	0.1	Yes	No
5	Euclid Av.	s/o Schaefer Av.	Commercial	80.4	80.5	0.1	No	No
6	Euclid Av.	s/o Edison Av.	Business Park	79.4	79.5	0.1	No	No
7	Euclid Av.	s/o Eucalyptus Av.	Residential	79.6	79.8	0.2	Yes	No
8	Euclid Av.	s/o Merrill Av.	Public	79.9	80.0	0.1	No	No
9	Euclid Av.	s/o Kimball Av.	Office Commercial	78.3	78.4	0.1	No	No
10	Euclid Av.	s/o Bickmore Av.	Regional Commercial	78.3	78.3	0.0	No	No
11	Euclid Av.	s/o Pine Av.	Urban Reserve	80.2	80.3	0.1	Yes	No
12	Flight Av.	n/o Merrill Av.	Business Park (Ag.)	67.6	67.6	0.0	No	No
13	Hellman Av.	s/o Kimball Av.	Residential	76.5	76.5	0.0	Yes	No
14	Hellman Av.	s/o Pine Av.	Residential	76.0	76.0	0.0	Yes	No
15	Archibald Av.	n/o Riverside Dr.	Residential	78.3	78.4	0.1	Yes	No
16	Archibald Av.	s/o Riverside Dr.	Residential	79.8	80.0	0.2	Yes	No
17	Archibald Av.	s/o Chino Av.	Residential	79.7	79.9	0.2	Yes	No
18	Archibald Av.	s/o Schaefer Av.	Residential	79.4	79.6	0.2	Yes	No
19	Archibald Av.	s/o Ontario Ranch Rd.	Residential	80.3	80.4	0.1	Yes	No
20	Archibald Av.	s/o Eucalyptus Av.	Residential	80.4	80.5	0.1	Yes	No
21	Archibald Av.	s/o Merrill Av.	Residential	79.8	79.9	0.1	Yes	No
22	Archibald Av.	s/o Limonite Av.	Commercial	80.2	80.2	0.0	No	No
23	Merrill Av.	e/o Euclid Av.	Commercial	79.8	80.2	0.4	No	No
24	Merrill Av.	e/o Bon View Av.	Public	78.5	78.9	0.4	No	No
25	Merrill Av.	e/o Flight Av.	Business Park	80.9	81.3	0.4	No	No
26	Merrill Av.	e/o Hellman Av.	Industrial	80.9	81.3	0.4	No	No
27	Kimball Av.	w/o Euclid Av.	Urban Reserve	78.7	78.8	0.1	Yes	No
28	Kimball Av.	e/o Euclid Av.	Public	79.3	79.3	0.0	No	No
29	Kimball Av.	e/o Rincon Meadows Av.	Residential	79.2	79.2	0.0	Yes	No
30	Kimball Av.	e/o Mill Creek Av.	Residential	79.5	79.5	0.0	Yes	No
31	Kimball Av.	e/o Main St.	Residential	81.1	81.1	0.0	Yes	No
32	Kimball Av.	e/o Flight Av.	Residential	79.1	79.1	0.0	Yes	No
33	Kimball Av.	e/o Meadow Valley Av.	Residential	77.2	77.2	0.0	Yes	No
34	Limonite Av.	e/o Hellman Av.	Industrial	72.7	72.7	0.0	No	No
35	Limonite Av.	e/o Archibald Av.	Commercial	78.8	78.9	0.1	No	No
36	Limonite Av.	e/o Harrison Av.	Residential	79.1	79.2	0.1	Yes	No
37	Limonite Av.	e/o Sumner Av.	Residential	79.0	79.2	0.2	Yes	No
38	Limonite Av.	e/o Scholar Wy.	Residential	79.1	79.2	0.1	Yes	No
39	Limonite Av.	e/o Hamner Av.	Commercial	78.5	78.7	0.2	No	No

<sup>1</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.<sup>2</sup> Significance Criteria (Section 4).

**TABLE 7-12: HORIZON YEAR 2040 WITH LIMONITE EXT. PROJECT TRAFFIC NOISE IMPACTS**

ID	Road	Segment	Adjacent Planned (Existing) Land Use <sup>1</sup>	CNEL at Adjacent Land Use (dBA) <sup>1</sup>			Noise- Sensitive Land Use?	Threshold Exceeded? <sup>2</sup>
				No Project	With Project	Project Addition		
1	Euclid Av.	s/o SR-60	Commercial	81.8	81.9	0.1	No	No
2	Euclid Av.	s/o Walnut Av.	Residential	80.9	81.0	0.1	Yes	No
3	Euclid Av.	s/o Riverside Dr.	Residential	80.1	80.2	0.1	Yes	No
4	Euclid Av.	s/o Chino Av.	Residential	80.4	80.5	0.1	Yes	No
5	Euclid Av.	s/o Schaefer Av.	Commercial	80.4	80.5	0.1	No	No
6	Euclid Av.	s/o Edison Av.	Business Park	79.4	79.5	0.1	No	No
7	Euclid Av.	s/o Eucalyptus Av.	Residential	79.6	79.8	0.2	Yes	No
8	Euclid Av.	s/o Merrill Av.	Public	79.9	80.0	0.1	No	No
9	Euclid Av.	s/o Kimball Av.	Office Commercial	78.3	78.4	0.1	No	No
10	Euclid Av.	s/o Bickmore Av.	Regional Commercial	78.3	78.3	0.0	No	No
11	Euclid Av.	s/o Pine Av.	Urban Reserve	80.2	80.3	0.1	Yes	No
12	Flight Av.	n/o Merrill Av.	Business Park (Ag.)	67.6	67.6	0.0	No	No
13	Hellman Av.	s/o Kimball Av.	Residential	77.7	77.7	0.0	Yes	No
14	Hellman Av.	s/o Pine Av.	Residential	76.0	76.0	0.0	Yes	No
15	Archibald Av.	n/o Riverside Dr.	Residential	78.3	78.4	0.1	Yes	No
16	Archibald Av.	s/o Riverside Dr.	Residential	79.8	80.0	0.2	Yes	No
17	Archibald Av.	s/o Chino Av.	Residential	79.7	79.9	0.2	Yes	No
18	Archibald Av.	s/o Schaefer Av.	Residential	79.4	79.6	0.2	Yes	No
19	Archibald Av.	s/o Ontario Ranch Rd.	Residential	80.3	80.4	0.1	Yes	No
20	Archibald Av.	s/o Eucalyptus Av.	Residential	80.4	80.5	0.1	Yes	No
21	Archibald Av.	s/o Merrill Av.	Residential	80.4	80.6	0.2	Yes	No
22	Archibald Av.	s/o Limonite Av.	Commercial	79.4	79.4	0.0	No	No
23	Merrill Av.	e/o Euclid Av.	Commercial	79.8	80.2	0.4	No	No
24	Merrill Av.	e/o Bon View Av.	Public	78.5	78.9	0.4	No	No
25	Merrill Av.	e/o Flight Av.	Business Park	79.3	79.8	0.5	No	No
26	Merrill Av.	e/o Hellman Av.	Industrial	79.0	79.6	0.6	No	No
27	Kimball Av.	w/o Euclid Av.	Urban Reserve	78.7	78.8	0.1	Yes	No
28	Kimball Av.	e/o Euclid Av.	Public	79.3	79.3	0.0	No	No
29	Kimball Av.	e/o Rincon Meadows Av.	Residential	79.4	79.4	0.0	Yes	No
30	Kimball Av.	e/o Mill Creek Av.	Residential	80.2	80.2	0.0	Yes	No
31	Kimball Av.	e/o Main St.	Residential	81.6	81.6	0.0	Yes	No
32	Kimball Av.	e/o Flight Av.	Residential	78.8	78.9	0.1	Yes	No
33	Kimball Av.	e/o Meadow Valley Av.	Residential	78.8	78.8	0.0	Yes	No
34	Limonite Av.	e/o Hellman Av.	Industrial	76.7	76.7	0.0	No	No
35	Limonite Av.	e/o Archibald Av.	Commercial	78.8	78.9	0.1	No	No
36	Limonite Av.	e/o Harrison Av.	Residential	79.1	79.2	0.1	Yes	No
37	Limonite Av.	e/o Sumner Av.	Residential	79.0	79.2	0.2	Yes	No
38	Limonite Av.	e/o Scholar Wy.	Residential	79.1	79.2	0.1	Yes	No
39	Limonite Av.	e/o Hamner Av.	Commercial	78.5	78.7	0.2	No	No

<sup>1</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.<sup>2</sup> Significance Criteria (Section 4).



## 8 RECEIVER LOCATIONS

To assess the potential for long-term operational and short-term construction noise impacts, the following seven receiver locations as shown on Exhibit 8-A were identified as representative locations for focused analysis. Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include: schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Moderately noise-sensitive land uses typically include: multi-family dwellings, hotels, motels, dormitories, out-patient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses that are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, natural open space, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

Sensitive receivers near the Project site include existing residential homes and agricultural land uses with residential homes, as described below. Other sensitive land uses in the Project study area that are located at greater distances than those identified in this noise study will experience lower noise levels than those presented in this report due to the additional attenuation from distance and the shielding of intervening structures.

- R1: Located approximately 1,432 feet northwest of the Project site, R1 represents an existing agricultural use with residential home on Grove Avenue. A 24-hour noise level measurement was taken near this location, L2, to describe the existing ambient noise environment.
- R2: Location R2 represents an existing agricultural use with residential home located approximately 1,948 feet north of the Project site on Grove Avenue. A 24-hour noise level measurement was taken near this location, L2, to describe the existing ambient noise environment.
- R3: Location R3 represents an existing agricultural use with residential home located roughly 2,454 feet north of the Project site.
- R4: Location R4 represents an existing agricultural use with residential home located roughly 2,090 feet east of the Project site on Merrill Avenue. A 24-hour noise level measurement was taken near this location, L4, to describe the existing ambient noise environment.
- R5: Location R5 represents an existing agricultural use with residential home located roughly 1,442 feet east of the Project site on Remington Avenue. A 24-hour noise level measurement was taken east of this location, L8, to describe the existing ambient noise environment.
- R6: Location R6 represents an existing agricultural use with residential home located approximately 2,626 feet south of the Project site on Kimball Avenue. A 24-hour noise level measurement was taken near this location, L10, to describe the existing ambient noise environment.

- R7: Located approximately 2,769 feet south of the Project site, R7 represents the existing residential homes south of Kimball Avenue. A 24-hour noise level measurement was taken near this location, L10, to describe the existing ambient noise environment.

### EXHIBIT 8-A: RECEIVER LOCATIONS



## 9 OPERATIONAL IMPACTS

This section analyzes the potential operational noise impacts due to the Project's stationary noise sources on the off-site sensitive receiver locations identified in Section 8. Exhibit 9-A identifies the receiver locations and noise source locations used to assess the Project-related operational noise levels.

### 9.1 REFERENCE NOISE LEVELS

To estimate the Project operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed Project. This section provides a detailed description of the reference noise level measurements shown on Table 9-1 used to estimate the Project operational noise impacts. It is important to note that the following projected noise levels assume the worst-case noise environment with the switcher trailer loading/unloading, truck idling, backup alarms, parking lot vehicle movements (switchers, trucks, and autos), trailer maintenance activities, and truck fuel pump activity all operating continuously. These noise level impacts will likely vary throughout the day.

**TABLE 9-1: REFERENCE NOISE LEVEL MEASUREMENTS**

Noise Source	Duration (h:mm:ss)	Ref. Dist. (Feet)	Noise Source Height (Feet)	Noise Level (dBA L <sub>eq</sub> )		Noise Level (dBA L <sub>50</sub> )	
				@ Ref. Distance	@ 50 Feet	@ Ref. Distance	@ 50 Feet
Switcher Loading/Unloading Activity <sup>1</sup>	0:02:30	30'	8'	77.0	72.6	74.4	70.0
Switcher/Truck Movements <sup>1</sup>	0:00:21	20'	8'	75.8	67.8	72.5	64.5
Parking Lot Vehicle Movements (Autos) <sup>2</sup>	1:00:00	10'	5'	52.2	41.7	49.0	38.5
Trailer Maintenance (Impact Hammer) <sup>1</sup>	0:00:19	40'	5'	73.0	71.1	63.6	61.7
Truck Fuel Pump Activity <sup>3</sup>	0:04:50	10'	5'	75.7	61.7	74.9	60.9

<sup>1</sup> As measured by Urban Crossroads, Inc. on 3/13/2017 at an existing parcel delivery facility in the community of Bloomington in unincorporated County of San Bernardino.

<sup>2</sup> As measured by Urban Crossroads, Inc. on 5/17/2017 at the Panasonic Avionics Corporation parking lot in the City of Lake Forest at typical lunch hour (12:00 p.m. to 1:00 p.m.).

<sup>3</sup> As measured by Urban Crossroads, Inc. on 7/5/2017 at the Ontario Travel Center gas station and truck stop.

#### 9.1.1 PARCEL DELIVERY FACILITY REFERENCE NOISE LEVEL MEASUREMENTS

On March 13, 2017 Urban Crossroads, Inc. collected reference noise level measurements at an existing parcel delivery hub facility in the community of Bloomington in unincorporated County of San Bernardino.

##### Switcher Loading/Unloading

A short-term reference noise level measurement was collected at the existing parcel delivery facility to describe the loading dock activities at the Project site. The reference measurement

includes switchers idling, backup alarms, and switchers moving trailers in and out of a loading dock area with 30 dock doors, in addition to background noise sources including switcher movements and unloading activity noise levels. At the uniform reference distance of 50 feet, the switcher loading/unloading reference noise level is 72.6 dBA  $L_{eq}$ .

#### Switcher/Truck Movements

An additional short-term reference noise level measurement was collected at the existing parcel delivery facility to describe the switcher and truck movements throughout the non-loading areas within the Project site. The reference measurement includes both a switcher with trailer pass-by and a semi-truck with trailer pass-by event, in addition to background switcher movements and loading activity noise levels. At the uniform reference distance of 50 feet, the reference switcher and truck movements noise level is 67.8 dBA  $L_{eq}$ .

#### Trailer Maintenance (Air Impact Hammer)

A short-term reference noise level measurement was collected at the existing parcel delivery facility trailer maintenance building to describe the peak noise events associated with air impact hammers used in future trailer repair activities within the Project site. The reference measurement includes one air impact hammer noise event, with background trailer maintenance activities including employees talking and metal tool clanging noise. At the uniform reference distance of 50 feet, the trailer maintenance reference noise level is 71.1 dBA  $L_{eq}$ .

### **9.1.2 PARKING LOT VEHICLE MOVEMENTS (AUTOS)**

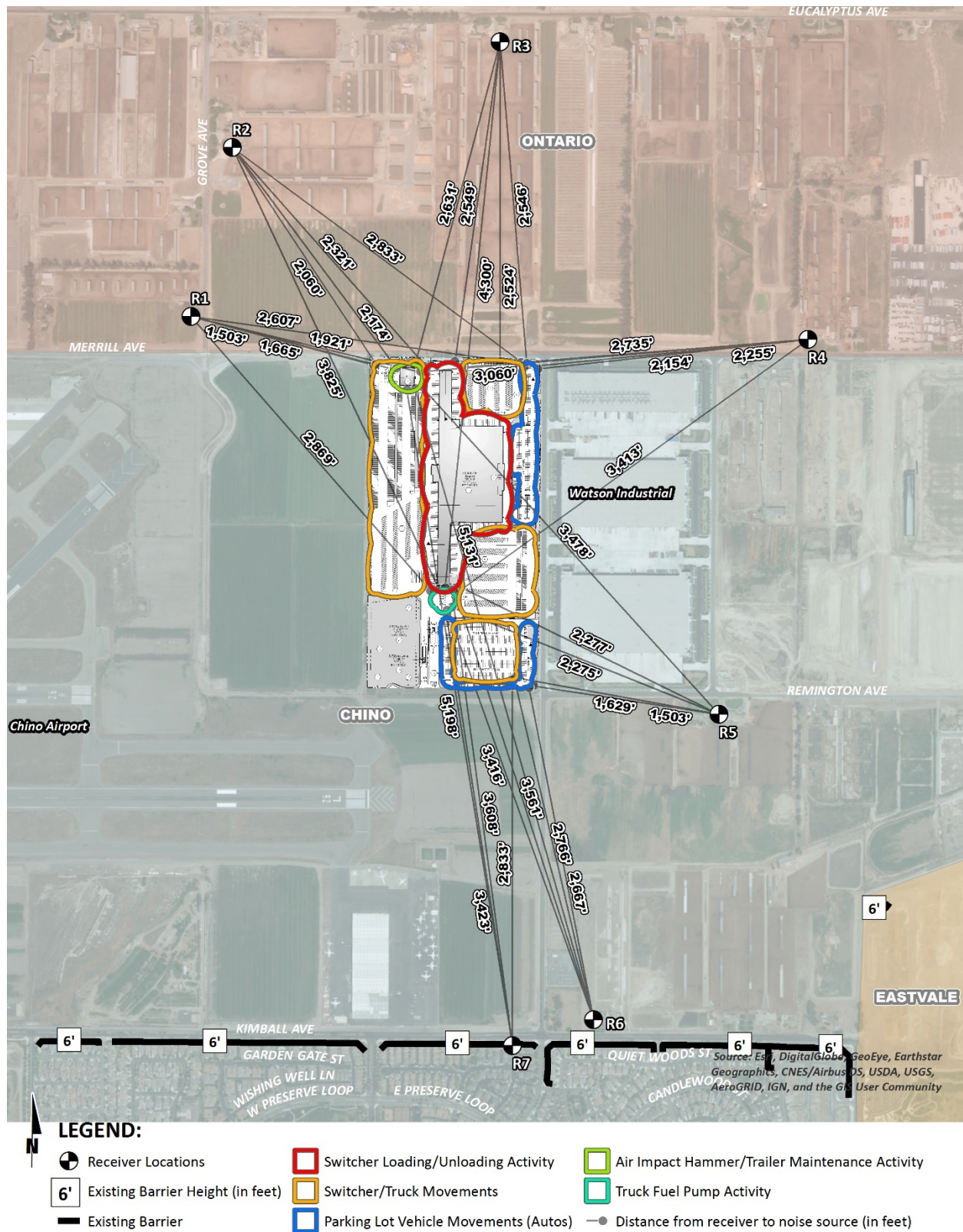
To determine the noise levels associated with parking lot vehicle movements, Urban Crossroads collected reference noise level measurements over a 24-hour period on May 17<sup>th</sup>, 2017 at the parking lot for the Panasonic Avionics Corporation in the City of Lake Forest. The peak hour of activity measured over the 24-hour noise level measurement period occurred between 12:00 p.m. to 1:00 p.m., or the typical lunch hour for employees working in the area. The measured reference noise level at 50 feet from parking lot vehicle movements was measured at 41.7 dBA  $L_{eq}$ . The parking lot noise levels are mainly due to cars pulling in and out of spaces during peak lunch hour activity and employees talking.

### **9.1.3 TRUCK FUEL PUMP ACTIVITY**

To determine the noise levels associated with truck fuel pump activities, Urban Crossroads collected a reference noise level measurement on July 5<sup>th</sup>, 2017 at the Ontario Travel Center. The measured reference noise level at 50 feet from truck fuel pumps is 61.7 dBA  $L_{eq}$ . The reference truck fuel pump activity noise level includes fuel pump noise, truck air brakes and backup alarms, and background auto fuel pump activity from adjacent fuel pumps.



## EXHIBIT 9-A: OPERATIONAL NOISE SOURCE AND RECEIVER LOCATIONS



## 9.2 OPERATIONAL NOISE LEVELS

Based upon the reference noise levels, it is possible to estimate the Project operational stationary-source noise levels at each of the sensitive receiver locations. The operational noise level calculations shown on Table 9-2 account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. Hard site conditions are used in the operational noise analysis which result in noise levels that attenuate (or decrease) at a rate of 6 dBA for each doubling of distance from a point source. The basic noise attenuation equation shown below is used to calculate the distance attenuation based on a reference noise level ( $SPL_1$ ):

$$SPL_2 = SPL_1 - 20\log(D_2/D_1)$$

Where  $SPL_2$  is the resulting noise level after attenuation,  $SPL_1$  is the source noise level,  $D_2$  is the distance to the reference sound pressure level ( $SPL_1$ ), and  $D_1$  is the distance to the receiver location. Table 9-2 indicates that the unmitigated operational noise levels associated with the switcher trailer loading/unloading, truck idling, backup alarms, parking lot vehicle movements (switchers, trucks, and autos), trailer maintenance activities, and truck fuel pump activity are expected to range from 38.4 to 42.9 dBA  $L_{eq}$  at the nearby sensitive receiver locations. The unmitigated operational noise level calculation worksheets are included in Appendix 9.1.

TABLE 9-2: UNMITIGATED PROJECT OPERATIONAL NOISE LEVELS

Receiver Location <sup>1</sup>	Noise Source <sup>2</sup>	Project Operational Noise Levels (dBA) <sup>3</sup>					
		L <sub>eq</sub> (E. Avg.)	L <sub>50</sub> (30 mins)	L <sub>25</sub> (15 mins)	L <sub>8</sub> (5 mins)	L <sub>2</sub> (1 min)	L <sub>max</sub> (Anytime)
R1	Switcher Loading/Unloading Activity	28.2	25.6	29.4	31.6	35.5	37.7
	Switcher/Truck Movements	38.3	35.0	40.2	42.5	42.9	43.0
	Parking Lot Vehicle Movements (Autos)	16.0	12.8	13.8	18.8	24.8	35.7
	Trailer Maintenance (Impact Hammer)	40.6	31.2	40.1	46.9	49.9	50.5
	Truck Fuel Pump Activity	26.5	25.7	26.2	27.2	31.0	37.6
	Combined Noise Level:	42.9	37.2	43.4	48.4	50.9	51.7
R2	Switcher Loading/Unloading Activity	39.2	36.6	40.4	42.6	46.5	48.7
	Switcher/Truck Movements	35.5	32.2	37.4	39.7	40.1	40.2
	Parking Lot Vehicle Movements (Autos)	15.4	12.2	13.2	18.2	24.2	35.1
	Trailer Maintenance (Impact Hammer)	38.3	28.9	37.8	44.6	47.6	48.2
	Truck Fuel Pump Activity	24.0	23.2	23.7	24.7	28.5	35.1
	Combined Noise Level:	42.8	38.6	43.6	47.5	50.5	52.0
R3	Switcher Loading/Unloading Activity	38.4	35.8	39.6	41.8	45.7	47.9
	Switcher/Truck Movements	33.8	30.5	35.7	38.0	38.4	38.5
	Parking Lot Vehicle Movements (Autos)	16.1	12.9	13.9	18.9	24.9	35.8
	Trailer Maintenance (Impact Hammer)	36.6	27.2	36.1	42.9	45.9	46.5
	Truck Fuel Pump Activity	23.0	22.2	22.7	23.7	27.5	34.1
	Combined Noise Level:	41.5	37.5	42.3	46.2	49.2	50.8
R4	Switcher Loading/Unloading Activity	37.8	35.2	39.0	41.2	45.1	47.3
	Switcher/Truck Movements	34.8	31.5	36.7	39.0	39.4	39.5
	Parking Lot Vehicle Movements (Autos)	17.2	14.0	15.0	20.0	26.0	36.9
	Trailer Maintenance (Impact Hammer)	35.3	25.9	34.8	41.6	44.6	45.2
	Truck Fuel Pump Activity	25.0	24.2	24.7	25.7	29.5	36.1
	Combined Noise Level:	41.1	37.3	42.0	45.6	48.5	50.2
R5	Switcher Loading/Unloading Activity	39.4	36.8	40.6	42.8	46.7	48.9
	Switcher/Truck Movements	37.6	34.3	39.5	41.8	42.2	42.3
	Parking Lot Vehicle Movements (Autos)	19.5	16.3	17.3	22.3	28.3	39.2
	Trailer Maintenance (Impact Hammer)	34.2	24.8	33.7	40.5	43.5	44.1
	Truck Fuel Pump Activity	28.6	27.8	28.3	29.3	33.1	39.7
	Combined Noise Level:	42.5	39.3	43.7	46.7	49.5	51.4
R6	Switcher Loading/Unloading Activity	35.5	32.9	36.7	38.9	42.8	45.0
	Switcher/Truck Movements	33.0	29.7	34.9	37.2	37.6	37.7
	Parking Lot Vehicle Movements (Autos)	15.8	12.6	13.6	18.6	24.6	35.5
	Trailer Maintenance (Impact Hammer)	30.8	21.4	30.3	37.1	40.1	40.7
	Truck Fuel Pump Activity	25.0	24.2	24.7	25.7	29.5	36.1
	Combined Noise Level:	38.5	35.2	39.6	42.7	45.6	47.5
R7	Switcher Loading/Unloading Activity	35.4	32.8	36.6	38.8	42.7	44.9
	Switcher/Truck Movements	32.8	29.5	34.7	37.0	37.4	37.5
	Parking Lot Vehicle Movements (Autos)	15.4	12.2	13.2	18.2	24.2	35.1
	Trailer Maintenance (Impact Hammer)	30.7	21.3	30.2	37.0	40.0	40.6
	Truck Fuel Pump Activity	25.0	24.2	24.7	25.7	29.5	36.1
	Combined Noise Level:	38.4	35.1	39.5	42.6	45.5	47.4

<sup>1</sup> See Exhibit 9-A for the receiver and noise source locations.<sup>2</sup> Reference noise sources as shown on Table 9-1.<sup>3</sup> Operational noise level calculations are provided in Appendix 9.2.

### 9.3 OPERATIONAL NOISE LEVEL COMPLIANCE

To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of Chino and City of Ontario exterior noise level standards. Table 9-3 shows the operational noise levels associated with Chino Parcel Delivery Project will satisfy the exterior noise level standards at all nearby sensitive receiver locations. Therefore, operational noise impacts are considered *less than significant* at the nearby sensitive uses.

**TABLE 9-3: UNMITIGATED OPERATIONAL NOISE LEVEL COMPLIANCE**

Receiver Location <sup>1</sup>	City	Noise Level at Receiver Locations (dBA) <sup>2</sup>						Threshold Exceeded? <sup>3</sup>	
		L <sub>eq</sub> (E. Avg.)	L <sub>50</sub> (30 mins)	L <sub>25</sub> (15 mins)	L <sub>8</sub> (5 mins)	L <sub>2</sub> (1 min)	L <sub>max</sub> (Anytime)		
								Daytime	Nighttime
Residential Noise Level Standards	Chino	-	55	60	65	70	75	-	-
		-	50	55	60	65	70	-	-
	Ontario	65	-	65	-	-	85	-	-
		45	-	45	-	-	65	-	-
R1	Ontario	42.9	37.2	43.4	48.4	50.9	51.7	No	No
R2	Ontario	42.8	38.6	43.6	47.5	50.5	52.0	No	No
R3	Ontario	41.5	37.5	42.3	46.2	49.2	50.8	No	No
R4	Ontario	41.1	37.3	42.0	45.6	48.5	50.2	No	No
R5	Chino	42.5	39.3	43.7	46.7	49.5	51.4	No	No
R6	Chino	38.5	35.2	39.6	42.7	45.6	47.5	No	No
R7	Chino	38.4	35.1	39.5	42.6	45.5	47.4	No	No

<sup>1</sup> See Exhibit 9-A for the receiver and noise source locations.

<sup>2</sup> Estimated Project operational noise levels as shown on Table 9-2.

<sup>3</sup> Do the estimated Project operational noise levels meet the operational noise level standards (Table 3-1)?

"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.; "E. Avg." = logarithmic (energy) average

### 9.4 PROJECT OPERATIONAL NOISE CONTRIBUTION

To describe the Project operational noise level contributions, the Project operational noise levels were combined with the existing ambient noise levels measurements for the off-site receiver locations potentially impacted by Project operational noise sources. Since the units used to measure noise, decibels (dB), are logarithmic units, the Project-operational and existing ambient noise levels cannot be combined using standard arithmetic equations. (4) Instead, they must be logarithmically added using the following base equation:

$$SPL_{Total} = 10\log_{10}[10^{SPL1/10} + 10^{SPL2/10} + \dots 10^{SPLn/10}]$$

Where "SPL1," "SPL2," etc. are equal to the sound pressure levels being combined, or in this case, the Project-operational and existing ambient noise levels. The difference between the combined Project and ambient noise levels describe the Project noise level contributions. Noise levels that



would be experienced at receiver locations when unmitigated Project-source noise is added to the ambient daytime and nighttime conditions are presented on Tables 9-4 and 9-5, respectively.

As indicated on Tables 9-4 and 9-5, the Project will contribute an operational noise level increase during the daytime hours of up to 0.1 dBA  $L_{eq}$  and during the nighttime hours of up to 0.3 dBA  $L_{eq}$ . Based on the without Project (ambient) noise levels, the Project operational noise level increases will satisfy the significance criteria discussed in Section 4, and therefore, the increases at the sensitive receiver locations will be *less than significant*. On this basis, Project operational stationary-source noise would not result in a substantial temporary/periodic, or permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.

**TABLE 9-4: DAYTIME OPERATIONAL NOISE LEVEL CONTRIBUTIONS**

Receiver Location <sup>1</sup>	Total Project Operational Noise Level (dBA $L_{eq}$ ) <sup>2</sup>	Measurement Location <sup>3</sup>	Reference Ambient Noise Levels (dBA $L_{eq}$ ) <sup>4</sup>	Combined Project and Ambient (dBA $L_{eq}$ ) <sup>5</sup>	Project Contribution (dBA $L_{eq}$ ) <sup>6</sup>	Threshold Exceeded? <sup>7</sup>
R1	42.9	L2	69.2	69.2	0.0	No
R2	42.8	L3	64.7	64.7	0.0	No
R3	41.5	L3	64.7	64.7	0.0	No
R4	41.1	L4	69.2	69.2	0.0	No
R5	42.5	L8	58.7	58.8	0.1	No
R6	38.5	L10	74.3	74.3	0.0	No
R7	38.4	L10	74.3	74.3	0.0	No

<sup>1</sup> See Exhibit 9-A for the sensitive receiver locations.

<sup>2</sup> Unmitigated Project operational noise levels as shown on Table 9-3.

<sup>3</sup> Reference noise level measurement locations as shown on Exhibit 5-A.

<sup>4</sup> Observed daytime ambient noise levels as shown on Table 5-1.

<sup>5</sup> Represents the combined ambient conditions plus the Project activities.

<sup>6</sup> The noise level increase expected with the addition of the proposed Project activities.

<sup>7</sup> Significance Criteria as defined in Section 4.

TABLE 9-5: NIGHTTIME OPERATIONAL NOISE LEVEL CONTRIBUTIONS

Receiver Location <sup>1</sup>	Total Project Operational Noise Level (dBA L <sub>eq</sub> ) <sup>2</sup>	Measurement Location <sup>3</sup>	Reference Ambient Noise Levels (dBA L <sub>eq</sub> ) <sup>4</sup>	Combined Project and Ambient (dBA L <sub>eq</sub> ) <sup>5</sup>	Project Contribution (dBA L <sub>eq</sub> ) <sup>6</sup>	Threshold Exceeded? <sup>7</sup>
R1	42.9	L2	66.9	66.9	0.0	No
R2	42.8	L3	62.7	62.7	0.0	No
R3	41.5	L3	62.7	62.7	0.0	No
R4	41.1	L4	65.2	65.2	0.0	No
R5	42.5	L8	54.2	54.5	0.3	No
R6	38.5	L10	72.2	72.2	0.0	No
R7	38.4	L10	72.2	72.2	0.0	No

<sup>1</sup> See Exhibit 9-A for the sensitive receiver locations.

<sup>2</sup> Unmitigated Project operational noise levels as shown on Table 9-3.

<sup>3</sup> Reference noise level measurement locations as shown on Exhibit 5-A.

<sup>4</sup> Observed nighttime ambient noise levels as shown on Table 5-1.

<sup>5</sup> Represents the combined ambient conditions plus the Project activities.

<sup>6</sup> The noise level increase expected with the addition of the proposed Project activities.

<sup>7</sup> Significance Criteria as defined in Section 4.

## 9.5 OPERATIONAL VIBRATION IMPACTS

To assess the potential vibration impacts from truck haul trips associated with operational activities the City of Chino threshold for vibration of 0.05 in/sec RMS is used. Truck vibration levels are dependent on vehicle characteristics, load, speed, and pavement conditions. Typical vibration levels for the Chino Parcel Delivery heavy truck activity at normal traffic speeds will approach 0.004 in/sec PPV and 0.003 in/sec RMS at 25 feet based on the FTA *Transit Noise Impact and Vibration Assessment*. (3) Trucks transiting on site will be travelling at very low speeds so it is expected that delivery truck vibration impacts at nearby homes will satisfy both the City of Chino vibration thresholds, and therefore, will be *less than significant*.

## 10 CONSTRUCTION IMPACTS

This section analyzes potential impacts resulting from the short-term construction activities associated with the development of the Project. Exhibit 10-A shows the construction activity boundaries in relation to the nearby sensitive receiver locations.

### 10.1 CONSTRUCTION NOISE LEVELS

Noise generated by the Project construction equipment will include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. The number and mix of construction equipment is expected to occur in the following stages:

- Demolition
- Grading
- Building Construction
- Architectural Coating
- Paving

This construction noise analysis was prepared using reference noise level measurements taken by Urban Crossroads, Inc. to describe the typical construction activity noise levels for each stage of Project construction. The construction reference noise level measurements represent a list of typical construction activity noise levels. Noise levels generated by heavy construction equipment can range from approximately 68 dBA to in excess of 80 dBA when measured at 50 feet. Hard site conditions are used in the construction noise analysis which result in noise levels that attenuate (or decrease) at a rate of 6 dBA for each doubling of distance from a point source (i.e. construction equipment). For example, a noise level of 80 dBA measured at 50 feet from the noise source to the receiver would be reduced to 74 dBA at 100 feet from the source to the receiver, and would be further reduced to 68 dBA at 200 feet from the source to the receiver. The construction stages used in this analysis are consistent with the data used to support the construction emissions in *Chino Parcel Delivery Air Quality Impact Analysis* prepared by Urban Crossroads, Inc. (26)

### 10.2 CONSTRUCTION REFERENCE NOISE LEVELS

To describe the Project construction noise levels, measurements were collected for similar activities at several construction sites. Table 10-1 provides a summary of the construction reference noise level measurements. Since the reference noise levels were collected at varying distances, all construction noise level measurements presented on Table 10-1 have been adjusted to describe a common reference distance of 50 feet.

**TABLE 10-1: CONSTRUCTION REFERENCE NOISE LEVELS**

ID	Noise Source	Reference Distance From Source (Feet)	Reference Noise Levels @ Reference Distance (dBA L <sub>eq</sub> )	Reference Noise Levels @ 50 Feet (dBA L <sub>eq</sub> ) <sup>6</sup>
1	Truck Pass-Bys & Dozer Activity <sup>1</sup>	30'	63.6	59.2
2	Dozer Activity <sup>1</sup>	30'	68.6	64.2
3	Construction Vehicle Maintenance Activities <sup>2</sup>	30'	71.9	67.5
4	Foundation Trenching <sup>2</sup>	30'	72.6	68.2
5	Rough Grading Activities <sup>2</sup>	30'	77.9	73.5
6	Water Truck Pass-By & Backup Alarm <sup>3</sup>	30'	76.3	71.9
7	Dozer Pass-By <sup>3</sup>	30'	84.0	79.6
8	Concrete Mixer Truck Movements <sup>4</sup>	50'	71.2	71.2
9	Concrete Paver Activities <sup>4</sup>	30'	70.0	65.6
10	Concrete Mixer Pour & Paving Activities <sup>4</sup>	30'	70.3	65.9
11	Concrete Mixer Backup Alarms & Air Brakes <sup>4</sup>	50'	71.6	71.6
12	Concrete Mixer Pour Activities <sup>4</sup>	50'	67.7	67.7
13	Forklift, Jackhammer, & Metal Truck Bed Loading <sup>5</sup>	50'	67.9	67.9

<sup>1</sup> As measured by Urban Crossroads, Inc. on 10/14/15 at a business park construction site located at the northwest corner of Barranca Parkway and Alton Parkway in the City of Irvine.

<sup>2</sup> As measured by Urban Crossroads, Inc. on 10/20/15 at a construction site located in Rancho Mission Viejo.

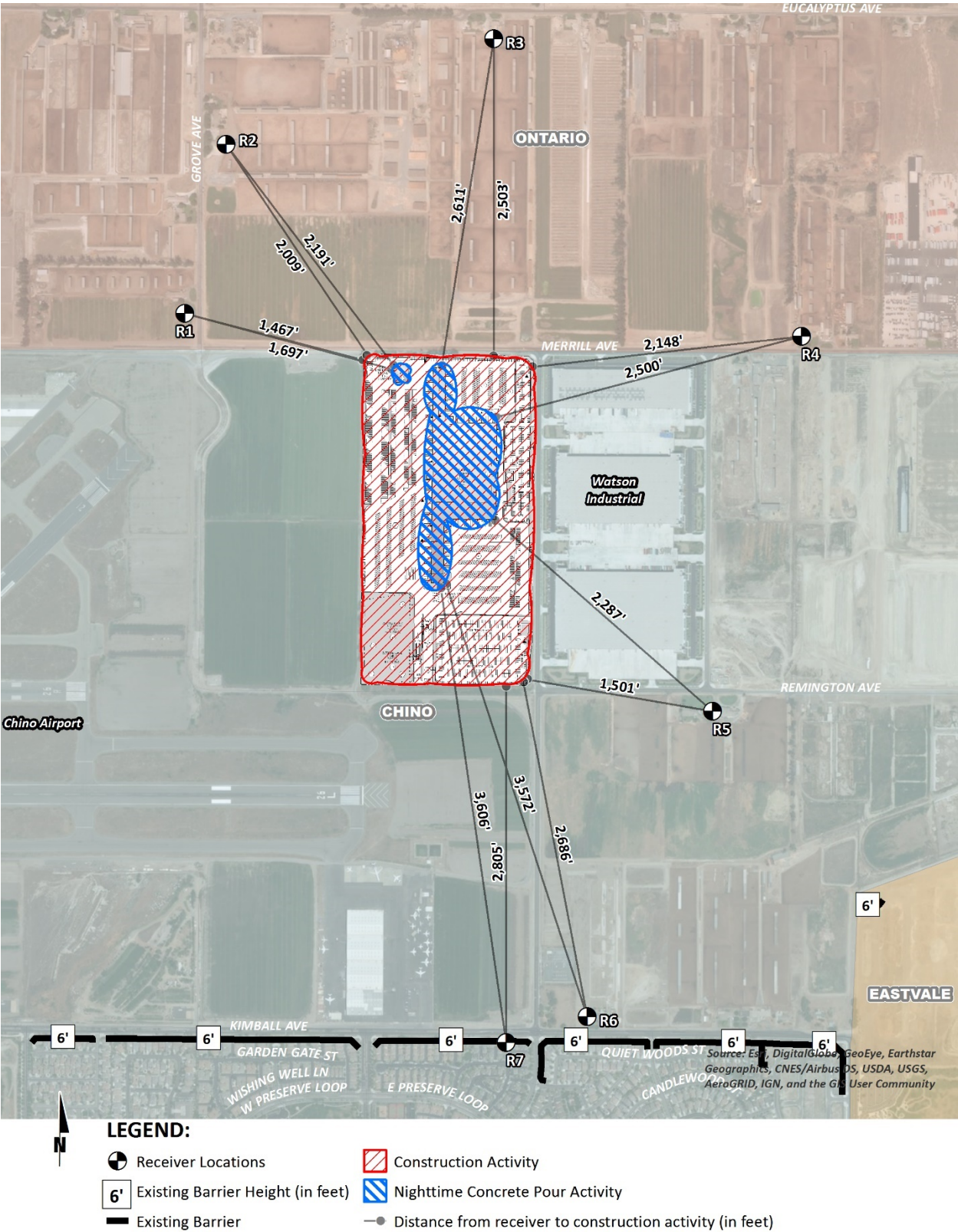
<sup>3</sup> As measured by Urban Crossroads, Inc. on 10/30/15 during grading operations within an industrial construction site located in the City of Ontario.

<sup>4</sup> Reference noise level measurements were collected from a nighttime concrete pour at an industrial construction site, located at 27334 San Bernardino Avenue in the City of Redlands, between 1:00 a.m. to 2:00 a.m. on 7/1/15.

<sup>5</sup> As measured by Urban Crossroads, Inc. on 9/9/16 during the demolition of an existing parking lot at 41 Corporate Park in Irvine.

<sup>6</sup> Reference noise levels are calculated at 50 feet using a drop off rate of 6 dBA per doubling of distance (point source).

EXHIBIT 10-A: CONSTRUCTION ACTIVITY AND RECEIVER LOCATIONS



### 10.3 DAYTIME CONSTRUCTION NOISE ANALYSIS

Tables 10-2 to 10-6 show the daytime Project construction stages and the reference construction noise levels used for each stage. Table 10-7 provides a summary of the daytime noise levels from each stage of construction at each of the sensitive receiver locations. Based on the reference construction noise levels, the Project-related daytime construction noise levels when the highest reference noise level is operating at the edge of primary construction activity nearest each sensitive receiver location will range from 39.6 to 50.2 dBA  $L_{eq}$  at the sensitive receiver locations, as shown on Table 10-7.

**TABLE 10-2: DEMOLITION ACTIVITY NOISE LEVELS**

Reference Construction Activity <sup>1</sup>	Reference Noise Level @ 50 Feet (dBA $L_{eq}$ )
Truck Pass-Bys & Dozer Activity	59.2
Dozer Activity	64.2
Dozer Pass-By	79.6
Forklift, Jackhammer, & Metal Truck Bed Activities	67.9
Highest Reference Noise Level at 50 Feet (dBA $L_{eq}$ ):	79.6

Receiver Location	Distance to Construction Activity (Feet) <sup>2</sup>	Distance Attenuation (dBA $L_{eq}$ ) <sup>3</sup>	Estimated Noise Barrier Attenuation (dBA $L_{eq}$ ) <sup>4</sup>	Construction Noise Level (dBA $L_{eq}$ )
R1	1,467'	-29.3	0.0	50.2
R2	2,009'	-32.1	0.0	47.5
R3	2,503'	-34.0	0.0	45.6
R4	2,148'	-32.7	0.0	46.9
R5	1,501'	-29.5	0.0	50.0
R6	2,686'	-34.6	0.0	45.0
R7	2,805'	-35.0	-5.0	39.6

<sup>1</sup> Reference construction noise level measurements taken by Urban Crossroads, Inc.

<sup>2</sup> Distance from the nearest point of construction activity to the nearest receiver.

<sup>3</sup> Point (stationary) source drop off rate of 6.0 dBA per doubling of distance.

<sup>4</sup> Estimated barrier attenuation from existing barriers and intervening structures in the Project study area.

**TABLE 10-3: GRADING ACTIVITY NOISE LEVELS**

Reference Construction Activity <sup>1</sup>	Reference Noise Level @ 50 Feet (dBA L <sub>eq</sub> )
Truck Pass-Bys & Dozer Activity	59.2
Dozer Activity	64.2
Rough Grading Activities	73.5
Water Truck Pass-By & Backup Alarm	71.9
Dozer Pass-By	79.6
Highest Reference Noise Level at 50 Feet (dBA L <sub>eq</sub> ):	79.6

Receiver Location	Distance to Construction Activity (Feet) <sup>2</sup>	Distance Attenuation (dBA L <sub>eq</sub> ) <sup>3</sup>	Estimated Noise Barrier Attenuation (dBA L <sub>eq</sub> ) <sup>4</sup>	Construction Noise Level (dBA L <sub>eq</sub> )
R1	1,467'	-29.3	0.0	50.2
R2	2,009'	-32.1	0.0	47.5
R3	2,503'	-34.0	0.0	45.6
R4	2,148'	-32.7	0.0	46.9
R5	1,501'	-29.5	0.0	50.0
R6	2,686'	-34.6	0.0	45.0
R7	2,805'	-35.0	-5.0	39.6

<sup>1</sup> Reference construction noise level measurements taken by Urban Crossroads, Inc.

<sup>2</sup> Distance from the nearest point of construction activity to the nearest receiver.

<sup>3</sup> Point (stationary) source drop off rate of 6.0 dBA per doubling of distance.

<sup>4</sup> Estimated barrier attenuation from existing barriers and intervening structures in the Project study area.

**TABLE 10-4: BUILDING CONSTRUCTION ACTIVITY NOISE LEVELS**

Reference Construction Activity <sup>1</sup>	Reference Noise Level @ 50 Feet (dBA L <sub>eq</sub> )
Construction Vehicle Maintenance Activities	67.5
Foundation Trenching	68.2
Highest Reference Noise Level at 50 Feet (dBA L <sub>eq</sub> ):	68.2

Receiver Location	Distance to Construction Activity (Feet) <sup>2</sup>	Distance Attenuation (dBA L <sub>eq</sub> ) <sup>3</sup>	Estimated Noise Barrier Attenuation (dBA L <sub>eq</sub> ) <sup>4</sup>	Construction Noise Level (dBA L <sub>eq</sub> )
R1	1,467'	-29.3	0.0	38.8
R2	2,009'	-32.1	0.0	36.1
R3	2,503'	-34.0	0.0	34.2
R4	2,148'	-32.7	0.0	35.5
R5	1,501'	-29.5	0.0	38.6
R6	2,686'	-34.6	0.0	33.6
R7	2,805'	-35.0	-5.0	28.2

<sup>1</sup> Reference construction noise level measurements taken by Urban Crossroads, Inc.

<sup>2</sup> Distance from the nearest point of construction activity to the nearest receiver.

<sup>3</sup> Point (stationary) source drop off rate of 6.0 dBA per doubling of distance.

<sup>4</sup> Estimated barrier attenuation from existing barriers and intervening structures in the Project study area.



**TABLE 10-5: ARCHITECTURAL ACTIVITY NOISE LEVELS**

Reference Construction Activity <sup>1</sup>	Reference Noise Level @ 50 Feet (dBA L <sub>eq</sub> )
Construction Vehicle Maintenance Activities	67.5
Highest Reference Noise Level at 50 Feet (dBA L <sub>eq</sub> ):	67.5

Receiver Location	Distance to Construction Activity (Feet) <sup>2</sup>	Distance Attenuation (dBA L <sub>eq</sub> ) <sup>3</sup>	Estimated Noise Barrier Attenuation (dBA L <sub>eq</sub> ) <sup>4</sup>	Construction Noise Level (dBA L <sub>eq</sub> )
R1	1,467'	-29.3	0.0	38.1
R2	2,009'	-32.1	0.0	35.4
R3	2,503'	-34.0	0.0	33.5
R4	2,148'	-32.7	0.0	34.8
R5	1,501'	-29.5	0.0	37.9
R6	2,686'	-34.6	0.0	32.9
R7	2,805'	-35.0	-5.0	27.5

<sup>1</sup> Reference construction noise level measurements taken by Urban Crossroads, Inc.

<sup>2</sup> Distance from the nearest point of construction activity to the nearest receiver.

<sup>3</sup> Point (stationary) source drop off rate of 6.0 dBA per doubling of distance.

<sup>4</sup> Estimated barrier attenuation from existing barriers and intervening structures in the Project study area.

**TABLE 10-6: PAVING ACTIVITY NOISE LEVELS**

Reference Construction Activity <sup>1</sup>	Reference Noise Level @ 50 Feet (dBA L <sub>eq</sub> )
Concrete Mixer Truck Movements	71.2
Concrete Paver Activities	65.6
Concrete Mixer Pour & Paving Activities	65.9
Concrete Mixer Backup Alarms & Air Brakes	71.6
Concrete Mixer Pour Activities	67.7
Highest Reference Noise Level at 50 Feet (dBA L <sub>eq</sub> ):	71.6

Receiver Location	Distance to Construction Activity (Feet) <sup>2</sup>	Distance Attenuation (dBA L <sub>eq</sub> ) <sup>3</sup>	Estimated Noise Barrier Attenuation (dBA L <sub>eq</sub> ) <sup>4</sup>	Construction Noise Level (dBA L <sub>eq</sub> )
R1	1,467'	-29.3	0.0	42.3
R2	2,009'	-32.1	0.0	39.5
R3	2,503'	-34.0	0.0	37.6
R4	2,148'	-32.7	0.0	38.9
R5	1,501'	-29.5	0.0	42.1
R6	2,686'	-34.6	0.0	37.0
R7	2,805'	-35.0	-5.0	31.6

<sup>1</sup> Reference construction noise level measurements taken by Urban Crossroads, Inc.

<sup>2</sup> Distance from the nearest point of construction activity to the nearest receiver.

<sup>3</sup> Point (stationary) source drop off rate of 6.0 dBA per doubling of distance.

<sup>4</sup> Estimated barrier attenuation from existing barriers and intervening structures in the Project study area.

**TABLE 10-7: UNMITIGATED DAYTIME CONSTRUCTION ACTIVITY NOISE LEVEL SUMMARY**

Receiver Location	Distance to Receiver (Feet)	Daytime Construction Noise Levels (dBA L <sub>eq</sub> )					
		Demolition	Grading	Building Construction	Architectural Coating	Paving	Highest Levels
R1	1,467'	50.2	50.2	38.8	38.1	42.3	50.2
R2	2,009'	47.5	47.5	36.1	35.4	39.5	47.5
R3	2,503'	45.6	45.6	34.2	33.5	37.6	45.6
R4	2,148'	46.9	46.9	35.5	34.8	38.9	46.9
R5	1,501'	50.0	50.0	38.6	37.9	42.1	50.0
R6	2,686'	45.0	45.0	33.6	32.9	37.0	45.0
R7	2,805'	39.6	39.6	28.2	27.5	31.6	39.6

## 10.4 NIGHTTIME CONCRETE POUR NOISE ANALYSIS

Using the reference concrete pour activity construction equipment noise levels, calculations of the nighttime Project construction noise level impacts at the nearby sensitive receiver locations were completed. Table 10-8 presents the short-term nighttime construction noise levels at the noise receiver locations which are expected to range from 29.4 to 41.0 dBA  $L_{eq}$ . To assess the highest nighttime construction noise levels, this analysis shows the highest noise impacts when the equipment with the highest reference noise level is operating at the closest point from nighttime concrete pour activity to each receiver location. Exhibit 10-A shows the distance from each receiver location to the nighttime concrete pour activity locations.

**TABLE 10-8: NIGHTTIME CONCRETE POUR EQUIPMENT NOISE LEVELS**

Reference Construction Activity <sup>1</sup>	Reference Noise Level @ 50 Feet (dBA $L_{eq}$ )
Concrete Mixer Truck Movements	71.2
Concrete Paver Activities	65.6
Concrete Mixer Pour & Paving Activities	65.9
Concrete Mixer Backup Alarms & Air Brakes	71.6
Concrete Mixer Pour Activities	67.7
Highest Reference Noise Level at 50 Feet (dBA $L_{eq}$ ):	71.6

Receiver Location	Distance to Nighttime Concrete Pour Activity (Feet) <sup>2</sup>	Distance Attenuation (dBA $L_{eq}$ ) <sup>3</sup>	Estimated Noise Barrier Attenuation (dBA $L_{eq}$ ) <sup>4</sup>	Construction Noise Level (dBA $L_{eq}$ )
R1	1,697'	-30.6	0.0	41.0
R2	2,191'	-32.8	0.0	38.8
R3	2,611'	-34.4	0.0	37.2
R4	2,500'	-34.0	0.0	37.6
R5	2,287'	-33.2	0.0	38.4
R6	3,572'	-37.1	0.0	34.5
R7	3,606'	-37.2	-5.0	29.4

<sup>1</sup> Reference construction noise level measurements taken by Urban Crossroads, Inc.

<sup>2</sup> Distance from the nearest point of construction activity to the nearest receiver.

<sup>3</sup> Point (stationary) source drop off rate of 6.0 dBA per doubling of distance.

<sup>4</sup> Estimated barrier attenuation from existing barriers and intervening structures in the Project study area.

## 10.5 CONSTRUCTION NOISE THRESHOLDS OF SIGNIFICANCE

Table 10-9 shows the highest construction noise levels at the potentially impacted receiver locations from daytime and nighttime activities. As shown on Table 10-9, the daytime construction noise levels are expected to approach 50.2 dBA  $L_{eq}$  and will satisfy the City of Chino 65 dBA  $L_{eq}$  significance threshold during temporary Project construction activities. Nighttime concrete pour activity noise levels are shown to approach 41.0 dBA  $L_{eq}$  and will satisfy the City of Chino 65 dBA  $L_{eq}$  significance threshold during temporary Project construction activities at the nearby sensitive receiver locations. Therefore, the unmitigated noise impact due to daytime and nighttime Project construction is considered *less than significant*.

**TABLE 10-9: UNMITIGATED CONSTRUCTION ACTIVITY NOISE LEVEL COMPLIANCE**

Receiver Location <sup>1</sup>	Unmitigated Construction Noise Levels (dBA $L_{eq}$ )			Threshold Exceeded? <sup>5</sup>	
	Highest Daytime Activity Noise Levels <sup>2</sup>	Nighttime Concrete Pour Activity Noise Levels	Threshold <sup>4</sup>	Highest Daytime Activity	Nighttime Concrete Pour Activity
R1	50.2	41.0	65	No	No
R2	47.5	38.8	65	No	No
R3	45.6	37.2	65	No	No
R4	46.9	37.6	65	No	No
R5	50.0	38.4	65	No	No
R6	45.0	34.5	65	No	No
R7	39.6	29.4	65	No	No

<sup>1</sup> Noise receiver locations are shown on Exhibit 10-A.

<sup>2</sup> Estimated daytime construction noise levels during peak operating conditions, as shown on Table 10-7.

<sup>3</sup> Estimated nighttime concrete pour construction noise levels during peak operating conditions, as shown on Table 10-8.

<sup>4</sup> Construction noise standards as shown on Table 4-2.

<sup>5</sup> Do the estimated Project construction noise levels satisfy the construction noise level threshold?

## 10.6 CONSTRUCTION VIBRATION IMPACTS

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from Project construction activities would cause only intermittent, localized intrusion. The proposed Project's construction activities most likely to cause vibration impacts are:

- **Heavy Construction Equipment:** Although all heavy mobile construction equipment has the potential of causing at least some perceptible vibration while operating close to building, the vibration is usually short-term and is not of sufficient magnitude to cause building damage. It is not expected that heavy equipment such as large bulldozers would operate close enough to any residences to cause a vibration impact.

- Trucks: Trucks hauling building materials to construction sites can be sources of vibration intrusion if the haul routes pass through residential neighborhoods on streets with bumps or potholes. Repairing the bumps and potholes generally eliminates the problem.

Ground-borne vibration levels resulting from construction activities occurring within the Project site were estimated by data published by the Federal Transit Administration. Construction activities that would have the potential to generate low levels of ground-borne vibration within the Project site include grading. Using the vibration source level of construction equipment provided on Table 6-9 and the construction vibration assessment methodology published by the FTA, it is possible to estimate the Project vibration impacts. Table 10-10 presents the expected Project related vibration levels at the nearby receiver locations.

Based on the reference vibration levels provided by the FTA, a large bulldozer represents the peak source of vibration with a reference velocity of 0.089 in/sec PPV at 25 feet. At distances ranging from 1,467 to 2,805 feet from Project construction activities, construction vibration velocity levels are expected to approach 0.0002 in/sec PPV, as shown on Table 10-10. To assess the human perception of vibration levels in PPV the velocities are converted to RMS vibration levels based on the Caltrans *Transportation and Construction Vibration Guidance Manual* conversion factor of 0.71. Table 10-10 shows the highest construction vibration levels in RMS are expected to approach 0.0001 in/sec RMS at the nearby receiver locations. Based on the City of Chino Municipal Code standard of 0.05 in/sec RMS, the proposed Project construction activities will satisfy the vibration standard of 0.05 in/sec RMS at all receiver locations during Project construction. Therefore, the Project-related vibration impacts will be *less than significant* during the construction activities at the Project site.

Further, the Project-related construction vibration levels do not represent levels capable of causing building damage to nearby residential homes. The FTA identifies construction vibration levels capable of building damage ranging from 0.12 to 0.5 in/sec PPV. (3) The peak Project-construction vibration levels shown on Table 10-10, approaching 0.0002 in/sec PPV, will remain below the FTA vibration levels for building damage at the residential homes near the Project site. Further, the impacts at the site of the closest sensitive receivers are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter.

**TABLE 10-10: UNMITIGATED CONSTRUCTION EQUIPMENT VIBRATION LEVELS**

Receiver Location <sup>1</sup>	Distance to Closest Const. Activity (Feet)	Receiver PPV Levels (in/sec) <sup>2</sup>					RMS Velocity Levels (in/sec) <sup>3</sup>	Threshold Exceeded? <sup>4</sup>
		Small Bulldozer	Jack-hammer	Loaded Trucks	Large Bulldozer	Peak Vibration		
R1	1,467'	0.0000	0.0001	0.0002	0.0002	0.0002	0.0001	No
R2	2,009'	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	No
R3	2,503'	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	No
R4	2,148'	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	No
R5	1,501'	0.0000	0.0001	0.0002	0.0002	0.0002	0.0001	No
R6	2,686'	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	No
R7	2,805'	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	No

<sup>1</sup> Receiver locations are shown on Exhibit 10-A.

<sup>2</sup> Based on the Vibration Source Levels of Construction Equipment included on Table 6-9.

<sup>3</sup> Vibration levels in PPV are converted to RMS velocity using a 0.71 conversion factor identified in the Caltrans Transportation and Construction Vibration Guidance Manual, September 2013.

<sup>4</sup> Does the vibration exceed the maximum acceptable vibration threshold?

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25. **California Department of Transportation.** *Traffic Noise Attenuation as a Function of Ground and Vegetation Final Report*. June 1995. FHWA/CA/TL-95/23.
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## 12 CERTIFICATION

The contents of this noise study report represent an accurate depiction of the noise environment and impacts associated with the proposed Chino Parcel Delivery Project. The information contained in this noise study report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (949) 336-5979.

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### EDUCATION

Master of Science in Civil and Environmental Engineering  
California Polytechnic State University, San Luis Obispo • December, 1993  
  
Bachelor of Science in City and Regional Planning  
California Polytechnic State University, San Luis Obispo • June, 1992

### PROFESSIONAL REGISTRATIONS

PE – Registered Professional Traffic Engineer – TR 2537 • January, 2009  
AICP – American Institute of Certified Planners – 013011 • June, 1997–January 1, 2012  
PTP – Professional Transportation Planner • May, 2007 – May, 2013  
INCE – Institute of Noise Control Engineering • March, 2004

### PROFESSIONAL AFFILIATIONS

ASA – Acoustical Society of America  
ITE – Institute of Transportation Engineers

### PROFESSIONAL CERTIFICATIONS

Certified Acoustical Consultant – County of Orange • February, 2011  
FHWA-NHI-142051 Highway Traffic Noise Certificate of Training • February, 2013

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**APPENDIX 3.1:**  
**CITY OF CHINO MUNICIPAL CODE**

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**Sections:**

9.40.010 - Definitions.

