# **CORAL MOUNTAIN RESORT**

# DRAFT EIR SCH# 2021020310

**TECHNICAL APPENDICES** 

Noise Study Appendix K.1

June 2021



# **Coral Mountain Specific Plan**

NOISE IMPACT ANALYSIS
CITY OF LA QUINTA

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# 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

 $\begin{array}{lll} L_{eq} & & \text{Equivalent continuous (average) sound level} \\ L_{max} & & \text{Maximum level measured over the time interval} \\ L_{min} & & \text{Minimum level measured over the time interval} \end{array}$ 

mph Miles per hour

PPV Peak Particle Velocity

Project Coral Mountain Specific Plan

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 for the proposed Coral Mountain Specific Plan development ("Project"). The Project site is located on the southwest corner of re-aligned Madison Street at 58<sup>th</sup> Avenue in the City of La Quinta. The Project is proposed to consist a master planned themed resort comprised of a recreational pool (wave basin), a 150-key hotel, 104 attached dwelling units, 496 detached dwelling units, 60,000 square feet of retail. The wave basin is a private facility. This study has been prepared consistent with applicable City of La Quinta noise standards, and significance criteria based on guidance provided by Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1)

#### **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 29 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 *Coral Mountain Specific Plan Traffic Impact Analysis*. (2) Based on the significance criteria in outlined in Section 4, the Project-related noise level increases are considered *potentially significant* under Existing with Project conditions at the following two roadway segments:

- Madison Street north of Avenue 58 (Segment 8)
- Avenue 60 west of Madison Street (Segment 27)

All other roadway segments are shown to experience *less than significant* noise level impacts under Existing plus Project conditions. However, this scenario is provided solely for analytical purposes and will not occur, since the Project will not be full developed (Phase 1, 2 & 3) and occupied under Existing 2019 conditions. Therefore, no mitigation measures are considered to reduce the Existing with Project condition traffic noise level increases, and impacts are considered *less than significant* since they will not actually occur. The analysis shows that the unmitigated Project-related traffic noise level increases under all traffic scenarios will be *less than significant*.

#### ON-SITE TRAFFIC NOISE ANALYSIS

An on-site exterior noise analysis has been completed to determine the traffic noise exposure and to identify potential necessary noise abatement measures for the proposed Coral Mountain Specific Plan Project. It is expected that the primary source of noise activity to the Project site will be traffic noise from Avenue 58 and Madison Street.

#### **EXTERIOR NOISE**

To satisfy the City of La Quinta 65 dBA CNEL exterior noise level standards for residential land use, the construction of 6-foot-high noise barriers is required for the low-density residential



development within Planning Area II. With the recommended noise barriers shown on Exhibit ES-A, the future exterior noise levels at the outdoor living areas (backyards) of single-family residential uses in Planning Areas II will be reduced to less than 65.0 dBA CNEL. This noise analysis shows that the recommended 6-foot-high noise barriers will satisfy the City of La Quinta 65 dBA CNEL exterior noise level standards for single-family residential use. Therefore, future on-site exterior traffic noise levels will be *less than significant*.

#### **INTERIOR NOISE**

The interior noise level analysis shows that the City of La Quinta 45 dBA CNEL residential interior noise standards can be satisfied using standard building construction, a windows-closed condition requiring a means of mechanical ventilation (e.g., air conditioning) and standard windows with STC ratings of 27 for all lots/units. Therefore, the future on-site interior traffic noise levels will be *less than significant*.

#### **OPERATIONAL NOISE ANALYSIS**

Using reference noise levels to represent the expected noise sources from the Coral Mountain Specific Plan site, this analysis estimates the Project-related stationary-source noise levels at nearby sensitive receiver locations. The normal activities associated with the proposed Coral Mountain Specific Plan are anticipated to include wave basin/wave machine activity, outdoor pool/spa activity, outdoor activity, and neighborhood commercial land use activity. The operational noise analysis shows that the Project-related stationary-source noise levels at the nearby sensitive receiver locations will satisfy the City of La Quinta daytime exterior noise level standards, with no planned nighttime activities. Therefore, the operational noise impacts are considered *less than significant* at all existing off-site receiver locations. Further, this analysis demonstrates that the Project will contribute a *less than significant* long-term unmitigated operational noise level increase to the existing daytime ambient noise environment at all existing off-site receiver locations.

### **CONSTRUCTION NOISE ANALYSIS**

Construction-related noise impacts are expected to create temporary and intermittent high-level noise conditions at receivers surrounding the Project site. Using sample reference noise levels to represent the planned construction activities of the Coral Mountain Specific Plan site, this analysis estimates the Project-related construction noise levels at nearby sensitive receiver locations. Since the City of La Quinta General Plan and Municipal Codes do not identify specific construction noise level thresholds, a threshold is identified based on the National Institute for Occupational Safety and Health (NIOSH) limits for construction noise. The Project Phase 1 construction noise levels are expected to range from 58.0 to 76.5 dBA Leq at the nearby receiver locations. The Project Phase 2 and Phase 3 construction noise levels are expected to range from 63.7 to 75.8 dBA. The construction noise analysis shows that the nearby receiver locations will satisfy the 85 dBA Leq significance threshold during Project construction activities. Therefore, the



noise impacts due to Project construction noise is considered *less than significant* at all receiver locations.

Though construction noise and vibration are temporary, intermittent and of short duration, and will not present any long-term impacts, the following mitigation measures would reduce noise and vibration levels produced by construction equipment to nearby noise-sensitive uses. Temporary construction-related noise and vibration impacts will be further reduced with the incorporation of the following measures:

- 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 La Quinta
  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.

#### **CONSTRUCTION VIBRATION ANALYSIS**

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. This analysis shows the highest construction vibration levels are expected to range from 0.000 to 0.009 in/sec RMS, which is below the vibration standard of 0.01 in/sec RMS at all receiver locations. Therefore, based on the results of this analysis, all nearby sensitive receiver locations will experience *less than significant* impacts due to Project construction noise levels.

#### **SUMMARY OF CEQA SIGNIFICANCE FINDINGS**

The results of this Coral Mountain Specific Plan 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** 

Analusia	Report	Significance Findings			
Analysis	Section	Unmitigated	Mitigated		
Off-Site Traffic Noise	7	Less Than Significant	-		
On-Site Traffic Noise	8	Less Than Significant	-		
Operational Noise	10	Less Than Significant	-		
Construction Noise	11	Less Than Significant	-		
Construction Vibration	11	Less Than Significant	-		



6' 6' 60TH AVE

**EXHIBIT ES-A: SUMMARY OF ON-SITE RECOMMENDATIONS** 



## **LEGEND:**

**6'** Recommended Noise Barrier Height (in feet)

= Recommended Noise Barrier



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# 1 INTRODUCTION

This noise analysis has been completed to determine the noise impacts associated with the development of the proposed Coral Mountain Specific Plan ("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 transportation 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 Project site is located on the southwest corner of re-aligned Madison Street at 58<sup>th</sup> Avenue in the City of La Quinta, as shown on Exhibit 1-A.

#### 1.2 PROJECT DESCRIPTION

The Project consists of a master planned themed resort comprised of a recreational pool (wave basin), a 150-key hotel, 104 attached dwelling units, 496 detached dwelling units, and 60,000 square feet of retail use. The wave basin is a private facility. The preliminary Project land use plan is presented on Exhibit 1-B.

The Project is anticipated to be constructed in phases, with Phase 1 (2021) including resort (wave basin and hotel uses), 104 attached dwelling units, 26 detached dwelling units, and 10,000 square feet of retail use. Project Phase 2 (2023) adds 25,000 square feet of retail. Project Phase 3 (2026) adds 470 detached dwelling units and 25,000 square feet of retail use.

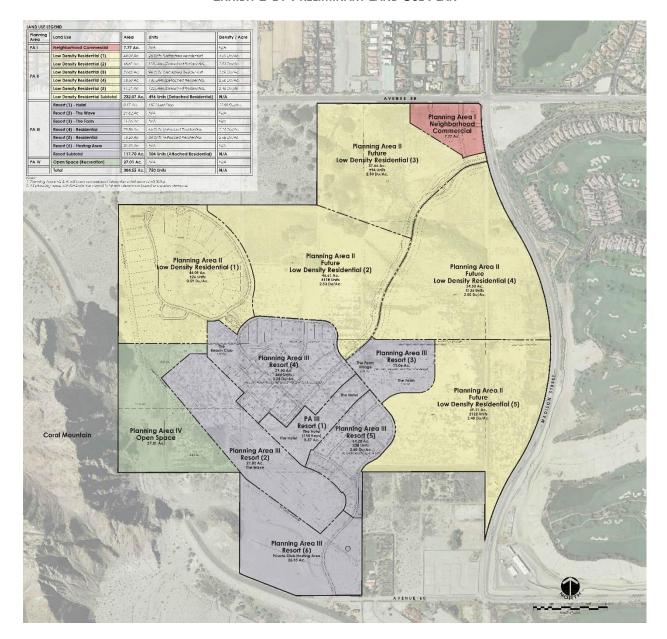


Greg Norman Golf Course Wanged Foot Lake Cahuilla Park Tiburon Dr. PGA West Colf Course View Dr PGA Blud The Palms Golf Club Cahuilla R La Quinta Golf Course Hermitage 58th Ave Aracena Quarry At La Quinta Andalusia O, Fazio Ln<sup>9</sup> SITE Quart Andalusia Country Club Coral Mountain Regional Park Trilogy At La Quinta 61st Ave Rustic Canyon Of 62nd Ave 62 nd Ave Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS

**EXHIBIT 1-A: LOCATION MAP** 

**LEGEND:** 





**EXHIBIT 1-B: PRELIMINARY LAND USE PLAN** 

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# **2 FUNDAMENTALS**

Noise is 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). Aweighted 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			
NEAR JET ENGINE		130	INTOLERABLE OR		
		120	DEAFENING	HEARING LOSS	
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110			
LOUD AUTO HORN		100			
GAS LAWN MOWER AT 1m (3 ft)		90	VERY NOISY		
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	SPEECH INTERFERENCE	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60			
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	SLEEP	
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		DISTURBANCE	
QUIET SUBURBAN NIGHTTIME	LIBRARY	30			
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20	FAINT		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	NO EFFECT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0	VENTIANT		

#### 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 Aweighted 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.

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<sub>eq</sub> sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA L<sub>eq</sub> 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 La Quinta 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 receiver 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 receiver, 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 receiver 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

Receivers 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 receiver can substantially attenuate noise levels at the receiver. 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 residents. 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 receiver by controlling the noise source, transmission path, receiver, or all three. This concept is known as the source-path-receiver 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 up to 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 receiver. 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

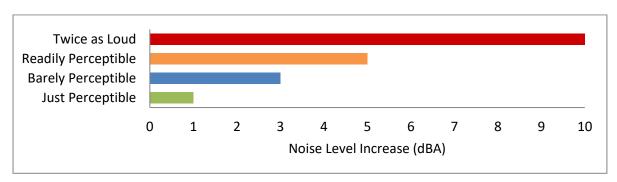
health and growth potential of a community by reducing the area's desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The FHWA encourages State and Local government to regulate 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 (9), 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. (10)

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.

#### 2.9 VIBRATION

Per the Federal Transit Administration (FTA) *Transit Noise Impact and Vibration Assessment* (11), 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), vibration-sensitive equipment and/or activities.

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.

Velocity Typical Sources Level\* (50 ft from source) Human/Structural Response 100 Threshold, minor cosmetic damage Blasting from construction projects fragile buildings Bulldozers and other heavy tracked construction equipment Difficulty with tasks such as 90 reading a VDT screen Commuter rail, upper range 80 Residential annoyance, infrequent Rapid transit, upper range events (e.g. commuter rail) Commuter rail, typical Residential annoyance, frequent Bus or truck over bump events (e.g. rapid transit) Rapid transit, typical Limit for vibration sensitive equipment. Approx. threshold for Bus or truck, typical human perception of vibration 60 Typical background vibration 50

**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. (12) 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 CODE

The State of California's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, and the California Building Code. These noise standards are applied to new construction in California for the purpose of controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are developed near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dBA CNEL or higher. Acoustical studies that accompany building plans for noise-sensitive land uses must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

## 3.3 CITY OF LA QUINTA GENERAL PLAN ENVIRONMENTAL HAZARDS ELEMENT

The City of La Quinta has adopted an Environmental Hazards Element (Chapter 4), Noise section, of the General Plan which identifies areas where noise levels are expected to reach unacceptable levels, and provides policies and programs which will assure that noise levels do not negatively impact the community. (13) 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. To protect City residents from excessive noise, the Environmental Hazards Element contains the following goal related to the Project:

N-1 A healthful noise environment which complements the City's residential and resort character.

The noise policies specified in the City of La Quinta Environmental Hazards Element provide the guidelines necessary to satisfy this goal. To minimize noise impacts to noise-sensitive land uses, the City has established Policy N-1.1 to identify noise standards consistent with the *Land Use Compatibility for Community Noise Environments*, Table IV-3, for various land uses. The Noise Element also provides several policies to minimize noise impacts from transportation, such as Policy N-1.2, which requires a noise study and any necessary mitigation measures for new developments along roadways where the noise levels are in excess of 65 dBA CNEL.

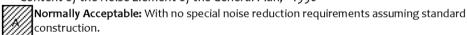
The noise criteria identified in the City of La Quinta Environmental Hazards Element, Noise section, are guidelines to evaluate the land use compatibility of transportation related noise. The compatibility criteria, shown on Exhibit 3-A, provides the City with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels. The *Land Use Compatibility for Community Noise Environments* (Table IV-3) matrix in the City of La Quinta General Plan provides guidelines to evaluate the acceptability of transportation-related noise level impacts. The Project residential and hotel uses, are considered *normally acceptable* with exterior noise levels below 60 dBA CNEL and *conditionally acceptable* with exterior noise levels of up to 70 dBA CNEL. For *conditionally acceptable* land use, the General Plan indicates *new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. (13)* 

Based on the City of La Quinta land use compatibility guidelines for the Project land uses, this noise study has been prepared to satisfy the 65 dBA CNEL exterior noise level criteria in outdoor living areas, and an interior noise standard of 45 dBA CNEL consistent with the State of California Building Code.

CNEL (dBA) **Land Uses** 80 50 55 65 70 Residential - Single Family Dwellings, Duplex, Mobile Homes ld||| Residential – Multiple Family dΠ Transient Lodging: Hotels and Motels School Classrooms, Libraries, Churches, Hospitals, Nursing Homes and **4**11111111 Convalescent Hospitals Auditoriums, Concert Halls, Amphitheaters Sports Arenas, Outdoor Spectator Sports R Playgrounds, Neighborhood Parks Golf Courses, Riding Stables, Water मागागा Recreation, Cemeteries

**EXHIBIT 3-A: LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS** 

Source: California Department of Health Services, "Guidelines for the Preparation and Content of the Noise Element of the General Plan," 1990



Office Buildings, Business, Commercial and

Industrial, Manufacturing, Utilities,

Professional

Agriculture

Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirement is made and needed noise insulation features included in the design

Normally Unacceptable: New construction is discouraged. If new construction does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

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

### 3.4 OPERATIONAL NOISE STANDARDS

To analyze noise impacts originating from a designated fixed location or private property such as the Project, stationary-source (operational) noise such as the expected wave basin/wave machine activity, outdoor pool/spa activity, outdoor activity, and neighborhood commercial land use activity are typically evaluated against standards established under a jurisdiction's Municipal Code.

The City of La Quinta Municipal Code, Ordinance 550, Sections 9.100.210 (B) and (C) establish the noise level standards for stationary noise sources. For residential properties, the exterior noise level shall not exceed 65 dBA  $L_{50}$  during the daytime hours (7:00 a.m. to 10:00 p.m.) and 50 dBA  $L_{50}$  during the nighttime hours. (14) The exterior noise level 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 La Quinta operational noise level standards are shown on Table 3-1 and included in Appendix 3.1.

	Land Use		Exterior Noise Level Standards <sup>1</sup>				
City		Time Period	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> (<1 min)
La Residential, Schools,		7:00 a.m. to 10:00 p.m.	65	70	75	80	85
Quinta <sup>2</sup>	Hospitals & Churches	10:00 p.m. to 7:00 a.m.	50	55	60	65	70

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

#### 3.5 CONSTRUCTION NOISE STANDARDS

To analyze noise impacts originating from the construction of Coral Mountain Specific Plan, noise from construction activities is 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 La Quinta to determine the potential noise impacts at nearby receiver locations.

To control noise impacts associated with the construction of the proposed Project, the City has established limits to the hours of operation. The City of La Quinta Municipal Code, Section 6.08.050 indicates that construction, shall be limited to the hours of 7:00 a.m. to 5:30 p.m. Mondays to Fridays during the months of October to April, and to the hours of 6:00 a.m. to 7:00 p.m. Mondays to Fridays during the months of May to September. All year, construction activities are limited to 8:00 a.m. to 5:00 p.m. on Saturdays, with no activity allowed on Sundays. (14) However, the City's General Plan and Municipal Code do not establish numeric maximum acceptable construction source noise levels at potentially affected receivers, which would allow for a quantified determination of what CEQA constitutes as the *generation of noise levels in* 

<sup>&</sup>lt;sup>1</sup> The noise level exceeded "n" percent of the time during the measurement period. L<sub>25</sub> is the noise level exceeded 25% of the time.

<sup>&</sup>lt;sup>2</sup> Source: City of La Quinta Municipal Code, Ordinance 550, Section 9.100.210 (B) & (C) (Appendix 3.1).

excess of standards or as a substantial temporary or periodic noise increase, the following construction noise level thresholds are used in this noise study.

To evaluate whether the Project will generate potentially significant temporary construction noise levels at off-site sensitive receiver locations, a construction-related noise level threshold is adopted from the Criteria for Recommended Standard: Occupational Noise Exposure prepared by the National Institute for Occupational Safety and Health (NIOSH). (15) A division of the U.S. Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The construction related noise level threshold starts at 85 dBA for more than eight hours per day, and for every 3 dBA increase, the exposure time is cut in half. This results in noise level thresholds of 88 dBA for more than four hours per day, 92 dBA for more than one hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. (15) For the purposes of this analysis, the lowest, more conservative construction noise level threshold of 85 dBA Leq is used as an acceptable threshold for construction noise at the nearby sensitive receiver locations. Since this construction-related noise level threshold represents the energy average of the noise source over a given time, they are expressed as Leg noise levels. Therefore, the noise level threshold of 85 dBA Leg over a period of eight hours or more is used to evaluate the potential Project-related construction noise level impacts at the nearby sensitive receiver locations.

#### 3.6 CONSTRUCTION VIBRATION STANDARDS

Since the City of La Quinta does not identify specific construction vibration level standards, the County of Riverside General Plan Noise Element Policy N 16.3 vibration standards are used in this noise study. Policy N 16.3 identifies a motion velocity perception threshold for vibration due to passing trains of 0.01 inches per second (in/sec) over the range of one to 100 Hz. (16) For the purposes of this analysis, the perception threshold of 0.01 in/sec shall be used to assess the potential impacts due to Project construction at nearby sensitive receiver locations.

Typically, the human response at the perception threshold for vibration includes annoyance in residential areas as previously shown on Exhibit 2-C, when vibration levels expressed in vibration decibels (VdB) approach 75 VdB. The County of Riverside, however, identifies a vibration perception threshold of 0.01 in/sec. For vibration levels expressed in velocity, the human body responds to the average vibration amplitude often described as the root-mean-square (RMS). The RMS of a signal is the average of the squared amplitude of the signal, typically calculated over a one-second period. As with airborne sound, the RMS velocity is often expressed in decibel notation as vibration decibels (VdB), which serves to reduce the range of numbers used to describe human response to vibration. Therefore, the County of Riverside vibration standard of 0.01 in/sec in RMS velocity levels is used in this analysis to assess the human perception of vibration levels due to Project-related construction activities.

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# 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. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- B. Generation of excessive ground-borne vibration or ground-borne noise levels?
- C. For a project located within the vicinity of a private airstrip or 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, would the project expose people residing or working in the project area to excessive noise levels?

While the City of La Quinta General Plan provide direction on noise compatibility and establish noise standards by land use type that are sufficient to assess the significance of noise impacts, they do not define the levels at which increases are considered substantial for use under Significance Criteria A. CEQA Appendix G Significance Criteria C applies to nearby public and private airports, if any, and the Project's land use compatibility.

# 4.1 CEQA GUIDELINES NOT FURTHER ANALYZED

The Project site is located roughly 19 miles southeast of Palm Springs International Airport, and five miles west of the Jacqueline Cochran Regional Airport. Therefore, the Project site is not located within two miles of a public airport or the vicinity of a private airstrip, and as such, no impact related to the exposure of people residing or working in the Project area to excessive airport related noise levels is anticipated.

#### 4.2 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. 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) (17) 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 (CNEL) and equivalent continuous noise level (Leq.).

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 the 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.

#### 4.3 SIGNIFICANCE CRITERIA SUMMARY

Noise impacts shall be considered significant if any of the following occur as a direct result of the proposed development. The significance criteria is shown on Table 4-2.

#### **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
  - o already exceed 65 dBA CNEL, and the Project creates a community noise level increase of greater than 1.5 dBA CNEL (FICON, 1992).

#### **ON-SITE TRAFFIC NOISE**

• If the on-site exterior noise levels exceed 65 dBA CNEL at the private outdoor living areas of residential homes, or common outdoor areas at hotel uses. Interior noise levels shall not exceed 45 dBA CNEL for residential homes and the hotel building (City of La Quinta Municipal Code, Ordinance 550, Section 9.100.210 (B) & General Plan Noise Element Policy N-1.2).

#### **OPERATIONAL NOISE**

- If Project-related operational (stationary-source) noise levels:
  - exceed the exterior 65 dBA L<sub>eq</sub> daytime or 50 dBA L<sub>eq</sub> nighttime noise level standards for residential and hotel land uses. (City of La Quinta Municipal Code, Ordinance 550, Section 9.100.210 (B) & (C)).
- If the existing ambient noise levels at the nearby noise-sensitive receivers near the Project site:
  - are less than 60 dBA L<sub>eq</sub> and the Project creates a readily perceptible 5 dBA L<sub>eq</sub> or greater
     Project-related noise level increase: or
  - range from 60 to 65 dBA L<sub>eq</sub> and the Project creates a barely perceptible 3 dBA L<sub>eq</sub> or greater Project-related noise level increase: or
  - $\circ$  already exceed 65 dBA L<sub>eq</sub>, and the Project creates a community noise level increase of greater than 1.5 dBA L<sub>eq</sub> (FICON, 1992).

#### **CONSTRUCTION NOISE & VIBRATION**

- If Project-related construction activities create noise levels which exceed the 85 dBA L<sub>eq</sub> acceptable noise level threshold at the nearby sensitive receiver locations (NIOSH, Criteria for Recommended Standard: Occupational Noise Exposure).
- If short-term Project generated construction vibration levels exceed the County of Riverside vibration standard of 0.01 in/sec RMS at sensitive receiver locations (County of Riverside General Plan Noise Element, Policy N 16.3).

**TABLE 4-2: SIGNIFICANCE CRITERIA SUMMARY** 

Australia	Receiving	C	Significance Criteria		
Analysis	Land Use	Condition(s)	Daytime	Nighttime	
	Noise- Sensitive	If ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase		
Off-Site Traffic Noise <sup>1</sup>		If ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase		
Trainic Noise		If ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase		
On-Site		Exterior Noise Level Criteria	65 dBA CNEL		
Traffic Noise		Interior Noise Level Standard	45 dBA CNEL		
		Exterior Noise Level Standards	See Table 3-1.		
Operational		if ambient is $<$ 60 dBA $L_{\text{eq}}$	≥ 5 dBA L <sub>eq</sub> Project increase		
Noise <sup>3</sup>		if ambient is 60 - 65 dBA L <sub>eq</sub>	≥ 3 dBA L <sub>eq</sub> Project increase		
		if ambient is $>$ 65 dBA $L_{\text{eq}}$	≥ 1.5 dBA L <sub>eq</sub> Project increase		
Construction <sup>4</sup>		Noise Level Threshold	85 dBA L <sub>eq</sub>	n/a	
Construction		Vibration Level Threshold	0.01 in/sec RMS	n/a	

<sup>&</sup>lt;sup>1</sup> Source: FICON, 1992.

<sup>&</sup>lt;sup>2</sup> Sources: City of La Quinta General Plan Noise Element & California Building Code.

<sup>&</sup>lt;sup>3</sup> Sources: City of La Quinta Municipal Code, Section 6.08.050 (Appendix 3.1) and FICON guidance.

<sup>&</sup>lt;sup>4</sup> Sources: NIOSH, Criteria for Recommended Standard: Occupational Noise Exposure and County of Riverside General Plan Noise Element, Policy 16.3.

<sup>&</sup>quot;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, 24-hour noise level measurements were taken at ten 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 October 16<sup>th</sup>, 2019. 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. (18)

#### **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 every 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. (11)

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. (11) 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. Additional median noise levels ( $L_{50}$ ) are provided on Table 5-1 consistent with the City of La Quinta Municipal Code exterior noise level standards. Appendix 5.2 provides a summary of the existing hourly ambient noise levels described below:

- Location L1 represents the noise located on 58th Avenue in front of entrance to Coral Mountain and west of Salida del Sol. The noise levels at this location consist primarily of traffic noise from 58th Avenue and background residential land use noise source activities. The noise level measurements collected show an overall 24-hour exterior noise level of 58.5 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 54.2 dBA L<sub>eq</sub> with an average nighttime noise level of 51.5 dBA L<sub>eq</sub>.
- Location L2 represents the noise levels on 58th Avenue south of a single-family residential home at 57925 Barristo Circle. The noise levels at this location consist primarily of traffic noise from 58th Avenue and background residential land use noise source activities. The noise level measurements collected show an overall 24-hour exterior noise level of 67.6 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 62.5 dBA L<sub>eq</sub> with an average nighttime noise level of 60.7 dBA L<sub>eq</sub>.
- Location L3 represents the noise levels located northeast of Madison Street and 58th Avenue
  adjacent to wall enclosing golf course. The noise levels at this location consist primarily of
  traffic noise from 58th Avenue and Madison Street. The noise level measurements collected
  show an overall 24-hour exterior noise level of 63.6 dBA CNEL. The energy (logarithmic)
  average daytime noise level was calculated at 61.2 dBA L<sub>eq</sub> with an average nighttime noise
  level of 55.6 dBA L<sub>eq</sub>.
- Location L4 represents the noise levels southeast of Madison Street and 58th Avenue. The
  noise level measurements collected show an overall 24-hour exterior noise level of 60.1 dBA
  CNEL. The energy (logarithmic) average daytime noise level was calculated at 54.5 dBA L<sub>eq</sub>
  with an average nighttime noise level of 53.2 dBA L<sub>eq</sub>. The noise levels at this location consist
  primarily of traffic noise from Street and 58th Avenue
- Location L5 represents the noise levels south of 58th Avenue outside northwest corner of the Analusia Country Club. The 24-hour CNEL indicates that the overall exterior noise level is 63.3 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 59.7 dBA L<sub>eq</sub> with an average nighttime noise level of 56.1 dBA L<sub>eq</sub>. Noise levels at this location are primarily due to traffic from Madison Street, 58<sup>th</sup> Avenue, and background residential land use activities.
- Location L6 represents the noise levels on Calle Conchita southeast of an existing single-family residential home at 80900 Calle Conchita. Noise levels at this location are primarily from traffic on Madison Street. The noise level measurements collected show an overall 24-hour

- exterior noise level of 63.0 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 58.7 dBA L<sub>eq</sub> with an average nighttime noise level of 55.8 dBA L<sub>eq</sub>.
- Location L7 represents noise levels on 60th Avenue north of gated entrance to a future single-family residential community. The noise level measurements collected show an overall 24-hour exterior noise level of 63.1 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 57.9 dBA L<sub>eq</sub> with an average nighttime noise level of 56.1 dBA L<sub>eq</sub>. The noise levels at this location primarily consist of traffic on 60th Ave. and background residential land use.
- Location L8 represents noise levels on the western end of 60th Avenue south of an existing single-family residential home at 80800 60th Avenue. Noise levels at this location are primarily from background residential use. The noise level measurements collected show an overall 24-hour exterior noise level of 47.3 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 43.8 dBA L<sub>eq</sub> with an average nighttime noise level of 39.9 dBA L<sub>eq</sub>.
- Location L9 represents noise levels on Jefferson Street north of Quarry Lane. Noise levels at this location are primarily from traffic on Jefferson Street. The noise level measurements collected show an overall 24-hour exterior noise level of 56.0 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 51.7 dBA L<sub>eq</sub> with an average nighttime noise level of 48.9 dBA L<sub>eq</sub>.
- Location L10 represents the noise levels on 58th Avenue. east of 58th Avenue. and Stone Creek Way intersection. Noise levels at this location primarily consist of traffic on 58th Avenue. The noise level measurements collected show an overall 24-hour exterior noise level of 63.3 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 61.9 dBA L<sub>eq</sub> with an average nighttime noise level of 54.2 dBA L<sub>eq</sub>.

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<sub>1</sub>, L<sub>2</sub>, L<sub>5</sub>, L<sub>8</sub>, L<sub>25</sub>, L<sub>50</sub>, L<sub>90</sub>, L<sub>95</sub>, and L<sub>99</sub> 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. 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>	Description	Noise	Average Level L <sub>eq</sub> ) <sup>2</sup>	CNEL
		Daytime	Nighttime	
L1	Located on 58th Ave. in front of entrance to Coral Mountain and west of Salida del Sol.	54.2	51.5	58.5
L2	Located on 58th Ave. south of home at 57925 Barristo Cir.	62.5	60.7	67.6
L3	Located northeast of Madison St. and 58th Ave. adjacent to wall enclosing golf course.	61.2	55.6	63.6
L4	Located on the southeast corner of 58th Ave, and Madison St.	54.5	53.2	60.1
L5	Located south of 58th Ave. outside northwest corner of the Analusia Country Club.	59.7	56.1	63.3
L6	Located on Calle Conchita southeast of home at 80900 Calle Conchita.	58.7	55.8	63.0
L7	Located on 60th Ave. north of gated entrance to single family homes.	57.9	56.1	63.1
L8	Located towards the western end of 60th Ave. south of home at 80800 60th Ave.	43.8	39.9	47.3
L9	Located on Jefferson St. north of Quarry Ln.	51.7	48.9	56.0
L10	Located on 58th Ave. slightly east of 58th Ave. and Stone Creek Way intersection.	61.9	54.2	63.3

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

 $<sup>^2</sup>$  Energy (logarithmic) average 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.

SITE 60TH AVE

**EXHIBIT 5-A: NOISE MEASUREMENT LOCATIONS** 



**LEGEND:** 

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 expected roadway noise level increases from vehicular traffic were calculated using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model- FHWA-RD-77-108. (19) 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. (20) Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period. Research conducted by Caltrans has shown that the use of soft site conditions is appropriate for the application of the FHWA traffic noise prediction model used in this analysis. (21)

This methodology is consistent with the County of Riverside Office of Industrial Hygiene Requirements for Determining and Mitigating Traffic Noise Impacts to Residential Structures, which specifically requires the FHWA RD-77-108 model to be used in analysis within the County's jurisdiction. (22)

#### 6.1.1 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 29 study area roadway segments, the distance from the centerline to adjacent land use based on the functional roadway classifications per the City of La Quinta General Plan Circulation Element, and the posted vehicle speeds. Consistent with *Coral Mountain Specific Plan Traffic Impact Analysis* prepared by Urban Crossroads, Inc. (2) the off-site traffic noise analysis maintains a peak hour to average daily traffic (peak-to-daily) relationship of approximately 9.30% and includes the following traffic scenarios.

- Existing (2019)
- Existing Plus Project (E+P)
- Existing Plus Ambient Growth Plus Project (EAP)
- Existing Plus Ambient Growth Plus Cumulative Projects without and with Project for each of the following phases (EAC and EAPC):
  - o Project Phase 1 (2021)
  - Project Phase 2 (2023)

- o Project Buildout (Phase 3, 2026)
- o Project Buildout (Phase 3, 2026) Special Event
- General Plan buildout (2040) Without Project Conditions establishes future year baseline to evaluate the proposed Project.
- General Plan buildout (2040) With Project Conditions represents future year baseline traffic conditions with the proposed Project.

The average daily traffic (ADT) volumes used for this study are presented on Table 6-2. Table 6-3 provides the time of day (daytime, evening, and nighttime) vehicle splits and Table 6-4 presents the traffic flow distributions (vehicle mix) used for this analysis. The vehicle mix provides the hourly distribution percentages of automobile, medium trucks, and heavy trucks for input into the FHWA noise prediction model.

**TABLE 6-1: OFF-SITE ROADWAY PARAMETERS** 

ID	Roadway	Segment	Location	Adjacent Land Use <sup>1</sup>	Roadway Classification <sup>2</sup>	Distance From Centerline To Nearest Adjacent Land Use (Feet) <sup>2</sup>	Vehicle Speed (mph) <sup>3</sup>
1	Jefferson St.	n/o Avenue 50	City of La Quinta	GC/LDR	Major Arterial	64'	55
2	Jefferson St.	n/o Avenue 52	City of La Quinta	y of La Quinta LDR/MHR/OS/GC Major Arterial		64'	55
3	Jefferson St.	n/o Avenue 54	City of La Quinta	MHR/OS	Major Arterial	64'	55
4	Madison St.	n/o Avenue 50	City of La Quinta	Festival District	Primary Arterial	54'	50
5	Madison St.	n/o Avenue 52	City of La Quinta	LDR	Primary Arterial	54'	50
6	Madison St.	n/o Avenue 54	City of La Quinta	cy of La Quinta LDR Primary Arter		54'	50
7	Madison St.	n/o Airport Bl.	City of La Quinta	LDR/OS	Primary Arterial	54'	50
8	Madison St.	n/o Avenue 58	City of La Quinta	LDR/OS	Primary Arterial	54'	50
9	Madison St.	n/o Avenue 60	City of La Quinta	LDR/GC	Secondary Arterial	51'	45
10	Monroe St.	n/o Avenue 50	City of Indio	LDR	Boulevard	64'	50
11	Monroe St.	n/o Avenue 52	City of Indio	LDR	Boulevard	64'	50
12	Monroe St.	n/o Avenue 54	City of La Quinta	LDR	Primary Arterial	54'	50
13	Monroe St.	n/o Airport Bl.	City of La Quinta	LDR	Primary Arterial	54'	50
14	Monroe St.	n/o Avenue 58	City of La Quinta	LDR/GC	Primary Arterial	54'	50
15	Monroe St.	n/o Avenue 60	City of La Quinta	LDR/GC	Primary Arterial	54'	50
16	Avenue 50	w/o Jefferson St.	City of La Quinta	LDR/GC	Primary Arterial	54'	50
17	Avenue 50	w/o Madison St.	City of La Quinta	LDR/GC	Primary Arterial	54'	50
18	Avenue 50	e/o Monroe St.	City of Indio	LDR	Boulevard	64'	50
19	Avenue 52	w/o Monroe St.	City of La Quinta	GC/OS	Primary Arterial	54'	50
20	Avenue 54	w/o Madison St.	City of La Quinta	LDR/MHR/GC/OS	Primary Arterial	54'	50
21	Avenue 54	w/o Monroe St.	City of La Quinta	LDR/MHR/OS	Primary Arterial	54'	50
22	Airport Bl.	w/o Monroe St.	City of La Quinta	LDR/OS	Primary Arterial	54'	50
23	Avenue 58	w/o Madison St.	City of La Quinta	LDR/MHR	Secondary Arterial	51'	45
24	Avenue 58	w/o Monroe St.	City of La Quinta	LDR/MCF	Secondary Arterial	51'	45



ID	Roadway	Segment	Location	Adjacent Land Use <sup>1</sup>	Roadway Classification <sup>2</sup>	Distance From Centerline To Nearest Adjacent Land Use (Feet) <sup>2</sup>	Vehicle Speed (mph) <sup>3</sup>
25	Avenue 58	w/o Jackson St.	Riverside County	LDR	Major	59'	50
26	Avenue 58	e/o Jackson St.	Riverside County	LDR	Major	59'	50
27	Avenue 60	w/o Madison St.	City of La Quinta	LDR	Collector	40'	40
28	Avenue 60	w/o Monroe St.	City of La Quinta	LDR/MHR/OS	Secondary Arterial	51'	45
29	Avenue 60	e/o Monroe St.	Riverside County	LDR/MHR	Arterial	64'	50

<sup>&</sup>lt;sup>1</sup> Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.

**TABLE 6-2: AVERAGE DAILY TRAFFIC VOLUMES** 

				Average Daily Traffic (1,000's) <sup>1</sup>												
ID	Poodway	adway Segment	Existing 2019		E	EA		EAC 2021		EAC 2023		2026	EACSE 2026		General Plan	
ID Road	Roduway		No Project	With Project	No Project	With Project	No Project	With Project	No Project	With Project	No Project	With Project	No Project	With Project	No Project	With Project
1	Jefferson St.	n/o Avenue 50	22.8	23.3	28.2	28.7	32.0	32.1	33.8	33.9	36.5	37.0	36.5	37.0	51.5	52.0
2	Jefferson St.	n/o Avenue 52	16.2	16.9	19.4	20.1	22.9	23.0	24.0	24.1	25.8	26.5	25.8	26.5	34.3	35.0
3	Jefferson St.	n/o Avenue 54	12.7	13.6	16.3	17.2	18.4	18.6	19.8	20.0	21.7	22.5	21.7	22.6	32.2	33.0
4	Madison St.	n/o Avenue 50	5.9	6.4	9.0	9.5	8.2	8.3	9.1	9.2	10.8	11.3	10.8	11.3	22.5	23.0
5	Madison St.	n/o Avenue 52	6.9	7.7	11.3	12.1	9.4	9.5	10.9	11.0	13.3	14.0	13.3	14.0	32.3	33.0
6	Madison St.	n/o Avenue 54	4.5	5.8	7.5	8.8	7.5	7.8	8.6	8.9	10.4	11.7	10.4	11.8	23.7	25.0
7	Madison St.	n/o Airport Bl.	9.4	11.9	15.2	17.7	13.8	14.4	15.3	16.0	18.2	20.7	18.2	21.0	42.5	45.0
8	Madison St.	n/o Avenue 58	6.7	9.7	10.7	13.7	11.3	12.1	12.3	13.3	14.3	17.4	14.3	18.0	31.0	34.0
9	Madison St.	n/o Avenue 60	2.8	3.9	5.1	6.2	4.7	5.0	5.4	5.8	6.6	7.6	6.6	7.9	19.0	20.0
10	Monroe St.	n/o Avenue 50	9.6	10.1	10.2	10.7	12.8	12.9	13.2	13.3	13.8	14.3	13.8	14.3	15.1	15.6



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

<sup>&</sup>lt;sup>3</sup> Source: The Wave-Coral Mountain Traffic Impact Analysis, Urban Crossroads, Inc.

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

								Averag	e Daily T	raffic (1	,000's)¹					
ID	Doodway	Segment	Existin	g 2019	E	A	EAC	2021	EAC	2023	EAC	2026	EACSE	2026	Gener	al Plan
ID	Roadway	Segment	No Project	With Project												
11	Monroe St.	n/o Avenue 52	7.5	8.2	9.7	10.4	10.7	10.8	11.7	11.8	13.1	13.8	13.1	13.8	19.3	20.0
12	Monroe St.	n/o Avenue 54	5.1	5.9	8.9	9.7	8.5	8.6	10.3	10.4	12.9	13.6	12.9	13.6	31.3	32.0
13	Monroe St.	n/o Airport Bl.	3.9	4.6	7.6	8.3	6.8	6.9	9.2	9.3	12.6	13.3	12.6	13.3	34.3	35.0
14	Monroe St.	n/o Avenue 58	3.4	4.4	6.1	7.1	6.7	6.9	9.0	9.3	12.0	13.1	12.0	13.2	24.9	26.0
15	Monroe St.	n/o Avenue 60	2.7	2.9	5.2	5.4	6.4	6.4	9.2	9.2	12.6	12.8	12.6	12.9	26.8	27.0
16	Avenue 50	w/o Jefferson St.	12.9	13.4	13.0	13.5	16.7	16.8	16.8	16.9	17.0	17.5	17.0	17.5	17.2	17.7
17	Avenue 50	w/o Madison St.	11.2	11.4	14.6	14.8	14.6	14.6	15.7	15.7	17.4	17.6	17.4	17.7	27.8	28.0
18	Avenue 50	e/o Monroe St.	9.3	9.5	11.9	12.1	11.1	11.1	11.9	11.9	13.3	13.5	13.3	13.6	20.8	21.0
19	Avenue 52	w/o Monroe St.	7.9	8.3	11.2	11.6	11.5	11.6	12.6	12.7	14.2	14.6	14.2	14.6	25.7	26.0
20	Avenue 54	w/o Madison St.	8.6	9.5	12.8	13.7	10.9	11.1	12.4	12.6	14.7	15.5	14.7	15.6	30.2	31.0
21	Avenue 54	w/o Monroe St.	5.3	5.6	7.7	8.0	6.5	6.6	7.7	7.8	9.3	9.7	9.3	9.7	17.7	18.0
22	Airport Bl.	w/o Monroe St.	2.0	2.3	4.0	4.3	2.9	3.0	3.5	3.6	4.4	4.8	4.4	4.8	16.7	17.0
23	Avenue 58	w/o Madison St.	1.6	2.2	2.8	3.4	4.8	5.1	5.0	5.5	5.7	6.2	5.7	6.7	11.9	12.5
24	Avenue 58	w/o Monroe St.	2.3	4.1	3.8	5.6	4.8	5.3	5.2	5.8	5.9	7.8	5.9	8.2	12.2	14.0
25	Avenue 58	w/o Jackson St.	1.8	2.7	3.8	4.7	2.7	2.9	3.6	3.8	4.9	5.7	4.9	5.8	18.2	19.0
26	Avenue 58	e/o Jackson St.	1.4	2.0	2.6	3.2	2.1	2.3	2.5	2.7	3.3	3.9	3.3	4.0	9.4	10.0
27	Avenue 60	w/o Madison St.	0.1	1.3	0.6	1.8	0.7	0.9	0.8	1.0	1.1	2.3	1.1	2.3	20.8	22.0
28	Avenue 60	w/o Monroe St.	3.2	4.5	6.0	7.3	4.7	5.1	5.4	5.9	6.9	8.2	6.9	8.5	22.7	24.0
29	Avenue 60	e/o Monroe St.	1.2	1.9	2.5	3.2	4.4	4.6	4.8	5.1	5.7	6.4	5.7	6.6	14.3	15.0



<sup>&</sup>lt;sup>1</sup> Source: Coral Mountain Specific Plan Traffic Impact Analysis, Urban Crossroads, Inc.
"EA" = Existing plus Ambient Growth; "EAC" = EA plus Cumulative; "EACSE" = EAC Special Event

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

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

<sup>&</sup>lt;sup>1</sup> Source: Typical Southern California vehicle mix.

TABLE 6-4: DISTRIBUTION OF TRAFFIC FLOW BY VEHICLE TYPE (VEHICLE MIX)

Classification		Total % Traffic Flow		Total
Classification	Autos	Medium Trucks	Heavy Trucks	Total
All Roadways <sup>1</sup>	97.42%	1.84%	0.74%	100.00%

<sup>&</sup>lt;sup>1</sup> Source: Typical Southern California vehicle mix and the County of Riverside Office of Industrial Hygiene.

#### 6.1.2 On-Site Traffic Noise Prediction Model Inputs

The on-site roadway parameters including the average daily traffic (ADT) volumes used for this study are presented on Table 6-5. To predict the future on-site noise environment at the Project site, parameters including the number of lanes and daily volume thresholds were obtained from the City of La Quinta General Plan Transportation Element and *Coral Mountain Specific Plan Traffic Impact Analysis*. For the purposes of this analysis, soft site conditions were used to analyze the on-site traffic noise impacts for the Project study area. Soft site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. Research by Caltrans has shown that the use of soft site conditions is appropriate for the application of the FHWA traffic noise prediction model used in this analysis. (21)

**TABLE 6-5: ON-SITE ROADWAY PARAMETERS** 

Roadway	Lanes	Classification <sup>1</sup>	Average Daily Traffic Volume <sup>1</sup>	Speed Limit (mph) <sup>2</sup>	Site Conditions
Avenue 58	4	Secondary Arterial	12,500	45	Soft
Madison Street	4	Secondary Arterial	20,000	45	Soft

<sup>&</sup>lt;sup>1</sup> Source: The Wave at Coral Mountain Traffic Impact Analysis General Plan Buildout (2040)

The site plan is used to identify the relationship between the roadway centerline elevation, the pad elevation and the centerline distance to any intervening noise barriers, and the building façade. The exterior noise level impacts were placed five feet above the finished floor elevation at the outdoor living areas and proposed building façades. Second-floor receivers were located 14 feet above the finished floor elevation.



<sup>&</sup>quot;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.

<sup>&</sup>lt;sup>2</sup> Posted speed limit.

### **6.2** VIBRATION ASSESSMENT

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 various types of construction equipment are summarized on Table 6-6. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential Project construction vibration levels using the following vibration assessment methods defined by the FTA. The FTA provides the following equation:  $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$ 

TABLE 6-6: 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



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## 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 *Coral Mountain Specific Plan 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:

- <u>Existing Without / With Project</u>: This scenario refers to the existing present-day 2019 noise conditions, without and with the development of the full Project (Phase 3). The Existing With Project scenario will not actually occur since the Project would not be fully constructed and operational until Phase 3 2026 conditions.
- Existing plus Ambient (EA) Without / With Project: This scenario refers to the existing presentday 2019 noise conditions plus the estimated 7 years of background growth in ambient traffic conditions without and with the development of the full Project (Phase 3).
- Existing plus Ambient plus Cumulative (EAC) 2021 Without / With Project: This scenario refers to
  the existing plus ambient plus cumulative noise conditions at 2021 without and with the proposed
  Project Phase 1. Project Phase 1 includes the 12-acre wave basin facility, a 150-key hotel, 96
  multifamily attached dwelling units, 26 single family detached dwelling units, and 10,000 square
  feet of retail
- Existing plus Ambient plus Cumulative (EAC) 2023 Without / With Project: This scenario refers to the existing plus ambient plus cumulative noise conditions at 2023 without and with the proposed Project Phase 2. In addition, to Project Phase 1, Project Phase 2 includes an additional 25,000 square feet of retail for a total of 12-acre wave basin facility, a 150-key hotel, 104 multifamily attached dwelling units, 26 single family detached dwelling units, and 35,000 square feet of retail
- Existing plus Ambient plus Cumulative (EAC) 2026 Without / With Project: This scenario refers to
  the existing plus ambient plus cumulative noise conditions at 2026 without and with the proposed
  Project Phase 3. In addition, to Project Phase 1 and 2, Project Phase 3 includes an additional
  25,000 square feet of retail and 470 single family detached dwelling units for a total of 12-acre
  wave basin facility, a 150-key hotel, 104 multifamily attached dwelling units, 496 single family
  detached dwelling units, 60,000 square feet of retail.
- Existing plus Ambient plus Cumulative (EAC) 2026 Special Events: This scenario refers to the existing plus ambient plus cumulative plus special events noise conditions at 2026 with the proposed Project Phase 3. The applicant anticipates the potential occurrence of special events at this location involving attendance of not-to-exceed 2,500 guests per day arriving or departing on Saturdays (up to 4 events per year).
- General Plan (GP) 2040 Without / With Project: This scenario refers to the future General Plan buildout conditions at Year 2040 without and with the proposed Project. This scenario represents buildout of the General Plan land use 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 Increase from the surrounding stationary noise sources within the Project study area. Tables 7-1 and 7-14 present a summary of the exterior traffic noise levels for each traffic condition. Appendix 7.1 includes the traffic noise level contours worksheets for each traffic condition.



TABLE 7-1: EXISTING 2019 WITHOUT PROJECT CONDITIONS NOISE CONTOURS

			Adjacent	CNEL at Nearest		nce to Co enterline	
ID	Road	Segment	Land Use <sup>1</sup>	Adjacent Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Jefferson St.	n/o Avenue 50	GC/LDR	71.8	85	182	393
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	70.3	67	145	313
3	Jefferson St.	n/o Avenue 54	MHR/OS	69.3	57	123	266
4	Madison St.	n/o Avenue 50	Festival District	65.6	28	59	128
5	Madison St.	n/o Avenue 52	LDR	66.3	31	66	142
6	Madison St.	n/o Avenue 54	LDR	64.4	23	50	107
7	Madison St.	n/o Airport Bl.	LDR/OS	67.6	38	81	175
8	Madison St.	n/o Avenue 58	LDR/OS	66.2	30	65	139
9	Madison St.	n/o Avenue 60	LDR/GC	61.5	14	30	64
10	Monroe St.	n/o Avenue 50	LDR	66.2	36	77	166
11	Monroe St.	n/o Avenue 52	LDR	65.1	30	65	141
12	Monroe St.	n/o Avenue 54	LDR	65.0	25	54	116
13	Monroe St.	n/o Airport Bl.	LDR	63.8	21	45	97
14	Monroe St.	n/o Avenue 58	LDR/GC	63.2	19	41	89
15	Monroe St.	n/o Avenue 60	LDR/GC	62.2	16	35	76
16	Avenue 50	w/o Jefferson St.	LDR/GC	69.0	46	100	216
17	Avenue 50	w/o Madison St.	LDR/GC	68.4	42	91	196
18	Avenue 50	e/o Monroe St.	LDR	66.1	35	75	162
19	Avenue 52	w/o Monroe St.	GC/OS	66.9	33	72	155
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	67.3	35	76	165
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	65.2	26	55	119
22	Airport Bl.	w/o Monroe St.	LDR/OS	60.9	13	29	62
23	Avenue 58	w/o Madison St.	LDR/MHR	59.1	10	20	44
24	Avenue 58	w/o Monroe St.	LDR/MCF	60.6	12	26	56
25	Avenue 58	w/o Jackson St.	LDR	59.4	12	25	54
26	Avenue 58	e/o Jackson St.	LDR	58.3	10	21	45
27	Avenue 60	w/o Madison St.	LDR	46.9	1	2	5
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	62.1	15	33	70
29	Avenue 60	e/o Monroe St.	LDR/MHR	57.3	9	20	42

<sup>&</sup>lt;sup>1</sup> Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



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

<sup>&</sup>quot;RW" = Location of the respective noise contour falls within the right-of-way of the road.

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

TABLE 7-2: EXISTING 2019 WITH PROJECT CONDITIONS NOISE CONTOURS

			Adjacent	CNEL at Nearest		nce to Co enterline	
ID	Road	Segment	Land Use <sup>1</sup>	Adjacent Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Jefferson St.	n/o Avenue 50	GC/LDR	71.9	86	185	398
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	70.5	69	149	322
3	Jefferson St.	n/o Avenue 54	MHR/OS	69.6	60	129	278
4	Madison St.	n/o Avenue 50	Festival District	66.0	29	63	135
5	Madison St.	n/o Avenue 52	LDR	66.8	33	71	153
6	Madison St.	n/o Avenue 54	LDR	65.5	27	59	127
7	Madison St.	n/o Airport Bl.	LDR/OS	68.7	44	95	204
8	Madison St.	n/o Avenue 58	LDR/OS	67.8	38	83	178
9	Madison St.	n/o Avenue 60	LDR/GC	62.9	17	37	80
10	Monroe St.	n/o Avenue 50	LDR	66.4	37	80	172
11	Monroe St.	n/o Avenue 52	LDR	65.5	32	69	149
12	Monroe St.	n/o Avenue 54	LDR	65.6	28	59	128
13	Monroe St.	n/o Airport Bl.	LDR	64.5	23	50	108
14	Monroe St.	n/o Avenue 58	LDR/GC	64.3	23	49	105
15	Monroe St.	n/o Avenue 60	LDR/GC	62.5	17	37	80
16	Avenue 50	w/o Jefferson St.	LDR/GC	69.2	48	103	221
17	Avenue 50	w/o Madison St.	LDR/GC	68.5	43	92	199
18	Avenue 50	e/o Monroe St.	LDR	66.2	36	76	165
19	Avenue 52	w/o Monroe St.	GC/OS	67.1	35	75	161
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	67.7	38	82	176
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	65.4	27	57	124
22	Airport Bl.	w/o Monroe St.	LDR/OS	61.5	15	32	68
23	Avenue 58	w/o Madison St.	LDR/MHR	60.4	12	25	55
24	Avenue 58	w/o Monroe St.	LDR/MCF	63.1	18	38	83
25	Avenue 58	w/o Jackson St.	LDR	61.2	15	33	70
26	Avenue 58	e/o Jackson St.	LDR	59.9	12	27	58
27	Avenue 60	w/o Madison St.	LDR	58.0	6	14	30
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	63.5	19	41	88
29	Avenue 60	e/o Monroe St.	LDR/MHR	59.3	12	27	57

<sup>&</sup>lt;sup>1</sup> Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



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

<sup>&</sup>quot;RW" = Location of the respective noise contour falls within the right-of-way of the road.

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

**TABLE 7-3: EA WITHOUT PROJECT CONDITIONS NOISE CONTOURS** 

			Adjacent	CNEL at Nearest		nce to Co enterline	
ID	Road	Segment	Land Use <sup>1</sup>	Adjacent Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Jefferson St.	n/o Avenue 50	GC/LDR	72.7	97	210	452
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	71.1	76	164	353
3	Jefferson St.	n/o Avenue 54	MHR/OS	70.4	68	146	314
4	Madison St.	n/o Avenue 50	Festival District	67.5	37	79	170
5	Madison St.	n/o Avenue 52	LDR	68.4	43	92	197
6	Madison St.	n/o Avenue 54	LDR	66.7	32	70	150
7	Madison St.	n/o Airport Bl.	LDR/OS	69.7	52	112	240
8	Madison St.	n/o Avenue 58	LDR/OS	68.2	41	88	190
9	Madison St.	n/o Avenue 60	LDR/GC	64.1	21	44	96
10	Monroe St.	n/o Avenue 50	LDR	66.5	37	80	173
11	Monroe St.	n/o Avenue 52	LDR	66.3	36	78	167
12	Monroe St.	n/o Avenue 54	LDR	67.4	36	78	168
13	Monroe St.	n/o Airport Bl.	LDR	66.7	33	70	152
14	Monroe St.	n/o Avenue 58	LDR/GC	65.8	28	61	131
15	Monroe St.	n/o Avenue 60	LDR/GC	65.1	25	55	118
16	Avenue 50	w/o Jefferson St.	LDR/GC	69.1	47	101	217
17	Avenue 50	w/o Madison St.	LDR/GC	69.6	50	109	234
18	Avenue 50	e/o Monroe St.	LDR	67.1	41	89	192
19	Avenue 52	w/o Monroe St.	GC/OS	68.4	42	91	196
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	69.0	46	100	214
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	66.8	33	71	153
22	Airport Bl.	w/o Monroe St.	LDR/OS	63.9	21	46	99
23	Avenue 58	w/o Madison St.	LDR/MHR	61.5	14	30	64
24	Avenue 58	w/o Monroe St.	LDR/MCF	62.8	17	36	79
25	Avenue 58	w/o Jackson St.	LDR	62.6	19	41	88
26	Avenue 58	e/o Jackson St.	LDR	61.0	15	32	69
27	Avenue 60	w/o Madison St.	LDR	54.7	4	8	18
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	64.8	23	49	107
29	Avenue 60	e/o Monroe St.	LDR/MHR	60.5	15	32	69

<sup>&</sup>lt;sup>1</sup> Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



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

<sup>&</sup>quot;RW" = Location of the respective noise contour falls within the right-of-way of the road.

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

**TABLE 7-4: EA WITH PROJECT CONDITIONS NOISE CONTOURS** 

			Adjacent	CNEL at Nearest		nce to Co enterline	
ID	Road	Segment	Land Use <sup>1</sup>	Adjacent Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Jefferson St.	n/o Avenue 50	GC/LDR	72.8	99	212	458
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	71.3	78	168	361
3	Jefferson St.	n/o Avenue 54	MHR/OS	70.6	70	151	325
4	Madison St.	n/o Avenue 50	Festival District	67.7	38	38 82	
5	Madison St.	n/o Avenue 52	LDR	68.7	45	45 96	
6	Madison St.	n/o Avenue 54	LDR	67.4	36	78	167
7	Madison St.	n/o Airport Bl.	LDR/OS	70.4	57	124	266
8	Madison St.	n/o Avenue 58	LDR/OS	69.3	48	104	224
9	Madison St.	n/o Avenue 60	LDR/GC	64.9	23	51	109
10	Monroe St.	n/o Avenue 50	LDR	66.7	38	83	178
11	Monroe St.	n/o Avenue 52	LDR	66.6	38	81	175
12	Monroe St.	n/o Avenue 54	LDR	67.8	38	83	178
13	Monroe St.	n/o Airport Bl.	LDR	67.1	35	75	161
14	Monroe St.	n/o Avenue 58	LDR/GC	66.4	31	67	145
15	Monroe St.	n/o Avenue 60	LDR/GC	65.2	26	56	121
16	Avenue 50	w/o Jefferson St.	LDR/GC	69.2	48	103	222
17	Avenue 50	w/o Madison St.	LDR/GC	69.6	51	110	236
18	Avenue 50	e/o Monroe St.	LDR	67.2	42	90	194
19	Avenue 52	w/o Monroe St.	GC/OS	68.6	43	93	201
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	69.3	48	104	224
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	66.9	34	73	157
22	Airport Bl.	w/o Monroe St.	LDR/OS	64.2	22	48	104
23	Avenue 58	w/o Madison St.	LDR/MHR	62.3	16	34	73
24	Avenue 58	w/o Monroe St.	LDR/MCF	64.5	22		
25	Avenue 58	w/o Jackson St.	LDR	63.6	22 47		102
26	Avenue 58	e/o Jackson St.	LDR	61.9	17 37		79
27	Avenue 60	w/o Madison St.	LDR	59.4	8 17		37
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	65.6	26	56	121
29	Avenue 60	e/o Monroe St.	LDR/MHR	61.5	17 38		81

 $<sup>^{\</sup>mathrm{1}}$  Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



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

<sup>&</sup>quot;RW" = Location of the respective noise contour falls within the right-of-way of the road.

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

TABLE 7-5: EAC 2021 WITHOUT PROJECT CONDITIONS NOISE CONTOURS

			Adjacent	CNEL at Nearest		nce to Co enterline	
ID	Road Segment Land Use <sup>1</sup>		Adjacent Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	
1	Jefferson St.	n/o Avenue 50	GC/LDR	73.3	106	228	492
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	71.8	85	183	394
3	Jefferson St.	n/o Avenue 54	MHR/OS	70.9	73	158	340
4	Madison St.	n/o Avenue 50	Festival District	67.1	34	34 74	
5	Madison St.	n/o Avenue 52	LDR	67.6	38	81	175
6	Madison St.	n/o Avenue 54	LDR	66.7	32	70	150
7	Madison St.	n/o Airport Bl.	LDR/OS	69.3	49	105	225
8	Madison St.	n/o Avenue 58	LDR/OS	68.4	43	92	197
9	Madison St.	n/o Avenue 60	LDR/GC	63.7	19	42	91
10	Monroe St.	n/o Avenue 50	LDR	67.5	43	93	201
11	Monroe St.	n/o Avenue 52	LDR	66.7	38	83	178
12	Monroe St.	n/o Avenue 54	LDR	67.2	35	76	163
13	Monroe St.	n/o Airport Bl.	LDR	66.2	30	65	141
14	Monroe St.	n/o Avenue 58	LDR/GC	66.2	30	65	139
15	Monroe St.	n/o Avenue 60	LDR/GC	66.0	29	63	135
16	Avenue 50	w/o Jefferson St.	LDR/GC	70.1	55	119	256
17	Avenue 50	w/o Madison St.	LDR/GC	69.6	50	109	234
18	Avenue 50	e/o Monroe St.	LDR	66.8	39	85	183
19	Avenue 52	w/o Monroe St.	GC/OS	68.5	43	93	200
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	68.3	42	89	193
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	66.0	29	63	137
22	Airport Bl.	w/o Monroe St.	LDR/OS	62.5	17	37	80
23	Avenue 58	w/o Madison St.	LDR/MHR	63.8	20	43	92
24	Avenue 58	w/o Monroe St.	LDR/MCF	63.8	20 43		92
25	Avenue 58	w/o Jackson St.	LDR	61.2	15 33		70
26	Avenue 58	e/o Jackson St.	LDR	60.1	13 28		60
27	Avenue 60	w/o Madison St.	LDR	55.3	4	9	20
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	63.7	19	42	91
29	Avenue 60	e/o Monroe St.	LDR/MHR	62.9			100

 $<sup>^{\</sup>mathrm{1}}$  Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



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

<sup>&</sup>quot;RW" = Location of the respective noise contour falls within the right-of-way of the road.

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

TABLE 7-6: EAC 2021 WITH PROJECT CONDITIONS NOISE CONTOURS

			Adjacent	CNEL at Nearest		nce to Co enterline	
ID	Road	Segment	Land Use <sup>1</sup>	Adjacent Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Jefferson St.	n/o Avenue 50	GC/LDR	73.3	106	229	493
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	71.9	85	183	395
3	Jefferson St.	n/o Avenue 54	MHR/OS	70.9	74	159	343
4	Madison St.	n/o Avenue 50	Festival District	67.1	35	75	161
5	Madison St.	n/o Avenue 52	LDR	67.7	38	82	176
6	Madison St.	n/o Avenue 54	LDR	66.8	33	72	154
7	Madison St.	n/o Airport Bl.	LDR/OS	69.5	50	108	232
8	Madison St.	n/o Avenue 58	LDR/OS	68.7	45	96	207
9	Madison St.	n/o Avenue 60	LDR/GC	64.0	20	44	94
10	Monroe St.	n/o Avenue 50	LDR	67.5	44	94	202
11	Monroe St.	n/o Avenue 52	LDR	66.7	39	83	180
12	Monroe St.	n/o Avenue 54	LDR	67.3	35	76	165
13	Monroe St.	n/o Airport Bl.	LDR	66.3	31	66	142
14	Monroe St.	n/o Avenue 58	LDR/GC	66.3	31	66	142
15	Monroe St.	n/o Avenue 60	LDR/GC	66.0	29	63	135
16	Avenue 50	w/o Jefferson St.	LDR/GC	70.2	55	119	257
17	Avenue 50	w/o Madison St.	LDR/GC	69.6	50	109	234
18	Avenue 50	e/o Monroe St.	LDR	66.8	39	85	183
19	Avenue 52	w/o Monroe St.	GC/OS	68.6	43	93	201
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	68.4	42	91	195
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	66.1	30	64	138
22	Airport Bl.	w/o Monroe St.	LDR/OS	62.7	18	38	82
23	Avenue 58	w/o Madison St.	LDR/MHR	64.1	21	44	96
24	Avenue 58	w/o Monroe St.	LDR/MCF	64.3	21 46		98
25	Avenue 58	w/o Jackson St.	LDR	61.5	16 34		74
26	Avenue 58	e/o Jackson St.	LDR	60.5	14 29		63
27	Avenue 60	w/o Madison St.	LDR	56.4	5	11	23
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	64.1	21	44	96
29	Avenue 60	e/o Monroe St.	LDR/MHR	63.1	22	48	103

 $<sup>^{\</sup>rm 1}$  Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



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

<sup>&</sup>quot;RW" = Location of the respective noise contour falls within the right-of-way of the road.

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

TABLE 7-7: EAC 2023 WITHOUT PROJECT CONDITIONS NOISE CONTOURS

			Adjacent	CNEL at Nearest		nce to Co enterline	
ID	Road	Segment	Land Use <sup>1</sup>	Adjacent Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Jefferson St.	n/o Avenue 50	GC/LDR	73.5	110	237	510
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	72.0	88	189	406
3	Jefferson St.	n/o Avenue 54	MHR/OS	71.2	77	166	357
4	Madison St.	n/o Avenue 50	Festival District	67.5	37	37 79	
5	Madison St.	n/o Avenue 52	LDR	68.3	42	89	193
6	Madison St.	n/o Avenue 54	LDR	67.3	35	76	165
7	Madison St.	n/o Airport Bl.	LDR/OS	69.8	52	112	242
8	Madison St.	n/o Avenue 58	LDR/OS	68.8	45	97	209
9	Madison St.	n/o Avenue 60	LDR/GC	64.3	21	46	99
10	Monroe St.	n/o Avenue 50	LDR	67.6	44	95	205
11	Monroe St.	n/o Avenue 52	LDR	67.1	41	88	189
12	Monroe St.	n/o Avenue 54	LDR	68.0	40	86	186
13	Monroe St.	n/o Airport Bl.	LDR	67.6	37	80	172
14	Monroe St.	n/o Avenue 58	LDR/GC	67.5	37	79	170
15	Monroe St.	n/o Avenue 60	LDR/GC	67.6	37	80	172
16	Avenue 50	w/o Jefferson St.	LDR/GC	70.2	55	119	257
17	Avenue 50	w/o Madison St.	LDR/GC	69.9	53	114	246
18	Avenue 50	e/o Monroe St.	LDR	67.1	41	89	192
19	Avenue 52	w/o Monroe St.	GC/OS	68.9	46	99	212
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	68.8	45	97	210
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	66.8	33	71	153
22	Airport Bl.	w/o Monroe St.	LDR/OS	63.4	19	42	90
23	Avenue 58	w/o Madison St.	LDR/MHR	64.0	20	44	94
24	Avenue 58	w/o Monroe St.	LDR/MCF	64.2	21 45		97
25	Avenue 58	w/o Jackson St.	LDR	62.4	18 40		85
26	Avenue 58	e/o Jackson St.	LDR	60.8	14 31		67
27	Avenue 60	w/o Madison St.	LDR	55.9	5	10	21
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	64.3	21	46	99
29	Avenue 60	e/o Monroe St.	LDR/MHR	63.3			106

 $<sup>^{\</sup>mathrm{1}}$  Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



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

<sup>&</sup>quot;RW" = Location of the respective noise contour falls within the right-of-way of the road.

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

TABLE 7-8: EAC 2023 WITH PROJECT CONDITIONS NOISE CONTOURS

			Adjacent	CNEL at Nearest		nce to Co enterline	
ID	Road	Segment	Land Use <sup>1</sup>	Adjacent Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Jefferson St.	n/o Avenue 50	GC/LDR	73.5	110	237	511
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	72.1	88	189	407
3	Jefferson St.	n/o Avenue 54	MHR/OS	71.2	78	167	360
4	Madison St.	n/o Avenue 50	Festival District	67.6	37	37 80	
5	Madison St.	n/o Avenue 52	LDR	68.3	42	90	194
6	Madison St.	n/o Avenue 54	LDR	67.4	36	78	168
7	Madison St.	n/o Airport Bl.	LDR/OS	70.0	54	116	249
8	Madison St.	n/o Avenue 58	LDR/OS	69.2	47	102	220
9	Madison St.	n/o Avenue 60	LDR/GC	64.6	22	48	104
10	Monroe St.	n/o Avenue 50	LDR	67.6	44	96	206
11	Monroe St.	n/o Avenue 52	LDR	67.1	41	88	190
12	Monroe St.	n/o Avenue 54	LDR	68.1	40	87	187
13	Monroe St.	n/o Airport Bl.	LDR	67.6	37	80	173
14	Monroe St.	n/o Avenue 58	LDR/GC	67.6	37	80	173
15	Monroe St.	n/o Avenue 60	LDR/GC	67.6	37	80	172
16	Avenue 50	w/o Jefferson St.	LDR/GC	70.2	56	120	258
17	Avenue 50	w/o Madison St.	LDR/GC	69.9	53	114	246
18	Avenue 50	e/o Monroe St.	LDR	67.1	41	89	192
19	Avenue 52	w/o Monroe St.	GC/OS	69.0	46	99	213
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	68.9	46	99	212
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	66.8	33	72	154
22	Airport Bl.	w/o Monroe St.	LDR/OS	63.5	20	43	92
23	Avenue 58	w/o Madison St.	LDR/MHR	64.4	22	47	101
24	Avenue 58	w/o Monroe St.	LDR/MCF	64.6	22	48	104
25	Avenue 58	w/o Jackson St.	LDR	62.6	19 41		88
26	Avenue 58	e/o Jackson St.	LDR	61.2	15 33		70
27	Avenue 60	w/o Madison St.	LDR	56.9	5 12		25
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	64.7	23	49	105
29	Avenue 60	e/o Monroe St.	LDR/MHR	63.6	24	51	111

<sup>&</sup>lt;sup>1</sup> Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



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

<sup>&</sup>quot;RW" = Location of the respective noise contour falls within the right-of-way of the road.

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

TABLE 7-9: EAC 2026 WITHOUT PROJECT CONDITIONS NOISE CONTOURS

			Adjacent	CNEL at Nearest		nce to Co enterline	
ID	Road	Segment	Land Use <sup>1</sup>	Adjacent Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Jefferson St.	n/o Avenue 50	GC/LDR	73.9	116	249	537
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	72.4	92	198	426
3	Jefferson St.	n/o Avenue 54	MHR/OS	71.6	82	176	380
4	Madison St.	n/o Avenue 50	Festival District	68.2	41	41 89	
5	Madison St.	n/o Avenue 52	LDR	69.2	47	102	220
6	Madison St.	n/o Avenue 54	LDR	68.1	40	87	187
7	Madison St.	n/o Airport Bl.	LDR/OS	70.5	58	126	271
8	Madison St.	n/o Avenue 58	LDR/OS	69.5	50	107	231
9	Madison St.	n/o Avenue 60	LDR/GC	65.2	24	53	113
10	Monroe St.	n/o Avenue 50	LDR	67.8	46	98	211
11	Monroe St.	n/o Avenue 52	LDR	67.6	44	95	204
12	Monroe St.	n/o Avenue 54	LDR	69.0	46	100	216
13	Monroe St.	n/o Airport Bl.	LDR	68.9	46	99	212
14	Monroe St.	n/o Avenue 58	LDR/GC	68.7	44	95	205
15	Monroe St.	n/o Avenue 60	LDR/GC	68.9	46	99	212
16	Avenue 50	w/o Jefferson St.	LDR/GC	70.2	56	120	259
17	Avenue 50	w/o Madison St.	LDR/GC	70.3	57	122	263
18	Avenue 50	e/o Monroe St.	LDR	67.6	44	96	206
19	Avenue 52	w/o Monroe St.	GC/OS	69.4	50	107	230
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	69.6	51	109	235
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	67.6	37	80	173
22	Airport Bl.	w/o Monroe St.	LDR/OS	64.3	23	49	105
23	Avenue 58	w/o Madison St.	LDR/MHR	64.6	22	48	103
24	Avenue 58	w/o Monroe St.	LDR/MCF	64.7	23	49	105
25	Avenue 58	w/o Jackson St.	LDR	63.7	23 49		105
26	Avenue 58	e/o Jackson St.	LDR	62.0	17 37		81
27	Avenue 60	w/o Madison St.	LDR	57.3	6 12		26
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	65.4	25 54		117
29	Avenue 60	e/o Monroe St.	LDR/MHR	64.0	26	55	119

 $<sup>^{\</sup>mathrm{1}}$  Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



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

<sup>&</sup>quot;RW" = Location of the respective noise contour falls within the right-of-way of the road.

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

**TABLE 7-10: EAC 2026 WITH PROJECT CONDITIONS NOISE CONTOURS** 

			Adjacent	CNEL at Nearest		nce to Co enterline	
ID	Road	Segment	Land Use <sup>1</sup>	Adjacent Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Jefferson St.	n/o Avenue 50	GC/LDR	73.9	117	252	542
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	72.5	94	201	434
3	Jefferson St.	n/o Avenue 54	MHR/OS	71.8	84	181	389
4	Madison St.	n/o Avenue 50	Festival District	68.4	43	92	197
5	Madison St.	n/o Avenue 52	LDR	69.4	49	106	228
6	Madison St.	n/o Avenue 54	LDR	68.6	44	94	202
7	Madison St.	n/o Airport Bl.	LDR/OS	71.1	64	137	295
8	Madison St.	n/o Avenue 58	LDR/OS	70.3	57	122	263
9	Madison St.	n/o Avenue 60	LDR/GC	65.8	27	58	125
10	Monroe St.	n/o Avenue 50	LDR	67.9	47	100	216
11	Monroe St.	n/o Avenue 52	LDR	67.8	46	98	211
12	Monroe St.	n/o Avenue 54	LDR	69.2	48	104	223
13	Monroe St.	n/o Airport Bl.	LDR	69.2	47	102	220
14	Monroe St.	n/o Avenue 58	LDR/GC	69.1	47	101	218
15	Monroe St.	n/o Avenue 60	LDR/GC	69.0	46	100	214
16	Avenue 50	w/o Jefferson St.	LDR/GC	70.3	57	123	264
17	Avenue 50	w/o Madison St.	LDR/GC	70.4	57	123	265
18	Avenue 50	e/o Monroe St.	LDR	67.7	45	97	208
19	Avenue 52	w/o Monroe St.	GC/OS	69.6	50	109	234
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	69.8	52	113	244
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	67.8	38	83	178
22	Airport Bl.	w/o Monroe St.	LDR/OS	64.7	24	52	112
23	Avenue 58	w/o Madison St.	LDR/MHR	64.9	23	51	109
24	Avenue 58	w/o Monroe St.	LDR/MCF	65.9			127
25	Avenue 58	w/o Jackson St.	LDR	64.4	25 54		116
26	Avenue 58	e/o Jackson St.	LDR	62.8	19 42		90
27	Avenue 60	w/o Madison St.	LDR	60.5	9	20	43
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	66.2	28 61		131
29	Avenue 60	e/o Monroe St.	LDR/MHR	64.5	28	60	129

 $<sup>^{\</sup>rm 1}$  Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



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

<sup>&</sup>quot;RW" = Location of the respective noise contour falls within the right-of-way of the road.