The following words, phrases and terms as used in this chapter shall have the meanings as indicated here:

"Agricultural property" means a parcel of real property which is undeveloped for any use other than agricultural purposes.

"Ambient noise level" means the all-encompassing noise level associated with a given environment, being a composite of sounds from all sources, excluding the alleged offensive noise, at the location and approximate time at which a comparison with the alleged offensive noise is to be made.

"A-weighted sound level" means the total sound level meter with a reference pressure of twenty micro-pascals using the A-weighted network (scale) at slow response. The unit of measurement shall be defined as dBA.

"Commercial property" means a parcel of real property which is developed and used as either in or part or in whole for commercial purposes.

"Cumulative period" means an additive period of time composed of individual time segments which may be continuous or interrupted.

"Decibel (dB)" means a unit which denotes the ratio between two quantities which are proportional to power: the number of decibels corresponding to the ratio of two amounts of power is ten times the logarithm to the base ten of this ratio.

"Director of community development" means the director of community development of the city of Chino or his/her duly authorized deputy.

"Dwelling unit" means a single unit providing complete independent living facilities for one or more persons including permanent provisions for living, sleeping, eating, cooking and sanitation.

"Emergency machinery, vehicle, work or alarm" means any machinery, vehicle, work or alarm used, employed, performed or operated in an effort to protect, provide or restore safety conditions in the community or for the citizenry, or work by private or public utilities when restoring utility service.

"Fixed noise source" means a stationary device which creates sounds while fixed or motionless including but not limited to residential, agricultural, industrial and commercial machinery and equipment, pumps, fans, compressors, air conditioners and refrigeration equipment.

"Grading" means any excavating or filling of earth material or any combination thereof conducted at a site to prepare said site for construction or other improvements thereon.

"Hertz (Hz)" means the unit which describes the frequency of a function periodic in time which is the reciprocal of the period.

"Health care institution" means any hospital, convalescent home or other similar facility excluding residential.

"Impulsive noise" means a noise of short duration usually less than one second and of high intensity, with an abrupt onset and rapid decay.

"Industrial property" means a parcel of real property which is developed and used either in part or in whole for manufacturing purposes.

"Intruding noise level" means the total sound level, in decibels, created, caused, maintained or originating from an alleged offensive source at a specified location while the alleged offensive source is in operation.

"Licensed" means the issuance of a formal license or permit by the appropriate jurisdictional authority, or where no permits or licenses are issued, the sanctioning of the activity by the jurisdiction as noted in public record.

"Major roadway" means any street, avenue, boulevard or highway used for motor vehicle traffic which is owned or controlled by a public government entity.

"Mobile noise source" means any noise source other than a fixed noise source.

"Person" means a person, firm, association, co-partnership, joint venture, corporation or any entity, public or private in nature.

"Residential property" means a parcel of real property which is developed and used either in part or in whole for residential purposes, other than transient uses such as hotels and motels, and residential care facilities.

"Simple tone noise" means a noise characterized by a predominant frequency or frequencies so that other frequencies cannot be readily distinguished. If measured, simple tone noise shall exist if the one-third octave band sound pressure levels in the band with the tone exceeds the arithmetic average of the sound pressure levels of the two continuous one-third octave bands as follows: 5 dB for frequencies of 500 Hertz (Hz) and above or; by 15 dB for frequencies less than equal to 125 Hz.

"Sound level meter" means an instrument meeting American National Standard Institute's Standard S1.4-1971 or most recent revision thereof for Type 2 sound level meters or an instrument and the associated recording and analyzing equipment which will provide equivalent data.

"Sound pressure level" of a sound, in decibels, means twenty times the logarithm to the base 10 of the ratio of the pressure of the sound to a reference pressure shall be explicitly stated.

"Vibration" means any movement of the earth, ground or other similar surface created by a temporal and spacial oscillation device or equipment located upon, affixed in conjunction with that surface.

(Ord. 95-10 § 1 (part), 1995.)

9.40.020 - Decibel measurement criteria.

Any decibel measurement made pursuant to the provisions of this chapter shall be based on a reference sound pressure of twenty micro-pascals as measured with a sound level meter using the A-weighted network (scale) at slow response.

(Ord. 95-10 § 1 (part), 1995.)

9.40.030 - Designated noise zones.

The properties hereinafter described are assigned to the following noise zones:

Noise Zone I: All single-, double- and multiple-family residential properties.

Noise Zone II: All commercial properties.

Noise Zone III: All manufacturing or industrial properties.

(Ord. 95-10 § 1 (part), 1995.)

9.40.040 - Exterior noise standards.

The following noise standards, unless otherwise specifically indicated, shall apply to all residential property with a designated noise zone:

These criteria are given in terms of allowable noise levels for a given period of time at the residential property boundary. Higher noise levels are permitted during the day (seven a.m. to ten p.m.) than the night (ten p.m. to seven a.m.). The table below shows the acceptable levels at residential land uses during the daytime and nighttime.

City of Chino Exterior Noise Ordinance

Criteria for Residential Properties (Zone 1)

Maximum Time of Exposure	Noise		
Metric	Noise Level Not to Exceed		
		7 am—10 pm	10 pm—7 am
30 min/hr	L50	55 dBA	50 dBA
15 min/hr	L25	60 dBA	55 dBA
5 min/hr	L8.3	65 dBA	60 dBA
1 min/hr	L1.7	70 dBA	65 dBA
Any period of time	Lmax	75 dBA	70 dBA

Each of the noise limits specified here shall be reduced by five dBA for impulse or simple tone noises, or for noises consisting of speech or music; provided, however, that if the ambient noise level exceeds the resulting standard, the ambient shall be the standard.

It is unlawful for any person at any location within the incorporated area of the city to create any noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which causes the noise level when measured on any other property, to exceed:

- The noise standard for a cumulative period of more than thirty minutes in any hour; or
- The noise standard plus five dBA for a cumulative period of more than fifteen minutes in any hour; or
- The noise standard plus ten dBA for a cumulative period of more than five minutes in any hour; or
- The noise standard plus fifteen dBA for a cumulative period of more than one minute in any hour; or
- The noise standard plus twenty dBA for any period of time.

In the event the ambient noise level exceeds any of the first four noise limit categories above, the cumulative period applicable to said category shall be increased to reflect said ambient noise level. In the event the ambient noise level exceeds the fifth noise category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.

If the measurement location is on boundary between two different noise zones, the lower noise level standard applicable to the noise zone shall apply.

If the intruding noise source is continuous and cannot be reasonably discontinued or stopped for a time period whereby the ambient noise level can be determined, the measured noise level obtained while the source is in operation shall be compared directly to the allowable noise level standards as specified respective to the measurement location's designated land use and for the time of the day the noise level is measured.

- A. The reasonableness of temporarily discontinuing the noise generation by an intruding noise source shall be determined by the director or his/her duly authorized deputy for the purpose of establishing the existing ambient noise level at the measurement location.

(Ord. 95-10 § 1 (part), 1995.)

#### 9.40.050 - Interior noise standards.

The following noise standard, unless otherwise specifically indicated, shall apply to all residential property within all noise zones:

Each of the noise limits specified above shall be reduced by five dBA for impulse or simple tone noises or for noises consisting of speech or music provided, however, if the ambient noise level exceeds the resulting standard, the ambient shall be the standard.

It is unlawful for any person at any location within the incorporated area of the city to create any noise or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such a person which causes the noise level when measured within any other residential dwelling unit in any noise zone to exceed:

- A. The noise standard for cumulative period of more than five minutes in any hour; or
- B. The noise standard plus 5 dBA for a cumulative period of more than one minute in any hour; or
- C. The noise standard plus ten dBA for any period of time.

In the event the ambient noise level exceeds any of the first two noise limit categories above, the noise standard applicable to said category shall be increased to reflect the maximum ambient noise level.

If the measurement location is on a boundary between two different noise zones, the lower noise level standard applicable to the noise zone shall apply.

If the intruding noise source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient noise level can be determined; the same procedures specified in Section 9.40.040(E), shall be deemed proper to enforce the provisions of this section.

(Ord. 95-10 § 1 (part), 1995.)

#### 9.40.060 - Special provisions.

The following activities shall be exempted from the provisions of this chapter:

- A. Activities conducted on public parks, public playgrounds and public or private school grounds including school athletic and school entertainment events that are conducted under the sanction of the school or which a license or permit has been duly issued pursuant to any provision of the city code;
- B. Occasional outdoor gatherings, public dances, show, sporting and entertainment events, provided said events are conducted pursuant to a permit or license issued by the appropriate jurisdiction relative to the staging of said events. Such permits and licenses may restrict noise;
- C. Any mechanical device, apparatus or equipment used, related to or connected with emergency machinery, vehicle, work or warning alarm or bell, provided the sounding of any bell or alarm on any building or motor vehicle shall terminate its operation within thirty minutes in any hour of its being activated;
- D. Noise sources associated with or vibration created by construction, repair, remodeling or grading of any real property or during authorized seismic surveys, provided said activities do not take place outside the hours for construction as defined in Section 15.44.030 of this code, and provided the noise standard of sixty-five dBA plus the limits specified in Section 9.40.040(B) as measured on residential property and any vibration created does not endanger the public health, welfare and safety;
- E. All mechanical devices, apparatus or equipment associated with agriculture operations provided:
  - 1. Operations do not take place between eight p.m. and seven a.m. on weekdays, including Saturday, or at any time Sunday or a Federal holiday, or
  - 2. Such operations and equipment are utilized for the protection of salvage of agricultural crops during periods of potential or actual frost damage or other adverse weather conditions, or
  - 3. Such operations and equipment are associated with agricultural pest control through pesticide application, provided the application is made in accordance with permits issued by or regulations enforced by the California Department of Agriculture,
  - 4. Noise sources associated with the maintenance of real property, provided said activities take place between the hours of seven a.m. to eight p.m. on any day except Sunday, or between the hours of nine a.m. and eight p.m. on Sunday,
  - 5. Any activity to the extent regulation thereof has been preempted by state or federal law.

NOTE: Preemption may include motor vehicle, aircraft in flight, and railroad noise regulations.

(Ord. 2004-23 § 59, 2004; Ord. 95-10 § 1 (part), 1995.)

#### 9.40.070 - Schools, churches, libraries, health care institutions—Special provisions.

It shall be deemed unlawful for any person to create any noise which causes the noise level at any school, hospital or similar health care institution, church or library while the same is in use, to exceed the noise standards specified in Section 9.40.040 prescribed for the assigned noise zone level, unreasonably interferes with the use of such institutions, or which unreasonably disturbs or annoys patients in a hospital, convalescent home or other similar health care institutions, provided conspicuous signs are displayed in three separate locations within one-tenth-mile of the institution or facility indicating a quiet zone.

(Ord. 95-10 § 1 (part), 1995.)

#### 9.40.080 - Air conditioning and refrigeration—Special provisions.

Until January 1, 1996, the noise standards enumerated in Section 9.40.040 and 9.40.050 shall be increased five dBA where the alleged intruding noise source is an air conditioning or refrigeration system or associated equipment which was installed prior to the effective date of the ordinance codified in this chapter.

(Ord. 95-10 § 1 (part), 1995.)

#### 9.40.090 - Noise sources generated on publicly owned property.

Notwithstanding any other provision of this code and in addition thereto, it is unlawful for any person to permit or cause any noise, sound, music or program to be emitted from any radio, tape player, tape recorder, record player, television outdoors, or any other mode on or in any publicly owned property, park or place when such noise, sound, music or program is audible to a person of normal hearing sensitivity one hundred feet from said radio, tape player, tape recorder, record player or television.

- A. As used herein, "a person of normal hearing sensitivity" means a person who has a hearing threshold level of between zero decibels and twenty-five decibels HL averaged over the frequencies 500, 1,000 and 2,000 Hertz.
- B. Notwithstanding any other provision of this code, any person violating this section shall be guilty of an infraction and upon conviction thereof, is punishable by a fine not exceeding fifty dollars, for a first violation; a fine not exceeding one hundred dollars for a second violation of this section within one year; a fine not exceeding two hundred fifty dollars for each additional violation of this section within one year. A person who violates the provisions of this section shall be deemed to be guilty of a separate offense for each day, or portion thereof, during which the violation continues or is repeated.
- C. Notwithstanding any other provision of this code, no citation or notice to appear shall be issued or criminal complaint shall be filed for a violation of this section unless the offending party is first given a verbal or written notification of violation by any peace officer, public officer, park ranger or other person charged with enforcing this section and the offending party given an opportunity to correct said violation.
- D. This section shall not apply to broadcasting from any aircraft, vehicle or stationary sound amplifying equipment or to the use of radios, tape players, tape recorders, record players or televisions in the course of an assembly or festival for which a license has been issued or a parade for which a permit has been issued pursuant to or any other activity, assembly or function for which a permit or license has been duly issued pursuant to any provision of the city code.

(Ord. 95-10 § 1 (part), 1995.)

#### 9.40.100 - Noise level measurement.

The location selected for measuring exterior noise levels shall be made within the affected residential unit. The measurements shall be made at a point at least four feet from the wall, ceiling or floor nearest the noise source with windows in an open position depending on the normal seasonal ventilation requirements.

(Ord. 95-10 § 1 (part), 1995.)

#### 9.40.110 - Vibration.

Notwithstanding other sections of this chapter, it is unlawful for any person to create, maintain or cause any ground vibration which is perceptible without instruments at any point on any affected property adjoining the property on which the vibration source is located. For the purpose of this chapter, the perception threshold shall be presumed to be more than 0.05 inches per second RMS vertical velocity.

(Ord. 95-10 § 1 (part), 1995.)

#### 9.40.120 - Proposed developments.

Each department whose duty it is to review and approve new projects or changes to existing projects that result or may result in the creation of noise shall consult with the director prior to any such approval. If at any time the director of community development has reason to believe that a standard, regulation, action, proposed standard, regulation or action of any department respecting noise does not conform to the provisions as specified in this chapter, the director may request such department to consult with them on the advisability of revising such standard or regulation to obtain uniformity.

(Ord. 95-10 § 1 (part), 1995.)

#### 9.40.130 - Variance procedure.

The variance procedure process shall remain as specified in the city's zoning code (Title 20).



(Ord. 95-10 § 1 (part), 1995.)

9.40.140 - Planning commission.

The planning commission shall evaluate all applications for variance from the requirements of this chapter and may grant said variances with respect to time for compliance, subject to such terms, conditions and requirements as it may deem reasonable to achieve maximum compliance with the provisions of this chapter. Said terms, conditions and requirements may include, but shall not be limited to, limitation on noise levels and operating hours. Each such variance shall set forth in detail the approved method of achieving maximum compliance and a time schedule for its accomplishment. In its determinations, the commission shall consider the following:

- A. The magnitude of nuisance caused by the offensive noise;
- B. The uses of property within the area of impingement by the noise;
- C. The time factors related to study, design, financing and construction of remedial work;
- D. The economic factors related to age and useful life of the equipment;
- E. The general public interest, welfare and safety.

Any variance granted by the commission shall be by resolution and shall be transmitted to the director of community development for enforcement. Any violation of the terms of said variance shall be unlawful.

The planning commission may require additional acoustical studies based on the individual circumstances of each case. Such studies must be performed by a person qualified in acoustical engineering with the state of California.

Meetings of the planning commission shall be held at the call of the secretary and at such times and locations as the commission shall determine. All such meetings shall be open to the public.

(Ord. 95-10 § 1 (part), 1995.)

9.40.150 - Appeals.

The appeal procedure process shall remain as specified in the city's zoning code (Title 20).

(Ord. 95-10 § 1 (part), 1995.)

9.40.160 - Prima facie violation.

Any noise exceeding the noise level standard as specified in Section 9.40.040 and 9.40.050 or vibration exceeding the standard as specified in Section 9.40.110 of this chapter, shall be deemed to be prima facie evidence of a violation of the provisions of this chapter.

(Ord. 95-10 § 1 (part), 1995.)

9.40.170 - Violations/misdemeanors.

Any persons violating any of the provisions of this chapter shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined in an amount not to exceed an amount as specified by city council resolution, or be imprisoned in the Jail for a period not to exceed six months or by both such fine and imprisonment. Each day such violation is committed or permitted to continue shall constitute a separate offense and shall be punishable as such.

(Ord. 95-10 § 1 (part), 1995.)

9.40.180 - Violations/additional remedies— Injunctions.

As an additional remedy, the operation or maintenance of any device, instrument, vehicle or machinery in violation of any provisions of this chapter which operation or maintenance causes or creates sound levels or vibration exceeding the allowable standards as specified in this chapter shall be deemed and is hereby declared to be a public nuisance and may be subject to abatement summarily by a restraining order or injunction issued by a court of competent jurisdiction.

Any violation of this chapter is declared to be a public nuisance and may be abated in accordance with law. The expense of this chapter is declared to be public nuisance and may be by resolution of the city council declared to be a lien against the property on which such nuisance is maintained, and such lien shall be made a personal obligation of the property owner.

(Ord. 95-10 § 1 (part), 1995.)

9.40.190 - Manner of enforcement.

The director is directed to enforce the provisions of this chapter and is authorized and may cite at his/her discretion, any person without a warrant who has reasonable cause to believe that such person has committed a misdemeanor in his/her presence.

No person shall interfere with, oppose or resist any authorized person charged with the enforcement of this chapter while such person is engaged in the performance of his/her duty.

Violations of this chapter shall be prosecuted in the same manner as other misdemeanor violations pursuant to Chapter 1.12; provided, however, that in the event of an initial violation of the provisions of this chapter, a written notice shall be given the alleged violator which specifies the time by which the condition shall be corrected or an application for variance shall be received by the event the cause of the violation has been removed, the condition abated or fully corrected within the time period specified in the written notice.

In the event the alleged violator cannot be located in order to serve the notice of intention to prosecute, the notice as required herein shall be deemed to be given upon mailing such notice to registered or certified mail to the alleged violator at his last known address or at the place where the violation occurred in which event the specified time period for abating the violation or applying for a variance shall commence at the date of the day following the mailing of such notice. Subsequent violations of the same offense shall result in the immediate filing of a misdemeanor complaint.

(Ord. 95-10 § 1 (part), 1995.)

#### 9.40.200 - Delay in implementation—Fixed noise sources.

None of the provisions of this chapter shall apply to a fixed sound source during the period commencing the effective date of this chapter and terminating one-hundred eighty days thereafter.

(Ord. 95-10 § 1 (part), 1995.)

- A. Purpose and intent. The planning boundaries of the airport overflight area have been established by the airport comprehensive land use plan (ACLUP), prepared for Chino Airport pursuant to California Public Utilities Code Section 21670 et seq. and generally shown on the zoning map. The provisions contained herein shall regulate the use and development of all property located within the airport overflight area. In addition to the general purpose of overlay districts as provided in Section 20.09.010 of this Code, the specific purpose of the airport (A) overlay district is to:
1. Implement the airport comprehensive land use plan, prepared for the Chino Airport pursuant to California Public Utilities Code Section 21670 et seq.;
  2. Identify areas of the city subject to high noise levels and crash impacts by the operation of the Chino Airport; and
  3. Encourage the orderly use and development of the area around Chino Airport, which is compatible with continued airports operations.
- B. Permitted uses.
1. Within each aviation safety zone identified in the ACLUP prepared for the Chino Airport, permitted uses shall be only those allowed by both the base zoning district and the airport overlay as shown in Table 20.09-1 of this chapter.
  2. An aviation easement shall be recorded against the property deed of all new development projects and use permits within a ten thousand-foot radius of Chino Airport (safety zone I, II and III), advising current and future property owner(s) of potential impacts and stating that the property may be subject to overflight noise, vibration, and dust from aircraft.

TABLE 20.09-1 AIRPORT LAND USE COMPATIBILITY

Land Use Groups	Aviation Safety Zones		
	I	II	III
Residential	Clearly Unacceptable	Clearly Unacceptable	Normally Acceptable
Lodging places	Clearly Unacceptable	Clearly Unacceptable	Normally Acceptable
Educational facilities	Clearly Unacceptable	Clearly Unacceptable	Normally Acceptable
Hospitals and nursing homes	Clearly Unacceptable	Clearly Unacceptable	Normally Acceptable
Assembly uses (auditoriums, stadiums, concert halls, theaters, churches, etc.)	Clearly Unacceptable	Clearly Unacceptable	Normally Acceptable
Sports arenas and outdoor spectator sports	Clearly Unacceptable	Clearly Unacceptable	Normally Acceptable
Parks, playgrounds, recreation centers, fairgrounds and picnic grounds	Clearly Unacceptable	Normally Unacceptable	Normally Acceptable
Libraries, museums and art galleries	Clearly Unacceptable	Clearly Unacceptable	Normally Acceptable
Golf courses, commercial riding stables and water recreation	Normally Unacceptable	Normally Acceptable	Normally Acceptable
Commercial office	Clearly Unacceptable**	Clearly Unacceptable**	Normally Acceptable**
Commercial retail	Clearly Unacceptable**	Clearly Unacceptable**	Normally Acceptable
Manufacturing and warehouse/distribution	Clearly Unacceptable	Normally Acceptable	Normally Acceptable
Public utilities	Clearly Unacceptable	Normally Acceptable	Normally Acceptable
Livestock, animal breeding and animal keeping	Normally Unacceptable**	Normally Acceptable**	Clearly Acceptable

Agriculture (commercial growing and field crops)	Normally Acceptable	Clearly Acceptable	Clearly Acceptable
Conservation areas and natural recreation areas	Normally Acceptable	Clearly Acceptable	Clearly Acceptable
Uses of a hazardous nature	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Maximum gross density (in persons per acre)	0.5	25	No Limit
Maximum assembly recommended*	10	100	No Limit

**Legend:** Clearly Acceptable—No restrictions.

Normally Acceptable—Restricted development undertaken only after detailed analysis and satisfactory mitigation measures are initiated.

Normally Unacceptable—No new development shall be permitted.

Clearly Unacceptable—New construction or development should not be undertaken. Furthermore, an effort should be made to relocate existing uses.

\* Assembly is the gathering together of persons for such purposes as deliberation, education, instruction, worship, entertainment, amusement, drinking or dining, or awaiting transportation, as defined in the California Building Code.

\*\* Some specific uses in this group may be acceptable, provided the density criteria are met.


- C. Noise standards. California Administrative Code Section 5000 et seq., establishes criteria for the regulation of noise in the vicinity of airports. In an effort to reduce and control the impact of noise generated from Chino Airport on the community, noise contours have been established by the ACLUP prepared for Chino Airport. Within each noise contour identified on the noise contour map contained within the ACLUP, land shall only be used and/or developed in accordance with Table 20.09-2 of this chapter. The table establishes the degree of acceptability of certain land use groups within each noise contour.


In addition to the requirements of the ACLUP, a noise impact notification notice shall be recorded against the property deed of all new development projects and use permits within the 65 CNEL noise contour, advising current and future property owner(s) of potential impacts and stating that the property may be subject to overflight noise, vibration, and dust from aircraft.


TABLE 20.09-2 COMMUNITY NOISE COMPATIBILITY STANDARDS


Land Use Group	Maximum Interior/Exterior Noise Levels (dBA)	Noise Contour per ACLUP									
		55	60	65	70	75	80				
Residential	45/60										
Lodging places	45/60										
Educational facilities	45/65										
Hospitals & nursing homes	45/65										
Assembly uses (auditoriums, stadiums, concert halls, theaters, churches, etc.)	45/no limit										
Sports arenas & outdoor spectator sports	45/no limit										
Parks, playgrounds, recreation centers, Fairgrounds & picnic grounds	50/65										
Libraries, museums & art galleries	45/65										
Golf courses, commercial riding stables & water recreation	50/65										
Commercial office	45/65										

Land Use Group	Maximum Interior/Exterior Noise Levels (dBA)	Noise Contour per ACLUP									
		55	60	65	70	75	80				
Commercial retail	50/no limit										
Manufacturing & warehouse/distribution	no limit/no limit										
Public utilities	no limit/no limit										
Livestock, animal breeding & animal Keeping	no limit/no limit										
Agriculture (commercial growing & field crops)	no limit/no limit										
Conservation areas & natural recreation areas	45/65										

Legend:  Normally Acceptable—Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

 Conditionally Acceptable—New construction or development shall only be undertaken after a detailed acoustic analysis is prepared recommending measures to mitigate noise impacts to specified interior/exterior levels and mitigation measures are incorporated in the project design.

 Normally Unacceptable—New construction or development is discouraged; however, if new construction or development does proceed, a detailed acoustic analysis shall be prepared recommending measures to mitigate noise impacts to specified interior/exterior levels and mitigation measures are incorporated in the project design.

 Clearly Unacceptable—New construction or development should generally not be undertaken.

- D. Objects affecting navigable airspace. Federal Aviation Regulation (FAR) Part 77, establishes criteria for determining obstructions in navigable airspace, sets forth procedures for noticing the FAA of certain proposed construction or alteration projects, provides for aeronautical studies of obstructions to air navigation to determine their effect on the safe and efficient use of airspace and provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation. The review of and restrictions on objects affecting navigable airspace shall be as prescribed by FAR Part 77.

(Ord. 2010-05, § 1(exh. A), 2010.)

**APPENDIX 3.2:**  
**CITY OF ONTARIO MUNICIPAL CODE**

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## CHAPTER 29: NOISE

- 5-29.01 Declaration of findings and policy
- 5-29.02 Definitions
- 5-29.03 Designated noise zones
- 5-29.04 Exterior noise standards
- 5-29.05 Interior noise standards
- 5-29.06 Exemptions
- 5-29.07 Loud and disturbing noise
- 5-29.08 Real property maintenance noise regulations
- 5-29.09 Construction activity noise regulations
- 5-29.10 Other public agency exceptions
- 5-29.11 Schools, day care centers, churches, libraries, museums, health care institutions; Special provisions
- 5-29.12 Sound amplifying equipment
- 5-29.13 Amplified sound
- 5-29.14 Motor vehicles
- 5-29.15 Noise level measurement
- 5-29.16 Prima facie violation
- 5-29.17 Penalty
- 5-29.18 Enforcement and administration
- 5-29.19 City Manager waiver
- 5-29.20 Noise abatement program

### Sec. 5-29.01. Declaration of findings and policy.

It is hereby found and declared that:

- (a) The making and creation of excessive, unnecessary or unusually loud noises within the limits of the City is a condition that has existed for some time, however, the extent and volume of such noises is increasing;
  - (b) The making, creation or maintenance of such excessive, unnecessary, unnatural or unusually loud noises that are prolonged, unusual and unnatural in their time, place and use affect and are a detriment to public health, comfort, convenience, safety, welfare and prosperity of the residents of the City; and
  - (c) The necessity in the public interest for the provisions and prohibitions hereinafter contained and enacted, is declared as a matter of legislative determination and public policy, and it is further declared that the provisions and prohibitions hereinafter contained and enacted are in pursuance of and for the purpose of securing and promoting the public health, comfort, convenience, safety, welfare and prosperity and the peace and quiet of the residents of the City.
- (§ 2, Ord. 2888, eff. March 6, 2008)

### Sec. 5-29.02. Definitions.

As used in this chapter, specific words and phrases are defined as follows:

- (a) "Ambient noise level" shall mean the all-encompassing noise level associated with a given environment and is a composite of sounds from all sources, excluding the alleged offensive noise or excessive sound, at the location and approximate time at which a comparison with the alleged offensive noise is to be made.
- (b) "Applicable (noise) zone" shall mean the noise zone category based on the actual use of the property, provided that the actual use is a legal use in the City.
- (c) "A-weighted sound level" shall mean the sound pressure level in decibels (dBAs) as measured with a sound level meter using the A-weighted filter network (scale) at slow response and at a pressure of twenty (20) micropascals. The A-weighted filter de-emphasizes the very low and a very high frequency component of sound in a manner similar to the response of the human ear, and is a numerical method of rating human judgment of loudness.
- (d) "Decibel (dBA)" shall mean a unit for measuring the amplitude of a sound, equal to twenty (20) times the logarithm to the base ten (10) of the ratio of pressure of the sound measured to the reference pressure of twenty (20) micropascals.
- (e) "Equivalent sound or noise level (Leq)" shall mean the International Electrotechnical Commission (IEC) 60804 Standard for measurement, or the most recent revision thereof, for the sound level corresponding to a steady state noise level over a given sample period with the same amount of acoustic energy as the actual time varying noise level or the energy average noise level during the sample period. The measurement period for the purposes of this chapter is fifteen (15) minutes.
- (f) "Impulsive noise" shall mean a noise of short duration usually less than one (1) second and of high intensity, with an abrupt onset and rapid decay. Such objectionable noises may also be repetitive.
- (g) "Intrusive noise" shall mean that noise that intrudes over and above the ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence and tonal information content, as well as the prevailing ambient noise level.
- (h) "Maintenance" shall mean the upkeep, repair or preservation of existing property or structures.

- (i) "Noise" shall mean any unwanted sound or sound that is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing or is otherwise annoying.
- (j) "Noise level (sound level)" shall mean the weighted sound pressure level obtained by use of a sound level meter having a standard frequency filter for attenuating part of the sound spectrum. For purposes of this chapter, all noise levels (sound levels) shall be A-weighted sound pressure level.
- (k) "Noise (sound) level meter" shall mean an instrument, including a microphone, an amplifier, an output meter and frequency weighting networks for the measurement and determination of noise and sound levels. For the purposes of this chapter, the sound level meter must meet the International Electrotechnical Commission (IEC) 60651 and 60804 Standards, or the most recent revisions thereof, for Type 1 sound level meters or an instrument and the associated recording and analyzing equipment that will provide equivalent data.
- (§ 2, Ord. 2888, eff. March 6, 2008)

#### Sec. 5-29.03. Designated noise zones.

The properties hereinafter described shall be assigned to the following noise zones:

Noise Zone I:	All single-family residential properties;
Noise Zone II:	All multi-family residential properties and mobile home parks;
Noise Zone III:	All commercial property;
Noise Zone IV:	The residential portion of mixed use properties;
Noise Zone V:	All manufacturing or industrial properties and all other uses.

The actual use of the property, and not necessarily its zoning designation, shall be the determining factor in establishing whether a property is in Noise Zone I, II, III, IV or V, provided that the actual use is a legal use within the applicable zone.

(§ 2, Ord. 2888, eff. March 6, 2008)

#### Sec. 5-29.04. Exterior noise standards.

- (a) The following exterior noise standards, unless otherwise specifically indicated, shall apply to all properties within a designated noise zone.

<i>Allowable Exterior Noise Level (1)</i>		<i>Allowed Equivalent Noise Level, Leq. (2)</i>	
<i>Noise Zone</i>	<i>Type of Land Use</i>	<i>7 a.m. to 10 p.m.</i>	<i>10 p.m. to 7 a.m.</i>
I	Single-Family Residential	65 dBA	45 dBA
II	Multi-Family Residential, Mobile Home Parks	65 dBA	50 dBA
III	Commercial Property	65 dBA	60 dBA
IV	Residential Portion of Mixed Use	70 dBA	70 dBA
V	Manufacturing and Industrial, Other Uses	70 dBA	70 dBA

- (1) If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard.
  - (2) Measurements for compliance are made on the affected property pursuant to § 5-29.15.
  - (b) It is unlawful for any person at any location within the incorporated area of the City to create noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which noise causes the noise level, when measured at any location on any other property, to exceed either of the following:
    - (1) The noise standard for the applicable zone for any fifteen-minute (15) period; and
    - (2) A maximum instantaneous (single instance) noise level equal to the value of the noise standard plus twenty (20) dBA for any period of time (measured using A-weighted slow response).
  - (c) In the event the ambient noise level exceeds the noise standard, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.
  - (d) The Noise Zone IV standard shall apply to that portion of residential property falling within one hundred (100) feet of a commercial property or use, if the noise originates from that commercial property or use.
  - (e) If the measurement location is on a boundary between two (2) different noise zones, the lower noise level standard applicable to the noise zone shall apply.
- (§ 2, Ord. 2888, eff. March 6, 2008)

#### Sec. 5-29.05. Interior noise standards.

- (a) The following interior noise standards, unless otherwise specifically indicated, shall apply to all properties within a designated noise zone.

<i>Allowable Interior Noise Level (1)</i>		<i>Allowed Equivalent Noise Level, Leq. (2)</i>	
<i>Noise Zone</i>	<i>Type of Land Use</i>	<i>7 a.m. to 10 p.m.</i>	<i>10 p.m. to 7 a.m.</i>
I	Single-Family Residential	45 dBA	40 dBA

II	Multi-Family Residential, Mobile Home Parks	45 dBA	40 dBA
IV	Residential Portion of Mixed Use	45 dBA	40 dBA

- (1) If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard.
  - (2) Measurements for compliance are made on the affected property pursuant to § 5-29.15.
  - (b) It is unlawful for any person at any location within the incorporated area of the City to create noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which noise causes the noise level, when measured at any location on any other property, to exceed either of the following:
    - (1) The noise standard for the applicable zone for any fifteen-minute (15) period;
    - (2) A maximum instantaneous (single instance) noise level equal to the value of the noise standard plus twenty (20) dBA for any period of time (measured using A-weighted slow response).
  - (c) In the event the ambient noise level exceeds the noise standard, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.
  - (d) The Noise Zone IV standard shall apply to that portion of residential property falling within one hundred (100) feet of a commercial property or use, if the noise originates from that commercial property or use.
  - (e) If the measurement location is on a boundary between two (2) different noise zones, the lower noise level standard applicable to the noise zone shall apply.
- (§ 2, Ord. 2888, eff. March 6, 2008)

#### **Sec. 5-29.06. Exemptions.**

The following activities shall be exempted from the provisions of this chapter:

- (a) Any activity conducted on public property, or on private property with the consent of the owner, by any public entity or its officers, employees, representatives, agents, subcontractors, permittees, licensees or lessees that the public entity has authorized are exempt from the provisions of this chapter. This includes, without limitation, sporting and recreational activities that are sponsored, co-sponsored, permitted or allowed by the City or any school district within the City's jurisdictional boundaries. This also includes, without limitation, occasional outdoor gatherings, public dances, shows or sporting and entertainment events, provided such events are conducted pursuant to an approval, authorization, contract, lease, permit or sublease by the appropriate public entity, specifically the planning commission or City Council;
  - (b) Occasional outdoor gatherings, public dances, show, sporting and entertainment events, provided said events are conducted pursuant to a permit or license issued by the appropriate jurisdiction relative to the staging of said events;
  - (c) Any mechanical device, apparatus or equipment used, related to or connected with emergency machinery, vehicle, work or warning alarm or bell, provided the sounding of any bell or alarm on any building or motor vehicle shall terminate its operation within forty-five (45) minutes in any hour of its being activated;
  - (d) Noise sources associated with construction, repair, remodeling, demolition or grading of any real property. Such activities shall instead be subject to the provisions of § 5-29.09;
  - (e) Noise sources associated with construction, repair, remodeling, demolition or grading of public rights-of-way or during authorized seismic surveys;
  - (f) All mechanical devices, apparatus or equipment associated with agriculture operations provided that:
    - (1) Operations do not take place between 8:00 p.m. and 7:00 a.m.;
    - (2) Such operations and equipment are utilized for the protection or salvage of agricultural crops during periods of potential or actual frost damage or other adverse weather conditions; or
    - (3) Such operations and equipment are associated with agricultural pest control through pesticide application, provided the application is made in accordance with permits issued by or regulations enforced by the California Department of Agriculture;
  - (g) Noise sources associated with the maintenance of real property. Such activities shall instead be subject to the provisions of § 5-29.08;
  - (h) Any activity to the extent regulation thereof has been preempted by state or federal law;
  - (i) Any noise sources associated with people and/or music associated with a party at a residential property. Such noise shall be subject to the provisions of OMC § 5-29.07;
  - (j) Any noise source emanating from an ice cream truck within the City. Such noise shall be subject to the provisions of OMC § 4-18.04;
  - (k) Any noise sources associated with barking dogs or other intermittent noises made by animals on any property within the City. Such noise shall be subject to the provisions of OMC Chapter 1, Title 6;
  - (l) Noise sources related to uses approved by a permit or development agreement adopted prior to the date of adoption of this chapter and that contains acoustic or noise standard conditions of approval. This exemption shall only be applicable during the effective period of the City-approved permit or development agreement.
- (§ 2, Ord. 2888, eff. March 6, 2008)

#### **Sec. 5-29.07. Loud and disturbing noise.**

- (a) It is unlawful for any person or property owner within the City to make, cause or allow to be made any loud, excessive, impulsive or intrusive noise, disturbance or commotion that disturbs the peace or quiet of any area or that causes discomfort or annoyance to any reasonable person of normal sensitivities in the area, after a Police or Code Enforcement Officer has first requested that the person or property owner cease and desist from making such noise. The types of loud, disturbing, excessive, impulsive or intrusive noise may include, but shall not be limited to, yelling, shouting, hooting, whistling, singing, playing a musical instrument, or emitting or transmitting any loud music or noise from any mechanical or electrical sound making or sound-amplifying device.
- (b) The factors, standards, and conditions that may be considered in determining whether a violation of the provisions of this section has been committed, included, but not limited to, the following:
  - (1) The level of the noise;
  - (2) The level and intensity of the background (ambient) noise, if any;
  - (3) The proximity of the noise to residential or commercial sleeping areas;

- (4) The nature and zoning of the area within which the noise emanates;
  - (5) The density of inhabitation of the area within which the noise emanates;
  - (6) The time of day and night the noise occurs;
  - (7) The duration of the noise;
  - (8) Whether the noise is constant, recurrent or intermittent;
  - (9) Whether the noise is produced by a commercial or noncommercial activity; and
  - (10) Whether the use is lawful under the provisions of Title 5 of this Code and whether the noise is one that could reasonably be expected from the activity or allowed use.
- (§ 2, Ord. 2888, eff. March 6, 2008)

**Sec. 5-29.08. Real property maintenance noise regulations.**

- (a) No person, while engaged in maintenance of real property, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, except between the hours of 8:00 a.m. and 6:00 p.m.
  - (b) Trimming or pruning that requires the use of chainsaws or mulching machines shall only be allowed between the hours of 8:00 a.m. and 6:00 p.m. on a weekday and between the hours of 9:00 a.m. and 5:00 p.m. on Saturday or Sunday.
  - (c) The use of electrical or gasoline powered blowers, such as commonly used by gardeners or other persons for cleaning lawns, yards, driveways, gutters and other property shall only be allowed between the hours of 8:00 a.m. and 6:00 p.m. on a weekday and between the hours of 9:00 a.m. and 5:00 p.m. on Saturday or Sunday.
  - (d) No landowner, gardener, property maintenance service, contractor, subcontractor or employer shall permit or allow any person or persons working under his or her direction or control to operate any tool, equipment or machine in violation of the provisions of this section.
  - (e) Exceptions. The provisions of this section shall not apply to the following:
    - (1) Emergency property maintenance required by the building official;
    - (2) The maintenance, repair or improvement of any public work or facility by public employees, by any person or persons acting pursuant to a public works contract, or by any person or persons performing such work or pursuant to the direction of, or on behalf of, any public agency; provided, however, this exception shall not apply to the City, or its employees, contractors or agents, unless:
      - (i) The City Manager or department head determines that the maintenance, repair or improvement is immediately necessary to maintain public service,
      - (ii) The maintenance, repair or improvement is of a nature that cannot feasibly be conducted during normal business hours, or
      - (iii) The City Council has approved project specifications, contract provisions, or an environmental document that specifically authorizes maintenance during hours of the day that would otherwise be prohibited pursuant to this section; and
    - (3) Any maintenance that complies with the noise limits specified in § 5-29.04.
- (§ 2, Ord. 2888, eff. March 6, 2008)

**Sec. 5-29.09. Construction activity noise regulations.**

- (a) No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m.
  - (b) No landowner, construction company owner, contractor, subcontractor, or employer shall permit or allow any person or persons working under their direction and control to operate any tool, equipment or machine in violation of the provisions of this section.
  - (c) Exceptions.
    - (1) The provisions of this section shall not apply to emergency construction work performed by a private party when authorized by the City Manager or his or her designee;
    - (2) The maintenance, repair or improvement of any public work or facility by public employees, by any person or persons acting pursuant to a public works contract, or by any person or persons performing such work or pursuant to the direction of, or on behalf of, any public agency; provided, however, this exception shall not apply to the City, or its employees, contractors or agents, unless:
      - (i) The City Manager or a department head determines that the maintenance, repair or improvement is immediately necessary to maintain public services,
      - (ii) The maintenance, repair or improvement is of a nature that cannot feasibly be conducted during normal business hours, or
      - (iii) The City Council has approved project specifications, contract provisions, or an environmental document that specifically authorizes construction during hours of the day that would otherwise be prohibited pursuant to this section; and
    - (3) Any construction that complies with the noise limits specified in §§ 5-29.04 or 5-29.05.
- (§ 2, Ord. 2888, eff. March 6, 2008)

**Sec. 5-29.10. Other public agency exceptions.**

The provisions of this chapter shall not be construed to prohibit any work at different hours by or under the direction of any other public agency or public or private utility companies in cases of necessity or emergency.

(§ 2, Ord. 2888, eff. March 6, 2008)

**Sec. 5-29.11. Schools, day care centers, churches, libraries, museums, health care institutions; Special provisions.**

It is unlawful for any person to create any noise that causes the outdoor noise level at any school, day care center, hospital or similar health care institution, church, library or museum while the same is in use, to exceed the noise standards specified in § 5-29.04 prescribed for the assigned Noise Zone I.

(§ 2, Ord. 2888, eff. March 6, 2008)

#### **Sec. 5-29.12. Sound amplifying equipment.**

Loudspeakers, sound amplifiers, public address systems or similar devices used to amplify sounds shall be subject to the provisions of § 5-29.13. Such sound amplifying equipment shall not be construed to include electronic devices, including but not limited to, radios, tape players, tape recorders, compact disc players, MP3 players, electric keyboards, music synthesizers, record players or televisions, which are designed and operated for personal use, or used entirely within a building and are not designed or used to convey the human voice, music or any other sound to an audience outside such building, or which are used in vehicles and heard only by occupants of the vehicle in which installed.

(§ 2, Ord. 2888, eff. March 6, 2008)

#### **Sec. 5-29.13. Amplified sound.**

(a) The City Council enacts the following legislation for the sole purpose of securing and promoting the public health, comfort, safety and welfare for its citizenry. While recognizing that the use of sound amplifying equipment may be entitled to certain protection by the constitutional rights of freedom of speech and assembly, the City Council finds that in order to protect the public safety and the correlative rights of the citizens of this community to privacy and freedom from public nuisance of loud and unnecessary noise, reasonable regulation of the time, place and manner of the use of amplifying equipment is necessary. In no event shall approval or authorization required herein be withheld by reason of the constitutionally protected content of any material proposed to be broadcast through amplifying equipment.

(b) It is unlawful for any person, other than personnel of law enforcement or governmental agencies, to install, use or operate a loudspeaker or sound amplifying device in a fixed or movable position or mounted upon any vehicle within the City for the purpose of giving instructions, directions, talks, addresses or lectures to any persons or assemblages of persons in or upon any street, alley, sidewalk, park, place or public property without a permit to do so from the Police Chief or his or her designee. Notwithstanding any other provision of this chapter, the provisions of this section shall also apply to the use of sound amplifying equipment upon public or private property when used in connection with outdoor or indoor public or private events, whether or not admission is charged or food or beverages are sold, when such activity is to be attended by more than one hundred (100) persons and the noise emanating from the event will be audible at the property plane, or in the case of a street dance or concert on the nearest residential property. Those activities listed in § 5-29.06(a) are exempt from the requirements of this section.

(c) The Police Chief or his or her designee is authorized to approve and issue permits under this section.

(d) An application for a permit required by this section shall be filed with the Police Chief at least sixteen (16) days and no more than one hundred twenty (120) days prior to the date on which the sound amplifying equipment is intended to be used. Applications for events covered by the First Amendment of the United States Constitution are exempt from the time requirements of this section if it is shown that circumstances require a shorter filing period and the event will not constitute an unsafe condition. The application shall contain the following information:

- (1) The name, address and telephone number of both the owner and the user of the sound amplifying equipment;
- (2) The license number, if a sound truck is to be used;
- (3) A general description of the sound amplifying equipment which is to be used;
- (4) Whether sound amplifying equipment will be used for commercial or noncommercial purpose;
- (5) The dates and times upon and within which, and the streets or property over or upon which, the equipment is proposed to be operated;
- (6) The name or names of one (1) or more persons who will be present during the conduct of any activities for which registration is sought and who will have authority to reduce the volume of any sound amplifying equipment during the course of the activities if required pursuant to this chapter and, otherwise, to insure compliance with the provisions of this chapter;
- (7) A statement by the applicant that he or she is willing and able to comply with the provisions of this chapter and the conditions of the permit; and
- (8) A sketch of the area or facilities within which the activities are to be conducted, with approximate dimensions and illustration of the location and orientation of all sound-amplifying equipment.

(e) The Police Chief shall deny the permit application or revoke any permit if the chief finds any of the following:

- (1) The application contains materially false or intentionally misleading information;
  - (2) The use of sound amplifying equipment at an event or activity proposed will be located in or upon a premises, building or structure that is hazardous to the health or safety of the employees or patrons of the premises, business, activity, or event, or the general public, under the standards established by the Uniform Building or Fire Codes, or other applicable codes, as set forth in OMC Titles 4 and 8;
  - (3) The use of sound amplifying equipment at an event or activity proposed in or upon a premises, building or structure that lacks adequate on-site parking for participants attending the proposed event or activity under the applicable standards set forth in OMC Title 9;
  - (4) The conditions of any motor vehicle movement are such that, in his or her opinion, the use of the equipment would constitute an unreasonable interference with traffic safety;
  - (5) The conditions of pedestrian movement are such that the use of the equipment would constitute a detriment to traffic safety;
  - (6) The application submitted by the applicant reveals that the applicant would violate the provisions of this section or any other provision of federal, state and/or local law;
  - (7) The applicant is unwilling or unable to comply with the provisions of this chapter or any conditions imposed upon any permit issued;
  - (8) There had already been a permitted event at the intended location, or within a two hundred (200) yard radius of the intended location and the prior permitted event was located on residentially zoned property or on a street, alley, public parking lot or neighborhood park within three (3) months prior to the intended event. Community parks are exempt from this subsection (8); or
  - (9) The applicant or location has had previous violations within the past calendar year, and in the judgment of the Police Chief, issuance would be contrary to the intent of this section.
- (f) In determining whether the use of the equipment would constitute an unreasonable interference with or detriment to traffic safety, the Police Chief shall consider, but shall not necessarily be limited to:

- (1) The volumes, patterns and speed of vehicular and pedestrian traffic in the proposed area of use;
- (2) The relationship of the proposed use of equipment and potential impacts upon traffic patterns;

- (3) Availability of sufficient room for the operation of the equipment without significantly interfering with the traffic patterns;
  - (4) Proximity to schools, playgrounds and similar facilities where use of such equipment might attract children into traffic patterns; or
  - (5) Proximity to busy intersections or other potentially hazardous conditions where use of such equipment might constitute a hazard by reason of its tendency to distract drivers of vehicles or pedestrians.
- (g) Issuance or denial.

(1) If the application is approved, the Police Chief shall return an approved copy of the application to the applicant and shall issue a permit. The permit shall constitute permission for the use of the sound amplifying equipment as requested.

(2) Any application filed shall be either approved or disapproved within five (5) days of the filing thereof.

(3) If the application is disapproved, the Police Chief shall return a disapproved copy forthwith to the applicant with a written statement on the reason for disapproval.

(i) Any person aggrieved by a decision of the Police Chief or his or her designee may file an appeal to the City Manager. A complete and proper appeal shall be filed with the City Clerk within ten (10) calendar days of the action that is the subject of the appeal. If the applicant fails to file an appeal within the ten (10) day filing period provided herein, denial shall take effect immediately upon expiration of such filing period. All appeals shall be in writing and shall contain the following information: (a) name(s) of the person filing the appeal, (b) a brief statement in ordinary and concise language of the relief sought, and (c) the signatures of all parties named as appellants and their mailing addresses. After receiving the appeal, the City Clerk shall immediately forward the matter to the City Manager for handling.

(ii) The City Manager shall, upon receipt of the appeal, set the matter for hearing before the City Manager or a hearing officer. Any hearing officer shall be a licensed attorney or recognized mediator designated by the City Manager. The hearing shall be set for not more than ten (10) calendar days after the receipt of the appeal unless a longer time is requested or consented to by the appellant. Notice of such hearing shall be given in writing and mailed at least five (5) calendar days prior to the date of the hearing, by U.S. mail, with a proof of service attached, addressed to the address listed on the permit application, or the written appeal if different from the permit application. The notice shall state the grounds of the complaint or reason for the denial and shall state the time and place where such hearing will be held.

(iii) The City Manager or hearing officer shall, within ten (10) calendar days following the conclusion of the hearing, make a written finding and decision, which shall be delivered to the City and the appellant by first class mail. Notwithstanding any provision in this Code, the decision of the City Manager or hearing officer shall be the final administrative decision of the City. Any party dissatisfied with the decision of the City Manager or hearing officer may seek review of such decision under the provisions of Code Civil Procedure, §§ 1094.5 and 1094.8, as amended from time to time.

(h) In addition to any other provisions of this Code, the use of sound-amplifying equipment and sound trucks in the City shall be subject to the following regulations:

- (1) The only sounds permitted are music and human speech;
- (2) Sound shall not be emitted within one hundred (100) yards of hospitals, churches, schools and City Hall;
- (3) The volume of sound shall be controlled so that it will not be audible for a distance in excess of one hundred (100) feet from the sound amplifying equipment or sound truck, and so that the volume is not unreasonably loud, raucous, jarring, disturbing or a nuisance to persons within the range of allowed audibility; or
- (4) The sound amplifying equipment or sound truck shall not be used between the hours of 8:00 p.m. and 8:00 a.m.

(§ 2, Ord. 2888, eff. March 6, 2008)

#### **Sec. 5-29.14. Motor vehicles.**

The use of any motor vehicle in such a condition as to create excessive, impulsive or intrusive noises is prohibited. The discharge into the open air of the exhaust of any internal combustion engine, stationary or mounted on wheels, motorboat or motor vehicle, including motor cycle, whether or not discharged through a muffler or other similar device, which discharge creates excessive, unusual, impulsive or intrusive noise is prohibited. Motor vehicles shall comply with the noise regulations of the California Vehicle Code.

(§ 2, Ord. 2888, eff. March 6, 2008)

#### **Sec. 5-29.15. Noise level measurement.**

(a) The location selected for measuring exterior noise levels in a residential area shall be at any part of a private yard, patio, deck or balcony normally used for human activity and identified by the owner or, if occupied by someone other than the owner, the occupant of the affected property as suspected of exceeding the noise level standard. This location may be the closest point in the private yard or patio, or on the deck or balcony, to the noise source, but should not be located in nonhuman activity areas such as trash container storage areas, planter beds, above or contacting a property line fence, or other areas not normally used as part of the yard, patio, deck or balcony. The location selected for measuring exterior noise levels in a nonresidential area shall be at the closest point to the noise source. The measurement microphone height shall be five (5) feet above finish elevation or, in the case of a deck or balcony, the measurement microphone height shall be five (5) feet above the finished floor level.

(b) The location selected for measuring interior noise levels shall be made within the affected residential unit. The measurements shall be made at a point at least four (4) feet from the wall, ceiling or floor, or within the frame of a window opening, nearest the noise source. The measurements shall be made with windows in an open position.

(c) Any decibel measurement made pursuant to the provisions of this chapter shall be measured in decibels (dBAs) as measured with a sound level meter using the A-weighted sound pressure level.

(§ 2, Ord. 2888, eff. March 6, 2008)

#### **Sec. 5-29.16. Prima facie violation.**

Any noise exceeding the noise level standard as specified in §§ 5-29.04 and 5-29.05, shall be deemed to be prima facie evidence of a violation of the provisions of this chapter.

(§ 2, Ord. 2888, eff. March 6, 2008)

#### **Sec. 5-29.17. Penalty.**

(a) Any person who negligently or knowingly violates any provision of this chapter shall be guilty of an infraction and upon conviction shall be punishable by a fine specified in OMC § 1-2.01. Each day a violation occurs shall constitute a separate offense and shall be punishable as such.

(b) Any person who negligently or knowingly violates any provision of this chapter may also be subject to fine(s) specified in the administrative citation schedule of fines set forth in OMC § 1-5.04. The manner of issuing administrative citations shall comply with all the procedures specified in OMC Chapter 5, Title 1.

(c) As an additional remedy, the operation or maintenance of any device, instrument, vehicle or machinery in violation of any provisions of this chapter, which operation or maintenance causes or creates sound levels exceeding the allowable standards as specified in this chapter, shall be deemed and is declared to be a public nuisance and may be subject to abatement by a restraining order or injunction issued by a court of competent jurisdiction.

(d) Any violation of this chapter is declared to be a public nuisance and may be abated in accordance with law. The expense of enforcing this chapter is declared to be public nuisance and may be by resolution of the City Council declared to be a lien and special assessment against the property on which such nuisance is maintained, and any such charge shall also be a personal obligation of the property owner.

(§ 2, Ord. 2888, eff. March 6, 2008)

#### **Sec. 5-29.18. Enforcement and administration.**

(a) It shall be the responsibility of Police or Code Enforcement Officers to enforce the provisions of this chapter and to perform all other functions required by this chapter. Such duties shall include, but not be limited to investigating potential violations, issuing warning notices and citations, and providing evidence to the City prosecutor for legal action.

(b) For violations of § 5-29.07, Police or Code Enforcement Officers shall obtain a declaration under penalty of perjury from two (2) declarants living in separate households within a sixty (60) day period stating in detail all of the following:

(1) That the declarant is a resident of a residential neighborhood located within two hundred (200) yards of the noise source; and

(2) Within the past month declarant has heard noise for substantially long periods to the extreme annoyance of the declarant.

(3) Declarations from two (2) declarants are required to prove a violation of § 5-29.07, but are not required to prove that a person has violated any other provision of this chapter.

(§ 2, Ord. 2888, eff. March 6, 2008)

#### **Sec. 5-29.19. City Manager waiver.**

The City Manager is authorized to grant a temporary waiver to the provisions of this chapter for a period of time necessary to correct the violations of this chapter, if such temporary waiver would be in the public interest and there is no feasible and prudent alternative to the activity, or the method of conducting the activity, for which the temporary waiver is sought. This time period may include a commitment to a program that includes placing necessary orders and entering into necessary contracts within thirty (30) days for repair or installation.

(§ 2, Ord. 2888, eff. March 6, 2008)

#### **Sec. 5-29.20. Noise abatement program.**

(a) In circumstances where adopted community-wide noise standards and policies prove impractical in controlling noise generated from a specific source, the City Council may establish a noise abatement program that recognizes the characteristics of the noise source and affected property and that incorporates specialized mitigation measures.

(b) Noise abatement programs shall set forth in detail the approved terms, conditions and requirements for achieving maximum compliance with noise standards and policies. Said terms, conditions and requirements may include, but shall not be limited to, limitations, restrictions, or prohibitions on operating hours, location of operations, and the types of equipment.

(§ 2, Ord. 2888, eff. March 6, 2008)

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**APPENDIX 5.1:**

**STUDY AREA PHOTOS**

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JN:11134 Chino Parcel Delivery



L1

33, 59' 17.080000", 117, 39' 3.330000"



L1\_E

33, 59' 17.100000", 117, 39' 3.470000"



L1\_N

33, 59' 16.930000", 117, 39' 3.360000"



L1\_S

33, 59' 17.000000", 117, 39' 3.440000"



L1\_W

33, 59' 16.880000", 117, 39' 3.250000"



L2\_E

33, 58' 59.850000", 117, 37' 40.240000"



JN:11134 Chino Parcel Delivery



L2\_N  
33, 58' 59.850000", 117, 37' 40.240000"



L2\_S  
33, 58' 59.850000", 117, 37' 40.240000"



L2\_W  
33, 58' 59.860000", 117, 37' 40.240000"



L3\_E  
33, 58' 58.860000", 117, 37' 8.630000"



L3\_N  
33, 58' 58.790000", 117, 37' 8.550000"



L3\_S  
33, 58' 58.850000", 117, 37' 8.630000"



JN:11134 Chino Parcel Delivery



L3\_W

33, 58' 58.860000", 117, 37' 8.630000"



L4\_E

33, 58' 59.230000", 117, 36' 46.820000"



L4\_N

33, 58' 59.250000", 117, 36' 46.960000"



L4\_S

33, 58' 59.230000", 117, 36' 46.820000"



L4\_W

33, 58' 59.190000", 117, 36' 46.710000"



L5

33, 58' 58.420000", 117, 35' 45.600000"



JN:11134 Chino Parcel Delivery



L5\_E  
33, 58' 58.850000", 117, 35' 45.770000"



L5\_S  
33, 58' 58.680000", 117, 35' 45.660000"



L5\_W  
33, 58' 58.680000", 117, 35' 45.660000"



L6  
33, 59' 6.880000", 117, 35' 34.780000"



L6\_N  
33, 59' 7.030000", 117, 35' 34.860000"



L6\_S  
33, 59' 7.030000", 117, 35' 34.860000"



JN:11134 Chino Parcel Delivery



L6\_W

33, 59' 7.030000", 117, 35' 34.860000"



L7\_E

33, 58' 33.510000", 117, 37' 10.990000"



L7\_N

33, 58' 33.610000", 117, 37' 11.130000"



L7\_S

33, 58' 33.500000", 117, 37' 11.050000"



L7\_W

33, 58' 33.520000", 117, 37' 10.990000"



L8\_E

33, 58' 33.110000", 117, 36' 54.620000"



JN:11134 Chino Parcel Delivery



L8\_N

33, 58' 32.890000", 117, 36' 54.290000"



L8\_S

33, 58' 33.030000", 117, 36' 54.380000"



L8\_W

33, 58' 33.110000", 117, 36' 54.680000"



L9

33, 58' 30.680000", 117, 35' 10.720000"



L9\_E

33, 58' 30.600000", 117, 35' 10.340000"



L9\_N

33, 58' 30.600000", 117, 35' 10.340000"



JN:11134 Chino Parcel Delivery



L9\_W  
33, 58' 30.600000", 117, 35' 10.340000"



L10\_E  
33, 58' 6.440000", 117, 37' 12.260000"



L10\_N  
33, 58' 6.440000", 117, 37' 12.260000"



L10\_S  
33, 58' 6.440000", 117, 37' 12.260000"



L10\_W  
33, 58' 6.440000", 117, 37' 12.260000"



L11\_N  
33, 58' 6.330000", 117, 38' 12.790000"

JN:11134 Chino Parcel Delivery



L11\_S

33, 58' 6.500000", 117, 38' 12.760000"



L11\_W

33, 58' 6.500000", 117, 38' 12.740000"

**APPENDIX 5.2:**

**NOISE LEVEL MEASUREMENT WORKSHEETS**

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## 24-Hour Noise Level Measurement Summary

Project Name: Chino Parcel Delivery

JN: 9842

24-Hour  
CNEL

Location: L1 - Located northwest of the Project site on Euclid Avenue adjacent to existing residential homes.