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

TABLE 7-11: EAC 2026 WITHOUT PROJECT WITHOUT SPECIAL EVENTS NOISE CONTOURS

			Adjacent	CNEL at Nearest		nce to Co enterline	
ID	Road Segment Land Use <sup>1</sup>		_	Adjacent Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Jefferson St.	n/o Avenue 50	GC/LDR	73.9	116	249	537
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	72.4	92	198	426
3	Jefferson St.	n/o Avenue 54	MHR/OS	71.6	82	176	380
4	Madison St.	n/o Avenue 50	Festival District	68.2	41	41 89	
5	Madison St.	n/o Avenue 52	LDR	69.2	47	102	220
6	Madison St.	n/o Avenue 54	LDR	68.1	40	87	187
7	Madison St.	n/o Airport Bl.	LDR/OS	70.5	58	126	271
8	Madison St.	n/o Avenue 58	LDR/OS	69.5	50	107	231
9	Madison St.	n/o Avenue 60	LDR/GC	65.2	24	53	113
10	Monroe St.	n/o Avenue 50	LDR	67.8	46	98	211
11	Monroe St.	n/o Avenue 52	LDR	67.6	44	95	204
12	Monroe St.	n/o Avenue 54	LDR	69.0	46	100	216
13	Monroe St.	n/o Airport Bl.	LDR	68.9	46	99	212
14	Monroe St.	n/o Avenue 58	LDR/GC	68.7	44	95	205
15	Monroe St.	n/o Avenue 60	LDR/GC	68.9	46	99	212
16	Avenue 50	w/o Jefferson St.	LDR/GC	70.2	56	120	259
17	Avenue 50	w/o Madison St.	LDR/GC	70.3	57	122	263
18	Avenue 50	e/o Monroe St.	LDR	67.6	44	96	206
19	Avenue 52	w/o Monroe St.	GC/OS	69.4	50	107	230
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	69.6	51	109	235
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	67.6	37	80	173
22	Airport Bl.	w/o Monroe St.	LDR/OS	64.3	23	49	105
23	Avenue 58	w/o Madison St.	LDR/MHR	64.6	22	48	103
24	Avenue 58	w/o Monroe St.	LDR/MCF	64.7	23 49		105
25	Avenue 58	w/o Jackson St.	LDR	63.7	23 49		105
26	Avenue 58	e/o Jackson St.	LDR	62.0	17 37		81
27	Avenue 60	w/o Madison St.	LDR	57.3	6	12	26
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	65.4	25	54	117
29	Avenue 60	e/o Monroe St.	LDR/MHR	64.0	26	55	119

 $<sup>^{\</sup>mathrm{1}}$  Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



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

<sup>&</sup>quot;RW" = Location of the respective noise contour falls within the right-of-way of the road.

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

TABLE 7-12: EAC 2026 WITH PROJECT WITH SPECIAL EVENTS NOISE CONTOURS

			Adjacent	CNEL at Nearest		nce to Co enterline	
ID	Road	Segment	Land Use <sup>1</sup>	Adjacent Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Jefferson St.	n/o Avenue 50	GC/LDR	73.9	117	252	542
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	72.5	94	201	434
3	Jefferson St.	n/o Avenue 54	MHR/OS	71.8	84	181	390
4	Madison St.	n/o Avenue 50	Festival District	68.4	43	43 92	
5	Madison St.	n/o Avenue 52	LDR	69.4	49	49 106	
6	Madison St.	n/o Avenue 54	LDR	68.6	44	94	203
7	Madison St.	n/o Airport Bl.	LDR/OS	71.1	64	138	298
8	Madison St.	n/o Avenue 58	LDR/OS	70.5	58	125	269
9	Madison St.	n/o Avenue 60	LDR/GC	66.0	28	59	128
10	Monroe St.	n/o Avenue 50	LDR	67.9	47	100	216
11	Monroe St.	n/o Avenue 52	LDR	67.8	46	98	211
12	Monroe St.	n/o Avenue 54	LDR	69.2	48	104	223
13	Monroe St.	n/o Airport Bl.	LDR	69.2	47	102	220
14	Monroe St.	n/o Avenue 58	LDR/GC	69.1	47	102	219
15	Monroe St.	n/o Avenue 60	LDR/GC	69.0	46	100	216
16	Avenue 50	w/o Jefferson St.	LDR/GC	70.3	57	123	264
17	Avenue 50	w/o Madison St.	LDR/GC	70.4	57	124	266
18	Avenue 50	e/o Monroe St.	LDR	67.7	45	97	209
19	Avenue 52	w/o Monroe St.	GC/OS	69.6	50	109	234
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	69.8	53	114	245
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	67.8	38	83	178
22	Airport Bl.	w/o Monroe St.	LDR/OS	64.7	24	52	112
23	Avenue 58	w/o Madison St.	LDR/MHR	65.3	25	53	115
24	Avenue 58	w/o Monroe St.	LDR/MCF	66.2	28	61	131
25	Avenue 58	w/o Jackson St.	LDR	64.5	25 54		117
26	Avenue 58	e/o Jackson St.	LDR	62.9	20 42		92
27	Avenue 60	w/o Madison St.	LDR	60.5	9	20	43
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	66.3	29	62	134
29	Avenue 60	e/o Monroe St.	LDR/MHR	64.7	28	61	131

<sup>&</sup>lt;sup>1</sup> Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



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

<sup>&</sup>quot;RW" = Location of the respective noise contour falls within the right-of-way of the road.

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

**TABLE 7-13: GENERAL PLAN 2040 WITHOUT PROJECT CONDITIONS NOISE CONTOURS** 

			Adjacent	CNEL at Nearest Adjacent	Distance to Contour from Centerline (Feet)			
ID	Road	Segment	Segment Land Use <sup>1</sup>		70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	
1	Jefferson St.	n/o Avenue 50	GC/LDR	75.4	146	314	676	
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	73.6	111	239	515	
3	Jefferson St.	n/o Avenue 54	MHR/OS	73.3	106	229	494	
4	Madison St.	n/o Avenue 50	Festival District	71.4	67	67 145		
5	Madison St.	n/o Avenue 52	LDR	73.0	86	185	398	
6	Madison St.	n/o Avenue 54	LDR	71.7	70	150	323	
7	Madison St.	n/o Airport Bl.	LDR/OS	74.2	103	222	477	
8	Madison St.	n/o Avenue 58	LDR/OS	72.8	83	180	387	
9	Madison St.	n/o Avenue 60	LDR/GC	69.8	49	107	230	
10	Monroe St.	n/o Avenue 50	LDR	68.2	48	104	224	
11	Monroe St.	n/o Avenue 52	LDR	69.2	57	123	264	
12	Monroe St.	n/o Avenue 54	LDR	72.9	84	181	389	
13	Monroe St.	n/o Airport Bl.	LDR	73.3	89	192	414	
14	Monroe St.	n/o Avenue 58	LDR/GC	71.9	72	155	334	
15	Monroe St.	n/o Avenue 60	LDR/GC	72.2	76	163	351	
16	Avenue 50	w/o Jefferson St.	LDR/GC	70.3	56	121	261	
17	Avenue 50	w/o Madison St.	LDR/GC	72.4	77	167	360	
18	Avenue 50	e/o Monroe St.	LDR	69.6	60	129	278	
19	Avenue 52	w/o Monroe St.	GC/OS	72.0	74	158	341	
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	72.7	82	176	380	
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	70.4	57	124	266	
22	Airport Bl.	w/o Monroe St.	LDR/OS	70.1	55	119	256	
23	Avenue 58	w/o Madison St.	LDR/MHR	67.8	36	78	168	
24	Avenue 58	w/o Monroe St.	LDR/MCF	67.9	37	79	171	
25	Avenue 58	w/o Jackson St.	LDR	69.4	54 117		251	
26	Avenue 58	e/o Jackson St.	LDR	66.6	35 75		162	
27	Avenue 60	w/o Madison St.	LDR	70.1	40	87	188	
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	70.6	56	120	259	
29	Avenue 60	e/o Monroe St.	LDR/MHR	68.0	47	102	220	

<sup>&</sup>lt;sup>1</sup> Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



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

<sup>&</sup>quot;RW" = Location of the respective noise contour falls within the right-of-way of the road.

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

TABLE 7-14: GENERAL PLAN 2040 WITH PROJECT CONDITIONS NOISE CONTOURS

			Adjacent	CNEL at Nearest			Distance to Contour from Centerline (Feet)			
ID	Road	Segment	Land Use <sup>1</sup>	Adjacent Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL			
1	Jefferson St.	n/o Avenue 50	GC/LDR	75.4	147	316	680			
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	73.7	113	243	522			
3	Jefferson St.	n/o Avenue 54	MHR/OS	73.4	108	233	502			
4	Madison St.	n/o Avenue 50	Festival District	71.5	68	68 147				
5	Madison St.	n/o Avenue 52	LDR	73.1	87	187	403			
6	Madison St.	n/o Avenue 54	LDR	71.9	72	156	335			
7	Madison St.	n/o Airport Bl.	LDR/OS	74.4	107	230	496			
8	Madison St.	n/o Avenue 58	LDR/OS	73.2	89	191	411			
9	Madison St.	n/o Avenue 60	LDR/GC	70.0	51	110	238			
10	Monroe St.	n/o Avenue 50	LDR	68.3	49	106	229			
11	Monroe St.	n/o Avenue 52	LDR	69.4	58	126	271			
12	Monroe St.	n/o Avenue 54	LDR	73.0	85	183	395			
13	Monroe St.	n/o Airport Bl.	LDR	73.4	90	195	419			
14	Monroe St.	n/o Avenue 58	LDR/GC	72.1	74	160	344			
15	Monroe St.	n/o Avenue 60	LDR/GC	72.2	76	164	353			
16	Avenue 50	w/o Jefferson St.	LDR/GC	70.4	57	124	266			
17	Avenue 50	w/o Madison St.	LDR/GC	72.4	78	168	361			
18	Avenue 50	e/o Monroe St.	LDR	69.6	60	130	280			
19	Avenue 52	w/o Monroe St.	GC/OS	72.1	74	160	344			
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	72.8	83	180	387			
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	70.5	58	125	269			
22	Airport Bl.	w/o Monroe St.	LDR/OS	70.2	56	120	259			
23	Avenue 58	w/o Madison St.	LDR/MHR	68.0	37	81	174			
24	Avenue 58	w/o Monroe St.	LDR/MCF	68.5	40 87		187			
25	Avenue 58	w/o Jackson St.	LDR	69.6	56 120		259			
26	Avenue 58	e/o Jackson St.	LDR	66.8	36 78		169			
27	Avenue 60	w/o Madison St.	LDR	70.3	42	90	195			
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	70.8	58	125	268			
29	Avenue 60	e/o Monroe St.	LDR/MHR	68.2	49	105	227			

 $<sup>^{\</sup>mathrm{1}}$  Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



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

<sup>&</sup>quot;RW" = Location of the respective noise contour falls within the right-of-way of the road.

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

## 7.2 EXISTING CONDITIONS PROJECT TRAFFIC NOISE LEVEL INCREASE

This analysis relies on a comparative review of the off-site traffic noise level increases, without and with project ADT traffic volumes from the Project traffic study. Using the incremental off-site traffic noise significance criteria outlined in Section 4, the impacts on nearby study area roadway segments for all the with the Project traffic conditions are evaluated. The incremental relative significance criteria identify potential impacts if the ambient noise environment is quiet (<60 dBA) and the new noise source greatly increases the noise levels by a *readily perceptible* 5 dBA or greater. In areas where the without project noise levels range from 60 to 65 dBA, a 3 dBA barely perceptible noise level increase is used and 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.

An analysis of existing traffic noise levels plus traffic noise generated by the proposed Project has been included in this report for informational purposes. However, the analysis of existing traffic noise levels plus traffic noise generated by the proposed Project scenario will not actually occur since the Project would not be fully constructed (Phase 1, 2 & 3) and operational until year 2026 cumulative conditions. Table 7-1 presents the Existing without Project conditions CNEL noise levels. The without Project exterior noise levels are expected to range from 46.9 to 71.8 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 58.0 to 71.9 dBA CNEL. As shown on Table 7-15 the Project will generate a noise level increase of up to 11.1 dBA CNEL on the study area roadway segments. Based on the significance criteria in Section 4, the Project-related noise level increases are considered *potentially significant* under Existing with Project conditions at the following two roadway segments:

- Madison Street north of Avenue 58 (Segment 8)
- Avenue 60 west of Madison Street (Segment 27)

All other roadway segments are shown to experience *less than significant* noise level impacts under Existing plus Project conditions. However, this scenario is provided solely for analytical purposes and will not occur, since the Project will not be full developed (Phase 1, 2 & 3) and occupied under Existing 2019 conditions. Therefore, no mitigation measures are considered to reduce the Existing with Project condition traffic noise level increases, and impacts are considered *less than significant* since they will not actually occur.



TABLE 7-15: EXISTING 2019 OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

			Adjacent		EL at Adjao nd Use (dB		Off-Site Traffic	Threshold
ID	Road	Segment	Land Use <sup>1</sup>	No Project	With Project	Project Addition	Noise Threshold <sup>3</sup>	Exceeded? <sup>3</sup>
1	Jefferson St.	n/o Avenue 50	GC/LDR	71.8	71.9	0.1	1.5	No
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	70.3	70.5	0.2	1.5	No
3	Jefferson St.	n/o Avenue 54	MHR/OS	69.3	69.6	0.3	1.5	No
4	Madison St.	n/o Avenue 50	Festival District	65.6	66.0	0.4	1.5	No
5	Madison St.	n/o Avenue 52	LDR	66.3	66.8	0.5	1.5	No
6	Madison St.	n/o Avenue 54	LDR	64.4	65.5	1.1	3.0	No
7	Madison St.	n/o Airport Bl.	LDR/OS	67.6	68.7	1.1	1.5	No
8	Madison St.	n/o Avenue 58	LDR/OS	66.2	67.8	1.6	1.5	Yes
9	Madison St.	n/o Avenue 60	LDR/GC	61.5	62.9	1.4	3.0	No
10	Monroe St.	n/o Avenue 50	LDR	66.2	66.4	0.2	1.5	No
11	Monroe St.	n/o Avenue 52	LDR	65.1	65.5	0.4	1.5	No
12	Monroe St.	n/o Avenue 54	LDR	65.0	65.6	0.6	1.5	No
13	Monroe St.	n/o Airport Bl.	LDR	63.8	64.5	0.7	3.0	No
14	Monroe St.	n/o Avenue 58	LDR/GC	63.2	64.3	1.1	3.0	No
15	Monroe St.	n/o Avenue 60	LDR/GC	62.2	62.5	0.3	3.0	No
16	Avenue 50	w/o Jefferson St.	LDR/GC	69.0	69.2	0.2	1.5	No
17	Avenue 50	w/o Madison St.	LDR/GC	68.4	68.5	0.1	1.5	No
18	Avenue 50	e/o Monroe St.	LDR	66.1	66.2	0.1	1.5	No
19	Avenue 52	w/o Monroe St.	GC/OS	66.9	67.1	0.2	1.5	No
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	67.3	67.7	0.4	1.5	No
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	65.2	65.4	0.2	1.5	No
22	Airport Bl.	w/o Monroe St.	LDR/OS	60.9	61.5	0.6	3.0	No
23	Avenue 58	w/o Madison St.	LDR/MHR	59.1	60.4	1.3	5.0	No
24	Avenue 58	w/o Monroe St.	LDR/MCF	60.6	63.1	2.5	3.0	No
25	Avenue 58	w/o Jackson St.	LDR	59.4	61.2	1.8	5.0	No
26	Avenue 58	e/o Jackson St.	LDR	58.3	59.9	1.6	5.0	No
27	Avenue 60	w/o Madison St.	LDR	46.9	58.0	11.1	5.0	Yes
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	62.1	63.5	1.4	3.0	No
29	Avenue 60	e/o Monroe St.	LDR/MHR	57.3	59.3	2.0	5.0	No

<sup>&</sup>lt;sup>1</sup> Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



<sup>&</sup>lt;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.

<sup>&</sup>lt;sup>3</sup> Significance Criteria (Section 4).

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

## 7.3 EA PROJECT TRAFFIC NOISE LEVEL INCREASE

Table 7-3 presents the EA without Project conditions CNEL noise levels which are expected to range from 54.7 to 72.7 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography.

Table 7-4 shows the EA with Project conditions will range from 59.4 to 72.8 dBA CNEL. As shown on Table 7-16 the Project will generate a noise level increase of up to 4.7 dBA CNEL on the study area roadway segments. However, this scenario is provided solely for analytical purposes and will not occur, since the Project will not be full developed (Phase 1, 2 & 3) and occupied under EA with Project conditions. Therefore, no mitigation measures are considered to reduce the EA with Project condition traffic noise level increases, and impacts are considered *less than significant* since they will not actually occur.



**TABLE 7-16: EA OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS** 

ID	Road	Segment	Adjacent Land Use <sup>1</sup>	CNEL at Adjacent Land Use (dBA) <sup>2</sup>			Off-Site Traffic	Threshold
				No Project	With Project	Project Addition	Noise Threshold <sup>3</sup>	Exceeded? <sup>3</sup>
1	Jefferson St.	n/o Avenue 50	GC/LDR	72.7	72.8	0.1	1.5	No
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	71.1	71.3	0.2	1.5	No
3	Jefferson St.	n/o Avenue 54	MHR/OS	70.4	70.6	0.2	1.5	No
4	Madison St.	n/o Avenue 50	Festival District	67.5	67.7	0.2	1.5	No
5	Madison St.	n/o Avenue 52	LDR	68.4	68.7	0.3	1.5	No
6	Madison St.	n/o Avenue 54	LDR	66.7	67.4	0.7	1.5	No
7	Madison St.	n/o Airport Bl.	LDR/OS	69.7	70.4	0.7	1.5	No
8	Madison St.	n/o Avenue 58	LDR/OS	68.2	69.3	1.1	1.5	No
9	Madison St.	n/o Avenue 60	LDR/GC	64.1	64.9	0.8	3.0	No
10	Monroe St.	n/o Avenue 50	LDR	66.5	66.7	0.2	1.5	No
11	Monroe St.	n/o Avenue 52	LDR	66.3	66.6	0.3	1.5	No
12	Monroe St.	n/o Avenue 54	LDR	67.4	67.8	0.4	1.5	No
13	Monroe St.	n/o Airport Bl.	LDR	66.7	67.1	0.4	1.5	No
14	Monroe St.	n/o Avenue 58	LDR/GC	65.8	66.4	0.6	1.5	No
15	Monroe St.	n/o Avenue 60	LDR/GC	65.1	65.2	0.1	1.5	No
16	Avenue 50	w/o Jefferson St.	LDR/GC	69.1	69.2	0.1	1.5	No
17	Avenue 50	w/o Madison St.	LDR/GC	69.6	69.6	0.0	1.5	No
18	Avenue 50	e/o Monroe St.	LDR	67.1	67.2	0.1	1.5	No
19	Avenue 52	w/o Monroe St.	GC/OS	68.4	68.6	0.2	1.5	No
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	69.0	69.3	0.3	1.5	No
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	66.8	66.9	0.1	1.5	No
22	Airport Bl.	w/o Monroe St.	LDR/OS	63.9	64.2	0.3	3.0	No
23	Avenue 58	w/o Madison St.	LDR/MHR	61.5	62.3	0.8	3.0	No
24	Avenue 58	w/o Monroe St.	LDR/MCF	62.8	64.5	1.7	3.0	No
25	Avenue 58	w/o Jackson St.	LDR	62.6	63.6	1.0	3.0	No
26	Avenue 58	e/o Jackson St.	LDR	61.0	61.9	0.9	3.0	No
27	Avenue 60	w/o Madison St.	LDR	54.7	59.4	4.7	5.0	No
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	64.8	65.6	0.8	3.0	No
29	Avenue 60	e/o Monroe St.	LDR/MHR	60.5	61.5	1.0	3.0	No

<sup>&</sup>lt;sup>1</sup> Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



<sup>&</sup>lt;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.

<sup>&</sup>lt;sup>3</sup> Significance Criteria (Section 4).

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

## 7.4 EAC 2021 Project Traffic Noise Level Increase

Table 7-5 presents the EAC 2021 without Project conditions CNEL noise levels are expected to range from 55.3 to 73.3 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography.

Table 7-6 shows the EAC 2021 with Project conditions will range from 56.4 to 73.3 dBA CNEL. As shown on Table 7-17 the Project will generate a noise level increase of up to 1.1 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 EAC 2021 with Project conditions at the land uses adjacent to roadways conveying Project traffic.



TABLE 7-17: EAC 2021 OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

ID	Road	Segment	Adjacent Land Use <sup>1</sup>	CNEL at Adjacent Land Use (dBA) <sup>2</sup>			Off-Site Traffic	Threshold
				No Project	With Project	Project Addition	Noise Threshold <sup>3</sup>	Exceeded? <sup>3</sup>
1	Jefferson St.	n/o Avenue 50	GC/LDR	73.3	73.3	0.0	1.5	No
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	71.8	71.9	0.1	1.5	No
3	Jefferson St.	n/o Avenue 54	MHR/OS	70.9	70.9	0.0	1.5	No
4	Madison St.	n/o Avenue 50	Festival District	67.1	67.1	0.0	1.5	No
5	Madison St.	n/o Avenue 52	LDR	67.6	67.7	0.1	1.5	No
6	Madison St.	n/o Avenue 54	LDR	66.7	66.8	0.1	1.5	No
7	Madison St.	n/o Airport Bl.	LDR/OS	69.3	69.5	0.2	1.5	No
8	Madison St.	n/o Avenue 58	LDR/OS	68.4	68.7	0.3	1.5	No
9	Madison St.	n/o Avenue 60	LDR/GC	63.7	64.0	0.3	3.0	No
10	Monroe St.	n/o Avenue 50	LDR	67.5	67.5	0.0	1.5	No
11	Monroe St.	n/o Avenue 52	LDR	66.7	66.7	0.0	1.5	No
12	Monroe St.	n/o Avenue 54	LDR	67.2	67.3	0.1	1.5	No
13	Monroe St.	n/o Airport Bl.	LDR	66.2	66.3	0.1	1.5	No
14	Monroe St.	n/o Avenue 58	LDR/GC	66.2	66.3	0.1	1.5	No
15	Monroe St.	n/o Avenue 60	LDR/GC	66.0	66.0	0.0	1.5	No
16	Avenue 50	w/o Jefferson St.	LDR/GC	70.1	70.2	0.1	1.5	No
17	Avenue 50	w/o Madison St.	LDR/GC	69.6	69.6	0.0	1.5	No
18	Avenue 50	e/o Monroe St.	LDR	66.8	66.8	0.0	1.5	No
19	Avenue 52	w/o Monroe St.	GC/OS	68.5	68.6	0.1	1.5	No
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	68.3	68.4	0.1	1.5	No
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	66.0	66.1	0.1	1.5	No
22	Airport Bl.	w/o Monroe St.	LDR/OS	62.5	62.7	0.2	3.0	No
23	Avenue 58	w/o Madison St.	LDR/MHR	63.8	64.1	0.3	3.0	No
24	Avenue 58	w/o Monroe St.	LDR/MCF	63.8	64.3	0.5	3.0	No
25	Avenue 58	w/o Jackson St.	LDR	61.2	61.5	0.3	3.0	No
26	Avenue 58	e/o Jackson St.	LDR	60.1	60.5	0.4	3.0	No
27	Avenue 60	w/o Madison St.	LDR	55.3	56.4	1.1	5.0	No
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	63.7	64.1	0.4	3.0	No
29	Avenue 60	e/o Monroe St.	LDR/MHR	62.9	63.1	0.2	3.0	No

<sup>&</sup>lt;sup>1</sup> Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



<sup>&</sup>lt;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.

<sup>&</sup>lt;sup>3</sup> Significance Criteria (Section 4).

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

# 7.5 EAC 2023 PROJECT TRAFFIC NOISE LEVEL INCREASE

Table 7-7 presents the EAC 2023 without Project conditions CNEL noise levels are expected to range from 55.9 to 73.5 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography.

Table 7-8 shows the EAC 2023 with Project conditions will range from 56.9 to 73.5 dBA CNEL. As shown on Table 7-18 the Project will generate a noise level increase of up to 1.0 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 EAC 2023 with Project conditions at the land uses adjacent to roadways conveying Project traffic.



TABLE 7-18: EAC 2023 OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

2	Dood	Commont	Adjacent		EL at Adjac nd Use (dB		Off-Site Traffic	Threshold
ID	Road	Segment	Land Use <sup>1</sup>	No Project	With Project	Project Addition	Noise Threshold <sup>3</sup>	Exceeded? <sup>3</sup>
1	Jefferson St.	n/o Avenue 50	GC/LDR	73.5	73.5	0.0	1.5	No
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	72.0	72.1	0.1	1.5	No
3	Jefferson St.	n/o Avenue 54	MHR/OS	71.2	71.2	0.0	1.5	No
4	Madison St.	n/o Avenue 50	Festival District	67.5	67.6	0.1	1.5	No
5	Madison St.	n/o Avenue 52	LDR	68.3	68.3	0.0	1.5	No
6	Madison St.	n/o Avenue 54	LDR	67.3	67.4	0.1	1.5	No
7	Madison St.	n/o Airport Bl.	LDR/OS	69.8	70.0	0.2	1.5	No
8	Madison St.	n/o Avenue 58	LDR/OS	68.8	69.2	0.4	1.5	No
9	Madison St.	n/o Avenue 60	LDR/GC	64.3	64.6	0.3	3.0	No
10	Monroe St.	n/o Avenue 50	LDR	67.6	67.6	0.0	1.5	No
11	Monroe St.	n/o Avenue 52	LDR	67.1	67.1	0.0	1.5	No
12	Monroe St.	n/o Avenue 54	LDR	68.0	68.1	0.1	1.5	No
13	Monroe St.	n/o Airport Bl.	LDR	67.6	67.6	0.0	1.5	No
14	Monroe St.	n/o Avenue 58	LDR/GC	67.5	67.6	0.1	1.5	No
15	Monroe St.	n/o Avenue 60	LDR/GC	67.6	67.6	0.0	1.5	No
16	Avenue 50	w/o Jefferson St.	LDR/GC	70.2	70.2	0.0	1.5	No
17	Avenue 50	w/o Madison St.	LDR/GC	69.9	69.9	0.0	1.5	No
18	Avenue 50	e/o Monroe St.	LDR	67.1	67.1	0.0	1.5	No
19	Avenue 52	w/o Monroe St.	GC/OS	68.9	69.0	0.1	1.5	No
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	68.8	68.9	0.1	1.5	No
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	66.8	66.8	0.0	1.5	No
22	Airport Bl.	w/o Monroe St.	LDR/OS	63.4	63.5	0.1	3.0	No
23	Avenue 58	w/o Madison St.	LDR/MHR	64.0	64.4	0.4	3.0	No
24	Avenue 58	w/o Monroe St.	LDR/MCF	64.2	64.6	0.4	3.0	No
25	Avenue 58	w/o Jackson St.	LDR	62.4	62.6	0.2	3.0	No
26	Avenue 58	e/o Jackson St.	LDR	60.8	61.2	0.4	3.0	No
27	Avenue 60	w/o Madison St.	LDR	55.9	56.9	1.0	5.0	No
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	64.3	64.7	0.4	3.0	No
29	Avenue 60	e/o Monroe St.	LDR/MHR	63.3	63.6	0.3	3.0	No

<sup>&</sup>lt;sup>1</sup> Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



<sup>&</sup>lt;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.

<sup>&</sup>lt;sup>3</sup> Significance Criteria (Section 4).

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

## 7.6 EAC 2026 Project Traffic Noise Level Increase

Table 7-9 presents the EAC 2026 without Project conditions CNEL noise levels are expected to range from 57.3 to 73.9 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography.

Table 7-10 shows the EAC 2026 with Project conditions will range from 60.5 to 73.9 dBA CNEL. As shown on Table 7-19 the Project will generate a noise level increase of up to 3.2 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 EAC 2026 with Project conditions at the land uses adjacent to roadways conveying Project traffic.



TABLE 7-19: EAC 2026 OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

2	Dood	Commont	Adjacent		EL at Adjac nd Use (dB		Off-Site Traffic	Threshold
ID	Road	Segment	Land Use <sup>1</sup>	No Project	With Project	Project Addition	Noise Threshold <sup>3</sup>	Exceeded? <sup>3</sup>
1	Jefferson St.	n/o Avenue 50	GC/LDR	73.9	73.9	0.0	1.5	No
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	72.4	72.5	0.1	1.5	No
3	Jefferson St.	n/o Avenue 54	MHR/OS	71.6	71.8	0.2	1.5	No
4	Madison St.	n/o Avenue 50	Festival District	68.2	68.4	0.2	1.5	No
5	Madison St.	n/o Avenue 52	LDR	69.2	69.4	0.2	1.5	No
6	Madison St.	n/o Avenue 54	LDR	68.1	68.6	0.5	1.5	No
7	Madison St.	n/o Airport Bl.	LDR/OS	70.5	71.1	0.6	1.5	No
8	Madison St.	n/o Avenue 58	LDR/OS	69.5	70.3	0.8	1.5	No
9	Madison St.	n/o Avenue 60	LDR/GC	65.2	65.8	0.6	1.5	No
10	Monroe St.	n/o Avenue 50	LDR	67.8	67.9	0.1	1.5	No
11	Monroe St.	n/o Avenue 52	LDR	67.6	67.8	0.2	1.5	No
12	Monroe St.	n/o Avenue 54	LDR	69.0	69.2	0.2	1.5	No
13	Monroe St.	n/o Airport Bl.	LDR	68.9	69.2	0.3	1.5	No
14	Monroe St.	n/o Avenue 58	LDR/GC	68.7	69.1	0.4	1.5	No
15	Monroe St.	n/o Avenue 60	LDR/GC	68.9	69.0	0.1	1.5	No
16	Avenue 50	w/o Jefferson St.	LDR/GC	70.2	70.3	0.1	1.5	No
17	Avenue 50	w/o Madison St.	LDR/GC	70.3	70.4	0.1	1.5	No
18	Avenue 50	e/o Monroe St.	LDR	67.6	67.7	0.1	1.5	No
19	Avenue 52	w/o Monroe St.	GC/OS	69.4	69.6	0.2	1.5	No
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	69.6	69.8	0.2	1.5	No
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	67.6	67.8	0.2	1.5	No
22	Airport Bl.	w/o Monroe St.	LDR/OS	64.3	64.7	0.4	3.0	No
23	Avenue 58	w/o Madison St.	LDR/MHR	64.6	64.9	0.3	3.0	No
24	Avenue 58	w/o Monroe St.	LDR/MCF	64.7	65.9	1.2	3.0	No
25	Avenue 58	w/o Jackson St.	LDR	63.7	64.4	0.7	3.0	No
26	Avenue 58	e/o Jackson St.	LDR	62.0	62.8	0.8	3.0	No
27	Avenue 60	w/o Madison St.	LDR	57.3	60.5	3.2	5.0	No
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	65.4	66.2	0.8	1.5	No
29	Avenue 60	e/o Monroe St.	LDR/MHR	64.0	64.5	0.5	3.0	No

<sup>&</sup>lt;sup>1</sup> Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



<sup>&</sup>lt;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.

<sup>&</sup>lt;sup>3</sup> Significance Criteria (Section 4).

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

## 7.7 EAC 2026 Project Special Events Traffic Noise Level Increase

Table 7-11 presents the EAC 2026 without Project conditions CNEL noise levels are expected to range from 57.3 to 73.9 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. The applicant anticipates the potential occurrence of special events at this location involving attendance of not-to-exceed 2,500 guests per day arriving or departing on Saturdays (up to 4 events per year).

Table 7-12 shows the EAC 2026 with Project with Special Event conditions will range from 60.5 to 73.9 dBA CNEL. As shown on Table 7-20 the Project will generate a noise level increase of up to 3.2 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 EAC 2026 with Project Special Event conditions at the land uses adjacent to roadways conveying Project traffic.



TABLE 7-20: EAC 2026 SPECIAL EVENT OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

i	Dood	Command	Adjacent		EL at Adjac nd Use (dB		Off-Site Traffic	Threshold
ID	Road	Segment	Land Use <sup>1</sup>	No Project	With Project	Project Addition	Noise Threshold <sup>3</sup>	Exceeded? <sup>3</sup>
1	Jefferson St.	n/o Avenue 50	GC/LDR	73.9	73.9	0.0	1.5	No
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	72.4	72.5	0.1	1.5	No
3	Jefferson St.	n/o Avenue 54	MHR/OS	71.6	71.8	0.2	1.5	No
4	Madison St.	n/o Avenue 50	Festival District	68.2	68.4	0.2	1.5	No
5	Madison St.	n/o Avenue 52	LDR	69.2	69.4	0.2	1.5	No
6	Madison St.	n/o Avenue 54	LDR	68.1	68.6	0.5	1.5	No
7	Madison St.	n/o Airport Bl.	LDR/OS	70.5	71.1	0.6	1.5	No
8	Madison St.	n/o Avenue 58	LDR/OS	69.5	70.5	1.0	1.5	No
9	Madison St.	n/o Avenue 60	LDR/GC	65.2	66.0	0.8	1.5	No
10	Monroe St.	n/o Avenue 50	LDR	67.8	67.9	0.1	1.5	No
11	Monroe St.	n/o Avenue 52	LDR	67.6	67.8	0.2	1.5	No
12	Monroe St.	n/o Avenue 54	LDR	69.0	69.2	0.2	1.5	No
13	Monroe St.	n/o Airport Bl.	LDR	68.9	69.2	0.3	1.5	No
14	Monroe St.	n/o Avenue 58	LDR/GC	68.7	69.1	0.4	1.5	No
15	Monroe St.	n/o Avenue 60	LDR/GC	68.9	69.0	0.1	1.5	No
16	Avenue 50	w/o Jefferson St.	LDR/GC	70.2	70.3	0.1	1.5	No
17	Avenue 50	w/o Madison St.	LDR/GC	70.3	70.4	0.1	1.5	No
18	Avenue 50	e/o Monroe St.	LDR	67.6	67.7	0.1	1.5	No
19	Avenue 52	w/o Monroe St.	GC/OS	69.4	69.6	0.2	1.5	No
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	69.6	69.8	0.2	1.5	No
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	67.6	67.8	0.2	1.5	No
22	Airport Bl.	w/o Monroe St.	LDR/OS	64.3	64.7	0.4	3.0	No
23	Avenue 58	w/o Madison St.	LDR/MHR	64.6	65.3	0.7	3.0	No
24	Avenue 58	w/o Monroe St.	LDR/MCF	64.7	66.2	1.5	3.0	No
25	Avenue 58	w/o Jackson St.	LDR	63.7	64.5	0.8	3.0	No
26	Avenue 58	e/o Jackson St.	LDR	62.0	62.9	0.9	3.0	No
27	Avenue 60	w/o Madison St.	LDR	57.3	60.5	3.2	5.0	No
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	65.4	66.3	0.9	1.5	No
29	Avenue 60	e/o Monroe St.	LDR/MHR	64.0	64.7	0.7	3.0	No

<sup>&</sup>lt;sup>1</sup> Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



<sup>&</sup>lt;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.

<sup>&</sup>lt;sup>3</sup> Significance Criteria (Section 4).

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

## 7.8 GENERAL PLAN 2040 PROJECT TRAFFIC NOISE LEVEL INCREASE

Table 7-13 presents the General Plan 2040 without Project conditions CNEL noise levels are expected to range from 66.6 to 75.4 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography.

Table 7-14 shows the General Plan 2040 with Project conditions will range from 66.8 to 75.4 dBA CNEL. As shown on Table 7-21 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 General Plan 2040 with Project conditions at the land uses adjacent to roadways conveying Project traffic.



TABLE 7-21: GENERAL PLAN 2040 OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

i	Dood	Commont	Adjacent		EL at Adjao nd Use (dB		Off-Site Traffic	Threshold
ID	Road	Segment	Land Use <sup>1</sup>	No Project	With Project	Project Addition	Noise Threshold <sup>3</sup>	Exceeded? <sup>3</sup>
1	Jefferson St.	n/o Avenue 50	GC/LDR	75.4	75.4	0.0	1.5	No
2	Jefferson St.	n/o Avenue 52	LDR/MHR/OS/GC	73.6	73.7	0.1	1.5	No
3	Jefferson St.	n/o Avenue 54	MHR/OS	73.3	73.4	0.1	1.5	No
4	Madison St.	n/o Avenue 50	Festival District	71.4	71.5	0.1	1.5	No
5	Madison St.	n/o Avenue 52	LDR	73.0	73.1	0.1	1.5	No
6	Madison St.	n/o Avenue 54	LDR	71.7	71.9	0.2	1.5	No
7	Madison St.	n/o Airport Bl.	LDR/OS	74.2	74.4	0.2	1.5	No
8	Madison St.	n/o Avenue 58	LDR/OS	72.8	73.2	0.4	1.5	No
9	Madison St.	n/o Avenue 60	LDR/GC	69.8	70.0	0.2	1.5	No
10	Monroe St.	n/o Avenue 50	LDR	68.2	68.3	0.1	1.5	No
11	Monroe St.	n/o Avenue 52	LDR	69.2	69.4	0.2	1.5	No
12	Monroe St.	n/o Avenue 54	LDR	72.9	73.0	0.1	1.5	No
13	Monroe St.	n/o Airport Bl.	LDR	73.3	73.4	0.1	1.5	No
14	Monroe St.	n/o Avenue 58	LDR/GC	71.9	72.1	0.2	1.5	No
15	Monroe St.	n/o Avenue 60	LDR/GC	72.2	72.2	0.0	1.5	No
16	Avenue 50	w/o Jefferson St.	LDR/GC	70.3	70.4	0.1	1.5	No
17	Avenue 50	w/o Madison St.	LDR/GC	72.4	72.4	0.0	1.5	No
18	Avenue 50	e/o Monroe St.	LDR	69.6	69.6	0.0	1.5	No
19	Avenue 52	w/o Monroe St.	GC/OS	72.0	72.1	0.1	1.5	No
20	Avenue 54	w/o Madison St.	LDR/MHR/GC/OS	72.7	72.8	0.1	1.5	No
21	Avenue 54	w/o Monroe St.	LDR/MHR/OS	70.4	70.5	0.1	1.5	No
22	Airport Bl.	w/o Monroe St.	LDR/OS	70.1	70.2	0.1	1.5	No
23	Avenue 58	w/o Madison St.	LDR/MHR	67.8	68.0	0.2	1.5	No
24	Avenue 58	w/o Monroe St.	LDR/MCF	67.9	68.5	0.6	1.5	No
25	Avenue 58	w/o Jackson St.	LDR	69.4	69.6	0.2	1.5	No
26	Avenue 58	e/o Jackson St.	LDR	66.6	66.8	0.2	1.5	No
27	Avenue 60	w/o Madison St.	LDR	70.1	70.3	0.2	1.5	No
28	Avenue 60	w/o Monroe St.	LDR/MHR/OS	70.6	70.8	0.2	1.5	No
29	Avenue 60	e/o Monroe St.	LDR/MHR	68.0	68.2	0.2	1.5	No

<sup>&</sup>lt;sup>1</sup> Sources: City of La Quinta, City of Indio and County of Riverside General Plan Land Use Map.



<sup>&</sup>lt;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.

<sup>&</sup>lt;sup>3</sup> Significance Criteria (Section 4).

<sup>&</sup>quot;LDR" = Low Density Residential; "MHR" = Medium/High Density Residential; "GC" = General Commercial;

<sup>&</sup>quot;MCF" = Major Community Facility; "OS" = Open Space

## 8 ON-SITE TRANSPORTATION NOISE IMPACTS

An on-site exterior noise impact analysis has been completed to determine the noise exposure levels that would result from adjacent traffic noise sources in the Project study area, and to identify potential noise abatement measures that would achieve acceptable Project exterior and interior noise levels. Exterior noise levels are generally limited to outdoor living areas of frequent human use (e.g., backyards of single-family homes). Interior noise levels are evaluated at the first and second floor building façade.

The primary source of traffic noise affecting the Project site is anticipated to be from Avenue 58 and Madison Street. The Project will also experience some background traffic noise impacts from its internal streets and parking lots, however, due to the low traffic volume and low speeds of vehicles travelling on these roadways, traffic noise will not make a significant contribution to the noise environment beyond of the right-of-way of each road.

### 8.1 EXTERIOR NOISE ANALYSIS

Using the FHWA traffic noise prediction model and the parameters outlined in Tables 6-3 to 6-5, the expected future exterior noise levels for the on-site building were calculated. Table 8-1 presents a summary of future exterior noise levels for the future low-density residential development within Planning Area II. The on-site exterior traffic noise levels indicate that the single-family residential development adjacent to Avenue 58 and Madison Street will experience exterior noise levels ranging from 66.7 to 68.8 dBA CNEL.

**TABLE 8-1: EXTERIOR TRAFFIC NOISE LEVELS** 

Receiver Location	Roadway		Exterior Noise Level Threshold (dBA CNEL) <sup>2</sup>	Threshold Exceeded?	
Dianning Area II I DD	Avenue 58	66.7	65	Yes	
Planning Area II-LDR	Madison Street	68.8	65	Yes	

<sup>&</sup>lt;sup>1</sup> On-site traffic noise calculations included in Appendix 8.1.

To satisfy the City of La Quinta 65 dBA CNEL exterior noise level standards for residential land use, the construction of 6-foot-high noise barriers is required for the private outdoor living areas (backyards) of single-family residential uses adjacent to Avenue 58 and Madison Street in Planning Area II. With the recommended noise barriers shown on Exhibit ES-A, the future exterior noise levels at the outdoor living areas (backyards) of single-family residential uses in Planning Area II will be reduced to levels ranging from 57.4 to 59.4 dBA CNEL as shown on Table 8-2.



<sup>&</sup>lt;sup>2</sup> City of La Quinta exterior noise criteria (See Section 4).

TABLE 8-2: EXTERIOR TRAFFIC NOISE LEVELS WITH NOISE ABATEMENT MEASURES

Receiver Location	Roadway	Exterior Noise Level (dBA CNEL) <sup>1</sup>	Exterior Noise Level Threshold (dBA CNEL) <sup>2</sup>	Threshold Exceeded?	Barrier Height (Feet)
	Avenue 58	57.4	65	No	6.0
Planning Area II-LDR	Madison Street	59.4	65	No	6.0

<sup>&</sup>lt;sup>1</sup> On-site traffic noise calculations included in Appendix 8.1.

With the recommended noise barriers shown on Exhibit ES-A, the future exterior noise levels represent a *less than significant* noise impact. This noise analysis shows that the recommended noise barriers will satisfy the City of La Quinta 65 dBA CNEL exterior noise level standards at the outdoor living areas of frequent human use (e.g., backyards of single-family homes). The effective noise barrier height represents the minimum wall and/or berm combination height to satisfy the City of La Quinta exterior noise level standards. The on-site exterior traffic noise analysis calculations are provided in Appendix 8.1.

#### 8.2 Interior Noise Analysis

To ensure that the interior noise levels comply with the City of La Quinta interior noise level standards, future noise levels were calculated at the first and second floor building façade locations.

#### 8.2.1 Noise Reduction Methodology

The interior noise level is the difference between the predicted exterior noise level at the building facade and the noise reduction of the structure. Typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." (23) (6) However, sound leaks, cracks and openings within the window assembly can greatly diminish its effectiveness in reducing noise. Several methods are used to improve interior noise reduction, including: (1) weather-stripped solid core exterior doors; (2) upgraded dual glazed windows; (3) mechanical ventilation/air conditioning; and (4) exterior wall/roof assembles free of cut outs or openings.

#### 8.2.2 Interior Noise Level Assessment

Table 8-3 shows that the Project buildings will require a windows-closed condition and a means of mechanical ventilation (e.g., air conditioning). Table 8-3 shows that the future exterior noise levels at the building façades are expected to range from 59.5 to 66.2 dBA CNEL. The interior noise level analysis shows that the City of La Quinta 45 dBA CNEL residential interior noise standards can be satisfied using standard building construction and windows with standard STC ratings of 27 for all lots/units. Therefore, the future on-site interior traffic noise impacts will be less than significant.



<sup>&</sup>lt;sup>2</sup> City of La Quinta exterior noise criteria (See Section 4).

## **TABLE 8-3: INTERIOR NOISE LEVELS (CNEL)**

Building (Façade)	Floor	Noise Level at Façade <sup>1</sup>	Required Interior NR <sup>2</sup>	Minimum Estimated Interior NR <sup>3</sup>	Upgraded Windows <sup>4</sup>	Interior Noise Level <sup>5</sup>	Threshold	Threshold Exceeded?
Avenue 58	1	56.3	11.3	25	No	31.3	45	No
Avenue 58	2	65.5	20.5	25	No	40.5	45	No
NA - di C+	1	58.3	13.3	25	No	33.3	45	No
Madison St.	2	67.5	22.5	25	No	42.5	45	No

<sup>&</sup>lt;sup>1</sup> Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning).



 $<sup>^{2}</sup>$  Noise reduction required to satisfy the 45 dBA CNEL interior noise standard for residential uses.

<sup>&</sup>lt;sup>3</sup> Estimated minimum interior noise reduction with the recommended windows and standard building construction.

<sup>&</sup>lt;sup>4</sup> Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?

 $<sup>^{\</sup>rm 5}$  Estimated interior noise level with minimum STC rating for all windows.

<sup>&</sup>quot;NR" = Noise Reduction

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## 9 SENSITIVE RECEIVER LOCATIONS

To assess the potential for long-term operational and short-term construction noise impacts, the following sensitive receiver locations, as shown on Exhibit 8-A, were identified as representative locations for 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, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

Receivers are located in outdoor living areas (e.g., backyards) at 10 feet from any existing or proposed barriers or at the building façade, whichever is closer to the Project site, based on FHWA guidance, and consistent with additional guidance provided by Caltrans and the FTA, as previously described in Section 5.2. Sensitive receiver locations in the Project study area include the nearby residential uses, 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 154 feet north of the Project site, R1 represents existing residential homes north of 58th Avenue. A 24-hour noise measurement was taken near this location, L1, to describe the existing ambient noise environment.
- R2: Location R2 represents the existing residential homes located north of the Project site at roughly 181 feet, on the north side of 58<sup>th</sup> Avenue. A 24-hour noise measurement was taken near this location, L2, to describe the existing ambient noise environment.
- R3: Location R3 represents the existing residential homes northeast of the intersection at 58th Avenue and Madison Street at approximately 231 feet from the Project site. A 24-hour noise measurement near this location, L3, is used to describe the existing ambient noise environment.
- R4: Location R4 represents the existing residential homes southeast of the intersection at 58th Avenue and Madison Street at approximately 185 feet from the Project site. A 24-hour noise measurement near this location, L4, is used to describe the existing ambient noise environment.
- R5: Location R5 represents the existing residential homes on the east side of Madison Street at approximately 352 feet from the Project site. A 24-hour noise measurement was taken near this location, L5, to describe the existing ambient noise environment.
- R6: Location R6 represents the existing residential home located north of Calle Conchita about 134 feet from the project site. A 24-hour noise measurement was taken near this location, L6, to describe the existing ambient noise environment.



- R7: Location R7 represents the existing residential homes located north of Avenue 60 about 37 feet from the project site. A 24-hour noise measurement was taken near this location, L7, to describe the existing ambient noise environment.
- R8: Location R8 represents the existing residential homes located south of Avenue 60 about 38 feet from the project site. A 24-hour noise measurement was taken near this location, L8, to describe the existing ambient noise environment.
- R9: Location R9 represents the existing residential homes located about 1,451 feet west of the Project site along Quarry Ranch Road. A 24-hour noise measurement was taken near this location, L9, to describe the existing ambient noise environment.
- R10: Location R10 represents the existing residential homes located about 1,378 feet northwest of the Project site north of 58th Avenue. A 24-hour noise measurement was taken near this location, L10, to describe the existing ambient noise environment.



1,451 SITE 60TH AVE

**EXHIBIT 9-A: RECEIVER LOCATIONS** 





Receiver Locations

■ Distance from receiver to Project site boundary (in feet)

Existing 6-Foot High Barrier



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## 10 OPERATIONAL NOISE IMPACTS

This section analyzes the potential stationary-source operational noise impacts at the nearby receiver locations, identified in Section 9, resulting from operation of the proposed Coral Mountain Specific Plan Project. Exhibit 10-A identifies the representative off-site receiver locations, on-site receiver locations and noise source locations used to assess the operational noise levels. Appendix 10.1 includes the detailed calculations for the Project operational noise levels presented in this section.

#### **10.1** 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 10-1 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 wave basin/wave machine activity, outdoor pool/spa activity, outdoor activity, and neighborhood commercial land use activity all operating simultaneously. These noise level impacts will likely vary throughout the day. The operational noise sources will be limited to the daytime hours of 7:00 a.m. to 10:00 p.m. with no planned nighttime activity.

#### 10.1.1 WAVE BASIN/WAVE MACHINE ACTIVITY

To describe the wave basin/wave machine activity, Urban Crossroads, Inc. collected reference noise level measurements at the existing Surf Ranch located at 18556 Jackson Avenue in the City of Lemoore, California. The Surf Ranch is a private facility with a proprietary wave machine technology capable of generating waves every 3 to 4 minutes. To create each wave, a large "sled" is pulled through the water using a cable system on metal rollers. Two buildings at each end of the cable system house the mechanical equipment and cable system.

To measure the noise levels associated with the wave machine, Urban Crossroads, Inc. collected reference noise level measurements at eight different locations around the Surf Ranch. The noise level measurement locations were selected to identify the unique noise characteristics associated with different stages of each wave. Prior to each wave, the control tower announces the event over the public address system. This is followed by the noise generated from the movement of the sled and an increase in noise levels from the mechanical equipment buildings. As the sled moves through the lagoon, noise from the cable and metal rollers is clearly audible. However, throughout each wave event, the primary noise source is simply the movement of water from each wave in the lagoon. Over a period of 53 minutes, ten wave events were measured at eight different locations on April 13, 2020. The reference noise levels suggest that during peak wave events, the Wave basin generates noise levels ranging from 62.6 dBA L<sub>eq</sub> at end of the lagoon, 73.8 dBA L<sub>eq</sub> in the lifeguard tower and 75.7 dBA L<sub>eq</sub> near the cable roller system.



OR1 58TH AVE ARACENA Planning Area II Future Low Density Residential (5) 49 21 Ac. 2122 Web 2.49 DU/Ac. P10 60TH AVE

**EXHIBIT 10-A: OPERATIONAL NOISE SOURCE AND RECEIVER LOCATIONS** 



**LEGEND:** 

Project Receiver Locations

Receiver Locations
Existing 6-Foot High Barrier

Surf Lagoon/Wave Machine

Outdoor/Pool/Spa Activity

**Outdoor Activity** 

Neighborhood Commercial

To describe the worst-case reference noise level conditions, the highest reference noise level describing each peak wave noise event of 75.7 dBA  $L_{eq}$  at a distance of 12 feet is used. This reference noise level likely overstates the expected noise levels from the wave basin/wave machine activity at the Coral Mountain Specific Plan since it only describes the actual wave event. In addition, improved designs plan for the Project have placed the cable roller system under the water surface to eliminate this noise source. The wave basin/wave machine activities will be limited to the daytime hours of 7:00 a.m. to 10:00 p.m. with no planned nighttime activities.

## 10.1.2 OUTDOOR POOL/SPA ACTIVITY

To determine the noise levels associated with outdoor hotel pool and spa activity, Urban Crossroads collected a reference noise level measurement on March  $16^{th}$ , 2005 at the Westin Hotel in the City of Rancho Mirage. The measured reference noise level at 50 feet is 57.8 dBA  $L_{eq}$ . The outdoor pool/spa activity noise levels include a waterfall, people talking, and children and adults swimming and playing in a pool. The outdoor pool/spa activities will be limited to the daytime hours of 7:00 a.m. to 10:00 p.m. with no planned nighttime activities.

### 10.1.3 OUTDOOR ACTIVITIES

To represent the potential noise level impacts associated with the Project's outdoor or beach club activities, a reference noise level measurement was collected on Wednesday, October 8<sup>th</sup>, 2014 at the Founders Park in the unincorporated community of Ladera Ranch in the County of Orange. The reference noise levels collected at the Founders Park are expected to overestimate the noise level activities within the outdoor fields and game areas at the Project site, since the reference noise level measurement includes parents speaking on cell phones, kids playing, and background youth soccer games, with coaches shouting instructions and people cheering and clapping. Using the uniform reference distance of 50 feet, the reference playground activity noise level is 43.4 dBA L<sub>eq</sub>. The outdoor field activities will be limited to the daytime hours of 7:00 a.m. to 10:00 p.m. with no planned nighttime activities.

## 10.1.4 NEIGHBORHOOD COMMERCIAL

To describe the potential noise level impacts associated the proposed neighborhood commercial center a reference noise level measurement was collected at the Destination Ramon Commercial Center in Cathedral City on April 18, 2018. The noise level measurements collected show a peak hourly noise level of 54.8 dBA Leq when measured at 50 feet. The neighborhood commercial use will be limited to the daytime hours of 7:00 a.m. to 10:00 p.m. with no planned nighttime activities.



**TABLE 10-1: REFERENCE NOISE LEVEL MEASUREMENTS** 

Noise Source	Duration	Ref.	Noise Source	Min./Hour <sup>5</sup>		Reference Noise Level (dBA L <sub>eq</sub> )		Sound Power
Noise Source	(hh:mm:ss)	Distance (Feet)	Height (Feet)	Day	Night	@ Ref. Dist.	@ 50 Feet	Level (dBA) <sup>6</sup>
Wave Basin/Wave Machine <sup>1</sup>	00:10:00	12'	5'	60	0	75.7	63.3	112.0
Outdoor Pool/Spa Activity <sup>2</sup>	00:10:00	5'	5'	60	0	77.8	57.8	103.3
Outdoor Activity <sup>3</sup>	00:15:00	5'	5'	60	0	63.4	43.4	84.3
Neighborhood Commercial <sup>4</sup>	00:01:00	20'	5'	60	0	62.8	54.8	99.6

<sup>&</sup>lt;sup>1</sup> As measured by Urban Crossroads, Inc. on 4/13/2020 at the Surf Ranch in the City of Lemoore, CA.

## 10.2 CADNAA NOISE PREDICTION MODEL

To fully describe the exterior operational noise levels from the Project, Urban Crossroads, Inc. developed a noise prediction model using the CadnaA (Computer Aided Noise Abatement) computer program. CadnaA can analyze multiple types of noise sources using the spatially accurate Project site plan, georeferenced Nearmap aerial imagery, topography, buildings, and barriers in its calculations to predict outdoor noise levels.

Using the ISO 9613 protocol, CadnaA will calculate the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of noise level at each receiver and the partial noise level contributions by noise source. Consistent with the ISO 9613 protocol, the CadnaA noise prediction model relies on the reference sound power level (PWL) to describe individual noise sources. While sound pressure levels (e.g. Leq) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (PWL) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish as a result of intervening obstacles and barriers, air absorption, wind, and other factors. Sound power is the acoustical energy emitted by the sound source and is an absolute value that is not affected by the environment.

The operational noise level calculations provided in this noise study 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. A default ground attenuation factor of 1.0 was used in the CadnaA noise analysis to account for hard site conditions. Appendix



<sup>&</sup>lt;sup>2</sup> As measured by Urban Crossroads, Inc. on 3/16/2005 at the Westin Hotel in the City of Rancho Mirage.

<sup>&</sup>lt;sup>3</sup> As measured by Urban Crossroads, Inc. on 10/8/2014 by Urban Crossroads, Inc. at the Founder's Park in the County of Orange.

<sup>&</sup>lt;sup>4</sup> As measured by Urban Crossroads, Inc. on 4/18/2018 by Urban Crossroads, Inc. at Destination Ramon Commercial Center

<sup>&</sup>lt;sup>5</sup> Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site.

<sup>&</sup>quot;Day" = 7:00 a.m. to 10:00 p.m.; "Night" = 10:00 p.m. to 7:00 a.m.

<sup>&</sup>lt;sup>6</sup> Sound power level represents the total amount of acoustical energy (noise level) produced by a sound source independent of distance or surroundings. Sound power levels calculated using the CadnaA noise model at the reference distance to the noise source. Numbers may vary due to size differences between point and area noise sources.

10.1 includes the detailed noise model inputs used to estimate the Project operational noise levels presented in this section.

## 10.3 Project Operational Noise Levels

Using the reference noise levels to represent the proposed Project operations that include wave basin/wave machine activity, outdoor pool/spa activity, outdoor activity, and neighborhood commercial land use activity, Urban Crossroads, Inc. calculated the off-site and on-site operational source noise levels that are expected to be generated at the Project site and the Project-related noise level increases that would be experienced at each of the receiver locations. Tables 10-2 shows the Project operational noise levels during the daytime hours of 7:00 a.m. to 10:00 p.m. The daytime hourly noise levels at the off-site receiver locations are expected to range from 39.8 to 53.3 dBA Leq. The on-site project receiver locations are expected to range from 51.8 to 64.5 dBA Leq. In addition, the unmitigated exterior noise levels at the property line located approximately 200 feet east of the wave basin are estimated at 59.3 dBA Leq. However, there are currently no outdoor living areas or receivers near this location.

**TABLE 10-2: DAYTIME PROJECT OPERATIONAL NOISE LEVELS** 

		Project Opera	ational Noise Lev	els (dBA Leq) <sup>2</sup>	
Receiver Location <sup>1</sup>	Wave Basin/ Wave Machine	Outdoor Pool/ Spa Activity	Outdoor Activity	Neighborhood Commercial	Total
R1	44.2	36.0	19.0	41.8	46.6
R2	38.0	30.3	11.8	45.7	46.5
R3	37.4	29.7	10.9	42.5	43.8
R4	38.2	30.9	11.4	40.9	43.0
R5	39.3	32.3	12.1	37.7	42.1
R6	51.4	44.0	19.5	31.5	52.2
R7	45.0	38.9	11.5	28.9	46.0
R8	46.6	36.5	13.5	23.2	47.0
R9	41.1	30.3	15.3	23.5	41.5
R10	38.6	29.0	13.5	31.4	39.8
P1	58.3	43.8	37.2	32.4	58.5
P2	53.1	51.4	23.8	34.5	55.4
Р3	61.1	46.7	29.2	30.5	61.3
P4	53.7	40.8	15.8	23.3	53.9
P5	53.9	48.6	22.0	32.8	55.1
P6	53.2	46.4	29.5	36.0	54.1
P7	50.4	45.6	23.5	37.6	51.8
P8	44.7	37.3	18.7	53.0	53.7
P9	62.2	47.9	38.6	32.5	62.4
P10	64.0	55.1	24.7	31.4	64.5

## 10.4 PROJECT 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 La Quinta exterior noise level standards at the off-site and on-site receiver locations. Table 10-3 shows the operational noise levels associated with Coral Mountain Specific Plan Project will satisfy the City of La Quinta daytime exterior noise level standards with no planned nighttime operational noise source activity. Therefore, the operational noise impacts are considered *less than significant* at all receiver locations.

**TABLE 10-3: OPERATIONAL NOISE LEVEL COMPLIANCE** 

Receiver Location <sup>1</sup>	Project Operational Noise Levels (dBA Leq) <sup>2</sup>	Noise Level Standards (dBA Leq) <sup>3</sup>	Noise Level Standards Exceeded? <sup>4</sup>
R1	46.6	65	No
R2	46.5	65	No
R3	43.8	65	No
R4	43.0	65	No
R5	42.1	65	No
R6	52.2	65	No
R7	46.0	65	No
R8	47.0	65	No
R9	41.5	65	No
R10	39.8	65	No
P1	58.5	65	No
P2	55.4	65	No
P3	61.3	65	No
P4	53.9	65	No
P5	55.1	65	No
P6	54.1	65	No
P7	51.8	65	No
P8	53.7	65	No
Р9	62.4	65	No
P10	64.5	65	No

<sup>&</sup>lt;sup>1</sup> See Exhibit 10-A for the off-site (R)eceiver and on-site (P)roject locations.



<sup>&</sup>lt;sup>1</sup> See Exhibit 10-A for the off-site (R)eceiver and on-site (P)roject locations.

<sup>&</sup>lt;sup>2</sup> Unmitigated CadnaA noise model calculations are included in Appendix 10.1.

<sup>&</sup>lt;sup>2</sup> Proposed Project daytime operational noise levels as shown on Tables 10-2.

<sup>&</sup>lt;sup>3</sup> Exterior noise level standards for residential land use, as shown on Table 4-2.

<sup>&</sup>lt;sup>4</sup> Do the estimated Project operational noise source activities exceed the noise level standards?

## 10.4 Project Operational Noise Level Increase

To describe the Project operational noise level Increase, the Project operational noise levels are combined with the existing ambient noise levels measurements for the nearby 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:

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

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 describes the Project noise level Increase to the existing ambient noise environment. As indicated on Tables 10-4 the Project will generate unmitigated daytime operational noise level increase ranging from 0.0 to 4.9 dBA L<sub>eq</sub> at nearby off-site receiver locations. This increase satisfies the incremental operational noise level criteria presented in Table 4-2. Therefore, the incremental Project operational noise level increase is considered *less than significant* at all receiver locations.

**TABLE 10-4: DAYTIME PROJECT OPERATIONAL NOISE LEVEL INCREASES** 

Receiver Location <sup>1</sup>	Total Project Operational Noise Level <sup>2</sup>	Meas. Location <sup>3</sup>	Reference Ambient Noise Levels <sup>4</sup>	Combined Project and Ambient <sup>5</sup>	Project Increase <sup>6</sup>	Threshold <sup>7</sup>	Threshold Exceeded? <sup>7</sup>
R1	46.6	L1	54.2	54.9	0.7	5.0	No
R2	46.5	L2	62.5	62.6	0.1	3.0	No
R3	43.8	L3	61.2	61.3	0.1	3.0	No
R4	43.0	L4	54.5	54.8	0.3	5.0	No
R5	42.1	L5	59.7	59.8	0.1	5.0	No
R6	52.2	L6	58.7	59.6	0.9	5.0	No
R7	46.0	L7	57.9	58.2	0.3	5.0	No
R8	47.0	L8	43.8	48.7	4.9	5.0	No
R9	41.5	L9	51.7	52.1	0.4	5.0	No
R10	39.8	L10	61.9	61.9	0.0	3.0	No

<sup>&</sup>lt;sup>1</sup> See Exhibit 9-A for the off-site sensitive receiver locations.



<sup>&</sup>lt;sup>2</sup> Total Project operational noise levels as shown on Table 10-3.

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

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

 $<sup>^{\</sup>rm 5}$  Represents the combined ambient conditions plus the Project activities.

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

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

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## 11 CONSTRUCTION IMPACTS

This section analyzes potential impacts resulting from the short-term construction activities associated with the development of the Project. Exhibit 11-A shows the construction noise source locations in relation to the nearby sensitive receiver locations previously described in Section 8. In addition, Exhibit 11-A outlines the Project Phase 1 boundaries to describe the potential construction impacts from on planned residential development in Phase 3.

### 11.1 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 are expected to occur in the following stages:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

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 more than 80 dBA when measured at 50 feet. However, these noise levels diminish with distance from the construction site at a rate of 6 dBA per doubling of distance. 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.

## 11.2 CONSTRUCTION REFERENCE NOISE LEVELS

To describe the Project construction noise levels, measurements were collected for similar activities at several construction sites. Table 11-1 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 11-1 have been adjusted to describe a uniform reference distance of 50 feet.



OM. 58TH AVE ARACENA R 60TH AVE

**EXHIBIT 11-A: CONSTRUCTION NOISE SOURCE AND RECEIVER LOCATIONS** 





**TABLE 11-1: CONSTRUCTION REFERENCE NOISE LEVELS** 

Construction Stage	Reference Construction Activity <sup>1</sup>	Reference Noise Level @ 50 Feet (dBA L <sub>eq</sub> )	Highest Reference Noise Level (dBA L <sub>eq</sub> )
	Scraper, Water Truck, & Dozer Activity	75.3	
Site Preparation	Backhoe	64.2	75.3
rreparation	Water Truck Pass-By & Backup Alarm	71.9	
	Rough Grading Activities	73.5	
Grading	Water Truck Pass-By & Backup Alarm	71.9	73.5
	Construction Vehicle Maintenance Activities	67.5	
	Foundation Trenching	68.2	
Building Construction	Framing	62.3	71.6
Construction	Concrete Mixer Backup Alarms & Air Brakes	71.6	
	Concrete Mixer Truck Movements	71.2	
Paving	Concrete Paver Activities	65.6	71.2
	Concrete Mixer Pour & Paving Activities	65.9	
	Air Compressors	65.2	
Architectural Coating	Generator	64.9	65.2
Couting	Crane	62.3	

#### 11.3 CONSTRUCTION NOISE ANALYSIS

Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts at the nearby sensitive receiver locations were completed. To assess the worst-case construction noise levels, the Project construction noise analysis relies on the highest noise level impacts when the equipment with the highest reference noise level is operating at the closest point from the edge of primary construction activity (Project site boundary) to each receiver location.

As shown on Table 11-2, the Project Phase 1 construction noise levels are expected to range from 58.0 to 76.5 dBA  $L_{eq}$  at the nearby receiver locations. The Project Phase 2 and Phase 3 construction noise levels are expected to range from 63.7 to 75.8 dBA  $L_{eq}$  as shown on Table 11-3. Appendix 11.1 includes the detailed CadnaA construction noise model inputs.



TABLE 11-2: PHASE 1 CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY

Receiver Location <sup>1</sup>	Construction Noise Levels (dBA L <sub>eq</sub> )									
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels <sup>2</sup>				
R1	65.6	63.8	61.9	61.5	55.5	65.6				
R2	65.8	64.0	62.1	61.7	55.7	65.8				
R3	63.0	61.2	59.3	58.9	52.9	63.0				
R4	62.3	60.5	58.6	58.2	52.2	62.3				
R5	61.6	59.8	57.9	57.5	51.5	61.6				
R6	71.3	69.5	67.6	67.2	61.2	71.3				
R7	72.5	70.7	68.8	68.4	62.4	72.5				
R8	76.5	74.7	72.8	72.4	66.4	76.5				
R9	58.7	56.9	55.0	54.6	48.6	58.7				
R10	58.0	56.2	54.3	53.9	47.9	58.0				

<sup>&</sup>lt;sup>1</sup>Noise receiver locations are shown on Exhibit 11-A.

TABLE 11-3: PHASE 2 & 3 CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY

	Construction Noise Levels (dBA Leq)									
Receiver Location <sup>1</sup>	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels <sup>2</sup>				
R1	74.8	73.0	71.1	70.7	64.7	74.8				
R2	69.9	68.1	66.2	65.8	59.8	69.9				
R3	67.9	66.1	64.2	63.8	57.8	67.9				
R4	68.8	67.0	65.1	64.7	58.7	68.8				
R5	70.6	68.8	66.9	66.5	60.5	70.6				
R6	75.8	74.0	72.1	71.7	65.7	75.8				
R7	68.6	66.8	64.9	64.5	58.5	68.6				
R8	67.5	65.7	63.8	63.4	57.4	67.5				
R9	63.7	61.9	60.0	59.6	53.6	63.7				
R10	64.0	62.2	60.3	59.9	53.9	64.0				
P1	82.8	81.0	79.1	78.7	72.7	82.8				
P2	76.8	75.0	73.1	72.7	66.7	76.8				
P3	82.3	80.5	78.6	78.2	72.2	82.3				
P4	70.6	68.8	66.9	66.5	60.5	70.6				
P5	82.5	80.7	78.8	78.4	72.4	82.5				
P6	82.9	81.1	79.2	78.8	72.8	82.9				
P7	83.2	81.4	79.5	79.1	73.1	83.2				
P8	83.1	81.3	79.4	79.0	73.0	83.1				



 $<sup>^2</sup>$  Construction noise level calculations based on distance from the project site boundaries (construction activity area) to nearby receiver locations. CadnaA construction noise model inputs are included in Appendix 11.1.

Receiver Location <sup>1</sup>	Construction Noise Levels (dBA L <sub>eq</sub> )								
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels <sup>2</sup>			
Р9	75.3	73.5	71.6	71.2	65.2	75.3			
P10	72.6	70.8	68.9	68.5	62.5	72.6			

<sup>&</sup>lt;sup>1</sup> Noise receiver locations are shown on Exhibit 11-A.

## 11.4 CONSTRUCTION NOISE LEVEL COMPLIANCE

The construction noise analysis shows that the highest construction noise levels will occur when construction activities take place at the closest point from primary Project construction activity to each of the nearby receiver locations. To evaluate whether the Project will generate potentially significant short-term noise levels at nearby receiver locations, a construction-related the NIOSH noise level threshold of 85 dBA L<sub>eq</sub> is used as acceptable thresholds to assess construction noise level impacts. The construction noise analysis shows that the nearby receiver locations will satisfy the 85 dBA L<sub>eq</sub> significance threshold during Project construction activities as shown on Tables 11-2 and 11-3. Therefore, the noise impacts due to Project construction noise is considered *less than significant* at all receiver locations.

#### 11.5 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 buildings, the
  vibration is usually short-term and is not of sufficient magnitude to cause building damage.
- 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 (FTA). 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 6-6 and the construction vibration assessment methodology published by the FTA, it is possible to estimate the Project vibration impacts. Table 11-4 presents the expected Project related vibration levels at the nearby receiver locations.



<sup>&</sup>lt;sup>2</sup> Construction noise level calculations based on distance from the project site boundaries (construction activity area) to nearby receiver locations. CadnaA construction noise model inputs are included in Appendix 11.1.

At distances ranging from 90 to 1,451 from Project construction activities, construction vibration velocity levels are estimated to range from 0.000 to 0.009 in/sec RMS and will remain below the threshold of 0.01 in/sec RMS at all receiver locations, as shown on Table 11-4. Therefore, the Project-related vibration impacts are considered *less than significant* during the construction activities at the Project site.

**TABLE 11-4: CONSTRUCTION EQUIPMENT VIBRATION LEVELS** 

	Distance to		Receiver	Levels (in/	sec) PPV²		RMS	Threshold	Threshold Exceeded? <sup>5</sup>	
Receiver <sup>1</sup>	Const. Activity (Feet)	Small Bulldozer	Jack- hammer	Loaded Trucks	Large Bulldozer	Peak Vibration	Velocity Levels (in/sec) <sup>3</sup>	(in/sec) RMS <sup>4</sup>		
R1	154'	0.000	0.002	0.005	0.006	0.006	0.004	0.01	No	
R2	181'	0.000	0.002	0.004	0.005	0.005	0.003	0.01	No	
R3	323'	0.000	0.001	0.002	0.002	0.002	0.001	0.01	No	
R4	519'	0.000	0.000	0.001	0.001	0.001	0.001	0.01	No	
R5	352'	0.000	0.001	0.001	0.002	0.002	0.001	0.01	No	
R6	134'	0.000	0.003	0.006	0.007	0.007	0.005	0.01	No	
R7	90'	0.000	0.005	0.011	0.013	0.013	0.009	0.01	No	
R8	90'	0.000	0.005	0.011	0.013	0.013	0.009	0.01	No	
R9	1,451'	0.000	0.000	0.000	0.000	0.000	0.000	0.01	No	
R10	1,378'	0.000	0.000	0.000	0.000	0.000	0.000	0.01	No	

<sup>&</sup>lt;sup>1</sup> Receiver locations are shown on Exhibit 11-A.

Moreover, 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.



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

<sup>&</sup>lt;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>&</sup>lt;sup>4</sup> Source: County of Riverside General Plan Noise Element, Policy N 16.3.

<sup>&</sup>lt;sup>5</sup> Does the vibration level exceed the maximum acceptable vibration threshold?

## 12 REFERENCES

- 1. **State of California.** *California Environmental Quality Act, Appendix G.* 2018.
- 2. Urban Crossroads, Inc. Coral Mountain Specific Plan Traffic Impact Analysis. April 2020.
- 3. Harris, Cyril M. Noise Control in Buildings. s.l.: McGraw-Hill, Inc., 1994.
- 4. California Department of Transportation Environmental Program. *Technical Noise Supplement A Technical Supplement to the Traffic Noise Analysis Protocol.* Sacramento, CA: s.n., September 2013.
- 5. **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.* March 1974. EPA/ONAC 550/9/74-004.
- 6. U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning, Noise and Air Quality Branch. Highway Traffic Noise Analysis and Abatement Policy and Guidance. December 2011.
- 7. **U.S. Department of Transportation, Federal Highway Administration.** *Highway Traffic Noise in the United States, Problem and Response.* April 2000. p. 3.
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- 13. City of La Quinta. General Plan Environmental Hazards Element, Noise. December 2013.
- 14. . Municipal Code, Sections 9.100, 6.08.
- 15. **National Institute for Occupational Safety and Health.** *Criteria for Recommended Standard: Occupational Noise Exposure.* June 1998.
- 16. County of Riverside. General Plan Noise Element. December 2015.
- 17. **Federal Interagency Committee on Noise.** *Federal Agency Review of Selected Airport Noise Analysis Issues.* August 1992.
- 18. American National Standards Institute (ANSI). Specification for Sound Level Meters ANSI S1.4-2014/IEC 61672-1:2013.
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- 20. California Department of Transportation Environmental Program, Office of Environmental Engineering. Use of California Vehicle Noise Reference Energy Mean Emission Levels (Calveno REMELs) in FHWA Highway Traffic Noise Prediction. September 1995. TAN 95-03.
- 21. **California Department of Transportation.** *Traffic Noise Attenuation as a Function of Ground and Vegetation Final Report.* June 1995. FHWA/CA/TL-95/23.
- 22. **County of Riverside, Office of Industrial Hygiene.** *Requirements for Determining and Mitigating Traffic Noise Impacts to Residential Structures.* April 2015.



23. California Department of Transportation. *Traffic Noise Analysis Protocol.* May 2011.



## 13 CERTIFICATION

The contents of this noise study report represent an accurate depiction of the noise environment and impacts associated with the proposed Coral Mountain Specific Plan 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 LA QUINTA MUNICIPAL CODE



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La Quinta Municipal Code									
<u>U</u> p	<u>Up</u> Pre <u>v</u> ious <u>N</u> ext <u>M</u> ain <u>S</u> earch <u>P</u> rint No F <u>r</u> ames								
Title 9 ZONING									
Chapter 9.100 SUPPLEMENTAL NONRESIDENTIAL REGULATIONS									

#### 9.100.210 Noise control.

- A. Purpose. The noise control standards for nonresidential land use districts set forth in this section are established to prevent excessive sound levels which are detrimental to the public health, welfare and safety or which are contrary to the public interest.
- B. Noise Standards. Exterior noise standards are set forth below. Residential property, schools, hospitals, and churches are considered noise sensitive land uses, regardless of the land use district in which they are located. All other uses shall comply with the "other nonresidential" standard. All noise measurements shall be taken using standard noise measuring instruments. Measurements shall be taken within the receiving property at locations determined by director to be most appropriate to the individual situation.

## Land Use Compatibility for Community Noise Environments

				CNEL	(dBA)			
Land Uses	50	55	60	65	7	70	75	80
	A							
Residential – Single-Family Dwellings, Duplex, Mobile Homes		В						
recordenial single running symmetry, moone fromes					C			
							D	
		A						
Residential – Multiple Family			В					
1					С			
	A							
Transient Lodging: Hotels and Motels			В					
					С			
								D
	A	1						
School Classrooms, Libraries, Churches, Hospitals, Nursing Homes and Convalescent			В	1				
Hospitals					С			
								D
Auditoriums, Concert Halls, Amphitheaters	В						$\perp$	
				С	1	C		
Sports Arenas, Outdoor Spectator Sports	В	_		T				
					С			
	A							_
Playgrounds, Neighborhood Parks				C				
					D			
	A				_			
Golf Courses, Riding Stables, Water Recreation, Cemeteries					С			
								D
	A	1						$\perp$
Office Buildings, Business, Commercial and Professional				В		D		
						D		
	A				D			_
Industrial, Manufacturing, Utilities, Agriculture					В	-		
			Dlam " 1000			D		

Source: California Department of Health Services, "Guidelines for the Preparation and Content of the Noise Element of the General Plan," 1990.