Analyst: A. Wolfe

Energy Average Leq

Day

Night

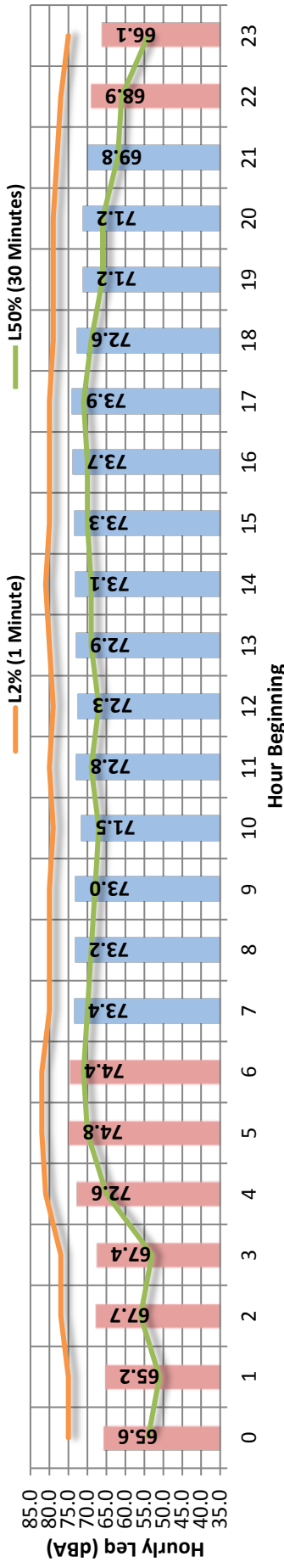
Date: 2/15/2017

72.7

70.7

77.7

Hourly Leq dBA Readings (unadjusted)



Time Period	Hour	Leq	Lmax	Lmin	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	69.8	85.6	43.7	80.0	78.0	75.0	74.0	69.0	62.0	52.0	49.0	46.0
	Max	73.9	98.4	54.2	82.0	81.0	79.0	77.0	75.0	71.0	61.0	57.0	55.0
	Energy Average:	72.7	Average:		81.2	79.6	77.4	76.3	72.6	68.1	56.3	53.2	49.7
Night	Min	65.2	85.2	45.3	77.0	75.0	71.0	68.0	58.0	51.0	47.0	47.0	46.0
	Max	74.8	95.4	54.1	84.0	82.0	80.0	79.0	75.0	71.0	60.0	58.0	55.0
	Energy Average:	70.7	Average:		80.2	77.9	75.0	72.9	66.7	59.4	51.3	50.3	49.1

### Hourly Summary

Night	0	65.6	85.6	46.5	77.0	75.0	72.0	69.0	61.0	54.0	48.0	48.0	47.0
	1	65.2	85.3	46.4	78.0	75.0	71.0	68.0	58.0	51.0	48.0	47.0	46.0
	2	67.7	86.1	46.3	80.0	77.0	73.0	71.0	65.0	56.0	48.0	47.0	47.0
	3	67.4	86.2	47.2	80.0	77.0	73.0	71.0	62.0	53.0	49.0	48.0	47.0
	4	72.6	86.7	50.1	82.0	81.0	79.0	77.0	73.0	65.0	53.0	52.0	51.0
	5	74.8	95.4	53.2	84.0	82.0	80.0	79.0	75.0	70.0	57.0	55.0	54.0
Day	6	74.4	90.2	54.1	83.0	82.0	80.0	78.0	75.0	71.0	60.0	58.0	55.0
	7	73.4	87.3	54.2	81.0	80.0	79.0	77.0	74.0	70.0	61.0	57.0	55.0
	8	73.2	94.3	52.6	82.0	80.0	78.0	77.0	73.0	69.0	60.0	57.0	54.0
	9	73.0	97.6	49.4	82.0	80.0	78.0	76.0	72.0	68.0	55.0	53.0	51.0
	10	71.5	87.7	48.5	80.0	79.0	77.0	76.0	72.0	67.0	55.0	53.0	50.0
	11	72.8	85.6	47.3	82.0	80.0	78.0	77.0	73.0	69.0	56.0	53.0	49.0
	12	72.3	98.4	43.7	81.0	79.0	77.0	76.0	72.0	67.0	53.0	49.0	46.0
	13	72.9	86.9	45.5	81.0	80.0	78.0	77.0	73.0	69.0	55.0	52.0	48.0
	14	73.1	93.6	46.8	82.0	81.0	78.0	77.0	73.0	69.0	58.0	54.0	49.0
	15	73.3	86.5	45.4	81.0	80.0	78.0	77.0	74.0	70.0	58.0	54.0	49.0
	16	73.7	92.9	47.4	82.0	80.0	78.0	77.0	74.0	70.0	60.0	56.0	52.0
	17	73.9	96.4	45.7	81.0	80.0	78.0	77.0	75.0	71.0	61.0	56.0	49.0
	18	72.6	96.8	47.1	81.0	79.0	77.0	76.0	73.0	69.0	55.0	53.0	49.0
	19	71.2	90.9	45.8	81.0	79.0	76.0	75.0	71.0	66.0	53.0	50.0	48.0
	20	71.2	90.3	45.8	81.0	79.0	76.0	75.0	71.0	66.0	52.0	50.0	47.0
	21	69.8	91.8	48.3	80.0	78.0	75.0	74.0	69.0	62.0	52.0	51.0	49.0
Night	22	68.9	86.9	48.0	80.0	77.0	75.0	73.0	68.0	61.0	52.0	51.0	49.0
	23	66.1	85.2	45.3	78.0	75.0	72.0	70.0	63.0	54.0	47.0	47.0	46.0

## 24-Hour Noise Level Measurement Summary

Project Name: Chino Parcel Delivery

JN: 11134

24-Hour  
CNEL

Location: L2 - Located northwest of the Project site on the northeast corner of Grove Avenue and Merrill Avenue.

Analyst: A. Wolfe

Energy Average Leq

Day

Night

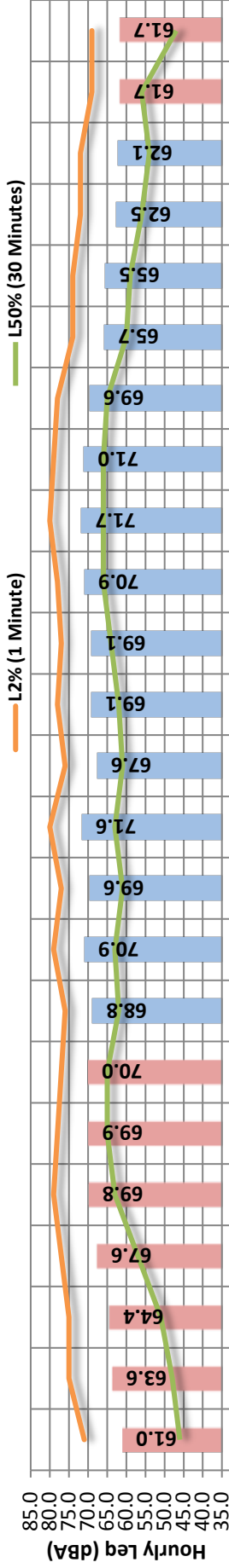
Date: 2/21/2018

66.9

69.2

73.9

Hourly Leq dBA Readings (unadjusted)



Hour Beginning

Time Period	Hour	Leq	Lmax	Lmin	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	62.1	79.3	42.6	74.0	72.0	68.0	65.0	60.0	54.0	46.0	45.0	43.0
	Max	71.7	95.7	55.1	83.0	80.0	77.0	75.0	70.0	66.0	62.0	61.0	59.0
	Energy Average:	69.2	Average:		78.8	76.7	73.5	71.5	66.5	61.9	55.3	53.5	50.5
Night	Min	61.0	80.6	39.7	71.0	69.0	65.0	62.0	53.0	46.0	42.0	41.0	41.0
	Max	70.0	92.8	51.9	80.0	79.0	76.0	75.0	69.0	65.0	60.0	59.0	55.0
	Energy Average:	66.9	Average:		76.6	74.4	71.0	68.7	61.1	55.3	48.3	47.2	45.2

Hourly Summary

Night	0	61.0	82.8	40.7	73.0	71.0	66.0	64.0	54.0	46.0	42.0	41.0	41.0
	1	63.6	81.6	41.5	77.0	75.0	69.0	65.0	56.0	48.0	43.0	42.0	42.0
	2	64.4	80.6	39.7	77.0	75.0	72.0	68.0	57.0	51.0	43.0	42.0	41.0
	3	67.6	84.6	42.5	79.0	77.0	74.0	72.0	64.0	57.0	46.0	45.0	43.0
	4	69.8	86.9	45.7	80.0	79.0	76.0	75.0	68.0	63.0	54.0	52.0	47.0
	5	69.9	90.2	50.4	80.0	78.0	75.0	74.0	68.0	65.0	59.0	58.0	53.0
	6	70.0	92.8	51.9	79.0	77.0	75.0	73.0	69.0	65.0	60.0	59.0	55.0
Day	7	68.8	92.1	46.1	79.0	76.0	73.0	71.0	66.0	62.0	56.0	53.0	49.0
	8	70.9	95.7	47.9	81.0	79.0	76.0	74.0	68.0	63.0	55.0	53.0	49.0
	9	69.6	94.5	47.2	79.0	77.0	74.0	72.0	67.0	61.0	54.0	52.0	50.0
	10	71.6	90.6	51.7	83.0	80.0	77.0	75.0	69.0	63.0	57.0	55.0	54.0
	11	67.6	87.8	45.2	78.0	76.0	73.0	72.0	66.0	61.0	53.0	51.0	48.0
	12	69.1	88.7	44.0	79.0	78.0	75.0	73.0	68.0	62.0	55.0	53.0	48.0
	13	69.1	87.4	49.3	79.0	77.0	74.0	73.0	68.0	64.0	57.0	55.0	52.0
	14	70.9	90.7	51.0	80.0	78.0	75.0	73.0	69.0	66.0	61.0	60.0	55.0
	15	71.7	90.4	50.9	82.0	80.0	77.0	75.0	70.0	66.0	62.0	60.0	58.0
	16	71.0	92.8	55.1	81.0	79.0	76.0	74.0	70.0	66.0	62.0	61.0	59.0
	17	69.6	86.1	50.8	81.0	78.0	75.0	73.0	68.0	65.0	60.0	58.0	55.0
	18	65.7	86.7	45.6	75.0	74.0	72.0	69.0	64.0	60.0	52.0	50.0	47.0
	19	65.5	89.2	45.1	77.0	74.0	70.0	67.0	63.0	59.0	51.0	49.0	46.0
	20	62.5	81.5	43.2	74.0	72.0	68.0	65.0	61.0	56.0	48.0	47.0	45.0
	21	62.1	79.3	42.6	74.0	72.0	68.0	66.0	60.0	54.0	46.0	45.0	43.0
Night	22	61.7	81.7	43.1	71.0	69.0	67.0	65.0	61.0	56.0	45.0	44.0	43.0
	23	61.7	88.6	41.4	73.0	69.0	65.0	62.0	53.0	47.0	43.0	42.0	42.0

## 24-Hour Noise Level Measurement Summary

Project Name: Chino Parcel Delivery

JN: 11134

24-Hour

Location: L3 - Located north of the Project site on Merrill Avenue adjacent to existing agricultural use.

Analyst: A. Wolfe

Energy Average Leq

Day

Night

CNEL

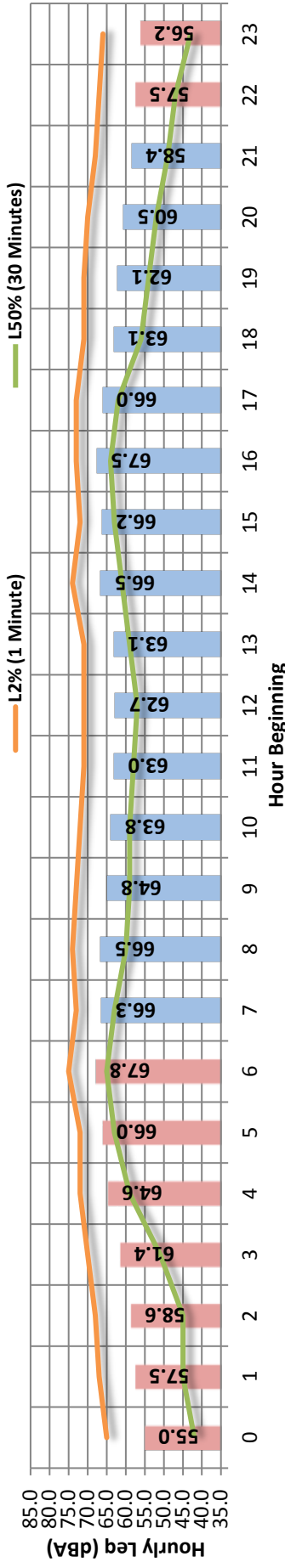
Date: 2/21/2018

64.7

62.7

69.6

Hourly Leq dBA Readings (unadjusted)



Time Period		Hour	Leq	Lmax	Lmin	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Night	Day	Min	58.4	77.4	39.0	69.0	68.0	65.0	63.0	56.0	49.0	42.0	41.0	39.0
		Max	67.5	91.8	50.3	78.0	74.0	71.0	70.0	68.0	64.0	57.0	55.0	53.0
	Energy Average:		64.7	Average:		73.4	71.8	69.3	67.9	63.4	58.4	50.2	48.3	45.5
	Night	Min	55.0	74.1	36.2	68.0	65.0	60.0	57.0	49.0	42.0	38.0	37.0	36.0
Day		Max	67.8	86.3	48.6	77.0	75.0	72.0	71.0	68.0	65.0	56.0	54.0	51.0
	Energy Average:		62.7	Average:		71.1	69.1	66.0	64.1	57.2	51.1	44.0	42.9	41.6
Hourly Summary														
Night	0	55.0	74.1	36.2	68.0	73.0	65.0	60.0	57.0	49.0	42.0	38.0	37.0	36.0
	1	57.5	79.0	37.8	67.0	74.0	67.0	63.0	60.0	51.0	45.0	39.0	38.0	38.0
	2	58.6	78.1	36.8	68.0	73.0	68.0	65.0	63.0	53.0	45.0	38.0	38.0	37.0
	3	61.4	78.2	39.9	71.0	75.0	70.0	68.0	67.0	59.0	51.0	42.0	41.0	40.0
	4	64.6	83.9	43.9	73.0	73.0	72.0	70.0	69.0	65.0	59.0	48.0	46.0	45.0
	5	66.0	77.7	47.8	73.0	73.0	72.0	71.0	70.0	67.0	63.0	55.0	53.0	50.0
	6	67.8	86.3	48.6	77.0	77.0	75.0	72.0	71.0	68.0	65.0	56.0	54.0	51.0
Day	7	66.3	83.5	44.8	74.0	74.0	73.0	71.0	70.0	67.0	63.0	54.0	51.0	48.0
	8	66.5	91.8	43.8	76.0	76.0	74.0	71.0	70.0	65.0	60.0	51.0	49.0	46.0
	9	64.8	83.4	43.8	75.0	75.0	73.0	70.0	68.0	64.0	59.0	49.0	47.0	45.0
	10	63.8	80.4	45.5	73.0	73.0	72.0	69.0	68.0	63.0	59.0	51.0	50.0	47.0
	11	63.0	79.7	41.3	73.0	73.0	71.0	68.0	67.0	63.0	58.0	48.0	46.0	43.0
	12	62.7	81.5	42.2	72.0	72.0	71.0	68.0	67.0	62.0	57.0	48.0	46.0	43.0
	13	63.1	79.6	43.5	72.0	72.0	71.0	68.0	67.0	63.0	59.0	50.0	48.0	45.0
	14	66.5	87.8	48.1	78.0	78.0	74.0	71.0	69.0	65.0	61.0	54.0	53.0	50.0
	15	66.2	84.4	47.2	74.0	74.0	72.0	71.0	69.0	67.0	63.0	56.0	55.0	51.0
	16	67.5	91.4	50.3	75.0	75.0	73.0	71.0	70.0	68.0	64.0	57.0	55.0	53.0
	17	66.0	82.8	45.9	75.0	75.0	73.0	71.0	70.0	66.0	62.0	54.0	52.0	49.0
	18	63.1	80.5	41.2	72.0	72.0	71.0	69.0	68.0	63.0	56.0	48.0	45.0	42.0
	19	62.1	77.4	39.8	72.0	72.0	71.0	69.0	67.0	61.0	54.0	46.0	44.0	41.0
	20	60.5	78.9	39.9	71.0	71.0	70.0	67.0	65.0	58.0	52.0	45.0	43.0	41.0
	21	58.4	78.5	39.0	69.0	69.0	68.0	65.0	63.0	56.0	49.0	42.0	41.0	39.0
Night	22	57.5	78.0	39.1	69.0	68.0	67.0	63.0	61.0	53.0	47.0	41.0	40.0	39.0
	23	56.2	76.6	37.6	68.0	66.0	66.0	62.0	59.0	50.0	43.0	39.0	39.0	38.0

## 24-Hour Noise Level Measurement Summary

Project Name: Chino Parcel Delivery

JN: 11134

24-Hour

Location: L4 - Located east of the Project site on Merrill Avenue near existing residential homes.

Analyst: A. Wolfe

Day

Night

CNEL

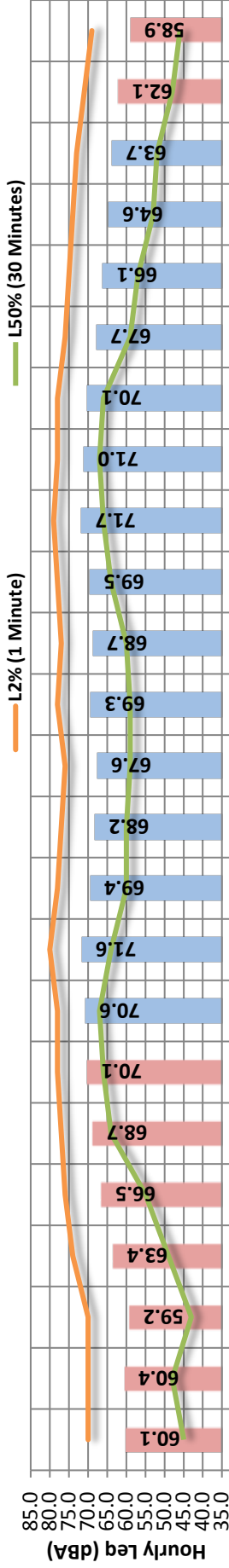
Date: 2/21/2018

69.2

65.2

72.6

Hourly Leq dBA Readings (unadjusted)



Hour Beginning

Time Period	Hour	Leq	Lmax	Lmin	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	63.7	84.4	40.8	75.0	73.0	70.0	68.0	59.0	52.0	46.0	44.0	43.0
	Max	71.7	97.5	48.9	81.0	80.0	77.0	75.0	71.0	67.0	56.0	54.0	52.0
	Energy Average:	69.2	Average:	Average:	78.7	77.0	74.1	72.5	67.0	60.9	50.3	48.5	45.8
Night	Min	58.9	78.6	39.0	71.0	69.0	64.0	61.0	49.0	43.0	39.0	39.0	39.0
	Max	70.1	90.0	48.6	79.0	78.0	75.0	74.0	70.0	66.0	55.0	53.0	50.0
	Energy Average:	65.2	Average:	Average:	74.9	72.8	68.7	66.1	57.6	51.6	45.2	44.1	42.8

Hourly Summary

Night	0	60.1	80.6	39.1	74.0	70.0	64.0	61.0	51.0	45.0	42.0	40.0	40.0
	1	60.4	82.9	39.1	73.0	70.0	65.0	61.0	54.0	48.0	42.0	41.0	39.0
	2	59.2	81.5	39.0	72.0	70.0	65.0	61.0	49.0	43.0	39.0	39.0	39.0
	3	63.4	82.0	40.8	77.0	74.0	70.0	67.0	55.0	49.0	43.0	42.0	41.0
	4	66.5	87.1	45.6	77.0	76.0	73.0	71.0	64.0	55.0	48.0	47.0	46.0
	5	68.7	84.2	46.3	78.0	77.0	74.0	73.0	69.0	64.0	53.0	50.0	47.0
Day	6	70.1	89.4	48.6	79.0	78.0	75.0	74.0	70.0	66.0	55.0	53.0	50.0
	7	70.6	88.3	46.5	80.0	78.0	76.0	74.0	70.0	67.0	56.0	53.0	50.0
	8	71.6	97.5	44.9	81.0	80.0	77.0	75.0	69.0	64.0	52.0	51.0	47.0
	9	69.4	89.9	40.8	80.0	78.0	76.0	73.0	68.0	60.0	48.0	46.0	43.0
	10	68.2	86.6	41.9	78.0	77.0	74.0	72.0	67.0	60.0	49.0	46.0	43.0
	11	67.6	84.4	42.7	78.0	76.0	73.0	72.0	66.0	59.0	47.0	45.0	43.0
	12	69.3	95.8	40.8	80.0	78.0	74.0	73.0	67.0	59.0	47.0	46.0	43.0
	13	68.7	91.9	43.1	79.0	77.0	74.0	72.0	67.0	60.0	48.0	47.0	45.0
	14	69.5	87.7	43.3	79.0	78.0	75.0	73.0	69.0	64.0	52.0	50.0	45.0
	15	71.7	93.1	47.9	81.0	79.0	76.0	75.0	71.0	66.0	54.0	52.0	49.0
	16	71.0	88.0	48.9	80.0	78.0	75.0	74.0	70.0	66.0	55.0	54.0	51.0
	17	70.1	84.4	48.3	79.0	78.0	75.0	74.0	70.0	66.0	55.0	54.0	52.0
	18	67.7	87.5	43.8	78.0	76.0	73.0	72.0	67.0	59.0	50.0	48.0	45.0
	19	66.1	84.8	43.7	77.0	75.0	72.0	71.0	64.0	57.0	49.0	47.0	45.0
	20	64.6	84.7	40.8	76.0	74.0	71.0	68.0	60.0	53.0	46.0	45.0	43.0
	21	63.7	86.8	42.0	75.0	73.0	70.0	68.0	59.0	52.0	46.0	44.0	43.0
Night	22	62.1	90.0	40.7	73.0	71.0	67.0	64.0	54.0	48.0	43.0	43.0	41.0
	23	58.9	78.6	41.6	71.0	69.0	65.0	63.0	52.0	46.0	42.0	42.0	42.0



## 24-Hour Noise Level Measurement Summary

Project Name: Chino Parcel Delivery

JN: 9842

24-Hour

Location: L5 - Located east of the Project site on Merrill Avenue adjacent to an existing residential home on agricultural land use.

Analyst: A. Wolfe

Energy Average Leq

Day

Night

CNEL

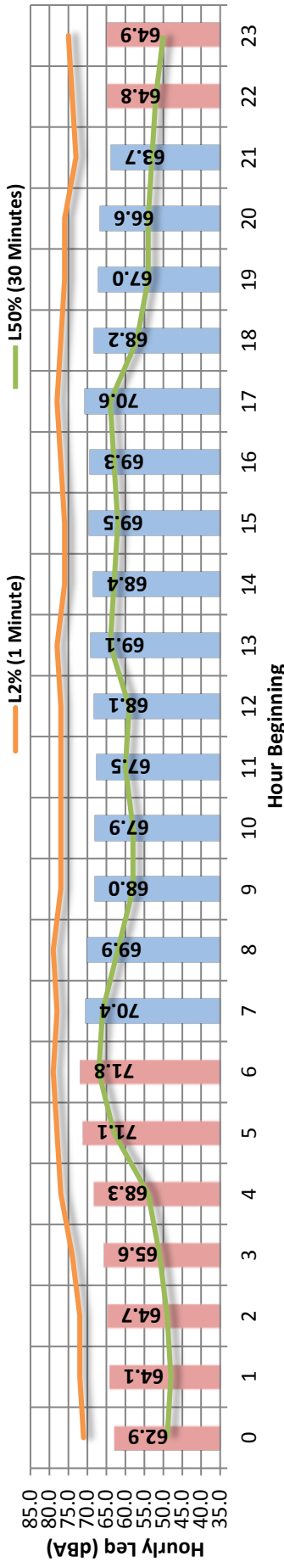
Date: 2/15/2017

68.6

67.6

74.4

Hourly Leq dBA Readings (unadjusted)



Time Period	Hour	Leq	Lmax	Lmin	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	63.7	83.7	44.8	76.0	73.0	70.0	68.0	57.0	53.0	48.0	47.0	46.0
	Max	70.6	98.2	52.9	81.0	79.0	76.0	74.0	70.0	66.0	57.0	56.0	54.0
	Energy Average:	68.6		Average:	79.1	76.8	73.5	71.7	65.7	59.8	51.9	50.6	48.8
Night	Min	62.9	86.8	43.4	75.0	71.0	64.0	59.0	51.0	48.0	45.0	45.0	44.0
	Max	71.8	96.2	52.8	81.0	79.0	76.0	75.0	71.0	67.0	59.0	58.0	55.0
	Energy Average:	67.6		Average:	78.0	74.7	69.3	66.4	57.9	53.7	49.4	48.9	47.7

### Hourly Summary

Night	0	62.9	88.7	44.7	76.0	71.0	64.0	60.0	52.0	49.0	47.0	46.0	45.0
	1	64.1	93.1	43.4	75.0	72.0	64.0	59.0	51.0	48.0	45.0	45.0	44.0
	2	64.7	92.7	45.5	75.0	72.0	66.0	63.0	53.0	49.0	47.0	46.0	46.0
	3	65.6	91.8	46.8	78.0	74.0	69.0	66.0	55.0	51.0	48.0	48.0	47.0
	4	68.3	94.2	47.5	80.0	77.0	73.0	71.0	62.0	54.0	50.0	50.0	49.0
	5	71.1	96.2	50.9	81.0	78.0	75.0	74.0	69.0	63.0	54.0	53.0	52.0
	6	71.8	93.9	52.8	81.0	79.0	76.0	75.0	71.0	67.0	59.0	58.0	55.0
Day	7	70.4	88.5	52.9	80.0	78.0	76.0	74.0	70.0	66.0	57.0	56.0	54.0
	8	69.9	91.3	49.7	81.0	79.0	75.0	73.0	68.0	62.0	55.0	53.0	51.0
	9	68.0	89.5	49.0	79.0	77.0	74.0	72.0	65.0	58.0	52.0	51.0	50.0
	10	67.9	88.0	46.5	79.0	77.0	74.0	72.0	65.0	58.0	51.0	50.0	48.0
	11	67.5	87.6	47.3	79.0	77.0	73.0	71.0	65.0	60.0	53.0	51.0	49.0
	12	68.1	87.6	46.0	80.0	77.0	74.0	72.0	66.0	59.0	52.0	51.0	48.0
	13	69.1	86.3	46.5	79.0	78.0	75.0	73.0	68.0	64.0	52.0	50.0	48.0
	14	68.4	83.7	45.0	78.0	76.0	73.0	72.0	69.0	63.0	51.0	50.0	47.0
	15	69.5	98.2	46.0	78.0	76.0	73.0	71.0	67.0	62.0	53.0	51.0	49.0
	16	69.3	92.7	47.9	79.0	77.0	74.0	72.0	68.0	63.0	54.0	52.0	50.0
	17	70.6	95.8	47.2	81.0	78.0	74.0	73.0	69.0	64.0	53.0	52.0	50.0
	18	68.2	86.1	45.2	80.0	77.0	73.0	72.0	66.0	57.0	48.0	47.0	46.0
	19	67.0	87.2	45.6	79.0	76.0	72.0	70.0	63.0	54.0	49.0	48.0	47.0
	20	66.6	87.6	44.8	79.0	76.0	72.0	70.0	60.0	54.0	49.0	48.0	47.0
	21	63.7	84.0	46.1	76.0	73.0	70.0	68.0	57.0	53.0	50.0	49.0	48.0
Night	22	64.8	86.8	44.2	78.0	74.0	69.0	66.0	55.0	52.0	49.0	48.0	46.0
	23	64.9	87.4	43.7	78.0	75.0	68.0	64.0	53.0	50.0	46.0	46.0	45.0

## 24-Hour Noise Level Measurement Summary

Project Name: Chino Parcel Delivery

JN: 9842

24-Hour

Location: L6 - Located east of the Project site on Archibald Avenue adjacent to future residential homes.

Analyst: A. Wolfe

Energy Average Leq

Day

Night

CNEL

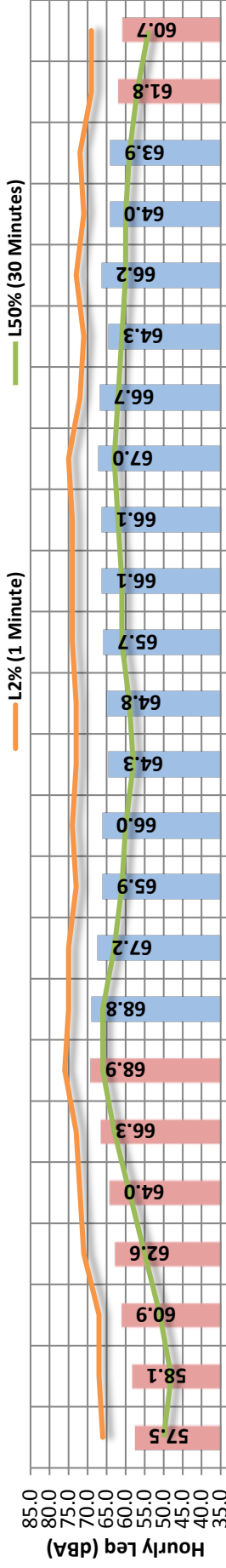
Date: 2/15/2017

66.0

63.8

70.9

### Hourly Leq dBA Readings (unadjusted)



### Hourly Summary

Time Period	Hour	Leq	Lmax	Lmin	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	0	57.5	63.9	68.8	73.0	75.0	78.0	80.0	83.0	85.0	87.0	89.0	91.0
	1	58.1	64.0	68.9	73.0	75.0	78.0	80.0	83.0	85.0	87.0	89.0	91.0
	2	60.9	66.3	70.0	73.0	75.0	78.0	80.0	83.0	85.0	87.0	89.0	91.0
Night	3	62.6	68.9	72.0	75.0	77.0	79.0	81.0	83.0	85.0	87.0	89.0	91.0
	4	64.0	70.0	73.0	75.0	77.0	79.0	81.0	83.0	85.0	87.0	89.0	91.0
	5	66.3	72.0	75.0	77.0	79.0	81.0	83.0	85.0	87.0	89.0	91.0	93.0
Energy Average:		63.8	68.8	72.0	75.0	77.0	79.0	81.0	83.0	85.0	87.0	89.0	91.0

### Hourly Summary

Night	6	68.9	74.0	77.0	79.0	81.0	83.0	85.0	87.0	89.0	91.0	93.0	95.0
	7	68.8	73.0	76.0	78.0	80.0	82.0	84.0	86.0	88.0	90.0	92.0	94.0
	8	67.2	72.0	75.0	77.0	79.0	81.0	83.0	85.0	87.0	89.0	91.0	93.0
	9	65.9	70.0	73.0	75.0	77.0	79.0	81.0	83.0	85.0	87.0	89.0	91.0
	10	66.0	71.0	74.0	76.0	78.0	80.0	82.0	84.0	86.0	88.0	90.0	92.0
	11	64.3	69.0	72.0	74.0	76.0	78.0	80.0	82.0	84.0	86.0	88.0	90.0
Day	12	64.8	69.0	72.0	74.0	76.0	78.0	80.0	82.0	84.0	86.0	88.0	90.0
	13	65.7	70.0	73.0	75.0	77.0	79.0	81.0	83.0	85.0	87.0	89.0	91.0
	14	66.1	71.0	74.0	76.0	78.0	80.0	82.0	84.0	86.0	88.0	90.0	92.0
	15	66.1	71.0	74.0	76.0	78.0	80.0	82.0	84.0	86.0	88.0	90.0	92.0
	16	67.0	72.0	75.0	77.0	79.0	81.0	83.0	85.0	87.0	89.0	91.0	93.0
	17	66.7	71.0	74.0	76.0	78.0	80.0	82.0	84.0	86.0	88.0	90.0	92.0
Night	18	64.3	69.0	72.0	74.0	76.0	78.0	80.0	82.0	84.0	86.0	88.0	90.0
	19	66.2	71.0	74.0	76.0	78.0	80.0	82.0	84.0	86.0	88.0	90.0	92.0
	20	64.0	69.0	72.0	74.0	76.0	78.0	80.0	82.0	84.0	86.0	88.0	90.0
	21	63.9	68.0	71.0	73.0	75.0	77.0	79.0	81.0	83.0	85.0	87.0	89.0
	22	61.8	66.0	69.0	71.0	73.0	75.0	77.0	79.0	81.0	83.0	85.0	87.0
	23	60.7	65.0	68.0	70.0	72.0	74.0	76.0	78.0	80.0	82.0	84.0	86.0

## 24-Hour Noise Level Measurement Summary

Project Name: Chino Parcel Delivery

JN: 11134

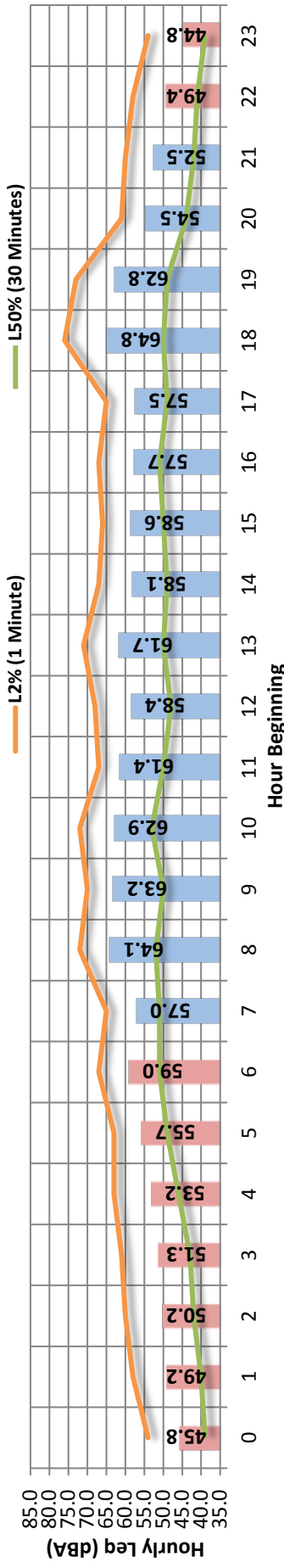
Analyst: A. Wolfe

Location: L7 - Located south of the Project site on Remington Avenue near Chino Airport.

Date: 2/21/2018

Energy Average Leq		24-Hour
Day	Night	CNEL
60.9	53.1	62.5

Hourly Leq dBA Readings (unadjusted)



Time Period	Hour	Leq	Lmax	Lmin	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Night	0	45.8	52.5	37.6	64.0	60.0	55.0	52.0	46.0	42.0	39.0	39.0	39.0
	1	49.2	64.8	43.0	78.0	76.0	70.0	65.0	57.0	53.0	47.0	46.0	45.0
	2	50.2	67.1	Average:	71.2	68.0	63.1	60.0	53.3	49.2	43.3	42.2	40.6
	3	51.3	68.9	36.1	56.0	54.0	49.0	46.0	41.0	39.0	36.0	36.0	36.0
	4	53.2	70.9	40.6	65.0	63.0	59.0	57.0	51.0	46.0	42.0	41.0	40.0
	5	55.7	78.1	41.8	66.0	63.0	60.0	59.0	53.0	49.0	45.0	44.0	43.0
Hourly Summary													
Day	6	59.0	82.8	Average:	62.6	59.8	56.0	53.6	47.1	43.3	40.2	39.7	39.0
	7	57.0	78.1	43.0	67.0	65.0	62.0	61.0	55.0	51.0	47.0	47.0	45.0
	8	64.1	86.2	37.6	76.0	72.0	66.0	63.0	54.0	51.0	47.0	46.0	45.0
	9	63.2	88.6	38.5	74.0	70.0	65.0	62.0	55.0	50.0	45.0	43.0	41.0
	10	62.9	83.6	39.0	76.0	72.0	68.0	65.0	57.0	53.0	46.0	43.0	39.0
	11	61.4	91.9	38.9	69.0	67.0	63.0	61.0	55.0	50.0	43.0	40.0	39.0
Night	12	58.4	79.2	39.0	71.0	68.0	63.0	60.0	53.0	48.0	43.0	42.0	40.0
	13	61.7	86.0	39.0	74.0	71.0	66.0	64.0	55.0	50.0	44.0	43.0	40.0
	14	58.1	83.2	38.4	70.0	67.0	63.0	59.0	53.0	49.0	43.0	42.0	40.0
	15	58.6	83.5	39.1	70.0	66.0	62.0	59.0	53.0	50.0	44.0	43.0	41.0
	16	57.7	76.5	42.4	70.0	67.0	63.0	60.0	54.0	51.0	46.0	45.0	44.0
	17	57.5	84.1	39.0	68.0	65.0	60.0	58.0	52.0	49.0	44.0	42.0	40.0
Day	18	64.8	84.8	39.3	78.0	76.0	70.0	65.0	54.0	50.0	43.0	42.0	40.0
	19	62.8	83.7	38.5	77.0	73.0	64.0	59.0	53.0	49.0	40.0	39.0	39.0
	20	54.5	80.5	38.8	64.0	61.0	57.0	54.0	49.0	44.0	39.0	39.0	39.0
	21	52.5	74.7	38.3	64.0	60.0	55.0	52.0	46.0	42.0	39.0	39.0	39.0
	22	49.4	70.3	36.1	62.0	58.0	54.0	51.0	45.0	41.0	39.0	38.0	36.0
	23	44.8	63.7	36.1	57.0	54.0	49.0	46.0	41.0	39.0	36.0	36.0	36.0

## 24-Hour Noise Level Measurement Summary

Project Name: Chino Parcel Delivery

JN: 11134

24-Hour

Location: L8 - Located east of the Project site on Remington Avenue near an existing residential home and industrial warehouse.

Analyst: A. Wolfe

Energy Average Leq

Day

Night

CNEL

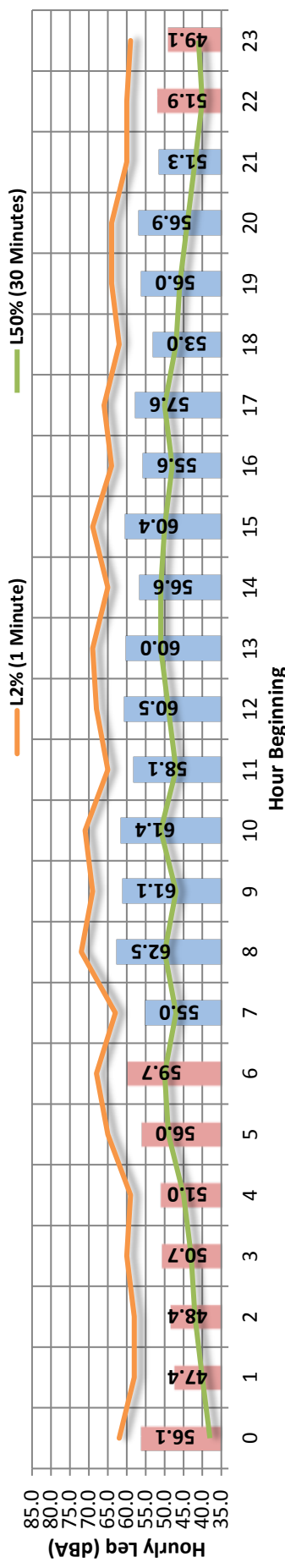
Date: 2/21/2018

58.7

54.2

61.9

### Hourly Leq dBA Readings (unadjusted)



Time Period	Hour	Leq	Lmax	Lmin	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	51.3	73.1	37.5	64.0	60.0	55.0	51.0	45.0	42.0	37.0	37.0	37.0
	Max	62.5	85.4	41.6	75.0	72.0	67.0	64.0	57.0	51.0	46.0	45.0	43.0
	Energy Average:	58.7	Average:		69.0	66.1	61.5	58.9	52.4	48.0	42.7	41.8	40.3
Night	Min	47.4	67.9	34.8	60.0	58.0	50.0	47.0	41.0	38.0	37.0	37.0	35.0
	Max	59.7	84.3	44.4	71.0	68.0	64.0	61.0	55.0	50.0	47.0	46.0	45.0
	Energy Average:	54.2	Average:		63.8	61.0	55.6	52.2	46.0	43.1	40.7	40.0	39.1

### Hourly Summary

Night	0	56.1	84.3	34.8	66.0	62.0	56.0	52.0	41.0	38.0	37.0	37.0	35.0
	1	47.4	71.1	37.3	60.0	58.0	50.0	47.0	42.0	40.0	37.0	37.0	37.0
	2	48.4	67.9	37.7	62.0	58.0	51.0	48.0	43.0	42.0	39.0	38.0	37.0
	3	50.7	74.8	39.4	63.0	60.0	54.0	50.0	45.0	43.0	41.0	40.0	39.0
	4	51.0	74.1	41.1	62.0	59.0	54.0	52.0	47.0	45.0	43.0	42.0	41.0
	5	56.0	72.8	43.2	66.0	65.0	62.0	60.0	54.0	49.0	45.0	44.0	43.0
	6	59.7	84.0	44.4	71.0	68.0	64.0	61.0	55.0	50.0	47.0	46.0	45.0
Day	7	55.0	74.7	41.6	67.0	63.0	60.0	58.0	52.0	47.0	44.0	43.0	42.0
	8	62.5	85.4	39.9	75.0	72.0	64.0	62.0	57.0	50.0	43.0	42.0	41.0
	9	61.1	85.0	38.8	71.0	69.0	64.0	61.0	53.0	47.0	41.0	40.0	39.0
	10	61.4	83.3	39.6	73.0	71.0	67.0	64.0	56.0	51.0	44.0	43.0	41.0
	11	58.1	85.2	37.8	68.0	65.0	62.0	60.0	53.0	47.0	41.0	40.0	39.0
	12	60.5	82.5	37.8	72.0	68.0	64.0	61.0	54.0	49.0	43.0	42.0	39.0
	13	60.0	81.3	37.8	72.0	69.0	62.0	59.0	54.0	51.0	43.0	42.0	39.0
	14	56.6	74.2	40.8	67.0	65.0	62.0	60.0	55.0	51.0	45.0	44.0	42.0
	15	60.4	84.1	39.7	72.0	69.0	64.0	61.0	54.0	50.0	45.0	44.0	41.0
	16	55.6	77.9	39.6	66.0	64.0	61.0	59.0	53.0	48.0	43.0	42.0	41.0
	17	57.6	77.3	41.5	70.0	66.0	62.0	60.0	53.0	50.0	46.0	45.0	43.0
	18	53.0	73.5	39.6	64.0	62.0	58.0	56.0	50.0	47.0	42.0	41.0	40.0
	19	56.0	79.9	40.6	66.0	64.0	60.0	58.0	50.0	46.0	43.0	42.0	41.0
	20	56.9	84.0	39.4	68.0	64.0	57.0	53.0	47.0	44.0	40.0	40.0	39.0
	21	51.3	73.1	37.5	64.0	60.0	55.0	51.0	45.0	42.0	37.0	37.0	37.0
Night	22	51.9	78.2	37.7	62.0	60.0	57.0	52.0	43.0	40.0	38.0	37.0	37.0
	23	49.1	73.1	37.8	62.0	59.0	52.0	48.0	44.0	41.0	39.0	39.0	38.0

## 24-Hour Noise Level Measurement Summary

Project Name: Chino Parcel Delivery

JN: 9842

24-Hour

Location: L9 - Located east of the Project site on Limonite Avenue adjacent to existing residential homes east of Harrison Avenue.

Analyst: A. Wolfe

Energy Average Leq

Day

Night

CNEL

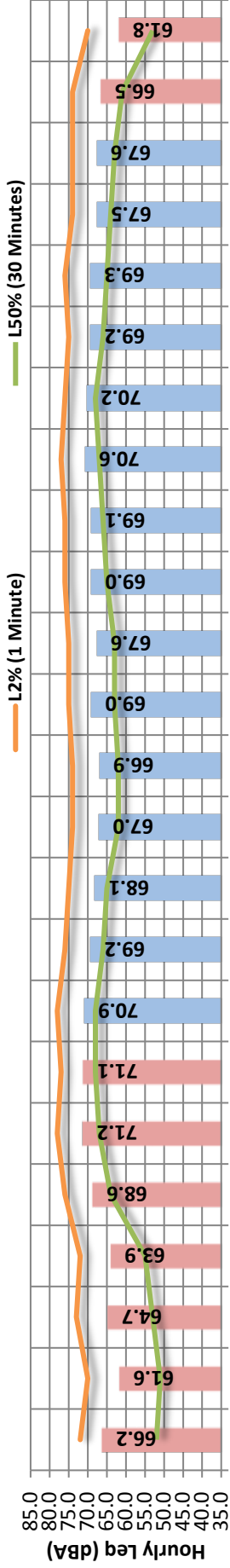
Date: 2/15/2017

68.9

67.5

74.4

Hourly Leq dBA Readings (unadjusted)



Hour Beginning

Time Period	Hour	Leq	Lmax	Lmin	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	66.9	84.3	41.7	75.0	74.0	72.0	71.0	67.0	62.0	50.0	47.0	43.0
	Max	70.9	95.1	54.6	80.0	78.0	75.0	74.0	71.0	68.0	59.0	57.0	55.0
	Energy Average:	68.9	Average:	Average:	77.1	75.4	73.0	72.0	68.9	64.9	53.6	51.1	48.3
Night	Min	61.6	76.7	40.8	71.0	70.0	68.0	66.0	57.0	51.0	45.0	44.0	41.0
	Max	71.2	94.9	53.9	80.0	78.0	75.0	74.0	72.0	68.0	60.0	58.0	56.0
	Energy Average:	67.5	Average:	Average:	75.6	73.6	71.0	69.4	63.9	58.2	51.6	50.4	49.1

Hourly Summary

Night	0	66.2	94.9	48.3	75.0	72.0	69.0	67.0	59.0	52.0	49.0	49.0	49.0
	1	61.6	81.7	45.5	73.0	70.0	68.0	66.0	57.0	51.0	47.0	46.0	46.0
	2	64.7	90.7	47.7	76.0	73.0	69.0	67.0	58.0	53.0	50.0	49.0	48.0
	3	63.9	83.1	48.9	74.0	72.0	70.0	68.0	62.0	55.0	51.0	51.0	49.0
	4	68.6	86.8	50.9	77.0	76.0	73.0	72.0	69.0	64.0	55.0	53.0	52.0
	5	71.2	90.4	53.9	80.0	78.0	75.0	74.0	71.0	67.0	58.0	57.0	55.0
	6	71.1	88.0	53.9	78.0	77.0	75.0	74.0	72.0	68.0	60.0	58.0	56.0
Day	7	70.9	85.5	54.6	80.0	78.0	75.0	74.0	71.0	68.0	59.0	57.0	55.0
	8	69.2	84.8	52.3	77.0	76.0	74.0	73.0	69.0	66.0	57.0	55.0	54.0
	9	68.1	85.8	47.8	77.0	75.0	72.0	71.0	68.0	65.0	54.0	52.0	49.0
	10	67.0	85.0	42.6	76.0	74.0	72.0	71.0	67.0	62.0	50.0	47.0	44.0
	11	66.9	84.8	42.5	76.0	74.0	72.0	71.0	67.0	62.0	51.0	48.0	45.0
	12	69.0	95.1	41.7	78.0	75.0	72.0	71.0	67.0	63.0	50.0	47.0	43.0
	13	67.6	87.2	43.2	76.0	75.0	73.0	71.0	68.0	63.0	51.0	48.0	45.0
	14	69.0	90.7	43.3	78.0	76.0	73.0	72.0	69.0	65.0	52.0	49.0	46.0
	15	69.1	84.5	45.5	77.0	76.0	74.0	73.0	70.0	66.0	54.0	51.0	48.0
	16	70.6	91.0	44.6	79.0	77.0	74.0	73.0	71.0	67.0	55.0	52.0	48.0
	17	70.2	87.8	46.5	77.0	76.0	74.0	73.0	71.0	68.0	56.0	53.0	50.0
	18	69.2	88.4	47.4	77.0	75.0	73.0	73.0	70.0	66.0	55.0	53.0	49.0
	19	69.3	90.2	49.1	78.0	76.0	73.0	72.0	69.0	65.0	55.0	53.0	50.0
	20	67.5	84.3	48.1	75.0	74.0	72.0	71.0	68.0	64.0	53.0	52.0	50.0
	21	67.6	87.0	46.2	76.0	74.0	72.0	71.0	68.0	63.0	52.0	50.0	48.0
Night	22	66.5	83.6	43.9	76.0	74.0	72.0	70.0	66.0	61.0	49.0	47.0	46.0
	23	61.8	76.7	40.8	71.0	70.0	68.0	67.0	61.0	53.0	45.0	44.0	41.0

## 24-Hour Noise Level Measurement Summary

Project Name: Chino Parcel Delivery

JN: 11134

24-Hour  
CNEL

Location: L10 - Located south of the Project site on Kimball Avenue adjacent to existing residential homes.

Analyst: A. Wolfe

Date: 2/21/2018

Energy Average Leq

Day

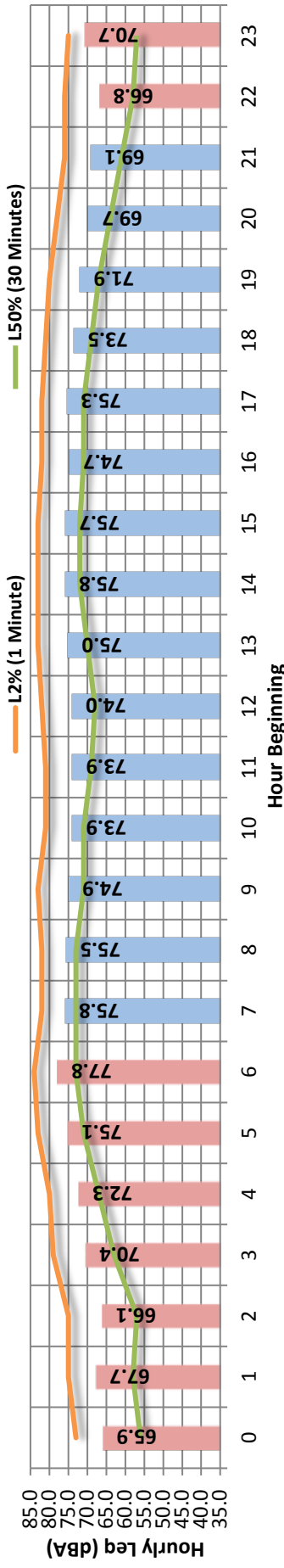
Night

74.3

72.2

79.2

Hourly Leq dBA Readings (unadjusted)



Time Period	Hour	Leq	Lmax	Lmin	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	69.1	90.0	51.9	79.0	76.0	73.0	71.0	66.0	61.0	56.0	56.0	54.0
	Max	75.8	100.2	65.6	85.0	83.0	80.0	79.0	75.0	73.0	70.0	69.0	68.0
	Energy Average:	74.3	Average:	Average:	83.3	81.3	78.3	76.7	72.7	69.5	64.1	63.1	60.9
Night	Min	65.9	90.6	49.5	77.0	73.0	69.0	66.0	58.0	56.0	53.0	52.0	51.0
	Max	77.8	106.7	64.3	87.0	84.0	80.0	79.0	75.0	73.0	70.0	69.0	68.0
	Energy Average:	72.2	Average:	Average:	80.7	77.8	73.8	71.8	65.8	62.2	58.8	57.9	57.1

### Hourly Summary

Night	0	65.9	94.0	49.5	77.0	73.0	69.0	66.0	58.0	56.0	53.0	52.0	52.0
	1	67.7	95.9	51.1	79.0	75.0	70.0	68.0	60.0	58.0	55.0	54.0	53.0
	2	66.1	90.6	51.1	78.0	75.0	71.0	69.0	62.0	57.0	54.0	54.0	53.0
	3	70.4	92.0	54.1	82.0	79.0	75.0	73.0	67.0	63.0	59.0	58.0	57.0
	4	72.3	92.1	58.8	83.0	80.0	77.0	75.0	71.0	67.0	63.0	62.0	61.0
	5	75.1	96.2	62.3	85.0	83.0	79.0	77.0	74.0	71.0	67.0	66.0	65.0
	6	77.8	106.7	64.3	87.0	84.0	80.0	79.0	75.0	73.0	70.0	69.0	68.0
Day	7	75.8	94.0	65.6	84.0	82.0	80.0	78.0	75.0	73.0	70.0	69.0	68.0
	8	75.5	98.1	62.9	84.0	82.0	79.0	78.0	75.0	73.0	69.0	69.0	67.0
	9	74.9	90.0	58.7	84.0	83.0	80.0	78.0	74.0	71.0	67.0	66.0	63.0
	10	73.9	90.3	61.5	82.0	81.0	79.0	77.0	74.0	71.0	66.0	65.0	64.0
	11	73.9	95.2	56.3	83.0	81.0	79.0	77.0	73.0	69.0	64.0	63.0	61.0
	12	74.0	97.6	54.5	85.0	82.0	79.0	77.0	72.0	68.0	62.0	61.0	58.0
	13	75.0	98.9	56.7	85.0	83.0	80.0	78.0	73.0	70.0	64.0	63.0	60.0
	14	75.8	100.2	59.2	85.0	83.0	80.0	78.0	75.0	72.0	66.0	65.0	63.0
	15	75.7	100.1	59.0	85.0	83.0	80.0	79.0	75.0	72.0	66.0	64.0	62.0
	16	74.7	94.6	56.8	84.0	82.0	79.0	78.0	74.0	71.0	64.0	63.0	61.0
	17	75.3	97.7	57.3	85.0	82.0	79.0	78.0	74.0	71.0	65.0	63.0	60.0
	18	73.5	98.9	57.4	83.0	81.0	77.0	76.0	72.0	69.0	63.0	62.0	60.0
	19	71.9	93.1	55.2	82.0	80.0	76.0	75.0	71.0	67.0	61.0	60.0	58.0
	20	69.7	90.0	53.3	80.0	78.0	75.0	73.0	68.0	64.0	58.0	57.0	55.0
	21	69.1	95.2	51.9	79.0	76.0	73.0	71.0	66.0	61.0	56.0	56.0	54.0
	22	66.8	90.9	51.4	78.0	76.0	72.0	70.0	63.0	58.0	55.0	54.0	54.0
	23	70.7	104.0	49.7	77.0	75.0	71.0	69.0	62.0	57.0	53.0	52.0	51.0

## 24-Hour Noise Level Measurement Summary

Project Name: Chino Parcel Delivery

JN: 9842

24-Hour  
CNEL

Location: L11 - Located southwest of the Project site adjacent to future residential homes at the southwest corner of Rincon Meadows Avenue and Kimball Avenue.