#### **Chart Legend**

- A Normally Acceptable: With no special noise reduction requirements assuming standard construction.
- **B** Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirement is made and needed noise insulation features included in the design.
- C Normally Unacceptable: New construction is discouraged. If new construction does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
- **D** Clearly Unacceptable: New construction or development should generally not be undertaken.

#### **Exterior Noise Standards**

Receiving Land Use	Noise Standard	Time Period
Noise sensitive	65 dB(A)	7:00 a.m.—10:00 p.m.
THOISE SCHSILIVE	50 dB(A)	10:00 p.m.—7:00 a.m.
Other nonresidential	75 dB(A)	7:00 a.m.—10:00 p.m.
Other nomesidential	65 dB(A)	10:00 p.m.—7:00 a.m.

If the noise consists entirely of impact noise, simple tone noise, speech or music, or any combination thereof, each of the noise levels specified in the table in this section shall be reduced by five dB(A).

- C. Noise Limits. It is unlawful for any person at any location within 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, when such noise causes the noise level, when measured on any adjacent property, to exceed:
  - 1. The noise standard for a cumulative period of more than thirty minutes in any hour;
  - 2. The noise standard plus five dB(A) for a cumulative period of more than fifteen minutes in any hour;
  - 3. The noise standard plus ten dB(A) for a cumulative period of more than five minutes in any hour;
  - 4. The noise standard plus fifteen dB(A) for a cumulative period of more than one minute in any hour; or
  - 5. The noise standard plus twenty dB(A) for any period of time.

For purposes of this section, the term "cumulative period" means the number of minutes that a noise occurs within any hour, whether such minutes are consecutive or not.

- D. Ambient Noise Level. If the ambient or background noise level exceeds any of the preceding noise categories, no increase above such ambient noise level shall be permitted.
- E. Exemptions. The following are exempt from the noise restrictions of this section:
  - 1. Emergency vehicles or other emergency operations.
  - 2. City maintenance, construction or similar activities.
  - 3. Construction activities regulated by Section 6.08.050 of the La Quinta Municipal Code.
  - 4. Golf course maintenance activities between five-thirty a.m. and ending no later than eight p.m. on any given day.
- F. Enforcement. The city manager or designee shall have the responsibility and authority to enforce the provisions of this section. (Ord. 565 § 1, 2017; Ord. 550 § 1, 2016)

View the mobile version.

# **APPENDIX 5.1:**

**STUDY AREA PHOTOS** 



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33, 37' 39.900000", 116, 15' 13.400000"



L1\_N 33, 37' 39.830000", 116, 15' 13.430000"



L1\_S 33, 37' 39.830000", 116, 15' 13.430000"



33, 37' 39.900000", 116, 15' 13.400000"



L2\_E 33, 37' 39.670000", 116, 15' 5.000000"



L2\_N 33, 37' 39.670000", 116, 15' 5.030000"



33, 37' 39.680000", 116, 15' 5.030000"



L2\_W 33, 37' 39.680000", 116, 15' 4.970000"



L3\_E 33, 37' 40.370000", 116, 15' 1.730000"



33, 37' 40.600000", 116, 15' 1.870000"



L3\_S 33, 37' 40.600000", 116, 15' 1.870000"



L3\_W 33, 37' 40.370000", 116, 15' 1.730000"



L4\_H 33, 37' 36.210000", 116, 15' 1.040000"



L4\_N 33, 37' 35.640000", 116, 14' 59.700000"



L4\_S 33, 37' 36.190000", 116, 15' 1.100000"



L4\_W 33, 37' 36.220000", 116, 15' 1.040000"



15\_E 33, 37' 38.390000", 116, 15' 1.730000"



L5\_N 33, 37' 37.150000", 116, 15' 1.700000"



15\_S 33, 37' 38.460000", 116, 15' 1.700000"



15\_W 33, 37' 38.350000", 116, 15' 1.700000"



L6\_E 33, 36' 56.080000", 116, 15' 2.250000"



L6\_N 33, 36' 53.960000", 116, 14' 58.540000"



.



L6\_W 33, 36' 55.980000", 116, 15' 2.200000"



L7\_E 33, 36' 46.100000", 116, 15' 7.170000"



L7\_N



L7\_S



L7\_W 33, 36' 45.940000", 116, 15' 7.060000"



L8\_E 33, 36' 45.670000", 116, 15' 21.180000"



L8\_N 33, 36' 53.960000", 116, 14' 58.540000"



L8\_S 33, 36' 45.670000", 116, 15' 21.180000"



L8\_W 33, 36' 45.660000", 116, 15' 21.150000"



L9\_E 33, 37' 28.040000", 116, 16' 13.330000"



33, 38' 49.930000", 116, 16' 5.310000"



L9\_S 33, 37' 28.020000", 116, 16' 13.330000"



L9\_W 33, 37' 28.050000", 116, 16' 13.310000"



L10\_E 33, 37' 39.780000", 116, 15' 47.190000"



L10\_N 33, 37' 39.760000", 116, 15' 47.190000"



L10\_S 33, 37' 39.760000", 116, 15' 47.190000"



L10\_W 33, 37' 39.820000", 116, 15' 47.210000"

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# APPENDIX 5.2:

**NOISE LEVEL MEASUREMENT WORKSHEETS** 



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Location: L1 - Located along 58th Ave. in front of entrance to Coral

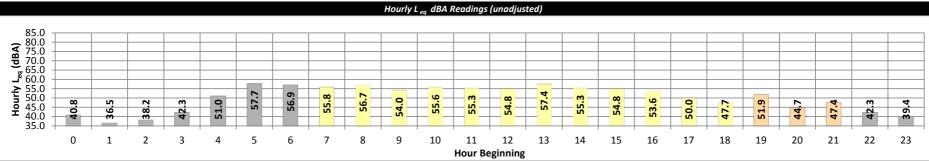
Date: Wednesday, October 16, 2019

Project: 1840 The Wave at Coral Mountain

Location: Location: Mountain and west of Salida del Sol.

Meter: Piccolo I

JN: 12642 Analyst: P. Mara

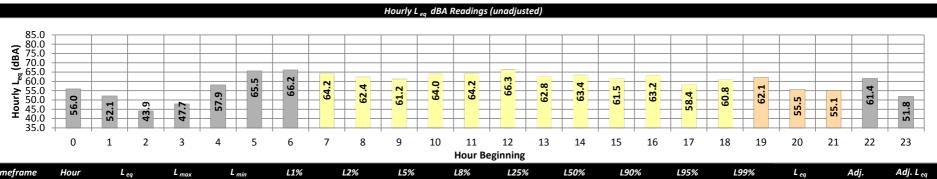


								Hour Be	giiiiiig							
Timeframe	Hour	L <sub>eq</sub>	L max	L min	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L eq	Adj.	Adj. L <sub>eq</sub>
	0	40.8	61.3	36.3	43.0	43.0	42.0	42.0	42.0	39.0	36.0	36.0	36.0	40.8	10.0	50.8
	1	36.5	43.9	36.3	39.0	39.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.5	10.0	46.5
	2	38.2	58.0	36.3	45.0	42.0	39.0	37.0	36.0	36.0	36.0	36.0	36.0	38.2	10.0	48.2
Night	3	42.3	64.6	36.3	52.0	48.0	43.0	41.0	39.0	36.0	36.0	36.0	36.0	42.3	10.0	52.3
	4	51.0	71.7	36.3	64.0	62.0	56.0	52.0	43.0	39.0	36.0	36.0	36.0	51.0	10.0	61.0
	5	57.7	80.3	36.3	68.0	67.0	64.0	62.0	53.0	46.0	39.0	39.0	36.0	57.7	10.0	67.7
	6	56.9	80.5	41.0	68.0	67.0	63.0	59.0	51.0	48.0	44.0	43.0	42.0	56.9	10.0	66.9
	7	55.8	76.5	41.8	67.0	66.0	63.0	60.0	50.0	46.0	43.0	42.0	42.0	55.8	0.0	55.8
	8	56.7	80.1	39.3	67.0	65.0	62.0	60.0	51.0	44.0	41.0	41.0	39.0	56.7	0.0	56.7
	9	54.0	75.0	39.1	66.0	64.0	60.0	58.0	47.0	42.0	39.0	39.0	39.0	54.0	0.0	54.0
	10	55.6	77.9	37.6	67.0	65.0	61.0	59.0	49.0	43.0	39.0	39.0	39.0	55.6	0.0	55.6
	11	55.3	74.7	41.0	67.0	65.0	62.0	59.0	49.0	43.0	41.0	41.0	41.0	55.3	0.0	55.3
Day	12	54.8	73.0	40.9	66.0	64.0	61.0	60.0	49.0	43.0	41.0	41.0	41.0	54.8	0.0	54.8
,	13	57.4	80.0	39.2	68.0	65.0	62.0	60.0	53.0	45.0	41.0	39.0	39.0	57.4	0.0	57.4
	14	55.3	78.2	38.7	66.0	65.0	61.0	59.0	50.0	44.0	40.0	39.0	39.0	55.3	0.0	55.3
	15	54.8	76.3	36.3	66.0	64.0	61.0	58.0	49.0	43.0	39.0	39.0	36.0	54.8	0.0	54.8
	16	53.6	73.1	36.3	66.0	64.0	60.0	57.0	45.0	40.0	36.0	36.0	36.0	53.6	0.0	53.6
	17	50.0	67.7	36.3	62.0	60.0	57.0	54.0	45.0	41.0	36.0	36.0	36.0	50.0	0.0	50.0
	18	47.7	67.4	36.3	60.0	57.0	53.0	50.0	44.0	41.0	37.0	36.0	36.0	47.7	0.0	47.7
Europia a	19	51.9	80.5	36.3	62.0	59.0	53.0	49.0	43.0	41.0	39.0	39.0	37.0	51.9	5.0	56.9
Evening	20	44.7	66.7	36.3	58.0	51.0	45.0	43.0	41.0	39.0	36.0	36.0	36.0	44.7	5.0	49.7
	21	47.4	74.1	36.3	58.0	54.0	47.0	45.0	43.0	39.0	36.0	36.0	36.0	47.4	5.0	52.4
Night	22	42.3	65.9	36.3	48.0	43.0	41.0	41.0	41.0	36.0	36.0	36.0	36.0	42.3	10.0	52.3
Timeframe	23	39.4	45.9	36.3	42.0 <b>L1%</b>	42.0 <b>L2%</b>	41.0 <b>L5%</b>	41.0 <b>L8%</b>	39.0 <b>L25%</b>	39.0	37.0 <b>L90%</b>	36.0 <b>L95%</b>	36.0 <b>L99%</b>	39.4	10.0 L <sub>eq</sub> (dBA)	49.4
Timeframe	Hour Min	L <sub>eq</sub> 47.7	L <sub>max</sub> 67.4	L <sub>min</sub> 36.3	60.0	57.0	53.0	50.0	44.0	<b>L50</b> % 40.0	36.0	36.0	36.0		L <sub>eq</sub> (UBA)	
Day	Max	57.4	80.1	41.8	68.0	66.0	63.0	60.0	53.0	46.0	43.0	42.0	42.0	24-Hour	Daytime	Nighttime
Energy	Average	54.9		rage:	65.7	63.7	60.3	57.8	48.4	42.9	39.4	39.0	38.6		_	
Lifelgy	Min	44.7	66.7	36.3	58.0	51.0	45.0	43.0	41.0	39.0	36.0	36.0	36.0	53.4	54.2	51.5
Evening	Max	51.9	80.5	36.3	62.0	59.0	53.0	49.0	43.0	41.0	39.0	39.0	37.0		Hour CNEL (d	(RA)
Fnergy	Average	49.0		rage:	59.3	54.7	48.3	45.7	42.3	39.7	37.0	37.0	36.3	24	TOUT CIVEL (U	DA)
	Min	36.5	43.9	36.3	39.0	39.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0		-0-	
Night	Max	57.7	80.5	41.0	68.0	67.0	64.0	62.0	53.0	48.0	44.0	43.0	42.0		58.5	
Energy	Average	51.5		rage:	52.1	50.3	47.2	45.7	42.2	39.4	37.3	37.1	36.7	1		
- 87	. 0 -	02.0			J2.1	50.5				55	57.5	J, 12	JU.,			



Meter: Piccolo I

Location: L2 - Located along 58th Ave. South of home at 57925 Barristo Cir. Date: Wednesday, October 16, 2019 JN: 12642 Analyst: P. Mara Project: 1840 The Wave at Coral Mountain

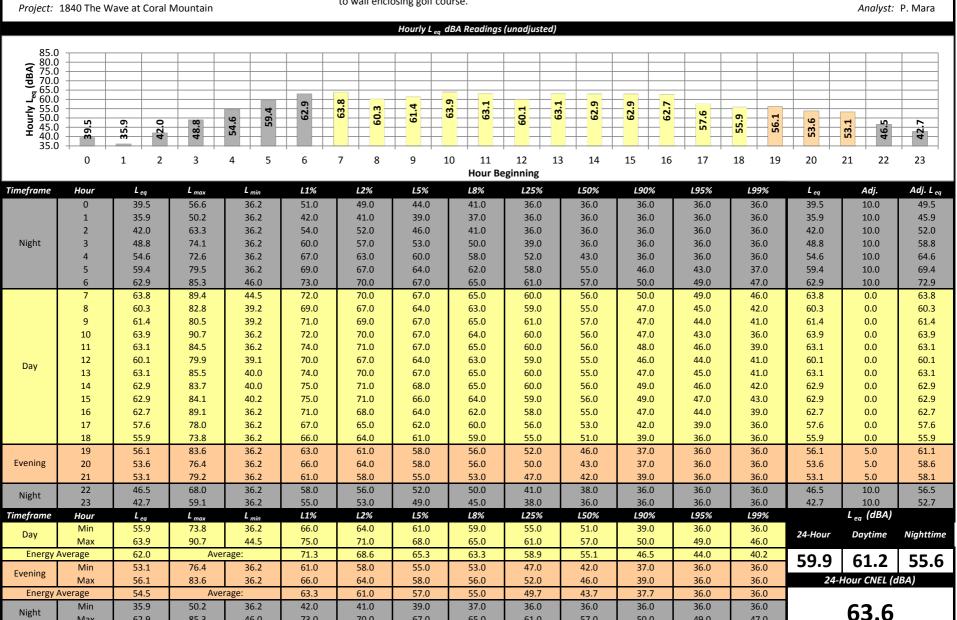


Timeframe	Hour	L eq	L max	L min	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L eq	Adj.	Adj. L <sub>eq</sub>
	0	56.0	67.2	36.1	64.0	64.0	63.0	59.0	56.0	55.0	36.0	36.0	36.0	56.0	10.0	66.0
	1	52.1	62.0	36.1	57.0	57.0	56.0	56.0	55.0	47.0	36.0	36.0	36.0	52.1	10.0	62.1
	2	43.9	64.1	36.1	57.0	54.0	46.0	42.0	36.0	36.0	36.0	36.0	36.0	43.9	10.0	53.9
Night	3	47.7	71.9	36.1	59.0	55.0	51.0	48.0	38.0	36.0	36.0	36.0	36.0	47.7	10.0	57.7
	4	57.9	77.2	36.1	71.0	68.0	64.0	61.0	53.0	43.0	36.0	36.0	36.0	57.9	10.0	67.9
	5	65.5	90.3	36.1	77.0	74.0	70.0	68.0	61.0	55.0	46.0	44.0	40.0	65.5	10.0	75.5
	6	66.2	91.4	42.1	77.0	73.0	68.0	66.0	59.0	56.0	50.0	48.0	45.0	66.2	10.0	76.2
	7	64.2	87.0	43.7	76.0	73.0	69.0	66.0	58.0	54.0	48.0	47.0	45.0	64.2	0.0	64.2
	8	62.4	84.2	39.7	74.0	71.0	67.0	65.0	58.0	53.0	46.0	44.0	41.0	62.4	0.0	62.4
	9	61.2	79.7	39.1	72.0	70.0	67.0	65.0	59.0	53.0	45.0	43.0	41.0	61.2	0.0	61.2
	10	64.0	91.2	36.1	73.0	71.0	68.0	66.0	59.0	53.0	44.0	41.0	38.0	64.0	0.0	64.0
	11	64.2	88.2	36.1	76.0	72.0	69.0	67.0	60.0	54.0	45.0	43.0	38.0	64.2	0.0	64.2
Day	12	66.3	90.2	39.1	79.0	75.0	70.0	67.0	59.0	54.0	46.0	44.0	41.0	66.3	0.0	66.3
Day	13	62.8	84.0	38.1	73.0	71.0	68.0	66.0	60.0	55.0	46.0	44.0	40.0	62.8	0.0	62.8
	14	63.4	86.5	38.4	74.0	72.0	68.0	66.0	60.0	55.0	45.0	43.0	40.0	63.4	0.0	63.4
	15	61.5	82.8	40.3	71.0	69.0	66.0	65.0	59.0	55.0	48.0	46.0	43.0	61.5	0.0	61.5
	16	63.2	89.8	36.1	74.0	72.0	67.0	64.0	57.0	52.0	45.0	42.0	36.0	63.2	0.0	63.2
	17	58.4	79.8	36.1	69.0	68.0	64.0	62.0	55.0	51.0	40.0	39.0	36.0	58.4	0.0	58.4
	18	60.8	80.7	36.1	72.0	70.0	67.0	65.0	56.0	51.0	38.0	36.0	36.0	60.8	0.0	60.8
	19	62.1	88.0	36.1	70.0	68.0	66.0	64.0	57.0	49.0	39.0	36.0	36.0	62.1	5.0	67.1
Evening	20	55.5	75.4	36.1	68.0	64.0	59.0	58.0	52.0	44.0	38.0	36.0	36.0	55.5	5.0	60.5
	21	55.1	79.5	36.1	67.0	63.0	60.0	58.0	51.0	45.0	39.0	38.0	36.0	55.1	5.0	60.1
Night	22	61.4	76.4	36.1	74.0	74.0	66.0	58.0	55.0	49.0	36.0	36.0	36.0	61.4	10.0	71.4
Nigitt	23	51.8	67.0	36.1	65.0	64.0	57.0	55.0	47.0	44.0	36.0	36.0	36.0	51.8	10.0	61.8
Timeframe	Hour	L <sub>eq</sub>	L max	L min	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%		L <sub>eq</sub> (dBA)	
Day	Min	58.4	79.7	36.1	69.0	68.0	64.0	62.0	55.0	51.0	38.0	36.0	36.0	24-Hour	Daytime	Nighttime
Day	Max	66.3	91.2	43.7	79.0	75.0	70.0	67.0	60.0	55.0	48.0	47.0	45.0	24-110u1	Daytiiie	Nighttime
Energy	Average	63.1	Avei	rage:	73.6	71.2	67.5	65.3	58.3	53.3	44.7	42.7	39.6	61.9	62.5	60.7
Evening	Min	55.1	75.4	36.1	67.0	63.0	59.0	58.0	51.0	44.0	38.0	36.0	36.0			
Lveillig	Max	62.1	88.0	36.1	70.0	68.0	66.0	64.0	57.0	49.0	39.0	38.0	36.0	24-1	Hour CNEL (a	IBA)
Energy	Average	58.8	Avei	rage:	68.3	65.0	61.7	60.0	53.3	46.0	38.7	36.7	36.0			
Night	Min	43.9	62.0	36.1	57.0	54.0	46.0	42.0	36.0	36.0	36.0	36.0	36.0		67.6	
Nigiit	Max	66.2	91.4	42.1	77.0	74.0	70.0	68.0	61.0	56.0	50.0	48.0	45.0		07.0	
Energy	Average	60.7	Avei	rage:	66.8	64.8	60.1	57.0	51.1	46.8	38.7	38.2	37.4			



L3 - Located northeast of Madison St. and 58th Ave. adjacent Location:

Date: Wednesday, October 16, 2019 Meter: Piccolo I to wall enclosing golf course.





49.0

38.2

47.0

37.3

JN: 12642

65.0

49.9

61.0

44.1

57.0

41.4

50.0

38.7

85.3

Average:

46.0

73.0

58.8

70.0

56.4

67.0

52.7

Night

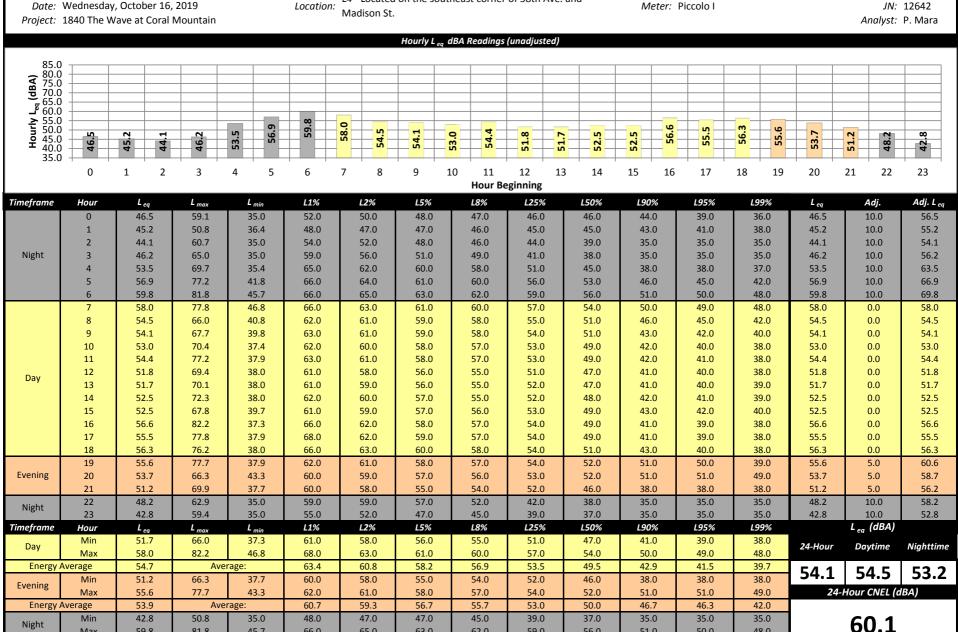
Max

**Energy Average** 

62.9

55.6

L4 - Located on the southeast corner of 58th Ave. and Location:





62.0

51.7

59.0

47.0

56.0

44.1

51.0

40.2

50.0

39.2

48.0

37.9

63.0

53.6

81.8

Average:

45.7

66.0

58.2

65.0

56.3

Night

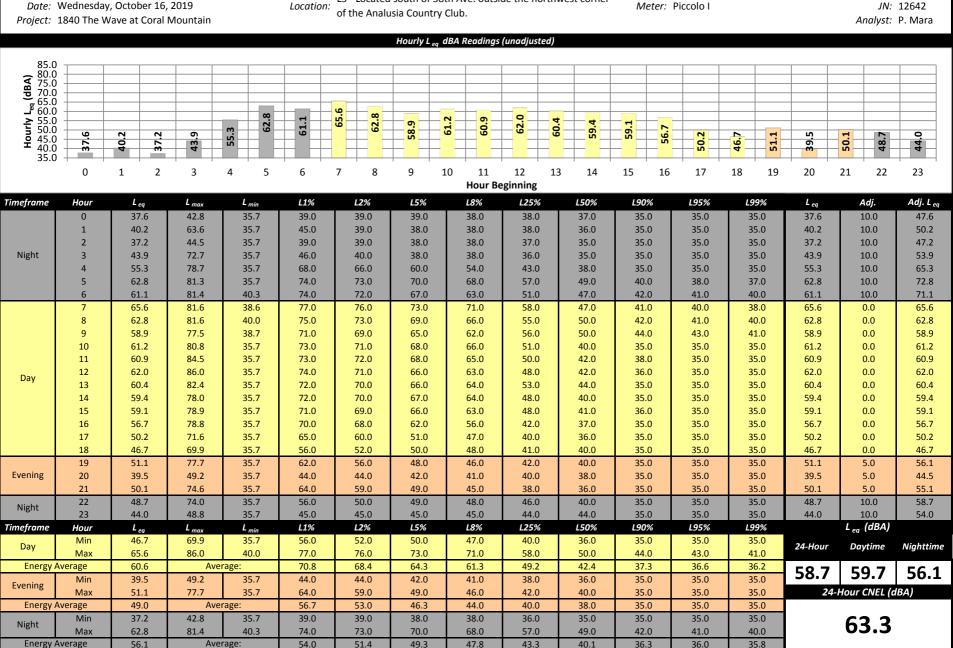
Max

**Energy Average** 

59.8

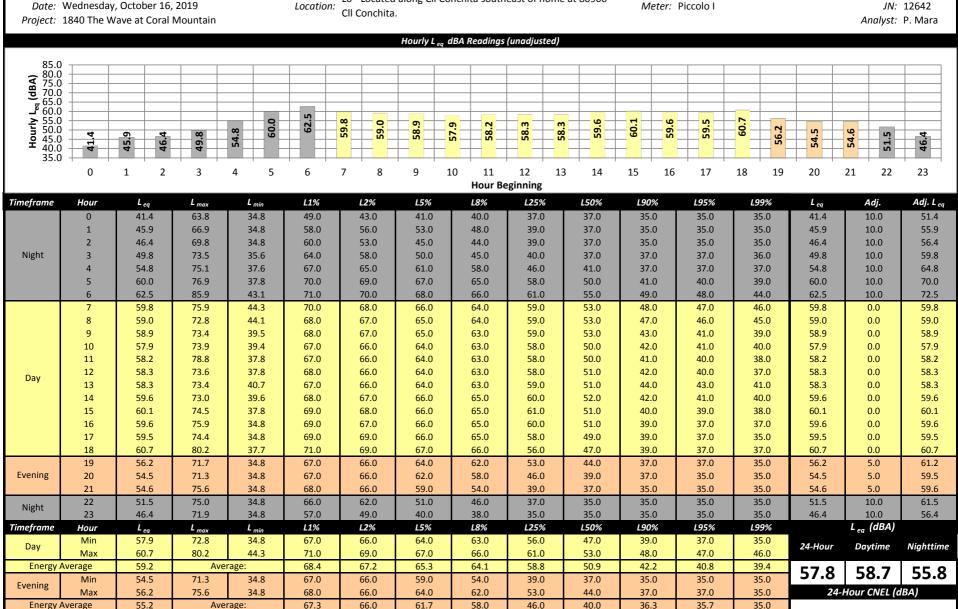
53.2

L5 - Located south of 58th Ave. outside the northwest corner Location:





L6 - Located along CII Conchita southeast of home at 80900 Location:





63.0

38.0

66.0

50.0

46.0

35.0

61.0

43.6

35.0

55.0

40.4

36.3

35.0

49.0

37.7

35.0

48.0

37.4

35.0

44.0

36.8

66.0

43.0

70.0

58.3

61.7

40.0

68.0

52.9

63.8

85.9

41.4

62.5

55.8

Average

Average:

34.8

43.1

49.0

71.0

62.4

**Energy Average** 

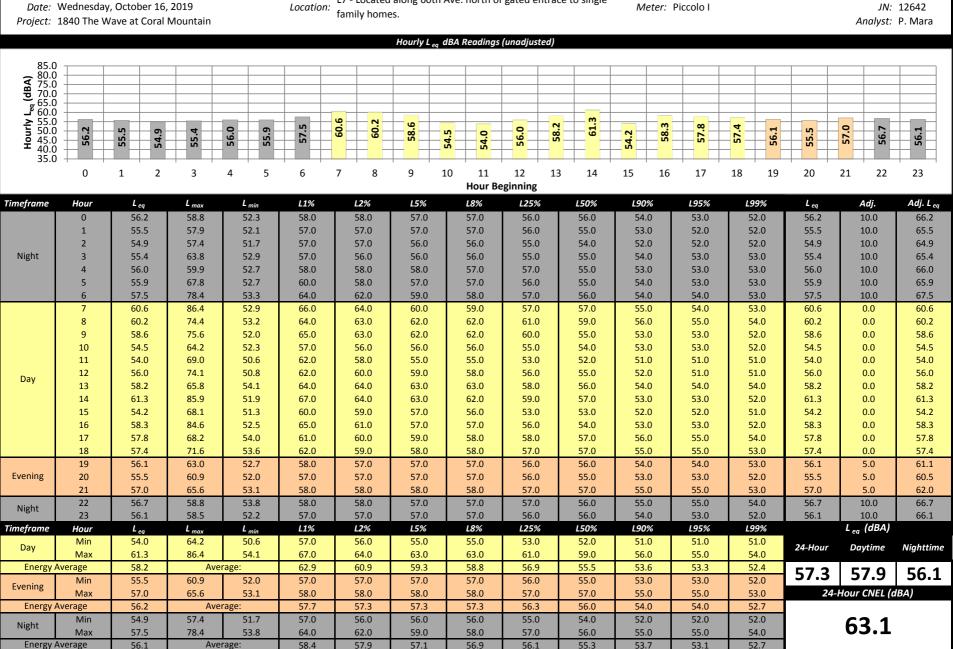
**Energy Average** 

Night

Min

Max

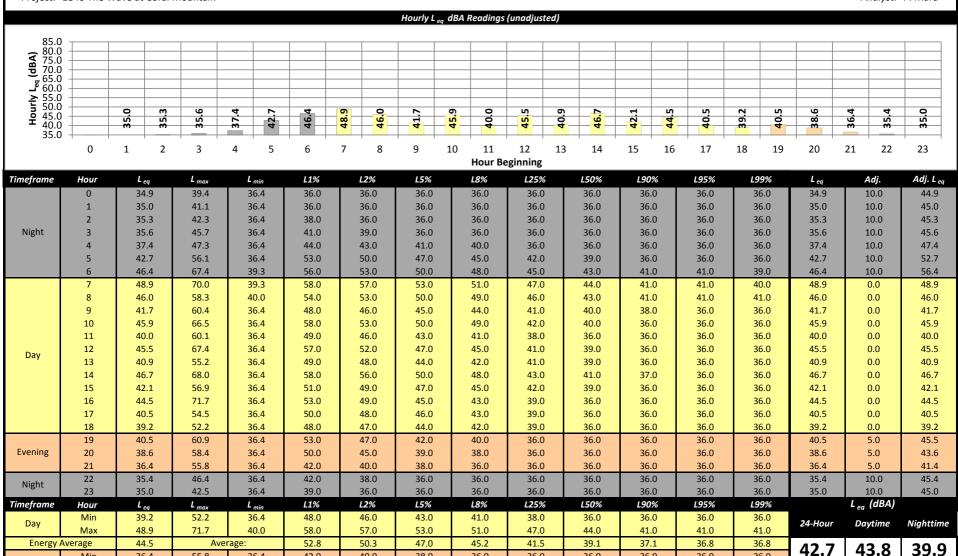
L7 - Located along 60th Ave. north of gated entrace to single





L8 - Located towards the western end of 60th Ave. south of Location:

Date: Wednesday, October 16, 2019 Meter: Piccolo I JN: 12642 home at 80800 60th Ave. Project: 1840 The Wave at Coral Mountain Analyst: P. Mara





24-Hour CNEL (dBA)

47.3

36.0

40.0

38.0

36.0

48.0

38.8

36.0

36.0

36.0

36.0

45.0

37.7

36.0

36.0

36.0

36.0

43.0

37.1

36.0

36.0

36.0

36.0

41.0

36.6

36.0

36.0

36.0

36.0

41.0

36.6

36.0

36.0

36.0

36.0

39.0

36.3

55.8

60.9

39.4

67.4

Average

Average:

36.4

36.4

36.4

42.0

53.0

48.3

36.0

56.0

42.8

40.0

47.0

44.0

36.0

53.0

40.8

38.0

42.0

39.7

36.0

50.0

39.3

Min

Max

Min

Max

**Energy Average** 

**Energy Average** 

Evening

Night

36.4

40.5

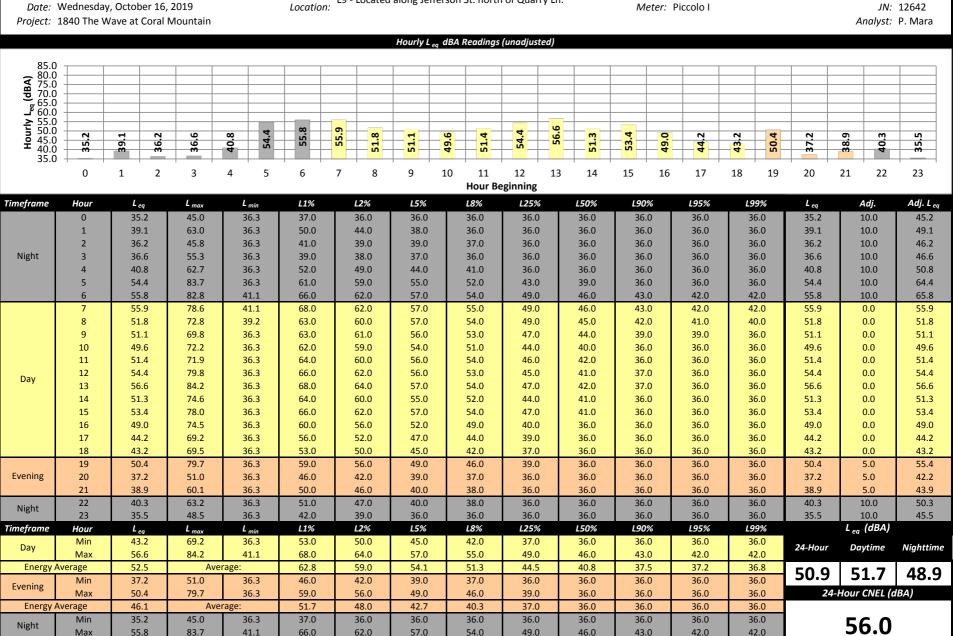
38.8

34.9

46.4

39.9

L9 - Located along Jefferson St. north of Quarry Ln.





40.7

38.2

37.4

36.8

36.7

36.7

Average:

48.8

45.9

42.4

48.9

**Energy Average** 

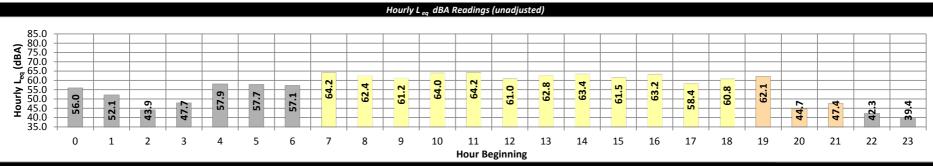
Location: L10 - Located along 58th Ave slighty east of 58th Ave. and

Stone Creek Way.

Meter: Piccolo I

JN: 12642

Analyst: P. Mara



	0 1 2	56.0 52.1	67.2 62.0	36.1	64.0	64.0										
	2		C2 0			04.0	63.0	59.0	56.0	55.0	36.0	36.0	36.0	56.0	10.0	66.0
	_		62.0	36.1	57.0	57.0	56.0	56.0	55.0	47.0	36.0	36.0	36.0	52.1	10.0	62.1
	_	43.9	64.1	36.1	57.0	54.0	46.0	42.0	36.0	36.0	36.0	36.0	36.0	43.9	10.0	53.9
Night	3	47.7	71.9	36.1	59.0	55.0	51.0	48.0	38.0	36.0	36.0	36.0	36.0	47.7	10.0	57.7
	4	57.9	77.2	36.1	71.0	68.0	64.0	61.0	53.0	43.0	36.0	36.0	36.0	57.9	10.0	67.9
	5	57.7	80.3	36.3	68.0	67.0	64.0	62.0	53.0	46.0	39.0	39.0	36.0	57.7	10.0	67.7
	6	57.1	74.2	37.3	68.0	67.0	64.0	62.0	54.0	47.0	41.0	39.0	39.0	57.1	10.0	67.1
	7	64.2	87.0	43.7	76.0	73.0	69.0	66.0	58.0	54.0	48.0	47.0	45.0	64.2	0.0	64.2
	8	62.4	84.2	39.7	74.0	71.0	67.0	65.0	58.0	53.0	46.0	44.0	41.0	62.4	0.0	62.4
	9	61.2	79.7	39.1	72.0	70.0	67.0	65.0	59.0	53.0	45.0	43.0	41.0	61.2	0.0	61.2
	10	64.0	91.2	36.1	73.0	71.0	68.0	66.0	59.0	53.0	44.0	41.0	38.0	64.0	0.0	64.0
	11	64.2	88.2	36.1	76.0	72.0	69.0	67.0	60.0	54.0	45.0	43.0	38.0	64.2	0.0	64.2
Day	12	61.0	83.8	36.1	72.0	70.0	66.0	64.0	58.0	53.0	46.0	43.0	40.0	61.0	0.0	61.0
,	13	62.8	84.0	38.1	73.0	71.0	68.0	66.0	60.0	55.0	46.0	44.0	40.0	62.8	0.0	62.8
	14	63.4	86.5	38.4	74.0	72.0	68.0	66.0	60.0	55.0	45.0	43.0	40.0	63.4	0.0	63.4
	15	61.5	82.8	40.3	71.0	69.0	66.0	65.0	59.0	55.0	48.0	46.0	43.0	61.5	0.0	61.5
	16	63.2	89.8	36.1	74.0	72.0	67.0	64.0	57.0	52.0	45.0	42.0	36.0	63.2	0.0	63.2
	17	58.4	79.8	36.1	69.0	68.0	64.0	62.0	55.0	51.0	40.0	39.0	36.0	58.4	0.0	58.4
	18	60.8	80.7	36.1	72.0	70.0	67.0	65.0	56.0	51.0	38.0	36.0	36.0	60.8	0.0	60.8
Francisco.	19	62.1	88.0	36.1	70.0	68.0	66.0	64.0	57.0	49.0	39.0	36.0	36.0	62.1	5.0	67.1
Evening	20	44.7	66.7	36.3	58.0	51.0	45.0	43.0	41.0	39.0	36.0	36.0	36.0	44.7	5.0	49.7
	21	47.4	74.1	36.3	58.0	54.0	47.0	45.0	43.0	39.0	36.0	36.0	36.0	47.4	5.0	52.4
Night	22	42.3	65.9	36.3	48.0	43.0	41.0	41.0	41.0	36.0	36.0	36.0	36.0	42.3	10.0	52.3
Timesframes	23	39.4	45.9	36.3	42.0 <b>L1%</b>	42.0 <b>L2%</b>	41.0 <b>L5%</b>	41.0 <b>L8%</b>	39.0 <b>L25</b> %	39.0 <b>L50%</b>	37.0 <b>L90%</b>	36.0 <b>L95</b> %	36.0 <b>L99%</b>	39.4	10.0 L <sub>eq</sub> (dBA)	49.4
Timeframe	Hour Min	L <sub>eq</sub> 58.4	L <sub>max</sub> 79.7	L <sub>min</sub> 36.1	69.0	68.0	64.0	62.0	55.0	51.0	38.0	36.0	36.0		L <sub>eq</sub> (UBA)	
Day	Max	64.2	91.2	43.7	76.0	73.0	69.0	67.0	60.0	55.0	48.0	47.0	45.0	24-Hour	Daytime	Nighttime
Energy Av		62.5		age:	73.0	70.8	67.2	65.1	58.3	53.3	44.7	42.6	39.5			
LIICIBY AV	Min	44.7	66.7	36.1	58.0	51.0	45.0	43.0	41.0	39.0	36.0	36.0	36.0	60.3	61.9	54.2
Evening	Max	62.1	88.0	36.3	70.0	68.0	66.0	64.0	57.0	49.0	39.0	36.0	36.0		Hour CNEL (a	
Energy Av		57.5	Aver		62.0	57.7	52.7	50.7	47.0	42.3	37.0	36.0	36.0	2.71	TOUT ENTEL (U	5,1,
	Min	39.4	45.9	36.1	42.0	42.0	41.0	41.0	36.0	36.0	36.0	36.0	36.0	ĺ	60.0	
Night	Max	57.9	80.3	37.3	71.0	68.0	64.0	62.0	56.0	55.0	41.0	39.0	39.0		63.3	
Energy Av	-	54.2	Aver		59.3	57.4	54.4	52.4	47.2	42.8	37.0	36.7	36.3	i		



Date: Wednesday, October 16, 2019

Project: 1840 The Wave at Coral Mountain

# APPENDIX 7.1:

**OFF-SITE TRAFFIC NOISE LEVEL CONTOURS** 



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	FH\	WA-RD-77-108	HIGH	YAW	NOISE P	REDICT	ION MC	DEL			
Road Nam	io: Existing (20 ne: Jefferson S nt: n/o Avenue	it.					t Name: lumber:		ave-Coral	Mountai	n
SITE	SPECIFIC IN	IPUT DATA				ı	NOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	22,800 vehicle	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles).	15		
Peak H	lour Volume:	2,120 vehicle	3		He	eavy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	55 mph		ŀ	Vehicle	Miv					
Near/Far La	ne Distance:	71 feet		F		icleType	9	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
Pa	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		64.0 feet		-	Noise S	ouroo E	lovetion	o (in f	0041		
Centerline Dist.	to Observer:	64.0 feet		-	Noise S			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (	Above Pad):	5.0 feet				m Truck		.006	Grade Ad	iustmon	t: 0.0
Pa	ad Elevation:	0.0 feet			Hea	vy Truck	is: 8	.006	Grade Au	justinen	1. 0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distar	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 53	.486			
	Left View:	-90.0 degree	es		Mediu	m Truck	rs: 53	.320			
	Right View:	90.0 degree	es		Hea	vy Truck	is: 53	.337			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres		Barrier Att	en Be	rm Atten
Autos:	71.78	0.44		-0.5	4	-1.20		-4.70	0.0	000	0.000
Medium Trucks:	82.40	-16.80		-0.5	_	-1.20		-4.88		000	0.000
Heavy Trucks:	86.40	-20.75		-0.5	2	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	r atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	'	Leq E	vening	Leq	Night		Ldn		NEL
Autos:	70		68.9		67.1		61.		69.7		70.3
Medium Trucks:	63		62.7		56.3		54.	-	63.2	_	63.5
Heavy Trucks:	63		62.8		53.8		55.		63.4		63.5
Vehicle Noise:	72	2.1	70.6		67.7		62.	8	71.3	3	71.8
Centerline Distance	e to Noise Co	ontour (in feet	)								
					dBA		dBA		60 dBA	1	dBA
		_	Ldn:		9		69		365		786
		C	NEL:	8	15	1	82		393		846

FH	WA-RD-77-108	HIGHWA	AY NOISE P	REDICTI	ON MO	DEL			
Scenario: Existing (2 Road Name: Jefferson Road Segment: n/o Avenu	St.				Name: lumber:		ave-Coral	Mountair	1
SITE SPECIFIC I	NPUT DATA						L INPUT	S	
Highway Data			Site Co.	nditions	•				
Average Daily Traffic (Adt):		S				Autos:			
Peak Hour Percentage:	9.30%			edium Tru		,			
Peak Hour Volume:	1,181 vehicle	S	Н	eavy Truc	cks (3+ A	Axles):	15		
Vehicle Speed:	55 mph		Vehicle	Mix					
Near/Far Lane Distance:	71 feet		Vel	hicleType		Day	Evening	Night	Daily
Site Data				F	Autos:	77.5%	12.9%	9.6%	97.42%
Barrier Height:	0.0 feet			1edium Ti		84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0			Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	64.0 feet		Noise S	ource El	evation	s (in fe	et)		
Centerline Dist. to Observer:	64.0 feet		110,000	Auto		000			
Barrier Distance to Observer:	0.0 feet		Medii	ım Truck:		297			
Observer Height (Above Pad):	5.0 feet		Hea	vy Truck	s: 8.0	006	Grade Ad	iustment	: 0.0
Pad Elevation:	0.0 feet			•					
Road Elevation:	0.0 feet		Lane Ed	uivalent		_ `	eet)		
Road Grade:	0.0%			Auto	00.	486			
Left View:	-90.0 degre			ım Truck	00.	320			
Right View:	90.0 degre	es	пеа	vy Truck:	s. 53.	337			
FHWA Noise Model Calculation	-								
VehicleType REMEL	Traffic Flow	Distan		Road	Fresn		Barrier Att		m Atten
Autos: 71.78			-0.54	-1.20		-4.70		000	0.000
Medium Trucks: 82.40			-0.52	-1.20		-4.88		000	0.000
Heavy Trucks: 86.40			-0.52	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise Levels (with								_	
VehicleType Leq Peak Ho	ur Leq Daj 7.9	66.4	eq Evening 64.6		Night 58.5	<u> </u>	Ldn 67.2		NEL 67.8
	7.9 1.3	60.2	53.8	-	52.2		60.7	-	60.9
	1.4	60.3	51.2	-	52.5	-	60.8		61.0
· -	9.5	68.1	65.1		60.2		68.8		69.3
Centerline Distance to Noise C	ontour (in feet	t)							
			70 dBA	65	dBA	6	i0 dBA	55	dBA
			10 UDA	001	uDA	-	O GD/ I	00	
		Ldn: NEL:	53	1	15		247	1	32

	- FH	WA-KD-//-10	o HIGI	TWATN	OISE PREDICT	TON MOD	EL			
	o: Existing (2					t Name: TI		e-Coral M	ountain	
	e: Jefferson S				Job i	Number: 12	2642			
Road Segmen	t: n/o Avenue	⇒ 52								
	PECIFIC II	NPUT DATA				NOISE M				
Highway Data				3	ite Conditions					
Average Daily	. ,		es				utos:	15		
	Percentage:	9.30%				rucks (2 A)		15		
	our Volume:	1,507 vehicl	es		Heavy Tro	icks (3+ A)	des):	15		
	nicle Speed:	55 mph		ν	ehicle Mix					
Near/Far Lar	ne Distance:	71 feet			VehicleTyp	e L	ay E	vening	Vight	Daily
Site Data						Autos: 7	7.5%	12.9%	9.6%	97.42%
Rar	rier Heiaht:	0.0 feet			Medium	Trucks: 8	4.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wa		0.0			Heavy	Trucks: 8	6.5%	2.7%	10.8%	0.74%
Centerline Dis		64.0 feet		۸	loise Source E	levations	(in feet	!)		
Centerline Dist. t	o Observer:	64.0 feet			Aut		•	,		
Barrier Distance t	o Observer:	0.0 feet			Medium Truc					
Observer Height (/	,	5.0 feet			Heavy Truc			rade Adju	stment:	0.0
	d Elevation:	0.0 feet		-						
	d Elevation:	0.0 feet		L	ane Equivaler		•	et)		
F	Road Grade:	0.0%			Aut					
	Left View:	-90.0 degre			Medium Truc					
	Right View:	90.0 degre	ees		Heavy Truc	ks: 53.3	37			
FHWA Noise Mode	I Calculation	ıs								
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite Road	Fresne	I Ba	arrier Atter	Ber	m Atten
Autos:	71.78			-0.54			4.70	0.00	-	0.00
Medium Trucks:	82.40		-	-0.52			4.88	0.00	0	0.00
Heavy Trucks:	86.40	-22.2	4	-0.52	-1.20	-	5.31	0.00	0	0.00
Unmitigated Noise										
	Leq Peak Ho			Leq Ev		Night	L	dn	CI	VEL
Autos:	-	9.0	67.4		65.6	59.6		68.2		68.
Medium Trucks:		2.4	61.2		54.8	53.3		61.8		62.
Heavy Trucks:		2.4	61.3		52.3	53.5		61.9		62.
Vehicle Noise:		0.6	69.1		66.2	61.3		69.9		70.
Centerline Distanc	e to Noise C	ontour (in fee	et)	70 d	DA O	dBA	60	dBA		dBA
				7U a	DM 65	UBA	00	UBA	25	
			I also	0.0		105				
			Ldn:	63 67		135 145	_	91 13	-	26 74

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGH	I YAWI	NOISE PI	REDICT	ION MO	DDEL			
Road Nan	rio: Existing (2) ne: Madison S ent: n/o Avenue	L.						The W 12642	ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	5,900 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2	Axles):	15		
Peak I	Hour Volume:	549 vehicles	3		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		ŀ	Vehicle I	Miv					
Near/Far La	ne Distance:	51 feet		ŀ		icleType		Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	- 0	9.6%	,
Ra	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0			- 1	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	54.0 feet		-					.,		
Centerline Dist.	to Observer:	54.0 feet		-	Noise Sc				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		0.000			
Observer Height	(Above Pad):	5.0 feet				m Truck		2.297	0	E	
	ad Elevation:	0.0 feet			Heav	y Truck	s: e	3.006	Grade Ad	justment	0.0
Ro	ad Elevation:	0.0 feet		Ī	Lane Eq	uivalent	Distar	nce (in t	eet)		
	Road Grade:	0.0%		Ī		Auto	s: 47	7.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	7.677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47	7.695			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	inel	Barrier Att	en Ber	m Atten
Autos:	70.20	-5.02		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-22.25		0.2	21	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-26.21		0.2	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er atter	nuation)						
VehicleType	Leq Peak Ho			Leq E	vening		Night		Ldn		NEL
Autos:			62.6		60.8		54		63.4		64.0
Medium Trucks:			56.6		50.2		48		57.		57.3
Heavy Trucks:			57.1		48.0		49	.3	57.0	3	57.8
Vehicle Noise:	65	5.9	64.4		61.4		56	.6	65.2	2	65.6
Centerline Distan	ce to Noise C	ontour (in feet,	)								
		-	$\neg$		dBA		dBA	6	0 dBA	1	dBA
			Ldn:	_	26	_	5		119	_	57
		C	VEL:	2	28	5	9		128	2	76

	FHV	VA-RD-77-108	HIGHW	VAY N	IOISE PF	REDICT	ION MC	DEL			
Road Nan	rio: Existing (20 ne: Madison St ent: n/o Avenue						t Name: lumber:		/ave-Coral I	Mountai	n
SITE	SPECIFIC IN	IPUT DATA				ı	IOISE	MODE	L INPUTS	5	
Highway Data					Site Con	ditions	(Hard =	: 10, S	oft = 15)		
Average Daily	Traffic (Adt):	6,900 vehicles	8					Autos	: 15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2	Axles)	: 15		
Peak H	Hour Volume:	642 vehicles	S		He	avy Tru	cks (3+	Axles)	: 15		
Ve	ehicle Speed:	50 mph			Vehicle I	/liv					
Near/Far La	ane Distance:	51 feet		F		cleType	9	Dav	Evening	Niaht	Dailv
Site Data							Autos:	77.59		9.6%	. ,
Ra	rrier Heiaht:	0.0 feet			Me	edium T	rucks:	84.89	6 4.9%	10.3%	1.84%
Barrier Type (0-V		0.0			F	leavy T	rucks:	86.59	6 2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	54.0 feet		- 1	O-			- /! /	41		
Centerline Dist.	to Observer:	54.0 feet		Ľ	Noise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height	(Above Pad):	5.0 feet				n Truck			Grade Ad	o t mo o m	4.00
P	Pad Elevation:	0.0 feet			Heav	y Truck	'S.' 8	.006	Grade Adj	usunen	i. U.U
Ro	ad Elevation:	0.0 feet		1	Lane Equ	ıivalen	t Distar	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 47	.677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47	.695			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	nel	Barrier Atte	en Be	rm Atten
Autos:	10.20	-4.34		0.1	8	-1.20		-4.67	0.0	00	0.000
Medium Trucks:	81.00	-21.57		0.2	1	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-25.53		0.2	0	-1.20		-5.39	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	′ L	Leq E	vening	Leq	Night		Ldn	С	NEL
Autos:	64	.9	63.3		61.5		55.	4	64.1		64.7
Medium Trucks:	58	.4	57.2		50.9		49.	3	57.8		58.0
Heavy Trucks:	58	.9	57.7		48.7		50.	0	58.3	1	58.4
Vehicle Noise:	66	.6	65.1		62.1		57.	3	65.8	1	66.3
Centerline Distan	ce to Noise Co	ontour (in feet,	)								
				70 d	dBA	65	dBA		60 dBA	55	dBA
			Ldn:	2	8	6	31		132	:	285
		Ci	NEL:	3	1	6	66		142	;	306

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGHV	VAY N	IOISE PI	REDICTI	ON MC	DEL			
Road Nam	rio: Existing (20 ne: Madison St ent: n/o Airport						Name: lumber:		ave-Coral	Mountai	n
SITE	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data					Site Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	9,400 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	ucks (2	Axles):	15		
Peak H	lour Volume:	874 vehicles	S		He	avy Truc	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		-	Vehicle i	Mix					
Near/Far La	ne Distance:	51 feet		F		icleType		Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	
Ra	rrier Heiaht:	0.0 feet			М	edium Ti	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W		0.0				Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Di	. ,	54.0 feet							-1		
Centerline Dist.	to Observer:	54.0 feet		1	Noise So			٠,	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height	(Above Pad):	5.0 feet				m Truck		.297			
	ad Elevation:	0.0 feet			Hear	y Truck	s: 8	.006	Grade Ad	ustmen	1: 0.0
Ro	ad Elevation:	0.0 feet		1	Lane Eq	uivalent	Distar	ice (in	feet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree			Hear	y Truck	s: 47	.695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-2.99		0.1	8	-1.20		-4.67	0.0	000	0.00
Medium Trucks:	81.00	-20.23		0.2	1	-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	85.38	-24.19		0.2	0	-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	e Levels (with	out Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	, ,	Leq E	vening	Leq	Night		Ldn	С	NEL
Autos:	66	i.2	64.6		62.8		56.	.8	65.4	ļ	66.
Medium Trucks:	59	1.8	58.6		52.2		50.	.7	59.1	1	59.
Heavy Trucks:			59.1		50.1		51.		59.7		59.
Vehicle Noise:	67	'.9	66.5		63.4		58.	.6	67.2	2	67.
Centerline Distand	ce to Noise Co	ontour (in feet,	)								
				70 d		65	dBA	6	60 dBA	55	dBA
			Ldn:	3	-		5		162		350
		C	NEL:	3	8	8	1		175	3	376

	FHW	A-RD-77-108 H	IGHWAY	NOIS	E PREDICTIO	N MODEL		
	Existing (201 Madison St. n/o Avenue 5	,				lame: The timber: 1264	Wave-Coral N 2	Mountain
	PECIFIC INF	UT DATA			NC	DISE MOD	EL INPUTS	i
Highway Data				Site	Conditions (F	lard = 10, 3	Soft = 15)	
Vehi	ercentage: ur Volume: icle Speed:	9.30% 419 vehicles 50 mph		Vehic	Medium Truck Heavy Truck		): 15	
Near/Far Lane	Distance:	51 feet			VehicleType	Day	Evening	Night Daily
Site Data  Barrier Type (0-Wal	ier Height: II, 1-Berm):	0.0 feet 0.0			Au Medium Tru Heavy Tru		% 4.9%	9.6% 97.42% 10.3% 1.84% 10.8% 0.74%
Centerline Dist.	to Barrier:	54.0 feet		Noise	Source Ele	vations (in	feet)	
Road	Observer:	54.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0%		F	Autos: edium Trucks: leavy Trucks: <b>Equivalent L</b> Autos:	2.297 8.006 Distance (ii		ustment: 0.0
	Left View: Right View:	-90.0 degrees 90.0 degrees			edium Trucks: leavy Trucks:			
FHWA Noise Model								
VehicleType Autos: Medium Trucks: Heavy Trucks:	70.20 81.00 85.38	-6.19 -23.43 -27.39	0.	18 21 20	-1.20 -1.20 -1.20	-4.6 -4.8 -5.3	7 0.0	0.000
						-0.0	0.0	0.000
Unmitigated Noise I								
Autos:	eq Peak Hour 63.0	61	1.4	-	9.6	53.6	Ldn 62.2	CNEL 62.8
Medium Trucks:	56.6		5.4		9.0	47.5	55.9	56.2
Heavy Trucks:	57.0		5.9		6.9	48.1	56.5	56.6
Vehicle Noise:	64.7	63	3.3	6	0.2	55.4	64.0	64.4
Centerline Distance	to Noise Con	, ,		) dBA	65 dE		60 dBA	55 dBA
			dn:	21	46		99	214
		CNE	:L:	23	50		107	230

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIG	HWAY	NOISE PI	REDICT	ION MO	DDEL			
	io: Existing (20 e: Madison St nt: n/o Avenue	. 1						The W 12642	ave-Coral	Mountair	1
SITE S	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	6,700 vehicles	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	623 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph			Vehicle	Miv					
Near/Far Lai	ne Distance:	51 feet				icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	-	9.6%	
Par	rier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	
Barrier Type (0-W	-	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	. ,	54.0 feet									
Centerline Dist.		54.0 feet			Noise So				eet)		
Barrier Distance		0.0 feet				Auto		.000			
Observer Height (		5.0 feet				m Truck		.297			
	ad Elevation:	0.0 feet			Hear	vy Truck	s: 8	.006	Grade Ad	justment	: 0.0
	ad Flevation:	0.0 feet			Lane Eq	uivalent	Distar	ice (in i	feet)		
·	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree			Hear	vy Truck	s: 47	.695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	-4.46		0.	18	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-21.70		0.:	21	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-25.66		0.:	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barri	er atte	nuation)						
VehicleType	Leq Peak Hou			Leq E	Evening		Night		Ldn		NEL
Autos:	64	.7	63.1		61.4		55	.3	63.9	9	64.5
Medium Trucks:	58	1.3	57.1		50.8		49	.2	57.		57.9
Heavy Trucks:	58	3.7	57.6		48.6		49	.8	58.2	2	58.3
Vehicle Noise:	66	6.4	65.0		61.9		57	.2	65.	7	66.2
Centerline Distanc	e to Noise Co	ontour (in feet,	)								
				70	dBA	65	dBA	6	60 dBA	55	dBA
			Ldn:		28	6	0		130	2	79
		C	NEL:		30	6	5		139	3	00

	FHW	/A-RD-77-108	HIGH	1 YAW	NOISE PI	REDICT	ION MO	DEL			
Road Nan	nio: Existing (20 ne: Madison St. nt: n/o Avenue	*					t Name: lumber:		ave-Coral	Mounta	in
SITE	SPECIFIC IN	PUT DATA				ı	NOISE I	MODE	L INPUT	s	
Highway Data					Site Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	2,800 vehicles	S					Autos.	15		
Peak Hour	Percentage:	9.30%			Ме	edium Ti	ucks (2	Axles)	15		
Peak H	lour Volume:	260 vehicles	8		He	avy Tru	cks (3+	Axles)	15		
Ve	hicle Speed:	45 mph		F	Vehicle i	Miv					
Near/Far La	ne Distance:	45 feet		F		icleType		Dav	Evening	Night	Daily
Site Data					*0		Autos:	77.5%		9.69	,
	rrier Height:	0.0 feet			М	edium 7		84.89	4.9%	10.39	
Barrier Type (0-W		0.0 feet				Heavy 7	rucks:	86.5%	2.7%	10.89	6 0.74%
Centerline Di		51.0 feet		L							
Centerline Dist.		51.0 feet		L	Noise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000			
Observer Height	(Above Pad):	5.0 feet				m Truck		297			
	ad Elevation:	0.0 feet			Hear	y Truck	is: 8.	006	Grade Ad	justmer	nt: 0.0
	ad Flevation:	0.0 feet		Ī	Lane Eq	uivalen	t Distan	ce (in	feet)		
	Road Grade:	0.0%			•	Auto	s: 46.	041			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 45.	848			
	Right View:	90.0 degree			Hear	y Truck	s: 45.	867			
FHWA Noise Mod	el Calculations										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresi	nel	Barrier Att	en Be	erm Atten
Autos:	68.46	-7.79		0.4	13	-1.20		-4.65	0.0	000	0.000
Medium Trucks:	79.45	-25.03		0.4	16	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	84.25	-28.99		0.4	16	-1.20		-5.42	0.0	000	0.000
Unmitigated Noise	e Levels (witho	ut Topo and	barrie	r atten	nuation)						
VehicleType	Leq Peak Hou	r Leq Day	′	Leq E	vening	Leq	Night		Ldn	(	CNEL
Autos:	59.	9	58.3		56.5		50.5	5	59.	1	59.7
Medium Trucks:	53.	7	52.5		46.1		44.6	3	53.	)	53.3
Heavy Trucks:	54.		53.4		44.4		45.6		54.		54.1
Vehicle Noise:	61.	7	60.3		57.2		52.	5	61.	)	61.5
Centerline Distant	ce to Noise Co.	ntour (in feet,	)								
					dBA		dBA	1 '	60 dBA	1	5 dBA
			Ldn:		13	-	28		60		129
		C	NEL:	1	14	;	30		64		138

	FH\	WA-RD-77-108	HIGHWA	Y NOISE P	REDICT	ION MC	DEL			
Road Nan	io: Existing (20 ne: Monroe St. nt: n/o Avenue	,				Name: lumber:		ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA			N	IOISE	MODE	L INPUT	s	
Highway Data				Site Cor	nditions	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	7,500 vehicles	s				Autos:	15		
Peak Hour	Percentage:	9.30%		Me	edium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	698 vehicle	S	He	eavy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		Vehicle	Miv					
Near/Far La	ne Distance:	43 feet			icleType		Dav	Evening	Night	Daily
Site Data						Autos:	77.5%	Ü	9.6%	
Ro	rrier Height:	0.0 feet		M	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		64.0 feet		Noise S			- /! #-	41		
Centerline Dist.	to Observer:	64.0 feet		Noise S	Auto		000	et)		
Barrier Distance	to Observer:	0.0 feet		1.4	Auto ım Truck		297			
Observer Height	(Above Pad):	5.0 feet					297 006	Grade Ad	li rotmont	. 0 0
P	ad Elevation:	0.0 feet		Hea	vy Truck	s: 8	006	Grade Ad	justrnent	. 0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalen	Distan	ce (in i	feet)		
	Road Grade:	0.0%			Auto	s: 60	.488			
	Left View:	-90.0 degree	es	Mediu	ım Truck	s: 60	.341			
	Right View:	90.0 degree	es	Hea	vy Truck	s: 60	.355			
FHWA Noise Mod	el Calculation	s								
VehicleType	REMEL	Traffic Flow	Distan	ce Finite	Road	Fresi	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	-3.97		-1.34	-1.20		-4.70	0.0	000	0.00
Medium Trucks:	81.00	-21.21		-1.33	-1.20		-4.88	0.0	000	0.00
Heavy Trucks:	85.38	-25.17		-1.33	-1.20		-5.31	0.0	000	0.00
Unmitigated Noise	e Levels (with	out Topo and	barrier a	ttenuation)						
VehicleType	Leq Peak Hou	.,.,		q Evening		Night		Ldn		NEL
Autos:	63		62.1	60.3		54.	-	62.9	-	63.
Medium Trucks:	57		56.1	49.7		48.		56.6		56.9
Heavy Trucks:	57		56.6	47.5		48.	_	57.		57.3
Vehicle Noise:	65	5.4	63.9	60.9	)	56.	1	64.7	7	65.
Centerline Distant	ce to Noise Co	ontour (in feet	)							
				70 dBA		dBA	6	60 dBA	1	dBA
			Ldn:	28		31		131		82
			NFI:	30	-	55		141	_	103

	FHV	VA-RD-77-108	HIGHWAY	NOISE P	REDICT	ION MODEL		
Scenario: Road Name: Road Segment:		,				t Name: The V Number: 12642		untain
SITE SP	ECIFIC IN	PUT DATA				NOISE MOD	L INPUTS	
Highway Data				Site Cor	nditions	(Hard = 10, S	oft = 15)	
Vehic	ercentage: ir Volume: cle Speed:	9,600 vehicles 9.30% 893 vehicles 50 mph			eavy Tru	Autos rucks (2 Axles, icks (3+ Axles,	: 15	
Near/Far Lane	Distance:	43 feet		Vel	nicleTyp	e Day	Evening N	light Daily
Site Data  Barrie  Barrier Type (0-Wall	er Height: , 1-Berm):	<b>0.0 feet</b> 0.0			fedium T Heavy T		6 4.9% 1	9.6% 97.42% 10.3% 1.84% 10.8% 0.74%
Centerline Dist.	to Barrier:	64.0 feet		Noise S	ource E	levations (in	eet)	
Road Ro	Observer:	64.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree		Hea Lane Eq	Auto Im Truck vy Truck uivalen Auto Im Truck vy Truck	ks: 2.297 ks: 8.006 t Distance (in ps: 60.488 ks: 60.341	Grade Adjus feet)	tment: 0.0
FHWA Noise Model (	Calculations			1				
VehicleType	REMEL	Traffic Flow	Distance		Road	Fresnel	Barrier Atten	
Autos:	70.20	-2.90		.34	-1.20	-4.70		
Medium Trucks:	81.00	-20.14		.33	-1.20	-4.88		
Heavy Trucks:	85.38	-24.10		.33	-1.20	-5.31	0.000	0.000
Unmitigated Noise L								
	eq Peak Hou			Evening	,	Night	Ldn	CNEL
Autos:	64	-	63.2	61.4		55.4	64.0	64.6
Medium Trucks:	58		57.1	50.8		49.2	57.7	57.9
Heavy Trucks:	58		57.6	48.6		49.9	58.2	58.3
Vehicle Noise:	66		65.0	62.0	)	57.2	65.7	66.1
Centerline Distance	to Noise Co	ntour (in feet)		) dBA	65	dBA	60 dBA	55 dBA
			Ldn:	33		72	154	333
		CI	VEL:	36		77	166	358

Wednesday, March 25, 2020

FI	WA-RD-77-108	HIGHWAY	NOISE P	REDICTIO	N MODEL		
Scenario: Existing (: Road Name: Monroe S Road Segment: n/o Avenu	t.				lame: The V mber: 1264:	Vave-Coral N	Mountain
SITE SPECIFIC	NPUT DATA			NO	DISE MOD	EL INPUTS	5
Highway Data			Site Cor	ditions (l	Hard = 10, S	oft = 15)	
Average Daily Traffic (Adt):	5,100 vehicles	3			Autos	: 15	
Peak Hour Percentage:	9.30%		Me	edium True	cks (2 Axles	): 15	
Peak Hour Volume:	474 vehicles	3	He	avy Truck	s (3+ Axles	): 15	
Vehicle Speed:	50 mph		Vehicle	Miv			
Near/Far Lane Distance:	51 feet			icleType	Dav	Evening	Night Daily
Site Data					utos: 77.5	-	9.6% 97.42%
Barrier Height:	0.0 feet		M	edium Tru	icks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-Wall, 1-Berm):	0.0			Heavy Tru	icks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dist. to Barrier:	54.0 feet		Noise S	nurce Fle	vations (in	feet)	
Centerline Dist. to Observer:	54.0 feet		710,00	Autos			
Barrier Distance to Observer:	0.0 feet		Madiu	m Trucks:			
Observer Height (Above Pad):	5.0 feet			vy Trucks:		Grade Adi	ustment: 0.0
Pad Elevation:	0.0 feet						
Road Elevation:	0.0 feet		Lane Eq		Distance (in	feet)	
Road Grade:	0.070			Autos:	11.002		
Left View:	-90.0 degree	es		m Trucks:			
Right View:	90.0 degree	es	Hea	vy Trucks:	47.695		
FHWA Noise Model Calculatio							
VehicleType REMEL	Traffic Flow	Distance		Road	Fresnel	Barrier Atte	
Autos: 70.2			18	-1.20	-4.67		
Medium Trucks: 81.0			21	-1.20	-4.87		
Heavy Trucks: 85.3			20	-1.20	-5.39	0.0	0.000
Unmitigated Noise Levels (wit							
VehicleType Leq Peak H			Evening	Leq N		Ldn	CNEL
		62.0	60.2		54.1	62.8	
		55.9	49.6		48.0	56.5	
		56.4	47.4		48.6	57.0	
		63.8	60.8		56.0	64.5	65.0
Centerline Distance to Noise (	Contour (in feet)		-104	or :	D4	00 -ID4	FF -1DA
		1	) dBA	65 d	U.	60 dBA	55 dBA
		Ldn: VFI :	23 25	50 54		108 116	233 250
	CI	VEL:	20	54		110	250

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	WAY I	NOISE P	REDICTI	ON MO	DEL	-		
Road Nam	io: Existing (20 e: Monroe St. nt: n/o Airport	,				.,	Name: ' umber: '		ave-Coral I	Mountai	'n
SITE S	SPECIFIC IN	IPUT DATA				N	OISE N	/IODE	L INPUTS	5	
Highway Data					Site Cor	ditions (	Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	3,900 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	icks (2 A	Axles):	15		
Peak H	our Volume:	363 vehicles	8		He	eavy Truc	ks (3+ A	Axles):	15		
Ve	hicle Speed:	50 mph		-	Vehicle	Miv					
Near/Far Lai	ne Distance:	51 feet		ŀ		icleTvpe		Dav	Evening	Night	Dailv
Site Data					¥ C//	//		77.5%		9.6%	. ,
		0.0 feet			M	ledium Tr	ucks:	84.8%	4.9%	10.3%	
Barrier Type (0-W	rier Height:	0.0 reet				Heavv Tr	ucks:	86.5%	2.7%	10.8%	6 0.74%
Centerline Dis	. ,	54.0 feet		L		,					
Centerline Dist		54.0 feet		L	Noise S	ource Ele	evations	s (in fe	et)		
Barrier Distance		0.0 feet				Autos		000			
Observer Height (		5.0 feet			Mediu	m Trucks	: 2.:	297			
	ad Elevation:	0.0 feet			Hea	vy Trucks	: 8.0	006	Grade Adj	ustmen	t: 0.0
	ad Elevation:	0.0 feet			Lane Eq	uivalent	Distano	e (in f	eet)		
	Road Grade:	0.0%		ŀ		Autos			,		
,	Left View:	-90.0 degree	ae .		Mediu	m Trucks					
	Right View:	90.0 degree				vy Trucks					
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresn	iel .	Barrier Atte	en Be	rm Atten
Autos:	70.20	-6.81		0.1	8	-1.20		-4.67	0.0	00	0.000
Medium Trucks:	81.00	-24.05		0.2	21	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-28.01		0.2	20	-1.20		-5.39	0.0	00	0.000
<b>Unmitigated Noise</b>	Levels (with	out Topo and	barrie	r atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	′	Leq E	vening	Leq I	Vight		Ldn	С	NEL
Autos:	62	2.4	60.8		59.0		53.0	)	61.6		62.2
Medium Trucks:	56	6.0	54.8		48.4		46.9	)	55.3		55.5
Heavy Trucks:	56	6.4	55.3		46.2		47.5	5	55.8		56.0
Vehicle Noise:	64	l.1	62.6		59.6		54.8	3	63.4		63.8
Centerline Distance	e to Noise Co	ontour (in feet,	)								
				70	dBA	65 0	IBA	6	0 dBA	55	ō dBA
			Ldn:	1	19	4:	2		90		195
		C	NEL:	2	21	4	5		97		209

	FH\	WA-RD-77-108	HIGH	IWAY N	OISE P	REDICT	ION M	ODEL			
Road Nam	io: Existing (20 ne: Monroe St. nt: n/o Avenue	,						The W	/ave-Coral	Mounta	in
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data					Site Cor	ditions	(Hard	= 10, S	oft = 15)		
Average Daily	. ,	2,700 vehicle	S					Autos			
	Percentage:	9.30%				edium Ti		,			
	lour Volume:	251 vehicle	S		He	eavy Tru	cks (3+	- Axles)	: 15		
	hicle Speed:	50 mph		١	/ehicle	Mix					
Near/Far La	ne Distance:	51 feet			Veh	icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.59	6 12.9%	9.69	6 97.42%
Bai	rrier Height:	0.0 feet			M	ledium 7	rucks:	84.89	6 4.9%	10.39	6 1.84%
Barrier Type (0-W	/all, 1-Berm):	0.0				Heavy 7	rucks:	86.59	6 2.7%	10.89	6 0.74%
Centerline Di		54.0 feet		1	Voise S	ource E	levatio	ns (in f	eet)		
Centerline Dist.		54.0 feet				Auto	s: (	0.000			
Barrier Distance		0.0 feet			Mediu	m Truck	s: :	2.297			
Observer Height (	(Above Pad): ad Flevation:	5.0 feet 0.0 feet			Hea	vy Truck	s: l	3.006	Grade Ad	justmer	t: 0.0
Roa	ad Elevation:	0.0 feet		I	ane Eq	uivalen	t Dista	nce (in	feet)		
	Road Grade:	0.0%				Auto	s: 4	7.862			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 4	7.677			
	Right View:	90.0 degre			Hea	vy Truck	s: 4	7.695			
FHWA Noise Mode	el Calculation										
VehicleType	REMEL	Traffic Flow		stance		Road	Fre		Barrier Att		rm Atten
Autos:	70.20	-8.41		0.18		-1.20		-4.67		000	0.000
Medium Trucks:	81.00			0.2		-1.20		-4.87		000	0.000
Heavy Trucks:	85.38			0.20		-1.20		-5.39	0.0	000	0.000
Unmitigated Noise											
VehicleType Autos:	Leq Peak Hou	ur Leq Daj	59.2	Leq E	ening 57.4		Night	4	Ldn 60.0		ONEL 60.6
Medium Trucks:		1.4	53.2		46.8		45		53.7	-	54.0
Heavy Trucks:	-	1.8	53.7		44.6		45		54.1		54.4
Vehicle Noise:		2.5	61.0		58.0		53		61.8		62.2
Centerline Distance	ce to Noise Co	ontour (in feet	<u>:</u> )								
		,		70 c	lBA	65	dBA		60 dBA	55	5 dBA
			Ldn:	15	5	;	33		71		152
		С	NEL:	16	3	:	35		76		164

	FHV	VA-RD-77-108	HIGH	NAY N	OISE PF	REDICT	ION MO	DEL			
Scenario: Existir Road Name: Monro Road Segment: n/o Av	e St.	,					Name: lumber:		ave-Coral	Mountai	n
SITE SPECIF	IC IN	IPUT DATA							L INPUT	s	
Highway Data				S	Site Con	ditions	(Hard =	10, Sc	ft = 15)		
Average Daily Traffic (A	dt):	3,400 vehicle	s					Autos:	15		
Peak Hour Percenta	ige:	9.30%					ucks (2 )	,	15		
Peak Hour Volui		316 vehicle	s		He	avy Tru	cks (3+ )	4xles):	15		
Vehicle Spe		50 mph		١	/ehicle I	Лix					
Near/Far Lane Distar	ice:	51 feet			Vehi	cleType	•	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Barrier Heid	aht:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-Wall, 1-Bei	,	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dist. to Bar		54.0 feet		٨	loise So	urce El	evation	s (in fe	et)		
Centerline Dist. to Obser		54.0 feet				Auto	s: 0.	000			
Barrier Distance to Obser		0.0 feet			Mediui	n Truck	s: 2.	297			
Observer Height (Above Pa	,	5.0 feet			Heav	y Truck	s: 8.	006	Grade Ad	justmen	t: 0.0
Pad Elevat		0.0 feet		-							
Road Elevat		0.0 feet		L	ane Equ				eet)		
Road Gra		0.0%			A de eller	Auto n Truck		862			
Left Vi		-90.0 degree						677 695			
Right Vi	ew:	90.0 degree	es		Heav	y Truck	S: 47.	695			
FHWA Noise Model Calcul	_										
VehicleType REME		Traffic Flow		ance	Finite		Fresr		Barrier Att		rm Atten
	70.20	-7.41		0.18	-	-1.20		-4.67		000	0.00
	31.00	-24.65		0.21		-1.20		-4.87		000	0.00
	35.38	-28.60		0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise Levels						100	Nicht		l dn		NEL
VehicleType Leq Pea	к <i>н</i> ог 61		60.2	Leq Ev	ening 58.4	Leq	Night 52.4	1	Lan 61.0	1	NEL 61
Medium Trucks:	55		54.2		47.8		46.3		54.1	-	55
Heavy Trucks:	55		54.7		45.6		46.9	-	55.3		55.
Vehicle Noise:	63		62.0		59.0		54.2		62.8		63.
Centerline Distance to Noi	se Co	ontour (in feet	)								
				70 d	IBA .	65	dBA	6	0 dBA	55	dBA
			'						00		178
			Ldn:	18	3	3	38		82		178