Analyst: A. Wolfe

Day

Night

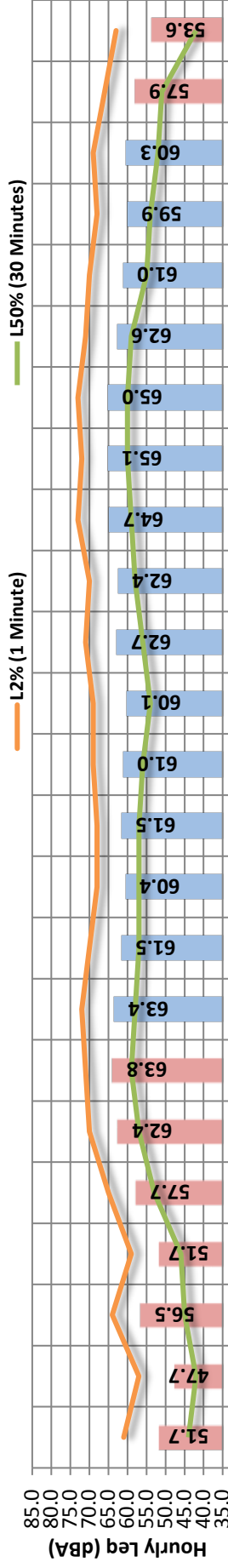
Date: 2/15/2017

62.5

58.5

66.1

Hourly Leq dBA Readings (unadjusted)



Hour Beginning

Time Period	Hour	Leq	Lmax	Lmin	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	59.9	76.4	39.7	69.0	68.0	64.0	63.0	58.0	52.0	44.0	44.0	42.0
	Max	65.1	90.5	51.5	75.0	73.0	70.0	68.0	63.0	60.0	55.0	54.0	52.0
	Energy Average:	62.5	Average:	Average:	72.3	70.2	66.7	64.9	60.8	56.8	49.6	48.1	45.9
Night	Min	47.7	67.6	36.4	59.0	57.0	51.0	49.0	44.0	42.0	39.0	38.0	36.0
	Max	63.8	85.2	50.4	74.0	71.0	68.0	66.0	62.0	59.0	54.0	53.0	51.0
	Energy Average:	58.5	Average:	Average:	66.2	64.0	60.6	58.8	52.7	48.8	44.8	44.2	43.0

Hourly Summary

Night	0	51.7	71.1	41.1	63.0	61.0	57.0	55.0	48.0	44.0	42.0	42.0	41.0
	1	47.7	67.6	39.5	59.0	57.0	51.0	49.0	44.0	42.0	41.0	41.0	41.0
	2	56.5	85.2	41.1	66.0	64.0	60.0	58.0	49.0	45.0	42.0	42.0	41.0
	3	51.7	74.5	42.8	62.0	59.0	57.0	55.0	48.0	46.0	44.0	44.0	43.0
	4	57.7	77.6	44.9	68.0	65.0	62.0	61.0	57.0	53.0	47.0	46.0	45.0
	5	62.4	84.4	48.8	72.0	70.0	67.0	65.0	60.0	57.0	52.0	51.0	50.0
	6	63.8	85.2	50.4	74.0	71.0	68.0	66.0	62.0	59.0	54.0	53.0	51.0
Day	7	63.4	80.8	51.5	74.0	72.0	68.0	66.0	62.0	58.0	55.0	54.0	52.0
	8	61.5	79.5	47.8	73.0	70.0	66.0	64.0	60.0	57.0	51.0	50.0	49.0
	9	60.4	80.0	47.7	70.0	68.0	65.0	63.0	59.0	57.0	52.0	50.0	49.0
	10	61.5	84.0	46.3	71.0	68.0	66.0	64.0	60.0	57.0	50.0	49.0	47.0
	11	61.0	79.8	42.8	70.0	69.0	66.0	65.0	60.0	56.0	50.0	48.0	45.0
	12	60.1	80.3	39.7	71.0	69.0	65.0	63.0	59.0	54.0	46.0	44.0	42.0
	13	62.7	85.6	41.2	73.0	71.0	67.0	65.0	61.0	56.0	48.0	47.0	43.0
	14	62.4	77.9	43.7	72.0	70.0	68.0	66.0	62.0	58.0	51.0	49.0	46.0
	15	64.7	82.6	43.9	75.0	73.0	70.0	68.0	63.0	59.0	52.0	49.0	47.0
	16	65.1	90.5	45.8	75.0	72.0	69.0	67.0	63.0	60.0	51.0	50.0	47.0
	17	65.0	89.7	45.4	75.0	73.0	68.0	67.0	63.0	60.0	53.0	51.0	47.0
	18	62.6	81.4	43.7	73.0	71.0	67.0	65.0	62.0	59.0	49.0	47.0	45.0
	19	61.0	79.3	42.7	72.0	70.0	66.0	64.0	60.0	55.0	46.0	45.0	43.0
	20	59.9	76.4	43.1	69.0	68.0	65.0	64.0	60.0	54.0	46.0	45.0	44.0
	21	60.3	81.8	42.2	72.0	69.0	64.0	63.0	58.0	52.0	44.0	44.0	43.0
Night	22	57.9	76.8	39.4	68.0	66.0	63.0	62.0	57.0	51.0	42.0	41.0	39.0
	23	53.6	76.2	36.4	64.0	63.0	60.0	58.0	49.0	42.0	39.0	38.0	36.0

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**APPENDIX 7.1:**

**OFF-SITE TRAFFIC NOISE LEVEL CONTOURS**

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Euclid Av. Road Segment: s/o SR-60					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 29,078 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 2,908 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 115 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos:	73.5%	8.7%	17.9%	83.44%
					Medium Trucks:	80.1%	5.7%	14.2%	8.26%
					Heavy Trucks:	76.2%	4.1%	19.7%	8.30%
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 80.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 80.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
					Lane Equivalent Distance (in feet)				
					Autos: 55.846				
					Medium Trucks: 55.687				
					Heavy Trucks: 55.703				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	1.14	-0.82	-1.20	-4.74	0.000	0.000		
Medium Trucks:	82.40	-8.90	-0.81	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-8.88	-0.81	-1.20	-5.23	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.9	68.8	65.5	63.9	71.3	71.6			
Medium Trucks:	71.5	69.7	64.3	63.5	71.3	71.5			
Heavy Trucks:	75.5	73.5	66.9	68.9	76.1	76.3			
Vehicle Noise:	77.9	76.0	70.5	70.9	78.3	78.5			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			287	617	1,330	2,865			
CNEL:			295	635	1,369	2,949			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: Existing Without Project Road Name: Euclid Av. Road Segment: s/o Walnut Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 24,535 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,454 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 115 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 80.0 feet Centerline Dist. to Observer: 80.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.44%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 55.846 Medium Trucks: 55.687 Heavy Trucks: 55.703				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	71.78	0.40	-0.82	-1.20	-4.74	0.000	0.000	
Medium Trucks:	82.40	-9.64	-0.81	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	86.40	-9.62	-0.81	-1.20	-5.23	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	70.2	68.0	64.8	63.1	70.5	70.8		
Medium Trucks:	70.8	69.0	63.6	62.7	70.5	70.8		
Heavy Trucks:	74.8	72.8	66.2	68.2	75.4	75.5		
Vehicle Noise:	77.2	75.2	69.7	70.2	77.6	77.8		
Centerline Distance to Noise Contour (in feet)								
			70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:			256	551	1,187	2,558		
CNEL:			263	567	1,222	2,634		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: Existing Without Project Road Name: Euclid Av. Road Segment: s/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 23,677 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,368 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
					VehicleType		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%					
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%					
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Noise Source Elevations (in feet)					
					Autos: 0.000					
					Medium Trucks: 2.297					
					Heavy Trucks: 8.004 Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 68.593					
					Medium Trucks: 68.464					
					Heavy Trucks: 68.476					
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	71.78	0.25	-2.16	-1.20	-4.77	0.000	0.000			
Medium Trucks:	82.40	-9.80	-2.15	-1.20	-4.88	0.000	0.000			
Heavy Trucks:	86.40	-9.77	-2.15	-1.20	-5.15	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	68.7	66.5	63.3	61.6	69.0	69.3				
Medium Trucks:	69.3	67.5	62.1	61.2	69.0	69.3				
Heavy Trucks:	73.3	71.3	64.7	66.7	73.9	74.0				
Vehicle Noise:	75.7	73.7	68.2	68.7	76.1	76.3				
Centerline Distance to Noise Contour (in feet)										
				70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:				262	564	1,215	2,617			
CNEL:				269	580	1,250	2,694			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: Existing Without Project Road Name: Euclid Av. Road Segment: s/o Chino Av.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 26,721 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,672 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	0.77	-2.16	-1.20	-4.77	0.000	0.000
Medium Trucks:	82.40	-9.27	-2.15	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-9.25	-2.15	-1.20	-5.15	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	69.2	67.1	63.8	62.2	69.6	69.9	
Medium Trucks:	69.8	68.0	62.6	61.8	69.6	69.8	
Heavy Trucks:	73.8	71.8	65.2	67.2	74.4	74.6	
Vehicle Noise:	76.2	74.3	68.8	69.2	76.6	76.8	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			284	611	1,317	2,837	
CNEL:			292	629	1,355	2,920	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Euclid Av. Road Segment: s/o Schaefer Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 24,077 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 2,408 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 154 feet					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 103.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Centerline Dist. to Observer: 103.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	0.32	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-9.72	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-9.70	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.7	66.6	63.3	61.7	69.1	69.4			
Medium Trucks:	69.3	67.6	62.1	61.3	69.1	69.3			
Heavy Trucks:	73.3	71.4	64.7	66.7	74.0	74.1			
Vehicle Noise:	75.8	73.8	68.3	68.8	76.1	76.3			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			265	570	1,228	2,646			
CNEL:			272	587	1,264	2,724			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Euclid Av. Road Segment: s/o Edison Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 23,493 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,349 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	0.21	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-9.83	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-9.81	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.6	66.5	63.2	61.6	69.0	69.3			
Medium Trucks:	69.2	67.5	62.0	61.2	69.0	69.2			
Heavy Trucks:	73.2	71.3	64.6	66.6	73.9	74.0			
Vehicle Noise:	75.6	73.7	68.2	68.7	76.0	76.2			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			260	561	1,208	2,603			
CNEL:			268	577	1,244	2,680			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Euclid Av. Road Segment: s/o Eucalyptus Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 25,450 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,545 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	0.56	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-9.48	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-9.46	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.0	66.8	63.6	62.0	69.3	69.6			
Medium Trucks:	69.6	67.8	62.4	61.6	69.3	69.6			
Heavy Trucks:	73.6	71.6	65.0	67.0	74.2	74.3			
Vehicle Noise:	76.0	74.0	68.6	69.0	76.4	76.6			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			275	592	1,275	2,746			
CNEL:			283	609	1,312	2,827			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Euclid Av. Road Segment: s/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 24,821 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,482 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	0.45	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-9.59	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-9.57	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.9	66.7	63.5	61.8	69.2	69.5			
Medium Trucks:	69.5	67.7	62.3	61.4	69.2	69.5			
Heavy Trucks:	73.5	71.5	64.9	66.9	74.1	74.2			
Vehicle Noise:	75.9	73.9	68.4	68.9	76.3	76.5			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			270	582	1,253	2,700			
CNEL:			278	599	1,290	2,780			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Euclid Av. Road Segment: s/o Kimball Av.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 15,311 vehicles				Autos: 15					
Peak Hour Percentage: 10%				Medium Trucks (2 Axles): 15					
Peak Hour Volume: 1,531 vehicles				Heavy Trucks (3+ Axles): 15					
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 154 feet				Vehicle Mix					
				VehicleType	Day	Evening	Night	Daily	
				Autos: 73.5% 8.7% 17.9% 83.44%					
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%					
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
Site Data				Noise Source Elevations (in feet)					
Barrier Height: 0.0 feet				Autos: 0.000					
Barrier Type (0-Wall, 1-Berm): 0.0				Medium Trucks: 2.297					
Centerline Dist. to Barrier: 103.0 feet				Heavy Trucks: 8.004 Grade Adjustment: 0.0					
Centerline Dist. to Observer: 103.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	-1.65	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-11.69	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-11.67	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	66.8	64.6	61.4	59.7	67.1	67.4			
Medium Trucks:	67.4	65.6	60.2	59.4	67.1	67.4			
Heavy Trucks:	71.4	69.4	62.8	64.8	72.0	72.1			
Vehicle Noise:	73.8	71.8	66.3	66.8	74.2	74.4			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			196	422	908	1,957			
CNEL:			201	434	935	2,015			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Euclid Av. Road Segment: s/o Bickmore Av.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 14,579 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,458 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data				Vehicle Mix					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily	
				Autos: 73.5% 8.7% 17.9% 83.44%					
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%					
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
				Noise Source Elevations (in feet)					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0					
				Lane Equivalent Distance (in feet)					
				Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476					
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	-1.86	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-11.90	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-11.88	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	66.6	64.4	61.2	59.5	66.9	67.2			
Medium Trucks:	67.2	65.4	60.0	59.1	66.9	67.2			
Heavy Trucks:	71.2	69.2	62.6	64.6	71.8	71.9			
Vehicle Noise:	73.6	71.6	66.1	66.6	74.0	74.2			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			189	408	879	1,894			
CNEL:			195	420	905	1,950			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Euclid Av. Road Segment: s/o Pine Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 34,983 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,498 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	1.94	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-8.10	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-8.08	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.4	68.2	65.0	63.3	70.7	71.0			
Medium Trucks:	71.0	69.2	63.8	62.9	70.7	71.0			
Heavy Trucks:	75.0	73.0	66.4	68.4	75.6	75.7			
Vehicle Noise:	77.4	75.4	69.9	70.4	77.8	78.0			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			339	731	1,576	3,395			
CNEL:			349	753	1,622	3,495			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Flight Av. Road Segment: n/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 1 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 0 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-43.08	1.28	-1.20	-4.61	0.000		0.000	
Medium Trucks:	81.00	-53.13	1.31	-1.20	-4.87	0.000		0.000	
Heavy Trucks:	85.38	-53.10	1.31	-1.20	-5.50	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	27.2	25.1	21.8	20.2	27.6	27.9			
Medium Trucks:	28.0	26.2	20.8	20.0	27.8	28.0			
Heavy Trucks:	32.4	30.4	23.8	25.8	33.0	33.1			
Vehicle Noise:	34.6	32.6	27.1	27.6	35.0	35.2			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				0	0	1	2		
CNEL:				0	0	1	2		

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Hellman Av. Road Segment: s/o Kimball Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 12,439 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 1,244 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 45 mph									
Near/Far Lane Distance: 51 feet					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 49.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 49.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos: 68.46 -1.68 1.01 -1.20 -4.64 0.000 0.000									
Medium Trucks: 79.45 -11.72 1.04 -1.20 -4.87 0.000 0.000									
Heavy Trucks: 84.25 -11.70 1.04 -1.20 -5.44 0.000 0.000									
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn		CNEL		
Autos: 66.6 64.5 61.2 59.6 67.0 67.3									
Medium Trucks: 67.6 65.8 60.4 59.6 67.3 67.6									
Heavy Trucks: 72.4 70.4 63.8 65.8 73.0 73.2									
Vehicle Noise: 74.4 72.5 66.8 67.5 74.8 75.0									
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				103	222	477	1,029		
CNEL:				106	228	491	1,058		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Hellman Av. Road Segment: s/o Pine Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
<b>Highway Data</b>					<b>Site Conditions (Hard = 10, Soft = 15)</b>				
Average Daily Traffic (Adt): 10,242 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 1,024 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 45 mph					<b>Vehicle Mix</b>				
Near/Far Lane Distance: 51 feet					VehicleType Day Evening Night Daily				
<b>Site Data</b>					Autos: 73.5% 8.7% 17.9% 83.44%				
Barrier Height: 0.0 feet					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
Barrier Type (0-Wall, 1-Berm): 0.0					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Centerline Dist. to Barrier: 49.0 feet					<b>Noise Source Elevations (in feet)</b>				
Centerline Dist. to Observer: 49.0 feet					Autos: 0.000				
Barrier Distance to Observer: 0.0 feet					Medium Trucks: 2.297				
Observer Height (Above Pad): 5.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Pad Elevation: 0.0 feet					<b>Lane Equivalent Distance (in feet)</b>				
Road Elevation: 0.0 feet					Autos: 42.140				
Road Grade: 0.0%					Medium Trucks: 41.929				
Left View: -90.0 degrees					Heavy Trucks: 41.950				
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	-2.52	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	79.45	-12.56	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-12.54	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn		CNEL		
Autos:	65.8	63.6	60.4	58.7	66.1		66.4		
Medium Trucks:	66.7	65.0	59.5	58.7	66.5		66.7		
Heavy Trucks:	71.5	69.6	63.0	64.9	72.2		72.3		
Vehicle Noise:	73.6	71.6	66.0	66.6	74.0		74.2		
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				90	195	419	904		
CNEL:				93	200	431	929		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Archibald Av. Road Segment: n/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 23,322 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,332 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	0.60	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-9.45	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-9.43	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.6	66.4	63.2	61.5	68.9	69.2			
Medium Trucks:	69.3	67.6	62.1	61.3	69.1	69.3			
Heavy Trucks:	73.7	71.7	65.1	67.1	74.3	74.5			
Vehicle Noise:	75.9	74.0	68.4	69.0	76.3	76.5			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			196	422	910	1,960			
CNEL:			202	434	936	2,017			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Archibald Av. Road Segment: s/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 22,555 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,256 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	0.04	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-10.01	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-9.99	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.6	67.4	64.2	62.5	69.9	70.2			
Medium Trucks:	70.2	68.4	63.0	62.2	69.9	70.2			
Heavy Trucks:	74.2	72.2	65.6	67.6	74.8	74.9			
Vehicle Noise:	76.6	74.6	69.1	69.6	77.0	77.2			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			216	466	1,004	2,162			
CNEL:			223	480	1,033	2,226			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Archibald Av. Road Segment: s/o Chino Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 17,211 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 1,721 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 93 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 74.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Centerline Dist. to Observer: 74.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	-1.14	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-11.18	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-11.16	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.4	66.3	63.0	61.4	68.8	69.1			
Medium Trucks:	69.0	67.2	61.8	61.0	68.8	69.0			
Heavy Trucks:	73.0	71.0	64.4	66.4	73.6	73.8			
Vehicle Noise:	75.4	73.5	68.0	68.4	75.8	76.0			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				181	389	838	1,805		
CNEL:				186	400	863	1,859		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Archibald Av. Road Segment: s/o Schaefer Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 17,669 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,767 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	-1.02	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-11.07	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-11.05	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.5	66.4	63.1	61.5	68.9	69.2			
Medium Trucks:	69.1	67.4	61.9	61.1	68.9	69.1			
Heavy Trucks:	73.1	71.1	64.5	66.5	73.7	73.9			
Vehicle Noise:	75.5	73.6	68.1	68.6	75.9	76.1			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				184	396	853	1,837		
CNEL:				189	407	878	1,891		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Archibald Av. Road Segment: s/o Ontario Ranch Rd.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 21,720 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,172 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	-0.13	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-10.17	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-10.15	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.4	67.3	64.0	62.4	69.8	70.1			
Medium Trucks:	70.0	68.2	62.8	62.0	69.8	70.0			
Heavy Trucks:	74.0	72.0	65.4	67.4	74.6	74.8			
Vehicle Noise:	76.4	74.5	69.0	69.5	76.8	77.0			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			211	454	979	2,108			
CNEL:			217	468	1,007	2,170			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Archibald Av. Road Segment: s/o Eucalyptus Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 21,708 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,171 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	-0.13	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-10.17	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-10.15	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.4	67.3	64.0	62.4	69.8	70.1			
Medium Trucks:	70.0	68.2	62.8	62.0	69.8	70.0			
Heavy Trucks:	74.0	72.0	65.4	67.4	74.6	74.8			
Vehicle Noise:	76.4	74.5	69.0	69.5	76.8	77.0			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			211	454	978	2,108			
CNEL:			217	467	1,007	2,170			

Friday, March 02, 2018



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Archibald Av. Road Segment: s/o Merrill Av.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt):		23,013 vehicles		Autos:		15			
Peak Hour Percentage:		10%		Medium Trucks (2 Axles):		15			
Peak Hour Volume:		2,301 vehicles		Heavy Trucks (3+ Axles):		15			
Vehicle Speed:		55 mph		Vehicle Mix					
Near/Far Lane Distance:		93 feet							
Site Data				Vehicle Type		Day	Evening	Night	Daily
Barrier Height:		0.0 feet		Autos:		73.5%	8.7%	17.9%	83.44%
Barrier Type (0-Wall, 1-Berm):		0.0		Medium Trucks:		80.1%	5.7%	14.2%	8.26%
Centerline Dist. to Barrier:		74.0 feet		Heavy Trucks:		76.2%	4.1%	19.7%	8.30%
Centerline Dist. to Observer:		74.0 feet		Noise Source Elevations (in feet)					
Barrier Distance to Observer:		0.0 feet							
Observer Height (Above Pad):		5.0 feet		Autos:		0.000			
Pad Elevation:		0.0 feet		Medium Trucks:		2.297			
Road Elevation:		0.0 feet		Heavy Trucks:		8.004		Grade Adjustment: 0.0	
Road Grade:		0.0%		Lane Equivalent Distance (in feet)					
Left View:		-90.0 degrees							
Right View:		90.0 degrees		Autos:		57.782			
				Medium Trucks:		57.629			
				Heavy Trucks:		57.644			
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	0.12	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-9.92	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-9.90	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.7	67.5	64.3	62.6	70.0	70.3			
Medium Trucks:	70.3	68.5	63.1	62.2	70.0	70.3			
Heavy Trucks:	74.3	72.3	65.7	67.7	74.9	75.0			
Vehicle Noise:	76.7	74.7	69.2	69.7	77.1	77.3			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			219	472	1,017	2,191			
CNEL:			226	486	1,047	2,256			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Archibald Av. Road Segment: s/o Limonite Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 19,580 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,958 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	-0.58	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-10.62	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-10.60	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.1	66.0	62.8	61.1	68.5	68.8			
Medium Trucks:	68.7	67.0	61.5	60.7	68.5	68.7			
Heavy Trucks:	72.8	70.8	64.2	66.1	73.4	73.5			
Vehicle Noise:	75.2	73.2	67.7	68.2	75.6	75.7			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			178	384	828	1,784			
CNEL:			184	396	852	1,836			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Merrill Av. Road Segment: e/o Euclid Av.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 7,180 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 718 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data				Vehicle Mix					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily	
				Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
				Noise Source Elevations (in feet)					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
				Lane Equivalent Distance (in feet)					
Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-4.52	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-14.56	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-14.54	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	65.8	63.6	60.4	58.7	66.1	66.4			
Medium Trucks:	66.5	64.8	59.3	58.5	66.3	66.6			
Heavy Trucks:	70.9	69.0	62.3	64.3	71.6	71.7			
Vehicle Noise:	73.2	71.2	65.6	66.2	73.6	73.7			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				76	164	353	760		
CNEL:				78	169	363	782		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Merrill Av. Road Segment: e/o Bon View Av.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 6,759 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 676 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data				Vehicle Mix					
				VehicleType	Day	Evening	Night	Daily	
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
				Noise Source Elevations (in feet)					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
				Lane Equivalent Distance (in feet)					
				Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262					
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-4.78	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-14.83	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-14.81	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	65.5	63.4	60.1	58.5	65.9	66.2			
Medium Trucks:	66.3	64.5	59.1	58.3	66.1	66.3			
Heavy Trucks:	70.7	68.7	62.1	64.1	71.3	71.4			
Vehicle Noise:	72.9	70.9	65.4	65.9	73.3	73.5			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				73	157	339	730		
CNEL:				75	162	349	752		



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: Existing Without Project Road Name: Merrill Av. Road Segment: e/o Flight Av.			Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA			NOISE MODEL INPUTS					
Highway Data			Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt):		7,393 vehicles	Autos:		15			
Peak Hour Percentage:		10%	Medium Trucks (2 Axles):		15			
Peak Hour Volume:		739 vehicles	Heavy Trucks (3+ Axles):		15			
Vehicle Speed:		50 mph						
Near/Far Lane Distance:		36 feet						
Site Data			Vehicle Mix					
Barrier Height:		0.0 feet	VehicleType	Day	Evening	Night	Daily	
Barrier Type (0-Wall, 1-Berm):		0.0	Autos:		73.5%	8.7%	17.9% 83.44%	
Centerline Dist. to Barrier:		44.0 feet	Medium Trucks:		80.1%	5.7%	14.2% 8.26%	
Centerline Dist. to Observer:		44.0 feet	Heavy Trucks:		76.2%	4.1%	19.7% 8.30%	
Barrier Distance to Observer:		0.0 feet						
Observer Height (Above Pad):		5.0 feet						
Pad Elevation:		0.0 feet						
Road Elevation:		0.0 feet						
Road Grade:		0.0%						
Left View:		-90.0 degrees						
Right View:		90.0 degrees						
			Noise Source Elevations (in feet)					
			Autos:		0.000			
			Medium Trucks:		2.297			
			Heavy Trucks:		8.004			
			Grade Adjustment: 0.0					
			Lane Equivalent Distance (in feet)					
			Autos:		40.460			
			Medium Trucks:		40.241			
			Heavy Trucks:		40.262			
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:		70.20	-4.39	1.28	-1.20	-4.61	0.000	0.000
Medium Trucks:		81.00	-14.44	1.31	-1.20	-4.87	0.000	0.000
Heavy Trucks:		85.38	-14.42	1.31	-1.20	-5.50	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:		65.9	63.8	60.5	58.9	66.2	66.5	
Medium Trucks:		66.7	64.9	59.5	58.7	66.5	66.7	
Heavy Trucks:		71.1	69.1	62.5	64.5	71.7	71.8	
Vehicle Noise:		73.3	71.3	65.8	66.3	73.7	73.9	
Centerline Distance to Noise Contour (in feet)								
			70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:			78	167	360	775		
CNEL:			80	172	370	798		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Merrill Av. Road Segment: e/o Hellman Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 7,598 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 760 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-4.27	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-14.32	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-14.30	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	66.0	63.9	60.6	59.0	66.4	66.7			
Medium Trucks:	66.8	65.0	59.6	58.8	66.6	66.8			
Heavy Trucks:	71.2	69.2	62.6	64.6	71.8	71.9			
Vehicle Noise:	73.4	71.5	65.9	66.5	73.8	74.0			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				79	170	367	790		
CNEL:				81	175	377	812		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: Existing Without Project Road Name: Kimball Av. Road Segment: w/o Euclid Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 17,383 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,738 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data  Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Vehicle Mix				
				Vehicle Type	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.44%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
				Noise Source Elevations (in feet)				
				Autos: 0.000				
				Medium Trucks: 2.297				
				Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Lane Equivalent Distance (in feet)								
Autos: 40.460								
Medium Trucks: 40.241								
Heavy Trucks: 40.262								
FHWA Noise Model Calculations								
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	70.20	-0.68	1.28	-1.20	-4.61	0.000	0.000	
Medium Trucks:	81.00	-10.72	1.31	-1.20	-4.87	0.000	0.000	
Heavy Trucks:	85.38	-10.70	1.31	-1.20	-5.50	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	69.6	67.5	64.2	62.6	70.0	70.3		
Medium Trucks:	70.4	68.6	63.2	62.4	70.2	70.4		
Heavy Trucks:	74.8	72.8	66.2	68.2	75.4	75.5		
Vehicle Noise:	77.0	75.0	69.5	70.0	77.4	77.6		
Centerline Distance to Noise Contour (in feet)								
			70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:			137	295	636	1,371		
CNEL:			141	304	655	1,411		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: Existing Without Project Road Name: Kimball Av. Road Segment: e/o Euclid Av.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 17,509 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,751 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.44%			
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%			
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%			
				Noise Source Elevations (in feet)			
				Autos: 0.000			
				Medium Trucks: 2.297			
				Heavy Trucks: 8.004 Grade Adjustment: 0.0			
Lane Equivalent Distance (in feet)							
				Autos: 42.140			
				Medium Trucks: 41.929			
				Heavy Trucks: 41.950			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	-0.65	1.01	-1.20	-4.64	0.000	0.000
Medium Trucks:	81.00	-10.69	1.04	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-10.67	1.04	-1.20	-5.44	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	69.4	67.2	64.0	62.3	69.7	70.0	
Medium Trucks:	70.2	68.4	63.0	62.1	69.9	70.2	
Heavy Trucks:	74.5	72.6	66.0	67.9	75.2	75.3	
Vehicle Noise:	76.8	74.8	69.2	69.8	77.2	77.4	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			147	317	684	1,473	
CNEL:			152	326	703	1,515	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Kimball Av. Road Segment: e/o Rincon Meadows Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 16,524 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 1,652 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 51 feet					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 49.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 49.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-0.90	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-10.94	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-10.92	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.1	67.0	63.7	62.1	69.5	69.8			
Medium Trucks:	69.9	68.1	62.7	61.9	69.7	69.9			
Heavy Trucks:	74.3	72.3	65.7	67.7	74.9	75.1			
Vehicle Noise:	76.5	74.6	69.0	69.6	76.9	77.1			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				142	305	658	1,417		
CNEL:				146	314	677	1,458		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Kimball Av. Road Segment: e/o Mill Creek Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 14,728 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,473 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-1.40	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-11.44	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-11.42	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.6	66.5	63.2	61.6	69.0	69.3			
Medium Trucks:	69.4	67.6	62.2	61.4	69.2	69.4			
Heavy Trucks:	73.8	71.8	65.2	67.2	74.4	74.6			
Vehicle Noise:	76.0	74.1	68.5	69.1	76.4	76.6			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				131	283	609	1,312		
CNEL:				135	291	627	1,350		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Kimball Av. Road Segment: e/o Main St.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 13,263 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,326 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-1.85	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-11.90	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-11.88	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.2	66.0	62.8	61.1	68.5	68.8			
Medium Trucks:	68.9	67.2	61.7	60.9	68.7	69.0			
Heavy Trucks:	73.3	71.4	64.7	66.7	74.0	74.1			
Vehicle Noise:	75.6	73.6	68.0	68.6	76.0	76.1			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			122	264	568	1,224			
CNEL:			126	271	584	1,259			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Kimball Av. Road Segment: e/o Flight Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 12,691 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,269 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140				
					Medium Trucks: 41.929				
					Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-2.05	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-12.09	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-12.07	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.0	65.8	62.6	60.9	68.3	68.6			
Medium Trucks:	68.8	67.0	61.6	60.7	68.5	68.8			
Heavy Trucks:	73.1	71.2	64.6	66.5	73.8	73.9			
Vehicle Noise:	75.4	73.4	67.9	68.4	75.8	76.0			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			119	256	552	1,188			
CNEL:			122	263	567	1,223			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: Existing Without Project Road Name: Kimball Av. Road Segment: e/o Meadow Valley Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 12,439 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,244 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
				Vehicle Type	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.44%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
				Noise Source Elevations (in feet)				
				Autos: 0.000				
				Medium Trucks: 2.297				
				Heavy Trucks: 8.004      Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 42.140				
				Medium Trucks: 41.929				
				Heavy Trucks: 41.950				
FHWA Noise Model Calculations								
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos: 70.20 -2.13 1.01 -1.20 -4.64 0.000 0.000								
Medium Trucks: 81.00 -12.18 1.04 -1.20 -4.87 0.000 0.000								
Heavy Trucks: 85.38 -12.16 1.04 -1.20 -5.44 0.000 0.000								
Unmitigated Noise Levels (without Topo and barrier attenuation)								
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos: 67.9 65.8 62.5 60.9 68.2 68.5								
Medium Trucks: 68.7 66.9 61.5 60.7 68.4 68.7								
Heavy Trucks: 73.1 71.1 64.5 66.5 73.7 73.8								
Vehicle Noise: 75.3 73.3 67.8 68.3 75.7 75.9								
Centerline Distance to Noise Contour (in feet)								
				70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:				117	253	544	1,172	
CNEL:				121	260	560	1,206	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Limonite Av. Road Segment: e/o Hellman Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 1 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 0 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-43.08	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-53.13	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-53.10	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	24.1	21.9	18.7	17.0	24.4	24.7			
Medium Trucks:	24.8	23.1	17.6	16.8	24.6	24.8			
Heavy Trucks:	29.2	27.3	20.6	22.6	29.9	30.0			
Vehicle Noise:	31.5	29.5	23.9	24.5	31.9	32.0			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				0	0	1	2		
CNEL:				0	0	1	2		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Limonite Av. Road Segment: e/o Archibald Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 16,364 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,636 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-0.94	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-10.99	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-10.97	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	66.2	64.1	60.8	59.2	66.6	66.9			
Medium Trucks:	67.0	65.2	59.8	59.0	66.7	67.0			
Heavy Trucks:	71.4	69.4	62.8	64.8	72.0	72.1			
Vehicle Noise:	73.6	71.6	66.1	66.6	74.0	74.2			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			140	302	651	1,403			
CNEL:			144	311	670	1,444			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Limonite Av. Road Segment: e/o Harrison Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 18,321 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,832 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-0.45	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-10.50	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-10.47	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn		CNEL		
Autos:	66.7	64.6	61.3	59.7	67.1		67.4		
Medium Trucks:	67.5	65.7	60.3	59.4	67.2		67.5		
Heavy Trucks:	71.9	69.9	63.3	65.3	72.5		72.6		
Vehicle Noise:	74.1	72.1	66.6	67.1	74.5		74.7		
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				151	326	702	1,513		
CNEL:				156	335	723	1,557		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Limonite Av. Road Segment: e/o Sumner Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 19,706 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,971 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-0.14	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-10.18	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-10.16	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	67.0	64.9	61.6	60.0	67.4	67.7			
Medium Trucks:	67.8	66.0	60.6	59.8	67.6	67.8			
Heavy Trucks:	72.2	70.2	63.6	65.6	72.8	72.9			
Vehicle Noise:	74.4	72.4	66.9	67.4	74.8	75.0			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				159	342	737	1,588		
CNEL:				163	352	759	1,634		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: Existing Without Project Road Name: Limonite Av. Road Segment: e/o Scholar Wy.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 22,773 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,277 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Vehicle Type		Day	Evening	Night	Daily
					Autos:		73.5%	8.7%	17.9%	83.44%
					Medium Trucks:		80.1%	5.7%	14.2%	8.26%
					Heavy Trucks:		76.2%	4.1%	19.7%	8.30%
					Noise Source Elevations (in feet)					
					Autos:		0.000			
					Medium Trucks:		2.297			
					Heavy Trucks:		8.004      Grade Adjustment: 0.0			
					Lane Equivalent Distance (in feet)					
					Autos:		65.422			
					Medium Trucks:		65.286			
					Heavy Trucks:		65.299			
FHWA Noise Model Calculations										
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	70.20	0.49	-1.85	-1.20	-4.73	0.000	0.000			
Medium Trucks:	81.00	-9.55	-1.84	-1.20	-4.88	0.000	0.000			
Heavy Trucks:	85.38	-9.53	-1.84	-1.20	-5.25	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	67.6	65.5	62.3	60.6	68.0	68.3				
Medium Trucks:	68.4	66.7	61.2	60.4	68.2	68.4				
Heavy Trucks:	72.8	70.8	64.2	66.2	73.4	73.6				
Vehicle Noise:	75.0	73.1	67.5	68.1	75.4	75.6				
Centerline Distance to Noise Contour (in feet)										
				70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:				175	377	812	1,749			
CNEL:				180	388	835	1,800			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing Without Project Road Name: Limonite Av. Road Segment: e/o Hamner Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 27,647 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,765 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	1.79	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	79.45	-8.25	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	84.25	-8.23	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	67.2	65.1	61.8	60.2	67.6	67.9			
Medium Trucks:	68.2	66.4	61.0	60.1	67.9	68.2			
Heavy Trucks:	73.0	71.0	64.4	66.4	73.6	73.7			
Vehicle Noise:	75.0	73.1	67.4	68.1	75.4	75.6			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				175	376	811	1,746		
CNEL:				180	387	834	1,796		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: Existing + Project Road Name: Euclid Av. Road Segment: s/o SR-60				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 29,530 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,953 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 115 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				Vehicle Type	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 80.0 feet Centerline Dist. to Observer: 80.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 82.97% Medium Trucks: 80.1% 5.7% 14.2% 8.58% Heavy Trucks: 76.2% 4.1% 19.7% 8.45%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 55.846 Medium Trucks: 55.687 Heavy Trucks: 55.703			
FHWA Noise Model Calculations							
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.18	-0.82	-1.20	-4.74	0.000	0.000
Medium Trucks:	82.40	-8.67	-0.81	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-8.74	-0.81	-1.20	-5.23	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	70.9	68.8	65.5	63.9	71.3	71.6	
Medium Trucks:	71.7	70.0	64.5	63.7	71.5	71.7	
Heavy Trucks:	75.7	73.7	67.1	69.0	76.3	76.4	
Vehicle Noise:	78.1	76.1	70.6	71.1	78.5	78.6	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			293	631	1,359	2,928	
CNEL:			301	649	1,399	3,014	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Euclid Av. Road Segment: s/o Walnut Av.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 25,040 vehicles				Autos: 15					
Peak Hour Percentage: 10%				Medium Trucks (2 Axles): 15					
Peak Hour Volume: 2,504 vehicles				Heavy Trucks (3+ Axles): 15					
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 115 feet				Vehicle Mix					
				VehicleType	Day	Evening	Night	Daily	
				Autos: 73.5% 8.7% 17.9% 82.92%					
				Medium Trucks: 80.1% 5.7% 14.2% 8.62%					
				Heavy Trucks: 76.2% 4.1% 19.7% 8.46%					
Site Data				Noise Source Elevations (in feet)					
Barrier Height: 0.0 feet				Autos: 0.000					
Barrier Type (0-Wall, 1-Berm): 0.0				Medium Trucks: 2.297					
Centerline Dist. to Barrier: 80.0 feet				Heavy Trucks: 8.004					
Centerline Dist. to Observer: 80.0 feet				Grade Adjustment: 0.0					
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	0.46	-0.82	-1.20	-4.74	0.000		0.000	
Medium Trucks:	82.40	-9.37	-0.81	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-9.45	-0.81	-1.20	-5.23	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.2	68.1	64.8	63.2	70.6	70.9			
Medium Trucks:	71.0	69.3	63.8	63.0	70.8	71.0			
Heavy Trucks:	74.9	73.0	66.3	68.3	75.6	75.7			
Vehicle Noise:	77.4	75.4	69.9	70.4	77.7	77.9			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			263	566	1,219	2,626			
CNEL:			270	582	1,255	2,703			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Euclid Av. Road Segment: s/o Riverside Dr.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 24,261 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,426 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data				Vehicle Mix					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily	
				Autos: 73.5% 8.7% 17.9% 82.96%					
				Medium Trucks: 80.1% 5.7% 14.2% 8.61%					
				Heavy Trucks: 76.2% 4.1% 19.7% 8.44%					
				Noise Source Elevations (in feet)					
				Autos: 0.000					
				Medium Trucks: 2.297					
				Heavy Trucks: 8.004 Grade Adjustment: 0.0					
				Lane Equivalent Distance (in feet)					
				Autos: 68.593					
				Medium Trucks: 68.464					
				Heavy Trucks: 68.476					
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	0.33	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-9.51	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-9.60	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.7	66.6	63.4	61.7	69.1	69.4			
Medium Trucks:	69.5	67.8	62.3	61.5	69.3	69.5			
Heavy Trucks:	73.4	71.5	64.9	66.8	74.1	74.2			
Vehicle Noise:	75.9	73.9	68.4	68.9	76.3	76.4			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			269	580	1,249	2,690			
CNEL:			277	597	1,285	2,769			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: Existing + Project Road Name: Euclid Av. Road Segment: s/o Chino Av.				Project Name: Chino Parcel Delivery Job Number: 11134						
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data				Site Conditions (Hard = 10, Soft = 15)						
Average Daily Traffic (Adt): 27,358 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,736 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15						
Site Data				Vehicle Mix						
				Vehicle Type		Day	Evening	Night	Daily	
						Autos:	73.5%	8.7%	17.9%	83.04%
						Medium Trucks:	80.1%	5.7%	14.2%	8.55%
						Heavy Trucks:	76.2%	4.1%	19.7%	8.41%
				Noise Source Elevations (in feet)						
						Autos:	0.000			
						Medium Trucks:	2.297			
						Heavy Trucks:	8.004			
						Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)						
						Autos:	68.593			
						Medium Trucks:	68.464			
		Heavy Trucks:	68.476							
FHWA Noise Model Calculations										
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	71.78	0.85	-2.16	-1.20	-4.77	0.000		0.000		
Medium Trucks:	82.40	-9.02	-2.15	-1.20	-4.88	0.000		0.000		
Heavy Trucks:	86.40	-9.09	-2.15	-1.20	-5.15	0.000		0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)										
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	69.3	67.1	63.9	62.2	69.6	69.9				
Medium Trucks:	70.0	68.3	62.8	62.0	69.8	70.0				
Heavy Trucks:	74.0	72.0	65.4	67.3	74.6	74.7				
Vehicle Noise:	76.4	74.4	68.9	69.4	76.8	76.9				
Centerline Distance to Noise Contour (in feet)										
			70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:			291	626	1,350	2,908				
CNEL:			299	645	1,389	2,993				

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Euclid Av. Road Segment: s/o Schaefer Av.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 24,767 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,477 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data				Vehicle Mix					
				VehicleType	Day	Evening	Night	Daily	
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.04% Medium Trucks: 80.1% 5.7% 14.2% 8.56% Heavy Trucks: 76.2% 4.1% 19.7% 8.40%					
				Noise Source Elevations (in feet)					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
				Lane Equivalent Distance (in feet)					
				Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476					
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	0.42	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-9.44	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-9.53	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.8	66.7	63.4	61.8	69.2	69.5			
Medium Trucks:	69.6	67.9	62.4	61.6	69.4	69.6			
Heavy Trucks:	73.5	71.5	64.9	66.9	74.1	74.3			
Vehicle Noise:	75.9	74.0	68.5	69.0	76.3	76.5			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			272	586	1,263	2,721			
CNEL:			280	603	1,300	2,801			



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Euclid Av. Road Segment: s/o Edison Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 24,433 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 2,443 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 154 feet					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.04%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.58%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.38%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 103.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Centerline Dist. to Observer: 103.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	0.36	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-9.49	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-9.60	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.8	66.7	63.4	61.8	69.1	69.4			
Medium Trucks:	69.6	67.8	62.4	61.5	69.3	69.6			
Heavy Trucks:	73.4	71.5	64.9	66.8	74.1	74.2			
Vehicle Noise:	75.9	73.9	68.4	68.9	76.3	76.5			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			269	580	1,251	2,694			
CNEL:			277	598	1,287	2,774			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Euclid Av. Road Segment: s/o Eucalyptus Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 26,522 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,652 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.16% Medium Trucks: 80.1% 5.7% 14.2% 8.51% Heavy Trucks: 76.2% 4.1% 19.7% 8.33%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	0.73	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-9.17	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-9.27	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.1	67.0	63.8	62.1	69.5	69.8			
Medium Trucks:	69.9	68.1	62.7	61.9	69.7	69.9			
Heavy Trucks:	73.8	71.8	65.2	67.2	74.4	74.5			
Vehicle Noise:	76.2	74.3	68.8	69.2	76.6	76.8			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			284	611	1,317	2,837			
CNEL:			292	629	1,356	2,920			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: Existing + Project Road Name: Euclid Av. Road Segment: s/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 25,206 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,521 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
					VehicleType		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.69%					
					Medium Trucks: 80.1% 5.7% 14.2% 8.75%					
					Heavy Trucks: 76.2% 4.1% 19.7% 8.56%					
					Noise Source Elevations (in feet)					
					Autos: 0.000					
					Medium Trucks: 2.297					
					Heavy Trucks: 8.004 Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 68.593					
					Medium Trucks: 68.464					
					Heavy Trucks: 68.476					
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	71.78	0.48	-2.16	-1.20	-4.77	0.000	0.000			
Medium Trucks:	82.40	-9.27	-2.15	-1.20	-4.88	0.000	0.000			
Heavy Trucks:	86.40	-9.37	-2.15	-1.20	-5.15	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	68.9	66.8	63.5	61.9	69.3	69.6		69.6		
Medium Trucks:	69.8	68.0	62.6	61.8	69.6	69.8		69.8		
Heavy Trucks:	73.7	71.7	65.1	67.1	74.3	74.4		74.4		
Vehicle Noise:	76.1	74.1	68.6	69.1	76.5	76.7		76.7		
Centerline Distance to Noise Contour (in feet)										
			70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:			278	599	1,291	2,781				
CNEL:			286	617	1,328	2,862				

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Euclid Av. Road Segment: s/o Kimball Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 15,729 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,573 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.07% Medium Trucks: 80.1% 5.7% 14.2% 8.54% Heavy Trucks: 76.2% 4.1% 19.7% 8.39%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	-1.55	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-11.43	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-11.50	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	66.9	64.7	61.5	59.8	67.2	67.5			
Medium Trucks:	67.6	65.9	60.4	59.6	67.4	67.6			
Heavy Trucks:	71.5	69.6	62.9	64.9	72.2	72.3			
Vehicle Noise:	74.0	72.0	66.5	67.0	74.4	74.5			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				201	433	932	2,009		
CNEL:				207	446	960	2,068		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: Existing + Project Road Name: Euclid Av. Road Segment: s/o Bickmore Av.			Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA			NOISE MODEL INPUTS				
Highway Data			Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 14,997 vehicles			Autos: 15				
Peak Hour Percentage: 10%			Medium Trucks (2 Axles): 15				
Peak Hour Volume: 1,500 vehicles			Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph							
Near/Far Lane Distance: 154 feet							
Site Data			Vehicle Mix				
Barrier Height: 0.0 feet			VehicleType	Day	Evening	Night	Daily
Barrier Type (0-Wall, 1-Berm): 0.0			Autos:		73.5%	8.7%	17.9% 83.05%
Centerline Dist. to Barrier: 103.0 feet			Medium Trucks:		80.1%	5.7%	14.2% 8.55%
Centerline Dist. to Observer: 103.0 feet			Heavy Trucks:		76.2%	4.1%	19.7% 8.40%
Barrier Distance to Observer: 0.0 feet							
Noise Source Elevations (in feet)							
Observer Height (Above Pad): 5.0 feet			Autos:		0.000		
Pad Elevation: 0.0 feet			Medium Trucks:		2.297		
Road Elevation: 0.0 feet			Heavy Trucks:		8.004		
Road Grade: 0.0%			Grade Adjustment: 0.0				
Left View: -90.0 degrees							
Right View: 90.0 degrees							
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	-1.76	-2.16	-1.20	-4.77	0.000	0.000
Medium Trucks:	82.40	-11.63	-2.15	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-11.71	-2.15	-1.20	-5.15	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	66.7	64.5	61.3	59.6	67.0	67.3	
Medium Trucks:	67.4	65.7	60.2	59.4	67.2	67.4	
Heavy Trucks:	71.3	69.4	62.7	64.7	72.0	72.1	
Vehicle Noise:	73.8	71.8	66.3	66.8	74.1	74.3	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			195	419	904	1,947	
CNEL:			200	432	930	2,004	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: Existing + Project Road Name: Euclid Av. Road Segment: s/o Pine Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 35,401 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,540 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.28% Medium Trucks: 80.1% 5.7% 14.2% 8.38% Heavy Trucks: 76.2% 4.1% 19.7% 8.34%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	71.78	1.99	-2.16	-1.20	-4.77	0.000	0.000	
Medium Trucks:	82.40	-7.98	-2.15	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	86.40	-8.01	-2.15	-1.20	-5.15	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	70.4	68.3	65.0	63.4	70.8	71.1		
Medium Trucks:	71.1	69.3	63.9	63.1	70.8	71.1		
Heavy Trucks:	75.0	73.1	66.4	68.4	75.7	75.8		
Vehicle Noise:	77.5	75.5	70.0	70.5	77.8	78.0		
Centerline Distance to Noise Contour (in feet)								
				70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:				343	740	1,594	3,434	
CNEL:				354	762	1,641	3,535	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: Existing + Project Road Name: Flight Av. Road Segment: n/o Merrill Av.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt):		54 vehicles		Autos:		15	
Peak Hour Percentage:		10%		Medium Trucks (2 Axles):		15	
Peak Hour Volume:		5 vehicles		Heavy Trucks (3+ Axles):		15	
Vehicle Speed:		50 mph					
Near/Far Lane Distance:		36 feet					
Site Data				Vehicle Mix			
Barrier Height:		0.0 feet		Autos:		73.5% 8.7% 17.9% 99.69%	
Barrier Type (0-Wall, 1-Berm):		0.0		Medium Trucks:		80.1% 5.7% 14.2% 0.15%	
Centerline Dist. to Barrier:		44.0 feet		Heavy Trucks:		76.2% 4.1% 19.7% 0.15%	
Centerline Dist. to Observer:		44.0 feet					
Barrier Distance to Observer:		0.0 feet					
Observer Height (Above Pad):		5.0 feet					
Pad Elevation:		0.0 feet					
Road Elevation:		0.0 feet					
Road Grade:		0.0%					
Left View:		-90.0 degrees					
Right View:		90.0 degrees					
				Noise Source Elevations (in feet)			
				Autos:		0.000	
				Medium Trucks:		2.297	
				Heavy Trucks:		8.004 Grade Adjustment: 0.0	
				Lane Equivalent Distance (in feet)			
				Autos:		40.460	
				Medium Trucks:		40.241	
				Heavy Trucks:		40.262	
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	-25.00	1.28	-1.20	-4.61	0.000	0.000
Medium Trucks:	81.00	-53.13	1.31	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-53.10	1.31	-1.20	-5.50	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	45.3	43.2	39.9	38.3	45.6	45.9	
Medium Trucks:	28.0	26.2	20.8	20.0	27.8	28.0	
Heavy Trucks:	32.4	30.4	23.8	25.8	33.0	33.1	
Vehicle Noise:	45.6	43.5	40.0	38.6	45.9	46.2	
Centerline Distance to Noise Contour (in feet)							
				70 dBA	65 dBA	60 dBA	55 dBA
Ldn:				1	2	5	11
CNEL:				1	2	5	11

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: Existing + Project Road Name: Hellman Av. Road Segment: s/o Kimball Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 12,915 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,291 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 84.05%				
				Medium Trucks: 80.1% 5.7% 14.2% 7.96%				
				Heavy Trucks: 76.2% 4.1% 19.7% 7.99%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	68.46	-1.48	1.01	-1.20	-4.64	0.000	0.000	
Medium Trucks:	79.45	-11.72	1.04	-1.20	-4.87	0.000	0.000	
Heavy Trucks:	84.25	-11.70	1.04	-1.20	-5.44	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	66.8	64.7	61.4	59.8	67.2	67.5		
Medium Trucks:	67.6	65.8	60.4	59.6	67.3	67.6		
Heavy Trucks:	72.4	70.4	63.8	65.8	73.0	73.2		
Vehicle Noise:	74.4	72.5	66.9	67.5	74.9	75.0		
Centerline Distance to Noise Contour (in feet)								
				70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:				103	223	480	1,034	
CNEL:				106	229	494	1,063	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Hellman Av. Road Segment: s/o Pine Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 10,533 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 1,053 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 45 mph									
Near/Far Lane Distance: 51 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.90%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.03%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.07%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 49.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 49.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	-2.37	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	79.45	-12.56	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-12.54	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	65.9	63.8	60.5	58.9	66.3	66.6			
Medium Trucks:	66.7	65.0	59.5	58.7	66.5	66.7			
Heavy Trucks:	71.5	69.6	63.0	64.9	72.2	72.3			
Vehicle Noise:	73.6	71.6	66.0	66.7	74.0	74.2			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				91	195	421	907		
CNEL:				93	201	433	933		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Archibald Av. Road Segment: n/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 23,914 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,391 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 82.37% Medium Trucks: 80.1% 5.7% 14.2% 8.97% Heavy Trucks: 76.2% 4.1% 19.7% 8.66%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	0.65	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-8.98	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-9.13	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.6	66.5	63.2	61.6	69.0	69.3			
Medium Trucks:	69.8	68.0	62.6	61.8	69.6	69.8			
Heavy Trucks:	74.0	72.0	65.4	67.4	74.6	74.8			
Vehicle Noise:	76.2	74.3	68.7	69.3	76.6	76.8			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				205	441	950	2,048		
CNEL:				211	454	978	2,107		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: Existing + Project Road Name: Archibald Av. Road Segment: s/o Riverside Dr.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 23,226 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,323 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 82.39% Medium Trucks: 80.1% 5.7% 14.2% 8.96% Heavy Trucks: 76.2% 4.1% 19.7% 8.65%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	71.78	0.11	-1.05	-1.20	-4.73	0.000	0.000	
Medium Trucks:	82.40	-9.53	-1.03	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	86.40	-9.68	-1.03	-1.20	-5.25	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	69.6	67.5	64.3	62.6	70.0	70.3		
Medium Trucks:	70.6	68.9	63.5	62.6	70.4	70.7		
Heavy Trucks:	74.5	72.5	65.9	67.9	75.1	75.2		
Vehicle Noise:	76.9	74.9	69.4	69.9	77.3	77.5		
Centerline Distance to Noise Contour (in feet)								
				70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:				226	487	1,050	2,262	
CNEL:				233	502	1,081	2,329	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Archibald Av. Road Segment: s/o Chino Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 17,882 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,788 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 82.08% Medium Trucks: 80.1% 5.7% 14.2% 9.17% Heavy Trucks: 76.2% 4.1% 19.7% 8.75%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	-1.04	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-10.56	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-10.77	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.5	66.4	63.1	61.5	68.9	69.2			
Medium Trucks:	69.6	67.9	62.4	61.6	69.4	69.6			
Heavy Trucks:	73.4	71.4	64.8	66.8	74.0	74.2			
Vehicle Noise:	75.8	73.9	68.3	68.8	76.2	76.4			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				191	413	889	1,915		
CNEL:				197	425	915	1,971		

Friday, March 02, 2018



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: Existing + Project Road Name: Archibald Av. Road Segment: s/o Schaefer Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 18,340 vehicles				Autos: 15				
Peak Hour Percentage: 10%				Medium Trucks (2 Axles): 15				
Peak Hour Volume: 1,834 vehicles				Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph				Vehicle Mix				
Near/Far Lane Distance: 93 feet				VehicleType	Day	Evening	Night	Daily
Site Data				Autos: 73.5% 8.7% 17.9% 82.12%				
Barrier Height: 0.0 feet				Medium Trucks: 80.1% 5.7% 14.2% 9.15%				
Barrier Type (0-Wall, 1-Berm): 0.0				Heavy Trucks: 76.2% 4.1% 19.7% 8.74%				
Centerline Dist. to Barrier: 74.0 feet				Noise Source Elevations (in feet)				
Centerline Dist. to Observer: 74.0 feet				Autos: 0.000				
Barrier Distance to Observer: 0.0 feet				Medium Trucks: 2.297				
Observer Height (Above Pad): 5.0 feet				Heavy Trucks: 8.004				
Pad Elevation: 0.0 feet				Grade Adjustment: 0.0				
Road Elevation: 0.0 feet				Lane Equivalent Distance (in feet)				
Road Grade: 0.0%				Autos: 57.782				
Left View: -90.0 degrees				Medium Trucks: 57.629				
Right View: 90.0 degrees				Heavy Trucks: 57.644				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	71.78	-0.93	-1.05	-1.20	-4.73	0.000	0.000	
Medium Trucks:	82.40	-10.46	-1.03	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	86.40	-10.66	-1.03	-1.20	-5.25	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	68.6	66.5	63.2	61.6	69.0	69.3		
Medium Trucks:	69.7	68.0	62.5	61.7	69.5	69.7		
Heavy Trucks:	73.5	71.5	64.9	66.9	74.1	74.3		
Vehicle Noise:	75.9	74.0	68.4	68.9	76.3	76.5		
Centerline Distance to Noise Contour (in feet)								
			70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:			195	419	903	1,946		
CNEL:			200	431	930	2,003		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Archibald Av. Road Segment: s/o Ontario Ranch Rd.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 22,391 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 2,239 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph					Vehicle Mix				
Near/Far Lane Distance: 93 feet					VehicleType				
Site Data					Day				
Barrier Height: 0.0 feet					Evening				
Barrier Type (0-Wall, 1-Berm): 0.0					Night				
Centerline Dist. to Barrier: 74.0 feet					Daily				
Centerline Dist. to Observer: 74.0 feet					Autos: 73.5% 8.7% 17.9% 82.36%				
Barrier Distance to Observer: 0.0 feet					Medium Trucks: 80.1% 5.7% 14.2% 8.99%				
Observer Height (Above Pad): 5.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.66%				
Pad Elevation: 0.0 feet					Noise Source Elevations (in feet)				
Road Elevation: 0.0 feet					Autos: 0.000				
Road Grade: 0.0%					Medium Trucks: 2.297				
Left View: -90.0 degrees					Heavy Trucks: 8.004				
Right View: 90.0 degrees					Grade Adjustment: 0.0				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	-0.05	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-9.67	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-9.83	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.5	67.4	64.1	62.5	69.8	70.1			
Medium Trucks:	70.5	68.7	63.3	62.5	70.3	70.5			
Heavy Trucks:	74.3	72.4	65.7	67.7	75.0	75.1			
Vehicle Noise:	76.7	74.8	69.3	69.8	77.1	77.3			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			221	476	1,026	2,210			
CNEL:			227	490	1,056	2,275			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Archibald Av. Road Segment: s/o Eucalyptus Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 22,416 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 2,242 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 93 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Site Data					Autos: 73.5% 8.7% 17.9% 82.22%				
					Medium Trucks: 80.1% 5.7% 14.2% 9.07%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.71%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
Barrier Height: 0.0 feet					Medium Trucks: 2.297				
Barrier Type (0-Wall, 1-Berm): 0.0					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Centerline Dist. to Barrier: 74.0 feet									
Centerline Dist. to Observer: 74.0 feet					Lane Equivalent Distance (in feet)				
Barrier Distance to Observer: 0.0 feet					Autos: 57.782				
Observer Height (Above Pad): 5.0 feet					Medium Trucks: 57.629				
Pad Elevation: 0.0 feet					Heavy Trucks: 57.644				
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	-0.05	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-9.63	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-9.80	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.5	67.4	64.1	62.5	69.8	70.1			
Medium Trucks:	70.5	68.8	63.4	62.5	70.3	70.6			
Heavy Trucks:	74.4	72.4	65.8	67.8	75.0	75.1			
Vehicle Noise:	76.8	74.8	69.3	69.8	77.2	77.3			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			222	478	1,030	2,219			
CNEL:			228	492	1,060	2,284			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Archibald Av. Road Segment: s/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 23,803 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 2,380 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph					Vehicle Mix				
Near/Far Lane Distance: 93 feet									
Site Data					VehicleType				
Barrier Height: 0.0 feet					Autos: 73.5%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1%				
Centerline Dist. to Barrier: 74.0 feet					Heavy Trucks: 76.2%				
Centerline Dist. to Observer: 74.0 feet					Autos: 0.000				
Barrier Distance to Observer: 0.0 feet					Medium Trucks: 2.297				
Observer Height (Above Pad): 5.0 feet					Heavy Trucks: 8.004				
Pad Elevation: 0.0 feet					Grade Adjustment: 0.0				
Road Elevation: 0.0 feet					Lane Equivalent Distance (in feet)				
Road Grade: 0.0%									
Left View: -90.0 degrees					Autos: 57.782				
Right View: 90.0 degrees					Medium Trucks: 57.629				
					Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	0.22	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-9.43	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-9.59	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn		CNEL		
Autos:	69.8	67.6	64.4	62.7	70.1		70.4		
Medium Trucks:	70.7	69.0	63.5	62.7	70.5		70.7		
Heavy Trucks:	74.6	72.6	66.0	68.0	75.2		75.3		
Vehicle Noise:	77.0	75.0	69.5	70.0	77.4		77.6		
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			230	495	1,066	2,296			
CNEL:			236	509	1,097	2,363			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Archibald Av. Road Segment: s/o Limonite Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 19,630 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 1,963 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 78 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.23%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.40%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.38%				
Site Data									
Barrier Height: 0.0 feet									
Barrier Type (0-Wall, 1-Berm): 0.0									
Centerline Dist. to Barrier: 76.0 feet									
Centerline Dist. to Observer: 76.0 feet									
Barrier Distance to Observer: 0.0 feet					Noise Source Elevations (in feet)				
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004				
Road Grade: 0.0%					Grade Adjustment: 0.0				
Left View: -90.0 degrees									
Right View: 90.0 degrees					Lane Equivalent Distance (in feet)				
					Autos: 65.422				
					Medium Trucks: 65.286				
					Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	-0.58	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-10.54	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-10.55	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.1	66.0	62.8	61.1	68.5	68.8			
Medium Trucks:	68.8	67.1	61.6	60.8	68.6	68.8			
Heavy Trucks:	72.8	70.8	64.2	66.2	73.4	73.6			
Vehicle Noise:	75.2	73.3	67.8	68.2	75.6	75.8			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			180	387	834	1,797			
CNEL:			185	398	859	1,850			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Merrill Av. Road Segment: e/o Euclid Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 8,636 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 864 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 80.38%				
					Medium Trucks: 80.1% 5.7% 14.2% 10.47%				
					Heavy Trucks: 76.2% 4.1% 19.7% 9.15%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
<th colspan="5">Lane Equivalent Distance (in feet)</th>					Lane Equivalent Distance (in feet)				
					Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-3.88	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-12.73	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-13.32	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	66.4	64.3	61.0	59.4	66.8	67.1			
Medium Trucks:	68.4	66.6	61.2	60.4	68.2	68.4			
Heavy Trucks:	72.2	70.2	63.6	65.6	72.8	72.9			
Vehicle Noise:	74.4	72.5	66.9	67.4	74.8	75.0			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				92	198	428	921		
CNEL:				95	204	440	947		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Merrill Av. Road Segment: e/o Bon View Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 8,215 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 822 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type		Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 80.23% Medium Trucks: 80.1% 5.7% 14.2% 10.58% Heavy Trucks: 76.2% 4.1% 19.7% 9.19%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-4.11	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-12.90	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-13.52	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	66.2	64.0	60.8	59.2	66.5			66.8	
Medium Trucks:	68.2	66.5	61.0	60.2	68.0			68.2	
Heavy Trucks:	72.0	70.0	63.4	65.4	72.6			72.7	
Vehicle Noise:	74.2	72.3	66.7	67.2	74.6			74.8	
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				89	193	415	894		
CNEL:				92	198	427	919		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: Existing + Project Road Name: Merrill Av. Road Segment: e/o Flight Av.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 8,944 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 894 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 77.84% Medium Trucks: 80.1% 5.7% 14.2% 12.05% Heavy Trucks: 76.2% 4.1% 19.7% 10.11%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	-3.87	1.28	-1.20	-4.61	0.000	0.000
Medium Trucks:	81.00	-11.97	1.31	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-12.73	1.31	-1.20	-5.50	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	66.4	64.3	61.0	59.4	66.8	67.1	
Medium Trucks:	69.1	67.4	61.9	61.1	68.9	69.1	
Heavy Trucks:	72.8	70.8	64.2	66.1	73.4	73.5	
Vehicle Noise:	75.0	73.0	67.4	68.0	75.4	75.5	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			100	216	465	1,001	
CNEL:			103	222	478	1,029	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Merrill Av. Road Segment: e/o Hellman Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt):		9,096 vehicles			Autos:		15		
Peak Hour Percentage:		10%			Medium Trucks (2 Axles):		15		
Peak Hour Volume:		910 vehicles			Heavy Trucks (3+ Axles):		15		
Vehicle Speed:		50 mph			Vehicle Mix				
Near/Far Lane Distance:		36 feet							
Site Data					Vehicle Type				
Barrier Height:		0.0 feet			Autos:		73.5%		8.7%
Barrier Type (0-Wall, 1-Berm):		0.0			Medium Trucks:		80.1%		5.7%
Centerline Dist. to Barrier:		44.0 feet			Heavy Trucks:		76.2%		4.1%
Centerline Dist. to Observer:		44.0 feet					19.7%		77.83%
Barrier Distance to Observer:		0.0 feet			Noise Source Elevations (in feet)				
Observer Height (Above Pad):		5.0 feet			Autos:		0.000		
Pad Elevation:		0.0 feet			Medium Trucks:		2.297		
Road Elevation:		0.0 feet			Heavy Trucks:		8.004		Grade Adjustment: 0.0
Road Grade:		0.0%			Lane Equivalent Distance (in feet)				
Left View:		-90.0 degrees			Autos:		40.460		
Right View:		90.0 degrees			Medium Trucks:		40.241		
					Heavy Trucks:		40.262		
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:		70.20	-3.80	1.28	-1.20	-4.61	0.000		0.000
Medium Trucks:		81.00	-11.90	1.31	-1.20	-4.87	0.000		0.000
Heavy Trucks:		85.38	-12.65	1.31	-1.20	-5.50	0.000		0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn		CNEL		
Autos:		66.5	64.4	61.1	59.5	66.8		67.1	
Medium Trucks:		69.2	67.5	62.0	61.2	69.0		69.2	
Heavy Trucks:		72.8	70.9	64.2	66.2	73.5		73.6	
Vehicle Noise:		75.1	73.1	67.4	68.1	75.4		75.6	
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA		55 dBA	
Ldn:				101	218	470		1,013	
CNEL:				104	224	483		1,042	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Kimball Av. Road Segment: w/o Euclid Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 17,589 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,759 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.91%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.61%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.48%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 40.460				
					Medium Trucks: 40.241				
					Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-0.66	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-10.49	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-10.56	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.6	67.5	64.2	62.6	70.0	70.3			
Medium Trucks:	70.6	68.9	63.4	62.6	70.4	70.6			
Heavy Trucks:	74.9	73.0	66.3	68.3	75.5	75.7			
Vehicle Noise:	77.1	75.2	69.6	70.2	77.5	77.7			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				140	302	650	1,401		
CNEL:				144	310	669	1,441		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Kimball Av. Road Segment: e/o Euclid Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 17,747 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,775 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.66% Medium Trucks: 80.1% 5.7% 14.2% 8.15% Heavy Trucks: 76.2% 4.1% 19.7% 8.19%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-0.58	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-10.69	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-10.67	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.4	67.3	64.0	62.4	69.8	70.1			
Medium Trucks:	70.2	68.4	63.0	62.1	69.9	70.2			
Heavy Trucks:	74.5	72.6	66.0	67.9	75.2	75.3			
Vehicle Noise:	76.8	74.8	69.3	69.8	77.2	77.4			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			148	318	685	1,476			
CNEL:			152	327	705	1,518			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Kimball Av. Road Segment: e/o Rincon Meadows Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 16,788 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,679 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.70% Medium Trucks: 80.1% 5.7% 14.2% 8.13% Heavy Trucks: 76.2% 4.1% 19.7% 8.17%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
					FHWA Noise Model Calculations				
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-0.82	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-10.94	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-10.92	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.2	67.1	63.8	62.2	69.6	69.9			
Medium Trucks:	69.9	68.1	62.7	61.9	69.7	69.9			
Heavy Trucks:	74.3	72.3	65.7	67.7	74.9	75.1			
Vehicle Noise:	76.5	74.6	69.0	69.6	76.9	77.1			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			142	306	659	1,420			
CNEL:			146	315	678	1,461			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Kimball Av. Road Segment: e/o Mill Creek Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 15,019 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 1,502 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph					Vehicle Mix				
Near/Far Lane Distance: 51 feet					VehicleType				
Site Data					Day				
Barrier Height: 0.0 feet					Evening				
Barrier Type (0-Wall, 1-Berm): 0.0					Night				
Centerline Dist. to Barrier: 49.0 feet					Daily				
Centerline Dist. to Observer: 49.0 feet					Autos: 73.5% 8.7% 17.9% 83.76%				
Barrier Distance to Observer: 0.0 feet					Medium Trucks: 80.1% 5.7% 14.2% 8.10%				
Observer Height (Above Pad): 5.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.14%				
Pad Elevation: 0.0 feet					Noise Source Elevations (in feet)				
Road Elevation: 0.0 feet					Autos: 0.000				
Road Grade: 0.0%					Medium Trucks: 2.297				
Left View: -90.0 degrees					Heavy Trucks: 8.004				
Right View: 90.0 degrees					Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140				
					Medium Trucks: 41.929				
					Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-1.30	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-11.44	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-11.42	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.7	66.6	63.3	61.7	69.1	69.4			
Medium Trucks:	69.4	67.6	62.2	61.4	69.2	69.4			
Heavy Trucks:	73.8	71.8	65.2	67.2	74.4	74.6			
Vehicle Noise:	76.0	74.1	68.5	69.1	76.4	76.6			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				132	284	611	1,316		
CNEL:				135	292	629	1,354		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Kimball Av. Road Segment: e/o Flight Av.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 13,167 vehicles				Autos: 15					
Peak Hour Percentage: 10%				Medium Trucks (2 Axles): 15					
Peak Hour Volume: 1,317 vehicles				Heavy Trucks (3+ Axles): 15					
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 51 feet				Vehicle Mix					
				Vehicle Type	Day	Evening	Night	Daily	
Site Data				Autos: 73.5% 8.7% 17.9% 84.04%					
				Medium Trucks: 80.1% 5.7% 14.2% 7.96%					
				Heavy Trucks: 76.2% 4.1% 19.7% 8.00%					
				Noise Source Elevations (in feet)					
				Autos: 0.000					
Barrier Height: 0.0 feet				Medium Trucks: 2.297					
Barrier Type (0-Wall, 1-Berm): 0.0				Heavy Trucks: 8.004 Grade Adjustment: 0.0					
Centerline Dist. to Barrier: 49.0 feet									
Centerline Dist. to Observer: 49.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-1.86	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-12.09	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-12.07	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn		CNEL		
Autos:	68.2	66.0	62.8	61.1	68.5		68.8		
Medium Trucks:	68.8	67.0	61.6	60.7	68.5		68.8		
Heavy Trucks:	73.1	71.2	64.6	66.5	73.8		73.9		
Vehicle Noise:	75.4	73.4	67.9	68.4	75.8		76.0		
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			119	257	555	1,195			
CNEL:			123	265	571	1,229			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Kimball Av. Road Segment: e/o Main St.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 13,580 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,358 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data				Vehicle Mix					
				VehicleType	Day	Evening	Night	Daily	
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.83% Medium Trucks: 80.1% 5.7% 14.2% 8.07% Heavy Trucks: 76.2% 4.1% 19.7% 8.11%					
				Noise Source Elevations (in feet)					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0					
				Lane Equivalent Distance (in feet)					
				Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950					
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-1.73	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-11.90	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-11.88	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.3	66.2	62.9	61.3	68.6	68.9			
Medium Trucks:	68.9	67.2	61.7	60.9	68.7	69.0			
Heavy Trucks:	73.3	71.4	64.7	66.7	74.0	74.1			
Vehicle Noise:	75.6	73.6	68.1	68.6	76.0	76.2			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			123	265	570	1,228			
CNEL:			126	272	586	1,264			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Kimball Av. Road Segment: e/o Meadow Valley Av.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 12,915 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,291 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data				Vehicle Mix					
				Vehicle Type	Day	Evening	Night	Daily	
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 84.05% Medium Trucks: 80.1% 5.7% 14.2% 7.96% Heavy Trucks: 76.2% 4.1% 19.7% 7.99%					
				Noise Source Elevations (in feet)					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0					
				Lane Equivalent Distance (in feet)					
				Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950					
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-1.94	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-12.18	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-12.16	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.1	65.9	62.7	61.1	68.4	68.7			
Medium Trucks:	68.7	66.9	61.5	60.7	68.4	68.7			
Heavy Trucks:	73.1	71.1	64.5	66.5	73.7	73.8			
Vehicle Noise:	75.3	73.4	67.8	68.4	75.7	75.9			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			118	254	547	1,179			
CNEL:			121	261	563	1,213			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: Existing + Project Road Name: Limonite Av. Road Segment: e/o Hellman Av.			Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA			NOISE MODEL INPUTS				
Highway Data			Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 1 vehicles			Autos: 15				
Peak Hour Percentage: 10%			Medium Trucks (2 Axles): 15				
Peak Hour Volume: 0 vehicles			Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph			Vehicle Mix				
Near/Far Lane Distance: 78 feet			VehicleType				
Site Data			Day	Evening	Night	Daily	
Barrier Height: 0.0 feet			Autos: 73.5%	8.7%	17.9%	83.44%	
Barrier Type (0-Wall, 1-Berm): 0.0			Medium Trucks: 80.1%	5.7%	14.2%	8.26%	
Centerline Dist. to Barrier: 76.0 feet			Heavy Trucks: 76.2%	4.1%	19.7%	8.30%	
Centerline Dist. to Observer: 76.0 feet			Noise Source Elevations (in feet)				
Barrier Distance to Observer: 0.0 feet			Autos: 0.000				
Observer Height (Above Pad): 5.0 feet			Medium Trucks: 2.297				
Pad Elevation: 0.0 feet			Heavy Trucks: 8.004	Grade Adjustment: 0.0			
Road Elevation: 0.0 feet			Lane Equivalent Distance (in feet)				
Road Grade: 0.0%			Autos: 65.422				
Left View: -90.0 degrees			Medium Trucks: 65.286				
Right View: 90.0 degrees			Heavy Trucks: 65.299				
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	-43.08	-1.85	-1.20	-4.73	0.000	0.000
Medium Trucks:	81.00	-53.13	-1.84	-1.20	-4.88	0.000	0.000
Heavy Trucks:	85.38	-53.10	-1.84	-1.20	-5.25	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	24.1	21.9	18.7	17.0	24.4	24.7	
Medium Trucks:	24.8	23.1	17.6	16.8	24.6	24.8	
Heavy Trucks:	29.2	27.3	20.6	22.6	29.9	30.0	
Vehicle Noise:	31.5	29.5	23.9	24.5	31.9	32.0	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			0	0	1	2	
CNEL:			0	0	1	2	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Limonite Av. Road Segment: e/o Archibald Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 17,103 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 1,710 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 78 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Site Data					Autos: 73.5% 8.7% 17.9% 82.31%				
					Medium Trucks: 80.1% 5.7% 14.2% 9.04%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.65%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
Barrier Height: 0.0 feet					Medium Trucks: 2.297				
Barrier Type (0-Wall, 1-Berm): 0.0					Heavy Trucks: 8.004				
Centerline Dist. to Barrier: 76.0 feet					Grade Adjustment: 0.0				
Centerline Dist. to Observer: 76.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-0.81	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-10.40	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-10.59	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	66.3	64.2	60.9	59.3	66.7	67.0			
Medium Trucks:	67.6	65.8	60.4	59.5	67.3	67.6			
Heavy Trucks:	71.7	69.8	63.1	65.1	72.4	72.5			
Vehicle Noise:	74.0	72.0	66.4	67.0	74.4	74.5			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			149	320	689	1,485			
CNEL:			153	329	709	1,528			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Limonite Av. Road Segment: e/o Harrison Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 19,060 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 1,906 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph					Vehicle Mix				
Near/Far Lane Distance: 78 feet					Vehicle Type				
Site Data					Day				
					Evening				
					Night				
					Daily				
					Autos: 73.5% 8.7% 17.9% 82.42%				
Barrier Height: 0.0 feet					Medium Trucks: 80.1% 5.7% 14.2% 8.96%				
Barrier Type (0-Wall, 1-Berm): 0.0					Heavy Trucks: 76.2% 4.1% 19.7% 8.61%				
Centerline Dist. to Barrier: 76.0 feet					Noise Source Elevations (in feet)				
Centerline Dist. to Observer: 76.0 feet					Autos: 0.000				
Barrier Distance to Observer: 0.0 feet					Medium Trucks: 2.297				
Observer Height (Above Pad): 5.0 feet					Heavy Trucks: 8.004				
Pad Elevation: 0.0 feet					Grade Adjustment: 0.0				
Road Elevation: 0.0 feet					Lane Equivalent Distance (in feet)				
Road Grade: 0.0%					Autos: 65.422				
Left View: -90.0 degrees					Medium Trucks: 65.286				
Right View: 90.0 degrees					Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-0.33	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-9.97	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-10.14	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	66.8	64.7	61.4	59.8	67.2	67.5			
Medium Trucks:	68.0	66.2	60.8	60.0	67.8	68.0			
Heavy Trucks:	72.2	70.2	63.6	65.6	72.8	73.0			
Vehicle Noise:	74.4	72.5	66.9	67.5	74.8	75.0			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			159	343	739	1,592			
CNEL:			164	353	760	1,638			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Limonite Av. Road Segment: e/o Sumner Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 20,445 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 2,044 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 78 feet					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Site Data					Autos: 73.5% 8.7% 17.9% 82.49%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.92%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.59%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
Barrier Height: 0.0 feet					Medium Trucks: 2.297				
Barrier Type (0-Wall, 1-Berm): 0.0					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Centerline Dist. to Barrier: 76.0 feet									
Centerline Dist. to Observer: 76.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-0.03	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-9.69	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-9.85	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	67.1	65.0	61.7	60.1	67.5	67.8			
Medium Trucks:	68.3	66.5	61.1	60.3	68.0	68.3			
Heavy Trucks:	72.5	70.5	63.9	65.9	73.1	73.2			
Vehicle Noise:	74.7	72.8	67.2	67.8	75.1	75.3			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			167	359	773	1,666			
CNEL:			171	369	795	1,714			

Friday, March 02, 2018



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Limonite Av. Road Segment: e/o Hamner Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 28,280 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 2,828 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 45 mph									
Near/Far Lane Distance: 78 feet					Vehicle Mix				
Site Data					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet					Autos:	73.5%	8.7%	17.9%	82.69%
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks:	80.1%	5.7%	14.2%	8.76%
Centerline Dist. to Barrier: 76.0 feet					Heavy Trucks:	76.2%	4.1%	19.7%	8.54%
Centerline Dist. to Observer: 76.0 feet					Noise Source Elevations (in feet)				
Barrier Distance to Observer: 0.0 feet					Autos:	0.000			
Observer Height (Above Pad): 5.0 feet					Medium Trucks:	2.297			
Pad Elevation: 0.0 feet					Heavy Trucks:	8.004      Grade Adjustment: 0.0			
Road Elevation: 0.0 feet					Lane Equivalent Distance (in feet)				
Road Grade: 0.0%					Autos:	65.422			
Left View: -90.0 degrees					Medium Trucks:	65.286			
Right View: 90.0 degrees					Heavy Trucks:	65.299			
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	1.85	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	79.45	-7.90	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	84.25	-8.01	-1.84	-1.20	-5.25	0.000	0.000		

Unmitigated Noise Levels (without Topo and barrier attenuation)						
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	67.3	65.1	61.9	60.2	67.6	67.9
Medium Trucks:	68.5	66.8	61.3	60.5	68.3	68.5
Heavy Trucks:	73.2	71.2	64.6	66.6	73.8	74.0
Vehicle Noise:	75.2	73.3	67.6	68.3	75.6	75.8

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	181	389	839	1,807
CNEL:	186	400	862	1,858

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Euclid Av. Road Segment: s/o Walnut Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt):		39,654 vehicles		Autos:		15			
Peak Hour Percentage:		10%		Medium Trucks (2 Axes):		15			
Peak Hour Volume:		3,965 vehicles		Heavy Trucks (3+ Axes):		15			
Vehicle Speed:		55 mph		Vehicle Mix					
Near/Far Lane Distance:		115 feet							
Site Data				Vehicle Type					
Barrier Height:		0.0 feet		Autos:		73.5%	8.7%	17.9%	83.44%
Barrier Type (0-Wall, 1-Berm):		0.0		Medium Trucks:		80.1%	5.1%	14.2%	8.26%
Centerline Dist. to Barrier:		80.0 feet		Heavy Trucks:		76.2%	4.7%	19.7%	8.30%
Centerline Dist. to Observer:		80.0 feet		Noise Source Elevations (in feet)					
Barrier Distance to Observer:		0.0 feet		Autos:		0.000			
Observer Height (Above Pad):		5.0 feet		Medium Trucks:		2.297			
Pad Elevation:		0.0 feet		Heavy Trucks:		8.004		Grade Adjustment: 0.0	
Road Elevation:		0.0 feet		Lane Equivalent Distance (in feet)					
Road Grade:		0.0%		Autos:		55.846			
Left View:		-90.0 degrees		Medium Trucks:		55.687			
Right View:		90.0 degrees		Heavy Trucks:		55.703			
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.49	-0.82	-1.20	-4.74	0.000	0.000		
Medium Trucks:	82.40	-7.56	-0.81	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.54	-0.81	-1.20	-5.23	0.000	0.000		

Unmitigated Noise Levels (without Topo and barrier attenuation)						
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	72.2	70.1	66.9	65.2	72.6	72.9
Medium Trucks:	72.8	71.1	65.6	64.8	72.6	72.8
Heavy Trucks:	76.9	74.9	68.3	70.2	77.5	77.6
Vehicle Noise:	79.3	77.3	71.8	72.3	79.7	79.8

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	352	759	1,635	3,523
CNEL:	363	781	1,683	3,627

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Euclid Av. Road Segment: s/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 40,585 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 4,059 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 154 feet					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 103.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Centerline Dist. to Observer: 103.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.59	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-7.46	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-7.43	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.0	68.9	65.6	64.0	71.4	71.7			
Medium Trucks:	71.6	69.8	64.4	63.6	71.4	71.6			
Heavy Trucks:	75.6	73.6	67.0	69.0	76.2	76.4			
Vehicle Noise:	78.0	76.1	70.6	71.0	78.4	78.6			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			375	807	1,740	3,748			
CNEL:			386	831	1,791	3,858			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Euclid Av. Road Segment: s/o Chino Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 44,918 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,492 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.03	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-7.01	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-6.99	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.4	69.3	66.1	64.4	71.8	72.1			
Medium Trucks:	72.0	70.3	64.8	64.0	71.8	72.0			
Heavy Trucks:	76.1	74.1	67.5	69.4	76.7	76.8			
Vehicle Noise:	78.5	76.5	71.0	71.5	78.9	79.0			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				401	864	1,861	4,010		
CNEL:				413	889	1,916	4,128		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Euclid Av. Road Segment: s/o Schaefer Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 43,100 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,310 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593				
					Medium Trucks: 68.464				
					Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.85	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-7.19	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-7.17	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.3	69.1	65.9	64.2	71.6	71.9			
Medium Trucks:	71.9	70.1	64.7	63.8	71.6	71.9			
Heavy Trucks:	75.9	73.9	67.3	69.3	76.5	76.6			
Vehicle Noise:	78.3	76.3	70.8	71.3	78.7	78.9			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			390	841	1,811	3,901			
CNEL:			402	865	1,864	4,016			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Euclid Av. Road Segment: s/o Edison Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 43,567 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,357 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.90	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-7.15	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-7.13	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.3	69.2	65.9	64.3	71.7	72.0			
Medium Trucks:	71.9	70.1	64.7	63.9	71.7	71.9			
Heavy Trucks:	75.9	73.9	67.3	69.3	76.5	76.7			
Vehicle Noise:	78.3	76.4	70.9	71.4	78.7	78.9			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			393	847	1,824	3,929			
CNEL:			405	872	1,878	4,045			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Euclid Av. Road Segment: s/o Eucalyptus Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 47,089 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 4,709 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 154 feet									
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 83.44%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
Centerline Dist. to Barrier: 103.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Centerline Dist. to Observer: 103.0 feet									
Barrier Distance to Observer: 0.0 feet					Noise Source Elevations (in feet)				
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees					Autos: 68.593				
Right View: 90.0 degrees					Medium Trucks: 68.464				
					Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.23	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-6.81	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.79	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.7	69.5	66.3	64.6	72.0	72.3			
Medium Trucks:	72.2	70.5	65.0	64.2	72.0	72.2			
Heavy Trucks:	76.3	74.3	67.7	69.6	76.9	77.0			
Vehicle Noise:	78.7	76.7	71.2	71.7	79.1	79.2			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			414	892	1,921	4,139			
CNEL:			426	918	1,978	4,260			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Euclid Av. Road Segment: s/o Merrill Av.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 40,892 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,089 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data				Vehicle Mix					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily	
				Autos: 73.5% 8.7% 17.9% 83.44%					
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%					
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
				Noise Source Elevations (in feet)					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0					
				Lane Equivalent Distance (in feet)					
				Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476					
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.62	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-7.42	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.40	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.0	68.9	65.6	64.0	71.4	71.7			
Medium Trucks:	71.6	69.9	64.4	63.6	71.4	71.6			
Heavy Trucks:	75.6	73.7	67.0	69.0	76.3	76.4			
Vehicle Noise:	78.1	76.1	70.6	71.1	78.4	78.6			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			377	812	1,748	3,767			
CNEL:			388	835	1,800	3,878			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: OY 2020 Without Project Road Name: Euclid Av. Road Segment: s/o Kimball Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 26,834 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,683 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
					VehicleType		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%					
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%					
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
					Noise Source Elevations (in feet)					
					Autos: 0.000					
					Medium Trucks: 2.297					
					Heavy Trucks: 8.004 Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 68.593					
					Medium Trucks: 68.464					
					Heavy Trucks: 68.476					
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	71.78	0.79	-2.16	-1.20	-4.77	0.000	0.000			
Medium Trucks:	82.40	-9.25	-2.15	-1.20	-4.88	0.000	0.000			
Heavy Trucks:	86.40	-9.23	-2.15	-1.20	-5.15	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	69.2	67.1	63.8	62.2	69.6	69.9				
Medium Trucks:	69.8	68.0	62.6	61.8	69.6	69.8				
Heavy Trucks:	73.8	71.8	65.2	67.2	74.4	74.6				
Vehicle Noise:	76.2	74.3	68.8	69.3	76.6	76.8				
Centerline Distance to Noise Contour (in feet)										
			70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:			284	613	1,320	2,845				
CNEL:			293	631	1,359	2,928				

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Euclid Av. Road Segment: s/o Bickmore Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 27,142 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,714 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	0.84	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-9.20	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-9.18	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.3	67.1	63.9	62.2	69.6	69.9			
Medium Trucks:	69.9	68.1	62.7	61.8	69.6	69.9			
Heavy Trucks:	73.9	71.9	65.3	67.3	74.5	74.6			
Vehicle Noise:	76.3	74.3	68.8	69.3	76.7	76.9			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			287	618	1,330	2,866			
CNEL:			295	636	1,370	2,951			



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Euclid Av. Road Segment: s/o Pine Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 48,894 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 4,889 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 154 feet					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 103.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Centerline Dist. to Observer: 103.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees					Autos: 68.593				
Right View: 90.0 degrees					Medium Trucks: 68.464				
					Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.40	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-6.65	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.63	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.8	69.7	66.4	64.8	72.2	72.5			
Medium Trucks:	72.4	70.6	65.2	64.4	72.2	72.4			
Heavy Trucks:	76.4	74.4	67.8	69.8	77.0	77.2			
Vehicle Noise:	78.8	76.9	71.4	71.9	79.2	79.4			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			424	914	1,970	4,244			
CNEL:			437	941	2,028	4,369			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Flight Av. Road Segment: n/o Merrill Av.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 1 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 0 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data				Vehicle Mix					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily	
				Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
				Noise Source Elevations (in feet)					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
				Lane Equivalent Distance (in feet)					
Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-43.08	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-53.13	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-53.10	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	27.2	25.1	21.8	20.2	27.6	27.9			
Medium Trucks:	28.0	26.2	20.8	20.0	27.8	28.0			
Heavy Trucks:	32.4	30.4	23.8	25.8	33.0	33.1			
Vehicle Noise:	34.6	32.6	27.1	27.6	35.0	35.2			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				0	0	1	2		
CNEL:				0	0	1	2		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: OY 2020 Without Project Road Name: Hellman Av. Road Segment: s/o Kimball Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 11,196 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,120 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
					VehicleType		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
					Noise Source Elevations (in feet)					
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950					
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	68.46	-2.13	1.01	-1.20	-4.64	0.000	0.000			
Medium Trucks:	79.45	-12.18	1.04	-1.20	-4.87	0.000	0.000			
Heavy Trucks:	84.25	-12.16	1.04	-1.20	-5.44	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	66.1	64.0	60.7	59.1	66.5	66.8				
Medium Trucks:	67.1	65.4	59.9	59.1	66.9	67.1				
Heavy Trucks:	71.9	70.0	63.3	65.3	72.6	72.7				
Vehicle Noise:	74.0	72.0	66.4	67.0	74.4	74.6				
Centerline Distance to Noise Contour (in feet)										
				70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:				96	207	445	959			
CNEL:				99	212	458	986			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Hellman Av. Road Segment: s/o Pine Av.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 12,437 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,244 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data				Vehicle Mix					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily	
				Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
				Noise Source Elevations (in feet)					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
				Lane Equivalent Distance (in feet)					
				Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950					
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	-1.68	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	79.45	-11.72	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-11.70	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	66.6	64.5	61.2	59.6	67.0	67.3			
Medium Trucks:	67.6	65.8	60.4	59.6	67.3	67.6			
Heavy Trucks:	72.4	70.4	63.8	65.8	73.0	73.2			
Vehicle Noise:	74.4	72.5	66.8	67.5	74.8	75.0			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			103	222	477	1,029			
CNEL:			106	228	491	1,058			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Archibald Av. Road Segment: n/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 39,195 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 3,920 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 93 feet									
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 83.44%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
Centerline Dist. to Barrier: 74.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Centerline Dist. to Observer: 74.0 feet									
Barrier Distance to Observer: 0.0 feet					Noise Source Elevations (in feet)				
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%									
Left View: -90.0 degrees					Lane Equivalent Distance (in feet)				
Right View: 90.0 degrees					Autos: 57.782				
					Medium Trucks: 57.629				
					Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	2.85	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-7.19	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-7.17	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.8	68.7	65.4	63.8	71.2	71.5			
Medium Trucks:	71.6	69.8	64.4	63.6	71.4	71.6			
Heavy Trucks:	76.0	74.0	67.4	69.4	76.6	76.7			
Vehicle Noise:	78.2	76.2	70.7	71.2	78.6	78.8			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				277	597	1,286	2,771		
CNEL:				285	614	1,323	2,851		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: OY 2020 Without Project Road Name: Archibald Av. Road Segment: s/o Riverside Dr.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 37,307 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,731 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.44%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	71.78	2.22	-1.05	-1.20	-4.73	0.000	0.000	
Medium Trucks:	82.40	-7.82	-1.03	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	86.40	-7.80	-1.03	-1.20	-5.25	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	71.8	69.6	66.4	64.7	72.1	72.4		
Medium Trucks:	72.4	70.6	65.2	64.3	72.1	72.4		
Heavy Trucks:	76.4	74.4	67.8	69.8	77.0	77.1		
Vehicle Noise:	78.8	76.8	71.3	71.8	79.2	79.4		
Centerline Distance to Noise Contour (in feet)								
				70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:				302	651	1,404	3,024	
CNEL:				311	671	1,445	3,113	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Archibald Av. Road Segment: s/o Chino Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 32,796 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 3,280 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph					Vehicle Mix				
Near/Far Lane Distance: 93 feet									
Site Data					VehicleType				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 83.44%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
Centerline Dist. to Barrier: 74.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Centerline Dist. to Observer: 74.0 feet					Noise Source Elevations (in feet)				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees									
Right View: 90.0 degrees					Autos: 57.782				
					Medium Trucks: 57.629				
					Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	1.66	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-8.38	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-8.36	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.2	69.1	65.8	64.2	71.6	71.9			
Medium Trucks:	71.8	70.0	64.6	63.8	71.6	71.8			
Heavy Trucks:	75.8	73.8	67.2	69.2	76.4	76.6			
Vehicle Noise:	78.2	76.3	70.8	71.2	78.6	78.8			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				277	598	1,288	2,775		
CNEL:				286	615	1,326	2,857		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: OY 2020 Without Project Road Name: Archibald Av. Road Segment: s/o Schaefer Av.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 33,604 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,360 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.77	-1.05	-1.20	-4.73	0.000	0.000
Medium Trucks:	82.40	-8.28	-1.03	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-8.25	-1.03	-1.20	-5.25	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	71.3	69.2	65.9	64.3	71.7	72.0	
Medium Trucks:	71.9	70.1	64.7	63.9	71.7	71.9	
Heavy Trucks:	75.9	73.9	67.3	69.3	76.5	76.7	
Vehicle Noise:	78.3	76.4	70.9	71.4	78.7	78.9	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			282	608	1,309	2,820	
CNEL:			290	626	1,348	2,903	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Archibald Av. Road Segment: s/o Ontario Ranch Rd.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 42,346 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 4,235 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 93 feet					Vehicle Mix				
<b>Site Data</b>  Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782				
Medium Trucks: 57.629									
Heavy Trucks: 57.644									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.77	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-7.27	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.25	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.3	70.2	66.9	65.3	72.7	73.0			
Medium Trucks:	72.9	71.1	65.7	64.9	72.7	72.9			
Heavy Trucks:	76.9	74.9	68.3	70.3	77.5	77.7			
Vehicle Noise:	79.3	77.4	71.9	72.4	79.7	79.9			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			329	709	1,527	3,290			
CNEL:			339	730	1,572	3,387			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Archibald Av. Road Segment: s/o Eucalyptus Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 42,625 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,263 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.80	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-7.24	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.22	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.3	70.2	66.9	65.3	72.7	73.0			
Medium Trucks:	72.9	71.2	65.7	64.9	72.7	72.9			
Heavy Trucks:	76.9	75.0	68.4	70.3	77.6	77.7			
Vehicle Noise:	79.4	77.4	71.9	72.4	79.7	79.9			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				330	712	1,534	3,305		
CNEL:				340	733	1,579	3,402		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Archibald Av. Road Segment: s/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 38,767 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,877 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.39	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-7.65	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.63	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.9	69.8	66.5	64.9	72.3	72.6			
Medium Trucks:	72.5	70.8	65.3	64.5	72.3	72.5			
Heavy Trucks:	76.5	74.6	67.9	69.9	77.2	77.3			
Vehicle Noise:	78.9	77.0	71.5	72.0	79.3	79.5			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				310	668	1,440	3,102		
CNEL:				319	688	1,482	3,194		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Archibald Av. Road Segment: s/o Limonite Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 33,607 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,361 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	1.77	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-8.27	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-8.25	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.5	68.4	65.1	63.5	70.9	71.2			
Medium Trucks:	71.1	69.3	63.9	63.1	70.9	71.1			
Heavy Trucks:	75.1	73.1	66.5	68.5	75.7	75.9			
Vehicle Noise:	77.5	75.6	70.1	70.5	77.9	78.1			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				256	551	1,187	2,557		
CNEL:				263	567	1,222	2,633		

Friday, March 02, 2018

Friday, March 02, 2018

Friday, March 02, 2018

Friday, March 02, 2018

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: OY 2020 Without Project Road Name: Kimball Av. Road Segment: w/o Euclid Av.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 28,338 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,834 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				Vehicle Type	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262			
FHWA Noise Model Calculations							
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	1.44	1.28	-1.20	-4.61	0.000	0.000
Medium Trucks:	81.00	-8.60	1.31	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-8.58	1.31	-1.20	-5.50	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	71.7	69.6	66.3	64.7	72.1	72.4
Medium Trucks:	72.5	70.8	65.3	64.5	72.3	72.5
Heavy Trucks:	76.9	74.9	68.3	70.3	77.5	77.7
Vehicle Noise:	79.1	77.2	71.6	72.2	79.5	79.7

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	190	409	882	1,899
CNEL:	195	421	907	1,954

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: OY 2020 Without Project Road Name: Kimball Av. Road Segment: e/o Euclid Av.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 24,968 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,497 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				Vehicle Type	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950			
FHWA Noise Model Calculations							
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	0.89	1.01	-1.20	-4.64	0.000	0.000
Medium Trucks:	81.00	-9.15	1.04	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-9.13	1.04	-1.20	-5.44	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	70.9	68.8	65.5	63.9	71.3	71.6
Medium Trucks:	71.7	69.9	64.5	63.7	71.5	71.7
Heavy Trucks:	76.1	74.1	67.5	69.5	76.7	76.8
Vehicle Noise:	78.3	76.4	70.8	71.4	78.7	78.9

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	187	402	866	1,866
CNEL:	192	414	891	1,920

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: OY 2020 Without Project Road Name: Kimball Av. Road Segment: e/o Rincon Meadows Av.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 21,674 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,167 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				Vehicle Type	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	0.28	1.01	-1.20	-4.64	0.000	0.000
Medium Trucks:	81.00	-9.77	1.04	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-9.74	1.04	-1.20	-5.44	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	70.3	68.2	64.9	63.3	70.7	71.0
Medium Trucks:	71.1	69.3	63.9	63.1	70.9	71.1
Heavy Trucks:	75.5	73.5	66.9	68.9	76.1	76.2
Vehicle Noise:	77.7	75.7	70.2	70.7	78.1	78.3

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	170	366	788	1,698
CNEL:	175	376	811	1,747

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: OY 2020 Without Project Road Name: Kimball Av. Road Segment: e/o Mill Creek Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 21,850 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,185 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
				Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations								
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	70.20	0.31	1.01	-1.20	-4.64	0.000	0.000	
Medium Trucks:	81.00	-9.73	1.04	-1.20	-4.87	0.000	0.000	
Heavy Trucks:	85.38	-9.71	1.04	-1.20	-5.44	0.000	0.000	

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	70.3	68.2	64.9	63.3	70.7	71.0
Medium Trucks:	71.1	69.4	63.9	63.1	70.9	71.1
Heavy Trucks:	75.5	73.5	66.9	68.9	76.1	76.3
Vehicle Noise:	77.7	75.8	70.2	70.8	78.1	78.3

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	171	368	792	1,707
CNEL:	176	378	815	1,756

Friday, March 02, 2018



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Kimball Av. Road Segment: e/o Main St.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 18,571 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 1,857 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 51 feet					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 49.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Centerline Dist. to Observer: 49.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees					Autos: 42.140				
Right View: 90.0 degrees					Medium Trucks: 41.929				
					Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-0.39	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-10.44	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-10.42	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.6	67.5	64.2	62.6	70.0	70.3			
Medium Trucks:	70.4	68.6	63.2	62.4	70.2	70.4			
Heavy Trucks:	74.8	72.8	66.2	68.2	75.4	75.6			
Vehicle Noise:	77.0	75.1	69.5	70.1	77.4	77.6			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			153	330	711	1,532			
CNEL:			158	340	731	1,576			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Kimball Av. Road Segment: e/o Flight Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 23,864 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,386 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	0.70	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-9.35	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-9.33	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.7	68.6	65.3	63.7	71.1	71.4			
Medium Trucks:	71.5	69.7	64.3	63.5	71.3	71.5			
Heavy Trucks:	75.9	73.9	67.3	69.3	76.5	76.7			
Vehicle Noise:	78.1	76.2	70.6	71.2	78.5	78.7			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			181	390	840	1,810			
CNEL:			186	401	865	1,863			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: OY 2020 Without Project Road Name: Kimball Av. Road Segment: e/o Meadow Valley Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 12,352 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,235 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
					Vehicle Type		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
					Noise Source Elevations (in feet)					
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950					
FHWA Noise Model Calculations										
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	70.20	-2.16	1.01	-1.20	-4.64	0.000	0.000			
Medium Trucks:	81.00	-12.21	1.04	-1.20	-4.87	0.000	0.000			
Heavy Trucks:	85.38	-12.19	1.04	-1.20	-5.44	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	67.9	65.7	62.5	60.8	68.2	68.5				
Medium Trucks:	68.6	66.9	61.4	60.6	68.4	68.6				
Heavy Trucks:	73.0	71.1	64.4	66.4	73.7	73.8				
Vehicle Noise:	75.3	73.3	67.7	68.3	75.7	75.8				
Centerline Distance to Noise Contour (in feet)										
				70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:				117	251	542	1,167			
CNEL:				120	259	557	1,201			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Limonite Av. Road Segment: e/o Hellman Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 1 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 0 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-43.08	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-53.13	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-53.10	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	24.1	21.9	18.7	17.0	24.4	24.7			
Medium Trucks:	24.8	23.1	17.6	16.8	24.6	24.8			
Heavy Trucks:	29.2	27.3	20.6	22.6	29.9	30.0			
Vehicle Noise:	31.5	29.5	23.9	24.5	31.9	32.0			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			0	0	1	2			
CNEL:			0	0	1	2			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Limonite Av. Road Segment: e/o Archibald Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 30,987 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 3,099 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 78 feet					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 76.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 76.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	1.83	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-8.21	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-8.19	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.0	66.8	63.6	62.0	69.3	69.6			
Medium Trucks:	69.7	68.0	62.5	61.7	69.5	69.8			
Heavy Trucks:	74.1	72.2	65.5	67.5	74.8	74.9			
Vehicle Noise:	76.4	74.4	68.8	69.4	76.8	77.0			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				215	463	997	2,148		
CNEL:				221	476	1,026	2,210		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: OY 2020 Without Project Road Name: Limonite Av. Road Segment: e/o Harrison Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 37,001 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,700 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType		Day	Evening	Night	Daily
					Autos:		73.5%	8.7%	17.9%	83.44%
					Medium Trucks:		80.1%	5.7%	14.2%	8.26%
					Heavy Trucks:		76.2%	4.1%	19.7%	8.30%
					Noise Source Elevations (in feet)					
					Autos:		0.000			
					Medium Trucks:		2.297			
					Heavy Trucks:		8.004		Grade Adjustment: 0.0	
					Lane Equivalent Distance (in feet)					
					Autos:		65.422			
					Medium Trucks:		65.286			
					Heavy Trucks:		65.299			
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	70.20	2.60	-1.85	-1.20	-4.73	0.000	0.000			
Medium Trucks:	81.00	-7.44	-1.84	-1.20	-4.88	0.000	0.000			
Heavy Trucks:	85.38	-7.42	-1.84	-1.20	-5.25	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	69.8	67.6	64.4	62.7	70.1	70.4				
Medium Trucks:	70.5	68.8	63.3	62.5	70.3	70.5				
Heavy Trucks:	74.9	72.9	66.3	68.3	75.5	75.7				
Vehicle Noise:	77.1	75.2	69.6	70.2	77.5	77.7				
Centerline Distance to Noise Contour (in feet)										
				70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:				242	521	1,122	2,417			
CNEL:				249	536	1,154	2,487			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL														
Scenario: OY 2020 Without Project Road Name: Limonite Av. Road Segment: e/o Sumner Av.					Project Name: Chino Parcel Delivery Job Number: 11134									
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS									
Highway Data					Site Conditions (Hard = 10, Soft = 15)									
Average Daily Traffic (Adt): 39,318 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,932 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15									
Site Data					Vehicle Mix									
					VehicleType		Day	Evening	Night	Daily				
					Autos: 73.5% 8.7% 17.9% 83.44%									
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%									
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%									
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Noise Source Elevations (in feet)									
					Autos: 0.000									
					Medium Trucks: 2.297									
					Heavy Trucks: 8.004 Grade Adjustment: 0.0									
					Lane Equivalent Distance (in feet)									
					Autos: 65.422									
					Medium Trucks: 65.286									
					Heavy Trucks: 65.299									
					FHWA Noise Model Calculations									
					VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	2.86	-1.85	-1.20	-4.73	0.000	0.000							
Medium Trucks:	81.00	-7.18	-1.84	-1.20	-4.88	0.000	0.000							
Heavy Trucks:	85.38	-7.16	-1.84	-1.20	-5.25	0.000	0.000							
Unmitigated Noise Levels (without Topo and barrier attenuation)														
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL								
Autos:	70.0	67.9	64.6	63.0	70.4	70.7								
Medium Trucks:	70.8	69.0	63.6	62.8	70.6	70.8								
Heavy Trucks:	75.2	73.2	66.6	68.6	75.8	75.9								
Vehicle Noise:	77.4	75.4	69.9	70.4	77.8	78.0								
Centerline Distance to Noise Contour (in feet)														
				70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:				252	542	1,168	2,517							
CNEL:				259	558	1,202	2,590							

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Limonite Av. Road Segment: e/o Scholar Wy.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 41,812 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,181 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	3.13	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-6.91	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-6.89	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.3	68.2	64.9	63.3	70.6	70.9			
Medium Trucks:	71.0	69.3	63.8	63.0	70.8	71.1			
Heavy Trucks:	75.4	73.5	66.9	68.8	76.1	76.2			
Vehicle Noise:	77.7	75.7	70.2	70.7	78.1	78.3			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			262	565	1,217	2,623			
CNEL:			270	581	1,252	2,698			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 Without Project Road Name: Limonite Av. Road Segment: e/o Hamner Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 46,434 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 4,643 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 45 mph									
Near/Far Lane Distance: 78 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 76.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Centerline Dist. to Observer: 76.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	4.04	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	79.45	-6.00	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	84.25	-5.98	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.5	67.3	64.1	62.4	69.8	70.1			
Medium Trucks:	70.4	68.7	63.2	62.4	70.2	70.4			
Heavy Trucks:	75.2	73.3	66.6	68.6	75.9	76.0			
Vehicle Noise:	77.3	75.3	69.7	70.3	77.7	77.9			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				247	532	1,145	2,468		
CNEL:				254	547	1,178	2,537		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: OY 2020 With Project Road Name: Euclid Av. Road Segment: s/o SR-60				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 44,451 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,445 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 115 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 80.0 feet Centerline Dist. to Observer: 80.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.13%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.47%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.40%				
				Noise Source Elevations (in feet)				
				Autos: 0.000				
				Medium Trucks: 2.297				
				Heavy Trucks: 8.004 Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 55.846				
				Medium Trucks: 55.687				
				Heavy Trucks: 55.703				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	71.78	2.97	-0.82	-1.20	-4.74	0.000	0.000	
Medium Trucks:	82.40	-6.95	-0.81	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	86.40	-6.99	-0.81	-1.20	-5.23	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	72.7	70.6	67.3	65.7	73.1	73.4		
Medium Trucks:	73.4	71.7	66.3	65.4	73.2	73.5		
Heavy Trucks:	77.4	75.4	68.8	70.8	78.0	78.2		
Vehicle Noise:	79.8	77.9	72.4	72.8	80.2	80.4		
Centerline Distance to Noise Contour (in feet)								
				70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:				383	825	1,778	3,831	
CNEL:				394	850	1,831	3,944	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: OY 2020 With Project Road Name: Euclid Av. Road Segment: s/o Walnut Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 40,159 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,016 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 115 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.12% Medium Trucks: 80.1% 5.7% 14.2% 8.48% Heavy Trucks: 76.2% 4.1% 19.7% 8.40%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 80.0 feet Centerline Dist. to Observer: 80.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Lane Equivalent Distance (in feet)				
				Autos: 55.846 Medium Trucks: 55.687 Heavy Trucks: 55.703				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	71.78	2.53	-0.82	-1.20	-4.74	0.000	0.000	
Medium Trucks:	82.40	-7.38	-0.81	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	86.40	-7.43	-0.81	-1.20	-5.23	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	72.3	70.2	66.9	65.3	72.6	72.9		
Medium Trucks:	73.0	71.3	65.8	65.0	72.8	73.0		
Heavy Trucks:	77.0	75.0	68.4	70.4	77.6	77.7		
Vehicle Noise:	79.4	77.4	71.9	72.4	79.8	80.0		
Centerline Distance to Noise Contour (in feet)								
				70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:				358	772	1,662	3,581	
CNEL:				369	794	1,711	3,687	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Euclid Av. Road Segment: s/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 41,169 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,117 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.16% Medium Trucks: 80.1% 5.7% 14.2% 8.46% Heavy Trucks: 76.2% 4.1% 19.7% 8.38%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.64	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-7.29	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.33	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.1	68.9	65.7	64.0	71.4	71.7			
Medium Trucks:	71.8	70.0	64.6	63.8	71.5	71.8			
Heavy Trucks:	75.7	73.7	67.1	69.1	76.3	76.5			
Vehicle Noise:	78.1	76.2	70.7	71.2	78.5	78.7			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				381	821	1,768	3,809		
CNEL:				392	845	1,820	3,922		

Friday, March 02, 2018



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Euclid Av. Road Segment: s/o Chino Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 45,555 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 4,555 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 154 feet									
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 83.20%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 8.43%				
Centerline Dist. to Barrier: 103.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.36%				
Centerline Dist. to Observer: 103.0 feet									
Barrier Distance to Observer: 0.0 feet					Noise Source Elevations (in feet)				
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees					Autos: 68.593				
Right View: 90.0 degrees					Medium Trucks: 68.464				
					Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.08	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-6.86	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-6.90	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.5	69.4	66.1	64.5	71.9	72.2			
Medium Trucks:	72.2	70.4	65.0	64.2	72.0	72.2			
Heavy Trucks:	76.1	74.2	67.6	69.5	76.8	76.9			
Vehicle Noise:	78.6	76.6	71.1	71.6	79.0	79.1			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			407	877	1,889	4,070			
CNEL:			419	903	1,945	4,190			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: OY 2020 With Project Road Name: Euclid Av. Road Segment: s/o Schaefer Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 43,790 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,379 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType		Day	Evening	Night	Daily
					Autos:		73.5%	8.7%	17.9%	83.21%
					Medium Trucks:		80.1%	5.7%	14.2%	8.43%
					Heavy Trucks:		76.2%	4.1%	19.7%	8.36%
					Noise Source Elevations (in feet)					
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004    Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476					
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	71.78	2.91	-2.16	-1.20	-4.77	0.000		0.000		
Medium Trucks:	82.40	-7.04	-2.15	-1.20	-4.88	0.000		0.000		
Heavy Trucks:	86.40	-7.08	-2.15	-1.20	-5.15	0.000		0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	71.3	69.2	65.9	64.3	71.7	72.0				
Medium Trucks:	72.0	70.3	64.8	64.0	71.8	72.0				
Heavy Trucks:	76.0	74.0	67.4	69.4	76.6	76.7				
Vehicle Noise:	78.4	76.4	70.9	71.4	78.8	79.0				
Centerline Distance to Noise Contour (in feet)										
			70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:			396	854	1,839	3,963				
CNEL:			408	879	1,894	4,080				

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Euclid Av. Road Segment: s/o Edison Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 44,507 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,451 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.22% Medium Trucks: 80.1% 5.7% 14.2% 8.44% Heavy Trucks: 76.2% 4.1% 19.7% 8.34%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.98	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-6.96	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-7.01	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.4	69.3	66.0	64.4	71.8	72.1			
Medium Trucks:	72.1	70.3	64.9	64.1	71.9	72.1			
Heavy Trucks:	76.0	74.1	67.4	69.4	76.7	76.8			
Vehicle Noise:	78.5	76.5	71.0	71.5	78.8	79.0			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			400	863	1,858	4,004			
CNEL:			412	888	1,913	4,122			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Euclid Av. Road Segment: s/o Eucalyptus Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 48,161 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,816 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.28% Medium Trucks: 80.1% 5.7% 14.2% 8.40% Heavy Trucks: 76.2% 4.1% 19.7% 8.32%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.32	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-6.64	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-6.68	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.7	69.6	66.4	64.7	72.1	72.4			
Medium Trucks:	72.4	70.7	65.2	64.4	72.2	72.4			
Heavy Trucks:	76.4	74.4	67.8	69.8	77.0	77.1			
Vehicle Noise:	78.8	76.8	71.3	71.8	79.2	79.4			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				421	908	1,955	4,213		
CNEL:				434	934	2,013	4,337		

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Euclid Av. Road Segment: s/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 41,277 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 4,128 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 154 feet					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.98%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.56%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.46%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 103.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 103.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos: 71.78 2.64 -2.16 -1.20 -4.77 0.000 0.000									
Medium Trucks: 82.40 -7.23 -2.15 -1.20 -4.88 0.000 0.000									
Heavy Trucks: 86.40 -7.28 -2.15 -1.20 -5.15 0.000 0.000									
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos: 71.1 68.9 65.7 64.0 71.4 71.7									
Medium Trucks: 71.8 70.1 64.6 63.8 71.6 71.8									
Heavy Trucks: 75.8 73.8 67.2 69.2 76.4 76.5									
Vehicle Noise: 78.2 76.2 70.7 71.2 78.6 78.8									
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			383	826	1,780	3,835			
CNEL:			395	850	1,832	3,948			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Euclid Av. Road Segment: s/o Kimball Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 27,252 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,725 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.23% Medium Trucks: 80.1% 5.7% 14.2% 8.42% Heavy Trucks: 76.2% 4.1% 19.7% 8.35%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	0.85	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-9.10	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-9.14	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.3	67.1	63.9	62.2	69.6	69.9			
Medium Trucks:	70.0	68.2	62.8	61.9	69.7	70.0			
Heavy Trucks:	73.9	71.9	65.3	67.3	74.5	74.7			
Vehicle Noise:	76.3	74.4	68.9	69.4	76.7	76.9			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			289	622	1,340	2,888			
CNEL:			297	640	1,380	2,973			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Euclid Av. Road Segment: s/o Bickmore Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 27,560 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,756 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.23%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.42%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.35%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593				
					Medium Trucks: 68.464				
					Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	0.90	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-9.05	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-9.09	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.3	67.2	63.9	62.3	69.7	70.0			
Medium Trucks:	70.0	68.2	62.8	62.0	69.8	70.0			
Heavy Trucks:	74.0	72.0	65.4	67.4	74.6	74.7			
Vehicle Noise:	76.4	74.4	68.9	69.4	76.8	77.0			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			291	627	1,350	2,909			
CNEL:			299	645	1,390	2,995			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Euclid Av. Road Segment: s/o Pine Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 49,312 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,931 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.32%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.35%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.33%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593				
					Medium Trucks: 68.464				
					Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.43	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-6.56	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.57	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.8	69.7	66.5	64.8	72.2	72.5			
Medium Trucks:	72.5	70.7	65.3	64.5	72.3	72.5			
Heavy Trucks:	76.5	74.5	67.9	69.9	77.1	77.2			
Vehicle Noise:	78.9	76.9	71.4	71.9	79.3	79.5			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			428	922	1,986	4,279			
CNEL:			440	949	2,045	4,405			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Flight Av. Road Segment: n/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt):		54 vehicles			Autos:		15		
Peak Hour Percentage:		10%			Medium Trucks (2 Axles):		15		
Peak Hour Volume:		5 vehicles			Heavy Trucks (3+ Axles):		15		
Vehicle Speed:		50 mph							
Near/Far Lane Distance:		36 feet							
Site Data					Vehicle Mix				
Barrier Height:		0.0 feet			Autos:		73.5%		8.7%
Barrier Type (0-Wall, 1-Berm):		0.0			Medium Trucks:		80.1%		5.7%
Centerline Dist. to Barrier:		44.0 feet			Heavy Trucks:		76.2%		4.1%
Centerline Dist. to Observer:		44.0 feet					19.7%		0.15%
Barrier Distance to Observer:		0.0 feet							
Observer Height (Above Pad):		5.0 feet							
Pad Elevation:		0.0 feet							
Road Elevation:		0.0 feet							
Road Grade:		0.0%							
Left View:		-90.0 degrees							
Right View:		90.0 degrees							
					Noise Source Elevations (in feet)				
					Autos:		0.000		
					Medium Trucks:		2.297		
					Heavy Trucks:		8.004		Grade Adjustment: 0.0
					Lane Equivalent Distance (in feet)				
					Autos:		40.460		
					Medium Trucks:		40.241		
					Heavy Trucks:		40.262		
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-25.00	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-53.13	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-53.10	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	45.3	43.2	39.9	38.3	45.6	45.9			
Medium Trucks:	28.0	26.2	20.8	20.0	27.8	28.0			
Heavy Trucks:	32.4	30.4	23.8	25.8	33.0	33.1			
Vehicle Noise:	45.6	43.5	40.0	38.6	45.9	46.2			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				1	2	5	11		
CNEL:				1	2	5	11		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Hellman Av. Road Segment: s/o Kimball Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 11,672 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,167 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 84.11% Medium Trucks: 80.1% 5.7% 14.2% 7.92% Heavy Trucks: 76.2% 4.1% 19.7% 7.96%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	-1.92	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	79.45	-12.18	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-12.16	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	66.4	64.2	61.0	59.3	66.7	67.0			
Medium Trucks:	67.1	65.4	59.9	59.1	66.9	67.1			
Heavy Trucks:	71.9	70.0	63.3	65.3	72.6	72.7			
Vehicle Noise:	74.0	72.0	66.4	67.1	74.4	74.6			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				96	208	448	964		
CNEL:				99	214	460	992		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: OY 2020 With Project Road Name: Hellman Av. Road Segment: s/o Pine Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 12,728 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,273 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.82%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.07%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.11%				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Noise Source Elevations (in feet)				
				Autos: 0.000				
				Medium Trucks: 2.297				
				Heavy Trucks: 8.004 Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
Autos: 42.140								
Medium Trucks: 41.929								
Heavy Trucks: 41.950								
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	68.46	-1.56	1.01	-1.20	-4.64	0.000	0.000	
Medium Trucks:	79.45	-11.72	1.04	-1.20	-4.87	0.000	0.000	
Heavy Trucks:	84.25	-11.70	1.04	-1.20	-5.44	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	66.7	64.6	61.3	59.7	67.1	67.4		
Medium Trucks:	67.6	65.8	60.4	59.6	67.3	67.6		
Heavy Trucks:	72.4	70.4	63.8	65.8	73.0	73.2		
Vehicle Noise:	74.4	72.5	66.9	67.5	74.9	75.0		
Centerline Distance to Noise Contour (in feet)								
			70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:			103	222	479	1,032		
CNEL:			106	229	492	1,061		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Archibald Av. Road Segment: n/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 39,787 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,979 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.80%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.69%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.52%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	2.88	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-6.91	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-6.99	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.8	68.7	65.5	63.8	71.2	71.5			
Medium Trucks:	71.9	70.1	64.7	63.8	71.6	71.9			
Heavy Trucks:	76.2	74.2	67.6	69.5	76.8	76.9			
Vehicle Noise:	78.4	76.4	70.8	71.4	78.8	79.0			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				284	613	1,320	2,845		
CNEL:				293	631	1,358	2,927		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Archibald Av. Road Segment: s/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 37,978 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 3,798 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 93 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.80%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.69%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.51%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 74.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 74.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.27	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-7.52	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.61	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.8	69.7	66.4	64.8	72.2	72.5			
Medium Trucks:	72.7	70.9	65.5	64.6	72.4	72.7			
Heavy Trucks:	76.6	74.6	68.0	69.9	77.2	77.3			
Vehicle Noise:	79.0	77.0	71.5	72.0	79.4	79.5			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				311	670	1,443	3,109		
CNEL:				320	689	1,485	3,200		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Archibald Av. Road Segment: s/o Chino Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 33,467 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,347 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 82.71% Medium Trucks: 80.1% 5.7% 14.2% 8.75% Heavy Trucks: 76.2% 4.1% 19.7% 8.54%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	1.71	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-8.04	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-8.15	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.2	69.1	65.9	64.2	71.6	71.9			
Medium Trucks:	72.1	70.4	64.9	64.1	71.9	72.1			
Heavy Trucks:	76.0	74.0	67.4	69.4	76.6	76.8			
Vehicle Noise:	78.4	76.5	71.0	71.4	78.8	79.0			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			286	617	1,329	2,864			
CNEL:			295	635	1,368	2,948			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Archibald Av. Road Segment: s/o Schaefer Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 34,275 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,428 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 82.73% Medium Trucks: 80.1% 5.7% 14.2% 8.73% Heavy Trucks: 76.2% 4.1% 19.7% 8.53%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	1.82	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-7.95	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-8.05	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.4	69.2	66.0	64.3	71.7	72.0			
Medium Trucks:	72.2	70.5	65.0	64.2	72.0	72.2			
Heavy Trucks:	76.1	74.1	67.5	69.5	76.7	76.9			
Vehicle Noise:	78.5	76.6	71.1	71.5	78.9	79.1			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			291	627	1,350	2,908			
CNEL:			299	645	1,390	2,994			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Archibald Av. Road Segment: s/o Ontario Ranch Rd.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 43,017 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,302 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.88%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.64%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.49%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.81	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-7.01	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.09	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.3	70.2	67.0	65.3	72.7	73.0			
Medium Trucks:	73.2	71.4	66.0	65.2	72.9	73.2			
Heavy Trucks:	77.1	75.1	68.5	70.5	77.7	77.8			
Vehicle Noise:	79.5	77.5	72.0	72.5	79.9	80.1			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			337	726	1,565	3,372			
CNEL:			347	748	1,611	3,471			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Archibald Av. Road Segment: s/o Eucalyptus Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 43,333 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 4,333 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 93 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.81%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.68%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.51%				
Site Data									
Barrier Height: 0.0 feet									
Barrier Type (0-Wall, 1-Berm): 0.0									
Centerline Dist. to Barrier: 74.0 feet									
Centerline Dist. to Observer: 74.0 feet									
Barrier Distance to Observer: 0.0 feet					Noise Source Elevations (in feet)				
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees					Autos: 57.782				
Right View: 90.0 degrees					Medium Trucks: 57.629				
					Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.84	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-6.96	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.04	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.4	70.2	67.0	65.4	72.7	73.0			
Medium Trucks:	73.2	71.5	66.0	65.2	73.0	73.2			
Heavy Trucks:	77.1	75.2	68.5	70.5	77.7	77.9			
Vehicle Noise:	79.5	77.6	72.1	72.6	79.9	80.1			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			339	731	1,576	3,394			
CNEL:			349	753	1,622	3,494			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: OY 2020 With Project Road Name: Archibald Av. Road Segment: s/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 39,557 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,956 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Vehicle Type		Day	Evening	Night	Daily
					Autos:		73.5%	8.7%	17.9%	82.84%
					Medium Trucks:		80.1%	5.7%	14.2%	8.67%
					Heavy Trucks:		76.2%	4.1%	19.7%	8.49%
					Noise Source Elevations (in feet)					
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644					
FHWA Noise Model Calculations										
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	71.78	2.45	-1.05	-1.20	-4.73	0.000	0.000			
Medium Trucks:	82.40	-7.36	-1.03	-1.20	-4.88	0.000	0.000			
Heavy Trucks:	86.40	-7.45	-1.03	-1.20	-5.25	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	72.0	69.9	66.6	65.0	72.3	72.6				
Medium Trucks:	72.8	71.1	65.6	64.8	72.6	72.8				
Heavy Trucks:	76.7	74.7	68.1	70.1	77.3	77.5				
Vehicle Noise:	79.1	77.2	71.7	72.2	79.5	79.7				
Centerline Distance to Noise Contour (in feet)										
			70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:			319	687	1,481	3,191				
CNEL:			328	708	1,524	3,284				