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 H	IIGHWAY	NOISE P	REDICTIO	N MODEL		
Scenario: E Road Name: A Road Segment: v	Avenue 50	-,				lame: The V mber: 1264:	Vave-Coral Mo 2	ountain
SITE SPE	ECIFIC IN	PUT DATA			NC	ISE MOD	EL INPUTS	
Highway Data				Site Cor	nditions (F	lard = 10, S	Soft = 15)	
Average Daily Trat	ffic (Adt): 1	12,900 vehicles				Autos	s: 15	
Peak Hour Per	centage:	9.30%		Me	edium Truc	ks (2 Axles	): 15	
Peak Hour	Volume:	1,200 vehicles		He	eavy Truck	s (3+ Axles	): 15	
Vehicle	e Speed:	50 mph		Vehicle	Miv			
Near/Far Lane L	Distance:	51 feet			icleType	Day	Evening N	light Daily
Site Data				VCI		itos: 77.5	0	9.6% 97.42%
	r Heiaht:	0.0 feet		M	ledium Tru			10.3% 1.84%
		0.0 reet 0.0			Heavy Tru			10.8% 0.74%
Barrier Type (0-Wall, Centerline Dist. to		54.0 feet						
Centerline Dist. to C		54.0 feet		Noise S		vations (in	feet)	
Barrier Distance to C		0.0 feet			Autos:			
Observer Height (Abo		5.0 feet			m Trucks:			
	levation:	0.0 feet		Hea	vy Trucks:	8.006	Grade Adjus	tment: 0.0
	Elevation:	0.0 feet		Lane Eq	uivalent E	Distance (in	feet)	
	d Grade:	0.0%			Autos:		,	
1	eft View:	-90.0 degrees		Mediu	m Trucks:	47.677		
Rig	ght View:	90.0 degrees		Hea	vy Trucks:	47.695		
FHWA Noise Model Co	alculations	5						
VehicleType F	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	-1.62	0.	18	-1.20	-4.67	0.000	0.000
Medium Trucks:	81.00	-18.86	0.	21	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-22.81	0.	20	-1.20	-5.39	0.000	0.000
Unmitigated Noise Le	vels (with	out Topo and b	arrier atte	nuation)				
VehicleType Lec	g Peak Hou	r Leq Day	Leq I	vening	Leq N	ight	Ldn	CNEL
Autos:	67.	.6 6	6.0	64.2		58.2	66.8	67.4
Medium Trucks:	61.	.2 60	0.0	53.6		52.1	60.5	60.7
Heavy Trucks:	61.	.6 6	0.5	51.4		52.7	61.0	61.2
Vehicle Noise:	69.	.3 6	7.8	64.8		60.0	68.6	69.0
Centerline Distance to	o Noise Co	ntour (in feet)						
			70	dBA	65 dl	BA	60 dBA	55 dBA
		L	dn:	43	93		201	432
		CNI	EL:	46	100	)	216	464

	FH	WA-RD-77-108	HIGHW	AY N	OISE PI	REDICTION	ON MO	DEL	-		
	io: Existing (2 e: Avenue 50 nt: w/o Madiso	1				.,	Name: ' ımber: '		ave-Coral N	Mountai	n
SITE S	SPECIFIC II	NPUT DATA				N	OISE N	/IODE	L INPUTS	;	
Highway Data				S	ite Con	ditions (	Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	11,200 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	cks (2 A	Axles):	15		
Peak H	our Volume:	1,042 vehicles	3		He	avy Truc	ks (3+ A	Axles):	15		
Ve	hicle Speed:	50 mph		ν	ehicle l	Mix					
Near/Far La	ne Distance:	51 feet		ľ		icleTvpe		Dav	Evening	Night	Dailv
Site Data						A	utos:	77.5%		9.6%	97.42%
Rai	rier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	. ,	54.0 feet			Inian C	ource Ele	untion	o (in fo	n41		
Centerline Dist.	to Observer:	54.0 feet		^	ioise sc			•	ei)		
Barrier Distance	to Observer:	0.0 feet			11-15	Autos m Trucks		000 297			
Observer Height (	Above Pad):	5.0 feet						297	Grade Adj	uetmon	e- n n
Pa	ad Elevation:	0.0 feet			Heat	y Trucks	: 8.1	JUO	Grade Auj	usunem	. 0.0
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distand	ce (in f	eet)		
1	Road Grade:	0.0%				Autos	: 47.	862			
	Left View:	-90.0 degree	es		Mediu	m Trucks	: 47.	677			
	Right View:	90.0 degree	es		Hear	y Trucks	: 47.	695			
FHWA Noise Mode	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dista			Road	Fresn		Barrier Atte		rm Atten
Autos:	70.20			0.18		-1.20		-4.67	0.0		0.000
Medium Trucks:	81.00			0.21		-1.20		-4.87	0.0		0.000
Heavy Trucks:	85.38	-23.43		0.20	)	-1.20		-5.39	0.0	00	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier a	attenu	ıation)						
	Leq Peak Ho			.eq Ev	ening	Leq N			Ldn		NEL
Autos:	-		65.4		63.6		57.5		66.2		66.8
Medium Trucks:	-		59.3		53.0		51.4		59.9		60.1
Heavy Trucks: Vehicle Noise:			59.9 67.2		50.8 64.2		52.1 59.4		60.4 67.9		60.5 68.4
					04.2		39.4	•	67.9		00.4
Centerline Distance	e to Noise C	ontour (in feet,	'	70 d	DA.	65 o	ID A	-	0 dBA		dBA
			l dn:	70 a		85			0 aBA 183		393
			Lan: VFI:	42		91			196		123
		Ci	VEL.	42		9			190	-	+23

	FH	WA-RD-77-108	HIGHW	AY NO	DISE PI	REDICTI	ои мо	DDEL			
Road Nam	io: Existing (2) le: Avenue 52 nt: w/o Monro	,						The W 12642	ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions (	Hard :	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	7,900 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%				edium Tru	,	,			
Peak H	lour Volume:	735 vehicles	3		He	avy Truc	ks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		V	ehicle i	Mix					
Near/Far La	ne Distance:	51 feet		F		icleType		Day	Evening	Night	Daily
Site Data						A	lutos:	77.5%	12.9%	9.6%	97.429
Rai	rrier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		54.0 feet			laina C	ource Ele	o rotio	o (in fe	na41		
Centerline Dist.	to Observer:	54.0 feet		/4	oise st				el)		
Barrier Distance	to Observer:	0.0 feet				Autos		.000			
Observer Height (	Above Pad):	5.0 feet				m Trucks		.297	0	E	
Pa	ad Elevation:	0.0 feet			Heat	y Trucks	s: e	.006	Grade Ad	justrnent	. 0.0
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	ice (in f	eet)		
1	Road Grade:	0.0%				Autos	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Trucks	s: 47	.677			
	Right View:	90.0 degree	es		Hear	y Trucks	s: 47	.695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	-3.75		0.18		-1.20		-4.67	0.0	000	0.00
Medium Trucks:	81.00	-20.99		0.21		-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	85.38	-24.94		0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barrier a	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Day	L	eq Eve	ening	Leq I	Night		Ldn	C	NEL
Autos:	65	5.4	63.9		62.1		56	.0	64.	7	65.
Medium Trucks:	59	9.0	57.8		51.5		49	.9	58.	4	58.
Heavy Trucks:	59	9.4	58.3		49.3		50	.5	58.	9	59.
Vehicle Noise:	67	7.1	65.7		62.7		57	.9	66.	4	66.
Centerline Distanc	e to Noise C	ontour (in feet,	)								
·	-			70 dl	BA	65 (	dBA	6	i0 dBA	55	dBA
			Ldn:	31		6	-		145	_	112
		C	VEL:	33		7:	2		155	3	35

v Eviatina /20	110)				Drainat N	lomo	The W	lava Caral	Mounto	in
	119)			,					iviounta	in
	St				JOD IVUI	nber.	12042			
			-						_	
PECIFIC IN	IPUT DATA		0.	4- 0					S	
			Si	te Cona	itions (F	iard =				
. ,	.,	s								
							,			
		S		Hea	vy Truck	s (3+	Axles):	15		
			Ve	ehicle M	ix					
e Distance:	43 feet			Vehic	leType		Day	Evening	Night	Daily
					Au	itos:	77.5%	12.9%	9.69	6 97.42
rier Heiaht:	0.0 feet			Med	dium Tru	cks:	84.8%	4.9%	10.39	6 1.84
all, 1-Berm):	0.0			He	eavy Tru	cks:	86.5%	2.7%	10.89	6 0.74
			No	oise Sou	rce Elev	vation	ıs (in fe	eet)		
	01.0				Autos:	0	.000			
				Medium	Trucks:	2	.297			
,				Heavy	Trucks:	8	.006	Grade A	djustmer	nt: 0.0
			-							
			La	ine Equi				reet)		
Right View:	90.0 degre	es		Heavy	Trucks:	60	.355			
						Fres				erm Atte
								-		0.0
81.00	-20.28									0.0
							-5.31	0.	.000	0.0
85.38			-1.33		-1.20		-0.07			
85.38	out Topo and	barrier a	ttenua	ation)		t-de t	-0.07	Lata		DAIE!
85.38 <b>Levels (with</b> Leq Peak Hou	out Topo and	barrier a		ation) ening	Leq Ni	_		Ldn		CNEL
85.38 Levels (with Leq Peak Hou	out Topo and ir Leq Day	barrier a y Le	ttenua	ening 61.3		55	2	63.	.8	64
85.38 Levels (with Leq Peak Hou 64 58	out Topo and ir Leq Day 1.6	barrier a y Le 63.0 57.0	ttenua	ening 61.3 50.6		55 49	2	63. 57.	.8 .6	64 57
85.38 Levels (with Leq Peak Hou 64 58 58	out Topo and Ir Leq Day 1.6 1.2	barrier a y Le 63.0 57.0	ttenua	ening 61.3 50.6 48.5		55 49 49	2 1 7	63. 57. 58.	.8 .6 .1	6- 5: 5:
85.38  Levels (without the property of the pro	out Topo and Ir Leq Day 6.6 6.2 6.6 6.3	63.0 57.0 64.9	ttenua	ening 61.3 50.6		55 49	2 1 7	63. 57.	.8 .6 .1	6- 5: 5:
85.38  Levels (without the property of the pro	out Topo and Ir Leq Day 1.6 1.2	63.0 57.0 64.9	attenua eq Eve	61.3 50.6 48.5 61.8	Leq Ni	55. 49. 49. 57.	2 1 7 1	63. 57. 58. 65.	.8 .6 .1 .6	64 57 58
85.38  Levels (without the property of the pro	out Topo and Ir Leq Day 6.6 6.2 6.6 6.3	63.0 57.0 64.9	ttenua	61.3 50.6 48.5 61.8		55. 49. 49. 57.	2 1 7 1	63. 57. 58.	.8 .6 .1 .6	57 58 66 5 dBA 326
	s: Existing (20: Avenue 50 t: elo Monroe PECIFIC IN Traffic (Adt): Percentage:	: Existing (2019) : Avenue 50 : elo Monroe St.  PECIFIC INPUT DATA  'raffic (Adt): 9,300 vehicle 'percentage: 9,30%  **uur Volume: 865 vehicle icle Speed: 50 mph  **e Distance: 43 feet  'ler Height: 0.0 feet ill, 1-Barmi: 0.0  **to Barrier: 64.0 feet  **o Observer: 0.0 feet blove Pad): 5.0 feet  **d Elevation: 0.0 feet d Elevation: 0.0 feet d Elevation: 0.0 feet d Elevation: 0.0 feet d Elevation: 0.0 feet Calculations  **REMEL Traffic Flow To.20 -3.04	: Existing (2019) : Avenue 50 : elo Monroe St.  PECIFIC INPUT DATA  "raffic (Adt): 9,300 vehicles Percentage: 9,30% Pur Volume: 865 vehicles Icle Speed: 50 mph e Distance: 43 feet  "lier Height: 0.0 feet Ill, 1-Berm): 0.0  t. to Barrier: 64.0 feet 0 Observer: 0.0 feet del Elevation: 0.0 degrees Right View: 90.0 degrees  Right View: 90.0 degrees  Right View: 70.0 Jostar  TO.20 -3.04	: Existing (2019) :: Avenue 50 :: elo Monroe St.  PECIFIC INPUT DATA  Si raffic (Adf): 9,300 vehicles Percentage: 9,30% Pur Volume: 865 vehicles Icle Speed: 50 mph Percentage: 9,30%  In July 10,00 teet Ill, 1-Berm): 0,0 Pet 43 feet  In July 10,00 teet Ill, 1-Berm): 0,0 Pet 40,0 feet Ill 1-Berm): 0,0 feet Ill 1-Berm): 0,0 feet Ill 1-Berm): 0,0 feet Ill 1-Berm): 0,0 feet Ill 1-Bermi: 0,0 feet Il	: Existing (2019) :: Avenue 50 :: elo Monroe St.  PECIFIC INPUT DATA  Site Cond raffic (Adf): 9,300 vehicles Percentage: 9,30% Percentage:	: Existing (2019)	: Existing (2019)	E Avenue 50 E elo Monroe St.  PECIFIC INPUT DATA    Site Conditions (Hard = 10, St. actions) (Ha	## Starting (2019)	Project Name: The Wave-Coral Mountary   Project Name: The Wave-Coral Mountary

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	WAY	NOISE P	REDICTI	ON M	ODEL			
Road Nam	io: Existing (20 ne: Avenue 54 nt: w/o Madiso	,						: The W : 12642	ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data					Site Cor	ditions	Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	8,600 vehicles	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	icks (2	2 Axles):	15		
Peak F	lour Volume:	800 vehicles	S		He	eavy Truc	ks (3-	+ Axles):	15		
Ve	hicle Speed:	50 mph		ł	Vehicle	Miv					
Near/Far La	ne Distance:	51 feet		-		icleType	1	Dav	Evening	Night	Daily
Site Data					*01		utos:	77.5%		9.6%	
	rrier Height:	0.0 feet			M	ledium Tı		84.8%		10.3%	
Barrier Type (0-W		0.0 1661				Heavy Tr	ucks:	86.5%	2.7%	10.8%	
Centerline Di	. ,	54.0 feet			M-1 0			( 6	41		
Centerline Dist.	to Observer:	54.0 feet			Noise S				eet)		
Barrier Distance	to Observer:	0.0 feet				Autos		0.000			
Observer Height	(Above Pad):	5.0 feet				m Trucks		2.297			
	ad Elevation:	0.0 feet			Hea	vy Trucks	S.:	8.006	Grade Ad	yustment	: 0.0
Ro	ad Elevation:	0.0 feet		İ	Lane Eq	uivalent	Dista	nce (in i	feet)		
	Road Grade:	0.0%		İ		Autos	3: 4	7.862			
	Left View:	-90.0 degree	es		Mediu	m Trucks	8: 4	7.677			
	Right View:	90.0 degree	es		Hea	vy Trucks	s: 4	7.695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance		Road	Fre		Barrier At		m Atten
Autos:	70.20			0.		-1.20		-4.67		000	0.000
Medium Trucks:	81.00			0.2		-1.20		-4.87		000	0.000
Heavy Trucks:	85.38	-24.57		0.2	20	-1.20		-5.39	0.	000	0.000
Inmitigated Noise	e Levels (with	out Topo and	barrie	er atte	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	′	Leq E	vening	Leq			Ldn	C	NEL
Autos:	65	5.8	64.2		62.5		56	6.4	65.	0	65.6
Medium Trucks:	59		58.2		51.8		50	0.3	58.	8	59.0
Heavy Trucks:	59	9.8	58.7		49.7		50	).9	59.	3	59.4
Vehicle Noise:	67	7.5	66.1		63.0		58	3.2	66.	8	67.3
Centerline Distant	ce to Noise Co	ontour (in feet,	)								
				70	dBA	65 (	1BA	6	60 dBA	55	dBA
			Ldn:	;	33	7	1		153	3	30
		C	NEL:	;	35	7	6		165	3	54

Wednesday, March 25, 2020

	Fŀ	lWA-RD-77-10	08 HIGH	HWAY I	NOISE P	REDICT	ON MO	DEL			
Road Na	ario: Existing (2 ame: Avenue 54 pent: w/o Monro	4					Name: lumber:		ave-Coral	Mounta	in
SIT	SPECIFIC I	NPUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data		0 . 5,,,,,			Site Cor	nditions					
Average Dai	ly Traffic (Adt):	5.300 vehic	les					Autos:	15		
	ur Percentage:	9.30%			Me	edium Tn	ucks (2	Axles):	15		
Peak	Hour Volume:	493 vehic	les		He	eavy True	cks (3+	Axles):	15		
,	/ehicle Speed:	50 mph		-	Vehicle	Miss					
Near/Far	ane Distance:	51 feet		-		iviix nicleType	. 1	Dav	Evenina	Niaht	Daily
Site Data					Ver		Autos:	77.5%		9.69	
		0.0.64			N	1edium T		84.8%		10.39	
Barrier Type (0-	Rarrier Height:	0.0 feet 0.0				Heavy T	rucks:	86.5%	2.7%	10.89	6 0.74%
,, ,	Dist. to Barrier:	54.0 feet									
	t. to Observer:	54.0 feet		L	Noise S	ource El		•	eet)		
Barrier Distant		0.0 feet				Auto.		.000			
Observer Heiah		5.0 feet				ım Truck		.297			
	Pad Elevation:	0.0 feet			Hea	vy Truck	s: 8	.006	Grade Ad	justmer	nt: 0.0
	nad Elevation:			ľ	Lane Eq	uivalent	Distar	ce (in	feet)		
	Road Grade:			İ		Auto.	s: 47	.862			
	I eft View:	-90.0 degr	ees		Mediu	ım Truck	s: 47	.677			
	Right View:	90.0 degr			Hea	vy Truck	s: 47	.695			
FHWA Noise Mo	del Calculatio	ns									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Auto		0 -5.4	-8	0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Truck	s: 81.0	0 -22.7	2	0.2	21	-1.20		-4.87	0.0	000	0.000
Heavy Truck	s: 85.3	8 -26.6	8	0.2	20	-1.20		-5.39	0.0	000	0.000
Unmitigated No.	se Levels (with	hout Topo an	d barri	er atter	nuation)						
VehicleType	Leq Peak Ho	our Leq D	ay	Leq E	vening	Leq	Night		Ldn	(	NEL
Auto	s: 6	3.7	62.1		60.4		54.	3	62.9	9	63.5
Medium Truck	s: 5	57.3	56.1		49.7		48.	2	56.6	3	56.9
Heavy Truck	s: 5	7.7	56.6		47.6	;	48.	8	57.2	2	57.3
Vehicle Nois	e: 6	55.4	64.0		60.9	)	56.	1	64.7	7	65.2
Centerline Dista	nce to Noise C	Contour (in fe	et)								
				70	dBA	65	dBA	6	60 dBA	55	5 dBA
			Ldn:	_	24		1		111		239
			CNEL:	2	26	5	5		119		257

	WA-RD-77-108	HIGHV	VAY NO	DISE P	REDICTION	ом ис	DEL			
Scenario: Existing (2 Road Name: Avenue 58 Road Segment: w/o Madis	3					Name: ' ımber:		ave-Coral	Mountair	1
SITE SPECIFIC I	NPUT DATA							L INPUT	s	
Highway Data			Si	ite Cor	ditions (					
Average Daily Traffic (Adt):	1,600 vehicle	:S					Autos:	15		
Peak Hour Percentage:	9.30%				edium Tru					
Peak Hour Volume:	149 vehicle	:S		He	eavy Truc	ks (3+ /	Axles):	15		
Vehicle Speed:	45 mph		V	ehicle	Mix					
Near/Far Lane Distance:	45 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data					Α	utos:	77.5%	12.9%	9.6%	97.42%
Barrier Height:	0.0 feet			M	ledium Tri	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	51.0 feet		N	oise S	ource Ele	vation	s (in fe	et)		
Centerline Dist. to Observer:	51.0 feet				Autos	: 0.	000			
Barrier Distance to Observer:	0.0 feet			Mediu	m Trucks	: 2.	297			
Observer Height (Above Pad): Pad Flevation:	5.0 feet 0.0 feet			Hea	vy Trucks	: 8.	006	Grade Ad	justment	: 0.0
Road Elevation:	0.0 feet		Li	ane Eq	uivalent	Distan	ce (in i	eet)		
Road Grade:	0.0%				Autos	: 46.	041			
Left View:	-90.0 degre	es		Mediu	m Trucks	: 45.	848			
Right View:	90.0 degre	es		Hea	vy Trucks	: 45.	867			
FHWA Noise Model Calculation	าร									
VehicleType REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresr	nel	Barrier Att	en Ber	m Atten
Autos: 68.46	3 -10.22	!	0.43		-1.20		-4.65	0.0	000	0.000
Medium Trucks: 79.45	5 -27.46		0.46		-1.20		-4.87	0.0	000	0.000
Heavy Trucks: 84.25	5 -31.42		0.46		-1.20		-5.42	0.0	000	0.000
Unmitigated Noise Levels (with										
VehicleType Leq Peak Ho			Leq Eve		Leq N			Ldn		NEL
	7.5	55.9		54.1		48.1		56.7		57.3
	1.2	50.1		43.7		42.1		50.6	-	50.8
Heavy Trucks: 5	9.3	51.0 57.9		41.9 54.7		43.2 50.1		51.6 58.6		51.7 59.1
Vehicle Noise: 5				0		55.		50.0	-	
	ontour (in foo	f)								
Vehicle Noise: 5  Centerline Distance to Noise C	Contour (in fee	t)	70 dE	BA	65 a	IBA .	6	i0 dBA	55	dBA
	Contour (in fee	t) Ldn:	70 dE	ВА	65 a		6	60 dBA 41	1	dBA 89

	FHV	VA-RD-77-108	HIGH	WAY N	IOISE PI	REDICTIO	ON MODEL			
Road Nan	rio: Existing (20 ne: Airport Bl. nt: w/o Monroe	•					Vame: The V Imber: 12642		Mountair	1
SITE Highway Data	SPECIFIC IN	IPUT DATA			Sita Can		DISE MODE		S	
					site Con	aitions (i				
Average Daily		2,000 vehicles	•				Autos			
	Percentage:	9.30%					cks (2 Axles)			
	lour Volume:	186 vehicles	•		He	avy Truci	ks (3+ Axles)	: 15		
	hicle Speed:	50 mph		١	Vehicle I	Wix				
Near/Far La	ne Distance:	51 feet			Veh	icleType	Day	Evening	Night	Daily
Site Data						A	utos: 77.5%	6 12.9%	9.6%	97.42%
Ва	rrier Heiaht:	0.0 feet			М	edium Tru	icks: 84.89	6 4.9%	10.3%	1.84%
Barrier Type (0-V	/all, 1-Berm):	0.0				Heavy Tru	icks: 86.5%	6 2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	54.0 feet		,	Voico S	urco Elo	vations (in f	inat)		
Centerline Dist.	to Observer:	54.0 feet		,	V0/36 30	Autos.		eei)		
Barrier Distance	to Observer:	0.0 feet			A de elle	m Trucks.				
Observer Height	(Above Pad):	5.0 feet				vy Trucks.		Grade Ad	iuetmant	- 0 0
P	ad Elevation:	0.0 feet			пеа	ry Trucks.	0.000	Orace Au	ustricin	. 0.0
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalent l	Distance (in	feet)		
	Road Grade:	0.0%				Autos.	47.862			
	Left View:	-90.0 degree	s		Mediu	m Trucks.	47.677			
	Right View:	90.0 degree	s		Hear	y Trucks	47.695			
FHWA Noise Mod	el Calculation	s								
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresnel	Barrier Atte	en Bei	m Atten
Autos:	70.20	-9.71		0.18	В	-1.20	-4.67	0.0	000	0.000
Medium Trucks:	81.00	-26.95		0.2	1	-1.20	-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-30.91		0.20	0	-1.20	-5.39	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	r atten	uation)					
VehicleType	Leq Peak Hou	ır Leq Day		Leq E	vening	Leq N	light	Ldn	C	NEL
Autos:	59	.5	57.9		56.1		50.1	58.7	,	59.3
Medium Trucks:	53	.1	51.9		45.5		44.0	52.4	ļ.	52.6
Heavy Trucks:	53	.5	52.4		43.3		44.6	52.9	)	53.1
Vehicle Noise:	61	.2	59.7		56.7		51.9	60.5	5	60.9
Centerline Distant	ce to Noise Co	ontour (in feet)								
				70.0	4RΔ	65 d	RΔ	60 dRA	1 55	dRA

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 I	HIGHWAY	NOISE P	REDICTIO	N MODEL					
	e: Existing (20 e: Avenue 58 t: w/o Monroe	-,				lame: The V mber: 12642	Vave-Coral Mo	untain			
SITE S	PECIFIC IN	PUT DATA			NC	ISE MODI	EL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily 7	raffic (Adt):	2,300 vehicles		Autos: 15							
Peak Hour F	Percentage:	9.30%		Me	edium Truc	ks (2 Axles)	: 15				
Peak Ho	our Volume:	214 vehicles		He	avy Truck	s (3+ Axles)	: 15				
Veh	icle Speed:	45 mph		Vehicle	Miv						
Near/Far Lan	e Distance:	45 feet			icleType	Day	Evening N	ight Daily			
Site Data				V C/		tos: 77.5°	-	9.6% 97.42%			
	dan Halmba	0.0.64		M	edium Tru			0.3% 1.84%			
Barrier Type (0-Wa	rier Height:	0.0 feet 0.0			Heavy Tru			0.8% 0.74%			
Centerline Dis		0.0 51.0 feet						0.070 0.7 770			
Centerline Dist. to		51.0 feet		Noise S		ations (in t	feet)				
Barrier Distance to		0.0 feet			Autos:	0.000					
Observer Height (A		5.0 feet			m Trucks:	2.297					
	d Flevation:	0.0 feet		Hea	vy Trucks:	8.006	Grade Adjust	tment: 0.0			
	d Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)				
	oad Grade:	0.0%			Autos:	46.041	,				
-	Left View:	-90.0 degrees	8	Mediu	m Trucks:	45.848					
	Right View:	90.0 degrees		Hea	vy Trucks:	45.867					
FHWA Noise Mode	Calculation	S									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	68.46	-8.65	0.	43	-1.20	-4.65	0.000	0.000			
Medium Trucks:	79.45	-25.89	0.	46	-1.20	-4.87	0.000	0.000			
Heavy Trucks:	84.25	-29.84	0.	46	-1.20	-5.42	0.000	0.000			
Unmitigated Noise	Levels (with										
	Leq Peak Hou			Evening	Leq Ni	ight	Ldn	CNEL			
Autos:	59		7.5	55.7		49.6	58.3	58.9			
Medium Trucks:	52		1.6	45.3		43.7	52.2	52.4			
Heavy Trucks:	53	.7 5	2.6	43.5		44.8	53.1	53.3			
Vehicle Noise:	60		9.5	56.3		51.6	60.2	60.6			
Centerline Distance	e to Noise Co	ntour (in feet)									
			1	dBA	65 dE	3A	60 dBA	55 dBA			
		_	.dn:	11	24		52	113			
		CN	EL:	12	26		56	121			

Wednesday, March 25, 2020

	FHW	/A-RD-77-108	HIGHV	YAY 1	NOISE PE	REDICT	ION MO	DEL			
Road Nam	o: Existing (20 e: Avenue 58 nt: w/o Jackson	19)				Projec		The W	ave-Coral	Mountai	n
SITE S	SPECIFIC INI	PUT DATA				ı	IOISE N	ИODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	1,800 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tı	ucks (2 )	Axles).	15		
Peak H	our Volume:	167 vehicles	3		He	avy Tru	cks (3+ )	Axles).	15		
Vei	hicle Speed:	50 mph		F	Vehicle I	Miss					
Near/Far Lai	ne Distance:	36 feet		F		icleType		Dav	Evening	Night	Dailv
Site Data					VCIII		Autos:	77.5%		9.6%	. ,
				-	M	edium 7		84.8%		10.3%	
	rier Height:	0.0 feet				Heavy 7		86.5%		10.8%	
Barrier Type (0-W Centerline Dis	. ,	0.0 59.0 feet								10.07	0.7 170
Centerline Dist		59.0 feet			Noise Sc	urce E	levation	s (in f	eet)		
Barrier Distance		0.0 feet				Auto	s: 0.	000			
		5.0 feet			Mediui	m Truck	s: 2.	297			
Observer Height (	nd Flevation:	0.0 feet			Heav	y Truck	s: 8.	006	Grade Ad	iustmen	t: 0.0
	nd Elevation:	0.0 feet		F	Lane Equ	ıivalen	t Distan	ce (in	feet)		
	Road Grade:	0.0%		H	Lano Lq	Auto		409	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
'	Left View:	-90.0 degree			Mediu	m Truck		252			
	Right View:	90.0 degree				y Truck		268			
	right view.	50.0 degree	,3		7,007	<i>y</i> 11401	o. oo.				
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Dista		Finite		Fresr		Barrier Att		rm Atten
Autos:	70.20	-10.17		-0.8		-1.20		-4.69		000	0.000
Medium Trucks:	81.00	-27.41		-0.8		-1.20		-4.88		000	0.000
Heavy Trucks:	85.38	-31.37		-0.8	37	-1.20		-5.35	0.0	000	0.000
Unmitigated Noise	Levels (witho	ut Topo and	barrier	atten	nuation)						
VehicleType	Leq Peak Hour	Leq Day	'   '	Leq E	vening	Leq	Night		Ldn		NEL
Autos:	57.	9	56.4		54.6		48.5	5	57.2	2	57.8
Medium Trucks:	51.	5	50.3		44.0		42.4	1	50.9	9	51.1
Heavy Trucks:	51.	9	50.8		41.8		43.0	)	51.4		51.5
Vehicle Noise:	59.	6	58.2		55.2		50.4	1	58.9	9	59.4
Centerline Distance	e to Noise Co	ntour (in feet)	)								
				70	dBA	65	dBA	-	60 dBA	55	dBA
			Ldn:	1	11	2	23		50		108
		CI	VEL:	1	12	:	25		54		116

	FHW	/A-RD-77-108	HIGH	IWAY N	IOISE PI	REDICT	ION M	ODEL				
Scenario: Road Name: Road Segment:		,					t Name lumber		Vave-Cor	al Mo	untain	
SITE SE	PECIFIC IN	PUT DATA				r	NOISE	MODE	EL INPL	JTS		
Highway Data				5	Site Con	ditions	(Hard	= 10, S	oft = 15)			
Average Daily Tr Peak Hour Pe Peak Hou	. ,	9.30% 9 vehicles				edium Tr eavy Tru	,	,	: 15			
Vehic	cle Speed:	40 mph		,	Vehicle I	Miv						
Near/Far Lane	Distance:	23 feet		H'		icleType	2	Dav	Evenin	a N	ight	Daily
Site Data					*011		Autos:	77.59		~	9.6%	97.42%
	or Holeshi	0.0 feet			М	edium 7	rucks:	84.89			0.3%	1.84%
Barrier Type (0-Wal	. ,	0.0			1	Heavy 7	rucks:	86.59			0.8%	0.74%
Centerline Dist.		40.0 feet		1	Voise So	ource E	levatio	ns (in t	eet)			
Centerline Dist. to		40.0 feet				Auto	s: (	0.000				
Barrier Distance to		0.0 feet			Mediu	m Truck	(S: 2	2.297				
Observer Height (Al Pad	bove Pad):   Elevation:	5.0 feet 0.0 feet			Hear	y Truck	s: 8	3.006	Grade	Adjusi	tment:	0.0
Road	Elevation:	0.0 feet		L	Lane Eq	uivalen	t Dista	nce (in	feet)			
Ro	ad Grade:	0.0%				Auto	s: 38	3.636				
	Left View:	-90.0 degree	es		Mediu	m Truck	rs: 38	3.406				
F	Right View:	90.0 degree			Hear	y Truck	is: 38	3.429				
FHWA Noise Model	Calculations	;										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	snel	Barrier .	Atten	Beri	n Atten
Autos:	66.51	-21.75		1.58	В	-1.20		-4.59		0.000	1	0.000
Medium Trucks:	77.72	-38.99		1.62	2	-1.20		-4.87		0.000		0.000
Heavy Trucks:	82.99	-42.95		1.6	1	-1.20		-5.56		0.000		0.000
Unmitigated Noise L	•											
	eq Peak Hou			Leq E			Night		Ldn		C١	IEL
Autos:	45.	-	43.5		41.8		35			4.4		45.0
Medium Trucks:	39.		37.9		31.6		30		-	8.5		38.7
Heavy Trucks: Vehicle Noise:	40. 47.		39.4 45.7		30.3 42.5		31			9.9 6.4		40.0
Centerline Distance		_			0		31					
Centernine Distance	to Noise Co.	intour (In feet,	, 	70 c	iBA	65	dBA		60 dBA		55	dBA
			Ldn:	1			2		5			1
	CNEL:			1	1 2 5 12					2		

	FHW.	A-RD-77-108 H	HIGHWAY	NOISE PE	REDICTI	ION MO	DDEL			
Road Nam	io: Existing (2019 e: Avenue 58 nt: e/o Jackson S	•					The War 12642	ave-Coral	Mountain	ı
	SPECIFIC INP	UT DATA						L INPUT	S	
Highway Data				Site Con	ditions	(Hard :	= 10, So	ft = 15)		
Average Daily	Traffic (Adt): 1	,400 vehicles					Autos:	15		
Peak Hour	Percentage:	9.30%			dium Tri		,			
Peak H	lour Volume:	130 vehicles		He	avy Truc	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		Vehicle I	Mix					
Near/Far Lai	ne Distance:	36 feet		Veh	icleType		Day	Evening	Night	Daily
Site Data					-	Autos:	77.5%	12.9%	9.6%	97.429
Rai	rier Height:	0.0 feet		M	edium Ti	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W		0.0		F	Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis		59.0 feet		Noise Sc	voo El	ovetle	no (in fo	na41		
Centerline Dist.	to Observer:	59.0 feet		Noise 30				et)		
Barrier Distance	to Observer:	0.0 feet			Auto: m Truck:		0.000 0.297			
Observer Height (	Above Pad):	5.0 feet				· -		Grade Ad	ii ietmont	0.0
Pa	ad Elevation:	0.0 feet		Heav	y Truck	S: 6	3.006	Grade Au	justinent.	0.0
Roa	ad Elevation:	0.0 feet		Lane Equ	uivalent	Distar	nce (in f	eet)		
I	Road Grade:	0.0%			Auto	s: 56	6.409			
	Left View:	-90.0 degrees	3	Mediu	m Truck	s: 56	6.252			
	Right View:	90.0 degrees	3	Heav	y Truck	s: 56	6.268			
FHWA Noise Mode				1						
VehicleType		raffic Flow	Distance		Road	Fres		Barrier Att		m Atten
Autos:	70.20	-11.26	-0.		-1.20		-4.69		000	0.00
Medium Trucks:	81.00	-28.50	-0.		-1.20		-4.88		000	0.00
Heavy Trucks:	85.38	-32.46	-0.		-1.20		-5.35	0.0	000	0.00
Unmitigated Noise							_			
	Leq Peak Hour			vening	Leq	Night	1	Ldn	1	VEL
Autos:	56.9		5.3	53.5		47		56.		56.
Medium Trucks:	50.4		9.2	42.9		41		49.8	-	50.
Heavy Trucks:	50.8		9.7	40.7		42		50.3		50.
Vehicle Noise:	58.6	5	7.1	54.1		49	.3	57.8	5	58.
Centerline Distance	e to Noise Con	tour (in feet)								

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 H	IGHWAY	NOISE P	REDICTIO	N MODEL					
	Existing (20 : Avenue 60 : w/o Monroe	-,				lame: The V mber: 12642	Vave-Coral Mo 2	untain			
SITE S	PECIFIC IN	PUT DATA			NC	ISE MOD	EL INPUTS				
Highway Data				Site Cor	nditions (H	lard = 10, S	oft = 15)				
Average Daily T	raffic (Adt):	3,200 vehicles		Autos: 15							
Peak Hour F	ercentage:	9.30%		Me	edium Truc	ks (2 Axles)	): 15				
Peak Ho	ur Volume:	298 vehicles		He	avy Truck	s (3+ Axles)	): 15				
Veh	icle Speed:	45 mph		Vehicle	Miv						
Near/Far Lan	e Distance:	45 feet			icleType	Day	Evening N	ight Daily			
Site Data						itos: 77.59	-	9.6% 97.42%			
Parr	ier Heiaht:	0.0 feet		M	ledium Tru	cks: 84.8°	% 4.9% 1	0.3% 1.84%			
Barrier Type (0-Wa		0.0			Heavy Tru	cks: 86.5°	% 2.7% 1	0.8% 0.74%			
Centerline Dist	. ,	51.0 feet									
Centerline Dist. to		51.0 feet		Noise S		vations (in	feet)				
Barrier Distance to	Observer:	0.0 feet			Autos:						
Observer Height (A	bove Pad):	5.0 feet			m Trucks:		0	·			
	d Elevation:	0.0 feet		Hea	vy Trucks:	8.006	Grade Adjus	tment: 0.0			
Road	d Elevation:	0.0 feet		Lane Eq	uivalent D	Distance (in	feet)				
R	oad Grade:	0.0%			Autos:	46.041					
	Left View:	-90.0 degrees		Mediu	m Trucks:	45.848					
	Right View:	90.0 degrees		Hea	vy Trucks:	45.867					
FHWA Noise Model	Calculations	6									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	68.46	-7.21	0.	43	-1.20	-4.65	0.000	0.000			
Medium Trucks:	79.45	-24.45		46	-1.20	-4.87					
Heavy Trucks:	84.25	-28.41	0.	46	-1.20	-5.42	0.000	0.000			
Unmitigated Noise	Levels (with		rrier atte	nuation)							
	.eq Peak Hou			Evening	Leq Ni		Ldn	CNEL			
Autos:	60		3.9	57.1		51.1	59.7	60.3			
Medium Trucks:	54		3.1	46.7		45.2	53.6	53.9			
Heavy Trucks:	55	.1 54	1.0	45.0	1	46.2	54.6	54.7			
Vehicle Noise:	62		0.9	57.7		53.1	61.6	62.1			
Centerline Distance	to Noise Co	ntour (in feet)					1				
			1	dBA	65 dE	BA	60 dBA	55 dBA			
				14	30		65	141			
		CNE	:L:	15	33		70	151			

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	WAY I	NOISE P	REDICT	ION MO	DDEL			
Road Nan	io: Existing (20 ne: Avenue 60 nt: e/o Monroe	,					t Name: lumber:		ave-Coral	Mountai	1
SITE	SPECIFIC IN	IPUT DATA				ı	IOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	1,200 vehicle	s					Autos	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles).	15		
Peak H	lour Volume:	112 vehicle	s		He	eavy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	50 mph		H	Vehicle	Miv					
Near/Far La	ne Distance:	48 feet		ŀ		icleType	,	Dav	Evening	Night	Daily
Site Data					*01.		Autos:	77.5%		9.6%	,
Pa	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0 1661				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		64.0 feet									
Centerline Dist.	to Observer:	64.0 feet		- 1	Noise S				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		0.000			
Observer Height	(Above Pad):	5.0 feet				m Truck	-	.297	0		
	ad Elevation:	0.0 feet			Hea	vy Truck	s: 8	1.006	Grade Ad	justment	: 0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distar	nce (in	feet)		
	Road Grade:	0.0%				Auto	s: 59	0.540			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 59	.391			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 59	9.406			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Bei	m Atten
Autos:	10.20	-11.93		-1.2	24	-1.20		-4.70	0.0	000	0.000
Medium Trucks:		-29.17		-1.2	22	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	85.38	-33.13		-1.2	23	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	er atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn	1	NEL
Autos:	55	i.8	54.2		52.5		46	.4	55.0	)	55.7
Medium Trucks:	49	1.4	48.2		41.9	1	40	.3	48.8	3	49.0
Heavy Trucks:	49		48.7		39.7		40		49.0		49.4
Vehicle Noise:	57	.5	56.1		53.0		48	.3	56.8	3	57.3
Centerline Distant	ce to Noise Co	ontour (in feet	)								
					dBA		dBA	-	60 dBA	1	dBA
			Ldn:		8		18		39		85
		C	NEL:		9	2	20		42		91

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIGH	WAY N	OISE PI	REDICT	ON MO	DDEL			
Scenari Road Nam Road Segmen	e: Jefferson S							The W 12642	ave-Coral	Mountair	1
SITE S	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	16,900 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	our Volume:	1,572 vehicles	3		He	avy Truc	cks (3+	Axles):	15		
Vel	hicle Speed:	55 mph		ν	ehicle i	Mix					
Near/Far Lar	ne Distance:	71 feet		F		icleType		Dav	Evening	Night	Dailv
Site Data							Autos:	77.5%	-	9.6%	97.42%
Rar	rier Heiaht:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		64.0 feet			·- ·- · · ·	ource El		/! 6	41		
Centerline Dist. t	to Observer:	64.0 feet		N	ioise so				et)		
Barrier Distance t	to Observer:	0.0 feet				Auto m Truck		2.000			
Observer Height (	Above Pad):	5.0 feet				vy Truck		.006	Grade Ad	iustmont	. 0.0
Pa	ad Elevation:	0.0 feet			пеа	y muck	s. c	.000	Grade Au	justinent	. 0.0
Roa	nd Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	ice (in i	feet)		
F	Road Grade:	0.0%				Auto.	s: 53	3.486			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 53	3.320			
	Right View:	90.0 degree	es		Hear	y Truck	s: 53	3.337			
FHWA Noise Mode	l Calculation	S									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	-0.86		-0.54		-1.20		-4.70	0.0	000	0.000
Medium Trucks:	82.40	-18.10		-0.52		-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	86.40	-22.05		-0.52		-1.20		-5.31	0.0	000	0.000
Unmitigated Noise			barrie	er attenu	ıation)						
	Leq Peak Hou			Leq Ev			Night		Ldn		NEL
Autos:	69	-	67.6		65.8		59		68.4		69.0
Medium Trucks:	62		61.4		55.0		53		61.9	-	62.2
Heavy Trucks: Vehicle Noise:	62 70		61.5 69.3		52.5 66.4		53 61		62. <sup>-</sup>		62.2 70.5
Centerline Distanc					30.4		- 01		70.		70.
Centernile Distant	e to Moise Co	miour (III leet)		70 d	D/	05	dBA	1 4	60 dBA	55	dBA
			Ldn:	64			39	,	299	1	44

	FH'	WA-RD-77-108	HIGHW	AY N	DISE PR	EDICT	ION MODEL		
Scenari Road Nam Road Segmer	e: Jefferson S						t Name: The \ Number: 1264:		lountain
	SPECIFIC IN	NPUT DATA					NOISE MOD		
Highway Data				S	ite Cond	litions	(Hard = 10, S	Soft = 15)	
Peak H	Traffic (Adt): Percentage: our Volume: hicle Speed:	23,300 vehicle 9.30% 2,167 vehicle 55 mph			Hea	vy Tru	Autos rucks (2 Axles icks (3+ Axles	): 15	
Near/Far Lai		71 feet		ν	ehicle N				
	ic Distance.	71 1001			Vehic	cleType			Night Daily
Site Data  Barrier Type (0-W	rier Height: all, 1-Berm):	0.0 feet 0.0				dium 7	Autos: 77.5 Frucks: 84.8 Frucks: 86.5	% 4.9%	9.6% 97.42% 10.3% 1.84% 10.8% 0.74%
Centerline Dis	st. to Barrier:	64.0 feet		٨	loise So	irce F	levations (in	feet)	
Ros	to Observer:	64.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre 90.0 degre		L	<b>ane Equ</b> Mediun	/ Truck ivalen Auto	ks: 2.297 ks: 8.006 t Distance (in bs: 53.486 ks: 53.320		sstment: 0.0
FHWA Noise Mode	el Calculation								
VehicleType	REMEL	Traffic Flow	Distar	псе	Finite I	Road	Fresnel	Barrier Atter	n Berm Atten
Autos:	71.78			-0.54		-1.20	-4.70		
Medium Trucks:	82.40			-0.52		-1.20	-4.88		
Heavy Trucks:	86.40	-20.66	i	-0.52		-1.20	-5.3	1 0.00	0.000
Unmitigated Noise									
	Leq Peak Ho			eq Ev	ening	Leq	Night	Ldn	CNEL
Autos:		0.6	69.0		67.2		61.2	69.8	70.4
Medium Trucks:	-	1.0	62.8		56.4		54.9	63.3	63.6
Heavy Trucks:		1.0	62.9		53.9		55.1	63.5	63.6
Vehicle Noise:		2.2	70.7		67.8		62.9	71.4	71.9
Centerline Distanc	e to Noise C	ontour (in feet	1)	70 d	BA	65	dBA	60 dBA	55 dBA
			I dn:	80			72	370	798
		C	NFI:	86			85	398	858

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 HI	IGHWAY	NOISE PI	REDICTIO	N MODEL		
Scenario. Road Name. Road Segment.	Jefferson S					lame: The V mber: 12642	Vave-Coral Mo 2	ountain
SITE SI	PECIFIC IN	PUT DATA			NC	ISE MOD	EL INPUTS	
Highway Data				Site Con	ditions (F	lard = 10, S	oft = 15)	
Average Daily Tr	raffic (Adt): 1	13,600 vehicles				Autos	: 15	
Peak Hour P	ercentage:	9.30%		Me	edium Truc	ks (2 Axles)	): 15	
Peak Ho	ur Volume:	1,265 vehicles		He	avy Truck	s (3+ Axles,	): 15	
Vehi	cle Speed:	55 mph		Vehicle	Miv			
Near/Far Lane	e Distance:	71 feet			icleType	Day	Evening N	light Daily
Site Data						itos: 77.59	-	9.6% 97.42%
Parri	ier Heiaht:	0.0 feet		М	edium Tru	cks: 84.8°	% 4.9%	10.3% 1.84%
Barrier Type (0-Wai		0.0			Heavy Tru	cks: 86.5°	% 2.7%	10.8% 0.74%
Centerline Dist.	. ,	64.0 feet					•	
Centerline Dist. to		64.0 feet		Noise S		vations (in	reet)	
Barrier Distance to	Observer:	0.0 feet			Autos:			
Observer Height (A	bove Pad):	5.0 feet			m Trucks:		0	
	l Elevation:	0.0 feet		Hear	vy Trucks:	8.006	Grade Adjus	tment: 0.0
Road	l Elevation:	0.0 feet		Lane Eq	uivalent E	Distance (in	feet)	
Ro	oad Grade:	0.0%			Autos:	53.486		
	Left View:	-90.0 degrees		Mediu	m Trucks:	53.320		
F	Right View:	90.0 degrees		Hear	vy Trucks:	53.337		
FHWA Noise Model	Calculations	s						
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	-1.80	-0.	54	-1.20	-4.70	0.000	0.000
Medium Trucks:	82.40	-19.04	-0.		-1.20	-4.88		
Heavy Trucks:	86.40	-23.00	-0.	52	-1.20	-5.31	0.000	0.000
Unmitigated Noise L	•		rrier atte	nuation)				
	eq Peak Hou			vening	Leq N		Ldn	CNEL
Autos:	68			64.9		58.8	67.5	68.1
Medium Trucks:	61			54.1		52.5	61.0	61.2
Heavy Trucks:	61			51.5		52.8	61.1	61.3
Vehicle Noise:	69		.4	65.4		60.5	69.1	69.6
Centerline Distance	to Noise Co	ntour (in feet)	1 70	-10.4	05."	24	CO -ID4	55 -(DA
				dBA	65 dE		60 dBA	55 dBA
		Ld CNF		56 60	120		259 278	557 599
		CNE	L.	DU	129	,	2/8	299

	FH	WA-RD-77-108	HIGHV	NAY N	IOISE PI	REDICTI	ON MO	DEL			
Road Nan	io: E+P ne: Madison S nt: n/o Avenue					.,	Name: umber:		ave-Coral	Mountai	in
SITE	SPECIFIC IN	IPUT DATA				N	OISE N	ИODE	L INPUT	S	
Highway Data					Site Con	ditions (	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	6,400 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tru	icks (2 )	Axles):	15		
Peak H	lour Volume:	595 vehicle	s		He	avy Truc	ks (3+ )	Axles):	15		
Ve	hicle Speed:	50 mph		H	Vehicle I	Miv					
Near/Far La	ne Distance:	51 feet		-		icleType		Dav	Evening	Night	Daily
Site Data							lutos:	77.5%		9.6%	
Ra	rrier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	6 1.84%
Barrier Type (0-W		0.0			1	Heavy Tr	ucks:	86.5%	2.7%	10.8%	6 0.74%
Centerline Di	. ,	54.0 feet		F	Noise So	roo El	overtie n	o (in fe	2041		
Centerline Dist.	to Observer:	54.0 feet		Ľ	Noise Sc			•	et)		
Barrier Distance	to Observer:	0.0 feet				Autos		000 297			
Observer Height	(Above Pad):	5.0 feet				m Trucks			Crosdo Ad	io.tmon	4.00
P	ad Elevation:	0.0 feet			Heav	y Trucks	8. 8.	006	Grade Ad	usunen	n. 0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalent	Distan	ce (in i	feet)		
	Road Grade:	0.0%				Autos	s: 47.	862			
	Left View:	-90.0 degree	es		Mediu	m Trucks	s: 47.	677			
	Right View:	90.0 degree	es		Heav	y Trucks	s: 47.	695			
FHWA Noise Mod	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresr	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-4.66		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-21.90		0.2	1	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-25.86		0.2	0	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	64	1.5	62.9		61.2		55.1	I	63.7	7	64.3
Medium Trucks:	58	3.1	56.9		50.6		49.0	)	57.5	5	57.7
Heavy Trucks:	58	3.5	57.4		48.4		49.6	3	58.0	)	58.1
Vehicle Noise:	66	3.2	64.8		61.7		57.0	)	65.5	5	66.0
Centerline Distant	ce to Noise C	ontour (in feet	)								
		-	Т		dBA	65 (		6	60 dBA	1	5 dBA
			Ldn:	2		5			126		271
		C	NEL:	2	9	6	3		135		291

	FHI	WA-RD-77-108	HIGH	HWAY N	OISE P	REDICTION	ON MC	DDEL			
Scenari Road Nam Road Segmen	e: Madison St	-						The W 12642	/ave-Coral	Mountai	n
	SPECIFIC IN	IPUT DATA							L INPUT	s	
	Traffic (Adt): Percentage: 'our Volume:	5,800 vehicle 9.30% 539 vehicle			Ме	edium True eavy Truc	icks (2	Autos Axles)	: 15 : 15		
	hicle Speed:	50 mph		1	/ehicle	Mix					
Near/Far Lar	ne Distance:	51 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						A	lutos:	77.59	6 12.9%	9.6%	97.429
Bar Barrier Type (0-W	rier Height: 'all, 1-Berm):	0.0 feet 0.0				ledium Tr Heavy Tr		84.89 86.59		10.3% 10.8%	
Centerline Dis	st. to Barrier:	54.0 feet		١,	Vaisa S	ource Ele	ovation	ne (in f	oot)		
Centerline Dist. t Barrier Distance t		54.0 feet 0.0 feet		,		Autos Im Trucks	s: 0	.000	eet)		
Observer Height (A	Above Pad): ad Elevation:	5.0 feet 0.0 feet			Heavy Trucks: 8.006 Grade Adjustment: 0.0  Lane Equivalent Distance (in feet)						
	ad Elevation:	0.0 feet		1	.ane Eq				feet)		
F	Road Grade:	0.0%				Autos		.862			
	Left View: Right View:	-90.0 degre 90.0 degre				ım Trucks vy Trucks		.677 .695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-5.09		0.18	3	-1.20		-4.67	0.0	000	0.00
Medium Trucks:	81.00	-22.33		0.2	1	-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	85.38	-26.28		0.20	)	-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leg Ev	rening	Leq I	Night		Ldn	С	NEL
Autos:	64	.1	62.5		60.7	,	54.	.7	63.	3	63.
Medium Trucks:	57	.7	56.5		50.1		48.	.6	57.	0	57.
Heavy Trucks:	58		57.0		48.0		49.	_	57.		57.
Vehicle Noise:	65	i.8	64.4		61.3		56.	.5	65.	1	65.
Centerline Distanc	e to Noise Co	ontour (in feet	)								
				70 c		65 c			60 dBA		dBA
			Ldn:	2	-	5	-		118		254
		С	NEL:	2	7	59	9		127	2	273

	FHV	VA-RD-77-108	HIG	1 YAWH	NOISE P	REDICT	ION M	ODEL			
Road Nam	io: E+P ne: Madison St. nt: n/o Avenue							: The W : 12642	ave-Coral	Mountaii	1
SITE	SPECIFIC IN	PUT DATA							L INPUT	S	
Highway Data					Site Cor	ditions	(Hard	= 10, Sc	oft = 15)		
	Traffic (Adt): Percentage: lour Volume:	7,700 vehicle 9.30% 716 vehicle						Autos: 2 Axles): + Axles):	15		
Near/Far La	hicle Speed: ne Distance:	50 mph 51 feet			Vehicle Veh	icleTyp		Day	Evening	Night	Daily
Site Data  Barrier Type (0-W	rrier Height:	0.0 feet				ledium 1 Heavy 1		77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	1.849
Centerline Dist. Centerline Dist. Barrier Distance	st. to Barrier: to Observer: to Observer:	54.0 feet 54.0 feet 0.0 feet			Noise S	ource E Auto	os:	ons (in fo 0.000 2.297	eet)		
Ros	ad Elevation: ad Elevation:	5.0 feet 0.0 feet 0.0 feet		-	Hea <b>Lane Eq</b>		t Dista	_	Grade Ad feet)	iustment	: 0.0
ı	Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree				Auto m Truck vy Truck	ks: 4	7.862 7.677 7.695			
FHWA Noise Mode	el Calculations			- '							
VehicleType	REMEL	Traffic Flow	Di	stance		Road	Fre	snel	Barrier Att	_	m Atten
Autos: Medium Trucks:	70.20 81.00	-3.86 -21.10		0.1	21	-1.20 -1.20		-4.67 -4.87	0.0	000	0.00
Heavy Trucks: Unmitigated Noise	85.38 Levels (with	-25.05 out Topo and		0.2 er atter		-1.20		-5.39	0.0	000	0.00
VehicleType	Leg Peak Hou				vening	Leg	Night		Ldn	C	NEL
Autos: Medium Trucks:	65 58	.3	63.7 57.7	- , -	62.0 51.4		55	5.9 9.8	64.5 58.3	5	65. 58.
Heavy Trucks: Vehicle Noise:	59 67		58.2 65.6		49.2 62.5			7.8	58.8 66.3		58. 66.
Centerline Distanc	ce to Noise Co	ntour (in feet	)	70	dBA	65	dBA		50 dBA	55	dBA

	FH	WA-RD-77-108	HIGH	IWAY N	IOISE PI	REDICT	ION MO	DDEL			
Road Nan	rio: E+P ne: Madison S ent: n/o Airport							The W 12642	ave-Coral	Mountair	1
	SPECIFIC II	NPUT DATA							L INPUT	s	
Highway Data					Site Con	ditions	(Hard :				
Average Daily	Traffic (Adt):	11,900 vehicles	6					Autos:	15		
	Percentage:	9.30%				dium Tr					
Peak I	Hour Volume:	1,107 vehicles	6		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph			Vehicle I	Mix					
Near/Far La	ne Distance:	51 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.42%
Ra	rrier Height:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0			- 1	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	54.0 feet		-					.,		
Centerline Dist.	to Observer:	54.0 feet		1	Voise So				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		0.000			
Observer Height	(Above Pad):	5.0 feet				m Truck		2.297	0	E	
	ad Elevation:	0.0 feet			Heav	y Truck	s: c	3.006	Grade Ad	justment	0.0
Ro	ad Elevation:	0.0 feet		1	Lane Eq	uivalent	Distar	nce (in t	eet)		
	Road Grade:	0.0%				Auto	s: 47	7.862			
	Left View:	-90.0 degree	s		Mediu	m Truck	s: 47	7.677			
	Right View:	90.0 degree	s		Heav	y Truck	s: 47	7.695			
FHWA Noise Mod	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	inel	Barrier Att	en Ber	m Atten
Autos:	70.20	-1.97		0.1	В	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-19.21		0.2	1	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-23.16		0.2	0	-1.20		-5.39	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	er atten	uation)						
VehicleType	Leq Peak Ho			Leq E		Leq	Night		Ldn		VEL
Autos:			65.6		63.9		57		66.4		67.0
Medium Trucks:			59.6		53.2		51		60.2	_	60.4
Heavy Trucks:			60.1		51.1		52		60.7	7	60.8
Vehicle Noise:			67.5		64.4		59	.7	68.2	2	68.7
Centerline Distan	ce to Noise C	ontour (in feet)									
				70 d			dBA	6	60 dBA	1	dBA
			Ldn:	4		_	8		190		10
		CI	VEL:	4	4	9	15		204	4	40

	FHW	VA-RD-77-108	HIGHV	VAY N	IOISE PF	EDICT	ON MO	DEL			
Road Nan	rio: E+P ne: Madison St. ent: n/o Avenue						Name: lumber:		/ave-Coral I	Mountaii	n
SITE	SPECIFIC IN	PUT DATA				N	IOISE I	MODE	L INPUTS	5	
Highway Data					Site Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	9,700 vehicles	3					Autos	: 15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2	Axles)	: 15		
Peak F	Hour Volume:	902 vehicles	3		He	avy Tru	cks (3+.	Axles)	: 15		
Ve	ehicle Speed:	50 mph		-	Vehicle I	Miss.					
Near/Far La	ane Distance:	51 feet		- F		u <b>x</b> cleType		Dav	Evening	Niaht	Dailv
Site Data					*0///		Autos:	77.59		9.6%	. ,
Da Da	rrier Heiaht:	0.0 feet			Me	edium T	rucks:	84.89	6 4.9%	10.3%	1.84%
Barrier Type (0-V		0.0 reet			F	leavy T	rucks:	86.59	6 2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	54.0 feet		L.							
Centerline Dist.		54.0 feet		1	Noise So			•	eet)		
Barrier Distance		0.0 feet				Auto		000			
Observer Height		5.0 feet				n Truck		297			
	Pad Elevation:	0.0 feet			Heav	y Truck	s: 8.	006	Grade Adj	ustment	: 0.0
	ad Elevation:	0.0 feet		1	Lane Equ	iivaleni	Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto		862	,		
	Left View:	-90.0 degree	20		Mediu	n Truck	s: 47	677			
	Right View:	90.0 degree			Heav	y Truck	s: 47	.695			
FHWA Noise Mod	el Calculations										
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresi	nel	Barrier Atte	en Bei	m Atten
Autos:	70.20	-2.86		0.1	8	-1.20		-4.67	0.0	00	0.000
Medium Trucks:	81.00	-20.09		0.2	1	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-24.05		0.2	0	-1.20		-5.39	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hou				vening	Leq	Night		Ldn	C	NEL
Autos:	66.	.3	64.7		63.0		56.	9	65.5	i	66.2
Medium Trucks:	59.	.9	58.7		52.4		50.	В	59.3		59.5
Heavy Trucks:	60.	.3	59.2		50.2		51.	4	59.8	1	59.9
Vehicle Noise:	68.	.0	66.6		63.5		58.	8	67.3		67.8
Centerline Distan	ce to Noise Co	ntour (in feet,	)								
				70 c	dBA .	65	dBA		60 dBA	55	dBA
			Ldn:	3	6	7	7		166	3	357
		Ci	VEL:	3	8	8	3		178	3	884

F	HWA	-RD-77-108	HIGH	A YAW	IOISE PI	REDICT	ION M	ODEL			
Scenario: E+P Road Name: Monroe Road Segment: n/o Aver		)						The W	/ave-Coral	Mounta	in
SITE SPECIFIC	INP	UT DATA							L INPUT	s	
Highway Data					Site Con	ditions	(Hard	= 10, S	oft = 15)		
Average Daily Traffic (Adt	: 10,	,100 vehicles	S					Autos			
Peak Hour Percentage	: 9	9.30%				edium Tr	,	,			
Peak Hour Volume	ď	939 vehicles	3		He	avy Tru	cks (3+	- Axles)	: 15		
Vehicle Speed		50 mph		-	Vehicle i	Mix					
Near/Far Lane Distance	e.	43 feet		F	Veh	icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.59	6 12.9%	9.69	6 97.429
Barrier Heigh	٠.	0.0 feet			М	edium T	rucks:	84.89	6 4.9%	10.39	6 1.84%
Barrier Type (0-Wall, 1-Berm	):	0.0				Heavy T	rucks:	86.59	6 2.7%	10.89	% 0.74%
Centerline Dist. to Barrie		64.0 feet		1	Noise So	ource El	levatio	ns (in f	eet)		
Centerline Dist. to Observe		64.0 feet				Auto	s: (	0.000			
Barrier Distance to Observe		0.0 feet			Mediu	m Truck	s:	2.297			
Observer Height (Above Pad Pad Flevation		5.0 feet 0.0 feet			Hear	vy Truck	s:	3.006	Grade Ad	ljustmei	nt: 0.0
Road Elevation	):	0.0 feet			Lane Eq	uivaleni	t Dista	nce (in	feet)		
Road Grade	9.7	0.0%				Auto	s: 6	0.488			
Left Viev	r: .	-90.0 degree	es		Mediu	m Truck	s: 6	0.341			
Right Viev	<i>r</i> :	90.0 degree	es		Hear	y Truck	s: 6	0.355			
FHWA Noise Model Calculati											
VehicleType REMEL		raffic Flow	Dis	stance		Road	Fre		Barrier Att		erm Atten
Autos: 70		-2.68		-1.3		-1.20		-4.70		000	0.00
Medium Trucks: 81.		-19.92		-1.3	-	-1.20		-4.88		000	0.000
Heavy Trucks: 85		-23.87		-1.3		-1.20		-5.31	0.0	000	0.000
Unmitigated Noise Levels (w										1 .	21/5/
VehicleType Leq Peak I	65.0	Leq Day	63.4	Leq E	vening 61.6		Night 55	6	Ldn 64		ONEL 64.8
Medium Trucks:	58.6		57.4		51.0		49		57.	_	58.1
Heavy Trucks:	59.0		57.9		48.8		50		58.4	-	58.6
Vehicle Noise:	66.7		65.2		62.2		57		66.		66.4
Centerline Distance to Noise	Cont	tour (in feet	)								
		,,		70 0	dBA	65	dBA		60 dBA	5	5 dBA
			Ldn:	3	4	7	74		160		344

	FH'	WA-RD-77-108	HIGH	WAY N	DISE P	REDICT	ION MO	DEL			
Scena	rio: E+P					Projec	t Name:	The W	ave-Coral I	Mountai	n
Road Nar	ne: Madison S	t.				Job I	Number:	12642			
Road Segme	ent: n/o Avenue	e 60									
	SPECIFIC II	NPUT DATA							L INPUTS	5	
Highway Data				S	ite Cor	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	3,900 vehicle	s					Autos:	15		
Peak Hou	Percentage:	9.30%			Me	edium T	rucks (2 /	Axles):	15		
Peak I	lour Volume:	363 vehicle	s		He	eavy Tru	icks (3+ A	Axles):	15		
Ve	ehicle Speed:	45 mph		V	ehicle	Miv					
Near/Far La	ane Distance:	45 feet		ř		icleTyp	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.42%
Ra	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline D	ist. to Barrier:	51.0 feet			laica S	ourco E	levation	c (in f	not)		
Centerline Dist.	to Observer:	51.0 feet		^	UISE SI	Auto		000	<i>(</i>		
Barrier Distance	to Observer:	0.0 feet			Modis	m Truck		297			
Observer Height	(Above Pad):	5.0 feet				vy Truci		006	Grade Adj	iietman	. 0 0
F	ad Elevation:	0.0 feet								aotimon	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distand	ce (in	feet)		
	Road Grade:	0.0%				Auto	os: 46.	041			
	Left View:	-90.0 degre	es		Mediu	m Truck	ks: 45.	848			
	Right View:	90.0 degre	es		Hea	vy Truck	ks: 45.	867			
FHWA Noise Mod	el Calculation	IS									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresn	iel .	Barrier Atte	en Be	rm Atten
Autos	68.46	-6.36		0.43		-1.20		-4.65	0.0	00	0.000
Medium Trucks:	79.45	-23.59		0.46		-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	84.25	-27.55		0.46		-1.20		-5.42	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	r attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Daj	/	Leq Ev	ening	Leq	Night		Ldn	С	NEL
Autos	61	1.3	59.8		58.0	i	51.9	)	60.6		61.2
Medium Trucks:	55	5.1	53.9		47.6	i	46.0	)	54.5	,	54.7
Heavy Trucks:	56	3.0	54.9		45.8		47.1	l	55.4		55.6
Vehicle Noise:	60	3.2	61.8		58.6		53.9	)	62.5		62.9
Centerline Distan	ce to Noise C	ontour (in feet	)								
				70 d	BA	65	dBA	- 6	60 dBA	55	dBA

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGI	HWAY	NOISE PI	REDICT	ION M	DDEL			
Road Nan	rio: E+P ne: Monroe St. ent: n/o Avenue							The W 12642	ave-Coral	Mountair	1
SITE	SPECIFIC IN	NPUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	8,200 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak I	lour Volume:	763 vehicle	s		He	eavy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph			Vehicle	Miv					
Near/Far La	ane Distance:	43 feet				icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	-	9.6%	
Ra	rrier Height:	0.0 feet			М	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	64.0 feet									
Centerline Dist.	to Observer:	64.0 feet			Noise So				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		0.000			
Observer Height	(Above Pad):	5.0 feet				m Truck		2.297	Grade Ad	li voteno na	. 0 0
	ad Elevation:	0.0 feet			Hear	vy Truck	s: t	3.006	Grade Ad	justment	0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalen	Dista	nce (in t	feet)		
	Road Grade:	0.0%				Auto	s: 60	0.488			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 60	0.341			
	Right View:	90.0 degree	es		Hear	vy Truck	s: 60	0.355			
FHWA Noise Mod	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	-3.59		-1.3	34	-1.20		-4.70	0.0	000	0.000
Medium Trucks:	81.00	-20.82		-1.3	33	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	85.38	-24.78		-1.3	33	-1.20		-5.31	0.0	000	0.000
Unmitigated Nois			barri	er atte	nuation)						
VehicleType	Leq Peak Ho			Leq E	vening		Night		Ldn		NEL
Autos:	-		62.5		60.7		54		63.3		63.9
Medium Trucks:	-	7.6	56.5		50.1		48		57.0	-	57.2
Heavy Trucks:		3.1	57.0		47.9		49		57.		57.7
Vehicle Noise:	-		64.3		61.3		56	.5	65.	1	65.5
Centerline Distan	ce to Noise C	ontour (in feet	)					_			
			!		dBA		dBA	6	60 dBA	1	dBA
			Ldn:		30		i5		139	-	00
		C	NEL:		32	6	19		149	3	22

	FHW	/A-RD-77-108	HIGHV	VAY N	NOISE PE	REDICT	ION MO	DEL			-
Road Nan	rio: E+P ne: Monroe St. nt: n/o Avenue	54					Name: ' lumber:		/ave-Coral I	Mountai	n
SITE	SPECIFIC IN	PUT DATA				N	IOISE N	/IODE	L INPUTS	5	
Highway Data					Site Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	5,900 vehicle	3					Autos.	: 15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2 A	Axles)	: 15		
Peak H	lour Volume:	549 vehicles	S		He	avy Tru	cks (3+ A	Axles)	: 15		
Ve	hicle Speed:	50 mph		H	Vehicle I	Miv					
Near/Far La	ne Distance:	51 feet		H		icleType	,	Dav	Evening	Night	Daily
Site Data					-			77.59		9.6%	,
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.89	6 4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			F	leavy T	rucks:	86.5%	6 2.7%	10.8%	0.74%
Centerline Di		54.0 feet		F	Noise Sc	5		- /! 6	41		
Centerline Dist.	to Observer:	54.0 feet		- 1	Noise 30			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000 297			
Observer Height	(Above Pad):	5.0 feet				m Truck	o		Grade Adj	o.tmon	4.00
P	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.	006	Grade Adj	usunen	. 0.0
Ro	ad Elevation:	0.0 feet			Lane Equ	uivalent	Distant	e (in	feet)		
	Road Grade:	0.0%				Auto	s: 47.	862			
	Left View:	-90.0 degree	es		Mediui	m Truck	s: 47.	677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47.	695			
FHWA Noise Mod	el Calculations										
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresn	iel	Barrier Atte	en Be	rm Atten
Autos:		-5.02		0.1	8	-1.20		-4.67	0.0	00	0.000
Medium Trucks:	81.00	-22.25		0.2	1	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-26.21		0.2	0	-1.20		-5.39	0.0	00	0.000
Unmitigated Noise	e Levels (witho	ut Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hour	r Leq Day	' L	Leq E	vening	Leq	Night		Ldn	1	NEL
Autos:	64.	2	62.6		60.8		54.8	3	63.4		64.0
Medium Trucks:	57.	8	56.6		50.2		48.7	,	57.1		57.3
Heavy Trucks:			57.1		48.0		49.3		57.6		57.8
Vehicle Noise:	65.	9	64.4		61.4		56.6	6	65.2		65.6
Centerline Distant	ce to Noise Co	ntour (in feet	)								
					dBA		dBA	'	60 dBA		dBA
			Ldn:		16	-	55		119	_	257
		C	NEL:	2	!8	5	59		128	2	276

	FH\	WA-RD-77-108	HIGH	A YAW	IOISE PI	REDICT	ION M	ODEL			
Scenario Road Name Road Segmen	e: Monroe St.	58						The W	/ave-Coral	Mounta	in
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data					Site Con	ditions	(Hard	_	oft = 15)		
Average Daily 1		4,400 vehicle	S					Autos			
Peak Hour I		9.30%				dium Tr	,	,			
	our Volume:	409 vehicle	S		HE	avy Tru	CKS (34	- Axies)	: 15		
ver Near/Far I ar	nicle Speed:	50 mph 51 feet			Vehicle I	Vix					
Near/Far Lar	ie Distance:	51 feet			Veh	icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.59	6 12.9%	9.69	6 97.42%
Bar	rier Height:	0.0 feet			М	edium T	rucks:	84.89	6 4.9%	10.39	6 1.84%
Barrier Type (0-Wa	all, 1-Berm):	0.0				Heavy T	rucks:	86.59	6 2.7%	10.89	6 0.74%
Centerline Dis	t. to Barrier:	54.0 feet			Noise So	ource E	levatio	ns (in f	eet)		
Centerline Dist. t	o Observer:	54.0 feet		i i	10,00	Auto		0.000	001)		
Barrier Distance t	o Observer:	0.0 feet			Mediu	m Truck		2.297			
Observer Height (/		5.0 feet			Hear	y Truck		3.006	Grade Ad	liustmer	nt: 0.0
	d Elevation:	0.0 feet		-							
	d Elevation:	0.0 feet		4	Lane Eq				feet)		
F	Road Grade:	0.0%				Auto		7.862			
	Left View:	-90.0 degre				m Truck		7.677			
	Right View:	90.0 degre	es		Hear	y Truck	s: 4	7.695			
FHWA Noise Mode	l Calculation	s									
VehicleType	REMEL	Traffic Flow		stance		Road	Fre		Barrier Att		erm Atten
Autos:	70.20	-6.29		0.1		-1.20		-4.67		000	0.000
Medium Trucks:	81.00	-23.53		0.2		-1.20		-4.87		000	0.000
Heavy Trucks:	85.38	-27.48		0.2		-1.20		-5.39	0.0	000	0.000
Unmitigated Noise VehicleType	Levels (with Lea Peak Hou						A Contra		Ldn		CNEL
Autos:	Leq Реак ног 62	-, -,	61.3	Leq E	vening 59.5	Leq	Night	.5	Lan 62		NEL 62.7
Medium Trucks:	56		55.3		48.9		47		55.5		56.1
Heavy Trucks:	56		55.8		46.8		48		56.4	-	56.5
Vehicle Noise:	64		63.2		60.1		55		63.		64.3
Centerline Distanc	e to Noise Co	ontour (in feet	t)								
			_	70 0	dBA	65	dBA		60 dBA	5	5 dBA
			Ldn:	2			15		98		211
		С	NEL:	2	3	4	19		105		227

	FH\	WA-RD-77-108	HIGH	VAY NO	ISE PR	EDICTIO	N MODEL		
Scenari Road Nam Road Segmer	e: Monroe St.						ame: The V	Vave-Coral M 2	ountain
	SPECIFIC IN	IPUT DATA				NO	ISE MOD	EL INPUTS	
Highway Data				Si	te Cond	ditions (H	lard = 10, S	oft = 15)	
	Traffic (Adt): Percentage: lour Volume:	4,600 vehicle 9.30% 428 vehicle					Autos ks (2 Axles s (3+ Axles	): 15	
Vei	hicle Speed:	50 mph		V	ehicle N	liv			
Near/Far Lai	ne Distance:	51 feet		-		cleType	Dav	Evening	Night Daily
Site Data					VCIII		tos: 77.5		9.6% 97.42%
	rier Heiaht:	0.0 feet			Ме	dium Tru	cks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-W		0.0			H	leavy Trui	cks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dis	st. to Barrier:	54.0 feet		N	oise So	urce Elev	rations (in	feet)	
Centerline Dist.	to Observer:	54.0 feet		-		Autos:	0.000	,	
Barrier Distance	to Observer:	0.0 feet			Madiur	n Trucks:	2.297		
Observer Height (	Above Pad):	5.0 feet				y Trucks:	8.006	Grade Adju	stment: 0.0
Pa	ad Elevation:	0.0 feet				<u> </u>			
Ros	ad Elevation:	0.0 feet		Lá	ne Equ		istance (in	feet)	
I	Road Grade:	0.0%				Autos:	47.862		
	Left View:	-90.0 degre	es			n Trucks:	47.677		
	Right View:	90.0 degre	es		Heav	y Trucks:	47.695		
FHWA Noise Mode	el Calculation	s							
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite I	Road	Fresnel	Barrier Atter	n Berm Atten
Autos:	70.20	-6.10		0.18		-1.20	-4.67	0.00	0.000
Medium Trucks:	81.00	-23.33		0.21		-1.20	-4.87	0.00	0.000
Heavy Trucks:	85.38	-27.29	1	0.20		-1.20	-5.39	0.00	0.000
<b>Unmitigated Noise</b>	Levels (with	out Topo and	barrier	attenua	ation)				
	Leq Peak Hou	ur Leq Da		Leq Eve	- 1	Leq Ni	- 1	Ldn	CNEL
Autos:		3.1	61.5		59.7		53.7	62.3	62.9
Medium Trucks:		5.7	55.5		49.1		47.6	56.0	56.3
Heavy Trucks:		7.1	56.0		46.9		48.2	56.6	56.7
Vehicle Noise:		1.8	63.4		60.3		55.5	64.1	64.5
Centerline Distance	e to Noise Co	ontour (in feet	t)						
				70 dE	BA	65 dE	3A	60 dBA	55 dBA
			Ldn:	22		47		101	217
		С	:NEL:	23		50		108	234

Wednesday, March 25, 2020

F	HWA-RE	D-77-108 H	IIGHWAY	NOISE P	REDICTION	ом мо	DEL			
Scenario: E+P Road Name: Monroe S Road Segment: n/o Aven					Project I Job Nu			ave-Coral I	Mountair	1
SITE SPECIFIC	INPUT	DATA						L INPUTS	S	
Highway Data				Site Cor	nditions (	Hard =	10, Sc	oft = 15)		
Average Daily Traffic (Adt)	2,900	vehicles					Autos:	15		
Peak Hour Percentage	9.30	)%		Me	edium Tru	cks (2 /	4xles):	15		
Peak Hour Volume	270	vehicles		He	eavy Truc	ks (3+ /	4xles):	15		
Vehicle Speed	50	) mph		Vehicle	Miv					
Near/Far Lane Distance	51	l feet			nicleType		Dav	Evening	Night	Daily
Site Data						utos:	77.5%		9.6%	97.42%
Barrier Height	. 0	0 feet		N	ledium Tru	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)					Heavy Tro	ıcks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier	54.	.0 feet		Noise S	ource Ele	vation	s (in fe	eet)		
Centerline Dist. to Observer	54.	.0 feet			Autos		000	,		
Barrier Distance to Observer	0.	.0 feet		Mediu	ım Trucks		297			
Observer Height (Above Pad)		.0 feet		Hea	vy Trucks	. 8	006	Grade Ad	iustment	0.0
Pad Elevation	٠.	0 feet								
Road Elevation		0 feet		Lane Eq	uivalent			feet)		
Road Grade		.0%			Autos		862			
Left View		.0 degrees			ım Trucks		677			
Right View	90.	.0 degrees		Hea	vy Trucks	: 47.	695			
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traff	ic Flow	Distance	Finite	Road	Fresr	nel	Barrier Atte	en Ber	m Atten
Autos: 70.2		-8.10		18	-1.20		-4.67		000	0.000
Medium Trucks: 81.0	-	-25.34		21	-1.20		-4.87		000	0.000
Heavy Trucks: 85.3		-29.29		20	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise Levels (wi		•								
VehicleType Leq Peak F		Leq Day		vening	Leq N			Ldn		VEL
	61.1	-	9.5	57.7		51.7		60.3	-	60.9
	54.7		3.5	47.1		45.6		54.0		54.3
	55.1		4.0	44.9		46.2		54.6		54.7
	62.8		1.3	58.3	3	53.5	5	62.1	1	62.5
Centerline Distance to Noise	Contour	r (in feet)	70	-10.4	05 -	D4		20 -(D4		-10.4
				dBA 16	65 d		1 6	60 dBA 74	1	dBA 60
		CN		16 17	34			74 80		60 72
		CIVI	EL:	17	31			oU	1	12

Wednesday, March 25, 2020

	FHV	WA-RD-77-108	HIGHW	YAY I	NOISE PE	REDICT	ON MO	DDEL			
Road Nam	io: E+P ne: Avenue 50 nt: w/o Jefferso	on St.				.,	Name. lumber.		/ave-Coral	Mounta	in
SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data					Site Con	ditions	(Hard :	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	13,400 vehicles	S					Autos	: 15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2	Axles)	: 15		
Peak H	lour Volume:	1,246 vehicles	3		He	avy Trud	cks (3+	Axles)	: 15		
Ve	hicle Speed:	50 mph		H	Vehicle I	/lix					
Near/Far La	ne Distance:	51 feet		h		cleType		Day	Evening	Night	Daily
Site Data							Autos:	77.59		9.69	,
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.89	6 4.9%	10.39	6 1.84%
Barrier Type (0-W		0.0			F	leavy T	rucks:	86.59	6 2.7%	10.89	6 0.74%
Centerline Di		54.0 feet		H	Noise Sc	urco El	ovatio	ac (in f	innt)		
Centerline Dist.	to Observer:	54.0 feet		H	Noise 30	Auto			eet)		
Barrier Distance	to Observer:	0.0 feet			A de elle	Auto. n Truck		2.000			
Observer Height	(Above Pad):	5.0 feet				n Truck y Truck	· -	.006	Grade Ad	liustmor	w- 0 0
P	ad Elevation:	0.0 feet			пеач	y Truck	s. c	.000	Orade Ad	justinoi	n. 0.0
Ro	ad Elevation:	0.0 feet			Lane Equ	ıivalent	Distar	nce (in	feet)		
	Road Grade:	0.0%				Auto.	s: 47	.862			
	Left View:	-90.0 degree	es		Mediui	n Truck	s: 47	.677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47	.695			
FHWA Noise Mode	el Calculation:	s									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	nel	Barrier Att	en Be	erm Atten
Autos:	70.20	-1.45		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-18.69		0.2	1	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-22.65		0.2	0	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hou			Leq E	vening	Leq	Night		Ldn	1 7	CNEL
Autos:	67		66.1		64.4		58		67.	-	67.6
Medium Trucks:	61		60.1		53.8		52	-	60.		60.9
Heavy Trucks:	61		60.6		51.6		52	_	61.:		61.3
Vehicle Noise:	69	).4	68.0		64.9		60	.2	68.	7	69.2
Centerline Distant	ce to Noise Co	ontour (in feet,	)								
					dBA		dBA	1	60 dBA	-	5 dBA
			Ldn:		4	-	16		206		443
		Ci	NEL:	4	8	10	03		221		476

	FHV	VA-RD-77-108	HIGHW	AY NO	DISE PI	REDICTI	ON MO	DDEL			
Scenario Road Name Road Segmen	e: Avenue 50	St.						The W 12642	ave-Coral	Mountair	1
SITE S	SPECIFIC IN	PUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	9,500 vehicles						Autos:	15		
Peak Hour I	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak Ho	our Volume:	884 vehicles			He	avy Truc	cks (3+	Axles):	15		
Vel	nicle Speed:	50 mph		V	ehicle i	Mix					
Near/Far Lar	ne Distance:	43 feet		Ė		icleType		Dav	Evening	Night	Dailv
Site Data							Autos:	77.5%	-	9.6%	97.42%
Ran	rier Heiaht:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wa		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		64.0 feet				ource El		/! 6-			
Centerline Dist. t	o Observer:	64.0 feet		N	oise so	Auto.		ns (in re	et)		
Barrier Distance t	o Observer:	0.0 feet			Modiu	Auto. m Truck		2.297			
Observer Height (/	Above Pad):	5.0 feet				vy Truck		3.006	Grade Ad	iuctmont	. 0.0
Pa	d Elevation:	0.0 feet			i icai	y Huck	s. c	5.000	Orade Au	ustricii	. 0.0
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	nce (in i	feet)		
F	Road Grade:	0.0%				Auto.	-	0.488			
	Left View:	-90.0 degree	s			m Truck	00	0.341			
	Right View:	90.0 degree	S		Hear	y Truck	s: 60	0.355			
FHWA Noise Mode	l Calculation:	S									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	70.20	-2.95		-1.34		-1.20		-4.70	0.0	000	0.000
Medium Trucks:	81.00	-20.18		-1.33		-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	85.38	-24.14		-1.33		-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and I	oarrier a	attenu	ation)						
	Leq Peak Hou			eq Eve			Night		Ldn		VEL
Autos:	64		33.1		61.4		55		63.9		64.5
Medium Trucks:	58		57.1		50.7		49	-	57.6		57.9
Heavy Trucks: Vehicle Noise:	58 66		57.6 55.0		48.6 61.9		49 57		58.2 65.3		58.3
Centerline Distance					01.5		31		00.		00.2
Centernile Distanc	e to Noise Co	intour (III leet)		70 dl	BA	65	dBA	1 6	60 dBA	55	dBA
			Ldn:	33				1			30
				3.5		7	'1		153	- 3	

	FH	WA-RD-77-108	HIGH	IWAY N	JISE PR	EDICT	ION MO	ODEL			
Scenario Road Name Road Segmen	: Avenue 50	on St.						: The W : 12642	ave-Coral	Mountair	1
SITE S	PECIFIC IN	IPUT DATA				ľ	IOISE	MODE	L INPUT	s	
Highway Data				s	ite Cond	litions	(Hard:	= 10, S	oft = 15)		
Average Daily 1 Peak Hour F Peak Ho	. ,	11,400 vehicle 9.30% 1,060 vehicle						Autos Axles) Axles)	15		
Veh	icle Speed:	50 mph		V	ehicle M	liv					
Near/Far Lan	e Distance:	51 feet		ř		cleType	9	Dav	Evening	Night	Dailv
Site Data							Autos:	77.59	Ü	9.6%	97.429
Pari	ier Heiaht:	0.0 feet			Me	dium T	rucks:	84.89	4.9%	10.3%	1.849
Barrier Type (0-Wa	ıll, 1-Berm):	0.0			Н	leavy T	rucks:	86.5%	6 2.7%	10.8%	0.749
Centerline Dis		54.0 feet		٨	oise So	urce E	levatio	ns (in f	eet)		
Centerline Dist. to Barrier Distance to		54.0 feet				Auto	s: (	0.000			
		0.0 feet			Mediun	n Truck	s: 2	2.297			
Observer Height (A	d Flevation:	5.0 feet 0.0 feet			Heavy	y Truck	:s: 8	3.006	Grade Ad	ljustment	: 0.0
	d Flevation:	0.0 feet		L	ane Equ	ivalen	t Distai	nce (in	feet)		
F	oad Grade:	0.0%				Auto	s: 47	7.862	,		
	Left View:	-90.0 degre	es		Mediun	n Truck	s: 47	7.677			
	Right View:	90.0 degre	es		Heavy	y Truck	s: 47	7.695			
FHWA Noise Mode	Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite F	Road	Fres	snel	Barrier Att	en Bei	m Atten
Autos:	70.20	-2.15	5	0.18		-1.20		-4.67	0.0	000	0.00
Medium Trucks:	81.00	-19.39	)	0.21		-1.20		-4.87	0.	000	0.00
Heavy Trucks:	85.38	-23.35	5	0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise											
	eq Peak Ho			Leq Ev		Leq	Night		Ldn	1	NEL
Autos:		7.0	65.4		63.7		57		66.	_	66.
Medium Trucks:		).6	59.4		53.1		51		60.	-	60.
Heavy Trucks:	-	1.0	59.9		50.9		52		60.	-	60.
Vehicle Noise:		3.7	67.3		64.2		59	1.5	68.	U	68.
Centerline Distance	to Noise Co	ontour (in fee	t)	70 '	D4 1	-	-/DA		CO -/D4		-10.4
			!	70 d			dBA	- 1	60 dBA	1	dBA
			I dn:	40		,	36		185	3	98
		_	NFI:	43			92		199		28

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 H	IIGHWAY	NOISE PI	REDICTIO	N MODEL		
Scenario Road Name Road Segmen	e: Avenue 52	St.				lame: The V mber: 12642	Vave-Coral Mo	untain
SITE S	PECIFIC IN	PUT DATA					EL INPUTS	
Highway Data				Site Con	ditions (F	lard = 10, S	oft = 15)	
Average Daily 1	raffic (Adt):	8,300 vehicles				Autos	: 15	
Peak Hour I	Percentage:	9.30%		Me	dium Truc	ks (2 Axles)	: 15	
Peak Ho	our Volume:	772 vehicles		He	avy Truck	s (3+ Axles)	: 15	
Vel	icle Speed:	50 mph		Vehicle I	Miv			
Near/Far Lar	e Distance:	51 feet			icleType	Day	Evening N	ight Daily
Site Data					Au	itos: 77.59	% 12.9%	9.6% 97.42%
Ban	rier Heiaht:	0.0 feet		М	edium Tru	icks: 84.89	% 4.9% 1	0.3% 1.84%
Barrier Type (0-Wa		0.0			Heavy Tru	cks: 86.59	% 2.7% 1	0.8% 0.74%
Centerline Dis	t. to Barrier:	54.0 feet		Noise Sc	ource Fle	vations (in i	Feet)	
Centerline Dist. t	o Observer:	54.0 feet		,,,,,,,,,	Autos:		001)	
Barrier Distance t	o Observer:	0.0 feet		Mediu	m Trucks:			
Observer Height (A	Above Pad):	5.0 feet			vy Trucks:		Grade Adjus	tment: 0.0
Pa	d Elevation:	0.0 feet						
Roa	d Elevation:	0.0 feet		Lane Eq		Distance (in	feet)	
F	Road Grade:	0.0%			Autos:	11.002		
	Left View:	-90.0 degrees			m Trucks:			
	Right View:	90.0 degrees		Heav	y Trucks:	47.695		
FHWA Noise Mode	l Calculations	S						
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	-3.53	0.	18	-1.20	-4.67	0.000	0.000
Medium Trucks:	81.00	-20.77	0.:	21	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-24.73	0.:	20	-1.20	-5.39	0.000	0.000
Unmitigated Noise	Levels (with	out Topo and ba	arrier atte	nuation)				
	Leq Peak Hou			vening	Leq N		Ldn	CNEL
Autos:	65		4.1	62.3		56.2	64.9	65.5
Medium Trucks:	59		3.0	51.7		50.1	58.6	58.8
Heavy Trucks:	59		3.5	49.5		50.8	59.1	59.2
Vehicle Noise:	67	.4 65	5.9	62.9		58.1	66.6	67.1
Centerline Distance	e to Noise Co	ntour (in feet)						
			1	dBA	65 di		60 dBA	55 dBA
				32	69		150	322
		CNE	EL:	35 75 161 3				346

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIGHV	VAY N	IOISE PR	EDICT	ON MO	DEL			
Road Nar	rio: E+P ne: Avenue 54 ent: w/o Madisor	n St.					Name: lumber:		/ave-Coral I	Mountai	n
SITE	SPECIFIC IN	PUT DATA				N	IOISE I	MODE	L INPUTS	;	
Highway Data					Site Cond	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	9,500 vehicles	S					Autos	: 15		
Peak Hou	Percentage:	9.30%			Med	dium Tr	ucks (2	Axles)	: 15		
Peak I	Hour Volume:	884 vehicles	S		He	avy Tru	cks (3+.	Axles)	: 15		
Ve	ehicle Speed:	50 mph			Vehicle N	/iiv					
Near/Far La	ane Distance:	51 feet		F		u <b>x</b> cleType		Dav	Evening	Niaht	Dailv
Site Data					*0111		Autos:	77.59		9.6%	. ,
D-	rrier Heiaht:	0.0 feet			Me	edium T	rucks:	84.89	6 4.9%	10.3%	1.84%
Barrier Type (0-V		0.0 1661			F	leavy T	rucks:	86.59	6 2.7%	10.8%	0.74%
,,,,	ist. to Barrier:	54.0 feet		H							
Centerline Dist		54.0 feet		Ľ	Noise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000			
Observer Height	(Above Pad):	5.0 feet				n Truck		297	0		
	Pad Elevation:	0.0 feet			Heav	y Truck	s: 8.	006	Grade Adj	ustment	: 0.0
Ro	ad Elevation:	0.0 feet		1	Lane Equ	iivaleni	Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 47	677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47	.695			
FHWA Noise Mod	el Calculations	3									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresi	nel	Barrier Atte	en Bei	rm Atten
Autos:	70.20	-2.95		0.1	8	-1.20		-4.67	0.0	00	0.000
Medium Trucks:	81.00	-20.18		0.2	1	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-24.14		0.2	0	-1.20		-5.39	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hou	r Leq Day	′ L	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	66	.2	64.7		62.9		56.	В	65.5		66.1
Medium Trucks:	59	.8	58.6		52.3		50.	7	59.2		59.4
Heavy Trucks:	60	.2	59.1		50.1		51.	3	59.7		59.8
Vehicle Noise:	67	.9	66.5		63.5		58.	7	67.2		67.7
Centerline Distan	ce to Noise Co	ntour (in feet	)								
				70 d	dBA	65	dBA		60 dBA	55	dBA
			Ldn:	3	5	7	6		164	3	353
		Ci	NEL:	3	8	8	2		176	3	379

Wednesday, March 25, 2020

	FH\	VA-RD-77-108	HIGH	WAY N	IOISE P	REDICT	ION MO	DEL			
	io: E+P ne: Airport Bl. nt: w/o Monroe	: St.					t Name: lumber:		ave-Coral I	Mounta	in
SITE	SPECIFIC IN	IPUT DATA				ı	IOISE N	ИODE	L INPUTS	5	
Highway Data					Site Cor	ditions	(Hard =	10, S	oft = 15)		
	Traffic (Adt): Percentage: four Volume:	2,300 vehicle 9.30% 214 vehicle					ucks (2 ) cks (3+ )	,	15		
Ve	hicle Speed:	50 mph		Η,	Vehicle	Miss					
Near/Far La	ne Distance:	51 feet				icleType		Dav	Evening	Night	Daily
Site Data					VCII		Autos:	77.5%	-	9.69	,
					M	edium T		84.8%		10.39	
Barrier Type (0-W	. ,	0.0 feet 0.0				Heavy T		86.5%		10.89	
Centerline Di		54.0 feet		1	Voise S	ource E	levation	s (in f	eet)		
Centerline Dist.		54.0 feet				Auto	s: 0.	000			
Barrier Distance		0.0 feet			Mediu	m Truck	s: 2.	297			
Observer Height (	(Above Pad): ad Elevation:	5.0 feet 0.0 feet			Hea	y Truck	s: 8.	006	Grade Adj	ustmer	nt: 0.0
Ro	ad Elevation:	0.0 feet		1	Lane Eq	uivalen	t Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 47.	862			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 47.	677			
	Right View:	90.0 degre	es		Hea	y Truck	s: 47.	695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresr	nel	Barrier Atte	en Be	erm Atten
Autos:	70.20	-9.11		0.1	В	-1.20		-4.67	0.0	00	0.000
Medium Trucks:	81.00	-26.34		0.2	1	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-30.30		0.2	D	-1.20		-5.39	0.0	00	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er atten	uation)						
VehicleType	Leq Peak Hou			Leg E			Night		Ldn		CNEL
Autos:	60		58.5		56.7		50.7		59.3		59.9
Medium Trucks:	53		52.5		46.1		44.6	-	53.0		53.3
Heavy Trucks: Vehicle Noise:	54 61		53.0 60.3		43.9 57.3		45.2 52.5		53.5 61.1		53.7 61.5
					57.3		52.5	)	01.1		01.5
Centerline Distant	ce to Noise Co	ontour (in feet	)	70 0	VD A	e e	dBA		60 dBA	-	5 dBA
			Lalor					1 ,		5	
	Ldn:					14 30 64 137 15 32 68 147					
		C	NEL:	1:	5	3	52		ზთ		14/

		WA-RD-77-108	- IIIOIIIV	AT 11	JIOL FI						
Scenario: E									ave-Coral	Mounta	in
Road Name: A Road Seament: w		. 04				JOD I	vumber	12642			
Road Segment: W	//O IVIONITOE	e St.									
	CIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard	= 10, S	oft = 15)		
Average Daily Traft	fic (Adt):	5,600 vehicle	s					Autos.			
Peak Hour Perd		9.30%						Axles).			
Peak Hour		521 vehicle	s		He	avy Tru	icks (3+	- Axles).	15		
	Speed:	50 mph		ν	ehicle I	Mix					
Near/Far Lane D	istance:	51 feet			Vehi	icleTyp	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	6 12.9%	9.69	6 97.429
Barrier	Heiaht:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.39	6 1.849
Barrier Type (0-Wall,	1-Berm):	0.0			F	Heavy T	rucks:	86.5%	6 2.7%	10.89	6 0.749
Centerline Dist. to		54.0 feet		Λ	loise So	urce E	levatio	ns (in f	eet)		
Centerline Dist. to O		54.0 feet				Auto	os:	0.000			
Barrier Distance to O		0.0 feet			Mediui	m Truci	ks:	2.297			
Observer Height (Abo	,	5.0 feet			Heav	v Truck	ks:	3.006	Grade Ad	djustmer	nt: 0.0
	levation:	0.0 feet		-						-	
	levation:	0.0 feet		L	ane Equ				feet)		
	d Grade:	0.0%				Auto		7.862			
_	eft View:	-90.0 degre				m Truci		7.677			
Rig	nht View:	90.0 degre	es		Heav	ry Truck	(S: 4	7.695			
FHWA Noise Model Ca											
, , ,	REMEL	Traffic Flow	Dista		Finite			snel	Barrier Att		erm Atten
Autos:	70.20			0.18		-1.20		-4.67		000	0.00
Medium Trucks:	81.00			0.21		-1.20		-4.87		000	0.00
Heavy Trucks:	85.38			0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise Le								_			
	Peak Hou			eq Ev	ening	Leq	Night		Ldn		ONEL
Autos:	63		62.4		60.6		54		63.	-	63.
Medium Trucks:	57		56.3		50.0		48		56.	-	57.
Heavy Trucks:	57		56.8		47.8		49		57.		57.
Vehicle Noise:	65		64.2		61.2		56	i.4	64.	9	65.
Centerline Distance to	Noise Co	ontour (in feet	)	70 d	RA	65	dBA	Τ.	60 dBA	5	5 dBA
			l dn:	25			53	1 '	115		248
		0	NFI:	27			57		124		266
		O		21							

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	FHV	VA-RD-77-108 H	IIGHWAY	NOISE P	REDICTIO	N MODEL		
Road Nar	rio: E+P me: Avenue 58 ent: w/o Madiso	n St.				lame: The V mber: 1264	Vave-Coral Mo 2	untain
SITE	SPECIFIC IN	IPUT DATA					EL INPUTS	
Highway Data				Site Cor	ditions (H	lard = 10, S	oft = 15)	
Average Daily	Traffic (Adt):	2,200 vehicles				Autos	: 15	
Peak Hou	r Percentage:	9.30%		Me	edium Truc	ks (2 Axles	): 15	
Peak I	Hour Volume:	205 vehicles		He	avy Truck	s (3+ Axles	): 15	
V	ehicle Speed:	45 mph		Vehicle	Miv			
Near/Far La	ane Distance:	45 feet			icleType	Dav	Evening Ni	ight Daily
Site Data						tos: 77.5	-	9.6% 97.42%
Ra	arrier Heiaht:	0.0 feet		M	edium Tru	cks: 84.8	% 4.9% 1	0.3% 1.84%
Barrier Type (0-V		0.0			Heavy Tru	cks: 86.5	% 2.7% 1	0.8% 0.74%
Centerline D	ist. to Barrier:	51.0 feet		Noise S	ource Elev	ations (in	feet)	
Centerline Dist	. to Observer:	51.0 feet			Autos:	0.000	,	
Barrier Distance	to Observer:	0.0 feet		Mediu	m Trucks:	2.297		
Observer Height		5.0 feet		Hea	vy Trucks:	8.006	Grade Adjust	ment: 0.0
	Pad Elevation:	0.0 feet			•			
Ro	oad Elevation:	0.0 feet		Lane Eq		istance (in	feet)	
	Road Grade:	0.0%			Autos:	46.041		
	Left View:	-90.0 degrees			m Trucks:	45.848		
	Right View:	90.0 degrees		Hea	vy Trucks:	45.867		
FHWA Noise Mod	lel Calculation	s						
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten
Autos	68.46	-8.84	0.	43	-1.20	-4.65	0.000	0.000
Medium Trucks		-26.08	0.	46	-1.20	-4.87	0.000	0.000
Heavy Trucks	84.25	-30.04	0.	46	-1.20	-5.42	0.000	0.000
Unmitigated Nois	e Levels (with	out Topo and b	arrier atte	nuation)				
VehicleType	Leq Peak Hou			vening	Leq Ni		Ldn	CNEL
Autos			7.3	55.5		49.4	58.1	58.7
Medium Trucks			1.4	45.1		43.5	52.0	52.2
Heavy Trucks			2.4	43.3		44.6	52.9	53.1
Vehicle Noise	: 60	.7 59	9.3	56.1		51.4	60.0	60.4
Centerline Distan	ce to Noise Co	ontour (in feet)						
				dBA	65 dE	BA	60 dBA	55 dBA
				11 24 51			110	
		CNI	EL:	12 25 55				118

	FHW	/A-RD-77-108	HIGHW	AY N	NOISE PE	REDICT	ION MO	DEL			-
Road Nam	io: E+P ne: Avenue 58 nt: w/o Monroe	St.					Name: lumber:		ave-Coral N	Mountai	n
SITE	SPECIFIC INI	PUT DATA				ı	NOISE N	/IODE	L INPUTS	5	
Highway Data					Site Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	4,100 vehicles	3					Autos.	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2 A	(xles	15		
Peak H	lour Volume:	381 vehicles	3		He	avy Tru	cks (3+ A	(xles	15		
Ve	hicle Speed:	45 mph		H	Vehicle I	Miv					
Near/Far La	ne Distance:	45 feet		H		icleType	,	Dav	Evening	Night	Daily
Site Data								77.59		9.6%	,
Ra	rrier Height:	0.0 feet			М	edium T	rucks:	84.89	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			1	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		51.0 feet		ŀ	Noise Sc	E	lovetion	/in f	004)		
Centerline Dist.	to Observer:	51.0 feet		· ·	Noise St	Auto		•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto m Truck		000 297			
Observer Height	(Above Pad):	5.0 feet					·	297	Grade Adj	uetmon	e- 0 0
P	ad Elevation:	0.0 feet			Heat	y Truck	S: 8.	JU6	Grade Auj	usunen	. 0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distand	e (in	feet)		
	Road Grade:	0.0%				Auto	s: 46.	041			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 45.	848			
	Right View:	90.0 degree	es		Heav	y Truck	s: 45.	867			
FHWA Noise Mode	el Calculations										
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresn	el	Barrier Atte	en Be	rm Atten
Autos:	68.46	-6.14		0.4	13	-1.20		-4.65	0.0	00	0.000
Medium Trucks:	79.45	-23.38		0.4	16	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	84.25	-27.33		0.4	16	-1.20		-5.42	0.0	00	0.000
Unmitigated Noise	e Levels (witho	ut Topo and	barrier a	atten	nuation)						
VehicleType	Leq Peak Hour	Leq Day	L	eq E	vening	Leq	Night		Ldn	С	NEL
Autos:	61.		60.0		58.2		52.2		60.8		61.4
Medium Trucks:	55.	-	54.1		47.8		46.2		54.7		54.9
Heavy Trucks:	56.		55.1		46.0		47.3		55.6		55.8
Vehicle Noise:	63.	4	62.0		58.8		54.1		62.7		63.1
Centerline Distant	ce to Noise Co	ntour (in feet,	1								
					dBA		dBA	'	60 dBA		dBA
			Ldn:		17		36		77		166
		C	VEL:	1	18	3	38		83		178

	FHV	VA-RD-77-108	HIGHW	VAY NO	OISE PI	REDICTI	ON MC	DEL			
	o: E+P e: Avenue 58 nt: e/o Jacksor	n St.					Name: umber:		ave-Coral I	Mountain	l
	SPECIFIC IN	IPUT DATA							L INPUTS	5	
Highway Data				S	ite Con	ditions	(Hard =	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	2,000 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tro	ıcks (2	Axles):	15		
Peak H	our Volume:	186 vehicles	3		He	avy Truc	cks (3+	Axles):	15		
Vei	hicle Speed:	50 mph		V	ehicle l	Miv					
Near/Far Lai	ne Distance:	36 feet		-		icleType		Day	Evening	Night	Daily
Site Data						- /	Autos:	77.5%	12.9%	9.6%	97.429
Rai	rier Height:	0.0 feet			M	edium Ti	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W		0.0			1	Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis	st. to Barrier:	59.0 feet		N	loise Sc	ource El	evation	s (in fe	et)		
Centerline Dist.	to Observer:	59.0 feet		Ë		Auto		.000	/		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s: 2	297			
Observer Height (.		5.0 feet			Heav	vy Trucks	s: 8	.006	Grade Ad	ustment.	0.0
	ad Elevation:	0.0 feet		-		•					
	ad Elevation:	0.0 feet		L	ane Eq	uivalent			eet)		
F	Road Grade:	0.0%				Auto	00	.409			
	Left View:	-90.0 degree				m Truck		.252			
	Right View:	90.0 degree	es		Heav	y Truck	s: 56	.268			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Dista			Road	Fres		Barrier Atte		m Atten
Autos:	70.20	-9.71		-0.89		-1.20		-4.69	0.0		0.00
Medium Trucks:	81.00	-26.95		-0.87		-1.20		-4.88		000	0.00
Heavy Trucks:	85.38	-30.91		-0.87		-1.20		-5.35	0.0	000	0.00
Unmitigated Noise								_			
VehicleType Autos:	Leq Peak Hou	. , . ,	56.8	eq Eve	ening 55.1	Leq	Night 49	^	Ldn 57.6		VEL 58.
Medium Trucks:	58 52		50.8		44.4		49.	-	51.3		58. 51.
Heavy Trucks:	52		51.3		44.4		42.	-	51.3		52
Vehicle Noise:	60	• •	58.7		55.6		50.	-	59.4		59.
Centerline Distanc	e to Noise Co	ontour (in feet	)								
		,		70 dl	BA	65	dBA	6	0 dBA	55	dBA
			Ldn:	12		2	5		54	1	16
			VFI:	12		_	7		58		24

Scenario: E+P		Project Name: The Wave-Coral Mountain									
Road Name: Aven Road Segment: w/o J		St.				Job Nu	ımber: '	12642			
SITE SPECIF	IC INF	PUT DATA				N	DISE N	/IODE	L INPUT	S	
Highway Data				Si	te Con	ditions (	Hard =	10, Sc	ft = 15)		
Average Daily Traffic (	Adt):	2,700 vehicles	3					Autos:	15		
Peak Hour Percent	age:	9.30%			Me	dium Tru	cks (2 A	(xles	15		
Peak Hour Volu	ıme:	251 vehicles			He	avy Truc	ks (3+ A	(xles	15		
Vehicle Sp	eed:	50 mph		1/4	ehicle N	/liv					
Near/Far Lane Dista	nce:	36 feet				cleType		Dav	Evening	Night	Daily
Site Data								77.5%	Ü	9.6%	,
Barrier Hei	iaht.	0.0 feet			Me	edium Tru	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Be	-	0.0			F	leavy Tro	ıcks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Ba	,	59.0 feet			-/ 0-	urce Ele		- /! 6-	-41		
Centerline Dist, to Obse	rver:	59.0 feet		N	oise so			•	et)		
Barrier Distance to Obse	rver:	0.0 feet				Autos		000 297			
Observer Height (Above F	Pad):	5.0 feet				n Trucks			Grade Ad	iuetmont	
Pad Eleva	tion:	0.0 feet			Heav	y Trucks	: 8.0	006	Grade Auj	usimeni	. 0.0
Road Eleva	tion:	0.0 feet		Lá	ne Equ	iivalent	Distanc	e (in t	eet)		
Road Gr	rade:	0.0%				Autos	: 56.	409			
Left V	/iew:	-90.0 degree	es		Mediur	n Trucks	: 56.:	252			
Right V	/iew:	90.0 degree	s		Heav	y Trucks	: 56.:	268			
FHWA Noise Model Calcu	lations										
VehicleType REM	EL	Traffic Flow	Dista	nce	Finite	Road	Fresn	el	Barrier Atte	en Bei	m Atten
	70.20	-8.41		-0.89		-1.20		-4.69	0.0	000	0.000
	81.00	-25.65		-0.87		-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	85.38	-29.60		-0.87		-1.20		-5.35	0.0	000	0.000
Unmitigated Noise Levels				attenua	ation)						
VehicleType Leq Pea				eq Eve	- 1	Leq N		ļ	Ldn	1	NEL
Autos:	59.7		58.1		56.4		50.3		58.9		59.
Medium Trucks:	53.0	-	52.1		45.7		44.2		52.6		52.9
Heavy Trucks: Vehicle Noise:	53.7 61.4		52.6 60.0		43.6 56.9		44.8 52.1		53.2 60.7		53.0 61.0
CHICLE I VOIGE.			00.0		50.5		UZ. I		00.7		01.
0		-4									
Centerline Distance to No		ntour (in feet		70 dE	3A	65 d	'BA	6	0 dBA	55	dBA
Centerline Distance to No		, ,	Ldn:	70 dE	BA	65 d		6	0 dBA 66	1	dBA 41

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Wednesday, March 25, 2020

	FHW	/A-RD-77-108	HIGH	WAY I	NOISE P	REDICTION	OM MC	DEL			
Scenario: E+P Road Name: Aven Road Segment: w/o N		ı St.						The W 12642	'ave-Coral	Mountai	n
SITE SPECIF	IC IN	PUT DATA				N	OISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions (	Hard =	= 10, Sc	oft = 15)		
Average Daily Traffic (A	Adt):	1,300 vehicles						Autos:	15		
Peak Hour Percenta	age:	9.30%			Me	edium Tru	cks (2	Axles):	15		
Peak Hour Volu	me:	121 vehicles			He	eavy Truc	ks (3+	Axles):	15		
Vehicle Spe	eed:	40 mph		-	Vehicle	Miv					
Near/Far Lane Dista	nce:	23 feet		H		icleType		Dav	Evening	Night	Daily
Site Data					*0,		utos:	77.5%	-	9.6%	-
Barrier Hei		0.0 feet			N	ledium Tr		84.8%		10.3%	
Barrier Type (0-Wall, 1-Be		0.0 reet 0.0				Heavy Tr		86.5%		10.8%	
Centerline Dist. to Bar	,	40.0 feet									
Centerline Dist. to Obser		40.0 feet			Noise S	ource Ele			eet)		
Barrier Distance to Obser		0.0 feet				Autos		.000			
Observer Height (Above F		5.0 feet				m Trucks	-	.297			
Pad Fleva		0.0 feet			Hea	vy Trucks	: 8	.006	Grade Ad	justmen	t: 0.0
Road Eleva		0.0 feet		ı	Lane Eo	uivalent	Distar	ce (in	feet)		
Road Gr		0.0%		ı		Autos	: 38	636			
I eft V	iew:	-90.0 degree	s		Mediu	m Trucks	: 38	406			
Right V	iew:	90.0 degree			Hea	vy Trucks	: 38	.429			
FHWA Noise Model Calcul	lations	;									
VehicleType REMI	EL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Bei	rm Atten
Autos:	66.51	-10.62		1.5	8	-1.20		-4.59	0.0	000	0.000
Medium Trucks:	77.72	-27.85		1.6	32	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	82.99	-31.81		1.6	61	-1.20		-5.56	0.0	000	0.000
Unmitigated Noise Levels	•		barrie								
VehicleType Leq Pea				Leq E	vening	Leq N			Ldn		NEL
Autos:	56.		54.7		52.9		46	-	55.5		56.1
Medium Trucks:	50.		49.1		42.7		41.		49.6		49.9
Heavy Trucks:	51.	6 5	50.5		41.5		42	7	51.1	1	51.2
Vehicle Noise:	58.		56.9		53.6	i	49	.1	57.6	3	58.0
Centerline Distance to No.	ise Co	ntour (in feet)		70	10.4						10.4
					dBA	65 0		1 (	60 dBA	1	dBA
		-	Ldn:	6 13 28 59							
		CN	VEL:		6	14	1		30		64

	FH	WA-RD-77-108	HIGH	WAY N	OISE PR	EDICTI	ON MO	DDEL			
Scenari Road Nam Road Segmei	e: Avenue 60					.,		The Wa 12642	ave-Coral	Mountai	n
SITE S	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data				S	ite Cond	ditions	(Hard :	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	4,500 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Med	dium Tro	ucks (2	Axles):	15		
Peak H	our Volume:	419 vehicle	S		Hea	avy Truc	cks (3+	Axles):	15		
Ve	hicle Speed:	45 mph		V	ehicle N	lix					
Near/Far La	ne Distance:	45 feet		F		cleType		Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
Rai	rier Height:	0.0 feet			Me	dium Ti	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	all, 1-Berm):	0.0			H	leavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		51.0 feet		۸	loise So	urce El	evatio	ns (in fe	et)		
Centerline Dist.		51.0 feet				Auto	s: C	.000			
Barrier Distance		0.0 feet			Mediun	n Truck	s: 2	.297			
Observer Height (	,	5.0 feet			Heav	y Trucks	s: 8	.006	Grade Ad	justmen	t: 0.0
	ad Elevation:	0.0 feet		ļ.							
	ad Elevation:	0.0 feet		L	ane Equ				eet)		
ı	Road Grade:	0.0%				Auto		3.041			
	Left View:	-90.0 degre				n Truck		.848			
	Right View:	90.0 degre	es		Heav	y Truck:	S: 40	5.867			
FHWA Noise Mode		-									
VehicleType	REMEL	Traffic Flow		ance	Finite I		Fres		Barrier Att		rm Atten
Autos:	68.46			0.43		-1.20		-4.65		000	0.000
Medium Trucks:	79.45			0.46		-1.20		-4.87		000	0.000
Heavy Trucks:	84.25			0.46		-1.20		-5.42	0.0	000	0.000
Unmitigated Noise								1		1 -	
VehicleType Autos:	Leq Peak Ho	ur Leq Day	60.4	Leq Ev	ening 58.6	Leq	Night 52		Ldn 61.3	1	NEL 61.8
Medium Trucks:		5.7	54.5		28.0 48.2		52 46		55.	_	55.3
			55.5		46.4		46				
Heavy Trucks: Vehicle Noise:		3.6	62.4		46.4 59.2		54		56.0 63.1		56.2 63.5
Centerline Distance					33.2		34		03.		03.0
Centernile Distant	e to Noise C	uniour (in teet		70 d	RΔ	65	dBA	6	0 dBA	5/	5 dBA
			I dn:	18			18 18	1 0	82	1	177
		C	NEL:	19		-	1		88		189
		O		10		7			00		

	FH\	WA-RD-77-108	HIGH	WAY N	OISE PI	REDICT	ION M	ODEL				
Scenari Road Name Road Segmen	e: Jefferson S						t Name Number		/ave-Cora	l Moi	untain	
SITE S	SPECIFIC IN	IPUT DATA				ı	VOISE	MODE	L INPU	ΓS		
Highway Data				5	ite Con	ditions	(Hard	= 10, S	oft = 15)			
Average Daily 1 Peak Hour	Traffic (Adt): Percentage:	28,200 vehicle: 9.30%	8		Ме	edium Tr	rucks (2	Autos Axles)				
	our Volume:	2,623 vehicles	3		He	avy Tru	icks (3+	Axles)	: 15			
	hicle Speed:	55 mph		1	/ehicle i	Wix						
Near/Far Lar	ne Distance:	71 feet		_ F	Veh	icleType	е	Day	Evening	N	ight	Daily
Site Data							Autos:	77.59	6 12.9%	,	9.6%	97.42%
Rar	rier Height:	0.0 feet			М	edium 7	rucks:	84.89	6 4.9%	1	0.3%	1.84%
Barrier Type (0-W	all, 1-Berm):	0.0				Heavy 7	rucks:	86.59	6 2.7%	1	0.8%	0.74%
Centerline Dis		64.0 feet		^	loise So	ource E	levatio	ns (in t	eet)			
Centerline Dist. t		64.0 feet				Auto	os: (	0.000				
Barrier Distance t	to Observer:	0.0 feet			Mediu	m Truck	ks: 2	2.297				
Observer Height (	Above Pad): ad Flevation:	5.0 feet 0.0 feet				y Truck		3.006	Grade A	djust	ment:	0.0
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in	feet)			
F	Road Grade:	0.0%				Auto	os: 50	3.486				
	Left View:	-90.0 degree	es		Mediu	m Truck	ks: 50	3.320				
	Right View:	90.0 degree			Hear	y Truck	rs: 50	3.337				
FHWA Noise Mode	l Calculation	-										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	snel	Barrier A	tten	Bern	n Atten
Autos:	71.78	1.36		-0.54		-1.20		-4.70	-	.000		0.000
Medium Trucks:	82.40			-0.52	-	-1.20		-4.88		.000		0.000
Heavy Trucks:	86.40			-0.52		-1.20		-5.31	0	.000		0.000
Unmitigated Noise	•									_		
	Leq Peak Hou			Leq Ev			Night		Ldn	ىل	CN	
Autos:			69.8		68.1		62		70			71.2
Medium Trucks:	-		63.6		57.3		55		64	-		64.4
Heavy Trucks: Vehicle Noise:	64 73		63.7 71.5		54.7 68.6		55 63		64 72			64.4 72.7
Centerline Distanc					55.0		50		12			
Contenine Distanc	C 10 110/36 C	ontour (III leet,		70 a	IBA	65	dBA		60 dBA	Т	55 (	IBA
			Ldn:	91	ı	1	95		421		90	06
		C	NEL:	97	7	2	10		452		97	75

	FH\	WA-RD-77-108	HIGHW	VAY NO	DISE PR	REDICTION	N MODE	-		
Scenario	): E+P					Project I	lame: The	Wave-Cor	al Mou	ntain
Road Name	e: Avenue 60					Job Nu	mber: 126	42		
Road Segmen	t: e/o Monroe	St.								
	PECIFIC IN	IPUT DATA						DEL INPU	ITS	
Highway Data				S	ite Con	ditions (i	Hard = 10,	Soft = 15)		
Average Daily 7	raffic (Adt):	1,900 vehicle	s				Aut	os: 15		
Peak Hour F	Percentage:	9.30%					cks (2 Axle	-,		
Peak Ho	our Volume:	177 vehicle	s		He	avy Truci	rs (3+ Axle	s): 15		
Veh	icle Speed:	50 mph		v	ehicle N	Nix				
Near/Far Lan	e Distance:	48 feet		Ė	Vehi	cleType	Da	y Evenin	g Nig	ıht Dai
Site Data						A	utos: 77.	5% 12.9	% 9	.6% 97.4
Barı	rier Heiaht:	0.0 feet			Me	edium Tru	icks: 84.	8% 4.99	% 10	.3% 1.8
Barrier Type (0-Wa		0.0			F	łeavy Tru	icks: 86.	5% 2.79	% 10	.8% 0.7
Centerline Dis	t. to Barrier:	64.0 feet		N	oise So	urce Ele	vations (i	n feet)		
Centerline Dist. to	o Observer:	64.0 feet				Autos				
Barrier Distance to	o Observer:	0.0 feet			Mediur	n Trucks				
Observer Height (A	lbove Pad):	5.0 feet				y Trucks			Adiustr	nent: 0.0
Pa	d Elevation:	0.0 feet							,	
Roa	d Elevation:	0.0 feet		L	ane Equ		Distance (			
R	load Grade:	0.0%				Autos.				
	Left View:	-90.0 degre				n Trucks				
	Right View:	90.0 degre	es		Heav	y Trucks	59.406			
FHWA Noise Mode	Calculation	s								
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresnel	Barrier /	Atten	Berm Atte
Autos:	70.20	-9.94		-1.24		-1.20	-4.		0.000	0.
Medium Trucks:	81.00	-27.17		-1.22		-1.20	-4.	38	0.000	0.
Heavy Trucks:	85.38	-31.13		-1.23		-1.20	-5.	31	0.000	0.
Unmitigated Noise										
	Leq Peak Hou			Leq Eve	- 1	Leq N		Ldn		CNEL
Autos:	57		56.2		54.5		48.4	-	7.0	5
Medium Trucks:	51		50.2		43.8		42.3	-	0.8	5
Heavy Trucks:		.8	50.7		41.7		42.9		1.3	5
Vehicle Noise:	59	).5	58.1		55.0		50.3	5	8.8	5
Centerline Distance	e to Noise Co	ontour (in feet	)							
			!	70 dl	3A	65 d		60 dBA	- 1	55 dBA
			Ldn: NFI:	11 12		25		53 57		115
						27				123

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIGHWAY	NOISE P	REDICTION	ON MODEL		
Scenario Road Name Road Segmen	e: Jefferson S					Name: The umber: 1264	Wave-Coral M 12	ountain
SITE S	PECIFIC IN	IPUT DATA			N	OISE MOD	EL INPUTS	
Highway Data				Site Con	ditions (	Hard = 10,	Soft = 15)	
Average Daily 1 Peak Hour F Peak Ho	. ,	19,400 vehicles 9.30% 1,804 vehicles				Auto icks (2 Axle ks (3+ Axle	s): 15	
Veh	icle Speed:	55 mph		Vehicle			-	
Near/Far Lan	e Distance:	71 feet			icleType	Dav	Evening	Night Daily
Site Data				1011		utos: 77.5		9.6% 97.42%
Ran	rier Heiaht:	0.0 feet		М	edium Tr	ucks: 84.8	3% 4.9%	10.3% 1.84%
Barrier Type (0-Wa		0.0			Heavy Tr	ucks: 86.5	5% 2.7%	10.8% 0.74%
Centerline Dis	t. to Barrier:	64.0 feet		Noise So	ource Ele	evations (in	feet)	
Centerline Dist. to	o Observer:	64.0 feet		110,00 01	Autos	-	7001)	
Barrier Distance to	o Observer:	0.0 feet		Mediu	m Trucks			
Observer Height (A	Above Pad):	5.0 feet			vy Trucks		Grade Adju	etment: 0 0
Pa	d Elevation:	0.0 feet						0.0
Roa	d Elevation:	0.0 feet		Lane Eq	uivalent	Distance (i	n feet)	
R	Road Grade:	0.0%			Autos	53.486		
	Left View:	-90.0 degree	s	Mediu	m Trucks	53.320		
	Right View:	90.0 degree	s	Hear	y Trucks	53.337		
FHWA Noise Mode	l Calculation:	s						
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atter	Berm Atten
Autos:	71.78	-0.26	-0	.54	-1.20	-4.7	0.00	0.000
Medium Trucks:	82.40	-17.50	-0	.52	-1.20	-4.8	8 0.00	0.000
Heavy Trucks:	86.40	-21.45	-0	.52	-1.20	-5.3	1 0.00	0.000
Unmitigated Noise	Levels (with	out Topo and L	parrier atte	enuation)				
VehicleType I	Leq Peak Hou	ır Leq Day	Leq	Evening	Leq I	Vight	Ldn	CNEL
Autos:	69	.8	38.2	66.4		60.4	69.0	69.6
Medium Trucks:	63	.2	32.0	55.6		54.1	62.5	62.8
Heavy Trucks:	63	.2 (	32.1	53.1		54.3	62.7	62.8
Vehicle Noise:	71	.4	69.9	67.0		62.1	70.6	71.1
Centerline Distance	e to Noise Co	ontour (in feet)						
·		-	70	0 dBA	65 c	iBA	60 dBA	55 dBA
			Ldn:	71	15	2	328	706
		CN	IEL:	76	16	i4	353	760

Wednesday, March 25, 2020

Scenario: EA         Project Name: The Wave Road Name: 196ferson St. 12642           Road Segment: n/o Avenue 54         Job Number: 12642           SITE SPECIFIC INPUT DATA         NOISE MODEL I           Highway Data         Site Conditions (Hard = 10, Soft: Note of the Conditions)		ıntain
	NIDLITC	
Highway Data Site Conditions (Hard = 10, Soft:	NPUIS	
	= 15)	
Average Daily Traffic (Adt): 16,300 vehicles Autos:	15	
Peak Hour Percentage: 9.30% Medium Trucks (2 Axles):	15	
Peak Hour Volume: 1,516 vehicles Heavy Trucks (3+ Axles):	15	
Vehicle Speed: 55 mph		
Near/Far Lane Distance: 71 feet VehicleType Day E	vening Nic	ght Daily
Site Data Autos: 77.5%	12.9%	9.6% 97.42%
Barrier Height: 0.0 feet Medium Trucks: 84.8%	4.9% 10	0.3% 1.84%
Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5%	2.7% 10	0.8% 0.74%
Centerline Dist. to Barrier: 64.0 feet Noise Source Elevations (in feet)	)	
Centerline Dist. to Observer: 64.0 feet Autos: 0.000		
Barrier Distance to Observer: 0.0 feet Medium Trucks: 2.297		
	rade Adjustr	ment: 0.0
Pad Elevation: 0.0 feet  Road Elevation: 0.0 feet  Lane Equivalent Distance (in fee	41	
2.5	i)	
Road Grade: 0.0%   Autos: 53.486		
Right View: 90.0 degrees Heavy Trucks: 53.337		
FHWA Noise Model Calculations		
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Ba	rrier Atten	Berm Atten
Autos: 71.78 -1.02 -0.54 -1.20 -4.70	0.000	0.000
Medium Trucks: 82.40 -18.25 -0.52 -1.20 -4.88	0.000	0.000
Heavy Trucks: 86.40 -22.21 -0.52 -1.20 -5.31	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)		
	dn	CNEL
Autos: 69.0 67.4 65.7 59.6	68.2	68.8
Medium Trucks: 62.4 61.2 54.9 53.3	61.8	62.0
Heavy Trucks: 62.5 61.4 52.3 53.6	61.9	62.
Vehicle Noise: 70.6 69.2 66.2 61.3	69.9	70.4
Centerline Distance to Noise Contour (in feet)	-IDA	EE -IDA
70 dBA 65 dBA 60 d		55 dBA
	92	55 dBA 629 676

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGHW	AY NO	DISE PI	REDICTI	ON MO	DDEL			
	rio: EA ne: Madison S nt: n/o Avenue							The W 12642	ave-Coral	Mountair	1
	SPECIFIC IN	NPUT DATA							L INPUT	s	
Highway Data				Si	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	11,300 vehicles	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	ucks (2	Axles):	15		
Peak F	lour Volume:	1,051 vehicles	3		He	avy Truc	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		1/4	ehicle i	Miv					
Near/Far La	ne Distance:	51 feet		-		icleType		Day	Evening	Night	Daily
Site Data						- /	Autos:	77.5%	12.9%	9.6%	97.429
Ra	rrier Height:	0.0 feet			М	edium Ti	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-V		0.0				Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Di	ist. to Barrier:	54.0 feet		A/	nien Sa	ource El	ovatio	ne (in fe	not)		
Centerline Dist.	to Observer:	54.0 feet		741	UISE SI	Auto:		0.000	et)		
Barrier Distance	to Observer:	0.0 feet			Modiu	m Truck:		.297			
Observer Height	(Above Pad):	5.0 feet				vy Truck		297	Grade Ad	liustmont	. 0.0
P	ad Elevation:	0.0 feet								justinon	. 0.0
Ro	ad Elevation:	0.0 feet		Lá	ane Eq	uivalent	Distar	nce (in i	feet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es			m Truck		.677			
	Right View:	90.0 degree	es		Hear	y Truck	s: 47	.695			
FHWA Noise Mod	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:		-2.19		0.18		-1.20		-4.67	0.0	000	0.00
Medium Trucks:	81.00			0.21		-1.20		-4.87		000	0.00
Heavy Trucks:	85.38	-23.39		0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Nois	e Levels (with	out Topo and	barrier a	attenu	ation)						
VehicleType	Leq Peak Ho			eq Eve		Leq	Night		Ldn		VEL
Autos:	-		65.4		63.6		57		66.	_	66.
Medium Trucks:			59.4		53.0		51		59.	-	60.
Heavy Trucks:			59.9		50.9		52		60.		60.
Vehicle Noise:			67.3		64.2		59	.4	68.	0	68
Centerline Distan	ce to Noise C	ontour (in feet,	)								
				70 dE	3A		dBA	6	60 dBA	1	dBA
			Ldn:	40		-	5		184	-	96
		C	NEL:	43		9	12		197	4	25

	FHV	VA-RD-77-108	HIGH	WAY N	DISE PR	REDICTION	ON MOI	DEL			
Scenario: EA						Project i	Name:	The W	ave-Coral	Mountai	n
Road Name: Mad						Job Nu	ımber: '	12642			
Road Segment: n/o	Avenue	50									
SITE SPECI	FIC IN	PUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions (	Hard =	10, So	ft = 15)		
Average Daily Traffic	(Adt):	9,000 vehicles	S					Autos:	15		
Peak Hour Percer	tage:	9.30%			Me	dium Tru	icks (2 A	(xles	15		
Peak Hour Vo	lume:	837 vehicles	S		He	avy Truc	ks (3+ A	(xles	15		
Vehicle S	peed:	50 mph		ν	ehicle N	/lix					
Near/Far Lane Dist	ance:	51 feet		Ė		cleType		Dav	Evening	Night	Dailv
Site Data							utos:	77.5%		9.6%	97.429
Barrier He	aiaht.	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-Wall, 1-E		0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.749
Centerline Dist. to B		54.0 feet		٨	oise So	urce Ele	evations	s (in fe	et)		
Centerline Dist. to Obs		54.0 feet				Autos	. 0.0	000			
Barrier Distance to Obs		0.0 feet			Mediur	n Trucks		297			
Observer Height (Above	,	5.0 feet			Heav	y Trucks	. 80	006	Grade Ad	iustmeni	t: 0.0
Pad Elev		0.0 feet									
Road Elev		0.0 feet		L	ane Equ	iivalent		_	eet)		
Road G		0.0%				Autos					
	View:	-90.0 degree	es			n Trucks					
Right	View:	90.0 degree	es		Heav	y Trucks	: 47.	695			
FHWA Noise Model Calc											
VehicleType REI		Traffic Flow	Dist	ance	Finite		Fresn		Barrier Att		rm Atten
Autos:	70.20	-3.18		0.18		-1.20		-4.67		000	0.00
Medium Trucks:	81.00	-20.42		0.21		-1.20		-4.87		000	0.00
Heavy Trucks:	85.38	-24.38		0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise Level										_	
	eak Hou			Leq Ev		Leq N		ļ	Ldn 65.2		NEL
Autos:	66	-	64.4 58.4		62.7		56.6			-	65.
Medium Trucks:	59				52.0		50.5		58.9	-	59.
Heavy Trucks: Vehicle Noise:	60 67	•	58.9 66.3		49.9 63.2		51.1 58.4		59.5 67.0		59. 67.
		•			03.2		30.4	'	67.0	,	07.
Centerline Distance to N	oise Co	ntour (in feet	,	70 d	RA	65 c	IRA	6	0 dBA	55	dBA
			I dn:	34		73		1	158	1	340
			NFI:	37		79	-		170		365
		O.	*	01		,,	-			,	,,,,

Wednesday, March 25, 2020

	FH'	WA-RD-77-108	HIGH	1 YAWH	IOISE PI	REDICT	ON M	DDEL			
	io: EA ne: Madison S nt: n/o Avenue							The W 12642	ave-Coral	Mountair	1
	SPECIFIC II	IPUT DATA							L INPUT	s	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	7,500 vehicles	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	698 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		F	Vehicle I	Miv					
Near/Far La	ne Distance:	51 feet				icleType		Day	Evening	Night	Dailv
Site Data							Autos:	77.5%	-	9.6%	. ,
Ra	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	. ,	54.0 feet		L							
Centerline Dist.		54.0 feet		L	Noise So				eet)		
Barrier Distance		0.0 feet				Auto		0.000			
Observer Height (		5.0 feet				m Truck		2.297		_	
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	: 0.0
	ad Flevation:	0.0 feet			Lane Eq	uivalent	Dista	nce (in	feet)		
	Road Grade:	0.0%				Auto	s: 47	7.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	7.677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47	7.695			
FHWA Noise Mode	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	inel	Barrier Att	en Bei	m Atten
Autos:	70.20	-3.97		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-21.21		0.2	1	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-25.17		0.2	0	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barri	er atter	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	′	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	65	5.2	63.6		61.9		55	.8	64.4	4	65.0
Medium Trucks:			57.6		51.2		49	.7	58.2	_	58.4
Heavy Trucks:	59	9.2	58.1		49.1		50	.3	58.	7	58.8
Vehicle Noise:	66	5.9	65.5		62.4		57	.6	66.2	2	66.7
Centerline Distand	e to Noise C	ontour (in feet,	)								
			$\neg$		dBA		dBA	- (	60 dBA	1	dBA
			Ldn:	-	0	_	5		140	-	01
		C	NEL:	3	2	7	0		150	3	24

	FH	WA-RD-77-108	HIGHW	VAY N	OISE P	REDICTI	ON MO	DEL			
	io: EA ne: Madison S nt: n/o Airport					.,	Name: umber:		ave-Coral	Mountai	'n
SITE	SPECIFIC II	IPUT DATA				N	OISE N	ИODE	L INPUT	S	
Highway Data				5	Site Con	ditions (	Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	15,200 vehicle	8					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tru	icks (2 i	Axles):	15		
Peak F	lour Volume:	1,414 vehicle	3		He	avy Truc	ks (3+ )	Axles):	15		
Ve	hicle Speed:	50 mph		,	/ehicle l	Miv					
Near/Far La	ne Distance:	51 feet		ľ		icleType		Dav	Evening	Night	Daily
Site Data							lutos:	77.5%		9.6%	
Ra	rrier Height:	0.0 feet			M	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			- 1	Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	. ,	54.0 feet		,	Jaina Ce	ource Ele	overtie n	o (in fe	2041		
Centerline Dist.	to Observer:	54.0 feet			voise sc	Autos		000	ei)		
Barrier Distance	to Observer:	0.0 feet			Modiu	Autos m Trucks		000 297			
Observer Height	(Above Pad):	5.0 feet				y Trucks		006	Grade Ad	iuetman	t· 0.0
P	ad Elevation:	0.0 feet			пеач	ry Trucks	s. o.	000	Orado Adj	ustmen	t. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distan	ce (in i	feet)		
	Road Grade:	0.0%				Autos	s: 47.	862			
	Left View:	-90.0 degree	es		Mediu	m Trucks	s: 47.	677			
	Right View:	90.0 degree	es		Heav	y Trucks	s: 47.	695			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresr	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-0.91		0.18	3	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-18.14		0.2	1	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-22.10		0.20	)	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	′ L	eq E	rening	Leq	Night		Ldn		NEL
Autos:	-		66.7		64.9		58.9		67.5		68.1
Medium Trucks:	-		60.7		54.3		52.8		61.2	-	61.5
Heavy Trucks:			61.2		52.1		53.4		61.7		61.9
Vehicle Noise:	70	0.0	68.5		65.5		60.7	7	69.3	3	69.7
Centerline Distant	ce to Noise C	ontour (in feet	)								
				70 c		65 (		1 6	60 dBA	1	5 dBA
			Ldn:	48	-	10			224		482
		C	NEL:	52	2	11	12		240		518

		A-RD-77-108	HIGHW	AY NO	ISE PI	KEDICTI	JN MOI	DEL			
Scenari									ave-Coral I	Mountain	
	e: Madison St.					Job Ni	ımber: '	12642			
Road Segmer	nt: n/o Avenue	50									
	SPECIFIC IN	PUT DATA		-					LINPUTS	6	
Highway Data				Sit	te Con	ditions (					
Average Daily	,	5,100 vehicles						Autos:	15		
	Percentage:	9.30%				dium Tru		,	15		
	our Volume:	474 vehicles			He	avy Truc	ks (3+ A	(xles	15		
	hicle Speed:	45 mph		Ve	ehicle l	Viix					
Near/Far Lai	ne Distance:	45 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						Α	utos:	77.5%	12.9%	9.6%	97.42%
Bar	rier Height:	0.0 feet			M	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	-	0.0			- 1	Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		51.0 feet		Me	nina Ca	ource Ele	untion	/in fo	041		
Centerline Dist.	to Observer:	51.0 feet		740	nse sc	Autos		000	ei)		
Barrier Distance	to Observer:	0.0 feet			Mar allia	Autos m Trucks		97			
Observer Height (	Above Pad):	5.0 feet				vy Trucks		297	Grade Adi	uetmont	0.0
Pa	ad Elevation:	0.0 feet			пеач	ry Trucks	. 0.0	JU0	Grade Auj	ustinent.	0.0
Roa	ad Elevation:	0.0 feet		La	ne Eq	uivalent	Distanc	e (in f	eet)		
F	Road Grade:	0.0%				Autos	: 46.	041			
	Left View:	-90.0 degree	s		Mediu	m Trucks	: 45.	848			
	Right View:	90.0 degree	s		Heav	y Trucks	: 45.	867			
FHWA Noise Mode	el Calculations										
VehicleType	REMEL	Traffic Flow	Distar		Finite	Road	Fresn		Barrier Atte		m Atten
Autos:	68.46	-5.19		0.43		-1.20		-4.65	0.0		0.00
Medium Trucks:	79.45	-22.43		0.46		-1.20		-4.87	0.0		0.00
Heavy Trucks:	84.25	-26.38		0.46		-1.20		-5.42	0.0	00	0.00
Unmitigated Noise	•		oarrier a	attenua	ation)						
				eq Eve		Leq I			Ldn		VEL
	Leq Peak Hour		30.9		59.2		53.1		61.7		62.
Autos:	62.	-							55.6	i	55.9
Autos: Medium Trucks:	62. 56.	3	55.1		48.7		47.2				
Autos: Medium Trucks: Heavy Trucks:	62. 56. 57.	3 : 1 :	56.0		47.0		48.2	!	56.6		56.
Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	62. 56. 57. 64.	3 ! 1 ! 3 (	56.0 62.9					!			
Autos: Medium Trucks: Heavy Trucks:	62. 56. 57. 64.	3 ! 1 ! 3 (	56.0 62.9	70 dB	47.0 59.8	65.0	48.2 55.1		56.6 63.6		64.
Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	62. 56. 57. 64.	3 1 3 ntour (in feet)	56.0 62.9	70 dB	47.0 59.8	65 d	48.2 55.1		56.6	55	

0-						Danie at M.	Th ''	· 0 · ·	Annual :	
Scenario	o: EA e: Madison S					roject Nan Job Numb		Vave-Coral N	viountair	1
Road Seamen						JOD INUMD	er: 12642	4		
	PECIFIC II	NPUT DATA						EL INPUTS	5	
Highway Data				S	ite Condi	tions (Har	d = 10, S	oft = 15)		
Average Daily	raffic (Adt):	10,700 vehicle	s				Autos	: 15		
Peak Hour I	Percentage:	9.30%			Medi	um Trucks	(2 Axles,	: 15		
Peak He	our Volume:	995 vehicle	s		Heav	y Trucks (	3+ Axles,	: 15		
Vel	icle Speed:	50 mph		V	ehicle Mi	v				
Near/Far Lar	e Distance:	51 feet		ľ	Vehicl		Dav	Evening	Night	Dailv
Site Data					* 011101	Auto			9.6%	. ,
					Men	lium Truck:			10.3%	
	rier Height:	0.0 feet				avy Truck			10.8%	
Barrier Type (0-Wa Centerline Dis		0.0 54.0 feet								****
Centerline Dist. t		54.0 feet		٨	loise Sou	rce Elevat	ions (in	feet)		
Barrier Distance t		0.0 feet				Autos:	0.000			
		5.0 feet			Medium	Trucks:	2.297			
Observer Height (	d Flevation:	0.0 feet			Heavy	Trucks:	8.006	Grade Adj	ustment	: 0.0
	d Elevation:	0.0 feet		1	ane Faui	valent Dis	tance (in	feet)		
	Coad Grade:	0.0%		F	ano Equi	Autos:	47.862	7001)		
,	Left View:	-90.0 degre	.00		Medium		47.677			
	Right View:	90.0 degre				Trucks:	47.695			
	rugin view.	90.0 degre	.03		770077	rraono.	11.000			
FHWA Noise Mode	l Calculation	18								
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite R	oad Fi	resnel	Barrier Atte	en Ber	m Atten
Autos:	70.20	-2.43	3	0.18		-1.20	-4.67	0.0	00	0.00
Medium Trucks:	81.00	-19.67	,	0.21		-1.20	-4.87	0.0	00	0.00
Heavy Trucks:	85.38	-23.62	2	0.20		-1.20	-5.39	0.0	00	0.00
Unmitigated Noise	Levels (with	out Topo and	barrie	attenu	iation)					
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq Ev	ening	Leq Nigh	t	Ldn	C	NEL
Autos:	6	6.8	65.2		63.4		57.4	66.0		66.
Medium Trucks:	6	0.3	59.1		52.8		51.2	59.7		59.
Heavy Trucks:	6	0.8	59.7		50.6		51.9	60.2		60.
Vehicle Noise:	6	8.5	67.0		64.0		59.2	67.7		68.
vernole Noise:	a to Noisa C	ontour (in fee	t)							
	0 10 110136 0									
	to Horse o	,		70 d	BA	65 dBA		60 dBA	55	dBA
Centerline Distanc	to Noise o	,	Ldn:	70 d		65 dBA 82 88	l	177		82

Wednesday, March 25, 2020

	FH'	WA-RD-77-108	HIGH	WAY N	OISE PI	REDICTI	ON MO	DDEL			
	io: EA ne: Monroe St. nt: n/o Avenue							The W 12642	'ave-Coral	Mountair	1
	SPECIFIC II	NPUT DATA							L INPUT	s	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	10,200 vehicles	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tru	ıcks (2	Axles):	15		
Peak H	lour Volume:	949 vehicles	S		He	avy Truc	ks (3+	Axles):	15		
Ve	hicle Speed:	50 mph			/ehicle l	Miv					
Near/Far La	ne Distance:	43 feet		H		icleType		Day	Evening	Night	Dailv
Site Data					*011		lutos:	77.5%	-	9.6%	. ,
Po	rrier Height:	0.0 feet			М	edium Tı	ucks:	84.8%	4.9%	10.3%	
Barrier Type (0-W		0.0 feet			,	Heavy Tr	ucks:	86.5%		10.8%	
Centerline Di	. ,	64.0 feet									•
Centerline Dist.		64.0 feet		1	Voise Sc				eet)		
Barrier Distance		0.0 feet				Autos		0.000			
Observer Height (		5.0 feet				m Trucks		2.297			
	ad Elevation:	0.0 feet			Heav	y Trucks	s: 8	3.006	Grade Ad	justment	: 0.0
	ad Elevation:	0.0 feet		1	ane Eq	uivalent	Distar	nce (in	feet)		
	Road Grade:	0.0%				Autos		1.488			
	Left View:	-90.0 degree	ae .		Mediu	m Truck		341			
	Right View:	90.0 degree			Heav	y Trucks	s: 60	).355			
FHWA Noise Mode	el Calculation	IS									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	inel	Barrier Att	en Ber	m Atten
Autos:	70.20	-2.64		-1.3	1	-1.20		-4.70	0.0	000	0.000
Medium Trucks:	81.00	-19.88		-1.3	3	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	85.38	-23.83		-1.3	3	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	er atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	′	Leq E	ening/	Leq	Night		Ldn		NEL
Autos:	65	5.0	63.4		61.7		55	.6	64.2	2	64.8
Medium Trucks:	58	3.6	57.4		51.0		49	.5	58.0	-	58.2
Heavy Trucks:	59	9.0	57.9		48.9		50	.1	58.	5	58.6
Vehicle Noise:	66	6.7	65.3		62.2		57	.5	66.0	)	66.5
Centerline Distand	ce to Noise C	ontour (in feet,	)								
		-	П	70 d			dBA	- (	60 dBA	1	dBA
			Ldn:	3	-		5		161	-	47
		C	NEL:	3	7	8	0		173	3	72

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	WAY N	IOISE P	REDICT	ION MO	DEL			
	io: EA ne: Monroe St. nt: n/o Avenue	52					t Name: lumber:		ave-Coral	Mountai	1
SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	9,700 vehicle	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles).	15		
Peak H	lour Volume:	902 vehicle	S		He	eavy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	50 mph		-	Vehicle	Miv					
Near/Far La	ne Distance:	43 feet				icleType	,	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	,
Ra	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		64.0 feet		-	Noise S	ouroo El	lovetio	o (in f	0041		
Centerline Dist.	to Observer:	64.0 feet		,	voise 3	Auto			eet)		
Barrier Distance	to Observer:	0.0 feet			14	Auto m Truck		.000			
Observer Height	(Above Pad):	5.0 feet					-	.006	Grade Ad	iustmon	. 0.0
P	ad Elevation:	0.0 feet			неа	vy Truck	s: e	.000	Grade Au	Justineni	. 0.0
Ro	ad Elevation:	0.0 feet		1	Lane Eq	uivalent	t Distar	ice (in	feet)		
	Road Grade:	0.0%				Auto	s: 60	.488			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 60	.341			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 60	.355			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Bei	m Atten
Autos:	70.20	-2.86		-1.3	4	-1.20		-4.70	0.0	000	0.000
Medium Trucks:	81.00	-20.09		-1.3	3	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	85.38	-24.05		-1.3	3	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	r atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	'	Leq E	vening	Leq	Night		Ldn	1	NEL
Autos:	64	.8	63.2		61.5		55	.4	64.0	)	64.6
Medium Trucks:	58	1.4	57.2		50.8		49	.3	57.	7	58.0
Heavy Trucks:	58		57.7		48.7		49		58.3		58.4
Vehicle Noise:	66	5.5	65.1		62.0		57	.2	65.8	3	66.3
Centerline Distant	ce to Noise Co	ontour (in feet	)								
			Г	70 d			dBA	-	60 dBA	1	dBA
			Ldn:	3			72		156	-	35
		C	NEL:	3	6	7	78		167	3	60

	FHV	VA-RD-77-108	HIGHV	VAY NO	OISE PI	REDICT	ом мо	DEL			
	o: EA e: Monroe St. nt: n/o Airport E	31.					Name: lumber:		ave-Coral I	Mountain	ı
	SPECIFIC IN	PUT DATA							L INPUTS	S	
Highway Data				Si	ite Con	ditions	(Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	7,600 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2 )	Axles):	15		
Peak H	our Volume:	707 vehicles	3		He	avy Truc	cks (3+ /	Axles):	15		
Vei	hicle Speed:	50 mph		V	ehicle i	Mix					
Near/Far Lai	ne Distance:	51 feet		F		icleType		Day	Evening	Night	Daily
Site Data						,	Autos:	77.5%	12.9%	9.6%	97.429
Rai	rier Height:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W	-	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis	st. to Barrier:	54.0 feet		M	Inisa Si	ource El	ovation	e (in fa	of)		
Centerline Dist.	to Observer:	54.0 feet		7.0	0/30 00	Auto.		000	,		
Barrier Distance	to Observer:	0.0 feet			Madiu	m Truck		297			
Observer Height (	Above Pad):	5.0 feet				vy Truck		006	Grade Ad	iustment	0.0
Pa	nd Elevation:	0.0 feet								uoti mont.	0.0
Roa	d Elevation:	0.0 feet		Li	ane Eq	uivalent	Distant	ce (in f	eet)		
F	Road Grade:	0.0%				Auto		862			
	Left View:	-90.0 degree	es			m Truck		677			
	Right View:	90.0 degree	es		Hear	y Truck	s: 47.	695			
FHWA Noise Mode	l Calculations	3		-							
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresr	nel	Barrier Atte	en Ber	m Atten
Autos:	70.20	-3.92		0.18		-1.20		-4.67	0.0	000	0.00
Medium Trucks:	81.00	-21.15		0.21		-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	85.38	-25.11		0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	•							1		1	
	Leq Peak Hou	- 1 - 7		Leq Eve			Night		Ldn		VEL
Autos:	65		63.7		61.9		55.9		64.5		65.
Medium Trucks:	58.		57.7		51.3		49.8		58.2		58.
Heavy Trucks: Vehicle Noise:	59. 67		58.2 65.5		49.1 62.5		50.4 57.7		58.7 66.3		58. 66.
					02.0		37.1	'	00.0	,	00.
Centerline Distanc	e to Noise Co	ntour (in feet,	,	70 dE	DΛ	e E	dBA	6	i0 dBA	55	dBA
			Ldn:	30			5		141		04

	FH\	WA-RD-77-108	HIGHV	VAY NO	DISE PR	REDICTI	ON MOD	EL			
Scenario	: EA					Project	Name: T	he Wa	ve-Coral N	lountair	1
	: Monroe St.					Job N	umber: 1	2642			
Road Segment	: n/o Avenue	: 54									
	PECIFIC IN	IPUT DATA							INPUTS		
Highway Data				S	te Con	ditions (	Hard = 1	0, So	ft = 15)		
Average Daily T	raffic (Adt):	8,900 vehicle	s				Α	utos:	15		
Peak Hour F	ercentage:	9.30%					icks (2 A.		15		
Peak Ho	ur Volume:	828 vehicle	s		He	avy Truc	ks (3+ A.	kles):	15		
Veh	icle Speed:	50 mph		V	ehicle N	/lix					
Near/Far Lan	e Distance:	51 feet		-	Vehi	cleType		Day	Evening	Night	Daily
Site Data						A	lutos: 7	7.5%	12.9%	9.6%	97.42
Barr	ier Heiaht:	0.0 feet			Me	edium Tr	ucks: 8	4.8%	4.9%	10.3%	1.84
Barrier Type (0-Wa		0.0			F	łeavy Tr	ucks: 8	6.5%	2.7%	10.8%	0.74
Centerline Dist	to Barrier:	54.0 feet		N	oise So	urce Ele	evations	(in fe	et)		
Centerline Dist. to	Observer:	54.0 feet		-	0.00 00	Autos		<u> </u>	J.,		
Barrier Distance to	Observer:	0.0 feet			Modium	n Trucks					
Observer Height (A	bove Pad):	5.0 feet				y Trucks			Grade Adju	ıstment	0.0
Pad	d Elevation:	0.0 feet									
Road	d Elevation:	0.0 feet		Li	ne Equ		Distance	_	eet)		
R	oad Grade:	0.0%				Autos					
	Left View:	-90.0 degre	es			n Trucks					
	Right View:	90.0 degre	es		Heav	y Trucks	3: 47.6	95			
FHWA Noise Model	Calculation	s		'_							
VehicleType	REMEL	Traffic Flow	Dista		Finite		Fresne		Barrier Atte		m Atter
Autos:	70.20			0.18		-1.20		4.67	0.00		0.0
Medium Trucks:	81.00			0.21		-1.20		4.87	0.00		0.00
Heavy Trucks:	85.38	-24.42		0.20		-1.20	-	5.39	0.00	00	0.0
Unmitigated Noise											
	eq Peak Hou			Leq Eve	-	Leq I			Ldn	C	NEL
Autos:	66		64.4		62.6		56.6		65.2		65
Medium Trucks:	59		58.3		52.0		50.4		58.9		59
Heavy Trucks:	60		58.9		49.8		51.1		59.4		59
Vehicle Noise:	67		66.2		63.2		58.4		66.9		67
Centerline Distance	to Noise Co	ontour (in feet	)	70			10.4				10.1
				70 dE	3A	65 0			0 dBA		dBA
			Ldn:	34		7:	-		157	_	38
		С	NEL:	36		7	В		168	3	63