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Archibald Av. Road Segment: s/o Limonite Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 33,657 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 3,366 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph					Vehicle Mix				
Near/Far Lane Distance: 78 feet									
Site Data					VehicleType				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 83.32%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 8.34%				
Centerline Dist. to Barrier: 76.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.34%				
Centerline Dist. to Observer: 76.0 feet					Noise Source Elevations (in feet)				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees									
Right View: 90.0 degrees					Autos: 65.422				
					Medium Trucks: 65.286				
					Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	1.77	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-8.23	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-8.22	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.5	68.4	65.1	63.5	70.9	71.2			
Medium Trucks:	71.1	69.4	63.9	63.1	70.9	71.1			
Heavy Trucks:	75.1	73.2	66.5	68.5	75.8	75.9			
Vehicle Noise:	77.5	75.6	70.1	70.6	77.9	78.1			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				257	553	1,192	2,568		
CNEL:				264	570	1,227	2,644		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Merrill Av. Road Segment: e/o Euclid Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 23,475 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,348 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.32%				
					Medium Trucks: 80.1% 5.7% 14.2% 9.07%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.61%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	0.57	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-9.01	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-9.24	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.8	68.7	65.5	63.8	71.2	71.5			
Medium Trucks:	72.1	70.3	64.9	64.1	71.9	72.1			
Heavy Trucks:	76.2	74.3	67.7	69.6	76.9	77.0			
Vehicle Noise:	78.5	76.5	70.9	71.5	78.9	79.1			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				172	370	798	1,719		
CNEL:				177	381	821	1,769		



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Merrill Av. Road Segment: e/o Flight Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt):		25,415 vehicles		Autos: 15					
Peak Hour Percentage:		10%		Medium Trucks (2 Axles): 15					
Peak Hour Volume:		2,541 vehicles		Heavy Trucks (3+ Axles): 15					
Vehicle Speed:		50 mph		Vehicle Mix					
Near/Far Lane Distance:		36 feet		Vehicle Type		Day	Evening	Night	Daily
Site Data				Autos: 73.5% 8.7% 17.9% 81.47%					
Barrier Height:		0.0 feet		Medium Trucks: 80.1% 5.7% 14.2% 9.59%					
Barrier Type (0-Wall, 1-Berm): 0.0				Heavy Trucks: 76.2% 4.1% 19.7% 8.94%					
Centerline Dist. to Barrier:		44.0 feet		Noise Source Elevations (in feet)					
Centerline Dist. to Observer:		44.0 feet		Autos:		0.000			
Barrier Distance to Observer:		0.0 feet		Medium Trucks:		2.297			
Observer Height (Above Pad):		5.0 feet		Heavy Trucks:		8.004		Grade Adjustment: 0.0	
Pad Elevation:		0.0 feet		Lane Equivalent Distance (in feet)					
Road Elevation:		0.0 feet		Autos:		40.460			
Road Grade:		0.0%		Medium Trucks:		40.241			
Left View:		-90.0 degrees		Heavy Trucks:		40.262			
Right View:		90.0 degrees							
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:		70.20	0.87	1.28	-1.20	-4.61	0.000	0.000	
Medium Trucks:		81.00	-8.42	1.31	-1.20	-4.87	0.000	0.000	
Heavy Trucks:		85.38	-8.73	1.31	-1.20	-5.50	0.000	0.000	

Unmitigated Noise Levels (without Topo and barrier attenuation)						
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	71.1	69.0	65.8	64.1	71.5	71.8
Medium Trucks:	72.7	70.9	65.5	64.7	72.5	72.7
Heavy Trucks:	76.8	74.8	68.2	70.1	77.4	77.5
Vehicle Noise:	79.0	77.0	71.4	72.0	79.4	79.6

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	185	399	860	1,853
CNEL:	191	411	885	1,906

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL													
Scenario: OY 2020 With Project Road Name: Kimball Av. Road Segment: w/o Euclid Av.							Project Name: Chino Parcel Delivery Job Number: 11134						
SITE SPECIFIC INPUT DATA							NOISE MODEL INPUTS						
Highway Data							Site Conditions (Hard = 10, Soft = 15)						
Average Daily Traffic (Adt):		28,544 vehicles					Autos:		15				
Peak Hour Percentage:		10%					Medium Trucks (2 Axes):		15				
Peak Hour Volume:		2,854 vehicles					Heavy Trucks (3+ Axes):		15				
Vehicle Speed:		50 mph					Vehicle Mix						
Near/Far Lane Distance:		36 feet											
Site Data							Vehicle Type		Day	Evening	Night	Daily	
Barrier Height:		0.0 feet					Autos:		73.5%	8.7%	17.9%	83.11%	
Barrier Type (0-Wall, 1-Berm):		0.0					Medium Trucks:		80.1%	5.7%	14.2%	8.47%	
Centerline Dist. to Barrier:		44.0 feet					Heavy Trucks:		76.2%	4.1%	19.7%	8.41%	
Centerline Dist. to Observer:		44.0 feet					Noise Source Elevations (in feet)						
Barrier Distance to Observer:		0.0 feet											
Observer Height (Above Pad):		5.0 feet					Autos:		0.000		Grade Adjustment: 0.0		
Pad Elevation:		0.0 feet					Medium Trucks:		2.297				
Road Elevation:		0.0 feet					Heavy Trucks:		8.004				
Road Grade:		0.0%					Lane Equivalent Distance (in feet)						
Left View:		-90.0 degrees											
Right View:		90.0 degrees					Autos:		40.460				
							Medium Trucks:		40.241				
							Heavy Trucks:		40.262				
FHWA Noise Model Calculations													
Vehicle Type		REMEL	Traffic Flow		Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten				
Autos:		70.20	1.46		1.28	-1.20	-4.61	0.000	0.000				
Medium Trucks:		81.00	-8.46		1.31	-1.20	-4.87	0.000	0.000				
Heavy Trucks:		85.38	-8.49		1.31	-1.20	-5.50	0.000	0.000				

Unmitigated Noise Levels (without Topo and barrier attenuation)						
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	71.7	69.6	66.3	64.7	72.1	72.4
Medium Trucks:	72.7	70.9	65.5	64.6	72.4	72.7
Heavy Trucks:	77.0	75.0	68.4	70.4	77.6	77.8
Vehicle Noise:	79.2	77.3	71.7	72.3	79.6	79.8

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	192	415	893	1,924
CNEL:	198	427	919	1,980

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Kimball Av. Road Segment: e/o Euclid Av.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 25,206 vehicles				Autos: 15					
Peak Hour Percentage: 10%				Medium Trucks (2 Axles): 15					
Peak Hour Volume: 2,521 vehicles				Heavy Trucks (3+ Axles): 15					
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 51 feet				Vehicle Mix					
				VehicleType	Day	Evening	Night	Daily	
				Autos:		73.5%	8.7%	17.9%	83.60%
				Medium Trucks:		80.1%	5.7%	14.2%	8.18%
				Heavy Trucks:		76.2%	4.1%	19.7%	8.22%
Site Data				Noise Source Elevations (in feet)					
Barrier Height: 0.0 feet				Autos:		0.000			
Barrier Type (0-Wall, 1-Berm): 0.0				Medium Trucks:		2.297			
Centerline Dist. to Barrier: 49.0 feet				Heavy Trucks:		8.004		Grade Adjustment: 0.0	
Centerline Dist. to Observer: 49.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	0.94	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-9.15	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-9.13	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.0	68.8	65.6	63.9	71.3	71.6			
Medium Trucks:	71.7	69.9	64.5	63.7	71.5	71.7			
Heavy Trucks:	76.1	74.1	67.5	69.5	76.7	76.8			
Vehicle Noise:	78.3	76.4	70.8	71.4	78.7	78.9			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			187	403	867	1,868			
CNEL:			192	414	892	1,922			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Kimball Av. Road Segment: e/o Rincon Meadows Av.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 21,938 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,194 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data				Vehicle Mix					
				VehicleType	Day	Evening	Night	Daily	
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.64% Medium Trucks: 80.1% 5.7% 14.2% 8.16% Heavy Trucks: 76.2% 4.1% 19.7% 8.20%					
				Noise Source Elevations (in feet)					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
				Lane Equivalent Distance (in feet)					
				Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950					
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	0.34	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-9.77	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-9.74	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.4	68.2	65.0	63.3	70.7	71.0			
Medium Trucks:	71.1	69.3	63.9	63.1	70.9	71.1			
Heavy Trucks:	75.5	73.5	66.9	68.9	76.1	76.2			
Vehicle Noise:	77.7	75.8	70.2	70.7	78.1	78.3			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			170	366	789	1,701			
CNEL:			175	377	812	1,750			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Kimball Av. Road Segment: e/o Mill Creek Av.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 22,141 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,214 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data				Vehicle Mix					
				VehicleType		Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.66% Medium Trucks: 80.1% 5.7% 14.2% 8.15% Heavy Trucks: 76.2% 4.1% 19.7% 8.19%					
				Noise Source Elevations (in feet)					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
				Lane Equivalent Distance (in feet)					
				Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950					
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	0.38	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-9.73	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-9.71	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.4	68.3	65.0	63.4	70.8	71.1			
Medium Trucks:	71.1	69.4	63.9	63.1	70.9	71.1			
Heavy Trucks:	75.5	73.5	66.9	68.9	76.1	76.3			
Vehicle Noise:	77.7	75.8	70.2	70.8	78.1	78.3			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			171	368	794	1,710			
CNEL:			176	379	817	1,760			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Kimball Av. Road Segment: e/o Main St.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 18,888 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,889 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data				Vehicle Mix					
				VehicleType	Day	Evening	Night	Daily	
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.72% Medium Trucks: 80.1% 5.7% 14.2% 8.12% Heavy Trucks: 76.2% 4.1% 19.7% 8.16%					
				Noise Source Elevations (in feet)					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
				Lane Equivalent Distance (in feet)					
				Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950					
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-0.31	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-10.44	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-10.42	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.7	67.6	64.3	62.7	70.1	70.4			
Medium Trucks:	70.4	68.6	63.2	62.4	70.2	70.4			
Heavy Trucks:	74.8	72.8	66.2	68.2	75.4	75.6			
Vehicle Noise:	77.0	75.1	69.5	70.1	77.4	77.6			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			154	331	713	1,535			
CNEL:			158	340	733	1,580			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: OY 2020 With Project Road Name: Kimball Av. Road Segment: e/o Flight Av.			Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA			NOISE MODEL INPUTS				
Highway Data			Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 24,340 vehicles			Autos: 15				
Peak Hour Percentage: 10%			Medium Trucks (2 Axles): 15				
Peak Hour Volume: 2,434 vehicles			Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph							
Near/Far Lane Distance: 51 feet							
Site Data			Vehicle Mix				
Barrier Height: 0.0 feet			VehicleType	Day	Evening	Night	Daily
Barrier Type (0-Wall, 1-Berm): 0.0			Autos: 73.5% 8.7% 17.9% 83.76%				
Centerline Dist. to Barrier: 49.0 feet			Medium Trucks: 80.1% 5.7% 14.2% 8.10%				
Centerline Dist. to Observer: 49.0 feet			Heavy Trucks: 76.2% 4.1% 19.7% 8.14%				
Barrier Distance to Observer: 0.0 feet							
Observer Height (Above Pad): 5.0 feet							
Pad Elevation: 0.0 feet							
Road Elevation: 0.0 feet							
Road Grade: 0.0%							
Left View: -90.0 degrees							
Right View: 90.0 degrees							
			Noise Source Elevations (in feet)				
			Autos: 0.000				
			Medium Trucks: 2.297				
			Heavy Trucks: 8.004				
			Grade Adjustment: 0.0				
			Lane Equivalent Distance (in feet)				
			Autos: 42.140				
			Medium Trucks: 41.929				
			Heavy Trucks: 41.950				
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	0.80	1.01	-1.20	-4.64	0.000	0.000
Medium Trucks:	81.00	-9.35	1.04	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-9.33	1.04	-1.20	-5.44	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	70.8	68.7	65.4	63.8	71.2	71.5	
Medium Trucks:	71.5	69.7	64.3	63.5	71.3	71.5	
Heavy Trucks:	75.9	73.9	67.3	69.3	76.5	76.7	
Vehicle Noise:	78.1	76.2	70.6	71.2	78.5	78.7	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			182	391	843	1,815	
CNEL:			187	402	867	1,868	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: OY 2020 With Project Road Name: Kimball Av. Road Segment: e/o Meadow Valley Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 12,828 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,283 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 84.05%				
				Medium Trucks: 80.1% 5.7% 14.2% 7.95%				
				Heavy Trucks: 76.2% 4.1% 19.7% 7.99%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	70.20	-1.97	1.01	-1.20	-4.64	0.000	0.000	
Medium Trucks:	81.00	-12.21	1.04	-1.20	-4.87	0.000	0.000	
Heavy Trucks:	85.38	-12.19	1.04	-1.20	-5.44	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	68.0	65.9	62.7	61.0	68.4	68.7		
Medium Trucks:	68.6	66.9	61.4	60.6	68.4	68.6		
Heavy Trucks:	73.0	71.1	64.4	66.4	73.7	73.8		
Vehicle Noise:	75.3	73.3	67.8	68.3	75.7	75.9		
Centerline Distance to Noise Contour (in feet)								
			70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:			117	253	545	1,173		
CNEL:			121	260	560	1,208		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Limonite Av. Road Segment: e/o Hellman Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 1 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 0 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
					FHWA Noise Model Calculations				
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-43.08	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-53.13	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-53.10	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	24.1	21.9	18.7	17.0	24.4	24.7			
Medium Trucks:	24.8	23.1	17.6	16.8	24.6	24.8			
Heavy Trucks:	29.2	27.3	20.6	22.6	29.9	30.0			
Vehicle Noise:	31.5	29.5	23.9	24.5	31.9	32.0			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				0	0	1	2		
CNEL:				0	0	1	2		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: OY 2020 With Project Road Name: Limonite Av. Road Segment: e/o Archibald Av.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 31,726 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,173 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 82.83% Medium Trucks: 80.1% 5.7% 14.2% 8.68% Heavy Trucks: 76.2% 4.1% 19.7% 8.49%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	1.90	-1.85	-1.20	-4.73	0.000	0.000
Medium Trucks:	81.00	-7.89	-1.84	-1.20	-4.88	0.000	0.000
Heavy Trucks:	85.38	-7.99	-1.84	-1.20	-5.25	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	69.1	66.9	63.7	62.0	69.4	69.7	
Medium Trucks:	70.1	68.3	62.9	62.1	69.8	70.1	
Heavy Trucks:	74.3	72.4	65.7	67.7	75.0	75.1	
Vehicle Noise:	76.6	74.6	69.0	69.6	77.0	77.2	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			221	477	1,028	2,215	
CNEL:			228	491	1,058	2,278	

Friday, March 02, 2018



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Limonite Av. Road Segment: e/o Harrison Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 37,740 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 3,774 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 78 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.93%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.62%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.46%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 76.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 76.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	2.66	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-7.17	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-7.25	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.8	67.7	64.4	62.8	70.2	70.5			
Medium Trucks:	70.8	69.0	63.6	62.8	70.6	70.8			
Heavy Trucks:	75.1	73.1	66.5	68.5	75.7	75.8			
Vehicle Noise:	77.3	75.4	69.8	70.3	77.7	77.9			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			248	534	1,151	2,480			
CNEL:			255	550	1,185	2,552			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Limonite Av. Road Segment: e/o Sumner Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 40,057 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,006 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.96%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.59%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.45%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	2.92	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-6.93	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-7.00	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.1	67.9	64.7	63.0	70.4	70.7			
Medium Trucks:	71.0	69.3	63.8	63.0	70.8	71.0			
Heavy Trucks:	75.3	73.4	66.7	68.7	76.0	76.1			
Vehicle Noise:	77.6	75.6	70.0	70.6	78.0	78.1			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			258	556	1,197	2,579			
CNEL:			265	572	1,232	2,653			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL														
Scenario: OY 2020 With Project Road Name: Limonite Av. Road Segment: e/o Scholar Wy.					Project Name: Chino Parcel Delivery Job Number: 11134									
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS									
Highway Data					Site Conditions (Hard = 10, Soft = 15)									
Average Daily Traffic (Adt): 42,551 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,255 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15									
Site Data					Vehicle Mix									
					Vehicle Type		Day	Evening	Night	Daily				
					Autos: 73.5% 8.7% 17.9% 82.98%									
					Medium Trucks: 80.1% 5.7% 14.2% 8.57%									
					Heavy Trucks: 76.2% 4.1% 19.7% 8.44%									
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Noise Source Elevations (in feet)									
					Autos: 0.000									
					Medium Trucks: 2.297									
					Heavy Trucks: 8.004 Grade Adjustment: 0.0									
					Lane Equivalent Distance (in feet)									
					Autos: 65.422									
					Medium Trucks: 65.286									
					Heavy Trucks: 65.299									
					FHWA Noise Model Calculations									
					Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	3.18	-1.85	-1.20	-4.73	0.000	0.000							
Medium Trucks:	81.00	-6.67	-1.84	-1.20	-4.88	0.000	0.000							
Heavy Trucks:	85.38	-6.74	-1.84	-1.20	-5.25	0.000	0.000							
Unmitigated Noise Levels (without Topo and barrier attenuation)														
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL								
Autos:	70.3	68.2	64.9	63.3	70.7	71.0								
Medium Trucks:	71.3	69.5	64.1	63.3	71.1	71.3								
Heavy Trucks:	75.6	73.6	67.0	69.0	76.2	76.4								
Vehicle Noise:	77.8	75.9	70.3	70.9	78.2	78.4								
Centerline Distance to Noise Contour (in feet)														
				70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:				268	578	1,245	2,683							
CNEL:				276	595	1,281	2,761							

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: OY 2020 With Project Road Name: Limonite Av. Road Segment: e/o Hammer Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 47,067 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,707 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.99%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.56%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.45%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	4.08	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	79.45	-5.78	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	84.25	-5.84	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.5	67.4	64.1	62.5	69.8	70.1			
Medium Trucks:	70.6	68.9	63.4	62.6	70.4	70.6			
Heavy Trucks:	75.4	73.4	66.8	68.8	76.0	76.1			
Vehicle Noise:	77.4	75.4	69.8	70.5	77.8	78.0			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			252	543	1,169	2,518			
CNEL:			259	558	1,202	2,590			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Euclid Av. Road Segment: s/o SR-60					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 52,933 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 5,293 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 115 feet									
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 83.44%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
Centerline Dist. to Barrier: 80.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Centerline Dist. to Observer: 80.0 feet									
Barrier Distance to Observer: 0.0 feet					Noise Source Elevations (in feet)				
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees					Autos: 55.846				
Right View: 90.0 degrees					Medium Trucks: 55.687				
					Heavy Trucks: 55.703				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.74	-0.82	-1.20	-4.74	0.000	0.000		
Medium Trucks:	82.40	-6.30	-0.81	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.28	-0.81	-1.20	-5.23	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	73.5	71.4	68.1	66.5	73.9	74.2			
Medium Trucks:	74.1	72.3	66.9	66.1	73.9	74.1			
Heavy Trucks:	78.1	76.1	69.5	71.5	78.7	78.9			
Vehicle Noise:	80.5	78.6	73.1	73.5	80.9	81.1			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			427	920	1,983	4,271			
CNEL:			440	947	2,041	4,397			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Euclid Av. Road Segment: s/o Walnut Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 51,163 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 5,116 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph					Vehicle Mix				
Near/Far Lane Distance: 115 feet									
Site Data					VehicleType				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 83.44%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
Centerline Dist. to Barrier: 80.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Centerline Dist. to Observer: 80.0 feet					Noise Source Elevations (in feet)				
Barrier Distance to Observer: 0.0 feet					Autos: 0.000				
Observer Height (Above Pad): 5.0 feet					Medium Trucks: 2.297				
Pad Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Elevation: 0.0 feet					Lane Equivalent Distance (in feet)				
Road Grade: 0.0%					Autos: 55.846				
Left View: -90.0 degrees					Medium Trucks: 55.687				
Right View: 90.0 degrees					Heavy Trucks: 55.703				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.59	-0.82	-1.20	-4.74	0.000	0.000		
Medium Trucks:	82.40	-6.45	-0.81	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.43	-0.81	-1.20	-5.23	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	73.4	71.2	68.0	66.3	73.7	74.0			
Medium Trucks:	73.9	72.2	66.8	65.9	73.7	74.0			
Heavy Trucks:	78.0	76.0	69.4	71.4	78.6	78.7			
Vehicle Noise:	80.4	78.4	72.9	73.4	80.8	81.0			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			418	900	1,938	4,176			
CNEL:			430	926	1,995	4,299			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Euclid Av. Road Segment: s/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 57,769 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,777 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
					Vehicle Type		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%					
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%					
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
					Noise Source Elevations (in feet)					
					Autos: 0.000					
					Medium Trucks: 2.297					
					Heavy Trucks: 8.004 Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 68.593					
					Medium Trucks: 68.464					
					Heavy Trucks: 68.476					
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	71.78	4.12	-2.16	-1.20	-4.77	0.000	0.000			
Medium Trucks:	82.40	-5.92	-2.15	-1.20	-4.88	0.000	0.000			
Heavy Trucks:	86.40	-5.90	-2.15	-1.20	-5.15	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	72.5	70.4	67.1	65.5	72.9	73.2				
Medium Trucks:	73.1	71.4	65.9	65.1	72.9	73.1				
Heavy Trucks:	77.1	75.2	68.5	70.5	77.8	77.9				
Vehicle Noise:	79.6	77.6	72.1	72.6	79.9	80.1				
Centerline Distance to Noise Contour (in feet)										
				70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:				474	1,022	2,201	4,743			
CNEL:				488	1,052	2,266	4,882			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Euclid Av. Road Segment: s/o Chino Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 61,345 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 6,135 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	4.38	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-5.66	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-5.64	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.8	70.7	67.4	65.8	73.2	73.5			
Medium Trucks:	73.4	71.6	66.2	65.4	73.2	73.4			
Heavy Trucks:	77.4	75.4	68.8	70.8	78.0	78.2			
Vehicle Noise:	79.8	77.9	72.4	72.8	80.2	80.4			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			494	1,064	2,291	4,936			
CNEL:			508	1,095	2,359	5,082			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Euclid Av. Road Segment: s/o Schaefer Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 61,768 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 6,177 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data  Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
Lane Equivalent Distance (in feet)					Autos: 68.593				
					Medium Trucks: 68.464				
					Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	4.41	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-5.63	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-5.61	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.8	70.7	67.4	65.8	73.2	73.5		73.5	
Medium Trucks:	73.4	71.7	66.2	65.4	73.2	73.4		73.4	
Heavy Trucks:	77.4	75.5	68.8	70.8	78.1	78.2		78.2	
Vehicle Noise:	79.8	77.9	72.4	72.9	80.2	80.4		80.4	
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				496	1,068	2,302	4,959		
CNEL:				511	1,100	2,370	5,105		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Euclid Av. Road Segment: s/o Edison Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 49,141 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,914 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.42	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-6.62	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-6.60	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.8	69.7	66.4	64.8	72.2	72.5			
Medium Trucks:	72.4	70.7	65.2	64.4	72.2	72.4			
Heavy Trucks:	76.4	74.5	67.8	69.8	77.1	77.2			
Vehicle Noise:	78.9	76.9	71.4	71.9	79.2	79.4			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			426	917	1,976	4,258			
CNEL:			438	944	2,035	4,383			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Euclid Av. Road Segment: s/o Eucalyptus Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 51,606 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,161 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
					VehicleType		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%					
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%					
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
					Noise Source Elevations (in feet)					
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476					
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	71.78	3.63	-2.16	-1.20	-4.77	0.000		0.000		
Medium Trucks:	82.40	-6.41	-2.15	-1.20	-4.88	0.000		0.000		
Heavy Trucks:	86.40	-6.39	-2.15	-1.20	-5.15	0.000		0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	72.0	69.9	66.7	65.0	72.4	72.7		72.7		
Medium Trucks:	72.6	70.9	65.4	64.6	72.4	72.6		72.6		
Heavy Trucks:	76.7	74.7	68.1	70.0	77.3	77.4		77.4		
Vehicle Noise:	79.1	77.1	71.6	72.1	79.5	79.6		79.6		
Centerline Distance to Noise Contour (in feet)										
				70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:				440	948	2,042	4,399			
CNEL:				453	976	2,102	4,529			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Euclid Av. Road Segment: s/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 55,163 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,516 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.92	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-6.12	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-6.10	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.3	70.2	66.9	65.3	72.7	73.0			
Medium Trucks:	72.9	71.2	65.7	64.9	72.7	72.9			
Heavy Trucks:	76.9	75.0	68.3	70.3	77.6	77.7			
Vehicle Noise:	79.4	77.4	71.9	72.4	79.7	79.9			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			460	991	2,135	4,599			
CNEL:			473	1,020	2,198	4,734			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Euclid Av. Road Segment: s/o Kimball Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 38,203 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 3,820 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 154 feet					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 103.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 103.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.33	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-7.72	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-7.70	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.7	68.6	65.4	63.7	71.1	71.4			
Medium Trucks:	71.3	69.6	64.1	63.3	71.1	71.3			
Heavy Trucks:	75.3	73.4	66.8	68.7	76.0	76.1			
Vehicle Noise:	77.8	75.8	70.3	70.8	78.2	78.3			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			360	776	1,671	3,600			
CNEL:			371	798	1,720	3,706			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Euclid Av. Road Segment: s/o Bickmore Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 37,567 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,757 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType		Day	Evening	Night	Daily
					Autos:		73.5%	8.7%	17.9%	83.44%
					Medium Trucks:		80.1%	5.7%	14.2%	8.26%
					Heavy Trucks:		76.2%	4.1%	19.7%	8.30%
					Noise Source Elevations (in feet)					
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004    Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476					
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	71.78	2.25	-2.16	-1.20	-4.77	0.000	0.000			
Medium Trucks:	82.40	-7.79	-2.15	-1.20	-4.88	0.000	0.000			
Heavy Trucks:	86.40	-7.77	-2.15	-1.20	-5.15	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	70.7	68.5	65.3	63.6	71.0	71.3				
Medium Trucks:	71.3	69.5	64.1	63.2	71.0	71.3				
Heavy Trucks:	75.3	73.3	66.7	68.7	75.9	76.0				
Vehicle Noise:	77.7	75.7	70.2	70.7	78.1	78.3				
Centerline Distance to Noise Contour (in feet)										
			70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:			356	767	1,652	3,560				
CNEL:			366	790	1,701	3,665				

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Euclid Av. Road Segment: s/o Pine Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 58,751 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,875 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
					VehicleType		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%					
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%					
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Noise Source Elevations (in feet)					
					Autos: 0.000					
					Medium Trucks: 2.297					
					Heavy Trucks: 8.004 Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 68.593					
					Medium Trucks: 68.464					
					Heavy Trucks: 68.476					
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	71.78	4.19	-2.16	-1.20	-4.77	0.000		0.000		
Medium Trucks:	82.40	-5.85	-2.15	-1.20	-4.88	0.000		0.000		
Heavy Trucks:	86.40	-5.83	-2.15	-1.20	-5.15	0.000		0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	72.6	70.5	67.2	65.6	73.0	73.3				
Medium Trucks:	73.2	71.4	66.0	65.2	73.0	73.2				
Heavy Trucks:	77.2	75.2	68.6	70.6	77.8	78.0				
Vehicle Noise:	79.6	77.7	72.2	72.7	80.0	80.2				
Centerline Distance to Noise Contour (in feet)										
			70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:			480	1,033	2,226	4,796				
CNEL:			494	1,064	2,292	4,938				

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Flight Av. Road Segment: n/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt):		1,726 vehicles			Autos: 15					
Peak Hour Percentage:		10%			Medium Trucks (2 Axles): 15					
Peak Hour Volume:		173 vehicles			Heavy Trucks (3+ Axles): 15					
Vehicle Speed:		50 mph								
Near/Far Lane Distance:		36 feet			Vehicle Mix					
					VehicleType		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%					
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%					
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
Site Data					Noise Source Elevations (in feet)					
Barrier Height:		0.0 feet			Autos: 0.000					
Barrier Type (0-Wall, 1-Berm):		0.0			Medium Trucks: 2.297					
Centerline Dist. to Barrier:		44.0 feet			Heavy Trucks: 8.004 Grade Adjustment: 0.0					
Centerline Dist. to Observer:		44.0 feet								
Barrier Distance to Observer:		0.0 feet								
Observer Height (Above Pad):		5.0 feet								
Pad Elevation:		0.0 feet								
Road Elevation:		0.0 feet								
Road Grade:		0.0%								
Left View:		-90.0 degrees								
Right View:		90.0 degrees								
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	70.20	-10.71	1.28	-1.20	-4.61	0.000		0.000		
Medium Trucks:	81.00	-20.75	1.31	-1.20	-4.87	0.000		0.000		
Heavy Trucks:	85.38	-20.73	1.31	-1.20	-5.50	0.000		0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	59.6	57.4	54.2	52.5	59.9	60.2				
Medium Trucks:	60.4	58.6	53.2	52.3	60.1	60.4				
Heavy Trucks:	64.8	62.8	56.2	58.1	65.4	65.5				
Vehicle Noise:	67.0	65.0	59.5	60.0	67.4	67.6				
Centerline Distance to Noise Contour (in feet)										
			70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:			29	63	136	294				
CNEL:			30	65	140	302				

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Hellman Av. Road Segment: s/o Kimball Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 17,423 vehicles				Autos: 15				
Peak Hour Percentage: 10%				Medium Trucks (2 Axles): 15				
Peak Hour Volume: 1,742 vehicles				Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 45 mph								
Near/Far Lane Distance: 51 feet				Vehicle Mix				
				Vehicle Type	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.44%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data				Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet				Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0				Medium Trucks: 2.297				
Centerline Dist. to Barrier: 49.0 feet				Heavy Trucks: 8.004				
Centerline Dist. to Observer: 49.0 feet				Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet								
Observer Height (Above Pad): 5.0 feet								
Pad Elevation: 0.0 feet								
Road Elevation: 0.0 feet								
Road Grade: 0.0%								
Left View: -90.0 degrees								
Right View: 90.0 degrees								
FHWA Noise Model Calculations								
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	68.46	-0.21	1.01	-1.20	-4.64	0.000	0.000	
Medium Trucks:	79.45	-10.26	1.04	-1.20	-4.87	0.000	0.000	
Heavy Trucks:	84.25	-10.24	1.04	-1.20	-5.44	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	68.1	65.9	62.7	61.0	68.4	68.7		
Medium Trucks:	69.0	67.3	61.8	61.0	68.8	69.0		
Heavy Trucks:	73.9	71.9	65.3	67.3	74.5	74.6		
Vehicle Noise:	75.9	73.9	68.3	68.9	76.3	76.5		
Centerline Distance to Noise Contour (in feet)								
			70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:			129	277	598	1,288		
CNEL:			132	285	615	1,324		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Hellman Av. Road Segment: s/o Pine Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 15,480 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,548 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	-0.73	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	79.45	-10.77	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-10.75	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	67.5	65.4	62.2	60.5	67.9	68.2			
Medium Trucks:	68.5	66.8	61.3	60.5	68.3	68.5			
Heavy Trucks:	73.3	71.4	64.8	66.7	74.0	74.1			
Vehicle Noise:	75.4	73.4	67.8	68.4	75.8	76.0			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				119	256	552	1,190		
CNEL:				122	264	568	1,224		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Archibald Av. Road Segment: n/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 34,689 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,469 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	2.32	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-7.72	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-7.70	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.3	68.1	64.9	63.3	70.6	70.9			
Medium Trucks:	71.0	69.3	63.9	63.0	70.8	71.1			
Heavy Trucks:	75.4	73.5	66.9	68.8	76.1	76.2			
Vehicle Noise:	77.7	75.7	70.2	70.7	78.1	78.3			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			255	550	1,185	2,554			
CNEL:			263	566	1,220	2,628			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Archibald Av. Road Segment: s/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 41,695 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,170 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.71	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-7.34	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.32	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.2	70.1	66.9	65.2	72.6	72.9			
Medium Trucks:	72.8	71.1	65.6	64.8	72.6	72.8			
Heavy Trucks:	76.8	74.9	68.3	70.2	77.5	77.6			
Vehicle Noise:	79.3	77.3	71.8	72.3	79.7	79.8			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			326	702	1,512	3,257			
CNEL:			335	722	1,556	3,352			

Friday, March 02, 2018



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Archibald Av. Road Segment: s/o Chino Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt):		40,465 vehicles		Autos: 15				
Peak Hour Percentage:		10%		Medium Trucks (2 Axles): 15				
Peak Hour Volume:		4,047 vehicles		Heavy Trucks (3+ Axles): 15				
Vehicle Speed:		55 mph						
Near/Far Lane Distance:		93 feet						
Site Data				Vehicle Mix				
Barrier Height:		0.0 feet		VehicleType	Day	Evening	Night	Daily
Barrier Type (0-Wall, 1-Berm):		0.0		Autos:		73.5%	8.7%	17.9% 83.44%
Centerline Dist. to Barrier:		74.0 feet		Medium Trucks:		80.1%	5.7%	14.2% 8.26%
Centerline Dist. to Observer:		74.0 feet		Heavy Trucks:		76.2%	4.1%	19.7% 8.30%
Barrier Distance to Observer:		0.0 feet						
Observer Height (Above Pad):		5.0 feet						
Pad Elevation:		0.0 feet						
Road Elevation:		0.0 feet						
Road Grade:		0.0%						
Left View:		-90.0 degrees						
Right View:		90.0 degrees						
				Noise Source Elevations (in feet)				
				Autos: 0.000				
				Medium Trucks: 2.297				
				Heavy Trucks: 8.004      Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 57.782				
				Medium Trucks: 57.629				
				Heavy Trucks: 57.644				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	71.78	2.58	-1.05	-1.20	-4.73	0.000	0.000	
Medium Trucks:	82.40	-7.47	-1.03	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	86.40	-7.45	-1.03	-1.20	-5.25	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	72.1	70.0	66.7	65.1	72.5	72.8		
Medium Trucks:	72.7	70.9	65.5	64.7	72.5	72.7		
Heavy Trucks:	76.7	74.7	68.1	70.1	77.3	77.5		
Vehicle Noise:	79.1	77.2	71.7	72.2	79.5	79.7		
Centerline Distance to Noise Contour (in feet)								
				70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:				319	688	1,482	3,192	
CNEL:				329	708	1,525	3,286	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Archibald Av. Road Segment: s/o Schaefer Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 37,907 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,791 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	71.78	2.29	-1.05	-1.20	-4.73	0.000	0.000	
Medium Trucks:	82.40	-7.75	-1.03	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	86.40	-7.73	-1.03	-1.20	-5.25	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	71.8	69.7	66.4	64.8	72.2	72.5		
Medium Trucks:	72.4	70.7	65.2	64.4	72.2	72.4		
Heavy Trucks:	76.4	74.5	67.8	69.8	77.1	77.2		
Vehicle Noise:	78.8	76.9	71.4	71.9	79.2	79.4		
Centerline Distance to Noise Contour (in feet)								
				70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:				306	658	1,419	3,056	
CNEL:				315	678	1,460	3,146	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Archibald Av. Road Segment: s/o Ontario Ranch Rd.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 45,993 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,599 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782				
					Medium Trucks: 57.629				
					Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.13	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-6.91	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.89	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.7	70.5	67.3	65.6	73.0	73.3			
Medium Trucks:	73.3	71.5	66.1	65.2	73.0	73.3			
Heavy Trucks:	77.3	75.3	68.7	70.7	77.9	78.0			
Vehicle Noise:	79.7	77.7	72.2	72.7	80.1	80.3			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				348	749	1,614	3,477		
CNEL:				358	771	1,661	3,579		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj, w/o Limonite E Road Name: Archibald Av. Road Segment: s/o Eucalyptus Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 47,042 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,704 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.23	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-6.81	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.79	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.8	70.6	67.4	65.7	73.1	73.4			
Medium Trucks:	73.4	71.6	66.2	65.3	73.1	73.4			
Heavy Trucks:	77.4	75.4	68.8	70.8	78.0	78.1			
Vehicle Noise:	79.8	77.8	72.3	72.8	80.2	80.4			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				353	760	1,638	3,529		
CNEL:				363	783	1,686	3,633		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Archibald Av. Road Segment: s/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 41,018 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 4,102 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 93 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 74.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 74.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.63	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-7.41	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.39	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.2	70.0	66.8	65.1	72.5	72.8		72.8	
Medium Trucks:	72.8	71.0	65.6	64.8	72.5	72.8		72.8	
Heavy Trucks:	76.8	74.8	68.2	70.2	77.4	77.5		77.5	
Vehicle Noise:	79.2	77.2	71.7	72.2	79.6	79.8		79.8	
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			322	694	1,495	3,221			
CNEL:			332	714	1,539	3,316			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Archibald Av. Road Segment: s/o Limonite Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 54,648 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,465 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.88	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-6.16	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.14	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.6	70.5	67.2	65.6	73.0	73.3			
Medium Trucks:	73.2	71.4	66.0	65.2	73.0	73.2			
Heavy Trucks:	77.2	75.2	68.6	70.6	77.8	78.0			
Vehicle Noise:	79.6	77.7	72.2	72.7	80.0	80.2			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			354	762	1,641	3,536			
CNEL:			364	784	1,690	3,640			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Merrill Av. Road Segment: e/o Euclid Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 29,091 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,909 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	1.56	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-8.49	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-8.47	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.8	69.7	66.4	64.8	72.2	72.5			
Medium Trucks:	72.6	70.9	65.4	64.6	72.4	72.6			
Heavy Trucks:	77.0	75.0	68.4	70.4	77.6	77.8			
Vehicle Noise:	79.2	77.3	71.7	72.3	79.6	79.8			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			193	416	897	1,933			
CNEL:			199	428	923	1,988			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Merrill Av. Road Segment: e/o Bon View Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 21,352 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,135 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	0.21	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-9.83	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-9.81	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.5	68.4	65.1	63.5	70.9	71.2			
Medium Trucks:	71.3	69.5	64.1	63.3	71.1	71.3			
Heavy Trucks:	75.7	73.7	67.1	69.1	76.3	76.4			
Vehicle Noise:	77.9	75.9	70.4	70.9	78.3	78.5			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				157	339	730	1,573		
CNEL:				162	349	751	1,618		

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Merrill Av. Road Segment: e/o Flight Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 37,100 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 3,710 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 36 feet									
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 83.44%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
Centerline Dist. to Barrier: 44.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Centerline Dist. to Observer: 44.0 feet									
Barrier Distance to Observer: 0.0 feet					Noise Source Elevations (in feet)				
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%									
Left View: -90.0 degrees					Lane Equivalent Distance (in feet)				
Right View: 90.0 degrees					Autos: 40.460				
					Medium Trucks: 40.241				
					Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	2.61	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-7.43	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-7.41	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn		CNEL		
Autos:	72.9	70.8	67.5	65.9	73.3		73.6		
Medium Trucks:	73.7	71.9	66.5	65.7	73.5		73.7		
Heavy Trucks:	78.1	76.1	69.5	71.5	78.7		78.8		
Vehicle Noise:	80.3	78.3	72.8	73.3	80.7		80.9		
Centerline Distance to Noise Contour (in feet)									
		70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:	227	490	1,055	2,273					
CNEL:	234	504	1,085	2,338					

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Merrill Av. Road Segment: e/o Hellman Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 37,434 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,743 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Lane Equivalent Distance (in feet)									
					Autos: 40.460				
					Medium Trucks: 40.241				
					Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	2.65	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-7.39	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-7.37	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.9	70.8	67.5	65.9	73.3	73.6			
Medium Trucks:	73.7	72.0	66.5	65.7	73.5	73.7			
Heavy Trucks:	78.1	76.1	69.5	71.5	78.7	78.9			
Vehicle Noise:	80.3	78.4	72.8	73.4	80.7	80.9			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				229	493	1,061	2,286		
CNEL:				235	507	1,092	2,352		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Kimball Av. Road Segment: w/o Euclid Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 22,414 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,241 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	0.42	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-9.62	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-9.60	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.7	68.6	65.3	63.7	71.1	71.4			
Medium Trucks:	71.5	69.7	64.3	63.5	71.3	71.5			
Heavy Trucks:	75.9	73.9	67.3	69.3	76.5	76.6			
Vehicle Noise:	78.1	76.2	70.6	71.2	78.5	78.7			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			162	350	754	1,624			
CNEL:			167	360	776	1,671			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Kimball Av. Road Segment: e/o Euclid Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 27,108 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,711 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140				
					Medium Trucks: 41.929				
					Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	1.25	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-8.79	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-8.77	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.3	69.1	65.9	64.2	71.6	71.9			
Medium Trucks:	72.0	70.3	64.9	64.0	71.8	72.1			
Heavy Trucks:	76.4	74.5	67.9	69.8	77.1	77.2			
Vehicle Noise:	78.7	76.7	71.1	71.7	79.1	79.3			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				197	425	915	1,971		
CNEL:				203	437	941	2,028		

Friday, March 02, 2018



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Kimball Av. Road Segment: e/o Rincon Meadows Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 26,854 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 2,685 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 51 feet					Vehicle Mix				
<b>Site Data</b>  Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
Heavy Trucks: 8.004 Grade Adjustment: 0.0									
					Lane Equivalent Distance (in feet)				
					Autos: 42.140				
					Medium Trucks: 41.929				
					Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	1.21	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-8.84	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-8.81	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.2	69.1	65.8	64.2	71.6	71.9			
Medium Trucks:	72.0	70.3	64.8	64.0	71.8	72.0			
Heavy Trucks:	76.4	74.4	67.8	69.8	77.0	77.2			
Vehicle Noise:	78.6	76.7	71.1	71.7	79.0	79.2			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			196	422	909	1,959			
CNEL:			202	434	935	2,015			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Kimball Av. Road Segment: e/o Mill Creek Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 28,895 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,890 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	1.53	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-8.52	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-8.50	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.5	69.4	66.2	64.5	71.9	72.2			
Medium Trucks:	72.3	70.6	65.1	64.3	72.1	72.3			
Heavy Trucks:	76.7	74.7	68.1	70.1	77.3	77.5			
Vehicle Noise:	78.9	77.0	71.4	72.0	79.3	79.5			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			206	443	955	2,057			
CNEL:			212	456	982	2,116			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Kimball Av. Road Segment: e/o Main St.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 41,127 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,113 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	3.06	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-6.98	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-6.96	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	73.1	70.9	67.7	66.1	73.4	73.7			
Medium Trucks:	73.9	72.1	66.7	65.8	73.6	73.9			
Heavy Trucks:	78.3	76.3	69.7	71.6	78.9	79.0			
Vehicle Noise:	80.5	78.5	73.0	73.5	80.9	81.1			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			260	561	1,208	2,602			
CNEL:			268	577	1,243	2,677			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Kimball Av. Road Segment: e/o Flight Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 26,102 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,610 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140				
					Medium Trucks: 41.929				
					Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	1.09	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-8.96	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-8.94	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.1	69.0	65.7	64.1	71.5	71.8			
Medium Trucks:	71.9	70.1	64.7	63.9	71.7	71.9			
Heavy Trucks:	76.3	74.3	67.7	69.7	76.9	77.0			
Vehicle Noise:	78.5	76.5	71.0	71.5	78.9	79.1			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			192	414	892	1,922			
CNEL:			198	426	918	1,977			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Kimball Av. Road Segment: e/o Meadow Valley Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 16,931 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 1,693 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 51 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 49.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 49.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-0.79	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-10.84	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-10.82	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn		CNEL		
Autos:	69.2	67.1	63.8	62.2	69.6		69.9		
Medium Trucks:	70.0	68.2	62.8	62.0	69.8		70.0		
Heavy Trucks:	74.4	72.4	65.8	67.8	75.0		75.2		
Vehicle Noise:	76.6	74.7	69.1	69.7	77.0		77.2		
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				144	310	668	1,440		
CNEL:				148	319	688	1,482		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Limonite Av. Road Segment: e/o Hellman Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 11,505 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,151 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-2.47	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-12.52	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-12.50	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	64.7	62.5	59.3	57.7	65.0	65.3			
Medium Trucks:	65.4	63.7	58.2	57.4	65.2	65.4			
Heavy Trucks:	69.8	67.9	61.2	63.2	70.5	70.6			
Vehicle Noise:	72.1	70.1	64.5	65.1	72.5	72.7			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				111	239	515	1,110		
CNEL:				114	246	530	1,142		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Limonite Av. Road Segment: e/o Archibald Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 47,078 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,708 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422				
					Medium Trucks: 65.286				
					Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	3.65	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-6.40	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-6.38	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn		CNEL		
Autos:	70.8	68.7	65.4	63.8	71.2		71.5		
Medium Trucks:	71.6	69.8	64.4	63.5	71.3		71.6		
Heavy Trucks:	76.0	74.0	67.4	69.4	76.6		76.7		
Vehicle Noise:	78.2	76.2	70.7	71.2	78.6		78.8		
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA		55 dBA		
Ldn:			284	612	1,318		2,838		
CNEL:			292	629	1,356		2,920		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Limonite Av. Road Segment: e/o Harrison Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 50,831 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,083 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	3.98	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-6.06	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-6.04	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn		CNEL		
Autos:	71.1	69.0	65.7	64.1	71.5		71.8		
Medium Trucks:	71.9	70.1	64.7	63.9	71.7		71.9		
Heavy Trucks:	76.3	74.3	67.7	69.7	76.9		77.1		
Vehicle Noise:	78.5	76.6	71.0	71.6	78.9		79.1		
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			299	644	1,387	2,987			
CNEL:			307	662	1,427	3,074			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Limonite Av. Road Segment: e/o Sumner Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 50,145 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 5,015 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph					Vehicle Mix				
Near/Far Lane Distance: 78 feet					VehicleType				
Site Data					Day				
Barrier Height: 0.0 feet					Evening				
Barrier Type (0-Wall, 1-Berm): 0.0					Night				
Centerline Dist. to Barrier: 76.0 feet					Daily				
Centerline Dist. to Observer: 76.0 feet					Autos: 73.5% 8.7% 17.9% 83.44%				
Barrier Distance to Observer: 0.0 feet					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
Observer Height (Above Pad): 5.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Pad Elevation: 0.0 feet					Noise Source Elevations (in feet)				
Road Elevation: 0.0 feet					Autos: 0.000				
Road Grade: 0.0%					Medium Trucks: 2.297				
Left View: -90.0 degrees					Heavy Trucks: 8.004				
Right View: 90.0 degrees					Grade Adjustment: 0.0				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	3.92	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-6.12	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-6.10	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.1	68.9	65.7	64.0	71.4	71.7			
Medium Trucks:	71.8	70.1	64.6	63.8	71.6	71.8			
Heavy Trucks:	76.2	74.3	67.6	69.6	76.9	77.0			
Vehicle Noise:	78.5	76.5	70.9	71.5	78.9	79.0			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				296	638	1,374	2,960		
CNEL:				305	656	1,414	3,046		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Limonite Av. Road Segment: e/o Scholar Wy.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 50,321 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,032 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	3.94	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-6.11	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-6.09	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.1	69.0	65.7	64.1	71.4	71.7			
Medium Trucks:	71.9	70.1	64.7	63.8	71.6	71.9			
Heavy Trucks:	76.2	74.3	67.7	69.6	76.9	77.0			
Vehicle Noise:	78.5	76.5	71.0	71.5	78.9	79.1			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			297	639	1,377	2,967			
CNEL:			305	658	1,417	3,053			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/o Limonite E Road Name: Limonite Av. Road Segment: e/o Hamner Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 54,492 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 5,449 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 45 mph					Vehicle Mix				
Near/Far Lane Distance: 78 feet					Vehicle Type				
Site Data					Day				
Barrier Height: 0.0 feet					Evening				
Barrier Type (0-Wall, 1-Berm): 0.0					Night				
Centerline Dist. to Barrier: 76.0 feet					Daily				
Centerline Dist. to Observer: 76.0 feet					Autos: 73.5% 8.7% 17.9% 83.44%				
Barrier Distance to Observer: 0.0 feet					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
Observer Height (Above Pad): 5.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Pad Elevation: 0.0 feet					Noise Source Elevations (in feet)				
Road Elevation: 0.0 feet					Autos: 0.000				
Road Grade: 0.0%					Medium Trucks: 2.297				
Left View: -90.0 degrees					Heavy Trucks: 8.004				
Right View: 90.0 degrees					Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422				
					Medium Trucks: 65.286				
					Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	4.74	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	79.45	-5.30	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	84.25	-5.28	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.1	68.0	64.8	63.1	70.5	70.8			
Medium Trucks:	71.1	69.3	63.9	63.1	70.9	71.1			
Heavy Trucks:	75.9	74.0	67.3	69.3	76.5	76.7			
Vehicle Noise:	78.0	76.0	70.4	71.0	78.4	78.5			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			275	591	1,274	2,745			
CNEL:			282	608	1,310	2,823			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Euclid Av. Road Segment: s/o SR-60					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 53,385 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,338 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 115 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 80.0 feet Centerline Dist. to Observer: 80.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.18% Medium Trucks: 80.1% 5.7% 14.2% 8.44% Heavy Trucks: 76.2% 4.1% 19.7% 8.38%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 55.846 Medium Trucks: 55.687 Heavy Trucks: 55.703				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.77	-0.82	-1.20	-4.74	0.000	0.000		
Medium Trucks:	82.40	-6.17	-0.81	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.20	-0.81	-1.20	-5.23	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	73.5	71.4	68.1	66.5	73.9	74.2			
Medium Trucks:	74.2	72.5	67.0	66.2	74.0	74.2			
Heavy Trucks:	78.2	76.2	69.6	71.6	78.8	78.9			
Vehicle Noise:	80.6	78.6	73.2	73.6	81.0	81.2			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				432	931	2,007	4,323		
CNEL:				445	959	2,066	4,451		

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Euclid Av. Road Segment: s/o Walnut Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 51,668 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 5,167 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 115 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.19%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.43%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.38%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 80.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 80.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
					Lane Equivalent Distance (in feet)				
					Autos: 55.846				
					Medium Trucks: 55.687				
					Heavy Trucks: 55.703				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.62	-0.82	-1.20	-4.74	0.000	0.000		
Medium Trucks:	82.40	-6.32	-0.81	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.35	-0.81	-1.20	-5.23	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	73.4	71.3	68.0	66.4	73.7	74.0			
Medium Trucks:	74.1	72.3	66.9	66.1	73.9	74.1			
Heavy Trucks:	78.0	76.1	69.5	71.4	78.7	78.8			
Vehicle Noise:	80.5	78.5	73.0	73.5	80.8	81.0			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			423	911	1,963	4,229			
CNEL:			435	938	2,021	4,353			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Euclid Av. Road Segment: s/o Riverside Dr.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 58,353 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,835 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Vehicle Type	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.24%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.40%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.36%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations								
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	71.78	4.15	-2.16	-1.20	-4.77	0.000	0.000	
Medium Trucks:	82.40	-5.80	-2.15	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	86.40	-5.83	-2.15	-1.20	-5.15	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	72.6	70.4	67.2	65.5	72.9	73.2		
Medium Trucks:	73.2	71.5	66.1	65.2	73.0	73.3		
Heavy Trucks:	77.2	75.2	68.6	70.6	77.8	78.0		
Vehicle Noise:	79.6	77.7	72.2	72.7	80.0	80.2		
Centerline Distance to Noise Contour (in feet)								
			70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:			480	1,034	2,227	4,797		
CNEL:			494	1,064	2,292	4,939		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Euclid Av. Road Segment: s/o Chino Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 61,982 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 6,198 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph					Vehicle Mix				
Near/Far Lane Distance: 154 feet									
Site Data					Vehicle Type				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 83.26%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 8.39%				
Centerline Dist. to Barrier: 103.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.35%				
Centerline Dist. to Observer: 103.0 feet					Noise Source Elevations (in feet)				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees									
Right View: 90.0 degrees					Autos: 68.593				
					Medium Trucks: 68.464				
					Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	4.42	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-5.55	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-5.57	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.8	70.7	67.4	65.8	73.2	73.5			
Medium Trucks:	73.5	71.7	66.3	65.5	73.3	73.5			
Heavy Trucks:	77.5	75.5	68.9	70.9	78.1	78.2			
Vehicle Noise:	79.9	77.9	72.4	72.9	80.3	80.5			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				499	1,075	2,316	4,991		
CNEL:				514	1,107	2,385	5,138		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Euclid Av. Road Segment: s/o Schaefer Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 62,458 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 6,246 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.28% Medium Trucks: 80.1% 5.7% 14.2% 8.38% Heavy Trucks: 76.2% 4.1% 19.7% 8.34%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	4.45	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-5.52	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-5.54	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.9	70.7	67.5	65.8	73.2	73.5			
Medium Trucks:	73.5	71.8	66.3	65.5	73.3	73.5			
Heavy Trucks:	77.5	75.5	68.9	70.9	78.1	78.3			
Vehicle Noise:	79.9	78.0	72.5	72.9	80.3	80.5			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			501	1,080	2,327	5,014			
CNEL:			516	1,112	2,396	5,162			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Euclid Av. Road Segment: s/o Edison Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 50,081 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 5,008 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 154 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.25%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.42%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.34%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 103.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Centerline Dist. to Observer: 103.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees					Autos: 68.593				
Right View: 90.0 degrees					Medium Trucks: 68.464				
					Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.49	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-6.46	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-6.50	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.9	69.8	66.5	64.9	72.3	72.6		72.6	
Medium Trucks:	72.6	70.8	65.4	64.6	72.4	72.6		72.6	
Heavy Trucks:	76.5	74.6	67.9	69.9	77.2	77.3		77.3	
Vehicle Noise:	79.0	77.0	71.5	72.0	79.4	79.5		79.5	
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			433	933	2,010	4,329			
CNEL:			446	960	2,069	4,457			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Euclid Av. Road Segment: s/o Eucalyptus Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 52,678 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,268 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.30% Medium Trucks: 80.1% 5.7% 14.2% 8.39% Heavy Trucks: 76.2% 4.1% 19.7% 8.32%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.71	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-6.26	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-6.29	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.1	70.0	66.7	65.1	72.5	72.8		72.8	
Medium Trucks:	72.8	71.0	65.6	64.8	72.6	72.6		72.8	
Heavy Trucks:	76.8	74.8	68.2	70.1	77.4	77.4		77.5	
Vehicle Noise:	79.2	77.2	71.7	72.2	79.6	79.6		79.8	
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				447	963	2,075	4,471		
CNEL:				460	992	2,136	4,603		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Euclid Av. Road Segment: s/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 55,548 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,555 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
					VehicleType		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.10% Medium Trucks: 80.1% 5.7% 14.2% 8.48% Heavy Trucks: 76.2% 4.1% 19.7% 8.42%					
					Noise Source Elevations (in feet)					
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Lane Equivalent Distance (in feet)					
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476					
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	71.78	3.93	-2.16	-1.20	-4.77	0.000		0.000		
Medium Trucks:	82.40	-5.98	-2.15	-1.20	-4.88	0.000		0.000		
Heavy Trucks:	86.40	-6.01	-2.15	-1.20	-5.15	0.000		0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	72.4	70.2	67.0	65.3	72.7	73.0				
Medium Trucks:	73.1	71.3	65.9	65.1	72.9	73.1				
Heavy Trucks:	77.0	75.1	68.4	70.4	77.7	77.8				
Vehicle Noise:	79.4	77.5	72.0	72.5	79.8	80.0				
Centerline Distance to Noise Contour (in feet)										
			70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:			466	1,004	2,163	4,661				
CNEL:			480	1,034	2,227	4,798				

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Euclid Av. Road Segment: s/o Kimball Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 38,621 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,862 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.29%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.37%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.34%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.37	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-7.61	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-7.63	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.8	68.7	65.4	63.8	71.1	71.4			
Medium Trucks:	71.4	69.7	64.2	63.4	71.2	71.4			
Heavy Trucks:	75.4	73.4	66.8	68.8	76.0	76.2			
Vehicle Noise:	77.8	75.9	70.4	70.9	78.2	78.4			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			364	784	1,689	3,638			
CNEL:			375	807	1,738	3,745			



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Euclid Av. Road Segment: s/o Bickmore Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 37,985 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 3,798 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph					Vehicle Mix				
Near/Far Lane Distance: 154 feet					VehicleType	Day	Evening	Night	Daily
Site Data					Autos: 73.5% 8.7% 17.9% 83.29%				
Barrier Height: 0.0 feet					Medium Trucks: 80.1% 5.7% 14.2% 8.37%				
Barrier Type (0-Wall, 1-Berm): 0.0					Heavy Trucks: 76.2% 4.1% 19.7% 8.34%				
Centerline Dist. to Barrier: 103.0 feet					Noise Source Elevations (in feet)				
Centerline Dist. to Observer: 103.0 feet					Autos: 0.000				
Barrier Distance to Observer: 0.0 feet					Medium Trucks: 2.297				
Observer Height (Above Pad): 5.0 feet					Heavy Trucks: 8.004				
Pad Elevation: 0.0 feet					Grade Adjustment: 0.0				
Road Elevation: 0.0 feet					Lane Equivalent Distance (in feet)				
Road Grade: 0.0%					Autos: 68.593				
Left View: -90.0 degrees					Medium Trucks: 68.464				
Right View: 90.0 degrees					Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.29	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-7.68	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-7.70	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.7	68.6	65.3	63.7	71.1	71.4			
Medium Trucks:	71.4	69.6	64.2	63.4	71.1	71.4			
Heavy Trucks:	75.3	73.4	66.7	68.7	76.0	76.1			
Vehicle Noise:	77.8	75.8	70.3	70.8	78.1	78.3			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			360	775	1,670	3,598			
CNEL:			370	798	1,719	3,704			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Euclid Av. Road Segment: s/o Pine Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 59,169 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,917 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType		Day	Evening	Night	Daily
					Autos:		73.5%	8.7%	17.9%	83.34%
					Medium Trucks:		80.1%	5.7%	14.2%	8.33%
					Heavy Trucks:		76.2%	4.1%	19.7%	8.32%
					Noise Source Elevations (in feet)					
					Autos:		0.000			
					Medium Trucks:		2.297			
					Heavy Trucks:		8.004		Grade Adjustment: 0.0	
					Lane Equivalent Distance (in feet)					
					Autos:		68.593			
					Medium Trucks:		68.464			
					Heavy Trucks:		68.476			
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	71.78	4.22	-2.16	-1.20	-4.77	0.000	0.000			
Medium Trucks:	82.40	-5.78	-2.15	-1.20	-4.88	0.000	0.000			
Heavy Trucks:	86.40	-5.78	-2.15	-1.20	-5.15	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	72.6	70.5	67.2	65.6	73.0	73.3				
Medium Trucks:	73.3	71.5	66.1	65.3	73.0	73.3				
Heavy Trucks:	77.3	75.3	68.7	70.7	77.9	78.0				
Vehicle Noise:	79.7	77.7	72.2	72.7	80.1	80.3				
Centerline Distance to Noise Contour (in feet)										
			70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:			483	1,041	2,242	4,830				
CNEL:			497	1,071	2,308	4,972				

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Flight Av. Road Segment: n/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 1,779 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 178 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 36 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.93%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.01%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.05%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 44.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 44.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-10.55	1.28	-1.20	-4.61	0.000		0.000	
Medium Trucks:	81.00	-20.75	1.31	-1.20	-4.87	0.000		0.000	
Heavy Trucks:	85.38	-20.73	1.31	-1.20	-5.50	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	59.7	57.6	54.3	52.7	60.1	60.4			
Medium Trucks:	60.4	58.6	53.2	52.3	60.1	60.4			
Heavy Trucks:	64.8	62.8	56.2	58.1	65.4	65.5			
Vehicle Noise:	67.0	65.0	59.5	60.0	67.4	67.6			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			30	64	137	295			
CNEL:			30	65	141	304			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Hellman Av. Road Segment: s/o Kimball Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 17,899 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,790 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.88% Medium Trucks: 80.1% 5.7% 14.2% 8.04% Heavy Trucks: 76.2% 4.1% 19.7% 8.08%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	-0.07	1.01	-1.20	-4.64	0.000		0.000	
Medium Trucks:	79.45	-10.26	1.04	-1.20	-4.87	0.000		0.000	
Heavy Trucks:	84.25	-10.24	1.04	-1.20	-5.44	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	68.2	66.1	62.8	61.2	68.6	68.9			
Medium Trucks:	69.0	67.3	61.8	61.0	68.8	69.0			
Heavy Trucks:	73.9	71.9	65.3	67.3	74.5	74.6			
Vehicle Noise:	75.9	73.9	68.3	69.0	76.3	76.5			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			129	278	600	1,292			
CNEL:			133	286	617	1,329			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Hellman Av. Road Segment: s/o Pine Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 15,771 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 1,577 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 45 mph									
Near/Far Lane Distance: 51 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.75%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.11%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.15%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 49.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Centerline Dist. to Observer: 49.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
					Lane Equivalent Distance (in feet)				
					Autos: 42.140				
					Medium Trucks: 41.929				
					Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	-0.63	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	79.45	-10.77	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-10.75	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	67.6	65.5	62.3	60.6	68.0	68.3			
Medium Trucks:	68.5	66.8	61.3	60.5	68.3	68.5			
Heavy Trucks:	73.3	71.4	64.8	66.7	74.0	74.1			
Vehicle Noise:	75.4	73.4	67.8	68.4	75.8	76.0			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				119	257	554	1,193		
CNEL:				123	264	569	1,227		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Archibald Av. Road Segment: n/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 35,281 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,528 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.71%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.74%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.55%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	2.36	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-7.40	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-7.50	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.3	68.2	64.9	63.3	70.7	71.0			
Medium Trucks:	71.4	69.6	64.2	63.4	71.1	71.4			
Heavy Trucks:	75.6	73.7	67.1	69.0	76.3	76.4			
Vehicle Noise:	77.9	75.9	70.3	70.9	78.3	78.4			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				263	567	1,221	2,631		
CNEL:				271	583	1,256	2,707		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Archibald Av. Road Segment: s/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 42,366 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 4,237 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph					Vehicle Mix				
Near/Far Lane Distance: 93 feet									
Site Data					VehicleType				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 82.87%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 8.64%				
Centerline Dist. to Barrier: 74.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.49%				
Centerline Dist. to Observer: 74.0 feet					Noise Source Elevations (in feet)				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees									
Right View: 90.0 degrees					Autos: 57.782				
					Medium Trucks: 57.629				
					Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.74	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-7.07	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.15	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn		CNEL		
Autos:	72.3	70.1	66.9	65.3	72.6		72.9		
Medium Trucks:	73.1	71.3	65.9	65.1	72.9		73.1		
Heavy Trucks:	77.0	75.0	68.4	70.4	77.6		77.8		
Vehicle Noise:	79.4	77.5	72.0	72.4	79.8		80.0		
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				334	719	1,550	3,339		
CNEL:				344	740	1,595	3,437		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Archibald Av. Road Segment: s/o Chino Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 41,136 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,114 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 82.85% Medium Trucks: 80.1% 5.7% 14.2% 8.66% Heavy Trucks: 76.2% 4.1% 19.7% 8.50%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644								
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	71.78	2.62	-1.05	-1.20	-4.73	0.000	0.000	
Medium Trucks:	82.40	-7.19	-1.03	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	86.40	-7.28	-1.03	-1.20	-5.25	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	72.2	70.0	66.8	65.1	72.5	72.8		
Medium Trucks:	73.0	71.2	65.8	65.0	72.8	73.0		
Heavy Trucks:	76.9	74.9	68.3	70.3	77.5	77.7		
Vehicle Noise:	79.3	77.4	71.8	72.3	79.7	79.9		
Centerline Distance to Noise Contour (in feet)								
				70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:				328	706	1,520	3,275	
CNEL:				337	726	1,565	3,371	

Friday, March 02, 2018



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Archibald Av. Road Segment: s/o Schaefer Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 38,578 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 3,858 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph					Vehicle Mix				
Near/Far Lane Distance: 93 feet									
Site Data					VehicleType				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 82.81%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 8.68%				
Centerline Dist. to Barrier: 74.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.51%				
Centerline Dist. to Observer: 74.0 feet					Noise Source Elevations (in feet)				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees									
Right View: 90.0 degrees					Autos: 57.782				
					Medium Trucks: 57.629				
					Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.34	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-7.46	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.55	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.9	69.7	66.5	64.8	72.2	72.5			
Medium Trucks:	72.7	71.0	65.5	64.7	72.5	72.7			
Heavy Trucks:	76.6	74.6	68.0	70.0	77.2	77.4			
Vehicle Noise:	79.0	77.1	71.6	72.1	79.4	79.6			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			314	677	1,458	3,141			
CNEL:			323	697	1,501	3,233			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Archibald Av. Road Segment: s/o Ontario Ranch Rd.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 46,664 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,666 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType		Day	Evening	Night	Daily
					Autos:		73.5%	8.7%	17.9%	82.92%
					Medium Trucks:		80.1%	5.7%	14.2%	8.61%
					Heavy Trucks:		76.2%	4.1%	19.7%	8.47%
					Noise Source Elevations (in feet)					
					Autos:		0.000			
					Medium Trucks:		2.297			
					Heavy Trucks:		8.004		Grade Adjustment: 0.0	
					Lane Equivalent Distance (in feet)					
					Autos:		57.782			
					Medium Trucks:		57.629			
					Heavy Trucks:		57.644			
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	71.78	3.17	-1.05	-1.20	-4.73	0.000	0.000			
Medium Trucks:	82.40	-6.67	-1.03	-1.20	-4.88	0.000	0.000			
Heavy Trucks:	86.40	-6.74	-1.03	-1.20	-5.25	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	72.7	70.6	67.3	65.7	73.1	73.4				
Medium Trucks:	73.5	71.7	66.3	65.5	73.3	73.5				
Heavy Trucks:	77.4	75.5	68.8	70.8	78.0	78.2				
Vehicle Noise:	79.8	77.9	72.4	72.9	80.2	80.4				
Centerline Distance to Noise Contour (in feet)										
				70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:				356	766	1,651	3,556			
CNEL:				366	789	1,699	3,661			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Archibald Av. Road Segment: s/o Eucalyptus Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 47,750 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,775 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.87% Medium Trucks: 80.1% 5.7% 14.2% 8.64% Heavy Trucks: 76.2% 4.1% 19.7% 8.49%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.26	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-6.55	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.63	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.8	70.7	67.4	65.8	73.2	73.5			
Medium Trucks:	73.6	71.9	66.4	65.6	73.4	73.6			
Heavy Trucks:	77.5	75.6	68.9	70.9	78.2	78.3			
Vehicle Noise:	79.9	78.0	72.5	73.0	80.3	80.5			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			362	779	1,678	3,616			
CNEL:			372	802	1,728	3,722			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Archibald Av. Road Segment: s/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 41,808 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,181 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 82.87% Medium Trucks: 80.1% 5.7% 14.2% 8.64% Heavy Trucks: 76.2% 4.1% 19.7% 8.48%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.69	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-7.13	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.21	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.2	70.1	66.8	65.2	72.6	72.9			
Medium Trucks:	73.0	71.3	65.8	65.0	72.8	73.1			
Heavy Trucks:	77.0	75.0	68.4	70.3	77.6	77.7			
Vehicle Noise:	79.4	77.4	71.9	72.4	79.8	79.9			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			331	713	1,535	3,308			
CNEL:			341	734	1,581	3,405			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Archibald Av. Road Segment: s/o Limonite Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 54,698 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 5,470 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 78 feet					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.36%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.31%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.33%				
Site Data									
Barrier Height: 0.0 feet									
Barrier Type (0-Wall, 1-Berm): 0.0									
Centerline Dist. to Barrier: 76.0 feet									
Centerline Dist. to Observer: 76.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422				
					Medium Trucks: 65.286				
					Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.88	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-6.13	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.12	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.6	70.5	67.2	65.6	73.0	73.3			
Medium Trucks:	73.2	71.5	66.0	65.2	73.0	73.2			
Heavy Trucks:	77.2	75.3	68.6	70.6	77.9	78.0			
Vehicle Noise:	79.6	77.7	72.2	72.7	80.0	80.2			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				355	764	1,646	3,545		
CNEL:				365	786	1,694	3,650		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Merrill Av. Road Segment: e/o Euclid Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 30,547 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,055 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.58% Medium Trucks: 80.1% 5.7% 14.2% 8.88% Heavy Trucks: 76.2% 4.1% 19.7% 8.54%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	1.72	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-7.96	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-8.13	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.0	69.9	66.6	65.0	72.4	72.7			
Medium Trucks:	73.2	71.4	66.0	65.1	72.9	73.2			
Heavy Trucks:	77.4	75.4	68.8	70.7	78.0	78.1			
Vehicle Noise:	79.6	77.6	72.1	72.6	80.0	80.2			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				204	439	946	2,037		
CNEL:				210	452	973	2,096		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Merrill Av. Road Segment: e/o Bon View Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 22,808 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,281 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
					VehicleType		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.28% Medium Trucks: 80.1% 5.7% 14.2% 9.10% Heavy Trucks: 76.2% 4.1% 19.7% 8.62%					
					Noise Source Elevations (in feet)					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262					
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	70.20	0.44	1.28	-1.20	-4.61	0.000	0.000			
Medium Trucks:	81.00	-9.13	1.31	-1.20	-4.87	0.000	0.000			
Heavy Trucks:	85.38	-9.36	1.31	-1.20	-5.50	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	70.7	68.6	65.3	63.7	71.1	71.4				
Medium Trucks:	72.0	70.2	64.8	64.0	71.8	72.0				
Heavy Trucks:	76.1	74.2	67.5	69.5	76.7	76.9				
Vehicle Noise:	78.4	76.4	70.8	71.4	78.8	78.9				
Centerline Distance to Noise Contour (in feet)										
				70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:				169	364	783	1,688			
CNEL:				174	374	806	1,736			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Merrill Av. Road Segment: e/o Flight Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 38,651 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,865 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.14% Medium Trucks: 80.1% 5.7% 14.2% 9.14% Heavy Trucks: 76.2% 4.1% 19.7% 8.72%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	2.72	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-6.82	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-7.02	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	73.0	70.9	67.6	66.0	73.4	73.7			
Medium Trucks:	74.3	72.5	67.1	66.3	74.1	74.3			
Heavy Trucks:	78.5	76.5	69.9	71.9	79.1	79.2			
Vehicle Noise:	80.7	78.7	73.1	73.7	81.1	81.3			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				241	520	1,119	2,412		
CNEL:				248	535	1,152	2,481		

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Merrill Av. Road Segment: e/o Hellman Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 38,932 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 3,893 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 36 feet									
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 82.13%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 9.14%				
Centerline Dist. to Barrier: 44.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.73%				
Centerline Dist. to Observer: 44.0 feet									
Barrier Distance to Observer: 0.0 feet					Noise Source Elevations (in feet)				
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees					Autos: 40.460				
Right View: 90.0 degrees					Medium Trucks: 40.241				
					Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	2.75	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-6.78	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-6.98	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	73.0	70.9	67.6	66.0	73.4	73.7			
Medium Trucks:	74.3	72.6	67.1	66.3	74.1	74.3			
Heavy Trucks:	78.5	76.5	69.9	71.9	79.1	79.3			
Vehicle Noise:	80.7	78.8	73.2	73.8	81.1	81.3			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				242	522	1,125	2,424		
CNEL:				249	537	1,158	2,494		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL												
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Kimball Av. Road Segment: w/o Euclid Av.					Project Name: Chino Parcel Delivery Job Number: 11134							
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt):		22,620 vehicles			Autos: 15							
Peak Hour Percentage:		10%			Medium Trucks (2 Axles): 15							
Peak Hour Volume:		2,262 vehicles			Heavy Trucks (3+ Axles): 15							
Vehicle Speed:		50 mph			Vehicle Mix							
Near/Far Lane Distance:		36 feet			VehicleType							
Site Data					Day		Evening		Night		Daily	
					Autos: 73.5%		8.7%		17.9%		83.03%	
					Medium Trucks: 80.1%		5.7%		14.2%		8.53%	
					Heavy Trucks: 76.2%		4.1%		19.7%		8.44%	
					Noise Source Elevations (in feet)							
					Autos: 0.000							
					Medium Trucks: 2.297							
					Heavy Trucks: 8.004		Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)							
					Autos: 40.460							
					Medium Trucks: 40.241							
					Heavy Trucks: 40.262							
FHWA Noise Model Calculations												
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten					
Autos:	70.20	0.44	1.28	-1.20	-4.61	0.000	0.000					
Medium Trucks:	81.00	-9.44	1.31	-1.20	-4.87	0.000	0.000					
Heavy Trucks:	85.38	-9.49	1.31	-1.20	-5.50	0.000	0.000					
Unmitigated Noise Levels (without Topo and barrier attenuation)												
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL						
Autos:	70.7	68.6	65.3	63.7	71.1	71.4						
Medium Trucks:	71.7	69.9	64.5	63.7	71.4	71.7						
Heavy Trucks:	76.0	74.0	67.4	69.4	76.6	76.8						
Vehicle Noise:	78.2	76.3	70.7	71.3	78.6	78.8						
Centerline Distance to Noise Contour (in feet)												
				70 dBA	65 dBA	60 dBA	55 dBA					
Ldn:				165	356	767	1,652					
CNEL:				170	366	789	1,699					

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Kimball Av. Road Segment: e/o Euclid Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 27,346 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,735 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.58% Medium Trucks: 80.1% 5.7% 14.2% 8.19% Heavy Trucks: 76.2% 4.1% 19.7% 8.23%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	1.30	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-8.79	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-8.77	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.3	69.2	65.9	64.3	71.7	72.0			
Medium Trucks:	72.0	70.3	64.9	64.0	71.8	72.1			
Heavy Trucks:	76.4	74.5	67.9	69.8	77.1	77.2			
Vehicle Noise:	78.7	76.7	71.2	71.7	79.1	79.3			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				197	425	916	1,973		
CNEL:				203	437	942	2,030		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Kimball Av. Road Segment: e/o Rincon Meadows Av.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 27,118 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,712 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
				Autos: 73.5% 8.7% 17.9% 83.60% Medium Trucks: 80.1% 5.7% 14.2% 8.18% Heavy Trucks: 76.2% 4.1% 19.7% 8.22%			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004			
				Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	1.26	1.01	-1.20	-4.64	0.000	0.000
Medium Trucks:	81.00	-8.84	1.04	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-8.81	1.04	-1.20	-5.44	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	71.3	69.1	65.9	64.3	71.6	71.9	
Medium Trucks:	72.0	70.3	64.8	64.0	71.8	72.0	
Heavy Trucks:	76.4	74.4	67.8	69.8	77.0	77.2	
Vehicle Noise:	78.6	76.7	71.1	71.7	79.0	79.2	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			196	423	910	1,961	
CNEL:			202	435	937	2,018	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Kimball Av. Road Segment: e/o Mill Creek Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 29,186 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 2,919 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 51 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.60%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.18%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.22%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 49.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Centerline Dist. to Observer: 49.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
					Lane Equivalent Distance (in feet)				
					Autos: 42.140				
					Medium Trucks: 41.929				
					Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	1.58	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-8.52	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-8.50	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.6	69.5	66.2	64.6	72.0	72.3			
Medium Trucks:	72.3	70.6	65.1	64.3	72.1	72.3			
Heavy Trucks:	76.7	74.7	68.1	70.1	77.3	77.5			
Vehicle Noise:	79.0	77.0	71.4	72.0	79.4	79.5			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				206	444	956	2,060		
CNEL:				212	457	984	2,119		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Kimball Av. Road Segment: e/o Main St.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 41,444 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,144 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.57%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.20%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.24%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	3.10	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-6.98	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-6.96	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	73.1	71.0	67.7	66.1	73.5	73.8			
Medium Trucks:	73.9	72.1	66.7	65.8	73.6	73.9			
Heavy Trucks:	78.3	76.3	69.7	71.6	78.9	79.0			
Vehicle Noise:	80.5	78.5	73.0	73.5	80.9	81.1			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				261	561	1,209	2,605		
CNEL:				268	577	1,244	2,680		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Kimball Av. Road Segment: e/o Flight Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 26,578 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 2,658 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph					Vehicle Mix				
Near/Far Lane Distance: 51 feet									
Site Data					VehicleType				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 83.74%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 8.11%				
Centerline Dist. to Barrier: 49.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.15%				
Centerline Dist. to Observer: 49.0 feet					Noise Source Elevations (in feet)				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees									
Right View: 90.0 degrees					Autos: 42.140				
					Medium Trucks: 41.929				
					Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	1.18	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-8.96	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-8.94	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.2	69.1	65.8	64.2	71.6	71.9			
Medium Trucks:	71.9	70.1	64.7	63.9	71.7	71.9			
Heavy Trucks:	76.3	74.3	67.7	69.7	76.9	77.0			
Vehicle Noise:	78.5	76.6	71.0	71.6	78.9	79.1			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				193	415	894	1,927		
CNEL:				198	427	920	1,983		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Kimball Av. Road Segment: e/o Meadow Valley Av.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 17,407 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,741 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.89% Medium Trucks: 80.1% 5.7% 14.2% 8.03% Heavy Trucks: 76.2% 4.1% 19.7% 8.07%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	-0.65	1.01	-1.20	-4.64	0.000	0.000
Medium Trucks:	81.00	-10.84	1.04	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-10.82	1.04	-1.20	-5.44	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	69.4	67.2	64.0	62.3	69.7	70.0	
Medium Trucks:	70.0	68.2	62.8	62.0	69.8	70.0	
Heavy Trucks:	74.4	72.4	65.8	67.8	75.0	75.2	
Vehicle Noise:	76.6	74.7	69.1	69.7	77.0	77.2	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			145	312	671	1,446	
CNEL:			149	321	691	1,488	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Limonite Av. Road Segment: e/o Hellman Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt):		11,505 vehicles			Autos:		15		
Peak Hour Percentage:		10%			Medium Trucks (2 Axles):		15		
Peak Hour Volume:		1,151 vehicles			Heavy Trucks (3+ Axles):		15		
Vehicle Speed:		50 mph			Vehicle Mix				
Near/Far Lane Distance:		78 feet							
Site Data					VehicleType				
Barrier Height:		0.0 feet			Autos:		73.5%		8.7%
Barrier Type (0-Wall, 1-Berm):		0.0			Medium Trucks:		80.1%		5.7%
Centerline Dist. to Barrier:		76.0 feet			Heavy Trucks:		76.2%		4.1%
Centerline Dist. to Observer:		76.0 feet			Grade Adjustment:		0.0		
Barrier Distance to Observer:		0.0 feet			Noise Source Elevations (in feet)				
Observer Height (Above Pad):		5.0 feet							
Pad Elevation:		0.0 feet			Autos:		0.000		
Road Elevation:		0.0 feet			Medium Trucks:		2.297		
Road Grade:		0.0%			Heavy Trucks:		8.004		
Left View:		-90.0 degrees			Lane Equivalent Distance (in feet)				
Right View:		90.0 degrees							
					Autos:		65.422		
					Medium Trucks:		65.286		
					Heavy Trucks:		65.299		
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-2.47	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-12.52	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-12.50	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	64.7	62.5	59.3	57.7	65.0	65.3			
Medium Trucks:	65.4	63.7	58.2	57.4	65.2	65.4			
Heavy Trucks:	69.8	67.9	61.2	63.2	70.5	70.6			
Vehicle Noise:	72.1	70.1	64.5	65.1	72.5	72.7			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				111	239	515	1,110		
CNEL:				114	246	530	1,142		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Limonite Av. Road Segment: e/o Archibald Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 47,817 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,782 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.03%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.54%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.42%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	3.69	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-6.18	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-6.24	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.8	68.7	65.5	63.8	71.2	71.5			
Medium Trucks:	71.8	70.0	64.6	63.8	71.6	71.8			
Heavy Trucks:	76.1	74.1	67.5	69.5	76.7	76.9			
Vehicle Noise:	78.3	76.4	70.8	71.4	78.7	78.9			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				290	624	1,345	2,897		
CNEL:				298	642	1,383	2,980		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Limonite Av. Road Segment: e/o Harrison Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 51,570 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,157 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
					Vehicle Type		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.06% Medium Trucks: 80.1% 5.7% 14.2% 8.52% Heavy Trucks: 76.2% 4.1% 19.7% 8.42%					
					Noise Source Elevations (in feet)					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299					
FHWA Noise Model Calculations										
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	70.20	4.02	-1.85	-1.20	-4.73	0.000	0.000			
Medium Trucks:	81.00	-5.87	-1.84	-1.20	-4.88	0.000	0.000			
Heavy Trucks:	85.38	-5.92	-1.84	-1.20	-5.25	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	71.2	69.0	65.8	64.1	71.5	71.8				
Medium Trucks:	72.1	70.3	64.9	64.1	71.9	72.1				
Heavy Trucks:	76.4	74.4	67.8	69.8	77.0	77.2				
Vehicle Noise:	78.6	76.7	71.1	71.7	79.0	79.2				
Centerline Distance to Noise Contour (in feet)										
				70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:				304	656	1,413	3,044			
CNEL:				313	675	1,454	3,132			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Limonite Av. Road Segment: e/o Sumner Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 50,884 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,088 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.06%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.52%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.42%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	70.20	3.96	-1.85	-1.20	-4.73	0.000	0.000	
Medium Trucks:	81.00	-5.92	-1.84	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	85.38	-5.98	-1.84	-1.20	-5.25	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	71.1	69.0	65.7	64.1	71.5	71.8		
Medium Trucks:	72.0	70.3	64.8	64.0	71.8	72.0		
Heavy Trucks:	76.4	74.4	67.8	69.8	77.0	77.1		
Vehicle Noise:	78.6	76.6	71.1	71.6	79.0	79.2		
Centerline Distance to Noise Contour (in feet)								
				70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:				302	650	1,401	3,017	
CNEL:				310	669	1,441	3,105	

Friday, March 02, 2018



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Limonite Av. Road Segment: e/o Scholar Wy.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 51,060 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 5,106 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 78 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Site Data					Autos: 73.5% 8.7% 17.9% 83.06%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.52%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.42%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
Barrier Height: 0.0 feet					Medium Trucks: 2.297				
Barrier Type (0-Wall, 1-Berm): 0.0					Heavy Trucks: 8.004				
Centerline Dist. to Barrier: 76.0 feet					Grade Adjustment: 0.0				
Centerline Dist. to Observer: 76.0 feet					Lane Equivalent Distance (in feet)				
Barrier Distance to Observer: 0.0 feet					Autos: 65.422				
Observer Height (Above Pad): 5.0 feet					Medium Trucks: 65.286				
Pad Elevation: 0.0 feet					Heavy Trucks: 65.299				
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	3.98	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-5.91	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-5.96	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.1	69.0	65.7	64.1	71.5	71.8			
Medium Trucks:	72.1	70.3	64.9	64.0	71.8	72.1			
Heavy Trucks:	76.4	74.4	67.8	69.8	77.0	77.1			
Vehicle Noise:	78.6	76.6	71.1	71.6	79.0	79.2			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			302	652	1,404	3,024			
CNEL:			311	670	1,444	3,112			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Euclid Av. Road Segment: s/o SR-60					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 62,621 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 6,262 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 115 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Site Data					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 55.846				
					Medium Trucks: 55.687				
					Heavy Trucks: 55.703				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	4.47	-0.82	-1.20	-4.74	0.000	0.000		
Medium Trucks:	82.40	-5.57	-0.81	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-5.55	-0.81	-1.20	-5.23	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	74.2	72.1	68.8	67.2	74.6	74.9			
Medium Trucks:	74.8	73.1	67.6	66.8	74.6	74.8			
Heavy Trucks:	78.8	76.9	70.2	72.2	79.5	79.6			
Vehicle Noise:	81.3	79.3	73.8	74.3	81.6	81.8			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				478	1,029	2,218	4,778		
CNEL:				492	1,060	2,283	4,919		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/o Limonite Ext Road Name: Limonite Av. Road Segment: e/o Hamner Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 55,125 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,513 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.06% Medium Trucks: 80.1% 5.7% 14.2% 8.52% Heavy Trucks: 76.2% 4.1% 19.7% 8.42%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	4.77	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	79.45	-5.12	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	84.25	-5.17	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.2	68.0	64.8	63.2	70.5	70.8			
Medium Trucks:	71.3	69.5	64.1	63.3	71.1	71.3			
Heavy Trucks:	76.0	74.1	67.4	69.4	76.7	76.8			
Vehicle Noise:	78.1	76.1	70.5	71.1	78.5	78.7			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			279	602	1,297	2,794			
CNEL:			287	619	1,333	2,873			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Euclid Av. Road Segment: s/o Walnut Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 51,015 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,102 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 115 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 80.0 feet Centerline Dist. to Observer: 80.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 55.846 Medium Trucks: 55.687 Heavy Trucks: 55.703				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.58	-0.82	-1.20	-4.74	0.000	0.000		
Medium Trucks:	82.40	-6.46	-0.81	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.44	-0.81	-1.20	-5.23	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	73.3	71.2	67.9	66.3	73.7	74.0			
Medium Trucks:	73.9	72.2	66.7	65.9	73.7	73.9			
Heavy Trucks:	77.9	76.0	69.4	71.3	78.6	78.7			
Vehicle Noise:	80.4	78.4	72.9	73.4	80.8	80.9			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				417	898	1,934	4,168		
CNEL:				429	924	1,991	4,290		

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Euclid Av. Road Segment: s/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 57,621 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 5,762 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 154 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 103.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 103.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	4.11	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-5.93	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-5.91	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.5	70.4	67.1	65.5	72.9	73.2			
Medium Trucks:	73.1	71.4	65.9	65.1	72.9	73.1			
Heavy Trucks:	77.1	75.2	68.5	70.5	77.8	77.9			
Vehicle Noise:	79.5	77.6	72.1	72.6	79.9	80.1			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			473	1,020	2,198	4,735			
CNEL:			487	1,050	2,262	4,874			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Euclid Av. Road Segment: s/o Chino Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 61,195 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 6,120 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	4.37	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-5.67	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-5.65	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.8	70.7	67.4	65.8	73.2	73.5			
Medium Trucks:	73.4	71.6	66.2	65.4	73.2	73.4			
Heavy Trucks:	77.4	75.4	68.8	70.8	78.0	78.2			
Vehicle Noise:	79.8	77.9	72.4	72.8	80.2	80.4			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				493	1,062	2,288	4,928		
CNEL:				507	1,093	2,355	5,074		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Euclid Av. Road Segment: s/o Schaefer Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 61,620 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 6,162 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593				
					Medium Trucks: 68.464				
					Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	4.40	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-5.64	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-5.62	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.8	70.7	67.4	65.8	73.2	73.5			
Medium Trucks:	73.4	71.7	66.2	65.4	73.2	73.4			
Heavy Trucks:	77.4	75.5	68.8	70.8	78.0	78.2			
Vehicle Noise:	79.8	77.9	72.4	72.9	80.2	80.4			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			495	1,067	2,298	4,951			
CNEL:			510	1,098	2,366	5,097			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Euclid Av. Road Segment: s/o Edison Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 48,993 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,899 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.41	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-6.64	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.62	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.8	69.7	66.4	64.8	72.2	72.5			
Medium Trucks:	72.4	70.7	65.2	64.4	72.2	72.4			
Heavy Trucks:	76.4	74.5	67.8	69.8	77.0	77.2			
Vehicle Noise:	78.8	76.9	71.4	71.9	79.2	79.4			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			425	915	1,972	4,249			
CNEL:			437	942	2,030	4,374			

Friday, March 02, 2018



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Euclid Av. Road Segment: s/o Eucalyptus Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 51,606 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 5,161 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 154 feet					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 103.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Centerline Dist. to Observer: 103.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees					Autos: 68.593				
Right View: 90.0 degrees					Medium Trucks: 68.464				
					Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.63	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-6.41	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.39	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.0	69.9	66.7	65.0	72.4	72.7			
Medium Trucks:	72.6	70.9	65.4	64.6	72.4	72.6			
Heavy Trucks:	76.7	74.7	68.1	70.0	77.3	77.4			
Vehicle Noise:	79.1	77.1	71.6	72.1	79.5	79.6			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			440	948	2,042	4,399			
CNEL:			453	976	2,102	4,529			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Euclid Av. Road Segment: s/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 55,163 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,516 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.92	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-6.12	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.10	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.3	70.2	66.9	65.3	72.7	73.0			
Medium Trucks:	72.9	71.2	65.7	64.9	72.7	72.9			
Heavy Trucks:	76.9	75.0	68.3	70.3	77.6	77.7			
Vehicle Noise:	79.4	77.4	71.9	72.4	79.7	79.9			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			460	991	2,135	4,599			
CNEL:			473	1,020	2,198	4,734			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Euclid Av. Road Segment: s/o Kimball Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 38,203 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,820 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.33	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-7.72	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.70	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.7	68.6	65.4	63.7	71.1	71.4			
Medium Trucks:	71.3	69.6	64.1	63.3	71.1	71.3			
Heavy Trucks:	75.3	73.4	66.8	68.7	76.0	76.1			
Vehicle Noise:	77.8	75.8	70.3	70.8	78.2	78.3			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			360	776	1,671	3,600			
CNEL:			371	798	1,720	3,706			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Euclid Av. Road Segment: s/o Bickmore Av.				Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 37,567 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,757 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data				Vehicle Mix					
				VehicleType	Day	Evening	Night	Daily	
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
				Noise Source Elevations (in feet)					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
				Lane Equivalent Distance (in feet)					
				Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476					
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.25	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-7.79	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.77	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.7	68.5	65.3	63.6	71.0	71.3			
Medium Trucks:	71.3	69.5	64.1	63.2	71.0	71.3			
Heavy Trucks:	75.3	73.3	66.7	68.7	75.9	76.0			
Vehicle Noise:	77.7	75.7	70.2	70.7	78.1	78.3			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			356	767	1,652	3,560			
CNEL:			366	790	1,701	3,665			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Euclid Av. Road Segment: s/o Pine Av.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 58,751 vehicles				Autos: 15			
Peak Hour Percentage: 10%				Medium Trucks (2 Axles): 15			
Peak Hour Volume: 5,875 vehicles				Heavy Trucks (3+ Axles): 15			
Vehicle Speed: 55 mph				Vehicle Mix			
Near/Far Lane Distance: 154 feet				VehicleType			
Site Data				Day			
Barrier Height: 0.0 feet				Evening			
Barrier Type (0-Wall, 1-Berm): 0.0				Night			
Centerline Dist. to Barrier: 103.0 feet				Daily			
Centerline Dist. to Observer: 103.0 feet				Autos: 73.5% 8.7% 17.9% 83.44%			
Barrier Distance to Observer: 0.0 feet				Medium Trucks: 80.1% 5.7% 14.2% 8.26%			
Observer Height (Above Pad): 5.0 feet				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%			
Pad Elevation: 0.0 feet				Noise Source Elevations (in feet)			
Road Elevation: 0.0 feet				Autos: 0.000			
Road Grade: 0.0%				Medium Trucks: 2.297			
Left View: -90.0 degrees				Heavy Trucks: 8.004			
Right View: 90.0 degrees				Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 68.593			
				Medium Trucks: 68.464			
				Heavy Trucks: 68.476			
FHWA Noise Model Calculations							
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	4.19	-2.16	-1.20	-4.77	0.000	0.000
Medium Trucks:	82.40	-5.85	-2.15	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-5.83	-2.15	-1.20	-5.15	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.6	70.5	67.2	65.6	73.0	73.3	
Medium Trucks:	73.2	71.4	66.0	65.2	73.0	73.2	
Heavy Trucks:	77.2	75.2	68.6	70.6	77.8	78.0	
Vehicle Noise:	79.6	77.7	72.2	72.7	80.0	80.2	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			480	1,033	2,226	4,796	
CNEL:			494	1,064	2,292	4,938	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Hellman Av. Road Segment: s/o Kimball Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 23,263 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 2,326 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 45 mph									
Near/Far Lane Distance: 51 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Site Data					Autos: 73.5% 8.7% 17.9% 83.44%				
Barrier Height: 0.0 feet					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
Barrier Type (0-Wall, 1-Berm): 0.0					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Centerline Dist. to Barrier: 49.0 feet					Noise Source Elevations (in feet)				
Centerline Dist. to Observer: 49.0 feet					Autos: 0.000				
Barrier Distance to Observer: 0.0 feet					Medium Trucks: 2.297				
Observer Height (Above Pad): 5.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Pad Elevation: 0.0 feet					Lane Equivalent Distance (in feet)				
Road Elevation: 0.0 feet					Autos: 42.140				
Road Grade: 0.0%					Medium Trucks: 41.929				
Left View: -90.0 degrees					Heavy Trucks: 41.950				
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	1.04	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	79.45	-9.00	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-8.98	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.3	67.2	63.9	62.3	69.7	70.0			
Medium Trucks:	70.3	68.5	63.1	62.3	70.1	70.3			
Heavy Trucks:	75.1	73.1	66.5	68.5	75.7	75.9			
Vehicle Noise:	77.1	75.2	69.5	70.2	77.6	77.7			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				156	336	725	1,562		
CNEL:				161	346	745	1,606		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Flight Av. Road Segment: n/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 1,726 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 173 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-10.71	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-20.75	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-20.73	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	59.6	57.4	54.2	52.5	59.9	60.2			
Medium Trucks:	60.4	58.6	53.2	52.3	60.1	60.4			
Heavy Trucks:	64.8	62.8	56.2	58.1	65.4	65.5			
Vehicle Noise:	67.0	65.0	59.5	60.0	67.4	67.6			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				29	63	136	294		
CNEL:				30	65	140	302		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Hellman Av. Road Segment: s/o Pine Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 15,480 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,548 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	-0.73	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	79.45	-10.77	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-10.75	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	67.5	65.4	62.2	60.5	67.9	68.2			
Medium Trucks:	68.5	66.8	61.3	60.5	68.3	68.5			
Heavy Trucks:	73.3	71.4	64.8	66.7	74.0	74.1			
Vehicle Noise:	75.4	73.4	67.8	68.4	75.8	76.0			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				119	256	552	1,190		
CNEL:				122	264	568	1,224		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Archibald Av. Road Segment: n/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 34,689 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 3,469 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 93 feet					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 74.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 74.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	2.32	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-7.72	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-7.70	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.3	68.1	64.9	63.3	70.6	70.9			
Medium Trucks:	71.0	69.3	63.9	63.0	70.8	71.1			
Heavy Trucks:	75.4	73.5	66.9	68.8	76.1	76.2			
Vehicle Noise:	77.7	75.7	70.2	70.7	78.1	78.3			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				255	550	1,185	2,554		
CNEL:				263	566	1,220	2,628		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Archibald Av. Road Segment: s/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 41,695 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,170 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.71	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-7.34	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.32	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.2	70.1	66.9	65.2	72.6	72.9			
Medium Trucks:	72.8	71.1	65.6	64.8	72.6	72.8			
Heavy Trucks:	76.8	74.9	68.3	70.2	77.5	77.6			
Vehicle Noise:	79.3	77.3	71.8	72.3	79.7	79.8			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			326	702	1,512	3,257			
CNEL:			335	722	1,556	3,352			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Archibald Av. Road Segment: s/o Chino Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 40,465 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,047 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.44%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
				Noise Source Elevations (in feet)				
				Autos: 0.000				
				Medium Trucks: 2.297				
				Heavy Trucks: 8.004 Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 57.782				
				Medium Trucks: 57.629				
				Heavy Trucks: 57.644				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	71.78	2.58	-1.05	-1.20	-4.73	0.000	0.000	
Medium Trucks:	82.40	-7.47	-1.03	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	86.40	-7.45	-1.03	-1.20	-5.25	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	72.1	70.0	66.7	65.1	72.5	72.8		
Medium Trucks:	72.7	70.9	65.5	64.7	72.5	72.7		
Heavy Trucks:	76.7	74.7	68.1	70.1	77.3	77.5		
Vehicle Noise:	79.1	77.2	71.7	72.2	79.5	79.7		
Centerline Distance to Noise Contour (in feet)								
				70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:				319	688	1,482	3,192	
CNEL:				329	708	1,525	3,286	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Archibald Av. Road Segment: s/o Schaefer Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 37,907 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,791 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.44%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	71.78	2.29	-1.05	-1.20	-4.73	0.000	0.000	
Medium Trucks:	82.40	-7.75	-1.03	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	86.40	-7.73	-1.03	-1.20	-5.25	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	71.8	69.7	66.4	64.8	72.2	72.5		
Medium Trucks:	72.4	70.7	65.2	64.4	72.2	72.4		
Heavy Trucks:	76.4	74.5	67.8	69.8	77.1	77.2		
Vehicle Noise:	78.8	76.9	71.4	71.9	79.2	79.4		
Centerline Distance to Noise Contour (in feet)								
			70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:			306	658	1,419	3,056		
CNEL:			315	678	1,460	3,146		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Archibald Av. Road Segment: s/o Ontario Ranch Rd.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 45,993 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,599 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
				Vehicle Type	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.44%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Noise Source Elevations (in feet)				
				Autos: 0.000				
				Medium Trucks: 2.297				
				Heavy Trucks: 8.004      Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 57.782				
				Medium Trucks: 57.629				
				Heavy Trucks: 57.644				
FHWA Noise Model Calculations								
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	71.78	3.13	-1.05	-1.20	-4.73	0.000	0.000	
Medium Trucks:	82.40	-6.91	-1.03	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	86.40	-6.89	-1.03	-1.20	-5.25	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	72.7	70.5	67.3	65.6	73.0	73.3		
Medium Trucks:	73.3	71.5	66.1	65.2	73.0	73.3		
Heavy Trucks:	77.3	75.3	68.7	70.7	77.9	78.0		
Vehicle Noise:	79.7	77.7	72.2	72.7	80.1	80.3		
Centerline Distance to Noise Contour (in feet)								
			70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:			348	749	1,614	3,477		
CNEL:			358	771	1,661	3,579		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Archibald Av. Road Segment: s/o Eucalyptus Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 47,042 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,704 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Lane Equivalent Distance (in feet)									
					Autos: 57.782				
					Medium Trucks: 57.629				
					Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.23	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-6.81	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.79	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.8	70.6	67.4	65.7	73.1	73.4			
Medium Trucks:	73.4	71.6	66.2	65.3	73.1	73.4			
Heavy Trucks:	77.4	75.4	68.8	70.8	78.0	78.1			
Vehicle Noise:	79.8	77.8	72.3	72.8	80.2	80.4			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				353	760	1,638	3,529		
CNEL:				363	783	1,686	3,633		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Archibald Av. Road Segment: s/o Merrill Av.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 47,826 vehicles				Autos: 15			
Peak Hour Percentage: 10%				Medium Trucks (2 Axles): 15			
Peak Hour Volume: 4,783 vehicles				Heavy Trucks (3+ Axles): 15			
Vehicle Speed: 55 mph				Vehicle Mix			
Near/Far Lane Distance: 93 feet							
Site Data				Vehicle Type			
Barrier Height: 0.0 feet				Autos: 73.5% 8.7% 17.9% 83.44%			
Barrier Type (0-Wall, 1-Berm): 0.0				Medium Trucks: 80.1% 5.7% 14.2% 8.26%			
Centerline Dist. to Barrier: 74.0 feet				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%			
Centerline Dist. to Observer: 74.0 feet				Noise Source Elevations (in feet)			
Barrier Distance to Observer: 0.0 feet							
Observer Height (Above Pad): 5.0 feet				Autos: 0.000			
Pad Elevation: 0.0 feet				Medium Trucks: 2.297			
Road Elevation: 0.0 feet				Heavy Trucks: 8.004 Grade Adjustment: 0.0			
Road Grade: 0.0%				Lane Equivalent Distance (in feet)			
Left View: -90.0 degrees							
Right View: 90.0 degrees				Autos: 57.782			
				Medium Trucks: 57.629			
				Heavy Trucks: 57.644			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	3.30	-1.05	-1.20	-4.73	0.000	0.000
Medium Trucks:	82.40	-6.74	-1.03	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-6.72	-1.03	-1.20	-5.25	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.8	70.7	67.4	65.8	73.2	73.5	
Medium Trucks:	73.4	71.7	66.2	65.4	73.2	73.4	
Heavy Trucks:	77.4	75.5	68.9	70.8	78.1	78.2	
Vehicle Noise:	79.9	77.9	72.4	72.9	80.2	80.4	
Centerline Distance to Noise Contour (in feet)							
				70 dBA	65 dBA	60 dBA	55 dBA
Ldn:				357	769	1,656	3,568
CNEL:				367	791	1,705	3,673

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL											
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Archibald Av. Road Segment: s/o Limonite Av.				Project Name: Chino Parcel Delivery Job Number: 11134							
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt): 45,650 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,565 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 78 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15							
Site Data				Vehicle Mix							
				Vehicle Type	Day	Evening	Night	Daily			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%							
				Noise Source Elevations (in feet)							
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0							
				Lane Equivalent Distance (in feet)							
				Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299							
				FHWA Noise Model Calculations							
				Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:				71.78	3.10	-1.85	-1.20	-4.73	0.000	0.000	
Medium Trucks:				82.40	-6.94	-1.84	-1.20	-4.88	0.000	0.000	
Heavy Trucks:				86.40	-6.92	-1.84	-1.20	-5.25	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)											
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:				71.8	69.7	66.4	64.8	72.2	72.5		
Medium Trucks:				72.4	70.7	65.2	64.4	72.2	72.4		
Heavy Trucks:				76.4	74.5	67.8	69.8	77.1	77.2		
Vehicle Noise:				78.8	76.9	71.4	71.9	79.2	79.4		
Centerline Distance to Noise Contour (in feet)											
				70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:				314	676	1,456	3,137				
CNEL:				323	696	1,499	3,229				

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Merrill Av. Road Segment: e/o Euclid Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 29,091 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,909 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
					Vehicle Type		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%					
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%					
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Noise Source Elevations (in feet)					
					Autos: 0.000					
					Medium Trucks: 2.297					
					Heavy Trucks: 8.004      Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 40.460					
					Medium Trucks: 40.241					
					Heavy Trucks: 40.262					
FHWA Noise Model Calculations										
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	70.20	1.56	1.28	-1.20	-4.61	0.000	0.000			
Medium Trucks:	81.00	-8.49	1.31	-1.20	-4.87	0.000	0.000			
Heavy Trucks:	85.38	-8.47	1.31	-1.20	-5.50	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	71.8	69.7	66.4	64.8	72.2	72.5				
Medium Trucks:	72.6	70.9	65.4	64.6	72.4	72.6				
Heavy Trucks:	77.0	75.0	68.4	70.4	77.6	77.8				
Vehicle Noise:	79.2	77.3	71.7	72.3	79.6	79.8				
Centerline Distance to Noise Contour (in feet)										
				70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:				193	416	897	1,933			
CNEL:				199	428	923	1,988			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Merrill Av. Road Segment: e/o Bon View Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 21,352 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,135 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	0.21	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-9.83	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-9.81	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.5	68.4	65.1	63.5	70.9	71.2			
Medium Trucks:	71.3	69.5	64.1	63.3	71.1	71.3			
Heavy Trucks:	75.7	73.7	67.1	69.1	76.3	76.4			
Vehicle Noise:	77.9	75.9	70.4	70.9	78.3	78.5			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			157	339	730	1,573			
CNEL:			162	349	751	1,618			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Merrill Av. Road Segment: e/o Flight Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 25,622 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,562 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
				Vehicle Type	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.44%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Noise Source Elevations (in feet)				
				Autos: 0.000				
				Medium Trucks: 2.297				
				Heavy Trucks: 8.004 Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
Autos: 40.460								
Medium Trucks: 40.241								
Heavy Trucks: 40.262								
FHWA Noise Model Calculations								
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	70.20	1.00	1.28	-1.20	-4.61	0.000	0.000	
Medium Trucks:	81.00	-9.04	1.31	-1.20	-4.87	0.000	0.000	
Heavy Trucks:	85.38	-9.02	1.31	-1.20	-5.50	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	71.3	69.2	65.9	64.3	71.6	71.9		
Medium Trucks:	72.1	70.3	64.9	64.1	71.8	72.1		
Heavy Trucks:	76.5	74.5	67.9	69.9	77.1	77.2		
Vehicle Noise:	78.7	76.7	71.2	71.7	79.1	79.3		
Centerline Distance to Noise Contour (in feet)								
			70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:			178	383	824	1,776		
CNEL:			183	394	848	1,827		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Merrill Av. Road Segment: e/o Hellman Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 24,044 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,404 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Vehicle Type	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.44%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262				
FHWA Noise Model Calculations								
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	70.20	0.73	1.28	-1.20	-4.61	0.000	0.000	
Medium Trucks:	81.00	-9.32	1.31	-1.20	-4.87	0.000	0.000	
Heavy Trucks:	85.38	-9.29	1.31	-1.20	-5.50	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	71.0	68.9	65.6	64.0	71.4	71.7		
Medium Trucks:	71.8	70.0	64.6	63.8	71.6	71.8		
Heavy Trucks:	76.2	74.2	67.6	69.6	76.8	77.0		
Vehicle Noise:	78.4	76.5	70.9	71.5	78.8	79.0		
Centerline Distance to Noise Contour (in feet)								
			70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:			170	367	790	1,702		
CNEL:			175	377	813	1,751		

Friday, March 02, 2018



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Kimball Av. Road Segment: w/o Euclid Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt):		22,414 vehicles			Autos:		15		
Peak Hour Percentage:		10%			Medium Trucks (2 Axles):		15		
Peak Hour Volume:		2,241 vehicles			Heavy Trucks (3+ Axles):		15		
Vehicle Speed:		50 mph			Vehicle Mix				
Near/Far Lane Distance:		36 feet							
Site Data					VehicleType				
Barrier Height:		0.0 feet			Autos:		73.5%		8.7%
Barrier Type (0-Wall, 1-Berm):		0.0			Medium Trucks:		80.1%		5.7%
Centerline Dist. to Barrier:		44.0 feet			Heavy Trucks:		76.2%		4.1%
Centerline Dist. to Observer:		44.0 feet					19.7%		83.44%
Barrier Distance to Observer:		0.0 feet			Noise Source Elevations (in feet)				
Observer Height (Above Pad):		5.0 feet							
Pad Elevation:		0.0 feet			Autos:		0.000		
Road Elevation:		0.0 feet			Medium Trucks:		2.297		
Road Grade:		0.0%			Heavy Trucks:		8.004		Grade Adjustment: 0.0
Left View:		-90.0 degrees			Lane Equivalent Distance (in feet)				
Right View:		90.0 degrees							
					Autos:		40.460		
					Medium Trucks:		40.241		
					Heavy Trucks:		40.262		
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	0.42	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-9.62	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-9.60	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.7	68.6	65.3	63.7	71.1	71.4			
Medium Trucks:	71.5	69.7	64.3	63.5	71.3	71.5			
Heavy Trucks:	75.9	73.9	67.3	69.3	76.5	76.6			
Vehicle Noise:	78.1	76.2	70.6	71.2	78.5	78.7			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			162	350	754	1,624			
CNEL:			167	360	776	1,671			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Kimball Av. Road Segment: e/o Euclid Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 27,108 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,711 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	1.25	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-8.79	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-8.77	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.3	69.1	65.9	64.2	71.6	71.9			
Medium Trucks:	72.0	70.3	64.9	64.0	71.8	72.1			
Heavy Trucks:	76.4	74.5	67.9	69.8	77.1	77.2			
Vehicle Noise:	78.7	76.7	71.1	71.7	79.1	79.3			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			197	425	915	1,971			
CNEL:			203	437	941	2,028			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Kimball Av. Road Segment: e/o Rincon Meadows Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 28,110 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,811 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	1.41	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-8.64	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-8.62	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.4	69.3	66.0	64.4	71.8	72.1			
Medium Trucks:	72.2	70.4	65.0	64.2	72.0	72.2			
Heavy Trucks:	76.6	74.6	68.0	70.0	77.2	77.4			
Vehicle Noise:	78.8	76.9	71.3	71.9	79.2	79.4			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			202	435	937	2,019			
CNEL:			208	448	964	2,077			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Kimball Av. Road Segment: e/o Mill Creek Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 33,993 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,399 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	2.23	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-7.81	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-7.79	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.2	70.1	66.9	65.2	72.6	72.9			
Medium Trucks:	73.0	71.3	65.8	65.0	72.8	73.0			
Heavy Trucks:	77.4	75.5	68.8	70.8	78.1	78.2			
Vehicle Noise:	79.6	77.7	72.1	72.7	80.0	80.2			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			229	494	1,064	2,292			
CNEL:			236	508	1,094	2,358			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Kimball Av. Road Segment: e/o Main St.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 46,287 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 4,629 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 51 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 49.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Centerline Dist. to Observer: 49.0 feet									
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	3.57	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-6.47	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-6.45	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	73.6	71.5	68.2	66.6	73.9	74.2			
Medium Trucks:	74.4	72.6	67.2	66.4	74.1	74.4			
Heavy Trucks:	78.8	76.8	70.2	72.2	79.4	79.5			
Vehicle Noise:	81.0	79.0	73.5	74.0	81.4	81.6			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				282	607	1,307	2,816		
CNEL:				290	624	1,345	2,897		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Kimball Av. Road Segment: e/o Flight Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 24,649 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,465 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.44%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
				Noise Source Elevations (in feet)				
				Autos: 0.000				
				Medium Trucks: 2.297				
				Heavy Trucks: 8.004 Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 42.140				
				Medium Trucks: 41.929				
				Heavy Trucks: 41.950				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	70.20	0.84	1.01	-1.20	-4.64	0.000	0.000	
Medium Trucks:	81.00	-9.21	1.04	-1.20	-4.87	0.000	0.000	
Heavy Trucks:	85.38	-9.19	1.04	-1.20	-5.44	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	70.9	68.7	65.5	63.8	71.2	71.5		
Medium Trucks:	71.6	69.9	64.4	63.6	71.4	71.6		
Heavy Trucks:	76.0	74.1	67.4	69.4	76.7	76.8		
Vehicle Noise:	78.3	76.3	70.7	71.3	78.7	78.8		
Centerline Distance to Noise Contour (in feet)								
				70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:				185	399	859	1,850	
CNEL:				190	410	883	1,903	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Kimball Av. Road Segment: e/o Meadow Valley Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 24,249 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,425 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.44%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Noise Source Elevations (in feet)				
				Autos: 0.000				
				Medium Trucks: 2.297				
				Heavy Trucks: 8.004 Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
Autos: 42.140								
Medium Trucks: 41.929								
Heavy Trucks: 41.950								
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	70.20	0.77	1.01	-1.20	-4.64	0.000	0.000	
Medium Trucks:	81.00	-9.28	1.04	-1.20	-4.87	0.000	0.000	
Heavy Trucks:	85.38	-9.26	1.04	-1.20	-5.44	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	70.8	68.6	65.4	63.8	71.1	71.4		
Medium Trucks:	71.6	69.8	64.4	63.6	71.3	71.6		
Heavy Trucks:	76.0	74.0	67.4	69.4	76.6	76.7		
Vehicle Noise:	78.2	76.2	70.7	71.2	78.6	78.8		
Centerline Distance to Noise Contour (in feet)								
			70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:			183	394	849	1,830		
CNEL:			188	406	874	1,883		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Limonite Av. Road Segment: e/o Hellman Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 29,088 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,909 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.44%				
				Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	70.20	1.56	-1.85	-1.20	-4.73	0.000	0.000	
Medium Trucks:	81.00	-8.49	-1.84	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	85.38	-8.47	-1.84	-1.20	-5.25	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	68.7	66.6	63.3	61.7	69.1	69.4		
Medium Trucks:	69.5	67.7	62.3	61.5	69.2	69.5		
Heavy Trucks:	73.9	71.9	65.3	67.3	74.5	74.6		
Vehicle Noise:	76.1	74.1	68.6	69.1	76.5	76.7		
Centerline Distance to Noise Contour (in feet)								
			70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:			206	444	956	2,059		
CNEL:			212	456	983	2,119		