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGH	HWAY I	NOISE PI	REDICT	ION MO	DDEL			
	rio: EA ne: Monroe St. ent: n/o Avenue							The W 12642	ave-Coral	Mountair	1
	SPECIFIC IN	NPUT DATA							L INPUT	s	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	6,100 vehicles	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2	Axles):	15		
Peak I	Hour Volume:	567 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		ŀ	Vehicle I	Miv					
Near/Far La	ne Distance:	51 feet		-		icleType	)	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	- 0	9.6%	,
Ra	rrier Height:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0			1	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	54.0 feet									
Centerline Dist.		54.0 feet			Noise So				eet)		
Barrier Distance		0.0 feet				Auto		0.000			
Observer Height		5.0 feet				m Truck		2.297			
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	: 0.0
	ad Flevation:	0.0 feet		-	Lane Eq	uivalent	t Distar	nce (in t	eet)		
	Road Grade:	0.0%		-		Auto	s: 47	7.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	7.677			
	Right View:	90.0 degree			Heav	y Truck	s: 47	7.695			
FHWA Noise Mod	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	-4.87		0.1	18	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-22.11		0.2	21	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-26.06		0.2	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er atter	nuation)						
VehicleType	Leq Peak Ho	ur Leq Day	′	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	64	1.3	62.7		61.0		54	.9	63.	5	64.1
Medium Trucks:			56.7		50.3		48	.8	57.3	3	57.5
Heavy Trucks:	58	3.3	57.2		48.2		49	.4	57.8	3	57.9
Vehicle Noise:	66	3.0	64.6		61.5		56	.8	65.3	3	65.8
Centerline Distan	ce to Noise C	ontour (in feet)	)								
			П	70	dBA	65	dBA	6	60 dBA	55	dBA
			Ldn:	2	26	5	57		122	2	62
		CI	NEL:	- 2	28	6	31		131	2	82

	FH\	WA-RD-77-108	HIGH	1 YAW	NOISE P	REDICT	ION M	ODEL			
	io: EA ne: Monroe St. nt: n/o Avenue	60					Name. Iumber.		/ave-Coral	Mountai	n
SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data					Site Cor	ditions	(Hard:	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	5,200 vehicle	s					Autos.	: 15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles)	: 15		
Peak H	lour Volume:	484 vehicle	s		He	eavy Tru	cks (3+	Axles)	: 15		
Ve	hicle Speed:	50 mph		ŀ	Vehicle	Miv					
Near/Far La	ne Distance:	51 feet		ŀ		icleType	,	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	,
Pa	rrier Height:	0.0 feet			N	ledium T	rucks:	84.89	6 4.9%	10.3%	1.84%
Barrier Type (0-W		0.0 1661				Heavy T	rucks:	86.5%	6 2.7%	10.8%	0.74%
Centerline Di		54.0 feet		-	M-! 0			/! 6	41		
Centerline Dist.	to Observer:	54.0 feet		-	Noise S				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		0.000 0.297			
Observer Height	(Above Pad):	5.0 feet				m Truck	-		Crode Ad	liuotmoni	
	ad Elevation:	0.0 feet			Hea	vy Truck	s: t	3.006	Grade Ad	justment	: 0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distai	nce (in	feet)		
	Road Grade:	0.0%				Auto	s: 47	7.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	7.677			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 47	7.695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	snel	Barrier Att	en Bei	rm Atten
Autos:	70.20	-5.56		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-22.80		0.2		-1.20		-4.87		000	0.000
Heavy Trucks:	85.38	-26.76		0.2	.0	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	er atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn	1	NEL
Autos:	63	.6	62.0		60.3		54	.2	62.8	В	63.4
Medium Trucks:	57	.2	56.0		49.7		48	.1	56.6	6	56.8
Heavy Trucks:	57		56.5		47.5		48		57.		57.2
Vehicle Noise:	65	i.3	63.9		60.8		56	.1	64.6	6	65.1
Centerline Distant	ce to Noise Co	ontour (in feet	)								
			Γ		dBA		dBA	1 7	60 dBA	55	dBA
			Ldn:	-	!4		51		110	_	236
		C	NEL:	2	:5	5	55		118	2	253

	FH\	WA-RD-77-108	HIGH	IWAY N	OISE PI	REDICT	ION M	ODEL			
	io: EA ne: Avenue 50 nt: w/o Madiso	n St.						The W	/ave-Coral	Mounta	in
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data				5	Site Con	ditions	(Hard	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	14,600 vehicle	s					Autos			
Peak Hour	Percentage:	9.30%				edium Tr	,	,			
Peak H	lour Volume:	1,358 vehicle	S		He	eavy Tru	cks (3+	- Axles)	: 15		
	hicle Speed:	50 mph		١	/ehicle	Mix					
Near/Far La	ne Distance:	51 feet				icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.59	6 12.9%	9.69	6 97.42%
Rai	rrier Height:	0.0 feet			М	ledium T	rucks:	84.89	6 4.9%	10.39	6 1.84%
Barrier Type (0-W	/all, 1-Berm):	0.0				Heavy T	rucks:	86.59	6 2.7%	10.89	6 0.74%
Centerline Dis		54.0 feet		^	loise So	ource E	levatio	ns (in f	eet)		
Centerline Dist.		54.0 feet				Auto	s: (	0.000			
Barrier Distance		0.0 feet			Mediu	m Truck	s: :	2.297			
Observer Height (	(Above Pad): ad Elevation:	5.0 feet 0.0 feet			Hear	vy Truck	s:	3.006	Grade Ad	justmer	t: 0.0
Ros	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in	feet)		
1	Road Grade:	0.0%				Auto	s: 4	7.862			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 4	7.677			
	Right View:	90.0 degre			Hear	vy Truck	s: 4	7.695			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Dis	tance		Road	Fre		Barrier Att		rm Atten
Autos:	70.20	-1.08		0.18		-1.20		-4.67		000	0.000
Medium Trucks:	81.00			0.21		-1.20		-4.87		000	0.000
Heavy Trucks:	85.38			0.20		-1.20		-5.39	0.0	000	0.000
Unmitigated Noise								-		1 -	
	Leq Peak Hou			Leq Ev			Night		Ldn		NEL
Autos:	68		66.5		64.8			.7	67.3	-	67.
Medium Trucks:	61		60.5		54.1		52		61.		61.3 61.3
Heavy Trucks: Vehicle Noise:	62		61.0 68.4		52.0 65.3		53 60		61.6		69.
Centerline Distance	ce to Noise Co	ontour (in feet	)								
		, , ,000		70 a	IBA .	65	dBA		60 dBA	55	5 dBA
			Ldn:	47	7	1	01		218		470
		С	NEL:	50	)	1	09		234		504

	FHV	VA-RD-77-108	HIGH	WAY NO	DISE PREDI	CTION MODEL		
Scenario: E Road Name: A Road Segment: w	venue 50	on St.				ect Name: The Number: 126	Wave-Coral M 42	ountain
	CIFIC IN	PUT DATA				NOISE MOI	DEL INPUTS	
Highway Data				S	ite Conditio	ns (Hard = 10,	Soft = 15)	
Average Daily Trafi Peak Hour Pero Peak Hour Vehicle	centage:	13,000 vehicle 9.30% 1,209 vehicle 50 mph		1/	Heavy	Auto Trucks (2 Axle rucks (3+ Axle	s): 15	
Near/Far Lane D	Distance:	51 feet		V	ehicle Mix	rpe Dav	. In animal	Night Daily
Site Data  Barrier Barrier Type (0-Wall,	Height: 1-Berm):	0.0 feet 0.0				Autos: 77. Trucks: 84. Trucks: 86.	5% 12.9% 8% 4.9%	Night Daily 9.6% 97.42% 10.3% 1.84% 10.8% 0.74%
Centerline Dist. to	Barrier:	54.0 feet		N	nise Source	Elevations (in	feet)	
Road E Road Lo	bserver:	54.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree		L	Medium Tro Heavy Tro ane Equival	ent Distance (utos: 47.862 ecks: 47.677		stment: 0.0
FHWA Noise Model Ca	alculations	3						
VehicleType R	REMEL	Traffic Flow	Dist	tance	Finite Road	Fresnel	Barrier Atter	Berm Atten
Autos: Medium Trucks: Heavy Trucks:	70.20 81.00 85.38	-1.58 -18.82 -22.78		0.18 0.21 0.20	-1.3	.0 -4.8	37 0.00	0.000
		T	t! -		-411			
	Peak Hou	r Leq Day	/	Leq Eve	ening L	eq Night	Ldn	CNEL
Autos:	67.		66.0		64.3	58.2	66.8	67.4
Medium Trucks: Heavy Trucks:	61. 61.	_	60.0 60.5		53.6 51.5	52.1 52.7	60.5 61.1	60.8 61.2
Vehicle Noise:	69	*	67.9		64.8	60.0	68.6	69.1
					00	00.0	00.0	03.1
Centerline Distance to	Noise Co	,	Ldn: NEL:	70 di 43 47		94 101	60 dBA 202 217	55 dBA 435 467

Wednesday, March 25, 2020

F	HWA-	-RD-77-108 I	HIGHW	AY NO	DISE PI	REDICTION	ON MO	ODEL			
Scenario: EA Road Name: Avenue: Road Segment: e/o Moni								The W 12642	'ave-Coral	Mountai	n
SITE SPECIFIC	INPU	JT DATA				N	OISE	MODE	L INPUT	s	
Highway Data				S	ite Con	ditions (	Hard :	= 10, S	oft = 15)		
Average Daily Traffic (Adt)	: 11,9	900 vehicles						Autos:	15		
Peak Hour Percentage	9	.30%			Me	dium Tru	cks (2	Axles).	15		
Peak Hour Volume	1,1	107 vehicles			He	avy Truc	ks (3+	Axles).	15		
Vehicle Speed		50 mph		V	ehicle l	Wix					
Near/Far Lane Distance	:	43 feet		-		icleType	Т	Dav	Evening	Night	Daily
Site Data							utos:	77.5%	-	9.6%	
Barrier Height		0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm,		0.0			-	Heavy Tr	ıcks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier	: (	64.0 feet		N	oise So	ource Ele	vatio	ns (in f	eet)		
Centerline Dist. to Observe	: (	64.0 feet				Autos		0.000	,		
Barrier Distance to Observe		0.0 feet			Mediu	m Trucks		297			
Observer Height (Above Pad,	:	5.0 feet				vy Trucks		3.006	Grade Ad	iustmeni	: 0.0
Pad Elevation	:	0.0 feet									
Road Elevation		0.0 feet		L	ane Eq	uivalent			feet)		
Road Grade	:	0.0%				Autos		0.488			
Left View	-4	90.0 degrees	S			m Trucks		0.341			
Right View	: !	90.0 degrees	S		Heav	y Trucks	: 60	0.355			
FHWA Noise Model Calculati	ons										
VehicleType REMEL	_	raffic Flow	Distar		Finite	Road	Fres		Barrier Att		rm Atten
Autos: 70.		-1.97		-1.34		-1.20		-4.70		000	0.000
Medium Trucks: 81.		-19.21		-1.33		-1.20		-4.88		000	0.000
Heavy Trucks: 85.	38	-23.16		-1.33		-1.20		-5.31	0.0	000	0.000
Unmitigated Noise Levels (w.	_										
VehicleType Leq Peak F		Leq Day		eq Eve	_	Leq N			Ldn		NEL
Autos:	65.7	-	4.1		62.3		56		64.9	-	65.5
Medium Trucks:	59.3		8.1		51.7		50		58.6		58.9
Heavy Trucks:	59.7		8.6		49.5		50		59.1		59.3
Vehicle Noise:	67.4		6.0		62.9		58	.1	66.7	7	67.1
Centerline Distance to Noise	Conto	our (in feet)	-	70.0		0.5					10.4
		,	do	70 dl	3A	65 0		1 '	60 dBA	1	dBA
		_	.dn:				384				
		CN	EL:	41		89	,		192	2	113

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGHV	VAY N	OISE PR	EDICTION	OM MO	DEL			
Road Nar	rio: EA ne: Avenue 52 ent: w/o Monro	e St.					Name: ' ımber:		ave-Coral	Mountair	ı
SITE	SPECIFIC IN	IPUT DATA				N	OISE N	/IODE	L INPUT	S	
Highway Data				S	ite Con	ditions (	Hard =	10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	11,200 vehicle	s					Autos:	15		
Peak Hou	Percentage:	9.30%			Med	dium Tru	cks (2 A	Axles):	15		
Peak I	Hour Volume:	1,042 vehicle	s		He	avy Truc	ks (3+ A	Axles):	15		
V	ehicle Speed:	50 mph		1/	ehicle N	Ai v					
Near/Far La	ane Distance:	51 feet				cleType		Dav	Evenina	Niaht	Dailv
Site Data					Verii		utos:	77.5%	- 3	9.6%	/
					Me	edium Tr		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet				leavy Tr		86.5%		10.8%	0.74%
Barrier Type (0-V	ist. to Barrier:	0.0 54.0 feet				loury III	30110.	00.070	2.170	10.070	0.7 170
Centerline Dist		54.0 feet		٨	loise So	urce Ele	vation	s (in fe	et)		
Barrier Distance		0.0 feet				Autos		000			
Observer Height		5.0 feet			Mediur	n Trucks	: 2.:	297			
	Pad Elevation:	0.0 feet			Heav	y Trucks	: 8.0	006	Grade Ad	ustment	0.0
	ad Elevation:	0.0 feet		L	ane Equ	iivalent	Distano	e (in i	eet)		
710	Road Grade:	0.0 1001		F		Autos			,		
	I eft View:	-90.0 degre	20		Mediur	n Trucks					
	Right View:	90.0 degre			Heav	y Trucks	: 47.	695			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresn	iel .	Barrier Att	en Ber	m Atten
Autos.	70.20	-2.23		0.18	t	4.00		-4.67	0.0	000	0.000
						-1.20		-4.07	0.0	700	
Medium Trucks.	81.00	-19.47		0.21		-1.20 -1.20		-4.87	0.0		0.000
Medium Trucks. Heavy Trucks.				0.21 0.20						000	
	85.38	-23.43		0.20	)	-1.20		-4.87	0.0	000	
Heavy Trucks.	85.38	-23.43 out Topo and	barrier	0.20	) uation)	-1.20		-4.87	0.0	000	
Heavy Trucks.  Unmitigated Nois	85.38 e Levels (with Leq Peak Ho	-23.43 out Topo and	barrier	0.20	) uation)	-1.20 -1.20		-4.87 -5.39	0.0	000 000	0.000 VEL
Heavy Trucks.  Unmitigated Nois  VehicleType	85.38  e Levels (with  Leq Peak Hotel  67	-23.43 out Topo and ur Leq Day	barrier	0.20	uation) rening	-1.20 -1.20	light	-4.87 -5.39	0.0 0.0	000 000 C/	0.000 VEL 66.8
Heavy Trucks.  Unmitigated Nois  VehicleType  Autos.	85.38  e Levels (with Leq Peak Hole 67	-23.43  out Topo and  ur Leq Day 7.0	barrier / 1	0.20	vation) rening 63.6	-1.20 -1.20	light 57.5	-4.87 -5.39	0.0 0.0 <i>Ldn</i> 66.2	000 000 C/	0.000 VEL 66.8 60.1
Heavy Trucks.  Unmitigated Nois  VehicleType  Autos.  Medium Trucks.	85.38  e Levels (with Leq Peak Hot 67 60	-23.43  out Topo and  ur   Leq Day  7.0  0.5	barrier /   65.4 59.3	0.20	(aation) rening 63.6 53.0	-1.20 -1.20	light 57.5 51.4	-4.87 -5.39	0.0 0.0 <i>Ldn</i> 66.2 59.9	C/	0.000 VEL 66.8 60.1 60.5
Heavy Trucks.  Unmitigated Nois  VehicleType  Autos.  Medium Trucks.  Heavy Trucks.	85.38  e Levels (with  Leq Peak Hot  67  60  67	-23.43  out Topo and  ur   Leq Day  7.0  0.5  1.0  3.7	barrier 65.4 59.3 59.9 67.2	0.20	ening 63.6 53.0 50.8	-1.20 -1.20	light 57.5 51.4 52.1	-4.87 -5.39	0.0 0.0 <i>Ldn</i> 66.2 59.9	C/	0.000 VEL 66.8 60.1 60.5
Unmitigated Nois VehicleType Autos. Medium Trucks. Heavy Trucks. Vehicle Noise.	85.38  e Levels (with  Leq Peak Hot  67  60  67	-23.43  out Topo and  ur   Leq Day  7.0  0.5  1.0  3.7	barrier 65.4 59.3 59.9 67.2	0.20	nation) rening 63.6 53.0 50.8 64.2	-1.20 -1.20	light 57.5 51.4 52.1 59.4	-4.87 -5.39	0.0 0.0 <i>Ldn</i> 66.2 59.9	C/2	0.000 0.000 VEL 66.8 60.1 60.5 68.4
Unmitigated Nois VehicleType Autos. Medium Trucks. Heavy Trucks. Vehicle Noise.	85.38  e Levels (with  Leq Peak Hot  67  60  67	-23.43  out Topo and  ur   Leq Day  7.0  0.5  1.0  3.7	barrier 65.4 59.3 59.9 67.2	0.20 attenu Leq Evi	10 (10 (10 (10 (10 (10 (10 (10 (10 (10 (	-1.20 -1.20	light 57.5 51.4 52.1 59.4	-4.87 -5.39	0.0 0.0 Ldn 66.2 59.9 60.4	CI CI CI CI CI CI CI CI CI CI CI CI CI C	0.000 VEL 66.8 60.1 60.5 68.4

	FHW.	A-RD-77-108	HIGH	WAY N	OISE PI	REDICT	ION MOI	DEL			
Scenario: Road Name: Road Segment:	Avenue 54	St.					Name: 1 lumber: 1		ave-Coral N	Mounta	in
	ECIFIC INF	UT DATA							L INPUTS	5	
Highway Data				S	Site Con	ditions	(Hard =				
Average Daily Tra	. ,	7,700 vehicle	S					Autos:			
Peak Hour Pe		9.30%					ucks (2 A				
Peak Hou		716 vehicle	S		He	avy Tru	cks (3+ A	(xles	15		
	le Speed:	50 mph		V	/ehicle l	Wix					
Near/Far Lane	Distance:	51 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						,	Autos:	77.5%	12.9%	9.69	6 97.42%
Barrie	r Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.39	6 1.84%
Barrier Type (0-Wall,	1-Berm):	0.0				Heavy T	rucks:	86.5%	2.7%	10.89	6 0.74%
Centerline Dist.	to Barrier:	54.0 feet		^	loise So	ource El	evations	(in f	eet)		
Centerline Dist. to	Observer:	54.0 feet		-	.0.00 0	Auto		•	,,,,		
Barrier Distance to	Observer:	0.0 feet			Mediu	m Truck					
Observer Height (Ab		5.0 feet				vy Truck		006	Grade Adj	ustmer	nt: 0.0
	Elevation:	0.0 feet		_		•					
	Elevation:	0.0 feet		L	ane Eq		Distanc	_	feet)		
	ad Grade:	0.0%				Auto					
-	Left View:	-90.0 degree				m Truck					
R	ight View:	90.0 degree	es		Hear	y Truck	s: 47.6	595			
FHWA Noise Model C											
		Traffic Flow	Dis	tance		Road	Fresn		Barrier Atte		erm Atten
Autos:	70.20	-3.86		0.18		-1.20		-4.67	0.0		0.000
Medium Trucks:	81.00	-21.10		0.21		-1.20		-4.87	0.0		0.000
Heavy Trucks:	85.38	-25.05		0.20	)	-1.20		-5.39	0.0	00	0.000
Unmitigated Noise Le	•										
	q Peak Hour			Leq Ev			Night		Ldn		CNEL
Autos:	65.3		63.7		62.0		55.9		64.5		65.1
Medium Trucks:	58.9		57.7		51.4		49.8		58.3		58.5
Heavy Trucks: Vehicle Noise:	59.3 67.0		58.2 65.6		49.2 62.5		50.4 57.8		58.8 66.3		58.9 66.8
Centerline Distance t					02.5		37.0		00.3		00.0
			,								
Centerinie Distance t	o Noise Con	itour (iii reet		70 d	IBA .	65	dBA	-	60 dBA	5	5 dBA
Contentine Distance t	o Noise Con	nour (iii reet	Ldn:	70 d			dBA 66	-	60 dBA 142		5 dBA 306

	FHV	WA-RD-77-108	HIGHWAY	NOISE P	REDICT	TION MODEL		
Scenari Road Name Road Segmen	e: Avenue 54	on St.				t Name: The V Number: 12642		ountain
SITE S	SPECIFIC IN	IPUT DATA				NOISE MOD	EL INPUTS	
Highway Data				Site Cor	ditions	(Hard = 10, S	oft = 15)	
Average Daily	Traffic (Adt):	12,800 vehicles				Autos	: 15	
Peak Hour	Percentage:	9.30%		Me	edium T	rucks (2 Axles,	: 15	
Peak He	our Volume:	1,190 vehicles		He	eavy Tru	icks (3+ Axles,	: 15	
Vel	hicle Speed:	50 mph		Vehicle	Mix			
Near/Far Lar	ne Distance:	51 feet			icleTyp	e Dav	Evening 1	light Daily
Site Data				101	1010171	Autos: 77.5	-	9.6% 97.42%
Par	rier Height:	0.0 feet		м	ledium 1	Trucks: 84.89	% 4.9%	10.3% 1.84%
Barrier Type (0-Wa		0.0 reet			Heavy 1	Trucks: 86.5°	% 2.7%	10.8% 0.74%
Centerline Dis		54.0 feet						
Centerline Dist. t		54.0 feet		Noise S		levations (in	eet)	
Barrier Distance t	to Observer:	0.0 feet			Auto			
Observer Height (/	Above Pad):	5.0 feet			m Truci		0	
Pa	d Elevation:	0.0 feet		Hea	vy Truci	ks: 8.006	Grade Adjus	surierii. U.U
Roa	d Elevation:	0.0 feet		Lane Eq	uivalen	t Distance (in	feet)	
F	Road Grade:	0.0%			Auto	os: 47.862		
	Left View:	-90.0 degree	s	Mediu	m Truci	ks: 47.677		
	Right View:	90.0 degree	s	Hea	vy Truci	ks: 47.695		
FHWA Noise Mode	l Calculation	-						
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	
Autos:	70.20		-	.18	-1.20			
Medium Trucks:	81.00		-	.21	-1.20			
Heavy Trucks:	85.38			.20	-1.20	-5.39	0.00	0.000
Unmitigated Noise							1	
	Leq Peak Hou			Evening		Night	Ldn	CNEL
Autos:	67		6.0	64.2		58.1	66.8	67.4
Medium Trucks:			59.9	53.6		52.0	60.5	60.7
Heavy Trucks:	61		30.4	51.4		52.6	61.0	61.1
Vehicle Noise:	69	-	67.8	64.7		60.0	68.5	69.0
Centerline Distanc	e to Noise Co	ontour (in feet)	7.	n dBA	C	: dDA	eo ada	EE dDA
			Ldn:	0 dBA 43		6 dBA 93	60 dBA 200	55 dBA 430
			Lan: IFI :	46		93 100	200	462
		Cr	ILL.	40		100	∠14	402

Wednesday, March 25, 2020

	FHW	A-RD-77-108 I	HIGHWA	Y NC	DISE PI	REDICTION	ON MO	ODEL			
Scenario: EA Road Name: Airpor Road Segment: w/o M		St.						The W	ave-Coral	Mountai	1
SITE SPECIF	IC INF	PUT DATA							L INPUT	S	
Highway Data				Si	te Con	ditions (	Hard:	= 10, S	oft = 15)		
Average Daily Traffic (A	dt):	4,000 vehicles						Autos	15		
Peak Hour Percenta	ige:	9.30%			Me	dium Tru	icks (2	Axles)	15		
Peak Hour Volui	me:	372 vehicles			He	avy Truc	ks (3+	- Axles)	15		
Vehicle Spe	ed:	50 mph		1/4	ehicle l	Miv					
Near/Far Lane Distar	ice:	51 feet		-		icleType		Dav	Evening	Night	Daily
Site Data							utos:	77.59	-	9.6%	
Barrier Heid	tht.	0.0 feet			М	edium Tr	ucks:	84.89	6 4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Bei	,	0.0			-	Heavy Tr	ucks:	86.59	6 2.7%	10.8%	0.74%
Centerline Dist. to Bar	rier:	54.0 feet		N	oise Sc	ource Ele	evatio	ns (in f	eet)		
Centerline Dist. to Obser	ver:	54.0 feet				Autos		0.000	,		
Barrier Distance to Obser	ver:	0.0 feet			Mediu	m Trucks		2.297			
Observer Height (Above Pa		5.0 feet			Heav	vy Trucks	: 8	3.006	Grade Ad	iustmen	: 0.0
Pad Elevat		0.0 feet									
Road Elevat		0.0 feet		Lá	ne Eq	uivalent			feet)		
Road Gra		0.0%				Autos		7.862			
Left Vi		-90.0 degrees	s			m Trucks		7.677			
Right Vi	ew:	90.0 degrees	S		Heav	y Trucks	: 47	7.695			
FHWA Noise Model Calcul	ations										
VehicleType REME	_	Traffic Flow	Distanc		Finite	Road	Fres		Barrier Att		m Atten
	70.20	-6.70		0.18		-1.20		-4.67		000	0.000
	31.00	-23.94		0.21		-1.20		-4.87		000	0.000
	35.38	-27.90		0.20		-1.20		-5.39	0.0	000	0.000
Unmitigated Noise Levels											
VehicleType Leq Pea				q Eve	_	Leq N			Ldn		NEL
Autos:	62.		0.9		59.1		53		61.7		62.3
Medium Trucks:	56.		4.9		48.5		47		55.4		55.7
Heavy Trucks:	56.		55.4		46.3		47		55.9		56.1
Vehicle Noise:	64.2		62.7		59.7		54	.9	63.5	)	63.9
Centerline Distance to Noi	se Cor	ntour (in feet)		70 ."		05	/D.4	-	CO -/D4		-(D.4
			- 1	70 dE	5/4	65 0			60 dBA	1	dBA
		_	.dn:	20		43	-		92		98
		CN	IEL:	21		46	0		99	2	213

	FHW	/A-RD-77-108	HIGH	YAY I	NOISE PE	REDICT	ION MOI	DEL			
	rio: EA ne: Avenue 58 nt: w/o Madisor	n St.					Name: 1		ave-Coral I	Mountai	n
SITE	SPECIFIC IN	PUT DATA				ı	IOISE N	/IODE	L INPUTS	;	
Highway Data					Site Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	2,800 vehicles	3				,	Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2 A	(xles	15		
Peak H	lour Volume:	260 vehicles	S		He	avy Tru	cks (3+ A	(xles	15		
Ve	hicle Speed:	45 mph		H	Vehicle I	Miv					
Near/Far La	ne Distance:	45 feet		F		icleType		Dav	Evening	Night	Daily
Site Data								77.5%		9.6%	,
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		51.0 feet		-	Noise Sc			. /! 6	41		
Centerline Dist.	to Observer:	51.0 feet		-	Noise 30			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000 297			
Observer Height	(Above Pad):	5.0 feet				m Truck	o		Grade Adj	uo4mo ni	4.00
P	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.0	006	Grade Adj	usunen	. 0.0
Ro	ad Elevation:	0.0 feet			Lane Equ	uivalen	Distanc	e (in	feet)		
	Road Grade:	0.0%				Auto	s: 46.0	041			
	Left View:	-90.0 degree	es		Mediui	m Truck	s: 45.	848			
	Right View:	90.0 degree	es		Heav	y Truck	s: 45.	867			
FHWA Noise Mode	el Calculations										
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresn	el	Barrier Atte	en Bei	rm Atten
Autos:	00.10	-7.79		0.4	13	-1.20		-4.65	0.0	00	0.000
Medium Trucks:	79.45	-25.03		0.4	16	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	84.25	-28.99		0.4	16	-1.20		-5.42	0.0	00	0.000
Unmitigated Noise	e Levels (with	ut Topo and	barrier	atten	nuation)						
VehicleType	Leq Peak Hou	r Leq Day	′	Leq E	vening	Leq	Night		Ldn		NEL
Autos:	59.		58.3		56.5		50.5		59.1		59.7
Medium Trucks:			52.5		46.1		44.6		53.0		53.3
Heavy Trucks:			53.4		44.4		45.6		54.0		54.1
Vehicle Noise:	61.	7	60.3		57.2		52.5	,	61.0		61.5
Centerline Distant	ce to Noise Co	ntour (in feet,	)								
					dBA		dBA	(	60 dBA		dBA
			Ldn:		13	_	8		60		129
		C	NEL:	1	14	3	0		64	1	138

	FH\	WA-RD-77-108	HIGH	IWAY N	OISE P	REDICT	ION MO	DEL			
Scenari Road Nam Road Segmer	e: Avenue 58	n St.					Name: lumber:		ave-Coral	Mountair	ı
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data				S	Site Cor	ditions	(Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	3,800 vehicle	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2 .	Axles):	15		
Peak H	our Volume:	353 vehicle	s		He	eavy Tru	cks (3+.	Axles):	15		
Vel	hicle Speed:	50 mph		ı	/ehicle	Mix					
Near/Far Lar	ne Distance:	36 feet		F		icleТуре		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Rar	rier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-Wi	-	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis		59.0 feet		٨	loise S	ource El	evation	s (in fe	et)		
Centerline Dist. t		59.0 feet				Auto	s: 0.	000			
Barrier Distance t		0.0 feet			Mediu	m Truck	s: 2.	297			
Observer Height (	,	5.0 feet			Hea	vy Truck	s: 8.	006	Grade Ad	iustment	0.0
	d Elevation:	0.0 feet		ļ.							
	d Elevation:	0.0 feet		L	ane Eq	uivalen			eet)		
F	Road Grade:	0.0%				Auto	00	.409			
	Left View:	-90.0 degre				m Truck	00	.252			
	Right View:	90.0 degre	es		Hea	vy Truck	s: 56	.268			
FHWA Noise Mode					,						
VehicleType	REMEL	Traffic Flow		tance		Road	Fresi		Barrier Att		m Atten
Autos:	70.20			-0.89		-1.20		-4.69		000	0.00
Medium Trucks:	81.00			-0.87		-1.20		-4.88		000	0.00
Heavy Trucks:	85.38			-0.87		-1.20		-5.35	0.0	000	0.00
Unmitigated Noise VehicleType	Levels (with Leg Peak Hou					Loc	Night	1	Ldn		VEL
Autos:		ur Leq Da	59.6	Leq Ev	ening 57.8		ivignt 51.	R	60.4		VEL 61.
Medium Trucks:		1.8	53.6		47.2		45.		54.1		54.
Heavy Trucks:	-	i.2	53.6 54.1		45.0		46.	-	54.6		54.
Vehicle Noise:	-	2.9	61.5		58.4		53.	_	62.2		62.
Centerline Distanc	e to Noise Co	ontour (in feet	t)								
				70 d	IBA .	65	dBA	6	0 dBA	55	dBA
			Ldn:	18	3		88		82	1	77

	FH\	WA-RD-77-108	HIGHW	AY NO	ISE PR	EDICTIO	ON MOD	EL				
Scenario	: EA					Project I	Name: T	he Wa	ave-Coral N	/lountair	1	
	: Avenue 58					Job Nu	ımber: 1	2642				
Road Segment	: w/o Monroe	e St.										
	PECIFIC IN	IPUT DATA			NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)							
Highway Data				Si	te Cond	litions (	Hard = 1	0, So	ft = 15)			
Average Daily T	raffic (Adt):	3,800 vehicle	s				Α	utos:	15			
Peak Hour F	ercentage:	9.30%					cks (2 A		15			
Peak Ho	ur Volume:	353 vehicle	s		Hea	avy Truc	ks (3+ A)	kles):	15			
Veh	icle Speed:	45 mph		V	ehicle N	lix						
Near/Far Lan	e Distance:	45 feet			Vehic	cleType	E	Day	Evening	Night	Daily	
Site Data						Α	utos: 7	7.5%	12.9%	9.6%	97.42	
Barr	ier Heiaht:	0.0 feet			Me	dium Tri	ucks: 8	4.8%	4.9%	10.3%	1.849	
Barrier Type (0-Wa		0.0			Н	leavy Tro	ucks: 8	6.5%	2.7%	10.8%	0.749	
Centerline Dist	to Barrier:	51.0 feet		N	oise So	urce Ele	vations	(in fe	et)			
Centerline Dist. to	Observer:	51.0 feet				Autos		•	- /			
Barrier Distance to	Observer:	0.0 feet			Mediun	n Trucks						
Observer Height (A	bove Pad):	5.0 feet				/ Trucks	-		Grade Adj	ustment	: 0.0	
Pad	d Elevation:	0.0 feet										
Road	d Elevation:	0.0 feet		Lá	ne Equ		Distance	•	eet)			
R	oad Grade:	0.0%				Autos						
	Left View:	-90.0 degre	es			n Trucks						
	Right View:	90.0 degre	es		Heav	y Trucks	: 45.8	67				
FHWA Noise Model	Calculation	s										
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite I	Road	Fresne	1	Barrier Atte	n Bei	m Atten	
Autos:	68.46	-6.47		0.43		-1.20		4.65	0.0		0.00	
Medium Trucks:	79.45			0.46		-1.20		4.87	0.0		0.00	
Heavy Trucks:	84.25	-27.66		0.46		-1.20	-	5.42	0.0	00	0.00	
Unmitigated Noise												
	eq Peak Hou			eq Eve	- 1	Leq N			Ldn	C	NEL	
Autos:	61		59.6		57.9		51.8		60.4		61.	
Medium Trucks:		i.0	53.8		47.4		45.9		54.4		54.	
Heavy Trucks:	55		54.7		45.7		47.0		55.3		55.	
Vehicle Noise:	63	3.1	61.6		58.5		53.8		62.4		62.	
Centerline Distance	to Noise Co	ontour (in feet	)									
				70 dE	3A	65 d	IBA .	6	0 dBA	55	dBA	
			Ldn: NFI:	16 17		34			73 79		58 69	

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 I	HIGHWAY	NOISE P	REDICTIO	N MODEL					
Scenario. Road Name. Road Segment	: Avenue 58	ı St.		Project Name: The Wave-Coral Mountain Job Number: 12642							
SITE SI	PECIFIC IN	PUT DATA			NC	ISE MOD	EL INPUTS				
Highway Data				Site Cor	nditions (F	lard = 10, S	oft = 15)				
Average Daily Ti	raffic (Adt):	2,600 vehicles				Autos	: 15				
Peak Hour P	ercentage:	9.30%		Me	edium Truc	ks (2 Axles	): 15				
Peak Ho	ur Volume:	242 vehicles		He	eavy Truck	s (3+ Axles	): 15				
Vehi	icle Speed:	50 mph		Vehicle	Miv						
Near/Far Lane	e Distance:	36 feet			icleType	Day	Evening N	ight Daily			
Site Data						itos: 77.5	-	9.6% 97.42%			
Parr	ier Heiaht:	0.0 feet		M	ledium Tru	cks: 84.8	% 4.9% 1	0.3% 1.84%			
Barrier Type (0-Wa		0.0 leet			Heavy Tru	cks: 86.5	% 2.7% 1	0.8% 0.74%			
Centerline Dist.	. ,	59.0 feet									
Centerline Dist. to		59.0 feet		Noise S		vations (in	reet)				
Barrier Distance to	Observer:	0.0 feet			Autos:						
Observer Height (A	bove Pad):	5.0 feet			m Trucks:		Grade Adjus	tmont: 0.0			
Pac	l Elevation:	0.0 feet		Hea	vy Trucks:	8.006	Grade Adjus	ment. 0.0			
Road	l Elevation:	0.0 feet		Lane Eq	uivalent E	Distance (in	feet)				
Ro	oad Grade:	0.0%			Autos:	56.409					
	Left View:	-90.0 degrees	S		m Trucks:						
ı	Right View:	90.0 degrees	S	Hea	vy Trucks:	56.268					
FHWA Noise Model	Calculations	5		!							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	70.20	-8.57	-0.	89	-1.20	-4.69	0.000	0.000			
Medium Trucks:	81.00	-25.81	-	87	-1.20	-4.88					
Heavy Trucks:	85.38	-29.77	-0.	87	-1.20	-5.35	0.000	0.000			
Unmitigated Noise I	•										
	eq Peak Hou			Evening	Leq N		Ldn	CNEL			
Autos:	59		8.0	56.2 45.6		50.1	58.8	59.4			
Medium Trucks:	53		51.9			44.0	52.5	52.7			
Heavy Trucks:	53		2.4	43.4		44.6	53.0	53.1			
Vehicle Noise:	61	-	9.8	56.8	1	52.0	60.5	61.0			
Centerline Distance	to Noise Co	ntour (in feet)			05 "		00 104	55 104			
			1	) dBA	65 dE	3A	60 dBA	55 dBA			
		_	.dn:	14	30		64	138			
		CN	EL:	15	32		69	148			

	FH\	WA-RD-77-108	HIGH	WAY	NOISE PI	REDICTI	ON MO	DEL			
	io: EA ne: Avenue 60 nt: w/o Madisc					.,	Name: ' umber:		ave-Coral	Mounta	ain
SITE	SPECIFIC IN	IPUT DATA				N	OISE N	/IODE	L INPUT	s	
Highway Data					Site Con	ditions (	Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	600 vehicle	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	icks (2 A	Axles):	15		
Peak H	lour Volume:	56 vehicle	8		He	avy Truc	ks (3+ A	Axles):	15		
Ve	hicle Speed:	40 mph		ł	Vehicle	Miv					
Near/Far La	ne Distance:	23 feet				icleTvpe		Dav	Evening	Niaht	Dailv
Site Data						//		77.5%		9.69	- /
Ra	rrier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.39	% 1.84%
Barrier Type (0-W		0.0 leet				Heavy Tr	ucks:	86.5%	2.7%	10.89	% 0.74%
Centerline Di		40.0 feet		-	Noise So	F1		- /! 6-	-41		
Centerline Dist.	to Observer:	40.0 feet		}	Noise 30			•	ei)		
Barrier Distance	to Observer:	0.0 feet				Autos m Trucks		000 297			
Observer Height	(Above Pad):	5.0 feet							Grade Ad	iuctmo	nt: 0 0
P	ad Elevation:	0.0 feet			Hear	y Trucks	8. 8.	006	Grade Adj	justriei	т. 0.0
Ro	ad Elevation:	0.0 feet		ĺ	Lane Eq	uivalent	Distanc	ce (in f	eet)		
	Road Grade:	0.0%				Autos	38.	636			
	Left View:	-90.0 degree	es		Mediu	m Trucks	s: 38.	406			
	Right View:	90.0 degree	es		Hear	y Trucks	38.	429			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresn	iel .	Barrier Att	en Be	erm Atten
Autos:	66.51	-13.97		1.5	58	-1.20		-4.59	0.0	000	0.000
Medium Trucks:	77.72	-31.21		1.6	62	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	82.99	-35.17		1.6	31	-1.20		-5.56	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	r attei	nuation)						
VehicleType	Leq Peak Hou			Leq E	vening	Leq	Night		Ldn		CNEL
Autos:	52	2.9	51.3		49.6		43.5	5	52.1	1	52.7
Medium Trucks:			45.7		39.4		37.8		46.3		46.5
Heavy Trucks:			47.1		38.1		39.3		47.7		47.8
Vehicle Noise:	54	1.9	53.5		50.2		45.7	7	54.2	2	54.7
Centerline Distant	ce to Noise Co	ontour (in feet	)							1	
					dBA	65 (		6	i0 dBA	5	i5 dBA
		_	Ldn:		4	8			16		36
		C	NEL:		4	8	3		18		38

	FHV	VA-RD-77-108	HIGH	WAY N	OISE PI	REDICT	ом мо	DEL			
	io: EA e: Avenue 60 nt: e/o Monroe	St.					Name: lumber:		ave-Coral I	Mountain	ı
	SPECIFIC IN	PUT DATA							L INPUTS	S	
Highway Data				S	ite Con	ditions	(Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	2,500 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2 )	Axles):	15		
Peak H	our Volume:	233 vehicles	3		He	avy Truc	cks (3+ /	Axles):	15		
Vei	hicle Speed:	50 mph		ν	ehicle	Mix					
Near/Far Lai	ne Distance:	48 feet		·		icleType		Day	Evening	Night	Daily
Site Data						,	Autos:	77.5%	12.9%	9.6%	97.429
Rai	rier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis	st. to Barrier:	64.0 feet			Inisa Si	ource El	ovation	e (in fa	ot)		
Centerline Dist.	to Observer:	64.0 feet			10/36 00	Auto.		000	<i>ct)</i>		
Barrier Distance	to Observer:	0.0 feet			Madiu	m Truck		297			
Observer Height (	Above Pad):	5.0 feet				vy Truck		006	Grade Ad	iustment	0.0
Pa	ad Elevation:	0.0 feet								uoti mom.	0.0
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distant	ce (in f	eet)		
F	Road Grade:	0.0%				Auto		540			
	Left View:	-90.0 degree	es			m Truck		391			
	Right View:	90.0 degree	es		Hear	y Truck	s: 59.	406			
FHWA Noise Mode	el Calculation:	S		-							
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fresr	nel .	Barrier Atte	en Ber	m Atten
Autos:	70.20	-8.74		-1.24		-1.20		-4.70	0.0		0.00
Medium Trucks:	81.00	-25.98		-1.22		-1.20		-4.88	0.0		0.00
Heavy Trucks:	85.38	-29.94		-1.23	3	-1.20		-5.31	0.0	000	0.00
Unmitigated Noise	•									1	
	Leq Peak Hou	.,.,		Leq Ev			Night		Ldn		VEL
Autos:	59		57.4		55.7		49.6		58.2		58.
Medium Trucks:	52		51.4		45.0		43.5	-	52.0		52.
Heavy Trucks: Vehicle Noise:	53 60		51.9 59.3		42.9 56.2		44.1 51.5		52.5 60.0		52. 60.
Centerline Distanc		**			30.2		31.0	,	00.0	<u>'</u>	00.
Centernine Distanc	e to worse Co	intour (In feet,	,	70 di	'BA	65	dBA	6	0 dBA	55	dBA
			Ldn:	14	ļ	3	0		64	1	38

	FHWA-R	D-77-108 HIGH	IWAY N	OISE PR	EDICT	ION MODEL				
Scenario: EA Road Name: Ave Road Segment: w/o				Project Name: The Wave-Coral Mountain Job Number: 12642						
SITE SPECI	FIC INPUT	DATA			- 1	NOISE MODI	EL INPUTS			
Highway Data			S	ite Cond	ditions	(Hard = 10, S	oft = 15)			
Average Daily Traffic Peak Hour Percer Peak Hour Vo Vehicle S <sub>I</sub> Near/Far Lane Dist	ntage: 9.3 lume: 55 peed: 4	0 vehicles 0% 8 vehicles 5 mph 5 feet	ν		avy Tru	Autos rucks (2 Axles) rcks (3+ Axles)	: 15 : 15			
Neal/Fal Latte Dist	arice. 4	o leet		Vehi	cleType	e Day	Evening N	light Daily		
Site Data Barrier He Barrier Type (0-Wall, 1-E		0.0 feet 0.0			edium 1 leavy 1		% 4.9% 1	9.6% 97.42% 10.3% 1.84% 10.8% 0.74%		
Centerline Dist. to B	arrier: 51	I.0 feet	۸	loise So	urce E	levations (in t	feet)			
Barrier Distance to Obs Observer Height (Above Pad Elev Road Elev Road G Left	ve Pad): 5.0 feet evation: 0.0 feet		L	Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.006 Grade Adjustment: 0.  Lane Equivalent Distance (in feet)  Autos: 46.041 Medium Trucks: 45.848 Heavy Trucks: 45.867						
FHWA Noise Model Calc										
VehicleType REI	MEL Trai	ffic Flow Dis	tance	Finite	Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	-4.48	0.43		-1.20	-4.65				
Medium Trucks:	79.45	-21.72	0.46		-1.20	-4.87				
Heavy Trucks:	84.25	-25.68	0.46		-1.20	-5.42	0.000	0.000		
Unmitigated Noise Level										
	eak Hour	Leq Day	Leq Ev		Leq	Night	Ldn	CNEL		
Autos:	63.2	61.6		59.9		53.8	62.4	63.0		
Medium Trucks:	57.0	55.8		49.4		47.9	56.3	56.6		
Heavy Trucks:	57.8	56.7		47.7		48.9	57.3	57.4		
Vehicle Noise:	65.1	63.6		60.5		55.8	64.3	64.8		
Centerline Distance to N	oise Contou	ır (in feet)	70 d	BA	65	dBA	60 dBA	55 dBA		
		Ldn:	21			46	99	214		
		CNEL:	23	3	4	49	107	229		

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIGHW	AY N	OISE PI	REDICT	ION MODEL		
Scenario Road Name Road Segmen	e: Jefferson St						t Name: The \ lumber: 1264:		Mountain
	PECIFIC IN	PUT DATA					NOISE MOD		;
Highway Data				S	ite Con	ditions	(Hard = 10, 5)	Soft = 15)	
		28,700 vehicles 9.30% 2,669 vehicles 55 mph		14		avy Tru	Autos rucks (2 Axles icks (3+ Axles	): 15	
Near/Far Lan	e Distance:	71 feet		V		icleType	e Dav	Evening	Night Daily
Site Data							Autos: 77.5	% 12.9%	9.6% 97.42% 10.3% 1.84%
	rier Height:	0.0 feet 0.0				Heavy 7			10.8% 0.74%
Barrier Type (0-Wa Centerline Dis		64.0 feet					levations (in		10.070 0.7 170
Centerline Dist. ti Barrier Distance ti Observer Height (A Pa	o Observer:	64.0 feet 0.0 feet 5.0 feet 0.0 feet			Mediu	Auto m Truck vy Truck	os: 0.000 (s: 2.297	•	ustment: 0.0
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalen	t Distance (in	feet)	
	Poad Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree				Auto m Truck vy Truck	s: 53.320		
FHWA Noise Model	Calculations	6							
VehicleType	REMEL	Traffic Flow	Distar	псе	Finite	Road	Fresnel	Barrier Atte	n Berm Atten
Autos:	71.78	1.44		-0.54		-1.20	-4.70		
Medium Trucks:	82.40 86.40	-15.80 -19.75		-0.52 -0.52		-1.20 -1.20	-4.88 -5.3		
Heavy Trucks:						-1.20	-5.3	0.0	0.000
Unmitigated Noise VehicleType	•	-				100	Minds	l dn	CNEL
Autos:	Leq Peak Hou 71		39.9	eq Ev	ening 68.1		Night 62.1	Lan 70.7	
Medium Trucks:	64		33.7		57.3		55.8	64.2	
Heavy Trucks:	64.				54.8		56.0	64.4	
Vehicle Noise:	73.	.1	71.6		68.7		63.8	72.3	72.8
Centerline Distance	to Noise Co	ntour (in feet)							
		-	Ldn:	70 da	2	1	<i>dBA</i> 97	60 dBA 425	55 dBA 917
		CI	IEL:	99	,	2	112	458	986

	FH	WA-RD-77-108	HIGHW	AY NO	DISE PF	REDICTIO	N MODEL			
Scenari Road Nam Road Segmen	e: Jefferson S						ame: The V nber: 12642	Vave-Coral	Mountai	n
SITE S	SPECIFIC II	NPUT DATA				NO	ISE MODI	L INPUT	s	
Highway Data				S	ite Con	ditions (H	ard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	20,100 vehicle	S				Autos	: 15		
Peak Hour	Percentage:	9.30%			Me	dium Truc	ks (2 Axles)	: 15		
Peak H	our Volume:	1,869 vehicle	s		He	avy Trucks	s (3+ Axles)	: 15		
Vel	nicle Speed:	55 mph		V	ehicle I	/lix				
Near/Far Lar	ne Distance:	71 feet		- 1		cleType	Dav	Evening	Night	Daily
Site Data							tos: 77.5°		9.6%	
Ran	rier Height:	0.0 feet			Me	edium Truc	cks: 84.89	% 4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			F	leavy Truc	cks: 86.5°	% 2.7%	10.8%	0.74%
Centerline Dis		64.0 feet		N	oise So	urce Elev	ations (in	eet)		
Centerline Dist. t		64.0 feet				Autos:	0.000			
Barrier Distance t		0.0 feet			Mediu	n Trucks:	2.297			
Observer Height (	,	5.0 feet			Heav	y Trucks:	8.006	Grade Ad	ljustment	: 0.0
	d Elevation:	0.0 feet		-		*				
	d Elevation:	0.0 feet		L	ane Equ		istance (in	feet)		
F	Road Grade:	0.0%				Autos:	53.486			
	Left View:	-90.0 degre				n Trucks:	53.320			
	Right View:	90.0 degre	es		Heav	y Trucks:	53.337			
FHWA Noise Mode		-								
VehicleType	REMEL	Traffic Flow	Dista		Finite		Fresnel	Barrier Att		m Atten
Autos:	71.78			-0.54		-1.20	-4.70		000	0.000
Medium Trucks:	82.40			-0.52		-1.20	-4.88		000	0.000
Heavy Trucks:	86.40			-0.52		-1.20	-5.31	0.0	000	0.000
Unmitigated Noise										
	Leq Peak Ho			eq Eve	-	Leq Ni	- 1	Ldn		NEL
Autos:		9.9 3.3	68.3 62.1		66.6 55.8		60.5 54.2	69.1 62.1	_	69.8 62.9
Medium Trucks:	-	3.4	62.3		53.2		54.5	62.		63.0
Heavy Trucks: Vehicle Noise:		1.5	70.1		67.1		62.2	70.	_	71.3
					07.1		02.2	70.	0	/1.3
Centerline Distanc	e to Noise C	ontour (in feet	;)	70 dl	ο Λ	65 dF	ν.	60 dBA	EE	dBA
			I dn:	70 at		156		336	1	723
		0	NFI:	78		168		361		778
		C	7466.	70		100		501	,	7.0

Wednesday, March 25, 2020

FHW	/A-RD-77-108	HIGHWA	AY NOISE	PREDIC"	TION MO	DDEL				
e: Madison St.	50		Project Name: The Wave-Coral Mountain Job Number: 12642							
SPECIFIC IN	PUT DATA				NOISE	MODE	L INPUT	S		
			Site C	conditions	(Hard:	= 10, So	ft = 15)			
Traffic (Adt):	9,500 vehicles					Autos:	15			
Percentage:	9.30%			Medium T	rucks (2	Axles):	15			
our Volume:	884 vehicles			Heavy Tr	ucks (3+	Axles):	15			
hicle Speed:	50 mph		Vehic	le Mix						
ne Distance:	51 feet				e	Day	Evening	Night	Daily	
					Autos:	77.5%	12.9%	9.6%	97.429	
rier Height	0.0 feet			Medium	Trucks:	84.8%	4.9%	10.3%	1.849	
				Heavy	Trucks:	86.5%	2.7%	10.8%	0.749	
. ,	54.0 feet		M-1	0	-1	/! 6-	-41			
to Observer:	54.0 feet		Noise				et)			
to Observer:	0.0 feet									
Above Pad):	5.0 feet						Crada Ad	ii iatmant	. 0 0	
d Elevation:	0.0 feet			eavy IIuc	KS. C	5.000	Grade Au	usunen	. 0.0	
d Elevation:	0.0 feet		Lane	Equivaler	nt Distai	nce (in f	eet)			
Road Grade:	0.0%			Aut	os: 47	7.862				
Left View:	-90.0 degree	s	Me	dium Truc	ks: 47	7.677				
Right View:	90.0 degree	s	Н	eavy Truc	ks: 47	7.695				
l Calculations			- 1							
REMEL	Traffic Flow	Distan	ce Fir			snel	Barrier Att	en Ber	m Atten	
			0.18			-4.67			0.00	
81.00	-20.18		0.21			-4.87			0.00	
85.38	-24.14		0.20	-1.20	1	-5.39	0.0	000	0.00	
Levels (witho	ut Topo and I	oarrier a	ttenuatio	n)						
							Ldn		VEL	
	-		-						66.	
59.			-	2.3	50		59.2	-	59.4	
		59.1	5	0.1	51	.3	59.7	7	59.	
60.				3.5	FO	7	67 1	)	67	
60.	9 (	66.5	6	3.5	58	.7	67.2	2	67.	
60.	9 (									
60.	9 (ntour (in feet)		70 dBA 35	65	58 5 dBA 76		67.2 60 dBA 164	55	67. dBA 53	
	o: EAP e: Madison St. ht: n/o Avenue SPECIFIC INI Traffic (Adt): Percentage: our Volume: nicle Speed: ne Distance: rier Height: all, 1-Barmi: to Observer: to Observer: Above Pad): de Elevation: Gaed Grade: Left View: I Calculations REMEL 70.20 81.00 85.38 Levels (witho	o: EAP e: Madison St. nt: n/o Avenue 50  SPECIFIC INPUT DATA  Traffic (Adt): 9,500 vehicles Percentage: 9,30% our Volume: 884 vehicles ficile Speed: 50 mph ne Distance: 51 feet  rier Height: 0.0 feet all, 1-Berm): 0.0 tit to Barrier: 54.0 feet to Observer: 54.0 feet to Observer: 0.0 feet Above Pad): 5,0 feet del Elevation: 0.0 feet Right View: -90.0 degree Right View: -90.0 degree Right View: -90.0 degree Right View: -90.0 degree Right View: -90.0 degree Right View: -90.0 degree Right View: -90.0 degree Right View: -90.0 degree Right View: -90.0 degree Right View: -90.0 degree Right View: -90.0 degree Right View: -90.0 degree Right View: -90.0 degree Right View: -90.0 degree Right View: -90.0 degree Right View: -90.0 degree Right View: -90.0 degree Right View: -90.0 degree	o: EAP e: Madison St. nt: n/o Avenue 50  SPECIFIC INPUT DATA  Traffic (Adt): 9,500 vehicles Percentage: 9,30% our Volume: 884 vehicles nicle Speed: 50 mph ne Distance: 51 feet  Trieff Height: 0.0 feet all, 1-Berm): 0.0 et all, 1-Berm): 54.0 feet to Observer: 54.0 feet to Observer: 54.0 feet to Observer: 0.0 feet ald Elevation: 0.0 feet ald	Carrell   Carr	Size   Project   Company	e: Madison St. 10b Number: 12642 tt. rio Avenue 50  SPECIFIC INPUT DATA  Site Conditions (Hard = 10, Sc Autos: 7 Autos: 9, 500 vehicles Percentage: 9, 30% Medium Trucks (2 Axies): 10 Medium Trucks (2 Axies): 10 Medium Trucks (2 Axies): 10 Medium Trucks (3 Axies): 10 Medium Trucks (4 Axies): 10 Medium Trucks (5 Axies): 10 Medium Trucks (6 Axies): 10 Medium Trucks: 10 Med	Project Name: The Wave-Coral   Job Number: 12642	Project Name: The Wave-Coral Mountain   Job Number: 12642		

	FH\	WA-RD-77-108	HIGHWA	Y NO	DISE PRE	DICT	ION MODEL			
Scenario Road Name Road Segmen	e: Jefferson S			Project Name: The Wave-Coral Mountain Job Number: 12642						
SITE S	PECIFIC IN	NPUT DATA				ľ	NOISE MOD	EL INPUTS	;	
Highway Data				S	ite Condi	itions	(Hard = 10, S	oft = 15)		
	. ,	17,200 vehicle 9.30% 1,600 vehicle 55 mph			Hear	y Tru	Autos rucks (2 Axles, cks (3+ Axles,	): 15		
Near/Far Lar		71 feet		V	ehicle Mi			1 1		
Site Data  Barrier Type (0-Wa	rier Height:	0.0 feet				lium T	Day Autos: 77.5° rucks: 84.8° rucks: 86.5°	% 12.9% % 4.9%	Night Daily 9.6% 97.42% 10.3% 1.84% 10.8% 0.74%	
Centerline Dis	. ,	64.0 feet								
Centerline Dist. t		64.0 feet		N	oise Sou	rce E	levations (in	feet)		
Roa		0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree		L	Medium Heavy <b>ane Equi</b> Medium	Truck valen Auto	:s: 2.297 :s: 8.006 t Distance (in :s: 53.486		ustment: 0.0	
FHWA Noise Mode	Right View:	90.0 degree			Heavy					
VehicleType	REMEL	Traffic Flow	Distan	се	Finite R	oad	Fresnel	Barrier Atte	n Berm Atten	
Autos:	71.78	-0.78		-0.54		-1.20	-4.70	0.0	0.000	
Medium Trucks:	82.40	-18.02		-0.52		-1.20	-4.88	0.0	0.000	
Heavy Trucks:	86.40	-21.98		-0.52		-1.20	-5.31	0.0	0.000	
<b>Unmitigated Noise</b>	Levels (with			ttenu	ation)					
	Leq Peak Ho			q Ev	ening	Leq	Night	Ldn	CNEL	
Autos:		9.3	67.7		65.9		59.9	68.5	69.1	
Medium Trucks:			61.5		55.1		53.6	62.0	62.3	
Heavy Trucks:		2.7	61.6		52.6		53.8	62.2	62.3	
Vehicle Noise:		0.8	69.4		66.4		61.6	70.1	70.6	
Centerline Distanc	e to Noise Co	ontour (in feet	)							
			Ldn: NFI:	70 di 65		1	dBA 40 51	60 dBA 302 325	55 dBA 652 701	
		C	IVEL.	70		1	01	323	701	

Wednesday, March 25, 2020

FHWA-RD-77-108 HIGH	WAY NOISE PREDICTION MODEL
Scenario: EAP Road Name: Madison St. Road Segment: n/o Avenue 52	Project Name: The Wave-Coral Mountain Job Number: 12642
SITE SPECIFIC INPUT DATA	NOISE MODEL INPUTS
Highway Data	Site Conditions (Hard = 10, Soft = 15)
Average Daily Traffic (Adt): 12,100 vehicles	Autos: 15
Peak Hour Percentage: 9.30%	Medium Trucks (2 Axles): 15
Peak Hour Volume: 1,125 vehicles	Heavy Trucks (3+ Axles): 15
Vehicle Speed: 50 mph	Vehicle Mix
Near/Far Lane Distance: 51 feet	VehicleType Day Evening Night Daily
Site Data	Autos: 77.5% 12.9% 9.6% 97.42%
Barrier Height: 0.0 feet	Medium Trucks: 84.8% 4.9% 10.3% 1.84%
Barrier Type (0-Wall, 1-Berm): 0.0	Heavy Trucks: 86.5% 2.7% 10.8% 0.74%
Centerline Dist. to Barrier: 54.0 feet	Noise Source Elevations (in feet)
Centerline Dist. to Observer: 54.0 feet	Autos: 0.000
Barrier Distance to Observer: 0.0 feet	Medium Trucks: 2.297
Observer Height (Above Pad): 5.0 feet	Heavy Trucks: 8.006 Grade Adjustment: 0.0
Pad Elevation: 0.0 feet	· ·
Road Elevation: 0.0 feet	Lane Equivalent Distance (in feet)
Road Grade: 0.0%	Autos: 47.862
Left View: -90.0 degrees	Medium Trucks: 47.677
Right View: 90.0 degrees	Heavy Trucks: 47.695
FHWA Noise Model Calculations	
	ance Finite Road Fresnel Barrier Atten Berm Atten
Autos: 70.20 -1.90	0.18 -1.20 -4.67 0.000 0.000
Medium Trucks: 81.00 -19.13	0.21 -1.20 -4.87 0.000 0.00
Heavy Trucks: 85.38 -23.09	0.20 -1.20 -5.39 0.000 0.00
Unmitigated Noise Levels (without Topo and barrie	
VehicleType Leq Peak Hour Leq Day  Autos: 67.3 65.7	Leq Evening         Leq Night         Ldn         CNEL           63.9         57.9         66.5         67.
Autos: 67.3 65.7  Medium Trucks: 60.9 59.7	53.9 57.9 66.5 67. 53.3 51.8 60.2 60.
Heavy Trucks: 61.3 60.2	51.1 52.4 60.8 60.1
Vehicle Noise: 69.0 67.6	64.5 59.7 68.3 68.
Centerline Distance to Noise Contour (in feet)	
, , , ,	70 dBA 65 dBA 60 dBA 55 dBA
	41 89 192 414
Ldn:	45 96 207 445

	FH	WA-RD-77-108	HIGHV	VAY N	OISE P	REDICTI	ом мо	DEL			
Road Na	ario: EAP me: Madison S ent: n/o Avenue					.,	Name: umber:		ave-Coral	Mountai	n
SITE	SPECIFIC II	NPUT DATA				N	OISE I	MODE	L INPUT	s	
Highway Data				S	ite Con	ditions (	Hard =	10, Sc	oft = 15)		
Average Dail	y Traffic (Adt):	8,800 vehicle	s					Autos:	15		
Peak Hou	ır Percentage:	9.30%			Me	dium Tru	cks (2	Axles):	15		
Peak	Hour Volume:	818 vehicle	s		He	avy Truc	ks (3+ )	Axles):	15		
1	ehicle Speed:	50 mph			/ehicle l	Miss					
Near/Far L	ane Distance:	51 feet				icleType		Dav	Evenina	Niaht	Daily
Site Data					¥ C//		utos:	77.5%		9.6%	. ,
	arrier Height:	0.0 feet			М	edium Tr		84.8%		10.3%	
Barrier Type (0-		0.0 feet			,	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
,, ,	Dist. to Barrier:	54.0 feet									
	t. to Observer:	54.0 feet		٨	loise Sc	urce Ele		•	eet)		
Barrier Distanc		0.0 feet				Autos		000			
Observer Heigh		5.0 feet				m Trucks		297			
	Pad Elevation:	0.0 feet			Heav	y Trucks	: 8.	006	Grade Ad	justmen	f: 0.0
	oad Flevation:	0.0 feet		L	ane Eq	uivalent	Distan	ce (in i	feet)		
	Road Grade:	0.0%				Autos	: 47.	862			
	I eft View:	-90.0 degre	es		Mediu	m Trucks	: 47.	677			
	Right View:	90.0 degre			Heav	y Trucks	: 47.	695			
FHWA Noise Mo	del Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresi	nel	Barrier Att	en Be	rm Atten
Autos		-3.28		0.18	3	-1.20		-4.67	0.0	000	0.000
		00.50		0.21							0.000
Medium Trucks	81.00	-20.52		0.21		-1.20		-4.87	0.0	000	0.000
Medium Trucks Heavy Trucks				0.20		-1.20 -1.20		-4.87 -5.39		000	
	85.38	3 -24.47		0.20	)						
Heavy Trucks	85.38	-24.47	barrier	0.20	uation)		Vight			000	
Heavy Trucks Unmitigated Noi	s: 85.38 se Levels (with	-24.47	barrier	0.20	uation)	-1.20	Night 56.	-5.39	0.0	000 C	0.000
Heavy Trucks Unmitigated Noi VehicleType	se Levels (with Leq Peak Ho s: 6	-24.47 nout Topo and ur Leq Da	barrier	0.20	uation) rening	-1.20		-5.39 5	0.0	) C	0.000 NEL 65.7
Heavy Trucks Unmitigated Noi VehicleType Autos	s: 85.38 se Levels (with Leq Peak Ho s: 66 s: 56	-24.47 nout Topo and ur Leq Da	barrier / 64.3	0.20	vation) rening 62.6	-1.20	56.	-5.39 5	0.0 Ldn 65.	)000 C	0.000 NEL 65.7 59.1
Heavy Trucks  Unmitigated Noi  VehicleType  Autos  Medium Trucks	85.38 <b>se Levels (with</b> Leq Peak Ho  3: 6: 5: 5:	3 -24.47  nout Topo and ur Leq Day 5.9 9.5	barrier / 64.3 58.3	0.20	uation) rening 62.6 51.9	-1.20	56.5 50.4	-5.39 5 4	0.0 Ldn 65.: 58.9	)000   C 1 9	0.000 NEL 65.7 59.1
Heavy Trucks Unmitigated Noi VehicleType Autos Medium Trucks Heavy Trucks	85.38  se Levels (with	3 -24.47  nout Topo and ur Leq Day 5.9 9.5 9.9 7.6	barrier 64.3 58.3 58.8 66.2	0.20	nuation) rening 62.6 51.9 49.8	-1.20	56.9 50.4 51.0	-5.39 5 4	0.0 Ldn 65.: 58.9 59.4	)000   C 1 9	0.000 NEL 65.7 59.1 59.5
Heavy Trucks  VehicleType  Autos  Medium Trucks  Heavy Trucks  Vehicle Noise	85.38  se Levels (with	3 -24.47  nout Topo and ur Leq Day 5.9 9.5 9.9 7.6	barrier 64.3 58.3 58.8 66.2	0.20	0 (ation) rening 62.6 51.9 49.8 63.1	-1.20	56.9 50.4 51.0 58.3	-5.39 5 4 0	0.0 Ldn 65.: 58.9 59.4	C 1 C 1 C 1 C 1 C 1 C 1 C 1 C 1 C 1 C 1	0.000 NEL 65.7 59.1 59.5
Heavy Trucks  Unmitigated Noi  VehicleType  Autos  Medium Trucks  Heavy Trucks  Vehicle Noise	85.38  se Levels (with	3 -24.47  nout Topo and ur Leq Day 5.9 9.5 9.9 7.6	barrier 64.3 58.3 58.8 66.2	0.20 attenu Leq Ev	pation) vening 62.6 51.9 49.8 63.1	-1.20	56.9 50.4 51.0 58.3	-5.39 5 4 0	0.0 Ldn 65.: 58.9 59.4	C 1 9 4 9 55	0.000 NEL 65.7 59.1 59.5 67.4

	FH	WA-RD-77-108	HIGH	HWAY N	OISE P	REDICTI	ION MC	DDEL					
Road Nar	rio: EAP me: Madison S ent: n/o Avenue				Project Name: The Wave-Coral Mountain Job Number: 12642								
	SPECIFIC II	NPUT DATA							L INPUT	s			
Peak Hou	r Traffic (Adt): r Percentage: Hour Volume:	13,700 vehicle 9.30% 1.274 vehicle		3	Ме	edium True	ucks (2	Autos: Axles):	15 15				
	ehicle Speed:	50 mph	:5	,	/ehicle		UNG (O+	AAICO).	10				
Near/Far L	ane Distance:	51 feet		F		icleType		Day	Evening	Night	Daily		
Site Data							Autos:	77.5%	12.9%	9.6%	97.429		
Barrier Type (0-V	arrier Height: Vall, 1-Berm):	0.0 feet 0.0				edium T. Heavy T.		84.8% 86.5%		10.3% 10.8%			
Centerline D	ist. to Barrier:	54.0 feet			Voise Si	ource El	evation	ıs (in f	oet)				
Centerline Dist Barrier Distance Observer Height	to Observer:	54.0 feet 0.0 feet 5.0 feet 0.0 feet		-	Mediu	Auto m Truck vy Truck	s: 0 s: 2	.000 .297 .006	Grade Ad	justment	: 0.0		
	nad Elevation:	0.0 feet		,	ane Fo	uivalent	Distar	ce (in	feet)				
	Road Grade: Left View: Right View:	0.0% -90.0 degre 90.0 degre				Auto m Truck vy Truck	s: 47	7.862 7.677 7.695	•				
FHWA Noise Mod	lel Calculation	IS											
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos		-1.36		0.18	-	-1.20		-4.67		000	0.00		
Medium Trucks				0.21		-1.20		-4.87		000	0.00		
Heavy Trucks				0.20		-1.20		-5.39	0.0	000	0.00		
Unmitigated Nois													
VehicleType Autos	Leq Peak Ho	ur Leq Da 7.8	66.2	Leq Ev	ening 64.5		Night 58		Ldn 67.0		NEL 67.		
Autos Medium Trucks		1.4	60.2		53.9		52		60.8	-	61.		
Heavy Trucks		1.8	60.7		51.7		52	-	61.3	-	61.		
Vehicle Noise		9.5	68.1		65.0		60.	-	68.8		69.		
Centerline Distan	ce to Noise C	ontour (in fee	t)										
				70 a			dBA	6	60 dBA	1	dBA		
			Ldn:	45	-	-	97		209		50		
		C	NEL:	48	3	10	04		224	4	83		

		WA-RD-77-108									
Scenario	o: EAP e: Madison S								ave-Coral I	Mountair.	1
Road Name Road Seamen						JOD INL	ımber: 1	2642			
	PECIFIC II	NPUT DATA							L INPUTS	•	
Highway Data				S	ite Cond	litions (	Hard =	10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	17,700 vehicle	s				,	Autos:	15		
Peak Hour I	Percentage:	9.30%				lium Tru		,			
Peak H	our Volume:	1,646 vehicle	s		Hea	vy Truc	ks (3+ A	xles):	15		
	nicle Speed:	50 mph		ı	ehicle M	ix					
Near/Far Lar	ne Distance:	51 feet			Vehic	leType		Day	Evening	Night	Daily
Site Data							utos:	77.5%	12.9%	9.6%	97.42%
Rar	rier Heiaht:	0.0 feet			Me	dium Tru	ucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-Wa	all, 1-Berm):	0.0			Н	eavy Tro	ıcks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		54.0 feet		٨	loise Sou	ırce Ele	vations	(in fe	eet)		
Centerline Dist. t		54.0 feet				Autos	: 0.0	000			
Barrier Distance t		0.0 feet			Medium	Trucks	: 2.2	97			
Observer Height (/	,	5.0 feet			Heavy	Trucks	: 8.0	006	Grade Adj	ustment	0.0
	d Elevation:	0.0 feet		,	ane Equ	ivalant	Diotone	o (in i	[aa4]		
	d Elevation: Road Grade:	0.0 feet			ane Equi	Autos			eei)		
,	l eft View:	0.0% -90.0 degre			Medium						
	Right View:	90.0 degre				Trucks					
			.03		nouvy	Trucks	. 47.5	,,,,			
FHWA Noise Mode										- 1 -	
VehicleType	REMEL	Traffic Flow		tance	Finite F		Fresn		Barrier Atte		m Atten
Autos: Medium Trucks:	70.20			0.18		-1.20		-4.67	0.0		0.00
	81.00			0.21		-1.20		-4.87	0.0		0.00
Heavy Trucks:	85.38			0.20		-1.20		-5.39	0.0	00	0.00
Unmitigated Noise VehicleType	Leveis (with Leg Peak Ho				ening	Leg N	liabt		l dn		NEL
Autos:		ur   Ley Da 3.9	67.4	Ley Ev	65.6	Leqn	119111 59.5	ļ	68.2		VEL 68.8
Medium Trucks:	-	2.5	61.3		55.0		53.4		61.9		62.
Heavy Trucks:		2.9	61.8		52.8		54.1		62.4		62.
Vehicle Noise:	-	0.6	69.2		66.2		61.4		69.9		70.
	e to Noise C	ontour (in fee	t)								
Centerline Distanc				70 d	RΔ	65 d	IRA	6	0 dBA	55	dBA
Centerline Distanc				700	DA	00 0					ab, i
Centerline Distanc			Ldn:	53 57	3	11	5		248 266		34

Wednesday, March 25, 2020

	FH'	WA-RD-77-108	HIG	I YAWH	NOISE PI	REDICT	ION MO	DDEL					
Road Nam	io: EAP ne: Madison S nt: n/o Avenue							The W 12642	ave-Coral	Mountair	n		
	SPECIFIC IN	NPUT DATA							L INPUT	s			
Highway Data					Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	6,200 vehicles	S					Autos:	15				
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2	Axles):	15				
Peak H	lour Volume:	577 vehicles	S		He	avy Tru	cks (3+	Axles):	15				
Ve	hicle Speed:	45 mph		ŀ	Vehicle I	Miv							
Near/Far La	ne Distance:	45 feet		ŀ		icleType		Day	Evening	Night	Dailv		
Site Data							Autos:	77.5%	-	9.6%	. ,		
Ra	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W		0.0			1	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Di	. ,	51.0 feet		-									
Centerline Dist.		51.0 feet			Noise So				eet)				
Barrier Distance		0.0 feet				Auto		.000					
Observer Height (		5.0 feet			m Truck		.297						
	ad Elevation:	0.0 feet			Heav	ry Truck	s: 8	.006	Grade Ad	ljustment	: 0.0		
	ad Flevation:	0.0 feet		İ	Lane Eq	uivalent	Distar	ice (in	feet)				
	Road Grade:	0.0%		ľ		Auto	s: 46	6.041					
	Left View:	-90.0 degree	25		Mediu	m Truck	s: 45	848					
	Right View:	90.0 degree			Heav	y Truck	s: 45	5.867					
FHWA Noise Mode	el Calculation	ıs											
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresnel		Barrier Att	en Bei	m Atten		
Autos:	68.46	-4.34		0.4	13	-1.20		-4.65	0.0	000	0.000		
Medium Trucks:	79.45	-21.58		0.4	16	-1.20		-4.87	0.0	000	0.000		
Heavy Trucks:	84.25	-25.54		0.4	16	-1.20		-5.42	0.0	000	0.000		
Unmitigated Noise	Levels (with	out Topo and	barri	er atter	nuation)								
VehicleType	Leq Peak Ho	ur Leq Day	′	Leq E	vening	Leq	Night		Ldn	C	NEL		
Autos:	63	3.4	61.8		60.0		53	.9	62.0	6	63.2		
Medium Trucks:			55.9		49.6		48	.0	56.	5	56.7		
Heavy Trucks:	58	3.0	56.9		47.8		49	.1	57.4	4	57.6		
Vehicle Noise:	65	5.2	63.8		60.6		55	.9	64.	5	64.9		
Centerline Distand	e to Noise C	ontour (in feet,	)										
	-			70	dBA	65	dBA	- (	60 dBA	55	dBA		
			Ldn:	_	22		7		101	_	19		
		C	NEL:	2	23	5	1		109	2	35		

Wednesday, March 25, 2020

	FHV	WA-RD-77-108	HIGHW	AY N	NOISE PR	EDICT	ION MO	DDEL			
Road Nam	io: EAP ne: Monroe St. nt: n/o Avenue	50				.,	Name. lumber.		/ave-Coral	Mounta	in
SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data					Site Cond	ditions	(Hard :	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	10,700 vehicles	8					Autos	: 15		
Peak Hour	Percentage:	9.30%			Med	dium Tr	ucks (2	Axles)	: 15		
Peak H	lour Volume:	995 vehicles	S		Hea	avy Truc	cks (3+	Axles)	: 15		
Ve	hicle Speed:	50 mph		H	Vehicle N	Niv					
Near/Far La	ne Distance:	43 feet		-		cleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.59		9.69	,
Pa	rrier Height:	0.0 feet			Me	edium T	rucks:	84.89	6 4.9%	10.39	6 1.84%
Barrier Type (0-W		0.0			F	leavy T	rucks:	86.59	6 2.7%	10.89	% 0.74%
Centerline Di		64.0 feet		- 1	Noise So	El	lovestie.	no (in f	ina41		
Centerline Dist.	to Observer:	64.0 feet		· ·	Noise 30	Auto.			eet)		
Barrier Distance	to Observer:	0.0 feet				Auto. n Truck		0.000 0.297			
Observer Height	(Above Pad):	5.0 feet					o	3.006	Grade Ad	liuotmo	nt: 0 0
P	ad Elevation:	0.0 feet			Heav	y Truck	S: 6	3.006	Grade Ad	justinei	и. О.О
Ro	ad Elevation:	0.0 feet			Lane Equ	ıivalent	t Distai	nce (in	feet)		
	Road Grade:	0.0%				Auto.	s: 60	0.488			
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 60	0.341			
	Right View:	90.0 degree	es		Heav	y Truck	s: 60	0.355			
FHWA Noise Mode	el Calculation:	s									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fres	snel	Barrier Att	en Be	erm Atten
Autos:	70.20	-2.43		-1.3	4	-1.20		-4.70	0.0	000	0.000
Medium Trucks:	81.00	-19.67		-1.3	3	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	85.38	-23.62		-1.3	3	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	' Li	eq E	vening	Leq	Night		Ldn	(	CNEL
Autos:	65	i.2	63.6		61.9		55	.8	64.	4	65.1
Medium Trucks:	58	8.8	57.6		51.3		49	.7	58.	2	58.4
Heavy Trucks:	59	1.2	58.1		49.1		50	.3	58.	7	58.8
Vehicle Noise:	66	i.9	65.5		62.4		57	.7	66.	2	66.7
Centerline Distant	ce to Noise Co	ontour (in feet,	)								
				70	dBA	65	dBA		60 dBA	5	5 dBA
			Ldn:	3	16	7	7		166		358
		C	NEL:	3	8	8	33		178		384

		VA-RD-77-108	HIGHW	AY NOISE						
	io: EAP le: Monroe St.					t Name: Jumber:		ave-Coral	Mountain	1
	nt: n/o Avenue	54			JOD I	vurriber.	12042			
	SPECIFIC IN				-	NOISE	MODE	L INPUT		
Highway Data	o. 2011 10 114			Site Co	onditions					
Average Daily	Traffic (Adt):	9,700 vehicles	;				Autos:	15		
Peak Hour	Percentage:	9.30%		٨	∕ledium Ti	ucks (2	Axles):	15		
Peak H	lour Volume:	902 vehicles	;	F	leavy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		Vehicle	- Mix					
Near/Far La	ne Distance:	51 feet			ehicleType	9	Dav	Evening	Night	Dailv
Site Data						Autos:	77.5%	12.9%	9.6%	97.429
Ra	rrier Height:	0.0 feet			Medium 7	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W		0.0			Heavy 7	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Di		54.0 feet		Maine	Source E	lovation	o (in fo	041		
Centerline Dist.	to Observer:	54.0 feet		Noise .	Source E Auto		.000	et)		
Barrier Distance	to Observer:	0.0 feet		44	Auto ium Truck		297			
Observer Height (	Above Pad):	5.0 feet					.006	Grade Ad	iuotmont	
Pa	ad Elevation:	0.0 feet		He	avy Truck	is: 8	.000	Grade Adj	usimeni.	. 0.0
Roa	ad Elevation:	0.0 feet		Lane E	quivalen	t Distan	ce (in f	eet)		
	Road Grade:	0.0%			Auto	s: 47	.862			
	Left View:	-90.0 degree	:S	Med	ium Truck	s: 47	.677			
	Right View:	90.0 degree	es.	He	avy Truck	s: 47	.695			
FHWA Noise Mode	el Calculations	3								
VehicleType	REMEL	Traffic Flow	Distar	ce Fini	te Road	d Fresnel		Barrier Atten		m Atten
Autos:	70.20	-2.86		0.18	.18 -1.20			0.0	000	0.00
Medium Trucks:	81.00	-20.09		0.21	-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	85.38	-24.05		0.20	-1.20		-5.39	0.0	000	0.00
Unmitigated Noise					)					
VehicleType	Leq Peak Hou	- 1 - 7		eq Evening	- 1	Night		Ldn		VEL
Autos:	66	-	64.7	63		56.	-	65.5		66.
Medium Trucks:	59		58.7	52		50.	-	59.3		59.
Heavy Trucks:	60.	-	59.2 66.6	50 63		51. 58.		59.8 67.3		59. 67.
		.0	00.0	00	.0	50.		07.0	,	07.
Vehicle Noise:		ntour (in foot								
		ntour (in feet)		70 dBA	65	dBA	6	0 dBA	55	dBA
Vehicle Noise:		, ,	Ldn:	70 dBA 36	1	dBA	6	0 dBA 166		dBA 57

FHWA-RD-77-108 HIGHWA	Y NOISE PREDICTION MODEL							
Scenario: EAP Road Name: Monroe St. Road Segment: n/o Avenue 52	Project Name: The Wave-Coral Mountain Job Number: 12642							
SITE SPECIFIC INPUT DATA	NOISE MODEL INPUTS							
Highway Data	Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt): 10,400 vehicles Peak Hour Percentage: 9.30% Peak Hour Volume: 967 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 43 feet	Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15  Vehicle Mix							
Site Data	VehicleType         Day         Evening         Night         Daily           Autos:         77.5%         12.9%         9.6%         97.42%							
Barrier Height:         0.0 feet           Barrier Type (0-Wall, 1-Berm):         0.0	Medium Trucks: 84.8% 4.9% 10.3% 1.84% Heavy Trucks: 86.5% 2.7% 10.8% 0.74%							
Centerline Dist. to Barrier: 64.0 feet	Noise Source Elevations (in feet)							
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation: Road Grade: Left View: Right View: 90.0 degrees	Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.006 Grade Adjustment: 0.0  Lane Equivalent Distance (in feet)  Autos: 60.488 Medium Trucks: 60.341 Heavy Trucks: 60.355							
FHWA Noise Model Calculations								
VehicleType REMEL Traffic Flow Distance								
	1.34 -1.20 -4.70 0.000 0.000							
01.00	1.33     -1.20     -4.88     0.000     0.000       1.33     -1.20     -5.31     0.000     0.000							
Unmitigated Noise Levels (without Topo and barrier at	enuation)							
	Evening   Leq Night   Ldn   CNEL 61.8 55.7 64.3 64.9							
Medium Trucks: 58.7 57.5	51.1 49.6 58.0 58.3							
Heavy Trucks: 59.1 58.0	49.0 50.2 58.6 58.7							
Vehicle Noise: 66.8 65.4	62.3 57.5 66.1 66.6							
Centerline Distance to Noise Contour (in feet)								
Ldn:	70 dBA 65 dBA 60 dBA 55 dBA 35 76 163 351 38 81 175 377							

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F	HWA-	-RD-77-108 I	HIGH	1 YAW	IOISE P	REDICTI	ON M	DDEL				
Scenario: EAP Road Name: Monroe Road Segment: n/o Airpo					Project Name: The Wave-Coral Mountain Job Number: 12642							
SITE SPECIFIC	INPU	JT DATA				N	OISE	MODE	L INPUT	s		
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt)	8,3	300 vehicles						Autos	15			
Peak Hour Percentage	9	.30%			Me	edium Tru	icks (2	Axles)	15			
Peak Hour Volume	. 7	772 vehicles			He	eavy Truc	ks (3+	Axles)	15			
Vehicle Speed		50 mph		-	Vehicle	Miv						
Near/Far Lane Distance		51 feet		H		nicleType		Dav	Evening	Night	Daily	
Site Data							lutos:	77.59	-	9.6%	,	
Barrier Height		0.0 feet			N	ledium Tr	ucks:	84.89	6 4.9%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm		0.0				Heavy Tr	ucks:	86.59	6 2.7%	10.8%	0.74%	
Centerline Dist. to Barrie		54.0 feet		-	N-: 0			/! 6	41			
Centerline Dist. to Observer	: :	54.0 feet		H	voise S	ource Ele Autos		n <b>s (in</b> 1	eet)			
Barrier Distance to Observer	:	0.0 feet			11-15	Autos ım Truck:		2.297				
Observer Height (Above Pad,	:	5.0 feet				ım Trucki vy Trucki		3.006	Grade Ad	liustmon	e- n n	
Pad Elevation	:	0.0 feet			пеа	vy Trucks	s. c	0.000	Grade Ad	justinen	. 0.0	
Road Elevation	:	0.0 feet			Lane Eq	uivalent	Dista	nce (in	feet)			
Road Grade	:	0.0%				Autos	s: 47	7.862				
Left View		90.0 degrees	s			ım Trucks		7.677				
Right View	: !	90.0 degrees	s		Hea	vy Trucks	s: 47	7.695				
FHWA Noise Model Calculati	ons											
VehicleType REMEL	Tr	raffic Flow	Dist	ance	Finite	Road	Fres	inel	Barrier Att	en Be	rm Atten	
Autos: 70.	20	-3.53		0.1	8	-1.20		-4.67	0.0	000	0.000	
Medium Trucks: 81.		-20.77		0.2		-1.20		-4.87		000	0.000	
Heavy Trucks: 85.	38	-24.73		0.2	0	-1.20		-5.39	0.0	000	0.000	
Unmitigated Noise Levels (w.	_		_									
VehicleType Leq Peak H		Leq Day		Leq E	vening		Night		Ldn		NEL	
Autos:	65.7	-	34.1		62.3		56	-	64.9	-	65.5	
Medium Trucks:	59.2		8.0		51.7		50		58.0		58.8	
Heavy Trucks:	59.7		8.5		49.5		50		59.		59.2	
Vehicle Noise:	67.4		35.9		62.9	)	58	.1	66.6	6	67.1	
Centerline Distance to Noise	Conto	our (in feet)						1				
					dBA	65 (			60 dBA		dBA	
		_	dn:	-	2	6	-		150		322	
		CN	IEL:	3	5	7	5		161		346	

	FH\	WA-RD-77-108	HIGH	WAY I	NOISE P	REDICT	ION MO	DEL			
Road Nam	io: EAP ne: Monroe St. nt: n/o Avenue	58					t Name: lumber:		'ave-Coral	Mountai	n
SITE	SPECIFIC IN	IPUT DATA				N	NOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	7,100 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles).	15		
Peak H	lour Volume:	660 vehicle	s		He	eavy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	50 mph		ŀ	Vehicle	Miv					
Near/Far La	ne Distance:	51 feet		-		icleType	9	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
Pa	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0 1661				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		54.0 feet		-	M-! 0			/! #	41		
Centerline Dist.	to Observer:	54.0 feet		ŀ	Noise S				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (	Above Pad):	5.0 feet				m Truck			Crada Aa	livotmon	4.00
Pa	ad Elevation:	0.0 feet			Hea	vy Truck	is: 8	.006	Grade Ad	justrieri	i. U.U
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distar	ice (in	feet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 47	.695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-4.21		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-21.45		0.2	21	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-25.41		0.2	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn	С	NEL
Autos:	65	i.0	63.4		61.6		55	.6	64.:	2	64.8
Medium Trucks:	58	1.6	57.4		51.0		49	.5	57.	9	58.2
Heavy Trucks:		0.0	57.9		48.8		50		58.		58.6
Vehicle Noise:	66	5.7	65.2		62.2		57	.4	66.	0	66.4
Centerline Distance	e to Noise Co	ontour (in feet	)								
			Γ		dBA		dBA	-	60 dBA	55	dBA
			Ldn:	_	29		53		135		290
		C	NEL:	3	31	6	37		145	;	312

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	FHW	/A-RD-77-108	HIGH	NAY N	DISE PI	REDICT	ION MC	DDEL			
Road Nam	io: EAP ne: Avenue 50 nt: w/o Jefferso	n St.					Name: lumber:		ave-Coral	Mountair	1
SITE	SPECIFIC IN	PUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 1	3,500 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	1,256 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		ν	ehicle i	Mix					
Near/Far La	ne Distance:	51 feet		ľ		icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Rai	rrier Heiaht:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Di	. ,	54.0 feet						/! #-	41		
Centerline Dist.	to Observer:	54.0 feet		N	oise so	ource El Auto		.000	et)		
Barrier Distance	to Observer:	0.0 feet				Auto m Truck		.000			
Observer Height (	(Above Pad):	5.0 feet						.297	Grade Ad	ii ratmant	
Pa	ad Elevation:	0.0 feet			Heat	y Truck	S: 8	.000	Grade Adj	justrnent	. 0.0
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	ice (in i	feet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree	es		Hear	y Truck	s: 47	.695			
FHWA Noise Mode	el Calculations										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road			Barrier Att	en Ber	m Atten
Autos:	70.20	-1.42		0.18		-1.20		-4.67		000	0.00
Medium Trucks:	81.00	-18.66		0.21		-1.20		-4.87		000	0.00
Heavy Trucks:	85.38	-22.61		0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	•		barrier	attenu	ation)						
VehicleType	Leq Peak Hou			Leq Ev		_	Night		Ldn		VEL
Autos:	67.	-	66.2		64.4		58.		67.0	-	67.
Medium Trucks:	61.	-	60.2		53.8		52.	_	60.7		60.
Heavy Trucks: Vehicle Noise:	61.		60.7 68.0		51.6 65.0		52. 60.	-	61.2		61. 69
		-			0.00		00.		08.	'	ъ9.
Centerline Distanc	ce to Noise Co	ntour (in feet,	,	70 d	DΛ	65	dBA	-	60 dBA	55	dBA
			I dn:					1 0	207	1	
			Lan: NFI:				46 79				
		C	VEL.	48		- 1	UJ		444	4	13

FH	WA-RD-77-108 HIGH	WAY N	DISE PREDICT	TION MODEL						
Scenario: EAP Road Name: Monroe St Road Segment: n/o Avenue				t Name: The V Number: 12642	Vave-Coral Moi	untain				
SITE SPECIFIC II	IPUT DATA			NOISE MODI						
Highway Data		S	Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt):  Peak Hour Percentage:  Peak Hour Volume:  Vehicle Speed:	5,400 vehicles 9.30% 502 vehicles 50 mph			Autos rucks (2 Axles) icks (3+ Axles)	: 15					
Near/Far Lane Distance:	51 feet	ν	ehicle Mix							
rvearri ai Larie Distance.	J1 leet		VehicleTyp		-	ght Daily				
Site Data				Autos: 77.59		9.6% 97.42%				
Barrier Height:	0.0 feet		Medium			0.3% 1.84%				
Barrier Type (0-Wall, 1-Berm):	0.0		Heavy	Trucks: 86.59	% 2.7% 1	0.8% 0.74%				
Centerline Dist. to Barrier:	54.0 feet	Λ	loise Source E	levations (in t	feet)					
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation: Road Grade: Left View: Right View: FHWA Noise Model Calculation VehicleType REMEL		L	Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.006 Grade Adjustment:  Lane Equivalent Distance (in feet) Autos: 47.862 Medium Trucks: 47.677 Heavy Trucks: 47.695							
Autos: 70.20		tance 0.18	Finite Road -1.20	Fresnel -4.67	Barrier Atten 0.000	Berm Atten 0.000				
Medium Trucks: 81.00		0.10				0.000				
Heavy Trucks: 85.38		0.21				0.00				
Unmitigated Noise Levels (with	out Tono and harrie	r attoni	ation)							
VehicleType Leg Peak Ho		Leg Ev		Night	Ldn	CNEL				
	3.8 62.2		60.4	54.4	63.0	63.6				
Medium Trucks: 5	7.4 56.2		49.8	48.3	56.7	57.0				
Heavy Trucks: 5	7.8 56.7		47.6	48.9	57.3	57.4				
	5.5 64.0		61.0	56.2	64.8	65.				
Centerline Distance to Noise C	ontour (in feet)									
	Ldn: CNFL:	70 d 24		52 56	60 dBA 112 121	55 dBA 242 260				

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	FH	IWA-RD-77-108	HIGH	WAY I	IOISE PI	REDICT	ON MO	DDEL					
Scenar	io: EAP				Project Name: The Wave-Coral Mountain								
Road Nam	e: Avenue 50	)				Job ∧	lumber:	12642					
Road Segme	nt: w/o Madis	on St.											
	SPECIFIC I	NPUT DATA							L INPUT	s			
Highway Data					Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	14,800 vehicle	s					Autos	: 15				
Peak Hour	Percentage:	9.30%				dium Tr							
Peak H	lour Volume:	1,376 vehicle	S		He	avy Tru	cks (3+	Axles)	: 15				
Ve	hicle Speed:	50 mph		-	Vehicle I	Vix							
Near/Far La	ne Distance:	51 feet				icleType		Day	Evening	Night	Daily		
Site Data							Autos:	77.59	6 12.9%	9.6	6 97.42%		
Ra	rrier Height:	0.0 feet			М	edium T	rucks:	84.89	6 4.9%	10.39	% 1.84%		
Barrier Type (0-W		0.0				Heavy T	rucks:	86.59	6 2.7%	10.89	% 0.74%		
Centerline Di		54.0 feet		F	M-1 0-	5		/! 6	41				
Centerline Dist.	to Observer:	54.0 feet		-	Noise So				eet)				
Barrier Distance	to Observer:	0.0 feet				Auto		.000					
Observer Height (	Above Pad):	5.0 feet			Medium Trucks: 2.297 Heavy Trucks: 8.006 Grade Adjustment: 0.0								
	ad Elevation:	0.0 feet			Heav	y Truck	s: c	.006	Grade Ad	njustme	nt: 0.0		
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	Distar	ice (in	feet)				
	Road Grade:	0.0%				Auto	s: 47	.862					
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 47	.677					
	Right View:	90.0 degre	es		Heav	ry Truck	s: 47	.695					
FHWA Noise Mode	el Calculation	ns											
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	e Road F		nel	Barrier At	ten B	erm Atten		
Autos:	70.20	0 -1.02		0.1	8	-1.20		-4.67	0.	000	0.000		
Medium Trucks:	81.00	0 -18.26		0.2	1	-1.20		-4.87	0.	000	0.000		
Heavy Trucks:	85.38	3 -22.22		0.2	0	-1.20		-5.39	0.	000	0.000		
Unmitigated Noise	e Levels (with	hout Topo and	barrie	er atter	uation)								
VehicleType	Leq Peak Ho			Leg E	vening	Leq	Night		Ldn		CNEL		
Autos:	-	8.2	66.6		64.8		58	-	67.		68.0		
Medium Trucks:	-	1.7	60.6		54.2		52		61.		61.3		
Heavy Trucks:	6	2.2	61.1		52.0		53	.3	61.	6	61.8		
Vehicle Noise:		9.9	68.4		65.4		60	.6	69.	1	69.6		
Centerline Distand	ce to Noise C	Contour (in feet	)										
			$-\top$		dBA		dBA		60 dBA	5	5 dBA		
			Ldn:		7		02		220		474		
		С	NEL:	5	1	1	10		236		509		

	FH\	WA-RD-77-108	HIGH	WAY I	NOISE P	REDICT	ION MC	DEL			
Road Nam	io: EAP ne: Avenue 50 nt: e/o Monroe	St.					t Name: lumber:		ave-Coral	Mounta	in
SITE :	SPECIFIC IN	IPUT DATA				N	NOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard =	: 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	12,100 vehicle	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles).	15		
Peak H	lour Volume:	1,125 vehicle	S		He	eavy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	50 mph		H	Vehicle	Miv					
Near/Far La	ne Distance:	43 feet		F		icleType		Dav	Evening	Night	Daily
Site Data					*01.		Autos:	77.5%		9.69	,
Par	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.39	6 1.84%
Barrier Type (0-W		0.0 1661				Heavy T	rucks:	86.5%	2.7%	10.89	6 0.74%
Centerline Dis		64.0 feet		-							
Centerline Dist.		64.0 feet		-	Noise S			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (	Above Pad):	5.0 feet				m Truck		.297			
	ad Elevation:	0.0 feet			Hea	vy Truck	s: 8	.006	Grade Ad	justmer	it: 0.0
	ad Elevation:	0.0 feet		Ī	Lane Eq	uivalen	t Distar	ce (in	feet)		
	Road Grade:	0.0%		Ī		Auto	s: 60	.488			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 60	.341			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 60	.355			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres		Barrier Att	en Be	rm Atten
Autos:	70.20	-1.90		-1.3	34	-1.20		-4.70	0.0	000	0.000
Medium Trucks:	81.00	-19.13		-1.3	33	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	85.38	-23.09		-1.3	33	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	r atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	′	Leq E	vening	Leq	Night		Ldn	1 .	CNEL
Autos:	65	i.8	64.2		62.4		56.	4	65.0	)	65.6
Medium Trucks:	59	1.3	58.1		51.8		50.	2	58.7	7	58.9
Heavy Trucks:	59		58.7		49.6		50.		59.2		59.3
Vehicle Noise:	67	'.5	66.0		63.0		58.	2	66.7	7	67.2
Centerline Distance	e to Noise Co	ontour (in feet	)								
					dBA		dBA	-	60 dBA		5 dBA
			Ldn:	-	39		34		180		388
		C	NEL:	4	12	9	90		194		417

	FHV	VA-RD-77-108	HIGHWA	AY NOISE P	REDICTI	ON MC	DEL			
Scenari Road Nam Road Segmer	e: Avenue 54	n St.				Name: umber:		ave-Coral	Mountair	1
	SPECIFIC IN	PUT DATA						L INPUT	s	
Highway Data				Site Co.	nditions (	Hard =	: 10, So	ft = 15)		
Average Daily	Traffic (Adt):	13,700 vehicles	3				Autos:	15		
Peak Hour	Percentage:	9.30%		M	edium Tru	icks (2	Axles):	15		
Peak H	our Volume:	1,274 vehicles	3	Н	eavy Truc	ks (3+	Axles):	15		
Vel	hicle Speed:	50 mph		Vehicle	Mix					
Near/Far Lar	ne Distance:	51 feet		Vel	hicleType		Day	Evening	Night	Daily
Site Data					- A	Autos:	77.5%	12.9%	9.6%	97.429
Rar	rier Heiaht:	0.0 feet		٨	1edium Tr	ucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W		0.0			Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis	. ,	54.0 feet		M-1 0			- /! #-	-41		
Centerline Dist. t	to Observer:	54.0 feet		Noise S	ource Ele			et)		
Barrier Distance t	to Observer:	0.0 feet		44-45	Autos ım Trucks		.000			
Observer Height (	Above Pad):	5.0 feet				–	.006	Grade Ad	ii ratmant	
Pa	d Elevation:	0.0 feet		Hea	vy Trucks	S: 8	.006	Grade Ad	justrnent	. 0.0
Roa	d Elevation:	0.0 feet		Lane Ed	quivalent	Distan	ce (in f	eet)		
F	Road Grade:	0.0%			Autos	s: 47	.862			
	Left View:	-90.0 degree	es	Mediu	ım Trucks	s: 47	.677			
	Right View:	90.0 degree	es	Hea	vy Trucks	s: 47	.695			
FHWA Noise Mode	l Calculations	S								
VehicleType	REMEL	Traffic Flow	Distan	ce Finite	e Road	Fresi		Barrier Att	en Ber	m Atten
Autos:	70.20	-1.36		0.18	-1.20		-4.67		000	0.00
Medium Trucks:	81.00	-18.59		0.21	-1.20		-4.87		000	0.00
Heavy Trucks:	85.38	-22.55		0.20	-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	•	-	barrier a	ttenuation)			,			
	Leq Peak Hou			q Evening	Leq I			Ldn		VEL
Autos:	67		66.2	64.5	-	58.		67.0		67.
Medium Trucks:	61		60.2	53.9		52.	-	60.8	-	61.
Heavy Trucks:	61		60.7 68.1	51.7 65.0		52. 60.		61.3		61. 69
	69	.0	UU. I	05.0	,	60.	J	08.6	,	09.
Vehicle Noise:	- 4- N-1 O-									
Vehicle Noise: Centerline Distanc	e to Noise Co	ntour (in feet,	1	70 dBA	65.0	HRA	6	0 dBA	55	dBA
	e to Noise Co	, ,	Ldn:	70 dBA 45	65 (		6	0 dBA 209	1	dBA 50

	FH'	WA-RD-77-108	HIGHWA	Y NO	DISE PRE	DICT	ION MODEL		
Road Nan	rio: EAP ne: Avenue 52 nt: w/o Monro				F		t Name: The V Number: 1264		ountain
SITE	SPECIFIC IN	NPUT DATA					NOISE MOD		
Highway Data				S	ite Condi	tions	(Hard = 10, S	oft = 15)	
Average Daily	Traffic (Adt):	11,600 vehicle	s				Autos	: 15	
Peak Hour	Percentage:	9.30%			Medi	um T	rucks (2 Axles	): 15	
Peak I	lour Volume:	1,079 vehicle	s		Hear	ıy Trı	icks (3+ Axles	): 15	
Ve	ehicle Speed:	50 mph		V	ehicle Mi	Y			
Near/Far La	ane Distance:	51 feet		Ť	Vehici		e Dav	Evening I	Night Daily
Site Data				+			Autos: 77.5	-	9.6% 97.42%
Ra	rrier Heiaht:	0.0 feet			Med	lium 1	Frucks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-V		0.0 1661			He	avy 1	Frucks: 86.5	% 2.7%	10.8% 0.74%
	ist. to Barrier:	54.0 feet		L.					
Centerline Dist.		54.0 feet		N	oise Sou		levations (in	reet)	
Barrier Distance	to Observer:	0.0 feet				Auto			
Observer Height	(Above Pad):	5.0 feet			Medium			Grade Adjus	atmont: 0.0
P	ad Elevation:	0.0 feet			Heavy	Truck	ks: 8.006	Grade Adju	sunent. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Equi	valen	t Distance (in	feet)	
	Road Grade:	0.0%				Auto	os: 47.862		
	Left View:	-90.0 degree	es		Medium	Truck	ks: 47.677		
	Right View:	90.0 degree	es		Heavy	Truck	ks: 47.695		
FHWA Noise Mod	el Calculation	-							
VehicleType	REMEL	Traffic Flow	Distan	се	Finite R	oad	Fresnel	Barrier Atter	Berm Atten
Autos:				0.18		-1.20	-4.67		
Medium Trucks:	01.00			0.21		-1.20	-4.87		
Heavy Trucks:				0.20		-1.20	-5.39	0.00	0.000
Unmitigated Nois									
VehicleType	Leq Peak Ho			q Ev	ening	Leq	Night	Ldn	CNEL
Autos: Medium Trucks:		7.1 0.7	65.5 59.5		63.8 53.1		57.7 51.6	66.3 60.1	66.9
	-	J. <i>1</i> 1.1	60.0		51.0		52.2	60.1	60.3
Heavy Trucks: Vehicle Noise:		8.8	67.4		64.3		59.5	68.1	68.6
	-		• • • • • • • • • • • • • • • • • • • •		04.3		39.3	00.1	08.0
Centerline Distan	ce to Noise C	ontour (in feet		70 di	RΔ	65	dBA	60 dBA	55 dBA
			Ldn:	40			87	187	403
		C	NFI:	43			93	201	433
		0		40			00		.55

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	HWAY	NOISE P	REDICTI	ON M	ODEL			
Scenar	io: EAP					Project	Name	: The W	ave-Coral	Mountair	1
Road Nan	ne: Avenue 54					Job N	umbei	: 12642			
Road Segme	nt: w/o Monroe	e St.									
	SPECIFIC IN	IPUT DATA			04- 0				L INPUT	s	
Highway Data					Site Cor	iaitions	Hara				
Average Daily	. ,	8,000 vehicle	S					Autos:			
	Percentage:	9.30%				edium Tru					
Peak F	lour Volume:	744 vehicle	S		He	eavy Truc	ks (3-	- Axles):	15		
Ve	hicle Speed:	50 mph			Vehicle	Mix					
Near/Far La	ne Distance:	51 feet			Veh	icleType		Day	Evening	Night	Daily
ite Data							lutos:	77.5%	12.9%	9.6%	97.42%
Ra	rrier Height:	0.0 feet			M	ledium Ti	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy Ti	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	. ,	54.0 feet			Noise S	ourco El	ovatio	ne (in f	not)		
Centerline Dist.	to Observer:	54.0 feet			NOISE S	Auto:		0.000	ei)		
Barrier Distance	to Observer:	0.0 feet			Modis	m Truck		2.297			
Observer Height	(Above Pad):	5.0 feet						2.297 B.006	Grade Ad	livotmont	. 0 0
P	ad Elevation:	0.0 feet			Hea	vy Trucks	5.	8.006	Grade At	ijusimeni	. 0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalent	Dista	nce (in i	feet)		
	Road Grade:	0.0%				Autos	s: 4	7.862			
	Left View:	-90.0 degre	es		Mediu	m Trucks	s: 4	7.677			
	Right View:	90.0 degre	es		Hea	vy Trucks	s: 4	7.695			
HWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance		Road	Fre		Barrier At		m Atten
Autos:	70.20			0.		-1.20		-4.67		000	0.000
Medium Trucks:	81.00			0.:		-1.20		-4.87		000	0.000
Heavy Trucks:	85.38	-24.89		0.:	20	-1.20		-5.39	0.	000	0.000
Inmitigated Nois			barrie	er atte	nuation)						
VehicleType	Leq Peak Hou			Leq E	Evening		Night		Ldn		NEL
Autos:	65		63.9		62.1			5.1	64.		65.3
Medium Trucks:		9.1	57.9		51.5			0.0	58.	•	58.7
Heavy Trucks:		9.5	58.4		49.4			).6	59.	•	59.1
Vehicle Noise:	67	7.2	65.8		62.7	•	57	'.9	66.	5	66.9
Centerline Distan	ce to Noise Co	ontour (in feet	)								
					dBA	65 (		6	60 dBA	1	dBA
			Ldn:		31	6	-		146	-	14
		C	NEL:		34	7	3		157	3	38

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGHW	VAY NO	OISE PF	REDICTI	ON MO	DEL			
Road Na	ario: EAP me: Airport Bl. ent: w/o Monro	e St.					Name: umber:		ave-Coral	Mountai	n
SITE	SPECIFIC II	NPUT DATA				N	OISE	MODE	L INPUT	s	
Highway Data				S	ite Con	ditions (	Hard =	10, Sc	oft = 15)		
Average Dail	y Traffic (Adt):	4,300 vehicle	s					Autos:	15		
Peak Hou	ır Percentage:	9.30%			Me	dium Tru	icks (2	Axles):	15		
Peak	Hour Volume:	400 vehicle	s		He	avy Truc	ks (3+.	Axles):	15		
V	ehicle Speed:	50 mph		1/	ehicle I	Miss					
Near/Far L	ane Distance:	51 feet				icleType		Dav	Evenina	Niaht	Daily
Site Data					¥ C/ //		utos:	77.5%		9.6%	. ,
		0.0 feet			Me	edium Tr		84.8%		10.3%	
Barrier Type (0-	arrier Height:	0.0 feet			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
,,,,	Dist. to Barrier:	54.0 feet									
Centerline Dis		54.0 feet		N	loise Sc	urce Ele		•	eet)		
Barrier Distanc		0.0 feet				Autos		000			
Observer Heigh		5.0 feet				m Trucks		297			
	Pad Elevation:	0.0 feet			Heav	y Trucks	: 8.	006	Grade Ad	justmen	f: 0.0
	oad Flevation:	0.0 feet		L	ane Equ	uivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%				Autos	: 47	862			
	I eft View:	-90.0 degre	es		Mediui	m Trucks	: 47	677			
	Right View:	90.0 degre			Heav	y Trucks	: 47	695			
FHWA Noise Mo	del Calculation	18									
FHWA Noise Mo	del Calculation REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresi	nel	Barrier Att	en Be	rm Atten
VehicleType Autos	REMEL 70.20	Traffic Flow	Dista	once 0.18		Road -1.20	Fresi	nel -4.67		en Be	
VehicleType	REMEL 70.20	Traffic Flow -6.39					Fresi		0.0		0.000
VehicleType Autos	REMEL 5: 70.20 6: 81.00	Traffic Flow -6.39 -23.63		0.18		-1.20	Fresi	-4.67	0.0	000	0.000
VehicleType Autos Medium Trucks	REMEL 3: 70.20 8: 81.00 8: 85.38	Traffic Flow  -6.39  -23.63  -27.58		0.18 0.21 0.20		-1.20 -1.20	Fresi	-4.67 -4.87	0.0	000	0.000
VehicleType Autos Medium Trucks Heavy Trucks	REMEL 3: 70.20 8: 81.00 8: 85.38	Traffic Flow -6.39 -23.63 -27.58	barrier	0.18 0.21 0.20	uation)	-1.20 -1.20		-4.67 -4.87	0.0	000	0.000
VehicleType Autos Medium Trucks Heavy Trucks Unmitigated Nois	REMEL   70.20	Traffic Flow -6.39 -23.63 -27.58	barrier	0.18 0.21 0.20 attenu	uation)	-1.20 -1.20 -1.20		-4.67 -4.87 -5.39	0.0 0.0 0.0	000 000 000	0.000 0.000 0.000
VehicleType Autos Medium Trucks Heavy Trucks Unmitigated Noi: VehicleType	REMEL :: 70.20 :: 81.00 :: 85.38 se Levels (with Leq Peak Ho) :: 6:	Traffic Flow   -6.39   -23.63   -27.58   rout Topo and   ur   Leq Daj	barrier	0.18 0.21 0.20 attenu	vation)	-1.20 -1.20 -1.20	Night	-4.67 -4.87 -5.39	0.0 0.0 0.0	000 000 000	0.000 0.000 0.000 NEL 62.6
VehicleType Autos Medium Trucks Heavy Trucks Unmitigated Noi: VehicleType Autos	REMEL   70.20   81.00   85.38   86 Levels (with   Leq Peak Ho   15.50   15.5	Traffic Flow   -6.39   -23.63   -27.58   -27.58   cout Topo and ur   Leq Day 2.8	<b>barrier</b> 61.2	0.18 0.21 0.20 attenu	ening 59.4	-1.20 -1.20 -1.20	Night 53	-4.67 -4.87 -5.39	0.0 0.0 0.0 <i>Ldn</i>	000 000 000 000	0.000 0.000 0.000 NEL 62.6 56.0
VehicleType Autos Medium Trucks Heavy Trucks Unmitigated Noi: VehicleType Autos Medium Trucks	REMEL 3: 70.20 5: 81.00 6: 85.38 5e Levels (with 5: 66 6: 50 6: 50	Traffic Flow   -6.39   -23.63   -27.58   -27.58     Leq Day   2.8   6.4	barrier 61.2 55.2	0.18 0.21 0.20 attenu	ening 59.4	-1.20 -1.20 -1.20	Vight 53 47.:	-4.67 -4.87 -5.39	0.0 0.0 0.0 Ldn 62.0 55.3	000 000 000 000 000	0.000 0.000 0.000 NEL 62.6 56.0
VehicleType Autos Medium Trucks Heavy Trucks Unmitigated Noi VehicleType Autos Medium Trucks Heavy Trucks	REMEL	Traffic Flow  -6.39  -23.63  -27.58  rout Topo and ur Leq Da 2.8 6.4 6.8 4.5	barrier ( 61.2 55.2 55.7 63.1	0.18 0.21 0.20 attenu	sening 59.4 48.8 46.7	-1.20 -1.20 -1.20	Night 53. 47.	-4.67 -4.87 -5.39	0.0 0.0 0.0 <i>Ldn</i> 62.0 55.1	000 000 000 000 000	0.000 0.000 0.000 NEL 62.6 56.0 56.4
VehicleType Autos Medium Trucks Heavy Trucks Unmitigated Noi VehicleType Autos Medium Trucks Heavy Trucks Vehicle Noise	REMEL	Traffic Flow  -6.39  -23.63  -27.58  rout Topo and ur Leq Da 2.8 6.4 6.8 4.5	barrier ( 61.2 55.2 55.7 63.1	0.18 0.21 0.20 attenu	sation) ening   59.4 48.8 46.7 60.0	-1.20 -1.20 -1.20	Night 53.47.47.555.	-4.67 -4.87 -5.39	0.0 0.0 0.0 <i>Ldn</i> 62.0 55.1	000 000 000 000 000	0.000 0.000 0.000
VehicleType Autos Medium Trucks Heavy Trucks Unmitigated Noi VehicleType Autos Medium Trucks Heavy Trucks Vehicle Noise	REMEL	Traffic Flow  -6.39  -23.63  -27.58  rout Topo and ur Leq Da 2.8 6.4 6.8 4.5	barrier ( 61.2 55.2 55.7 63.1	0.18 0.21 0.20 <b>attenu</b> Leq Eve	sening 59.4 48.8 46.7 60.0	-1.20 -1.20 -1.20	Night 53.47.147.155.1	-4.67 -4.87 -5.39	0.0 0.0 0.0 <i>Ldn</i> 62.1 55 56.3	0000 0000 0000 0000	0.000 0.000 0.000 NEL 62.6 56.0 56.4

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	IWAY N	IOISE P	REDICTI	ON MC	DEL			
Road Nam	io: EAP ne: Avenue 58 nt: w/o Monroe	e St.						The W 12642	ave-Coral	Mountai	n
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Peak H	Percentage: lour Volume:	5,600 vehicle 9.30% 521 vehicle		3	Ме	edium True eavy True	ıcks (2	Autos: Axles):	15 15		
	hicle Speed: ne Distance:	45 mph 45 feet		١	Vehicle .						
Site Data	no Biotarioo.	10 1001			Veh	icleType	utos:	Day	Evening	Night	Daily 97.429
	rrier Height: /all, 1-Berm):	0.0 feet 0.0				ledium Tr Heavy Tr	ucks:	77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	1.849
Centerline Di	st. to Barrier:	51.0 feet		,	Voise Si	ource Ele	evation	s (in f	oet)		
Centerline Dist. Barrier Distance Observer Height	to Observer:	51.0 feet 0.0 feet 5.0 feet 0.0 feet			Mediu	Autos m Trucks vy Trucks	s: 0 s: 2	.000 .297 .006	Grade Ad	ljustment	t: 0.0
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalent	Distar	ce (in	feet)		
	Road Grade: Left View: Right View:	0.0% -90.0 degre 90.0 degre				Autos m Trucks vy Trucks	3: 45	.041 .848 .867			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Bei	rm Atten
Autos:	68.46	-4.78		0.43	3	-1.20		-4.65	0.0	000	0.00
Medium Trucks:	79.45			0.46	-	-1.20		-4.87		000	0.00
Heavy Trucks:	84.25	-25.98		0.46	6	-1.20		-5.42	0.0	000	0.00
Unmitigated Noise	e Levels (with	out Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Hou			Leg Ev		Leq I			Ldn		NEL
Autos:		2.9	61.3		59.6		53.	-	62.		62.
Medium Trucks:		5.7	55.5		49.1		47.	-	56.	-	56.
Heavy Trucks: Vehicle Noise:		7.5 1.8	56.4 63.3		47.4 60.2		48. 55.	-	57. 64.	-	57. 64
Centerline Distant					30.2		00.		04.		04.
Jerneriine Distant	SE TO MOISE CO	omour (iii leei		70 c		65 0			60 dBA		dBA
			Ldn:	20	-	4			95	_	204
		С	NEL:	22	2	4	7		102	2	219

		VA-RD-77-108	HIGHW	7-41-181	JISL PI						
Scenario:									ave-Coral	Mountai	n
Road Name: . Road Seament:		n C+				JOD N	lumber:	12642			
Road Segment:	w/o iviadiso	n St.									
	ECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard =		oft = 15)		
Average Daily Tra	ffic (Adt):	3,400 vehicle	s					Autos:			
Peak Hour Pe		9.30%				dium Tr		,			
Peak Hou		316 vehicle	s		He	avy Tru	cks (3+	Axles):	15		
	le Speed:	45 mph		ν	ehicle I	Лix					
Near/Far Lane	Distance:	45 feet			Vehi	cleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Rarrie	r Heiaht:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-Wall,	1-Berm):	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dist. t		51.0 feet		٨	loise So	urce El	evation	ıs (in fe	eet)		
Centerline Dist. to 0		51.0 feet				Auto	s: 0	.000			
Barrier Distance to 0		0.0 feet			Mediui	n Truck	s: 2	.297			
Observer Height (Ab	,	5.0 feet			Heav	v Truck	s: 8	.006	Grade Ad	ljustmen	t: 0.0
	Elevation:	0.0 feet		_							
	Elevation:	0.0 feet		L	ane Equ				reet)		
	ad Grade:	0.0%				Auto		.041			
-	_eft View:	-90.0 degree				n Truck		.848			
Ri	ght View:	90.0 degree	es		Heav	y Truck	s: 45	.867			
FHWA Noise Model C											
, , ,	REMEL	Traffic Flow	Dista		Finite		Fres		Barrier Att		rm Atten
Autos:	68.46	-6.95		0.43		-1.20		-4.65		000	0.00
Medium Trucks:	79.45	-24.19		0.46		-1.20		-4.87		000	0.00
Heavy Trucks:	84.25	-28.15		0.46		-1.20		-5.42	0.0	000	0.00
Unmitigated Noise Le			_					_			
	q Peak Hοι			.eq Ev		Leq	Night	_	Ldn		NEL
Autos:	60		59.2		57.4		51.	-	60.	-	60.
Medium Trucks:	54		53.3		47.0		45.		53.	-	54.
Heavy Trucks:	55	• •	54.3		45.2		46.	-	54.		55.
Vehicle Noise:	62		61.2		58.0		53.	3	61.	9	62.
Centerline Distance t	o Noise Co	ontour (in feet	)	70 d	DΛ	65	dBA	1 4	SO dBA	5.6	5 dBA
			I dn:	15			и <i>Б</i> А 32	1 ,	68	1	146
		_	NFI:	16		-	34		73		157
		C	· *LL.	10	'		,		7.0		101

Wednesday, March 25, 2020

FI	-1WA-RD-77-108	HIGHWAY	NOISE P	REDICTIO	N MODEL		
Scenario: EAP Road Name: Avenue 5 Road Segment: w/o Jacks					lame: The V mber: 1264:	Vave-Coral Mo	ountain
SITE SPECIFIC	INPUT DATA			NO	DISE MOD	EL INPUTS	
Highway Data			Site Cor	nditions (l	lard = 10, S	oft = 15)	
Average Daily Traffic (Adt):	4,700 vehicle	s s			Autos	: 15	
Peak Hour Percentage:	9.30%		Me	edium Truc	cks (2 Axles	): 15	
Peak Hour Volume:	437 vehicle	·S	He	eavy Truck	s (3+ Axles	): 15	
Vehicle Speed:	50 mph		Vehicle	Miv			
Near/Far Lane Distance:	36 feet			icleType	Dav	Evening 1	light Daily
Site Data			ver		Itos: 77.5	-	9.6% 97.42%
				ledium Tru			10.3% 1.84%
Barrier Height:				Heavy Tru			10.8% 0.74%
Barrier Type (0-Wall, 1-Berm):				neavy me	UNS. 00.5	70 2.770	10.070 0.7470
Centerline Dist. to Barrier:			Noise S	ource Ele	vations (in	feet)	
Centerline Dist. to Observer:				Autos:	0.000		
Barrier Distance to Observer:			Mediu	m Trucks:	2.297		
Observer Height (Above Pad): Pad Flevation:			Hea	vy Trucks:	8.006	Grade Adjus	stment: 0.0
Road Elevation:	0.0 1000		I ano Fo	uivalent l	Distance (in	foot)	
Road Grade:			Lane Lq	Autos		1001)	
Left View	0.070		Modiu	m Trucks:	00.100		
Right View:	00.0 409.0			vy Trucks:			
Rigiti view.	90.0 degre	es	i ica	vy Trucks.	30.200		
FHWA Noise Model Calculation	-						
VehicleType REMEL	Traffic Flow	Distance		Road	Fresnel	Barrier Atten	
Autos: 70.2			).89	-1.20	-4.69		
Medium Trucks: 81.0			).87	-1.20	-4.88		
Heavy Trucks: 85.3	8 -27.20	-(	).87	-1.20	-5.35	0.00	0.000
Unmitigated Noise Levels (wit			enuation)				
VehicleType Leq Peak H	our Leq Da		Evening	Leq N		Ldn	CNEL
	62.1	60.5	58.8		52.7	61.3	61.9
	55.7	54.5	48.1		46.6	55.1	55.3
Heavy Trucks:	56.1	55.0	46.0	1	47.2	55.6	55.7
Vehicle Noise:	33.8	62.4	59.3		54.5	63.1	63.6
Centerline Distance to Noise	Contour (in feet						
			0 dBA	65 d		60 dBA	55 dBA
		Ldn:	20	44		95	204
	C	NEL:	22	47		102	220

	FH)	WA-RD-77-108	HIGHWA	Y NO	DISE PR	EDICT	ION MO	DFI				
Road Nam	rio: EAP ne: Avenue 58 nt: e/o Jackso					Project	Name: lumber:	The V		oral Mo	ountain	
	SPECIFIC IN	IPUT DATA					IOISE					
Highway Data				S	ite Cond	litions	(Hard =	10, S	oft = 1	5)		
Average Daily	Traffic (Adt):	3,200 vehicles	3					Autos	: 15			
Peak Hour	Percentage:	9.30%			Med	lium Tr	ucks (2	Axles)	: 15			
Peak H	lour Volume:	298 vehicles	3		Hea	avy Truc	cks (3+	Axles)	: 15			
Ve	hicle Speed:	50 mph		V	ehicle M	liv						
Near/Far La	ne Distance:	36 feet				cleType		Day	Ever	nina N	light	Daily
Site Data							Autos:	77.59		.9%	9.6%	97.42%
Ra	rrier Heiaht:	0.0 feet			Me	dium T	rucks:	84.89	6 4	.9%	10.3%	1.84%
Barrier Type (0-W		0.0			Н	leavy T	rucks:	86.59	6 2	.7%	10.8%	0.74%
Centerline Di	. ,	59.0 feet			oise So	uraa El	lovestion	o (in i	0041			
Centerline Dist.	to Observer:	59.0 feet		/4	oise soi			•	eet)			
Barrier Distance	to Observer:	0.0 feet				Auto		000				
Observer Height	(Above Pad):	5.0 feet			Mediun			297	Cmd	lo Adius	4mont	0.0
P	ad Elevation:	0.0 feet			Heav	/ Truck	s: 8	006	Grau	e Adjus	unen.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Equ	ivalent	Distan	ce (in	feet)			
	Road Grade:	0.0%				Auto	s: 56	409				
	Left View:	-90.0 degree	es		Mediun	n Truck	s: 56	252				
	Right View:	90.0 degree	es		Heav	/ Truck	s: 56	.268				
FHWA Noise Mode	el Calculation	s										
VehicleType	REMEL	Traffic Flow	Distan	се	Finite I	Road	Fresi	nel	Barrie	er Atten	Ben	n Atten
Autos:	70.20	-7.67		-0.89		-1.20		-4.69		0.000	)	0.000
Medium Trucks:	81.00	-24.91		-0.87		-1.20		-4.88		0.000	)	0.000
Heavy Trucks:	85.38	-28.87		-0.87		-1.20		-5.35		0.000	)	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	ttenu	ation)							
VehicleType	Leq Peak Ho	ur Leq Day	/ Le	q Eve	ening	Leq	Night		Ldn		CI	IEL
Autos:	60	0.4	58.9		57.1		51.	0		59.7		60.3
Medium Trucks:	54	1.0	52.8		46.5		44.	9		53.4		53.6
Heavy Trucks:	54	1.4	53.3		44.3		45.	5		53.9		54.0
Vehicle Noise:	62	2.1	60.7		57.7		52.	9		61.4		61.9
Centerline Distant	ce to Noise C	ontour (in feet	)									
				70 dl	BA	65	dBA		60 dBA	4	55	dBA
			Ldn:	16		3	34		73		1	58
		C	NEL:	17		3	37		79		1	70

	FHW	A-RD-77-108	HIGH	WAY N	OISE PI	REDICTI	ON MOI	DEL			
Scenari									ave-Coral I	Mountair	1
	e: Avenue 60					Job Ni	umber: 1	12642			
Road Segmer	nt: w/o Monroe	St.									
	SPECIFIC IN	PUT DATA							LINPUTS	5	
Highway Data				3	ite Con	ditions (					
Average Daily	,	7,300 vehicles	3					Autos:	15		
	Percentage:	9.30%				edium Tru	,	,	15		
	our Volume:	679 vehicles	3		He	eavy Truc	ks (3+ A	(xles	15		
	hicle Speed:	45 mph		ν	ehicle i	Mix					
Near/Far Lai	ne Distance:	45 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	97.429
Bar	rier Height:	0.0 feet			M	ledium Tr	ucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W	•	0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis	. ,	51.0 feet			laina C	ource Ele	n matic m	/in fo	-04l		
Centerline Dist.	to Observer:	51.0 feet		^	oise so	Autos		000	ei)		
Barrier Distance	to Observer:	0.0 feet				m Trucks		97			
Observer Height (	Above Pad):	5.0 feet				vy Trucks		297	Grade Adi	undennnend	. 0 0
Pa	ad Elevation:	0.0 feet			пеа	vy Trucks	. 0.0	JU0	Grade Auj	usuneni	. 0.0
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distanc	e (in f	eet)		
F	Road Grade:	0.0%				Autos	: 46.	041			
	Left View:	-90.0 degree	es		Mediu	m Trucks	3: 45.	848			
	Right View:	90.0 degree	es		Hear	vy Trucks	: 45.	867			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Dis	tance		Road	Fresn		Barrier Atte		m Atten
Autos:	68.46	-3.63		0.43		-1.20		-4.65	0.0		0.00
Medium Trucks:	79.45	-20.87		0.46		-1.20		-4.87	0.0		0.00
Heavy Trucks:	84.25	-24.83		0.46	i	-1.20		-5.42	0.0	00	0.00
Unmitigated Noise											
	Leq Peak Hou	.,.,		Leq Ev		Leq I			Ldn		VEL
Autos: Medium Trucks:	64. 57.		62.5		60.7 50.3		54.7 48.7		63.3 57.2		63. 57.
	57. 58.	-	56.6 57.6		50.3 48.5		48.7		57.2 58.1		57. 58.
Heavy Trucks: Vehicle Noise:	58. 65.		64.5		48.5 61.3		49.8		58.1 65.2		58. 65.
Centerline Distanc	e to Noise Co	ntour (in feet)									
		(377000)		70 d	BA	65 0	BA.	6	0 dBA	55	dBA
			I dn:	24		5	3		113		44
			Luii.	24		5	3		110		

Scenario: EAP	1
Average Daily Traffic (Adt): 1,800 vehicles   Autos: 15     Peak Hour Percentage: 9,30%   Heavy Trucks (2 Axles): 15     Peak Hour Volume: 167 vehicles   Vehicle Speed: 40 mph Near/Far Lane Distance: 23 feet   Vehicle Type   Day   Evening   Night Near/Far Lane Distance: 40.0 feet   Heavy Trucks: 84.8%   4.9%   10.3%     Barrier Height: Barrier Type (O-Wall, 1-Berm): 0,0   Heavy Trucks: 86.5%   2.7%   10.8%     Noise Source Elevations (in feet)	
Average Daily Traffic (Adt): 1,800 vehicles   Peak Hour Percentage: 9,30%   Medium Trucks (2 Axles): 15   15	
Peak Hour Percentiage: 9.30%   Medium Trucks (2 Axles): 15   Heavy Trucks (3+ Axles): 15	
Peak Hour Volume: 167 vehicles   Heavy Trucks (3+ Axles): 15   Vehicle Speed: 40 mph   Vehicle Mix   Vehicle Type   Day   Evening   Night   Vehicle Type   Day   Evening   Night   Vehicle Type   Day   Evening   Night   Vehicle Type   Day   Evening   Night   Vehicle Type   Day   Evening   Night   Vehicle Type   Day   Evening   Night   Vehicle Type   Day   Evening   Night   Vehicle Type   Day   Evening   Night   Vehicle Type   Day   Evening   Night   Vehicle Type   Day   Evening   Night   Vehicle Type   Day   Evening   Night   Vehicle Type   Day   Evening   Night   Vehicle Type   Day   Evening   Night   Vehicle Type   Day   Evening   Night   Vehicle Type   Day   Da	
Vehicle Speed:	
Near/Far Lane Distance: 23 feet     Venice Mix   Venice	
Near/Far Lane Distance: 23 feet   VehicleType   Day   Evening   Night	
Barrier Height: 0.0 feet   Medium Trucks: 84.8% 4.9% 10.3%	Daily
Barrier Type (C-Wall, 1-Berrier)	97.42%
Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5% 2.7% 10.8%  Centerline Dist. to Barrier: 40.0 feet Noise Source Elevations (in feet)	1.84%
Centerline Dist. to Barrier: 40.0 feet Noise Source Elevations (in feet)	0.74%
Noise Source Lievations (In reet)	
Centerline Dist. to Observer: 40.0 feet Autos: 0.000	
Barrier Distance to Observer: 0.0 feet Medium Trucks: 0.000  Medium Trucks: 2.297	
Observer Height (Above Pad): 5.0 feet Heavy Trucks: 8.006 Grade Adjustment	. 0 0
Pad Elevation: 0.0 feet Reavy Trucks. 8.000 Grade Adjustment	. 0.0
Road Elevation: 0.0 feet Lane Equivalent Distance (in feet)	
Road Grade: 0.0% Autos: 38.636	
Left View: -90.0 degrees Medium Trucks: 38.406	
Right View: 90,0 degrees Heavy Trucks: 38.429	
FHWA Noise Model Calculations	
	m Atten
Autos: 66.51 -9.20 1.58 -1.20 -4.59 0.000	0.000
Medium Trucks: 77.72 -26.44 1.62 -1.20 -4.87 0.000	0.000
Heavy Trucks: 82.99 -30.40 1.61 -1.20 -5.56 0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)	
	NEL
Autos: 57.7 56.1 54.3 48.3 56.9	
Medium Trucks: 51.7 50.5 44.1 42.6 51.1	57.5
Heavy Trucks: 53.0 51.9 42.9 44.1 52.5	51.3
Vehicle Noise:         59.7         58.3         55.0         50.5         59.0	51.3 52.6
Centerline Distance to Noise Contour (in feet)	51.3

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGH	HWAY I	NOISE PI	REDICTI	ON MO	DDEL			
Road Nan	rio: EAP ne: Avenue 60 ent: e/o Monroe							The W 12642	ave-Coral	Mountair	1
	SPECIFIC IN	NPUT DATA							L INPUT	s	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	3,200 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tri	ıcks (2	Axles):	15		
Peak I	Hour Volume:	298 vehicle	S		He	avy Truc	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		H	Vehicle	Wix					
Near/Far La	ane Distance:	48 feet		ŀ		icleType		Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	- 0	9.6%	
Ra	rrier Height:	0.0 feet			М	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0				Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	64.0 feet		-					.,		
Centerline Dist.	to Observer:	64.0 feet		-	Noise So				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		0.000			
Observer Height	(Above Pad):	5.0 feet				m Truck		2.297	0	E	
	Pad Elevation:	0.0 feet			Hear	y Truck	s: 8	3.006	Grade Ad	yustment	0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalent	Distar	nce (in t	eet)		
	Road Grade:	0.0%				Auto	s: 59	9.540			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 59	9.391			
	Right View:	90.0 degre	es		Hear	y Truck	s: 59	9.406			
FHWA Noise Mod	lel Calculation	IS									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	inel	Barrier Att	en Ber	m Atten
Autos:	70.20	-7.67		-1.2	4	-1.20		-4.70	0.0	000	0.000
Medium Trucks:	81.00	-24.91		-1.2	2	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	85.38	-28.87		-1.2	3	-1.20		-5.31	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er atter	uation)						
VehicleType	Leq Peak Ho			Leq E	vening	Leq	Night		Ldn		VEL
Autos:		0.1	58.5		56.7		50		59.3		59.9
Medium Trucks:		3.7	52.5		46.1		44		53.0		53.3
Heavy Trucks:		4.1	53.0		43.9		45	.2	53.	5	53.7
Vehicle Noise:		1.8	60.4		57.3		52	.5	61.	1	61.5
Centerline Distan	ce to Noise C	ontour (in fee	t)								
					dBA		dBA	6	60 dBA		dBA
		-	Ldn:		6	-	5		75		63
		С	NEL:	1	7	3	8		81	1	75

	FHW	/A-RD-77-108	HIGHV	NAY N	IOISE PF	REDICT	ON MO	DEL			
Road Nan	rio: EAC21 ne: Jefferson St ent: n/o Avenue						Name: lumber:		/ave-Coral I	Mountaii	n
SITE	SPECIFIC IN	PUT DATA				N	IOISE N	ИODE	L INPUTS	5	
Highway Data					Site Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt): 3	2,000 vehicle	3					Autos.	: 15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2 )	Axles)	: 15		
Peak F	Hour Volume:	2,976 vehicle	3		He	avy Tru	cks (3+ )	Axles)	: 15		
Vé	ehicle Speed:	55 mph		-	Vehicle I	/iiv					
Near/Far La	ane Distance:	71 feet				cleType		Dav	Evening	Niaht	Dailv
Site Data					VCIII		Autos:	77.5%		9.6%	. ,
	rrier Heiaht:	0.0 feet			Me	edium T		84.89		10.3%	
Barrier Type (0-V		0.0 reet			F	leavy T	rucks:	86.5%	6 2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	64.0 feet		H							
Centerline Dist.		64.0 feet		Ľ	Noise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000			
Observer Height	(Above Pad):	5.0 feet				n Truck		297	Crodo Adi	i io4moni	
	Pad Elevation:	0.0 feet			Heav	y Truck	s: 8.	006	Grade Adj	ustment	: 0.0
Ro	ad Elevation:	0.0 feet		1	Lane Equ	iivaleni	Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 53.	486			
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 53.	320			
	Right View:	90.0 degree	es		Heav	y Truck	s: 53.	337			
FHWA Noise Mod	el Calculations	;									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresr	nel	Barrier Atte	en Bei	rm Atten
Autos:	0	1.91		-0.5	4	-1.20		-4.70	0.0	00	0.000
Medium Trucks:		-15.32		-0.5	2	-1.20		-4.88	0.0	00	0.000
Heavy Trucks:	86.40	-19.28		-0.5	2	-1.20		-5.31	0.0	00	0.000
<b>Unmitigated Nois</b>	e Levels (witho	out Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hou	r Leq Day	′	Leq E	vening	Leq	Night		Ldn	С	NEL
Autos:	72.	0	70.4		68.6		62.5	5	71.2		71.8
Medium Trucks:	65.	4	64.2		57.8		56.3	3	64.7		65.0
Heavy Trucks:			64.3		55.2		56.5		64.9		65.0
Vehicle Noise:	73.	5	72.1		69.1		64.3	3	72.8		73.3
Centerline Distan	ce to Noise Co	ntour (in feet	)								
				70 d	dBA .	65	dBA		60 dBA	55	dBA
			Ldn:	9	-	_	12		458	-	986
		C	NEL:	10	06	2	28		492	1,	060

Wednesday, March 25, 2020

	FH\	WA-RD-77-10	B HIGH	WAY N	OISE PI	REDICTI	ON MC	DEL			
	o: EAC21 e: Jefferson S nt: n/o Avenue						Name: umber:		ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data				٤	Site Con	ditions	(Hard =				
Average Daily	. ,		es					Autos:			
	Percentage:	9.30%				edium Tru					
	our Volume:	1,711 vehicle	es		He	eavy Truc	cks (3+	Axles):	15		
	hicle Speed:	55 mph		١	/ehicle l	Mix					
Near/Far Lai	ne Distance:	71 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Bar	rier Height:	0.0 feet			М	edium Tr	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W	all, 1-Berm):	0.0				Heavy Tr	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis		64.0 feet		^	Voise So	ource Ele	evation	s (in fe	et)		
Centerline Dist.		64.0 feet				Autos	s: 0	.000			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks	s: 2	.297			
Observer Height (		5.0 feet			Hear	y Trucks	s: 8	.006	Grade Ad	iustment	: 0.0
	nd Elevation:	0.0 feet		-		•					
	d Elevation:	0.0 feet			.ane Eq	uivalent			eet)		
F	Road Grade:	0.0%				Autos	00	.486			
	Left View:	-90.0 degre				m Trucks	00	.320			
	Right View:	90.0 degre	es		Hear	y Trucks	s: 53	.337			
FHWA Noise Mode		_									
VehicleType	REMEL	Traffic Flow		tance		Road	Fres		Barrier Att		m Atten
Autos:	71.78			-0.54		-1.20		-4.70		000	0.00
Medium Trucks:	82.40			-0.52	_	-1.20		-4.88		000	0.00
Heavy Trucks:	86.40			-0.52		-1.20		-5.31	0.0	000	0.00
Unmitigated Noise	•										
	Leq Peak Hou			Leq Ev			Night		Ldn		NEL
Autos:		9.5	68.0		66.2		60.		68.8		69.
Medium Trucks:	63		61.8		55.4		53.	-	62.3		62.
Heavy Trucks: Vehicle Noise:	63		61.9		52.8 66.7		54. 61.		62.5 70.4		62. 70.
Centerline Distanc											
		(117 700	7	70 a	iBA	65 (	dBA	6	i0 dBA	55	dBA
			Ldn:	68	3	14	17	1	316	. 6	82
			NFI:	73					340		33

	FHV	VA-RD-77-108 I	HIGHWA	Y NC	ISE P	REDICT	ION MO	DEL			
Road Nan	Scenario: EAC21 Road Name: Jefferson St. Road Segment: n/o Avenue 52 SITE SPECIFIC INPUT DATA						t Name: ` lumber:		ave-Coral	Mountair	1
SITE	SPECIFIC IN	IPUT DATA				ı	NOISE N	/ODE	L INPUT	S	
Highway Data				Si	te Con	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	22,900 vehicles						Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Ti	rucks (2 /	Axles):	15		
Peak F	lour Volume:	2,130 vehicles			He	eavy Tru	icks (3+ /	Axles):	15		
Ve	hicle Speed:	55 mph		Ve	ehicle	Mix					
Near/Far La	ne Distance:	71 feet		-		icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.42%
Ra	rrier Height:	0.0 feet		1	М	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
,,,,	st. to Barrier:	64.0 feet		A/a	nina C	E	levation	o (in f	2041		
Centerline Dist.	to Observer:	64.0 feet		/40	Jise 30	Auto		000	et)		
Barrier Distance	to Observer:	0.0 feet			Modiu	m Truck		297			
Observer Height	(Above Pad):	5.0 feet				vy Truck		006	Grade Ad	iustment	: 0.0
P	ad Elevation:	0.0 feet				•				,	
	ad Elevation:	0.0 feet		La	ne Eq		t Distand		feet)		
	Road Grade:	0.0%				Auto		486			
	Left View:	-90.0 degrees				m Truck		320			
	Right View:	90.0 degrees	S		Hea	vy Truck	(s: 53.	337			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distanc	e	Finite	Road	Fresn	iel .	Barrier Att	en Ber	m Atten
Autos:	71.78	0.46		0.54		-1.20		-4.70		000	0.000
Medium Trucks:	02.10	-16.78		0.52		-1.20		-4.88		000	0.000
Heavy Trucks:	86.40	-20.73	-	0.52		-1.20		-5.31	0.0	000	0.000
Unmitigated Noise			arrier at	tenua	ation)						
VehicleType	Leq Peak Hou			q Eve	ning	Leq	Night		Ldn	1	NEL
Autos:	70		8.9		67.1		61.1		69.7		70.3
Medium Trucks:			2.7		56.3		54.8		63.3		63.5
Heavy Trucks:	63		2.8		53.8		55.0		63.4		63.5
Vehicle Noise:	72	1 7	0.6		67.7		62.8	3	71.4	1	71.8
Centerline Distant	ce to Noise Co	ontour (in feet)									
				70 dE	3A	65	dBA	1 6	60 dBA	55	dBA

Wednesday, March 25, 2020

	FH\	VA-RD-77-108 I	HIGHWAY	NOISE P	REDICTION	N MODEL	-	
Road Nan	rio: EAC21 ne: Madison St ent: n/o Avenue					lame: The mber: 126	Wave-Coral N 42	Mountain
SITE	SPECIFIC IN	IPUT DATA					DEL INPUTS	3
Highway Data				Site Cor	nditions (i	Hard = 10,	Soft = 15)	
Average Daily	Traffic (Adt):	8,200 vehicles				Auto	os: 15	
Peak Hour	Percentage:	9.30%		Me	edium Tru	cks (2 Axle	s): 15	
Peak I	lour Volume:	763 vehicles		He	eavy Truck	s (3+ Axle	s): 15	
Ve	ehicle Speed:	50 mph		Vehicle	Miv			
Near/Far La	ne Distance:	51 feet			nicleType	Day	y Evening	Night Daily
Site Data						utos: 77.		9.6% 97.42%
Ba	rrier Heiaht:	0.0 feet		I.	ledium Tru	icks: 84.	8% 4.9%	10.3% 1.84%
Barrier Type (0-V		0.0			Heavy Tru	icks: 86.	5% 2.7%	10.8% 0.74%
Centerline D	ist. to Barrier:	54.0 feet		Noise S	ource Ele	vations (ir	n feet)	
Centerline Dist.	to Observer:	54.0 feet		710,000	Autos			
Barrier Distance	to Observer:	0.0 feet		Mediu	ım Trucks			
Observer Height		5.0 feet		Hea	vy Trucks	8.006	Grade Adi	ustment: 0.0
	ad Elevation:	0.0 feet						
	ad Elevation:	0.0 feet		Lane Eq		Distance (	-	
	Road Grade:	0.0%			Autos.	11.002		
	Left View:	-90.0 degrees			ım Trucks.			
	Right View:	90.0 degrees	3	Hea	vy Trucks	47.695		
FHWA Noise Mod	el Calculation	s		1				
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Atte	en Berm Atten
Autos:		-3.59	-	).18	-1.20	-4.6		
Medium Trucks:	81.00	-20.82	-	).21	-1.20	-4.8		0.000
Heavy Trucks:	85.38	-24.78	C	0.20	-1.20	-5.3	39 0.0	0.000
Unmitigated Nois	e Levels (with	out Topo and b	arrier att	enuation)				
VehicleType	Leq Peak Hou			Evening	Leq N		Ldn	CNEL
Autos:			4.0	62.2		56.2	64.8	
Medium Trucks:			8.0	51.6		50.1	58.5	
Heavy Trucks:			8.5	49.5		50.7	59.1	
Vehicle Noise:			5.9	62.8	3	58.0	66.6	67.1
Centerline Distan	ce to Noise Co	ontour (in feet)						
			- 1	0 dBA	65 d		60 dBA	55 dBA
			.dn:	32	69		148	320
		CN	EL:	34	74		159	343

	FH	WA-RD-77-108	HIGHV	VAY NO	DISE PR	EDICTIO	N MODEL			
	io: EAC21 e: Madison S nt: n/o Avenue					,	ame: The V	Vave-Coral	Mountair	1
SITE S	SPECIFIC IN	NPUT DATA				NO	ISE MOD	EL INPUT	S	
Highway Data				S	ite Con	ditions (H	lard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	9,400 vehicle	s				Autos	: 15		
Peak Hour	Percentage:	9.30%			Me	dium Truc	ks (2 Axles	): 15		
Peak H	our Volume:	874 vehicle	s		He	avy Truck	s (3+ Axles	): 15		
Vei	hicle Speed:	50 mph		V	ehicle N	lix				
Near/Far Lai	ne Distance:	51 feet				cleType	Day	Evening	Night	Daily
Site Data						Au	tos: 77.5	% 12.9%	9.6%	97.42%
Rai	rier Height:	0.0 feet			Me	edium True	cks: 84.8	% 4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			F	leavy Tru	cks: 86.5°	% 2.7%	10.8%	0.74%
Centerline Dis		54.0 feet		N	oise So	urce Elev	ations (in	feet)		
Centerline Dist.		54.0 feet				Autos:	0.000			
Barrier Distance		0.0 feet			Mediur	n Trucks:	2.297			
Observer Height (	,	5.0 feet			Heav	y Trucks:	8.006	Grade Ad	iustment	0.0
	ad Elevation:	0.0 feet								
	ad Elevation:	0.0 feet		Li	ane Equ		istance (in	teet)		
ļ ,	Road Grade:	0.0%				Autos:				
	Left View:	-90.0 degre				n Trucks:				
	Right View:	90.0 degre	es		Heav	y Trucks:	47.695			
FHWA Noise Mode		-								
VehicleType	REMEL	Traffic Flow	Dista		Finite		Fresnel	Barrier Att	_	m Atten
Autos:	70.20			0.18		-1.20	-4.67		000	0.000
Medium Trucks:	81.00			0.21		-1.20	-4.87		000	0.000
Heavy Trucks:	85.38			0.20		-1.20	-5.39	0.0	000	0.000
Unmitigated Noise									1 -	
	Leq Peak Ho			Leq Eve	- 1	Leq Ni	- 1	Ldn	1	VEL
Autos:		3.2	64.6		62.8		56.8	65.4		66.0
Medium Trucks:		9.8	58.6		52.2		50.7	59.1		59.4
Heavy Trucks:		0.2	59.1		50.1		51.3	59.7		59.8
Vehicle Noise:		7.9	66.5		63.4		58.6	67.2	2	67.6
Centerline Distance	e to Noise C	ontour (in feet	*)	70 "	24	05 15		00 -ID4		-ID4
			Later	70 dE	34	65 dE	S/A	60 dBA	1	dBA
		_	Ldn: NFI:	35 38		75 81		162 175	-	50
		C	INEL:	38		81		1/5	3	76

	FHV	VA-RD-77-108	HIGH	1 YAW	IOISE P	REDICT	ION MO	DDEL			
Road Name	o: EAC21 e: Madison St. nt: n/o Airport I							The W 12642	ave-Coral	Mountai	n
	SPECIFIC IN	PUT DATA							L INPUT	s	
Highway Data					Site Cor	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 1	13,800 vehicle	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	our Volume:	1,283 vehicle	s		He	eavy Tru	cks (3+	Axles):	15		
Vel	hicle Speed:	50 mph			Vehicle	Mix					
Near/Far Lar	ne Distance:	51 feet		F		icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Rar	rier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	-	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	st. to Barrier:	54.0 feet			Noise S	ource E	evation	ne (in fa	not)		
Centerline Dist. t	to Observer:	54.0 feet		F.	110/30 01	Auto		0.000			
Barrier Distance t	to Observer:	0.0 feet			Modiu	m Truck		297			
Observer Height (A	Above Pad):	5.0 feet				vy Truck		.006	Grade Ad	iuetman	. 0 0
Pa	d Elevation:	0.0 feet		L	i ica	vy Truck	s. c	.000	Orade Au	Justinoni	. 0.0
Roa	d Elevation:	0.0 feet			Lane Eq	uivalen	Distar	ice (in i	feet)		
F	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 47	.695			
FHWA Noise Mode	l Calculation:	S									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Bei	rm Atten
Autos:	70.20	-1.32		0.1	8	-1.20		-4.67	0.0	000	0.00
Medium Trucks:	81.00	-18.56		0.2	1	-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	85.38	-22.52		0.2	0	-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	•		barri	er atten	uation)					,	
	Leq Peak Hou			Leq E	vening		Night		Ldn		NEL
Autos:	67		66.3		64.5		58		67.		67.
Medium Trucks:	61		60.3		53.9		52		60.8	-	61.0
Heavy Trucks: Vehicle Noise:	61		60.8		51.7		53		61.3		61.
					65.1		60	.3	68.8	5	69.
Centerline Distanc	e to Noise Co	ntour (in feet	)	70	dBA	65	dBA		60 dBA	55	dBA
			Ldn:		л <i>о</i> м 5		и <i>Б</i> А 97	1 '	210	1	152
		_	NFI:	4	-		05		225		186
		C.	VLL.	4	-	'	00		220	-	100

	FH\	WA-RD-77-108	HIGHV	VAY NO	ISE PR	REDICTION	ON MODEL			
Scenario	: EAC21					Project I	Vame: The \	Vave-Coral I	Mountain	
Road Name	: Madison St					Job Nu	mber: 1264	2		
Road Segment	t: n/o Avenue	54								
	PECIFIC IN	IPUT DATA						EL INPUTS	5	
Highway Data				Si	te Con	ditions (i	Hard = 10, S	Soft = 15)		
Average Daily T	raffic (Adt):	7,500 vehicle	s				Autos	s: 15		
Peak Hour F	Percentage:	9.30%					cks (2 Axles			
Peak Ho	ur Volume:	698 vehicle	s		He	avy Truci	ks (3+ Axles	): 15		
Veh	icle Speed:	50 mph		V	ehicle N	Nix				_
Near/Far Lan	e Distance:	51 feet				cleType	Day	Evening	Night D	Daily
Site Data						A	utos: 77.5	% 12.9%	9.6% 97	7.42
Barr	ier Heiaht:	0.0 feet			Ме	edium Tru	icks: 84.8	% 4.9%	10.3% 1	1.84
Barrier Type (0-Wa		0.0			F	łeavy Tru	icks: 86.5	% 2.7%	10.8%	0.74
Centerline Dist	t. to Barrier:	54.0 feet		N	oise So	urce Ele	vations (in	feet)		_
Centerline Dist. to	Observer:	54.0 feet				Autos.		,		_
Barrier Distance to	Observer:	0.0 feet			Mediur	n Trucks				
Observer Height (A	lbove Pad):	5.0 feet				y Trucks		Grade Adi	ustment: 0.0	0
Pad	d Elevation:	0.0 feet								
Road	d Elevation:	0.0 feet		La	ane Equ		Distance (in	feet)		
R	oad Grade:	0.0%				Autos.				
	Left View:	-90.0 degre	es			n Trucks				
	Right View:	90.0 degre	es		Heav	y Trucks	47.695			
FHWA Noise Model	Calculation	s								_
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresnel	Barrier Atte	en Berm A	Atter
Autos:	70.20	-3.97		0.18		-1.20	-4.67	0.0	00	0.0
Medium Trucks:	81.00	-21.21		0.21		-1.20	-4.87	0.0	00	0.00
Heavy Trucks:	85.38	-25.17		0.20		-1.20	-5.39	0.0	100	0.0
Unmitigated Noise			barrier	attenu	ation)					
	eq Peak Hou			Leq Eve	-	Leq ∧		Ldn	CNEL	
Autos:	65		63.6		61.9		55.8	64.4		65
Medium Trucks:		1.8	57.6		51.2		49.7	58.2		58
Heavy Trucks:		1.2	58.1		49.1		50.3	58.7		58
Vehicle Noise:	66	5.9	65.5		62.4		57.6	66.2	!	66
Centerline Distance	to Noise Co	ontour (in feet	)							
				70 dE	BA	65 d		60 dBA	55 dB/	Α
			I dn:	30		65		140	301	
			NFI:	32		70		150	324	