Friday, March 02, 2018



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Limonite Av. Road Segment: e/o Archibald Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 47,350 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 4,735 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 78 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 76.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 76.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	3.67	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-6.37	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-6.35	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.8	68.7	65.4	63.8	71.2	71.5			
Medium Trucks:	71.6	69.8	64.4	63.6	71.4	71.6			
Heavy Trucks:	76.0	74.0	67.4	69.4	76.6	76.7			
Vehicle Noise:	78.2	76.3	70.7	71.3	78.6	78.8			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			285	614	1,323	2,849			
CNEL:			293	632	1,361	2,932			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Limonite Av. Road Segment: e/o Harrison Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 50,831 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,083 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%					
					Noise Source Elevations (in feet)					
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299					
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	70.20	3.98	-1.85	-1.20	-4.73	0.000	0.000			
Medium Trucks:	81.00	-6.06	-1.84	-1.20	-4.88	0.000	0.000			
Heavy Trucks:	85.38	-6.04	-1.84	-1.20	-5.25	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	71.1	69.0	65.7	64.1	71.5	71.8				
Medium Trucks:	71.9	70.1	64.7	63.9	71.7	71.9				
Heavy Trucks:	76.3	74.3	67.7	69.7	76.9	77.1				
Vehicle Noise:	78.5	76.6	71.0	71.6	78.9	79.1				
Centerline Distance to Noise Contour (in feet)										
				70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:				299	644	1,387	2,987			
CNEL:				307	662	1,427	3,074			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Limonite Av. Road Segment: e/o Sumner Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 50,145 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,015 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	3.92	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-6.12	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-6.10	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.1	68.9	65.7	64.0	71.4	71.7			
Medium Trucks:	71.8	70.1	64.6	63.8	71.6	71.8			
Heavy Trucks:	76.2	74.3	67.6	69.6	76.9	77.0			
Vehicle Noise:	78.5	76.5	70.9	71.5	78.9	79.0			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			296	638	1,374	2,960			
CNEL:			305	656	1,414	3,046			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Limonite Av. Road Segment: e/o Scholar Wy.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 50,321 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,032 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.44% Medium Trucks: 80.1% 5.7% 14.2% 8.26% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	3.94	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-6.11	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-6.09	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.1	69.0	65.7	64.1	71.4	71.7			
Medium Trucks:	71.9	70.1	64.7	63.8	71.6	71.9			
Heavy Trucks:	76.2	74.3	67.7	69.6	76.9	77.0			
Vehicle Noise:	78.5	76.5	71.0	71.5	78.9	79.1			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			297	639	1,377	2,967			
CNEL:			305	658	1,417	3,053			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/o Proj. w/ Limonite Ext Road Name: Limonite Av. Road Segment: e/o Hamner Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 54,492 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 5,449 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 45 mph									
Near/Far Lane Distance: 78 feet									
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 83.44%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 8.26%				
Centerline Dist. to Barrier: 76.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
Centerline Dist. to Observer: 76.0 feet									
Barrier Distance to Observer: 0.0 feet					Noise Source Elevations (in feet)				
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees					Autos: 65.422				
Right View: 90.0 degrees					Medium Trucks: 65.286				
					Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	4.74	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	79.45	-5.30	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	84.25	-5.28	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.1	68.0	64.8	63.1	70.5	70.8			
Medium Trucks:	71.1	69.3	63.9	63.1	70.9	71.1			
Heavy Trucks:	75.9	74.0	67.3	69.3	76.5	76.7			
Vehicle Noise:	78.0	76.0	70.4	71.0	78.4	78.5			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			275	591	1,274	2,745			
CNEL:			282	608	1,310	2,823			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Euclid Av. Road Segment: s/o SR-60					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 63,073 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 6,307 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 115 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 80.0 feet Centerline Dist. to Observer: 80.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.22%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.41%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.37%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Lane Equivalent Distance (in feet)									
					Autos: 55.846				
					Medium Trucks: 55.687				
					Heavy Trucks: 55.703				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	4.49	-0.82	-1.20	-4.74	0.000	0.000		
Medium Trucks:	82.40	-5.46	-0.81	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-5.48	-0.81	-1.20	-5.23	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	74.2	72.1	68.9	67.2	74.6	74.9			
Medium Trucks:	74.9	73.2	67.7	66.9	74.7	74.9			
Heavy Trucks:	78.9	76.9	70.3	72.3	79.5	79.7			
Vehicle Noise:	81.3	79.4	73.9	74.3	81.7	81.9			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				483	1,040	2,241	4,827		
CNEL:				497	1,071	2,306	4,969		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Euclid Av. Road Segment: s/o Walnut Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 51,520 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,152 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 115 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.19% Medium Trucks: 80.1% 5.7% 14.2% 8.44% Heavy Trucks: 76.2% 4.1% 19.7% 8.38%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 80.0 feet Centerline Dist. to Observer: 80.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Lane Equivalent Distance (in feet)				
				Autos: 55.846 Medium Trucks: 55.687 Heavy Trucks: 55.703				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	71.78	3.61	-0.82	-1.20	-4.74	0.000	0.000	
Medium Trucks:	82.40	-6.33	-0.81	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	86.40	-6.36	-0.81	-1.20	-5.23	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	73.4	71.2	68.0	66.3	73.7	74.0		
Medium Trucks:	74.1	72.3	66.9	66.1	73.8	74.1		
Heavy Trucks:	78.0	76.1	69.4	71.4	78.7	78.8		
Vehicle Noise:	80.4	78.5	73.0	73.5	80.8	81.0		
Centerline Distance to Noise Contour (in feet)								
			70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:			422	909	1,959	4,221		
CNEL:			435	936	2,017	4,345		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Euclid Av. Road Segment: s/o Riverside Dr.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 58,205 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,820 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.24% Medium Trucks: 80.1% 5.7% 14.2% 8.40% Heavy Trucks: 76.2% 4.1% 19.7% 8.36%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	4.14	-2.16	-1.20	-4.77	0.000	0.000
Medium Trucks:	82.40	-5.81	-2.15	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-5.84	-2.15	-1.20	-5.15	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.6	70.4	67.2	65.5	72.9	73.2	
Medium Trucks:	73.2	71.5	66.0	65.2	73.0	73.2	
Heavy Trucks:	77.2	75.2	68.6	70.6	77.8	78.0	
Vehicle Noise:	79.6	77.7	72.2	72.6	80.0	80.2	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			479	1,032	2,223	4,789	
CNEL:			493	1,062	2,288	4,930	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Euclid Av. Road Segment: s/o Chino Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 61,832 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 6,183 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 154 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.26%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.39%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.35%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 103.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 103.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
					Lane Equivalent Distance (in feet)				
					Autos: 68.593				
					Medium Trucks: 68.464				
					Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	4.41	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-5.56	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-5.58	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.8	70.7	67.4	65.8	73.2	73.5			
Medium Trucks:	73.5	71.7	66.3	65.5	73.3	73.5			
Heavy Trucks:	77.5	75.5	68.9	70.9	78.1	78.2			
Vehicle Noise:	79.9	77.9	72.4	72.9	80.3	80.5			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			498	1,073	2,313	4,983			
CNEL:			513	1,105	2,381	5,129			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Euclid Av. Road Segment: s/o Schaefer Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 62,310 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 6,231 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.28% Medium Trucks: 80.1% 5.7% 14.2% 8.38% Heavy Trucks: 76.2% 4.1% 19.7% 8.34%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	4.44	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-5.53	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-5.55	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.9	70.7	67.5	65.8	73.2	73.5			
Medium Trucks:	73.5	71.8	66.3	65.5	73.3	73.5			
Heavy Trucks:	77.5	75.5	68.9	70.9	78.1	78.3			
Vehicle Noise:	79.9	78.0	72.5	72.9	80.3	80.5			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				501	1,079	2,324	5,006		
CNEL:				515	1,110	2,392	5,153		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Euclid Av. Road Segment: s/o Edison Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 49,933 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,993 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.25% Medium Trucks: 80.1% 5.7% 14.2% 8.42% Heavy Trucks: 76.2% 4.1% 19.7% 8.34%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.48	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-6.47	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.51	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.9	69.8	66.5	64.9	72.3	72.6			
Medium Trucks:	72.6	70.8	65.4	64.6	72.4	72.6			
Heavy Trucks:	76.5	74.6	67.9	69.9	77.2	77.3			
Vehicle Noise:	79.0	77.0	71.5	72.0	79.3	79.5			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			432	931	2,006	4,321			
CNEL:			445	958	2,065	4,448			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Euclid Av. Road Segment: s/o Eucalyptus Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 52,678 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,268 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.30% Medium Trucks: 80.1% 5.7% 14.2% 8.39% Heavy Trucks: 76.2% 4.1% 19.7% 8.32%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.71	-2.16	-1.20	-4.77	0.000	0.000		
Medium Trucks:	82.40	-6.26	-2.15	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.29	-2.15	-1.20	-5.15	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.1	70.0	66.7	65.1	72.5	72.8			
Medium Trucks:	72.8	71.0	65.6	64.8	72.6	72.8			
Heavy Trucks:	76.8	74.8	68.2	70.1	77.4	77.5			
Vehicle Noise:	79.2	77.2	71.7	72.2	79.6	79.8			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			447	963	2,075	4,471			
CNEL:			460	992	2,136	4,603			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Euclid Av. Road Segment: s/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 55,548 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 5,555 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 154 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.10%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.48%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.42%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 103.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 103.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.93	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-5.98	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-6.01	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.4	70.2	67.0	65.3	72.7	73.0			
Medium Trucks:	73.1	71.3	65.9	65.1	72.9	73.1			
Heavy Trucks:	77.0	75.1	68.4	70.4	77.7	77.8			
Vehicle Noise:	79.4	77.5	72.0	72.5	79.8	80.0			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			466	1,004	2,163	4,661			
CNEL:			480	1,034	2,227	4,798			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Euclid Av. Road Segment: s/o Kimball Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 38,621 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,862 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.29% Medium Trucks: 80.1% 5.7% 14.2% 8.37% Heavy Trucks: 76.2% 4.1% 19.7% 8.34%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.37	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-7.61	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-7.63	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.8	68.7	65.4	63.8	71.1	71.4			
Medium Trucks:	71.4	69.7	64.2	63.4	71.2	71.4			
Heavy Trucks:	75.4	73.4	66.8	68.8	76.0	76.2			
Vehicle Noise:	77.8	75.9	70.4	70.9	78.2	78.4			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				364	784	1,689	3,638		
CNEL:				375	807	1,738	3,745		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Euclid Av. Road Segment: s/o Bickmore Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 37,985 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,798 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.29% Medium Trucks: 80.1% 5.7% 14.2% 8.37% Heavy Trucks: 76.2% 4.1% 19.7% 8.34%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.29	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-7.68	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-7.70	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.7	68.6	65.3	63.7	71.1	71.4			
Medium Trucks:	71.4	69.6	64.2	63.4	71.1	71.4			
Heavy Trucks:	75.3	73.4	66.7	68.7	76.0	76.1			
Vehicle Noise:	77.8	75.8	70.3	70.8	78.1	78.3			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			360	775	1,670	3,598			
CNEL:			370	798	1,719	3,704			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Euclid Av. Road Segment: s/o Pine Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 59,169 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,917 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 154 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 103.0 feet Centerline Dist. to Observer: 103.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.34% Medium Trucks: 80.1% 5.7% 14.2% 8.33% Heavy Trucks: 76.2% 4.1% 19.7% 8.32%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 68.593 Medium Trucks: 68.464 Heavy Trucks: 68.476				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	4.22	-2.16	-1.20	-4.77	0.000		0.000	
Medium Trucks:	82.40	-5.78	-2.15	-1.20	-4.88	0.000		0.000	
Heavy Trucks:	86.40	-5.78	-2.15	-1.20	-5.15	0.000		0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.6	70.5	67.2	65.6	73.0	73.3			
Medium Trucks:	73.3	71.5	66.1	65.3	73.0	73.3			
Heavy Trucks:	77.3	75.3	68.7	70.7	77.9	78.0			
Vehicle Noise:	79.7	77.7	72.2	72.7	80.1	80.3			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			483	1,041	2,242	4,830			
CNEL:			497	1,071	2,308	4,972			

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Flight Av. Road Segment: n/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 1,779 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 178 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph					Vehicle Mix				
Near/Far Lane Distance: 36 feet					VehicleType	Day	Evening	Night	Daily
Site Data					Autos: 73.5% 8.7% 17.9% 83.93%				
Barrier Height: 0.0 feet					Medium Trucks: 80.1% 5.7% 14.2% 8.01%				
Barrier Type (0-Wall, 1-Berm): 0.0					Heavy Trucks: 76.2% 4.1% 19.7% 8.05%				
Centerline Dist. to Barrier: 44.0 feet					Noise Source Elevations (in feet)				
Centerline Dist. to Observer: 44.0 feet					Autos: 0.000				
Barrier Distance to Observer: 0.0 feet					Medium Trucks: 2.297				
Observer Height (Above Pad): 5.0 feet					Heavy Trucks: 8.004				
Pad Elevation: 0.0 feet					Grade Adjustment: 0.0				
Road Elevation: 0.0 feet					Lane Equivalent Distance (in feet)				
Road Grade: 0.0%					Autos: 40.460				
Left View: -90.0 degrees					Medium Trucks: 40.241				
Right View: 90.0 degrees					Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-10.55	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-20.75	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-20.73	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	59.7	57.6	54.3	52.7	60.1	60.4			
Medium Trucks:	60.4	58.6	53.2	52.3	60.1	60.4			
Heavy Trucks:	64.8	62.8	56.2	58.1	65.4	65.5			
Vehicle Noise:	67.0	65.0	59.5	60.0	67.4	67.6			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				30	64	137	295		
CNEL:				30	65	141	304		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Hellman Av. Road Segment: s/o Kimball Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 23,554 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 2,355 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 45 mph									
Near/Far Lane Distance: 51 feet					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Site Data					Autos: 73.5% 8.7% 17.9% 83.64%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.16%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.20%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 42.140				
					Medium Trucks: 41.929				
Heavy Trucks: 41.950									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	1.11	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	79.45	-9.00	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-8.98	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	69.4	67.2	64.0	62.4	69.7	70.0			
Medium Trucks:	70.3	68.5	63.1	62.3	70.1	70.3			
Heavy Trucks:	75.1	73.1	66.5	68.5	75.7	75.9			
Vehicle Noise:	77.1	75.2	69.6	70.2	77.6	77.7			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				156	337	726	1,564		
CNEL:				161	347	747	1,608		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Hellman Av. Road Segment: s/o Pine Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 15,771 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 1,577 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 45 mph									
Near/Far Lane Distance: 51 feet					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.75%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.11%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.15%				
Site Data					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet					Autos: 0.000				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 2.297				
Centerline Dist. to Barrier: 49.0 feet					Heavy Trucks: 8.004				
Centerline Dist. to Observer: 49.0 feet					Grade Adjustment: 0.0				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	-0.63	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	79.45	-10.77	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-10.75	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	67.6	65.5	62.3	60.6	68.0	68.3			
Medium Trucks:	68.5	66.8	61.3	60.5	68.3	68.5			
Heavy Trucks:	73.3	71.4	64.8	66.7	74.0	74.1			
Vehicle Noise:	75.4	73.4	67.8	68.4	75.8	76.0			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				119	257	554	1,193		
CNEL:				123	264	569	1,227		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Archibald Av. Road Segment: n/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 35,281 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,528 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
					Vehicle Type		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.71% Medium Trucks: 80.1% 5.7% 14.2% 8.74% Heavy Trucks: 76.2% 4.1% 19.7% 8.55%					
					Noise Source Elevations (in feet)					
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644					
FHWA Noise Model Calculations										
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	70.20	2.36	-1.05	-1.20	-4.73	0.000	0.000			
Medium Trucks:	81.00	-7.40	-1.03	-1.20	-4.88	0.000	0.000			
Heavy Trucks:	85.38	-7.50	-1.03	-1.20	-5.25	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	70.3	68.2	64.9	63.3	70.7	71.0				
Medium Trucks:	71.4	69.6	64.2	63.4	71.1	71.4				
Heavy Trucks:	75.6	73.7	67.1	69.0	76.3	76.4				
Vehicle Noise:	77.9	75.9	70.3	70.9	78.3	78.4				
Centerline Distance to Noise Contour (in feet)										
			70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:			263	567	1,221	2,631				
CNEL:			271	583	1,256	2,707				



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Archibald Av. Road Segment: s/o Riverside Dr.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 42,366 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 4,237 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 93 feet									
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet					Vehicle Type	Day	Evening	Night	Daily
Barrier Type (0-Wall, 1-Berm): 0.0					Autos: 73.5% 8.7% 17.9% 82.87%				
Centerline Dist. to Barrier: 74.0 feet					Medium Trucks: 80.1% 5.7% 14.2% 8.64%				
Centerline Dist. to Observer: 74.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.49%				
Barrier Distance to Observer: 0.0 feet									
Observer Height (Above Pad): 5.0 feet									
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet									
Road Grade: 0.0%									
Left View: -90.0 degrees									
Right View: 90.0 degrees									
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782				
					Medium Trucks: 57.629				
					Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.74	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-7.07	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.15	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.3	70.1	66.9	65.3	72.6	72.9			
Medium Trucks:	73.1	71.3	65.9	65.1	72.9	73.1			
Heavy Trucks:	77.0	75.0	68.4	70.4	77.6	77.8			
Vehicle Noise:	79.4	77.5	72.0	72.4	79.8	80.0			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			334	719	1,550	3,339			
CNEL:			344	740	1,595	3,437			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Archibald Av. Road Segment: s/o Chino Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 41,136 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,114 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 82.85% Medium Trucks: 80.1% 5.7% 14.2% 8.66% Heavy Trucks: 76.2% 4.1% 19.7% 8.50%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644									
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	2.62	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-7.19	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-7.28	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.2	70.0	66.8	65.1	72.5	72.8			
Medium Trucks:	73.0	71.2	65.8	65.0	72.8	73.0			
Heavy Trucks:	76.9	74.9	68.3	70.3	77.5	77.7			
Vehicle Noise:	79.3	77.4	71.8	72.3	79.7	79.9			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			328	706	1,520	3,275			
CNEL:			337	726	1,565	3,371			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Archibald Av. Road Segment: s/o Schaefer Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 38,578 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,858 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
				Vehicle Type	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 82.81% Medium Trucks: 80.1% 5.7% 14.2% 8.68% Heavy Trucks: 76.2% 4.1% 19.7% 8.51%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Lane Equivalent Distance (in feet)				
				Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644				
FHWA Noise Model Calculations								
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	71.78	2.34	-1.05	-1.20	-4.73	0.000	0.000	
Medium Trucks:	82.40	-7.46	-1.03	-1.20	-4.88	0.000	0.000	
Heavy Trucks:	86.40	-7.55	-1.03	-1.20	-5.25	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	71.9	69.7	66.5	64.8	72.2	72.5		
Medium Trucks:	72.7	71.0	65.5	64.7	72.5	72.7		
Heavy Trucks:	76.6	74.6	68.0	70.0	77.2	77.4		
Vehicle Noise:	79.0	77.1	71.6	72.1	79.4	79.6		
Centerline Distance to Noise Contour (in feet)								
			70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:			314	677	1,458	3,141		
CNEL:			323	697	1,501	3,233		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Archibald Av. Road Segment: s/o Ontario Ranch Rd.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 46,664 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,666 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				Vehicle Type	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 82.92% Medium Trucks: 80.1% 5.7% 14.2% 8.61% Heavy Trucks: 76.2% 4.1% 19.7% 8.47%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 57.782 Medium Trucks: 57.629 Heavy Trucks: 57.644			
FHWA Noise Model Calculations							
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	3.17	-1.05	-1.20	-4.73	0.000	0.000
Medium Trucks:	82.40	-6.67	-1.03	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-6.74	-1.03	-1.20	-5.25	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.7	70.6	67.3	65.7	73.1	73.4	
Medium Trucks:	73.5	71.7	66.3	65.5	73.3	73.5	
Heavy Trucks:	77.4	75.5	68.8	70.8	78.0	78.2	
Vehicle Noise:	79.8	77.9	72.4	72.9	80.2	80.4	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			356	766	1,651	3,556	
CNEL:			366	789	1,699	3,661	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Archibald Av. Road Segment: s/o Eucalyptus Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 47,750 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 4,775 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 55 mph									
Near/Far Lane Distance: 93 feet									
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 82.87%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 8.64%				
Centerline Dist. to Barrier: 74.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.49%				
Centerline Dist. to Observer: 74.0 feet									
Barrier Distance to Observer: 0.0 feet					Noise Source Elevations (in feet)				
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%					Lane Equivalent Distance (in feet)				
Left View: -90.0 degrees					Autos: 57.782				
Right View: 90.0 degrees					Medium Trucks: 57.629				
					Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.26	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-6.55	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.63	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn		CNEL		
Autos:	72.8	70.7	67.4	65.8	73.2		73.5		
Medium Trucks:	73.6	71.9	66.4	65.6	73.4		73.6		
Heavy Trucks:	77.5	75.6	68.9	70.9	78.2		78.3		
Vehicle Noise:	79.9	78.0	72.5	73.0	80.3		80.5		
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA		55 dBA		
Ldn:	362	779			1,678		3,616		
CNEL:	372	802			1,728		3,722		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Archibald Av. Road Segment: s/o Merrill Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 48,457 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,846 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 93 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 74.0 feet Centerline Dist. to Observer: 74.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Vehicle Type	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 82.90%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.62%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.48%				
					Noise Source Elevations (in feet)				
					Autos: 0.000				
					Medium Trucks: 2.297				
					Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 57.782				
					Medium Trucks: 57.629				
					Heavy Trucks: 57.644				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.33	-1.05	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-6.50	-1.03	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.57	-1.03	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.9	70.7	67.5	65.8	73.2	73.5			
Medium Trucks:	73.7	71.9	66.5	65.7	73.5	73.7			
Heavy Trucks:	77.6	75.6	69.0	71.0	78.2	78.4			
Vehicle Noise:	80.0	78.1	72.5	73.0	80.4	80.6			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				365	786	1,694	3,649		
CNEL:				376	809	1,744	3,756		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Archibald Av. Road Segment: s/o Limonite Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 45,885 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,588 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.42% Medium Trucks: 80.1% 5.7% 14.2% 8.29% Heavy Trucks: 76.2% 4.1% 19.7% 8.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	71.78	3.12	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	82.40	-6.91	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	86.40	-6.90	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.8	69.7	66.5	64.8	72.2	72.5			
Medium Trucks:	72.5	70.7	65.3	64.4	72.2	72.5			
Heavy Trucks:	76.5	74.5	67.9	69.8	77.1	77.2			
Vehicle Noise:	78.9	76.9	71.4	71.9	79.3	79.4			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			315	678	1,461	3,148			
CNEL:			324	698	1,504	3,241			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Merrill Av. Road Segment: e/o Euclid Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 30,547 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,055 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					Vehicle Type	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 82.58% Medium Trucks: 80.1% 5.7% 14.2% 8.88% Heavy Trucks: 76.2% 4.1% 19.7% 8.54%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	1.72	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-7.96	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-8.13	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	72.0	69.9	66.6	65.0	72.4	72.7			
Medium Trucks:	73.2	71.4	66.0	65.1	72.9	73.2			
Heavy Trucks:	77.4	75.4	68.8	70.7	78.0	78.1			
Vehicle Noise:	79.6	77.6	72.1	72.6	80.0	80.2			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			204	439	946	2,037			
CNEL:			210	452	973	2,096			

Friday, March 02, 2018



FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Merrill Av. Road Segment: e/o Bon View Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 22,808 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 2,281 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 36 feet									
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 82.28%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 9.10%				
Centerline Dist. to Barrier: 44.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.62%				
Centerline Dist. to Observer: 44.0 feet									
Barrier Distance to Observer: 0.0 feet					Noise Source Elevations (in feet)				
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%									
Left View: -90.0 degrees					Lane Equivalent Distance (in feet)				
Right View: 90.0 degrees					Autos: 40.460				
					Medium Trucks: 40.241				
					Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	0.44	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-9.13	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-9.36	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.7	68.6	65.3	63.7	71.1	71.4			
Medium Trucks:	72.0	70.2	64.8	64.0	71.8	72.0			
Heavy Trucks:	76.1	74.2	67.5	69.5	76.7	76.9			
Vehicle Noise:	78.4	76.4	70.8	71.4	78.8	78.9			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				169	364	783	1,688		
CNEL:				174	374	806	1,736		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Merrill Av. Road Segment: e/o Flight Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 27,014 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,701 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				VehicleType	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 81.49%				
				Medium Trucks: 80.1% 5.7% 14.2% 9.56%				
				Heavy Trucks: 76.2% 4.1% 19.7% 8.95%				
				Noise Source Elevations (in feet)				
				Autos: 0.000				
				Medium Trucks: 2.297				
				Heavy Trucks: 8.004      Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 40.460				
				Medium Trucks: 40.241				
				Heavy Trucks: 40.262				
FHWA Noise Model Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	70.20	1.13	1.28	-1.20	-4.61	0.000	0.000	
Medium Trucks:	81.00	-8.17	1.31	-1.20	-4.87	0.000	0.000	
Heavy Trucks:	85.38	-8.46	1.31	-1.20	-5.50	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	71.4	69.3	66.0	64.4	71.8	72.1		
Medium Trucks:	72.9	71.2	65.7	64.9	72.7	72.9		
Heavy Trucks:	77.0	75.1	68.4	70.4	77.6	77.8		
Vehicle Noise:	79.2	77.3	71.7	72.3	79.6	79.8		
Centerline Distance to Noise Contour (in feet)								
				70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:				193	416	896	1,930	
CNEL:				199	428	922	1,986	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Merrill Av. Road Segment: e/o Hellman Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 25,383 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,538 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 81.33% Medium Trucks: 80.1% 5.7% 14.2% 9.66% Heavy Trucks: 76.2% 4.1% 19.7% 9.01%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	0.85	1.28	-1.20	-4.61	0.000	0.000		
Medium Trucks:	81.00	-8.40	1.31	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-8.70	1.31	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.1	69.0	65.7	64.1	71.5			71.8	
Medium Trucks:	72.7	71.0	65.5	64.7	72.5			72.7	
Heavy Trucks:	76.8	74.8	68.2	70.2	77.4			77.5	
Vehicle Noise:	79.0	77.0	71.4	72.0	79.4			79.6	
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				186	401	863	1,859		
CNEL:				191	412	888	1,913		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Kimball Av. Road Segment: w/o Euclid Av.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 22,620 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,262 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 36 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.03% Medium Trucks: 80.1% 5.7% 14.2% 8.53% Heavy Trucks: 76.2% 4.1% 19.7% 8.44%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 40.460 Medium Trucks: 40.241 Heavy Trucks: 40.262			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	0.44	1.28	-1.20	-4.61	0.000	0.000
Medium Trucks:	81.00	-9.44	1.31	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-9.49	1.31	-1.20	-5.50	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	70.7	68.6	65.3	63.7	71.1	71.4	
Medium Trucks:	71.7	69.9	64.5	63.7	71.4	71.7	
Heavy Trucks:	76.0	74.0	67.4	69.4	76.6	76.8	
Vehicle Noise:	78.2	76.3	70.7	71.3	78.6	78.8	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			165	356	767	1,652	
CNEL:			170	366	789	1,699	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Kimball Av. Road Segment: e/o Euclid Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 27,346 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 2,735 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 51 feet									
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 83.58%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 8.19%				
Centerline Dist. to Barrier: 49.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.23%				
Centerline Dist. to Observer: 49.0 feet									
Barrier Distance to Observer: 0.0 feet					Noise Source Elevations (in feet)				
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Road Grade: 0.0%									
Left View: -90.0 degrees					Lane Equivalent Distance (in feet)				
Right View: 90.0 degrees					Autos: 42.140				
					Medium Trucks: 41.929				
					Heavy Trucks: 41.950				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	1.30	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:	81.00	-8.79	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-8.77	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.3	69.2	65.9	64.3	71.7	72.0			
Medium Trucks:	72.0	70.3	64.9	64.0	71.8	72.1			
Heavy Trucks:	76.4	74.5	67.9	69.8	77.1	77.2			
Vehicle Noise:	78.7	76.7	71.2	71.7	79.1	79.3			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				197	425	916	1,973		
CNEL:				203	437	942	2,030		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Kimball Av. Road Segment: e/o Rincon Meadows Av.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 28,374 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,837 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				Vehicle Type	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.59% Medium Trucks: 80.1% 5.7% 14.2% 8.18% Heavy Trucks: 76.2% 4.1% 19.7% 8.22%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950			
FHWA Noise Model Calculations							
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	1.46	1.01	-1.20	-4.64	0.000	0.000
Medium Trucks:	81.00	-8.64	1.04	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-8.62	1.04	-1.20	-5.44	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	71.5	69.3	66.1	64.4	71.8	72.1	
Medium Trucks:	72.2	70.4	65.0	64.2	72.0	72.2	
Heavy Trucks:	76.6	74.6	68.0	70.0	77.2	77.4	
Vehicle Noise:	78.8	76.9	71.3	71.9	79.2	79.4	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			202	436	938	2,022	
CNEL:			208	448	966	2,080	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Kimball Av. Road Segment: e/o Mill Creek Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 34,284 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 3,428 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
					Vehicle Type		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.58% Medium Trucks: 80.1% 5.7% 14.2% 8.19% Heavy Trucks: 76.2% 4.1% 19.7% 8.23%					
					Noise Source Elevations (in feet)					
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950					
FHWA Noise Model Calculations										
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	70.20	2.28	1.01	-1.20	-4.64	0.000	0.000			
Medium Trucks:	81.00	-7.81	1.04	-1.20	-4.87	0.000	0.000			
Heavy Trucks:	85.38	-7.79	1.04	-1.20	-5.44	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	72.3	70.2	66.9	65.3	72.7	73.0				
Medium Trucks:	73.0	71.3	65.8	65.0	72.8	73.0				
Heavy Trucks:	77.4	75.5	68.8	70.8	78.1	78.2				
Vehicle Noise:	79.7	77.7	72.1	72.7	80.1	80.2				
Centerline Distance to Noise Contour (in feet)										
				70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:				229	494	1,065	2,295			
CNEL:				236	509	1,096	2,361			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Kimball Av. Road Segment: e/o Main St.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 46,604 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,660 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				Vehicle Type	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.55% Medium Trucks: 80.1% 5.7% 14.2% 8.20% Heavy Trucks: 76.2% 4.1% 19.7% 8.24%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950			
FHWA Noise Model Calculations							
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	3.61	1.01	-1.20	-4.64	0.000	0.000
Medium Trucks:	81.00	-6.47	1.04	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-6.45	1.04	-1.20	-5.44	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	73.6	71.5	68.2	66.6	74.0	74.3	
Medium Trucks:	74.4	72.6	67.2	66.4	74.1	74.4	
Heavy Trucks:	78.8	76.8	70.2	72.2	79.4	79.5	
Vehicle Noise:	81.0	79.0	73.5	74.0	81.4	81.6	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			282	607	1,308	2,818	
CNEL:			290	625	1,346	2,900	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Kimball Av. Road Segment: e/o Flight Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt):		25,283 vehicles			Autos:		15			
Peak Hour Percentage:		10%			Medium Trucks (2 Axles):		15			
Peak Hour Volume:		2,528 vehicles			Heavy Trucks (3+ Axles):		15			
Vehicle Speed:		50 mph			Vehicle Mix					
Near/Far Lane Distance:		51 feet								
Site Data					Vehicle Type					
Barrier Height:		0.0 feet			Autos:		73.5%	8.7%	17.9%	83.86%
Barrier Type (0-Wall, 1-Berm):		0.0			Medium Trucks:		80.1%	5.7%	14.2%	8.05%
Centerline Dist. to Barrier:		49.0 feet			Heavy Trucks:		76.2%	4.1%	19.7%	8.09%
Centerline Dist. to Observer:		49.0 feet			Noise Source Elevations (in feet)					
Barrier Distance to Observer:		0.0 feet								
Observer Height (Above Pad):		5.0 feet			Autos:		0.000			
Pad Elevation:		0.0 feet			Medium Trucks:		2.297			
Road Elevation:		0.0 feet			Heavy Trucks:		8.004		Grade Adjustment: 0.0	
Road Grade:		0.0%			Lane Equivalent Distance (in feet)					
Left View:		-90.0 degrees								
Right View:		90.0 degrees			Autos:		42.140			
					Medium Trucks:		41.929			
					Heavy Trucks:		41.950			
FHWA Noise Model Calculations										
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:		70.20	0.97	1.01	-1.20	-4.64	0.000	0.000		
Medium Trucks:		81.00	-9.21	1.04	-1.20	-4.87	0.000	0.000		
Heavy Trucks:		85.38	-9.19	1.04	-1.20	-5.44	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:		71.0	68.9	65.6	64.0	71.3	71.6			
Medium Trucks:		71.6	69.9	64.4	63.6	71.4	71.6			
Heavy Trucks:		76.0	74.1	67.4	69.4	76.7	76.8			
Vehicle Noise:		78.3	76.3	70.8	71.3	78.7	78.9			
Centerline Distance to Noise Contour (in feet)										
				70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:				186	400	862	1,857			
CNEL:				191	412	887	1,910			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL								
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Kimball Av. Road Segment: e/o Meadow Valley Av.				Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 24,883 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,488 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data				Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 49.0 feet Centerline Dist. to Observer: 49.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Vehicle Type	Day	Evening	Night	Daily
				Autos: 73.5% 8.7% 17.9% 83.86% Medium Trucks: 80.1% 5.7% 14.2% 8.05% Heavy Trucks: 76.2% 4.1% 19.7% 8.09%				
				Noise Source Elevations (in feet)				
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
				Lane Equivalent Distance (in feet)				
				Autos: 42.140 Medium Trucks: 41.929 Heavy Trucks: 41.950				
FHWA Noise Model Calculations								
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten	
Autos:	70.20	0.90	1.01	-1.20	-4.64	0.000	0.000	
Medium Trucks:	81.00	-9.28	1.04	-1.20	-4.87	0.000	0.000	
Heavy Trucks:	85.38	-9.26	1.04	-1.20	-5.44	0.000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)								
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	70.9	68.8	65.5	63.9	71.3	71.6		
Medium Trucks:	71.6	69.8	64.4	63.6	71.3	71.6		
Heavy Trucks:	76.0	74.0	67.4	69.4	76.6	76.7		
Vehicle Noise:	78.2	76.3	70.7	71.3	78.6	78.8		
Centerline Distance to Noise Contour (in feet)								
				70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:				184	396	852	1,837	
CNEL:				189	407	877	1,890	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL										
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Limonite Av. Road Segment: e/o Hellman Av.					Project Name: Chino Parcel Delivery Job Number: 11134					
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS					
Highway Data					Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 29,431 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,943 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
Site Data					Vehicle Mix					
					Vehicle Type		Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.63% Medium Trucks: 80.1% 5.7% 14.2% 8.16% Heavy Trucks: 76.2% 4.1% 19.7% 8.20%					
					Noise Source Elevations (in feet)					
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0					
					Lane Equivalent Distance (in feet)					
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299					
FHWA Noise Model Calculations										
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	70.20	1.62	-1.85	-1.20	-4.73	0.000	0.000			
Medium Trucks:	81.00	-8.49	-1.84	-1.20	-4.88	0.000	0.000			
Heavy Trucks:	85.38	-8.47	-1.84	-1.20	-5.25	0.000	0.000			
Unmitigated Noise Levels (without Topo and barrier attenuation)										
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	68.8	66.6	63.4	61.7	69.1	69.4				
Medium Trucks:	69.5	67.7	62.3	61.5	69.2	69.5				
Heavy Trucks:	73.9	71.9	65.3	67.3	74.5	74.6				
Vehicle Noise:	76.1	74.1	68.6	69.1	76.5	76.7				
Centerline Distance to Noise Contour (in feet)										
				70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:				206	444	957	2,063			
CNEL:				212	457	985	2,122			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL							
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Limonite Av. Road Segment: e/o Archibald Av.				Project Name: Chino Parcel Delivery Job Number: 11134			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 48,089 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 4,809 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				Vehicle Type	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 73.5% 8.7% 17.9% 83.04% Medium Trucks: 80.1% 5.7% 14.2% 8.54% Heavy Trucks: 76.2% 4.1% 19.7% 8.42%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299			
FHWA Noise Model Calculations							
Vehicle Type	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	3.72	-1.85	-1.20	-4.73	0.000	0.000
Medium Trucks:	81.00	-6.16	-1.84	-1.20	-4.88	0.000	0.000
Heavy Trucks:	85.38	-6.22	-1.84	-1.20	-5.25	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
Vehicle Type	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	70.9	68.7	65.5	63.8	71.2	71.5	
Medium Trucks:	71.8	70.0	64.6	63.8	71.6	71.8	
Heavy Trucks:	76.1	74.1	67.5	69.5	76.7	76.9	
Vehicle Noise:	78.3	76.4	70.8	71.4	78.7	78.9	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			291	626	1,350	2,908	
CNEL:			299	644	1,388	2,991	

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Limonite Av. Road Segment: e/o Harrison Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 51,570 vehicles					Autos: 15				
Peak Hour Percentage: 10%					Medium Trucks (2 Axles): 15				
Peak Hour Volume: 5,157 vehicles					Heavy Trucks (3+ Axles): 15				
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 78 feet									
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet					Autos: 73.5% 8.7% 17.9% 83.06%				
Barrier Type (0-Wall, 1-Berm): 0.0					Medium Trucks: 80.1% 5.7% 14.2% 8.52%				
Centerline Dist. to Barrier: 76.0 feet					Heavy Trucks: 76.2% 4.1% 19.7% 8.42%				
Centerline Dist. to Observer: 76.0 feet									
Barrier Distance to Observer: 0.0 feet					Noise Source Elevations (in feet)				
Observer Height (Above Pad): 5.0 feet					Autos: 0.000				
Pad Elevation: 0.0 feet					Medium Trucks: 2.297				
Road Elevation: 0.0 feet					Heavy Trucks: 8.004				
Road Grade: 0.0%					Grade Adjustment: 0.0				
Left View: -90.0 degrees									
Right View: 90.0 degrees					Lane Equivalent Distance (in feet)				
					Autos: 65.422				
					Medium Trucks: 65.286				
					Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	4.02	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-5.87	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-5.92	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.2	69.0	65.8	64.1	71.5	71.8			
Medium Trucks:	72.1	70.3	64.9	64.1	71.9	72.1			
Heavy Trucks:	76.4	74.4	67.8	69.8	77.0	77.2			
Vehicle Noise:	78.6	76.7	71.1	71.7	79.0	79.2			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			304	656	1,413	3,044			
CNEL:			313	675	1,454	3,132			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Limonite Av. Road Segment: e/o Sumner Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 50,884 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,088 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.06%				
					Medium Trucks: 80.1% 5.7% 14.2% 8.52%				
					Heavy Trucks: 76.2% 4.1% 19.7% 8.42%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004      Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	3.96	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-5.92	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-5.98	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.1	69.0	65.7	64.1	71.5	71.8			
Medium Trucks:	72.0	70.3	64.8	64.0	71.8	72.0			
Heavy Trucks:	76.4	74.4	67.8	69.8	77.0	77.1			
Vehicle Noise:	78.6	76.6	71.1	71.6	79.0	79.2			
Centerline Distance to Noise Contour (in feet)									
				70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:				302	650	1,401	3,017		
CNEL:				310	669	1,441	3,105		

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Limonite Av. Road Segment: e/o Scholar Wy.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 51,060 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,106 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
					Autos: 73.5% 8.7% 17.9% 83.06% Medium Trucks: 80.1% 5.7% 14.2% 8.52% Heavy Trucks: 76.2% 4.1% 19.7% 8.42%				
					Noise Source Elevations (in feet)				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	3.98	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	81.00	-5.91	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	85.38	-5.96	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.1	69.0	65.7	64.1	71.5	71.8			
Medium Trucks:	72.1	70.3	64.9	64.0	71.8	72.1			
Heavy Trucks:	76.4	74.4	67.8	69.8	77.0	77.1			
Vehicle Noise:	78.6	76.6	71.1	71.6	79.0	79.2			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			302	652	1,404	3,024			
CNEL:			311	670	1,444	3,112			

Friday, March 02, 2018

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: HY 2040 w/ Proj. w/ Limonite Ext. Road Name: Limonite Av. Road Segment: e/o Hammer Av.					Project Name: Chino Parcel Delivery Job Number: 11134				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 55,125 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,513 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 78 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 76.0 feet Centerline Dist. to Observer: 76.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 73.5% 8.7% 17.9% 83.06% Medium Trucks: 80.1% 5.7% 14.2% 8.52% Heavy Trucks: 76.2% 4.1% 19.7% 8.42%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 65.422 Medium Trucks: 65.286 Heavy Trucks: 65.299				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	4.77	-1.85	-1.20	-4.73	0.000	0.000		
Medium Trucks:	79.45	-5.12	-1.84	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	84.25	-5.17	-1.84	-1.20	-5.25	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.2	68.0	64.8	63.2	70.5	70.8			
Medium Trucks:	71.3	69.5	64.1	63.3	71.1	71.3			
Heavy Trucks:	76.0	74.1	67.4	69.4	76.7	76.8			
Vehicle Noise:	78.1	76.1	70.5	71.1	78.5	78.7			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			279	602	1,297	2,794			
CNEL:			287	619	1,333	2,873			

**APPENDIX 9.1:**

**OPERATIONAL NOISE LEVEL CALCULATIONS**

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## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R1**

Source: Switcher Loading/Unloading  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	1,921.0 feet	<b>Barrier Height:</b>	<b>20.0 feet</b>
Noise Distance to Barrier:	30.0 feet	Noise Source Height:	8.0 feet
Barrier Distance to Observer:	1,891.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	30.0	77.0	74.4	78.2	80.4	84.3	86.5
Distance Attenuation	1,921.0	-36.1	-36.1	-36.1	-36.1	-36.1	-36.1
Shielding (Barrier Attenuation)	30.0	-12.7	-12.7	-12.7	-12.7	-12.7	-12.7
Raw (Distance + Barrier)		28.2	25.6	29.4	31.6	35.5	37.7
<b>60 Minute Hourly Adjustment</b>		<b>28.2</b>	<b>25.6</b>	<b>29.4</b>	<b>31.6</b>	<b>35.5</b>	<b>37.7</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R1**

Source: Switcher/Truck Movements  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	1,503.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	1,503.0 feet	Noise Source Height:	8.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	20.0	75.8	72.5	77.7	80.0	80.4	80.5
Distance Attenuation	1,503.0	-37.5	-37.5	-37.5	-37.5	-37.5	-37.5
Shielding (Barrier Attenuation)	1,503.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		38.3	35.0	40.2	42.5	42.9	43.0
<b>60 Minute Hourly Adjustment</b>		<b>38.3</b>	<b>35.0</b>	<b>40.2</b>	<b>42.5</b>	<b>42.9</b>	<b>43.0</b>



## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R1**

Source: Parking Lot Veh. Movements (Autos)  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,607.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,607.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	15.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	10.0	52.2	49.0	50.0	55.0	61.0	71.9
Distance Attenuation	2,607.0	-36.2	-36.2	-36.2	-36.2	-36.2	-36.2
Shielding (Barrier Attenuation)	2,607.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		16.0	12.8	13.8	18.8	24.8	35.7
<b>60 Minute Hourly Adjustment</b>		<b>16.0</b>	<b>12.8</b>	<b>13.8</b>	<b>18.8</b>	<b>24.8</b>	<b>35.7</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R1**

Source: Trailer Maint./Impact Hammer  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	1,665.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	1,665.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	40.0	73.0	63.6	72.5	79.3	82.3	82.9
Distance Attenuation	1,665.0	-32.4	-32.4	-32.4	-32.4	-32.4	-32.4
Shielding (Barrier Attenuation)	1,665.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		40.6	31.2	40.1	46.9	49.9	50.5
<b>60 Minute Hourly Adjustment</b>		<b>40.6</b>	<b>31.2</b>	<b>40.1</b>	<b>46.9</b>	<b>49.9</b>	<b>50.5</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R1**

Source: Truck Fuel Pump Activity  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,869.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,869.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet		

20 = 6 dBA per doubling of distance  
15 = 4.5 dBA per doubling of distance

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	10.0	75.7	74.9	75.4	76.4	80.2	86.8
Distance Attenuation	2,869.0	-49.2	-49.2	-49.2	-49.2	-49.2	-49.2
Shielding (Barrier Attenuation)	2,869.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		26.5	25.7	26.2	27.2	31.0	37.6
<b>60 Minute Hourly Adjustment</b>		<b>26.5</b>	<b>25.7</b>	<b>26.2</b>	<b>27.2</b>	<b>31.0</b>	<b>37.6</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R2**

Source: Switcher Loading/Unloading  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,321.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,321.0 feet	Noise Source Height:	8.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet		

20 = 6 dBA per doubling of distance  
15 = 4.5 dBA per doubling of distance

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	30.0	77.0	74.4	78.2	80.4	84.3	86.5
Distance Attenuation	2,321.0	-37.8	-37.8	-37.8	-37.8	-37.8	-37.8
Shielding (Barrier Attenuation)	2,321.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		39.2	36.6	40.4	42.6	46.5	48.7
<b>60 Minute Hourly Adjustment</b>		<b>39.2</b>	<b>36.6</b>	<b>40.4</b>	<b>42.6</b>	<b>46.5</b>	<b>48.7</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R2**

Source: Switcher/Truck Movements  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,060.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,060.0 feet	Noise Source Height:	8.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	20.0	75.8	72.5	77.7	80.0	80.4	80.5
Distance Attenuation	2,060.0	-40.3	-40.3	-40.3	-40.3	-40.3	-40.3
Shielding (Barrier Attenuation)	2,060.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		35.5	32.2	37.4	39.7	40.1	40.2
<b>60 Minute Hourly Adjustment</b>		<b>35.5</b>	<b>32.2</b>	<b>37.4</b>	<b>39.7</b>	<b>40.1</b>	<b>40.2</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R2**

Source: Parking Lot Veh. Movements (Autos)  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,833.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,833.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	15.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	10.0	52.2	49.0	50.0	55.0	61.0	71.9
Distance Attenuation	2,833.0	-36.8	-36.8	-36.8	-36.8	-36.8	-36.8
Shielding (Barrier Attenuation)	2,833.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		15.4	12.2	13.2	18.2	24.2	35.1
<b>60 Minute Hourly Adjustment</b>		<b>15.4</b>	<b>12.2</b>	<b>13.2</b>	<b>18.2</b>	<b>24.2</b>	<b>35.1</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R2**

Source: Trailer Maint./Impact Hammer  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,174.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,174.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	40.0	73.0	63.6	72.5	79.3	82.3	82.9
Distance Attenuation	2,174.0	-34.7	-34.7	-34.7	-34.7	-34.7	-34.7
Shielding (Barrier Attenuation)	2,174.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		38.3	28.9	37.8	44.6	47.6	48.2
<b>60 Minute Hourly Adjustment</b>		<b>38.3</b>	<b>28.9</b>	<b>37.8</b>	<b>44.6</b>	<b>47.6</b>	<b>48.2</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R2**

Source: Truck Fuel Pump Activity  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	3,825.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	3,825.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	10.0	75.7	74.9	75.4	76.4	80.2	86.8
Distance Attenuation	3,825.0	-51.7	-51.7	-51.7	-51.7	-51.7	-51.7
Shielding (Barrier Attenuation)	3,825.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		24.0	23.2	23.7	24.7	28.5	35.1
<b>60 Minute Hourly Adjustment</b>		<b>24.0</b>	<b>23.2</b>	<b>23.7</b>	<b>24.7</b>	<b>28.5</b>	<b>35.1</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R3**

Source: Switcher Loading/Unloading  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,549.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,549.0 feet	Noise Source Height:	8.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	30.0	77.0	74.4	78.2	80.4	84.3	86.5
Distance Attenuation	2,549.0	-38.6	-38.6	-38.6	-38.6	-38.6	-38.6
Shielding (Barrier Attenuation)	2,549.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		38.4	35.8	39.6	41.8	45.7	47.9
<b>60 Minute Hourly Adjustment</b>		<b>38.4</b>	<b>35.8</b>	<b>39.6</b>	<b>41.8</b>	<b>45.7</b>	<b>47.9</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R3**

Source: Switcher/Truck Movements  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,524.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,524.0 feet	Noise Source Height:	8.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	20.0	75.8	72.5	77.7	80.0	80.4	80.5
Distance Attenuation	2,524.0	-42.0	-42.0	-42.0	-42.0	-42.0	-42.0
Shielding (Barrier Attenuation)	2,524.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		33.8	30.5	35.7	38.0	38.4	38.5
<b>60 Minute Hourly Adjustment</b>		<b>33.8</b>	<b>30.5</b>	<b>35.7</b>	<b>38.0</b>	<b>38.4</b>	<b>38.5</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R3**

Source: Parking Lot Veh. Movements (Autos)  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,546.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,546.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	15.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	10.0	52.2	49.0	50.0	55.0	61.0	71.9
Distance Attenuation	2,546.0	-36.1	-36.1	-36.1	-36.1	-36.1	-36.1
Shielding (Barrier Attenuation)	2,546.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		16.1	12.9	13.9	18.9	24.9	35.8
<b>60 Minute Hourly Adjustment</b>		<b>16.1</b>	<b>12.9</b>	<b>13.9</b>	<b>18.9</b>	<b>24.9</b>	<b>35.8</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R3**

Source: Trailer Maint./Impact Hammer  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,631.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,631.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	40.0	73.0	63.6	72.5	79.3	82.3	82.9
Distance Attenuation	2,631.0	-36.4	-36.4	-36.4	-36.4	-36.4	-36.4
Shielding (Barrier Attenuation)	2,631.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		36.6	27.2	36.1	42.9	45.9	46.5
<b>60 Minute Hourly Adjustment</b>		<b>36.6</b>	<b>27.2</b>	<b>36.1</b>	<b>42.9</b>	<b>45.9</b>	<b>46.5</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R3**

Source: Truck Fuel Pump Activity  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	4,300.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	4,300.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	10.0	75.7	74.9	75.4	76.4	80.2	86.8
Distance Attenuation	4,300.0	-52.7	-52.7	-52.7	-52.7	-52.7	-52.7
Shielding (Barrier Attenuation)	4,300.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		23.0	22.2	22.7	23.7	27.5	34.1
<b>60 Minute Hourly Adjustment</b>		<b>23.0</b>	<b>22.2</b>	<b>22.7</b>	<b>23.7</b>	<b>27.5</b>	<b>34.1</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R4**

Source: Switcher Loading/Unloading  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,735.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,735.0 feet	Noise Source Height:	8.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	30.0	77.0	74.4	78.2	80.4	84.3	86.5
Distance Attenuation	2,735.0	-39.2	-39.2	-39.2	-39.2	-39.2	-39.2
Shielding (Barrier Attenuation)	2,735.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		37.8	35.2	39.0	41.2	45.1	47.3
<b>60 Minute Hourly Adjustment</b>		<b>37.8</b>	<b>35.2</b>	<b>39.0</b>	<b>41.2</b>	<b>45.1</b>	<b>47.3</b>



## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R4**

Source: Switcher/Truck Movements  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,255.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,255.0 feet	Noise Source Height:	8.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	20.0	75.8	72.5	77.7	80.0	80.4	80.5
Distance Attenuation	2,255.0	-41.0	-41.0	-41.0	-41.0	-41.0	-41.0
Shielding (Barrier Attenuation)	2,255.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		34.8	31.5	36.7	39.0	39.4	39.5
<b>60 Minute Hourly Adjustment</b>		<b>34.8</b>	<b>31.5</b>	<b>36.7</b>	<b>39.0</b>	<b>39.4</b>	<b>39.5</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R4**

Source: Parking Lot Veh. Movements (Autos)  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,154.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,154.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	15.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	10.0	52.2	49.0	50.0	55.0	61.0	71.9
Distance Attenuation	2,154.0	-35.0	-35.0	-35.0	-35.0	-35.0	-35.0
Shielding (Barrier Attenuation)	2,154.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		17.2	14.0	15.0	20.0	26.0	36.9
<b>60 Minute Hourly Adjustment</b>		<b>17.2</b>	<b>14.0</b>	<b>15.0</b>	<b>20.0</b>	<b>26.0</b>	<b>36.9</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R4**

Source: Trailer Maint./Impact Hammer  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	3,060.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	3,060.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	40.0	73.0	63.6	72.5	79.3	82.3	82.9
Distance Attenuation	3,060.0	-37.7	-37.7	-37.7	-37.7	-37.7	-37.7
Shielding (Barrier Attenuation)	3,060.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		35.3	25.9	34.8	41.6	44.6	45.2
<b>60 Minute Hourly Adjustment</b>		<b>35.3</b>	<b>25.9</b>	<b>34.8</b>	<b>41.6</b>	<b>44.6</b>	<b>45.2</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R4**

Source: Truck Fuel Pump Activity  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	3,413.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	3,413.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	10.0	75.7	74.9	75.4	76.4	80.2	86.8
Distance Attenuation	3,413.0	-50.7	-50.7	-50.7	-50.7	-50.7	-50.7
Shielding (Barrier Attenuation)	3,413.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		25.0	24.2	24.7	25.7	29.5	36.1
<b>60 Minute Hourly Adjustment</b>		<b>25.0</b>	<b>24.2</b>	<b>24.7</b>	<b>25.7</b>	<b>29.5</b>	<b>36.1</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R5**

Source: Switcher Loading/Unloading  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,277.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,277.0 feet	Noise Source Height:	8.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	30.0	77.0	74.4	78.2	80.4	84.3	86.5
Distance Attenuation	2,277.0	-37.6	-37.6	-37.6	-37.6	-37.6	-37.6
Shielding (Barrier Attenuation)	2,277.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		39.4	36.8	40.6	42.8	46.7	48.9
<b>60 Minute Hourly Adjustment</b>		<b>39.4</b>	<b>36.8</b>	<b>40.6</b>	<b>42.8</b>	<b>46.7</b>	<b>48.9</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R5**

Source: Switcher/Truck Movements  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	1,629.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	1,629.0 feet	Noise Source Height:	8.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	20.0	75.8	72.5	77.7	80.0	80.4	80.5
Distance Attenuation	1,629.0	-38.2	-38.2	-38.2	-38.2	-38.2	-38.2
Shielding (Barrier Attenuation)	1,629.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		37.6	34.3	39.5	41.8	42.2	42.3
<b>60 Minute Hourly Adjustment</b>		<b>37.6</b>	<b>34.3</b>	<b>39.5</b>	<b>41.8</b>	<b>42.2</b>	<b>42.3</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R5**

Source: Parking Lot Veh. Movements (Autos)  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	1,503.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	1,503.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	15.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	10.0	52.2	49.0	50.0	55.0	61.0	71.9
Distance Attenuation	1,503.0	-32.7	-32.7	-32.7	-32.7	-32.7	-32.7
Shielding (Barrier Attenuation)	1,503.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		19.5	16.3	17.3	22.3	28.3	39.2
<b>60 Minute Hourly Adjustment</b>		<b>19.5</b>	<b>16.3</b>	<b>17.3</b>	<b>22.3</b>	<b>28.3</b>	<b>39.2</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R5**

Source: Trailer Maint./Impact Hammer  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	3,478.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	3,478.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	40.0	73.0	63.6	72.5	79.3	82.3	82.9
Distance Attenuation	3,478.0	-38.8	-38.8	-38.8	-38.8	-38.8	-38.8
Shielding (Barrier Attenuation)	3,478.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		34.2	24.8	33.7	40.5	43.5	44.1
<b>60 Minute Hourly Adjustment</b>		<b>34.2</b>	<b>24.8</b>	<b>33.7</b>	<b>40.5</b>	<b>43.5</b>	<b>44.1</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R5**

Source: Truck Fuel Pump Activity  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,275.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,275.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	10.0	75.7	74.9	75.4	76.4	80.2	86.8
Distance Attenuation	2,275.0	-47.1	-47.1	-47.1	-47.1	-47.1	-47.1
Shielding (Barrier Attenuation)	2,275.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		28.6	27.8	28.3	29.3	33.1	39.7
<b>60 Minute Hourly Adjustment</b>		<b>28.6</b>	<b>27.8</b>	<b>28.3</b>	<b>29.3</b>	<b>33.1</b>	<b>39.7</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R6**

Source: Switcher Loading/Unloading  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	3,561.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	3,561.0 feet	Noise Source Height:	8.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	30.0	77.0	74.4	78.2	80.4	84.3	86.5
Distance Attenuation	3,561.0	-41.5	-41.5	-41.5	-41.5	-41.5	-41.5
Shielding (Barrier Attenuation)	3,561.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		35.5	32.9	36.7	38.9	42.8	45.0
<b>60 Minute Hourly Adjustment</b>		<b>35.5</b>	<b>32.9</b>	<b>36.7</b>	<b>38.9</b>	<b>42.8</b>	<b>45.0</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R6**

Source: Switcher/Truck Movements  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,766.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,766.0 feet	Noise Source Height:	8.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	20.0	75.8	72.5	77.7	80.0	80.4	80.5
Distance Attenuation	2,766.0	-42.8	-42.8	-42.8	-42.8	-42.8	-42.8
Shielding (Barrier Attenuation)	2,766.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		33.0	29.7	34.9	37.2	37.6	37.7
<b>60 Minute Hourly Adjustment</b>		<b>33.0</b>	<b>29.7</b>	<b>34.9</b>	<b>37.2</b>	<b>37.6</b>	<b>37.7</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R6**

Source: Parking Lot Veh. Movements (Autos)  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,667.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,667.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	15.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	10.0	52.2	49.0	50.0	55.0	61.0	71.9
Distance Attenuation	2,667.0	-36.4	-36.4	-36.4	-36.4	-36.4	-36.4
Shielding (Barrier Attenuation)	2,667.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		15.8	12.6	13.6	18.6	24.6	35.5
<b>60 Minute Hourly Adjustment</b>		<b>15.8</b>	<b>12.6</b>	<b>13.6</b>	<b>18.6</b>	<b>24.6</b>	<b>35.5</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R6**

Source: Trailer Maint./Impact Hammer  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	5,131.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	5,131.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	40.0	73.0	63.6	72.5	79.3	82.3	82.9
Distance Attenuation	5,131.0	-42.2	-42.2	-42.2	-42.2	-42.2	-42.2
Shielding (Barrier Attenuation)	5,131.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		30.8	21.4	30.3	37.1	40.1	40.7
<b>60 Minute Hourly Adjustment</b>		<b>30.8</b>	<b>21.4</b>	<b>30.3</b>	<b>37.1</b>	<b>40.1</b>	<b>40.7</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R6**

Source: Truck Fuel Pump Activity  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	3,416.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	3,416.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	10.0	75.7	74.9	75.4	76.4	80.2	86.8
Distance Attenuation	3,416.0	-50.7	-50.7	-50.7	-50.7	-50.7	-50.7
Shielding (Barrier Attenuation)	3,416.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		25.0	24.2	24.7	25.7	29.5	36.1
<b>60 Minute Hourly Adjustment</b>		<b>25.0</b>	<b>24.2</b>	<b>24.7</b>	<b>25.7</b>	<b>29.5</b>	<b>36.1</b>



## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R7**

Source: Switcher Loading/Unloading  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	3,608.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	3,608.0 feet	Noise Source Height:	8.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	30.0	77.0	74.4	78.2	80.4	84.3	86.5
Distance Attenuation	3,608.0	-41.6	-41.6	-41.6	-41.6	-41.6	-41.6
Shielding (Barrier Attenuation)	3,608.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		35.4	32.8	36.6	38.8	42.7	44.9
<b>60 Minute Hourly Adjustment</b>		<b>35.4</b>	<b>32.8</b>	<b>36.6</b>	<b>38.8</b>	<b>42.7</b>	<b>44.9</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R7**

Source: Switcher/Truck Movements  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,833.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,833.0 feet	Noise Source Height:	8.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	20.0	75.8	72.5	77.7	80.0	80.4	80.5
Distance Attenuation	2,833.0	-43.0	-43.0	-43.0	-43.0	-43.0	-43.0
Shielding (Barrier Attenuation)	2,833.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		32.8	29.5	34.7	37.0	37.4	37.5
<b>60 Minute Hourly Adjustment</b>		<b>32.8</b>	<b>29.5</b>	<b>34.7</b>	<b>37.0</b>	<b>37.4</b>	<b>37.5</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R7**

Source: Parking Lot Veh. Movements (Autos)  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	2,833.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	2,833.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	15.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	10.0	52.2	49.0	50.0	55.0	61.0	71.9
Distance Attenuation	2,833.0	-36.8	-36.8	-36.8	-36.8	-36.8	-36.8
Shielding (Barrier Attenuation)	2,833.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		15.4	12.2	13.2	18.2	24.2	35.1
<b>60 Minute Hourly Adjustment</b>		<b>15.4</b>	<b>12.2</b>	<b>13.2</b>	<b>18.2</b>	<b>24.2</b>	<b>35.1</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R7**

Source: Trailer Maint./Impact Hammer  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134  
Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	5,198.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	5,198.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance	

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	40.0	73.0	63.6	72.5	79.3	82.3	82.9
Distance Attenuation	5,198.0	-42.3	-42.3	-42.3	-42.3	-42.3	-42.3
Shielding (Barrier Attenuation)	5,198.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		30.7	21.3	30.2	37.0	40.0	40.6
<b>60 Minute Hourly Adjustment</b>		<b>30.7</b>	<b>21.3</b>	<b>30.2</b>	<b>37.0</b>	<b>40.0</b>	<b>40.6</b>

## STATIONARY SOURCE NOISE PREDICTION MODEL

3/13/2018

**Observer Location: R7**

Source: Truck Fuel Pump Activity  
Condition: Operational

Project Name: Chino Parcel

Job Number: 11134

Analyst: A. Wolfe

## NOISE MODEL INPUTS

Noise Distance to Observer	3,423.0 feet	<b>Barrier Height:</b>	<b>0.0 feet</b>
Noise Distance to Barrier:	3,423.0 feet	Noise Source Height:	5.0 feet
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0
Barrier Elevation:	0.0 feet		

20 = 6 dBA per doubling of distance  
15 = 4.5 dBA per doubling of distance

## NOISE MODEL PROJECTIONS

Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	10.0	75.7	74.9	75.4	76.4	80.2	86.8
Distance Attenuation	3,423.0	-50.7	-50.7	-50.7	-50.7	-50.7	-50.7
Shielding (Barrier Attenuation)	3,423.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		25.0	24.2	24.7	25.7	29.5	36.1
<b>60 Minute Hourly Adjustment</b>		<b>25.0</b>	<b>24.2</b>	<b>24.7</b>	<b>25.7</b>	<b>29.5</b>	<b>36.1</b>