Wednesday, March 25, 2020

FH	WA-RD-77-108 F	HIGHWAY	NOISE PI	REDICTIO	N MODEL		
Scenario: EAC21 Road Name: Madison S Road Segment: n/o Avenu					Vame: The Imber: 1264	Wave-Coral N 2	Mountain
SITE SPECIFIC I	NPUT DATA					EL INPUTS	5
Highway Data			Site Con	ditions (i	Hard = 10, 3	Soft = 15)	
Average Daily Traffic (Adt):	11,300 vehicles				Auto	s: 15	
Peak Hour Percentage:	9.30%		Me	edium Tru	cks (2 Axles	): 15	
Peak Hour Volume:	1,051 vehicles		He	avy Truci	ks (3+ Axles	): 15	
Vehicle Speed:	50 mph		Vehicle	Miv			
Near/Far Lane Distance:	51 feet			icleType	Dav	Evening	Night Daily
Site Data			1011		utos: 77.5	-	9.6% 97.42%
Barrier Height:	0.0 feet		М	edium Tru	ıcks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-Wall, 1-Berm):	0.0 feet			Heavy Tru	icks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dist. to Barrier:	54.0 feet						
Centerline Dist. to Observer:	54.0 feet		Noise So		vations (in	teet)	
Barrier Distance to Observer:	0.0 feet			Autos.			
Observer Height (Above Pad):	5.0 feet			m Trucks.		0	
Pad Elevation:	0.0 feet		Hear	vy Trucks	8.006	Grade Adj	ustment: 0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent l	Distance (ii	ı feet)	
Road Grade:	0.0%			Autos.	47.862		
Left View:	-90.0 degrees	3	Mediu	m Trucks	47.677		
Right View:	90.0 degrees	3	Hear	vy Trucks	47.695		
FHWA Noise Model Calculation	18						
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Berm Atten
Autos: 70.20	-2.19	0.	18	-1.20	-4.6	7 0.0	0.000
Medium Trucks: 81.00	-19.43	0.	21	-1.20	-4.8	7 0.0	0.000
Heavy Trucks: 85.38	-23.39	0.	20	-1.20	-5.3	9 0.0	0.000
Unmitigated Noise Levels (with	out Topo and b	arrier atte	nuation)				
VehicleType Leq Peak Ho			vening	Leq N		Ldn	CNEL
		5.4	63.6		57.6	66.2	
		9.4	53.0		51.5	59.9	
Heavy Trucks: 6	1.0 5	9.9	50.9		52.1	60.5	60.6
Vehicle Noise: 6	8.7 6	7.3	64.2		59.4	68.0	68.4
Centerline Distance to Noise C	ontour (in feet)						
			dBA	65 d	1	60 dBA	55 dBA
	_		40	85		184	396
	CN	EL:	43	92		197	425

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGH	IWAY I	NOISE PI	REDICTI	ON MO	DEL			
Road Nam	io: EAC21 ne: Madison S nt: n/o Avenue					.,	Name: ' umber:		ave-Coral	Mounta	ain
SITE	SPECIFIC IN	IPUT DATA				N	OISE N	/IODE	L INPUT	S	
Highway Data					Site Con	ditions (	Hard =	10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	4,700 vehicles	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	icks (2 /	Axles):	15		
Peak H	lour Volume:	437 vehicles	s		He	avy Truc	ks (3+ A	Axles):	15		
Ve	hicle Speed:	45 mph		-	Vehicle	Miv					
Near/Far La	ne Distance:	45 feet		ł		icleTvpe		Dav	Evening	Niaht	Daily
Site Data						,,,		77.5%		9.6	,
Ra	rrier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3	% 1.84%
Barrier Type (0-W		0.0 1001				Heavy Tr	ucks:	86.5%	2.7%	10.8	% 0.74%
Centerline Di		51.0 feet		-	M-! 0	F1		- /! 6-	-41		
Centerline Dist.	to Observer:	51.0 feet			Noise So			•	et)		
Barrier Distance	to Observer:	0.0 feet				Autos		000 297			
Observer Height (	(Above Pad):	5.0 feet				m Trucks			Crada Ad	iuotmo	m4: 0 0
Pa	ad Elevation:	0.0 feet			Hear	y Trucks	8. 8.	006	Grade Ad	usine	т. О.О
Roa	ad Elevation:	0.0 feet		Ī	Lane Eq	uivalent	Distanc	ce (in i	eet)		
	Road Grade:	0.0%		ĺ		Autos	s: 46.	041			
	Left View:	-90.0 degree	es		Mediu	m Trucks	s: 45.	848			
	Right View:	90.0 degree	es		Hear	y Trucks	s: 45.	867			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresn	iel .	Barrier Att	en B	erm Atten
Autos:	68.46	-5.55		0.4	13	-1.20		-4.65	0.0	000	0.000
Medium Trucks:	79.45	-22.78		0.4	16	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	84.25	-26.74		0.4	16	-1.20		-5.42	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	er attei	nuation)						
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq E	vening	Leq	Night		Ldn	1	CNEL
Autos:	62	2.1	60.6		58.8		52.7	,	61.4	1	62.0
Medium Trucks:	55	5.9	54.7		48.4		46.8	3	55.3	3	55.5
Heavy Trucks:		3.8	55.7		46.6		47.9		56.2		56.4
Vehicle Noise:	64	1.0	62.6		59.4		54.7	7	63.3	3	63.7
Centerline Distance	ce to Noise C	ontour (in feet	)								
			П		dBA		dBA	6	i0 dBA	5	i5 dBA
			Ldn:		18	3	-		84		182
		C	NEL:		19	4	2		91		195

IIIVA	RD-77-108 HIG	HWAY	NOISE P	REDICTIO	N MOI	DEL			
Scenario: EAC21 Road Name: Monroe St. Road Segment: n/o Avenue 52				Project N Job Nur			ave-Coral I	Mountair	1
SITE SPECIFIC INPU	T DATA						LINPUTS	5	
Highway Data			Site Con	ditions (H	ard =	10, So	ft = 15)		
Average Daily Traffic (Adt): 10,7	00 vehicles					Autos:	15		
Peak Hour Percentage: 9.	30%		Me	dium Truc	ks (2 A	(xles	15		
Peak Hour Volume: 9	95 vehicles		He	avy Truck	s (3+ A	(xles	15		
Vehicle Speed:	50 mph		Vehicle I	Mix					
Near/Far Lane Distance:	43 feet			icleType		Day	Evening	Night	Daily
Site Data				Au	tos:	77.5%	12.9%	9.6%	97.429
Barrier Height:	0.0 feet		М	edium Tru	cks:	84.8%	4.9%	10.3%	1.84%
•	0.0		1	leavy Tru	cks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier: 6	34.0 feet		Noise Sc	urce Elev	ations	(in fe	et)		
Centerline Dist. to Observer: 6	34.0 feet			Autos:		000	,		
	0.0 feet		Mediu	m Trucks:	2.3	297			
	5.0 feet			y Trucks:			Grade Adi	ustment	0.0
	0.0 feet			,					
	0.0 feet		Lane Eq	uivalent D			eet)		
	0.0%			Autos:	60.4				
	0.0 degrees			m Trucks:	60.3				
Right View: 9	0.0 degrees		Heav	y Trucks:	60.	355			
FHWA Noise Model Calculations									
		Distance	Finite		Fresn		Barrier Atte		m Atten
Autos: 70.20	-2.43	-1.3		-1.20		-4.70	0.0		0.00
Medium Trucks: 81.00	-19.67	-1.3		-1.20		-4.88	0.0		0.00
Heavy Trucks: 85.38	-23.62	-1.3	33	-1.20		-5.31	0.0	00	0.00
Unmitigated Noise Levels (without	•	_							
VehicleType Leq Peak Hour	Leq Day		vening	Leq Ni			Ldn		VEL
Autos: 65.2 Medium Trucks: 58.8	63.6 57.6	-	61.9		55.8 49.7		64.4 58.2		65. 58.4
	57.6	-	51.3 49.1		50.3		58.2 58.7		58.4
Heavy Trucks: 59.2	65.5		62.4		57.7		66.2		66.
Vehicle Noise: 66.9									
	ur (in feet)								
Vehicle Noise: 66.9  Centerline Distance to Noise Conto	ur (in feet)	70	dBA	65 dE	BA .	6	0 dBA	55	dBA
	<b>ur (in feet)</b> Ldn	1	dBA 36	65 dE 77	BA	6	0 dBA 166		dBA 58

FI	HWA-RD-77-10	HIGHW	AY NO	DISE PRE	DICTIO	MOD	EL			
Scenario: EAC21								ave-Coral	Mountai	n
Road Name: Monroe S					Job Nun	nber: 12	2642			
Road Segment: n/o Avenu	ie 50									
SITE SPECIFIC	INPUT DATA							INPUT	S	
Highway Data			S	ite Condi	tions (H	ard = 1	0, So	ft = 15)		
Average Daily Traffic (Adt):	12,800 vehicle	es					utos:	15		
Peak Hour Percentage:					um Truci			15		
Peak Hour Volume:	.,	es		Heav	y Trucks	(3+ A)	des):	15		
Vehicle Speed:			V	ehicle Mi	x					
Near/Far Lane Distance:	43 feet			Vehicl	еТуре	D	ay	Evening	Night	Daily
Site Data					Au	tos: 7	7.5%	12.9%	9.6%	97.429
Barrier Height:	0.0 feet			Mea	lium Truc	ks: 8	4.8%	4.9%	10.3%	1.849
Barrier Type (0-Wall, 1-Berm):	0.0			He	avy Truc	ks: 8	6.5%	2.7%	10.8%	0.749
Centerline Dist. to Barrier:			N	oise Sou	rce Elev	ations	(in fe	et)		
Centerline Dist. to Observer:	01.0				Autos:	0.00	00			
Barrier Distance to Observer:	0.0			Medium	Trucks:	2.29	97			
Observer Height (Above Pad):				Heavy	Trucks:	8.00	06	Grade Ad	justmen	t: 0.0
Pad Elevation:	0.0		-							
Road Elevation:	0.0		Li	ane Equi			•	eet)		
Road Grade:	0.070				Autos:	60.48				
Left View:	00.05			Medium						
Right View:	90.0 degre	es		Heavy	Trucks:	60.3	55			
FHWA Noise Model Calculation										
VehicleType REMEL	Traffic Flow	Dista		Finite R		Fresne	_	Barrier Att		rm Atten
Autos: 70.2			-1.34		-1.20		4.70		000	0.00
Medium Trucks: 81.0			-1.33		-1.20		4.88		000	0.00
Heavy Trucks: 85.3		-	-1.33		-1.20	-4	5.31	0.0	000	0.00
Unmitigated Noise Levels (with										
VehicleType Leq Peak H	our Leq Da 36.0	y   L 64.4	eq Eve	ening 62.7	Leq Ni	9ht   56.6		Ldn 65.3	1	NEL 65
	56.0 59.6	58.4		52.7 52.0		50.5		58.9	_	55.
	50.0	58.9		49.9		51.1		59.	-	59. 59.
	50.0 57.7	66.3		63.2		58.4		67.0		67.
	Contour (in foo	f)								
Contarlina Distance to Maise										
Centerline Distance to Noise	Jontour (in lee	<i>′</i>	70 dE	BA	65 dB	A	6	0 dBA	5.5	5 dBA
Centerline Distance to Noise	somour (in lee	I dn:	70 dE		65 dB 87	A	6	0 dBA 187		6 dBA 403

Wednesday, March 25, 2020

	FHW	A-RD-77-108 I	HIGHWA	Y NOIS	E PRE	DICTIO	ON MO	DDEL			
Scenario: EAC2 Road Name: Monn Road Segment: n/o A	oe St.	54			F	Project I Job Nu			ave-Coral	Mountai	1
SITE SPECIF	IC INF	PUT DATA				N	DISE	MODE	L INPUT	s	
Highway Data				Site	Condi	itions (l	Hard :	= 10, Sc	oft = 15)		
Average Daily Traffic (A	Adt):	8,500 vehicles						Autos:	15		
Peak Hour Percent	age:	9.30%			Medi	ium Tru	cks (2	Axles).	15		
Peak Hour Volu	me:	791 vehicles			Hear	vy Truci	ks (3+	Axles).	15		
Vehicle Spe	eed:	50 mph		Vohi	icle Mi	iv					
Near/Far Lane Dista	nce:	51 feet				k leType		Dav	Evening	Night	Daily
Site Data					VEITICI		utos:	77.5%	-	9.6%	-
				-	Med	dium Tru		84.89		10.3%	
Barrier Hei		0.0 feet				eavy Tru		86.5%		10.8%	
Barrier Type (0-Wall, 1-Be	,	0.0 54.0 feet								10.070	0.7470
Centerline Dist. to Bar Centerline Dist. to Obser		54.0 feet		Nois	e Sou	rce Ele	vatio	ns (in f	eet)		
Barrier Distance to Obser		0.0 feet				Autos.	. (	0.000			
Observer Height (Above F		5.0 feet		M	ledium	Trucks.	: 2	2.297			
Pad Fleva		0.0 feet		1	Heavy	Trucks.	: 8	3.006	Grade Ad	justmen	: 0.0
Road Eleva		0.0 feet		Lane	e Eaui	valent i	Distai	nce (in	feet)		
Road Gr		0.0%			qu.	Autos		7.862	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
I eft V		-90.0 degree:		14	ledium	Trucks.		7.677			
Right V		90.0 degrees				Trucks		7.695			
FHWA Noise Model Calcul	lations										
VehicleType REMI	EL	Traffic Flow	Distanc	e F	inite R	oad	Fres	nel	Barrier Att	en Bei	m Atten
Autos:	70.20	-3.43		0.18		-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-20.67		0.21		-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-24.62		0.20		-1.20		-5.39	0.0	000	0.000
Unmitigated Noise Levels	(witho	ut Topo and b	arrier at	tenuatio	on)						
VehicleType Leq Pea	ak Hour	Leq Day	Lec	g Evenir	ng	Leq N	light		Ldn	С	NEL
Autos:	65.8	В 6	4.2		62.4		56	.4	65.0	)	65.6
Medium Trucks:	59.0	3 5	8.1		51.8		50	.2	58.7	7	58.9
Heavy Trucks:	59.8	B 5	8.7		49.6		50	.9	59.2	2	59.3
Vehicle Noise:	67.	5 6	6.0	(	63.0		58	.2	66.7	7	67.2
Centerline Distance to No.	ise Cor	ntour (in feet)									
			1	70 dBA		65 d		(	60 dBA	1	dBA
		_	.dn:	33		71			152		127
		CN	EL:	35		76			163	3	152

Wednesday, March 25, 2020

	FHW	/A-RD-77-108	HIGH	IWAY I	NOISE PE	REDICT	ION MO	DEL			
Road Nam	rio: EAC21 ne: Monroe St. nt: n/o Airport E	BI.					Name: ' lumber:		ave-Coral I	Mountai	n
SITE	SPECIFIC IN	PUT DATA				N	IOISE N	/IODE	L INPUTS	5	
Highway Data					Site Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	6,800 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2 A	(xles	15		
Peak H	lour Volume:	632 vehicles	s		He	avy Tru	cks (3+ A	(xles	15		
Ve	hicle Speed:	50 mph		H	Vehicle I	Miv					
Near/Far La	ne Distance:	51 feet		ŀ		icleType	,	Dav	Evening	Night	Daily
Site Data								77.5%		9.6%	,
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		54.0 feet			Noise Sc	uraa E	lovestie n	/in f	0041		
Centerline Dist.	to Observer:	54.0 feet			Noise 30			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000 297			
Observer Height	(Above Pad):	5.0 feet				m Truck	o		Grade Adj	o.tmon	4.00
P	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.	006	Grade Adj	usunen	. 0.0
Ro	ad Elevation:	0.0 feet			Lane Equ	uivalen	Distant	e (in	feet)		
	Road Grade:	0.0%				Auto	s: 47.	862			
	Left View:	-90.0 degree	es		Mediui	m Truck	s: 47.	677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47.	695			
FHWA Noise Mode	el Calculations	;									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresn	el	Barrier Atte	en Be	rm Atten
Autos:	70.20	-4.40		0.1	18	-1.20		-4.67	0.0	00	0.000
Medium Trucks:	81.00	-21.64		0.2	21	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-25.59		0.2	20	-1.20		-5.39	0.0	00	0.000
Unmitigated Noise	e Levels (witho	out Topo and	barrie	er atter	nuation)						
VehicleType	Leq Peak Hou	r Leq Day	/	Leq E	vening	Leq	Night		Ldn	С	NEL
Autos:	64.	8	63.2		61.4		55.4		64.0		64.6
Medium Trucks:	58.	4	57.2		50.8		49.3		57.7		58.0
Heavy Trucks:	58.	8	57.7		48.6		49.9	1	58.3		58.4
Vehicle Noise:	66.	5	65.1		62.0		57.2	!	65.8		66.2
Centerline Distance	ce to Noise Co.	ntour (in feet	)								
			T		dBA		dBA	-	60 dBA		dBA
			Ldn:		28		61		131	_	282
		C	NEL:	3	30	6	55		141	3	303

		VA-RD-77-108	HIGHW	AY NOISE								
Road Nam	io: EAC21 ne: Monroe St. nt: n/o Avenue	60				t Name: lumber:		ave-Coral	Mountair	1		
SITE S	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS								
Highway Data				Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	6,400 vehicles	3				Autos:	15				
Peak Hour	Percentage:	9.30%		/	Лedium Ті	ucks (2	Axles):	15				
Peak H	lour Volume:	595 vehicles	3	1	Heavy Tru	cks (3+.	Axles):	15				
Ve	hicle Speed:	50 mph		Vehicle	o Miv							
Near/Far La	ne Distance:	51 feet			ehicleType	9	Dav	Evening	Night	Dailv		
Site Data						Autos:	77.5%	12.9%	9.6%	. ,		
Rai	rrier Height:	0.0 feet			Medium 7	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W		0.0			Heavy 7	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dis		54.0 feet						-1				
Centerline Dist.	to Observer:	54.0 feet		Noise	Source E			et)				
Barrier Distance	to Observer:	0.0 feet			Auto		000					
Observer Height (	Above Pad):	5.0 feet			lium Truck		297	0		. 0 0		
	ad Elevation:	0.0 feet		He	avy Truck	(S. 8.	006	Grade Ad	ustment	: 0.0		
Roa	ad Elevation:	0.0 feet		Lane E	quivalen	t Distan	ce (in f	eet)				
1	Road Grade:	0.0%			Auto	s: 47	.862					
	Left View:	-90.0 degree	es	Mea	lium Truck	s: 47	.677					
	Right View:	90.0 degree	es	He	avy Truck	s: 47	.695					
FHWA Noise Mode	el Calculations	5										
VehicleType	REMEL	Traffic Flow	Distar	ce Fini	te Road	Fresi		Barrier Att	en Ber	m Atten		
Autos:	70.20	-4.66		0.18	-1.20		-4.67	0.0	000	0.00		
Medium Trucks:	81.00	-21.90		0.21	-1.20		-4.87	0.0	000	0.00		
Heavy Trucks:	85.38	-25.86		0.20	-1.20		-5.39	0.0	000	0.00		
Unmitigated Noise	Levels (with	out Topo and	barrier a	ttenuation	)							
VehicleType	Leq Peak Hou	.,.,		eq Evening		Night		Ldn		NEL		
Autos:	64		62.9	61	-	55.		63.7		64.3		
Medium Trucks:	58		56.9	50		49.	-	57.5		57.7		
	58		57.4 64.8	48 61		49. 57.	-	58.0 65.5		58.°		
Heavy Trucks:	66			01	.,	37.		00.0	,	00.		
Vehicle Noise:	66											
· · · · · ·			)	70 dBA	65	dBA	6	0 dBA	55	dBA		
Vehicle Noise:		ntour (in feet)	Ldn:	70 dBA 27		dBA 58	6	0 dBA 126	1	dBA		

FH	WA-RD-77-108 HIG	HWAY N	OISE PREDICT	ION MODEL						
Scenario: EAC21 Road Name: Monroe St Road Segment: n/o Avenue				t Name: The V Number: 12642		untain				
SITE SPECIFIC II	NPUT DATA			NOISE MODI						
Highway Data		S	Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt):  Peak Hour Percentage:  Peak Hour Volume:  Vehicle Speed:	6,700 vehicles 9.30% 623 vehicles 50 mph			Autos rucks (2 Axles) icks (3+ Axles)	: 15					
Near/Far Lane Distance:	51 feet	ν	ehicle Mix							
Near/Far Larie Distance.	31 leet		VehicleTyp	e Day	Evening N	light Daily				
Site Data  Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet		Medium 1 Heavy 1		% 4.9% 1	9.6% 97.42% 10.3% 1.84% 10.8% 0.74%				
Centerline Dist. to Barrier:	54.0 feet		laina Cauraa E	Javatiana (in t	fand)					
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation: Road Grade: Left View: Right View:	54.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degrees 90.0 degrees	L	Noise Source Elevations (in feet)  Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.006 Grade Adjustm  Lane Equivalent Distance (in feet)  Autos: 47.862 Medium Trucks: 47.677 Heavy Trucks: 47.695							
FHWA Noise Model Calculation	-		I							
VehicleType REMEL		stance	Finite Road	Fresnel	Barrier Atten					
Autos: 70.20 Medium Trucks: 81.00		0.18		-4.67 -4.87						
Heavy Trucks: 85.38		0.21		-4.87 -5.39						
Unmitigated Noise Levels (with	aut Tone and have	lar attanı	intion)							
VehicleType Leg Peak Ho		Leg Ev		Night	Ldn	CNEL				
	4.7 63.1	Log Lv	61.4	55.3	63.9	64.5				
	3.3 57.1		50.8	49.2	57.7	57.9				
Heavy Trucks: 5	3.7 57.6		48.6	49.8	58.2	58.3				
	6.4 65.0		61.9	57.2	65.7	66.2				
Centerline Distance to Noise C	ontour (in feet)									
	Ldn: CNEL:	70 d 28 30	3	60 65	60 dBA 130 139	55 dBA 279 300				

Wednesday, March 25, 2020

FH	WA-RD-77-108 H	IGHWAY	NOISE PI	REDICTIO	ON MODEL		
Scenario: EAC21 Road Name: Avenue 50 Road Segment: w/o Jeffers	on St.				Vame: The Vamber: 1264	Wave-Coral I 2	Mountain
SITE SPECIFIC IN	IPUT DATA					EL INPUTS	S
Highway Data			Site Con	ditions (i	Hard = 10, S	Soft = 15)	
Average Daily Traffic (Adt):	16,700 vehicles				Auto	s: 15	
Peak Hour Percentage:	9.30%		Me	edium Tru	cks (2 Axles	): 15	
Peak Hour Volume:	1,553 vehicles		He	avy Truci	ks (3+ Axles	): 15	
Vehicle Speed:	50 mph		Vehicle	Miv			
Near/Far Lane Distance:	51 feet			icleType	Dav	Evening	Night Daily
Site Data					utos: 77.5	-	9.6% 97.42%
Barrier Height:	0.0 feet		М	edium Tru	ıcks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-Wall, 1-Berm):	0.0 leet			Heavy Tru	icks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dist. to Barrier:	54.0 feet		Noise S	ourco Elo	vations (in	foot)	
Centerline Dist. to Observer:	54.0 feet		NOISE S	Autos		ieei)	
Barrier Distance to Observer:	0.0 feet		Modiu	m Trucks			
Observer Height (Above Pad):	5.0 feet			vy Trucks.		Grade Adi	iustment: 0.0
Pad Elevation:	0.0 feet		i ica	y Trucks.	0.000	Orado Adj	dolinent. 0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent l	Distance (ir	r feet)	
Road Grade:	0.0%			Autos.	47.862		
Left View:	-90.0 degrees			m Trucks			
Right View:	90.0 degrees		Hear	vy Trucks	47.695		
FHWA Noise Model Calculation	s						
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Berm Atten
Autos: 70.20	-0.50	0.	18	-1.20	-4.6	7 0.0	0.000
Medium Trucks: 81.00	-17.73	0.	21	-1.20	-4.8	7 0.0	0.000
Heavy Trucks: 85.38	-21.69	0.	20	-1.20	-5.3	9 0.0	0.000
Unmitigated Noise Levels (with	out Topo and ba	arrier atte	nuation)				
VehicleType Leq Peak Hot	ur Leq Day	Leq I	vening	Leq N	light	Ldn	CNEL
	3.7 67		65.3		59.3	67.9	
	2.3 61		54.7		53.2	61.6	
Heavy Trucks: 62	2.7 61	.6	52.5		53.8	62.2	62.3
Vehicle Noise: 70	).4 69	9.0	65.9		61.1	69.7	70.1
Centerline Distance to Noise Co	ontour (in feet)						
			dBA	65 d	U.	60 dBA	55 dBA
			51	11		238	514
	CNE	EL:	55	119	9	256	552

	FHW	/A-RD-77-108	HIGHV	VAY N	NOISE PF	EDICT	ION MOI	DEL			
Road Nam	io: EAC21 ne: Avenue 50 nt: w/o Madisor	n St.					Name: 1		ave-Coral I	Mountai	n
SITE	SPECIFIC IN	PUT DATA				N	IOISE N	/IODE	L INPUTS	5	
Highway Data					Site Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt): 1	4,600 vehicles	3				,	Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2 A	(xles	15		
Peak H	lour Volume:	1,358 vehicles	S		He	avy Tru	cks (3+ A	(xles	15		
Ve	hicle Speed:	50 mph		H	Vehicle I	Niv					
Near/Far La	ne Distance:	51 feet		ŀ		cleType		Dav	Evening	Night	Daily
Site Data								77.5%		9.6%	,
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		54.0 feet		-	Noise So			. /! 6	41		
Centerline Dist.	to Observer:	54.0 feet		ľ	Noise 50			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000 297			
Observer Height	(Above Pad):	5.0 feet				n Truck	o		Grade Adj	undman	4.00
P	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.0	006	Grade Adj	usuneni	. 0.0
Ro	ad Elevation:	0.0 feet			Lane Equ	iivaleni	Distanc	e (in	feet)		
	Road Grade:	0.0%				Auto	s: 47.	862			
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 47.	677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47.	695			
FHWA Noise Mode	el Calculations										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresn	el	Barrier Atte	en Bei	rm Atten
Autos:	70.20	-1.08		0.1	8	-1.20		-4.67	0.0	00	0.000
Medium Trucks:	81.00	-18.32		0.2	1	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-22.27		0.2	0	-1.20		-5.39	0.0	00	0.000
Unmitigated Noise	e Levels (witho	ut Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hou	r Leq Day	' I	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	68.	1	66.5		64.8		58.7		67.3		67.9
Medium Trucks:	61.	7	60.5		54.1		52.6		61.1		61.3
Heavy Trucks:	62.		61.0		52.0		53.2		61.6		61.7
Vehicle Noise:	69.	8	68.4		65.3		60.5	,	69.1		69.6
Centerline Distant	ce to Noise Co.	ntour (in feet,	)								
					dBA		dBA		60 dBA		dBA
			Ldn:	4			01		218		170
		C	NEL:	5	i0	1	09		234	5	504

	FH\	WA-RD-77-108	HIGHV	WAY N	OISE PI	REDICT	ION MC	DEL					
Road Nar	nrio: EAC21 me: Avenue 52 ent: w/o Monroe	e St.			Project Name: The Wave-Coral Mountain Job Number: 12642								
SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	S			
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	/ Traffic (Adt):	11,500 vehicle	3					Autos:	15				
Peak Hou	r Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15				
Peak I	Hour Volume:	1,070 vehicle	S		He	avy Tru	cks (3+	Axles):	15				
V	ehicle Speed:	50 mph		ν	ehicle	Mix							
Near/Far L	ane Distance:	51 feet		F		icleType	9	Dav	Evening	Night	Dailv		
Site Data							Autos:	77.5%	-	9.6%	97.429		
R:	arrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.849		
Barrier Type (0-V		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749		
	ist. to Barrier:	54.0 feet			Inina C	ource El	lovotion	o (in fe	na41				
Centerline Dist	to Observer:	54.0 feet		^	ioise so	Auto		.000	et)				
Barrier Distance	e to Observer:	0.0 feet			11-15	Auto m Truck		.000					
Observer Height	(Above Pad):	5.0 feet						.297	Crada Ad	ii iatmant			
F	Pad Elevation:	0.0 feet			Heat	y Truck	S: 8	.000	Grade Ad	usunen	. 0.0		
Road Elevation: 0.0 feet				L	ane Eq	uivalent	t Distan	ce (in f	eet)				
	Road Grade:	0.0%				Auto	s: 47	.862					
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677					
	Right View:	90.0 degree	es		Hear	y Truck	s: 47	.695					
FHWA Noise Mod	del Calculation	s											
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres		Barrier Att	en Ber	m Atten		
Autos	70.20	-2.12		0.18	3	-1.20		-4.67	0.0	000	0.00		
Medium Trucks	: 81.00	-19.36		0.21		-1.20		-4.87	0.0	000	0.00		
Heavy Trucks	: 85.38	-23.31		0.20	)	-1.20		-5.39	0.0	000	0.00		
Unmitigated Nois	e Levels (with	out Topo and	barrier	attenu	ıation)								
VehicleType	Leq Peak Hou	.,.,		Leq Ev			Night		Ldn		VEL		
Autos			65.5		63.7		57.		66.3		66.		
Medium Trucks			59.5		53.1		51.	-	60.0		60.		
Heavy Trucks			60.0 67.3		50.9		52.		60.5		60.		
Vehicle Noise					64.3		59.	5	68.1	1	68.		
Centerline Distan	ice to Noise Co	ontour (in feet	)	70 -	ID A	er.	AD A	1 -	O ADA		dD1		
			Later	70 d			dBA	6	i0 dBA	1	dBA 00		
		0	Ldn:	40		-	36		186				
		C	NEL:	43	)	٤	93		200	4	30		

FH	IWA-RD-77-108	HIGHWA	AY NO	DISE PRE	DICTIO	N MODE	L				
Scenario: EAC21				F	Project N	ame: The	Wave-Cora	l Mounta	in		
Road Name: Avenue 5	-				Job Nur	nber: 126	42				
Road Segment: e/o Monro	e St.										
SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)								
Highway Data			S	ite Condi	tions (H	ard = 10	Soft = 15)				
Average Daily Traffic (Adt):	11,100 vehicle	s				Aut	los: 15				
Peak Hour Percentage:	9.30%			Medi	um Truc	ks (2 Axle	es): 15				
Peak Hour Volume:	1,032 vehicle	s		Hear	y Truck	3+ Axle	es): 15				
Vehicle Speed:	50 mph		V	ehicle Mi	×						
Near/Far Lane Distance:	43 feet		F	Vehici	eType	Da	y Evening	Night	Daily		
Site Data						tos: 77	.5% 12.9%		6 97.429		
Barrier Height:	0.0 feet			Med	lium Truc	ks: 84	.8% 4.9%	10.39	6 1.849		
Barrier Type (0-Wall, 1-Berm):	0.0			He	eavy Truc	ks: 86	.5% 2.7%	10.89	6 0.749		
Centerline Dist. to Barrier:	64.0 feet		N	oise Sou	rce Elev	ations (i	n feet)				
Centerline Dist. to Observer:	64.0 feet				Autos:	0.000	)				
Barrier Distance to Observer:	0.0 feet			Medium	Trucks:	2.297	,				
Observer Height (Above Pad):	5.0 feet			Heavv	Trucks:	8.006	Grade A	djustmer	nt: 0.0		
Pad Elevation:	0.0 feet		-								
Road Elevation: 0.0 feet				ane Equi							
Road Grade:	0.0%				Autos:	60.488					
Left View:	-90.0 degre			Medium		60.341					
Right View:	90.0 degre	es		Heavy	Trucks:	60.355	)				
FHWA Noise Model Calculation											
VehicleType REMEL	Traffic Flow	Distan		Finite R		Fresnel	Barrier A		rm Atten		
Autos: 70.2			-1.34		-1.20	-4.		.000	0.00		
Medium Trucks: 81.0			-1.33		-1.20	-4.		.000	0.00		
Heavy Trucks: 85.3			-1.33		-1.20	-5.	31 0	.000	0.00		
Unmitigated Noise Levels (with											
VehicleType Leq Peak Ho	our Leq Da	y   Le 63.8	eq Eve	ening 62.0	Leq Ni	9nt 56.0	Ldn 64		CNEL 65.		
	i9.0	57.8		51.4		49.9	58		58.		
	i9.0	58.3		49.2			58		59.		
	9.4 7.1	65.7		62.6		50.5 57.8	66		66.		
Vehicle Noise: 6									50.		
	Contour (in foo	F)									
Vehicle Noise: 6	Contour (in feet	*)	70 dE	BA	65 dE	iA .	60 dBA	5	5 dBA		
	Contour (in feet	t) Ldn:	70 dE 37		65 dE 79	А	60 dBA 170	1	5 dBA 367		

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGHW	AY N	OISE PI	REDICT	ION MODEL		
	o: EAC21 e: Avenue 54 t: w/o Madiso	on St.					t Name: The I Number: 1264		Mountain
	PECIFIC IN	IPUT DATA					NOISE MOD		•
Highway Data				S	ite Con	ditions	(Hard = 10, 3	Soft = 15)	
	Percentage:	9.30%					Auto rucks (2 Axles rcks (3+ Axles	:): 15	
Veh	icle Speed:	50 mph		ν	ehicle l	Mix			
Near/Far Lar	e Distance:	51 feet				icleType	e Day	Evening	Night Daily
Site Data	Peak Hour Percentage:         9.30%           Peak Hour Volume:         1,014 vehicles           Vehicle Speed:         50 mph           Near/Far Land Distance:         51 feet           e Data         Barrier Height:         0.0 feet           arrier Type (0-Wall, 1-Berm):         0.0         54.0 feet           Centerline Dist. to Observer:         54.0 feet         54.0 feet           Barrier Distance to Observer:         0.0 feet         0.0 feet						Autos: 77.5		9.6% 97.42%
Ran	Barrier Height:				М	edium 7	rucks: 84.8	% 4.9%	10.3% 1.84%
					-	Heavy 7	rucks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dis	t. to Barrier:	54.0 feet		N	loise So	urce E	levations (in	feet)	
Barrier Distance t Observer Height (A	o Observer: Above Pad):	0.0 feet 5.0 feet			Mediu	Auto m Truck ry Truck	os: 0.000 (s: 2.297		ustment: 0.0
					ane Eq	uivalen	t Distance (ii	n feet)	
F	Road Grade:	0.0%				Auto	s: 47.862		
						m Truck ry Truck			
FHWA Noise Mode	l Calculation	s							
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresnel	Barrier Atte	n Berm Atten
Autos:	70.20	-2.35		0.18		-1.20	-4.6	7 0.0	0.000
Medium Trucks:	81.00	-19.59		0.21		-1.20	-4.8	7 0.0	0.000
Heavy Trucks:	85.38	-23.54		0.20	1	-1.20	-5.3	9 0.0	0.000
<b>Unmitigated Noise</b>	•		barrier a	attenu	ıation)				
	Leq Peak Hοι			eq Ev		Leq	Night	Ldn	CNEL
Autos:	66		65.3		63.5		57.4	66.1	66.7
Medium Trucks:	60		59.2		52.9		51.3	59.8	
Heavy Trucks:  Vehicle Noise:			59.7 67.1		50.7 64.1		51.9 59.3	60.3 67.8	
Centerline Distance					34.1		55.5	07.0	00.0
Centernile Distance	e to Moise Co	ontour (III leet)	,	70 d	BA	65	dBA	60 dBA	55 dBA
			Ldn:	39	, '		33	179	386
		CI	NEL:	42	2	1	39	193	415

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	WAY N	NOISE P	REDICT	ION M	ODEL			
Road Nam	io: EAC21 ne: Avenue 54 nt: w/o Monroe					.,		The W	ave-Coral	Mounta	ain
SITE	SPECIFIC IN	IPUT DATA				ı	IOISE	MODE	L INPUT	S	
Highway Data					Site Cor	ditions	(Hard:	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	6,500 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	605 vehicle	S		He	eavy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		+	Vehicle	Miv					
Near/Far La	ne Distance:	51 feet		-		icleType	9	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	v	9.69	,
Pa	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.39	% 1.84%
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.89	% 0.74%
Centerline Di		54.0 feet			M-! 0			(! 6	41		
Centerline Dist.	to Observer:	54.0 feet		Ľ	Noise S				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		0.000			
Observer Height	(Above Pad):	5.0 feet				m Truck	-	2.297	0	E 1	-4: 0.0
	ad Elevation:	0.0 feet			Hea	vy Truck	s: t	3.006	Grade Ad	justmei	nt: U.U
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distai	nce (in :	feet)		
	Road Grade:	0.0%				Auto	s: 47	7.862			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 47	7.677			
	Right View:	90.0 degre			Hea	vy Truck	s: 47	7.695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	snel	Barrier Att	en Be	erm Atten
Autos:	70.20	-4.59		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-21.83		0.2	1	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-25.79		0.2	0	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	r atten	uation)						
VehicleType	Leq Peak Hou	ur Leq Daj		Leq E	vening		Night		Ldn	1 .	CNEL
Autos:	64	1.6	63.0		61.2		55	.2	63.	В	64.4
Medium Trucks:		3.2	57.0		50.6		49		57.	-	57.8
Heavy Trucks:		3.6	57.5		48.5		49	••	58.		58.2
Vehicle Noise:	66	3.3	64.9		61.8	i	57	.0	65.	6	66.0
Centerline Distant	ce to Noise Co	ontour (in feet	)								
					dBA		dBA	6	60 dBA	5	i5 dBA
		_	Ldn:	_	27		59		127		274
		С	NEL:	2	19	6	33		137		294

	FHW	/A-RD-77-108	HIGHW	VAY NOIS	SE PF	REDICTION	ON MOI	DEL					
Road Name	o: EAC21 e: Avenue 58 nt: w/o Madisor	n St.					Vame: 1 Imber: 1		ave-Coral I	Mountain	1		
SITE S	SPECIFIC IN	PUT DATA				N	DISE N	IODE	LINPUTS	5			
Highway Data				Site	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	4,800 vehicles	3				/	Autos:	15				
Peak Hour	Percentage:	9.30%			Me	dium Tru	cks (2 A	(xles	15				
Peak H	our Volume:	446 vehicles			He	avy Truci	ks (3+ A	(xles	15				
Vel	hicle Speed:	45 mph		Veh	icle I	Wix							
Near/Far Lar	ne Distance:	45 feet		10		icleType		Day	Evening	Night	Daily		
Site Data						A	utos:	77.5%	12.9%	9.6%	97.429		
Bar	rier Height:	0.0 feet			Me	edium Tru	icks:	84.8%	4.9%	10.3%	1.849		
Barrier Type (0-Wa	•	0.0			F	Heavy Tru	ıcks:	86.5%	2.7%	10.8%	0.749		
Centerline Dis	. ,	51.0 feet		M-1	00.0-	ource Ele	unting	lin f-	a4\				
Centerline Dist. t	to Observer:	51.0 feet		NOI	se so				et)				
Barrier Distance t	to Observer:	0.0 feet			4 Hi	Autos m Trucks		000 297					
Observer Height (	Above Pad):	5.0 feet		, A					Crodo Ad	untmont			
Pa	d Elevation:	0.0 feet			Heav	y Trucks	. 8.0	000	Grade Adj	usimeni.	0.0		
Roa	d Elevation:	0.0 feet		Lan	e Equ	uivalent	Distano	e (in f	eet)				
F	Road Grade:	0.0%				Autos	46.0	041					
	Left View:	-90.0 degree	es.	٨	∕lediui	m Trucks	45.8	848					
	Right View:	90.0 degree	:S		Heav	y Trucks	45.8	867					
FHWA Noise Mode	l Calculations	;											
VehicleType	REMEL	Traffic Flow	Dista	nce l	Finite	Road	Fresn		Barrier Atte	en Ber	m Atten		
Autos:	68.46	-5.45		0.43		-1.20		-4.65	0.0		0.00		
Medium Trucks:	79.45	-22.69		0.46		-1.20		-4.87	0.0		0.00		
Heavy Trucks:	84.25	-26.65		0.46		-1.20		-5.42	0.0	00	0.00		
Unmitigated Noise			barrier	attenuat	ion)								
	Leq Peak Hou	.,.,		_eq Even		Leq N			Ldn		VEL		
Autos:	62.	-	60.7		58.9		52.8		61.5		62.		
Medium Trucks:	56.		54.8		48.5		46.9		55.4		55.		
Heavy Trucks: Vehicle Noise:	56. 64	•	55.8 62.7		46.7 59.5		48.0 54.8		56.3 63.4		56. 63.		
Centerline Distanc					55.5		J4.0	'	03.4	•	03.		
	e to noise Co	ntour (in feet)											
oomonino Biotano				70 dBA	\ I	65 d	BA	6	0 dBA	55	dBA		
Contonino Dictano			l dn:	70 dBA	1	65 d		6	0 dBA 86		dBA 84		

	FH	WA-RD-77-108	HIGHW	AY N	OISE PREDI	CTION MOI	DEL						
	o: EAC21							ave-Coral Mo	untain				
	e: Airport Bl.				Jo	b Number:	12642						
Road Segmer	nt: w/o Monro	e St.											
	SPECIFIC II	NPUT DATA						L INPUTS					
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	. ,	2,900 vehicle	s				Autos:						
	Percentage:	9.30%				Trucks (2 A	,						
	our Volume:	270 vehicle	S		Heavy	rucks (3+ A	(xles	15					
	hicle Speed:	50 mph		ν	ehicle Mix								
Near/Far Lai	ne Distance:	51 feet			VehicleT	/ре	Day	Evening N	ight Daily				
Site Data						Autos:	77.5%	12.9%	9.6% 97.42%				
Bai	rier Heiaht:	0.0 feet			Mediur	n Trucks:	84.8%	4.9% 1	0.3% 1.84%				
Barrier Type (0-W		0.0			Heav	/ Trucks:	86.5%	2.7% 1	0.8% 0.74%				
Centerline Dis		54.0 feet		۸	loise Source	Elevations	s (in fe	et)					
Centerline Dist.		54.0 feet			A	utos: 0.0	000						
Barrier Distance		0.0 feet			Medium Tr		297						
Observer Height (		5.0 feet			Heavy Tr	icks: 8.0	006	Grade Adjust	ment: 0.0				
Pad Elevation: 0.0 feet				-	,								
Road Elevation: 0.0 feet				L	ane Equival			eet)					
I	Road Grade:	0.0%				utos: 47.							
	Left View:	-90.0 degre			Medium Tr								
	Right View:	90.0 degre	es		Heavy Tr	icks: 47.	595						
FHWA Noise Mode													
VehicleType	REMEL	Traffic Flow	Dista		Finite Roa			Barrier Atten	Berm Atten				
Autos:	70.20			0.18			-4.67	0.000					
Medium Trucks:	81.00			0.21			-4.87	0.000					
Heavy Trucks:	85.38	-29.29		0.20	-1.	20	-5.39	0.000	0.00				
	Levels (with	out Topo and				eq Night			01/5/				
	I D1-11-	I D			ening L			Ldn	CNEL				
VehicleType	Leq Peak Ho			.cq _v	-		ļ	60.3	60				
VehicleType Autos:	6	1.1	59.5	.cq Lv	57.7	51.7		60.3	60.				
VehicleType Autos: Medium Trucks:	6 5	1.1 4.7	59.5 53.5	oy Ev	57.7 47.1	51.7 45.6	i	54.0	54.				
VehicleType Autos:	6 5 5	1.1	59.5		57.7	51.7	:		60.9 54.3 54.3				
VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	6 5 5 6	1.1 4.7 5.1 2.8	59.5 53.5 54.0 61.3	.cq	57.7 47.1 44.9	51.7 45.6 46.2	:	54.0 54.6	54. 54.				
VehicleType Autos: Medium Trucks: Heavy Trucks:	6 5 5 6	1.1 4.7 5.1 2.8	59.5 53.5 54.0 61.3	70 d	57.7 47.1 44.9 58.3	51.7 45.6 46.2	i !	54.0 54.6	54. 54.				
VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	6 5 5 6	1.1 4.7 5.1 2.8	59.5 53.5 54.0 61.3		57.7 47.1 44.9 58.3	51.7 45.6 46.2 53.5	i !	54.0 54.6 62.1	54. 54. 62.				

Wednesday, March 25, 2020

FH	WA-RD-77-108	HIGHWA	Y NOISE F	REDICT	ION MODEL		
Scenario: EAC21 Road Name: Avenue 58 Road Segment: w/o Monro	e St.				t Name: The V Number: 1264	Vave-Coral Mo 2	ountain
SITE SPECIFIC IN	IPUT DATA				NOISE MOD		
Highway Data			Site Co.	nditions	(Hard = 10, S		
Average Daily Traffic (Adt):	4,800 vehicles	3			Autos		
Peak Hour Percentage:	9.30%				rucks (2 Axles		
Peak Hour Volume:	446 vehicles	3	Н	eavy Iru	icks (3+ Axles	): 15	
Vehicle Speed: Near/Far Lane Distance:	45 mph 45 feet		Vehicle	Mix			
Near/Far Larie Distance.	45 1661		Ve	hicleTyp		-	light Daily
Site Data					Autos: 77.5		9.6% 97.42%
Barrier Height:	0.0 feet		٨	1edium 1			10.3% 1.84%
Barrier Type (0-Wall, 1-Berm):	0.0			Heavy T	rucks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dist. to Barrier:	51.0 feet		Noise S	ource E	levations (in	feet)	
Centerline Dist. to Observer:	51.0 feet			Auto	os: 0.000	,	
Barrier Distance to Observer:	0.0 feet		Medi	ım Truck	ks: 2.297		
Observer Height (Above Pad):	5.0 feet		Hea	vy Truck	ks: 8.006	Grade Adjus	tment: 0.0
Pad Elevation:	0.0 feet		I ano E	vuivalon	t Distance (in	foot)	
Road Elevation: Road Grade:	0.0 feet 0.0%		Laile L	Auto		reet)	
I eft View:	-90.0 degree		Medi	ım Truci	10.011		
Right View:	90.0 degree			vy Truck			
FHWA Noise Model Calculation	s						
VehicleType REMEL	Traffic Flow	Distan	ce Finite	e Road	Fresnel	Barrier Atten	Berm Atten
Autos: 68.46	-5.45		0.43	-1.20	-4.65	0.000	0.000
Medium Trucks: 79.45			0.46	-1.20	-4.87		
Heavy Trucks: 84.25	-26.65		0.46	-1.20	-5.42	0.000	0.000
Unmitigated Noise Levels (with	out Topo and	barrier a	ttenuation)				
VehicleType Leq Peak Ho			q Evening		Night	Ldn	CNEL
		60.7	58.9	-	52.8	61.5	62.1
		54.8	48.		46.9	55.4	55.6
Heavy Trucks: 56		55.8 62.7	46.° 59.		48.0 54.8	56.3 63.4	56.5 63.8
· -							
Vehicle Noise: 64			35.	,	01.0		
· —		)					55 dBA
Vehicle Noise: 64	ontour (in feet)	)	70 dBA 18	65	dBA	60 dBA 86	55 dBA 184

	FH\	WA-RD-77-108	HIGH	1 YAW	NOISE P	REDICT	ION MC	DEL			
Road Nam	io: EAC21 ne: Avenue 58 nt: w/o Jackso	n St.					t Name: lumber:		ave-Coral	Mountai	in
SITE S	SPECIFIC IN	IPUT DATA				ı	NOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	2,700 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles).	15		
Peak H	lour Volume:	251 vehicle	S		He	eavy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	50 mph		F	Vehicle	Miv					
Near/Far La	ne Distance:	36 feet		F		icleType	9	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	,
Par	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	6 1.84%
Barrier Type (0-W		0.0 1661				Heavy T	rucks:	86.5%	2.7%	10.8%	6 0.74%
Centerline Dis		59.0 feet		-							
Centerline Dist.	to Observer:	59.0 feet		F	Noise S			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (	Above Pad):	5.0 feet				m Truck			Grade Ad	livotmon	4.00
Pa	ad Elevation:	0.0 feet			Hea	vy Truck	is: 8	.006	Grade Ad	justrnen	n. 0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distar	ce (in	feet)		
I	Road Grade:	0.0%				Auto	s: 56	.409			
	Left View:	-90.0 degre	es		Mediu	m Truck	rs: 56	.252			
	Right View:	90.0 degre	es		Hea	vy Truck	rs: 56	.268			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-8.41		-0.8	9	-1.20		-4.69	0.0	000	0.000
Medium Trucks:	81.00	-25.65		-0.8		-1.20		-4.88		000	0.000
Heavy Trucks:	85.38	-29.60		-0.8	7	-1.20		-5.35	0.0	000	0.000
Unmitigated Noise											
VehicleType	Leq Peak Hou			Leq E	vening		Night		Ldn	1	CNEL
Autos:	59		58.1		56.4		50.		58.		59.5
Medium Trucks:		.3	52.1		45.7		44.	_	52.	-	52.9
Heavy Trucks: Vehicle Noise:	53 61	i.7	52.6 60.0		43.6 56.9		44. 52.	_	53.		53.3 61.2
Centerline Distance	-				00.0		02.		00.		01.2
Centerline Distant	e to Noise Co	mour (iii reet	_	70	dBA	65	dBA	_	60 dBA	55	5 dBA
			Ldn:		4		30	1 '	66	1	141
		С	NEL:	1	5		33		70		152

	FHV	VA-RD-77-108	HIGI	I YAWH	NOISE PI	REDICT	ION MO	DDEL			
	o: EAC21								ave-Coral	Mountair	1
Road Nam	e: Avenue 60					Job ∧	lumber:	12642			
Road Segmer	nt: w/o Madiso	n St.									
	SPECIFIC IN	PUT DATA			o:- o				L INPUT	s	
Highway Data					Site Con	ditions	(Hard :				
Average Daily	Traffic (Adt):	700 vehicles	S					Autos:			
Peak Hour	Percentage:	9.30%				dium Tr	,	,			
Peak H	our Volume:	65 vehicles	S		He	avy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	40 mph		t	Vehicle I	Vlix					
Near/Far La	ne Distance:	23 feet				ісlеТуре		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.42%
Rai	rier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			1	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	. ,	40.0 feet		-	Noise Sc	roo El	lovetio	an (in f	0041		
Centerline Dist.	to Observer:	40.0 feet		-	Noise 30	Auto			eet)		
Barrier Distance	to Observer:	0.0 feet			A deceller	Auto m Truck		0.000			
Observer Height (	Above Pad):	5.0 feet						.297	Grade Ad	i rotmont	. 0 0
Pa	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	1.006	Grade Adj	ustment	0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalent	Distar	nce (in	feet)		
ı	Road Grade:	0.0%				Auto	s: 38	3.636			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 38	3.406			
	Right View:	90.0 degree	es		Heav	y Truck	s: 38	3.429			
FHWA Noise Mode	el Calculation:	S									
VehicleType	REMEL	Traffic Flow	Di	stance		Road	Fres		Barrier Att		m Atten
Autos:	66.51	-13.30		1.5		-1.20		-4.59		000	0.00
Medium Trucks:	77.72	-30.54		1.6	-	-1.20		-4.87		000	0.000
Heavy Trucks:	82.99	-34.50		1.6	1	-1.20		-5.56	0.0	000	0.000
Unmitigated Noise	•	-	_								
	Leq Peak Hou	.,.,		Leq E	vening	Leq	Night		Ldn		VEL
Autos:	53		52.0		50.2		44	_	52.8		53.4
Medium Trucks:	47		46.4		40.0		38		47.0		47.2
Heavy Trucks: Vehicle Noise:	48 55		47.8 54.2		38.8 50.9		40		48.4 54.9		48.5 55.1
Centerline Distance					50.9		40		54.8	,	JJ.
Centernine Distant	e to worse Co	intour (In feet,	,	70	dBA	65	dBA		60 dBA	55	dBA
			Ldn:		4		8		18	1	39

Road Nam	o: EAC21 e: Avenue 58 nt: e/o Jacksor	ı St.						e: The W er: 12642	/ave-Cora	l Mounta	in
SITE S	SPECIFIC IN	PUT DATA				ľ	NOISI	MODE	L INPUT	rs	
Highway Data				Si	te Cond	ditions	(Haro	l = 10, S	oft = 15)		
Peak H	Percentage: our Volume:	2,100 vehicles 9.30% 195 vehicles						Autos 2 Axles) + Axles)	: 15		
Vel Near/Far I ai	hicle Speed:	50 mph 36 feet		Ve	ehicle N	lix					
Near/Far Lar	ne Distance:	36 leet			Vehic	cleType		Day	Evening		Daily
Site Data							Autos:				
Bar	rier Height:	0.0 feet				edium T					
Barrier Type (0-W	all, 1-Berm):	0.0			Н	leavy T	rucks.	86.59	6 2.7%	10.89	6 0.74%
Centerline Dis		59.0 feet		N	oise So	urce E	levatio	ons (in f	eet)		
	to Observer:	59.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet		Li		y Truck	(S:	0.000 2.297 8.006	Grade A	djustmer	nt: 0.0
	Road Grade:	0.0%		Г		Auto		56.409	,		
	Left View: Right View:	-90.0 degree 90.0 degree			Mediun Heav	n Truck y Truck		56.252 56.268			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Distanc		Finite I		Fre	esnel	Barrier A		rm Atten
Autos:	70.20	-9.50		0.89		-1.20		-4.69		.000	0.00
Medium Trucks: Heavy Trucks:	81.00 85.38	-26.74 -30.70		0.87 0.87		-1.20 -1.20		-4.88 -5.35	-	.000	0.00
Unmitigated Noise	Levels (with	out Topo and L	parrier at	tenu	ation)						
VehicleType	Leq Peak Hou	r Leq Day	Le	q Eve	ening	Leq	Night		Ldn	(	CNEL
Autos:	58	.6 5	57.0		55.3		4	9.2	57	.8	58.
Medium Trucks:	52		51.0		44.6			3.1	51		51.
Heavy Trucks:	52		51.5		42.5			3.7	52		52.
Vehicle Noise:	60	.3	58.9		55.8		5	1.0	59	.6	60.
Centerline Distanc	e to Noise Co	ntour (in feet)									
				70 dE	3A	65	dBA		60 dBA	5	5 dBA
			Ldn:	12		_	26		55		119
		CN	IEL:	13		2	28		60		128

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Wednesday, March 25, 2020

F	HWA-RD-77-	108 HIGH	WAY N	OISE P	REDICTIO	ON MOD	EL			
Scenario: EAC21 Road Name: Avenue 6 Road Segment: w/o Mont	-					Vame: T mber: 1		ave-Coral I	Mountain	
SITE SPECIFIC	INPUT DAT	Ά			N	DISE M	ODE	LINPUTS	5	
Highway Data				Site Cor	ditions (i	Hard = 1	10, So	ft = 15)		
Average Daily Traffic (Adt).	4,700 veh	icles				Α	lutos:	15		
Peak Hour Percentage.	9.30%			Me	edium Tru	cks (2 A.	xles):	15		
Peak Hour Volume	437 veh	icles		He	eavy Truck	ks (3+ A.	xles):	15		
Vehicle Speed.	45 mpl	n	-	/ehicle	Miv					
Near/Far Lane Distance	45 feet				icleType	1	Dav	Evening	Night	Daily
Site Data							77.5%	0	9.6%	97.42%
Barrier Height	0.0 fee	*		M	ledium Tru	ıcks: 8	34.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)		, L			Heavy Tru	icks: 8	36.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier		et		Vaisa S	ource Ele	vations	(in fo	of)		
Centerline Dist. to Observer	51.0 fee	et	ŀ.	10/30 01	Autos		•	Ci)		
Barrier Distance to Observer	0.0 fee	et		Madii	m Trucks					
Observer Height (Above Pad)	5.0 fee	et			vy Trucks			Grade Adj	ustment.	0.0
Pad Elevation	0.0 fee	et	L		*				uoumom.	0.0
Road Elevation	0.0 fee	et	1	.ane Eq	uivalent l	Distance	e (in f	eet)		
Road Grade	0.0%				Autos.	10.0				
Left View	-90.0 de	grees			m Trucks		48			
Right View	90.0 de	grees		Hea	vy Trucks	45.8	67			
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flo	w Dis	stance	Finite	Road	Fresne	el	Barrier Atte	en Berr	n Atten
Autos: 68.4	16 -5	.55	0.4	3	-1.20	-	4.65	0.0	100	0.000
Medium Trucks: 79.4	15 -22	.78	0.4	3	-1.20	-	4.87	0.0	00	0.000
Heavy Trucks: 84.2	25 -26	.74	0.4	3	-1.20	-	5.42	0.0	00	0.000
Unmitigated Noise Levels (wi	thout Topo a	nd barri	er atten	uation)						
VehicleType Leq Peak H	our Leq	Day	Leq E	rening	Leq N	light		Ldn	C٨	IEL
	62.1	60.6		58.8		52.7		61.4		62.0
	55.9	54.7		48.4		46.8		55.3		55.5
Heavy Trucks:	56.8	55.7		46.6	i	47.9		56.2	!	56.4
Vehicle Noise:	64.0	62.6		59.4		54.7		63.3	3	63.7
Centerline Distance to Noise	Contour (in f	eet)								
			70 (		65 d		6	0 dBA	55 (	
		Ldn:	1	-	39			84		32
		CNEL:	1	9	42	!		91	19	95

	FH\	WA-RD-77-108	HIGH	WAY I	NOISE P	REDICT	ION MO	DDEL			
Road Nan	io: EAC21 ne: Avenue 60 nt: e/o Monroe	St.					t Name: lumber:		ave-Coral	Mountair	1
SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data					Site Cor	nditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	4,400 vehicle	s					Autos	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles).	15		
Peak H	lour Volume:	409 vehicle	s		He	eavy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	50 mph		H	Vehicle	Miv					
Near/Far La	ne Distance:	48 feet		ŀ		icleType	,	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	,
Pa	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0 1661				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		64.0 feet		-							
Centerline Dist.	to Observer:	64.0 feet		-	Noise S				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		0.000			
Observer Height	(Above Pad):	5.0 feet				ım Truck	-	.297	Crodo Ad	ii ratmant	
	ad Elevation:	0.0 feet			Hea	vy Truck	s: 8	1.006	Grade Ad	justment	: 0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distar	nce (in	feet)		
	Road Grade:	0.0%				Auto	s: 59	.540			
	Left View:	-90.0 degree	es		Mediu	ım Truck	s: 59	.391			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 59	9.406			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres		Barrier Att	en Ber	m Atten
Autos:	70.20	-6.29		-1.2	24	-1.20		-4.70	0.0	000	0.000
Medium Trucks:	81.00	-23.53		-1.2	_	-1.20		-4.88		000	0.000
Heavy Trucks:	85.38	-27.48		-1.2	23	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er atter	nuation)						
VehicleType	Leq Peak Hou			Leq E	vening		Night		Ldn	1	NEL
Autos:	61		59.9		58.1		52		60.7		61.3
Medium Trucks:	55		53.9		47.5		45		54.4		54.6
Heavy Trucks:	55		54.4		45.3		46		54.9		55.1
Vehicle Noise:	63		61.7		58.7		53	.9	62.5	)	62.9
Centerline Distant	ce to Noise Co	ontour (in feet	)								
			!		dBA		dBA	"	60 dBA	1	dBA
			Ldn:		20		13		93	_	201
		C	NEL:	2	22	4	17		100	2	16

	FH\	WA-RD-77-108	HIGH	WAY N	DISE P	REDICT	ION MO	DEL			
Road Nan	io: EACP21 ne: Jefferson S nt: n/o Avenue						t Name: lumber:		ave-Coral I	Mountai	n
SITE	SPECIFIC IN	IPUT DATA				ı	IOISE I	MODE	L INPUTS	S	
Highway Data				S	ite Cor	ditions	(Hard =	10, Sc	oft = 15)		
	Traffic (Adt): Percentage: lour Volume:	23,000 vehicle 9.30% 2,139 vehicle					ucks (2 . cks (3+ .	,	15		
Ve	hicle Speed:	55 mph		1/	ehicle	Miss					
Near/Far La	ne Distance:	71 feet				icleType	,	Dav	Evening	Night	Daily
Site Data					*01.		Autos:	77.5%	-	9.6%	,
Pa	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	
Barrier Type (0-VI	/all, 1-Berm):	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	
Centerline Di		64.0 feet		Ν	oise S	ource E	levation	s (in fe	eet)		
Centerline Dist.		64.0 feet				Auto	s: 0.	000			
Barrier Distance		0.0 feet			Mediu	m Truck	s: 2.	297			
Observer Height	(Above Pad): ad Flevation:	5.0 feet 0.0 feet			Hea	vy Truck	s: 8.	006	Grade Adj	ustmen	: 0.0
	ad Elevation:	0.0 feet		L	ane Ea	uivalen	t Distan	ce (in i	feet)		
	Road Grade:	0.0%				Auto	s: 53	486			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 53	320			
	Right View:	90.0 degre			Hea	vy Truck	s: 53	337			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresi	nel	Barrier Atte	en Be	rm Atten
Autos:	71.78	0.48		-0.54		-1.20		-4.70	0.0	000	0.000
Medium Trucks:	82.40	-16.76		-0.52		-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	86.40	-20.71		-0.52		-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	er attenu	ation)						
VehicleType	Leq Peak Hou			Leq Ev			Night		Ldn		NEL
Autos:		).5	68.9		67.2		61.		69.7		70.3
Medium Trucks:		3.9	62.7		56.4		54.	-	63.3		63.5
Heavy Trucks:	64		62.9		53.8		55.		63.4		63.5
Vehicle Noise:		2.1	70.7		67.7		62.	В	71.4	l .	71.9
Centerline Distant	ce to Noise Co	ontour (in feet	:)					1		1	
				70 di			dBA	6	60 dBA		dBA
		_	Ldn:	79			70		367		91
		С	NEL:	85		1	83		395	8	351

	- FH	WA-RD-77	-108 HIGI	TWAT	OISE PR	CEDIC I	ON MC	DEL			
	o: EACP21								ave-Cora	Mount	tain
	e: Jefferson S					Job ∧	lumber:	12642			
Road Segmer	t: n/o Avenue	e 50									
	SPECIFIC II	NPUT DA	TA						L INPUT	'S	
Highway Data					Site Con	ditions	(Hard :	= 10, S			
Average Daily			nicles					Autos			
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2	Axles)			
Peak H	our Volume:	2,985 vel	nicles		He	avy Tru	cks (3+	Axles)	15		
	hicle Speed:	55 mp	h	- 1	/ehicle I	Лix					
Near/Far Lai	ne Distance:	71 fee	t		Vehi	cleType		Day	Evening	Nigh	t Daily
Site Data							Autos:	77.59	6 12.9%	9.6	3% 97.429
Rai	rier Heiaht:	0.0 fe	et		Me	edium T	rucks:	84.89	4.9%	10.3	3% 1.849
Barrier Type (0-W	all, 1-Berm):	0.0			F	leavy T	rucks:	86.5%	6 2.7%	10.8	3% 0.749
Centerline Dis		64.0 fe	et	1	Voise So	urce El	evatio	ns (in f	eet)		
Centerline Dist.		64.0 fe	et			Auto	s: 0	0.000			
Barrier Distance		0.0 fe	et		Mediu	n Truck		.297			
Observer Height (	,	5.0 fe				y Truck		3.006	Grade A	djustme	ent: 0.0
	d Elevation:	0.0 fe		-		_					
	d Elevation:	0.0 fe	et	μ'	.ane Equ				teet)		
I	Road Grade:	0.0%				Auto		3.486			
	Left View:	-90.0 de	-			n Truck		3.320			
	Right View:	90.0 de	egrees		Heav	y Truck	s: 50	3.337			
FHWA Noise Mode											
VehicleType	REMEL	Traffic FI		stance	Finite		Fres		Barrier A		Berm Atten
Autos:	71.78		1.93	-0.5		-1.20		-4.70	-	.000	0.00
Medium Trucks:	82.40		5.31	-0.5	_	-1.20		-4.88	0	.000	0.00
Heavy Trucks:	86.40	) -1	9.27	-0.5	2	-1.20		-5.31	0	.000	0.00
Unmitigated Noise											
	Leq Peak Ho		Day	Leq E	ening/	Leq	Night		Ldn		CNEL
Autos:		2.0	70.4		68.6		62		71	_	71.
Medium Trucks:	-	5.4	64.2		57.8		56		64		65.
Heavy Trucks:		5.4	64.3		55.3		56		64		65.
Vehicle Noise:		3.5	72.1		69.1		64	.3	72	.8	73
Centerline Distanc	e to Noise C	ontour (in	feet)	70	·D.4		10.4				ee 10.4
			1	70 0			dBA	1	60 dBA	1	55 dBA
			I dn:	9	9	2	13		458		988
			CNFI:	10		_	29		493		1.063

Wednesday, March 25, 2020

	FH	WA-RD-77-10	B HIGI	HWAY I	NOISE PI	REDICT	ION MO	DDEL			
Road Nan	io: EACP21 ne: Jefferson \$ nt: n/o Avenue							The W 12642	ave-Coral	Mountair	1
	SPECIFIC II	NPUT DATA							L INPUT	S	
Highway Data					Site Con	aitions	(Hard :				
Average Daily	Traffic (Adt):	18,600 vehicle	es					Autos:	15		
	Percentage:	9.30%				edium Tr					
Peak F	lour Volume:	1,730 vehicle	es		He	eavy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	55 mph		ŀ	Vehicle I	Mix					
Near/Far La	ne Distance:	71 feet		ŀ		icleType		Dav	Evening	Night	Dailv
Site Data							Autos:	77.5%	12.9%	9.6%	97.42%
Ra	rrier Height:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			- 1	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		64.0 feet		ŀ					.,		
Centerline Dist.	to Observer:	64.0 feet		ŀ	Noise So				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		0.000			
Observer Height	(Above Pad):	5.0 feet				m Truck		2.297	0	E	
	ad Elevation:	0.0 feet			Heal	vy Truck	s: e	3.006	Grade Ad	yustment	. 0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalent	Distar	nce (in t	eet)		
	Road Grade:	0.0%				Auto	s: 53	3.486			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 53	3.320			
	Right View:	90.0 degre	es		Heav	vy Truck	s: 53	3.337			
FHWA Noise Mode	el Calculation	15									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Bei	m Atten
Autos:	71.78	3 -0.44	1	-0.5	54	-1.20		-4.70	0.0	000	0.000
Medium Trucks:	82.40	-17.68	3	-0.5	52	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	86.40	-21.64	1	-0.5	52	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Topo and	l barri	er atter	nuation)						
VehicleType	Leq Peak Ho			Leq E	vening		Night		Ldn		NEL
Autos:		9.6	68.0		66.2		60		68.8		69.4
Medium Trucks:	-	3.0	61.8		55.4		53		62.4		62.6
Heavy Trucks:	6	3.0	61.9		52.9		54	.1	62.	-	62.6
Vehicle Noise:	7	1.2	69.7		66.8		61	.9	70.	5	70.9
Centerline Distand	ce to Noise C	ontour (in fee	t)								
					dBA		dBA	6	0 dBA	1	dBA
			Ldn:		39		48		319	-	87
		C	NEL:	7	74	1	59		343	7	39

	FHV	VA-RD-77-108	HIGHV	VAY N	IOISE PR	REDICT	ON MC	DEL			
Road Nar	rio: EACP21 ne: Madison St ent: n/o Avenue						Name: lumber:		/ave-Coral I	Mountai	n
SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUTS	5	
Highway Data					Site Cond	ditions	(Hard =	: 10, S	oft = 15)		
Average Daily	Traffic (Adt):	8,300 vehicles	S					Autos.	: 15		
Peak Hou	Percentage:	9.30%			Med	dium Tr	ucks (2	Axles)	: 15		
Peak I	Hour Volume:	772 vehicles	3		He	avy Truc	cks (3+	Axles)	: 15		
Ve	ehicle Speed:	50 mph			Vehicle N	Niv					
Near/Far La	ane Distance:	51 feet		F		cleType		Dav	Evening	Niaht	Dailv
Site Data					*0///		Autos:	77.5%		9.6%	. ,
Rs	rrier Heiaht:	0.0 feet			Me	edium T	rucks:	84.89	6 4.9%	10.3%	1.84%
Barrier Type (0-V		0.0			F	leavy T	rucks:	86.5%	6 2.7%	10.8%	0.74%
,,,,	ist. to Barrier:	54.0 feet		- 1	M-! 0-			- /! #	41		
Centerline Dist.	to Observer:	54.0 feet		Ľ	Noise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height	(Above Pad):	5.0 feet				n Truck		.297	0		4.00
	Pad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Adj	ustmen	t: U.U
Ro	ad Elevation:	0.0 feet		1	Lane Equ	iivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto.	s: 47	.862			
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 47	.677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47	.695			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	nel	Barrier Atte	en Be	rm Atten
Autos:	10.20	-3.53		0.1	8	-1.20		-4.67	0.0	00	0.000
Medium Trucks:		-20.77		0.2	1	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-24.73		0.2	0	-1.20		-5.39	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	′ L	Leq E	vening	Leq	Night		Ldn	С	NEL
Autos:	65	.7	64.1		62.3		56.	2	64.9	)	65.5
Medium Trucks:	59	.2	58.0		51.7		50.	1	58.6	i	58.8
Heavy Trucks:			58.5		49.5		50.	_	59.1		59.2
Vehicle Noise:	67	.4	65.9		62.9		58.	1	66.6	i	67.1
Centerline Distan	ce to Noise Co	ontour (in feet,	)								
				70 0	dBA	65	dBA		60 dBA	55	dBA
			Ldn:	3	_		9		150		322
		C	NEL:	3	5	7	5		161	;	346

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIGH	WAY N	OISE PI	REDICTI	ON MO	DEL			
	o: EACP21 e: Madison St. nt: n/o Avenue						Name: lumber:		ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	7,800 vehicle	S					Autos:	15		
Peak Hour	Percentage:	9.30%				edium Tru			15		
Peak H	our Volume:	725 vehicle	3		He	avy Truc	cks (3+.	Axles):	15		
Vel	hicle Speed:	50 mph		V	ehicle i	Miv					
Near/Far Lar	ne Distance:	51 feet		ř		icleType		Day	Evening	Night	Daily
Site Data						-	Autos:	77.5%	12.9%	9.6%	97.429
Rar	rier Height:	0.0 feet			М	edium Ti	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-Wi	-	0.0				Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis	st. to Barrier:	54.0 feet		Ν	loise So	ource El	evation	s (in fe	et)		
Centerline Dist. t	to Observer:	54.0 feet				Auto	s: 0.	000	,		
Barrier Distance t	to Observer:	0.0 feet			Mediu	m Truck		297			
Observer Height (	Above Pad):	5.0 feet				vy Truck		006	Grade Ad	iustment	0.0
Pa	nd Elevation:	0.0 feet				•					
	nd Elevation:	0.0 feet		L	ane Eq	uivalent			eet)		
F	Road Grade:	0.0%				Auto		.862			
	Left View:	-90.0 degree	es			m Truck		.677			
	Right View:	90.0 degree	es		Hear	y Truck:	s: 47	.695			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Dis	tance		Road	Fresi		Barrier Att		m Atten
Autos:	70.20	-3.80		0.18		-1.20		-4.67	0.0		0.00
Medium Trucks:	81.00	-21.04		0.21		-1.20		-4.87		000	0.00
Heavy Trucks:	85.38	-25.00		0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	•							_			
	Leq Peak Hou	.,.,		Leq Ev			Night	_	Ldn 64.6		VEL 65.
Autos: Medium Trucks:	65 59		63.8 57.8		62.0 51.4		56. 49.		58.3		58.
			58.3		49.2			-	58.8		
Heavy Trucks: Vehicle Noise:	59 67		65.6		62.6		50. 57.		66.4		59. 66.
Centerline Distanc	e to Noise Co	ntour (in feet	)								
		( 100)		70 di	BA	65	dBA	6	0 dBA	55	dBA
			Ldn:	31		6	7		143	3	09
			NFI:	33			2		154		32

FH	WA-RD-77-108 H	IGHWAY I	NOISE PR	REDICTION	N MODEL		
Scenario: EACP21 Road Name: Madison S Road Segment: n/o Avenue					ame: The W nber: 12642	/ave-Coral M	ountain
SITE SPECIFIC II	NPUT DATA					L INPUTS	
Highway Data			Site Con	ditions (H	ard = 10, S	oft = 15)	
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume: Vehicle Speed:	9,500 vehicles 9.30% 884 vehicles 50 mph	-		avy Trucks	Autos (s (2 Axles) (3+ Axles)	: 15	
Near/Far Lane Distance:	51 feet	ŀ	Vehi	cleType	Day	Evening I	Night Daily
Site Data				Aut	os: 77.59	-	9.6% 97.42%
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0			edium Truc Heavy Truc			10.3% 1.84% 10.8% 0.74%
Centerline Dist. to Barrier:	54.0 feet	ŀ	Noise So	urce Elev	ations (in f	eet)	
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation:	54.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet	-	Heav	Autos: n Trucks: y Trucks:	0.000 2.297 8.006	Grade Adju	stment: 0.0
Road Elevation. Road Grade:	0.0 reet	F	Lane Lye	Autos:	47.862	iccij	
Left View: Right View:	-90.0 degrees 90.0 degrees			n Trucks: y Trucks:	47.677 47.695		
FHWA Noise Model Calculation	ıs						
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atter	Berm Atten
Autos: 70.20	-2.95	0.1	8	-1.20	-4.67	0.00	0.000
Medium Trucks: 81.00	-20.18	0.2	1	-1.20	-4.87	0.00	0.000
Heavy Trucks: 85.38	-24.14	0.2	10	-1.20	-5.39	0.00	0.000
Unmitigated Noise Levels (with	out Topo and ba	arrier atter	uation)				
VehicleType Leq Peak Ho	ur Leq Day	Leq E	vening	Leq Nig	ght	Ldn	CNEL
Autos: 6	6.2 64	1.7	62.9		56.8	65.5	66.1
		3.6	52.3		50.7	59.2	59.4
		9.1	50.1		51.3	59.7	59.8
Vehicle Noise: 6	7.9 66	6.5	63.5		58.7	67.2	67.7
Centerline Distance to Noise C	ontour (in feet)						
	Lo		dBA 85	65 dB 76	A	60 dBA 164	55 dBA 353
	CNE	EL: 3	8	82		176	379

Wednesday, March 25, 2020

FH	WA-RD-77-108 HI	IGHWAY	NOISE PI	REDICTION	ON MODEL		
Scenario: EACP21 Road Name: Madison St Road Segment: n/o Airport	-				Vame: The I Imber: 1264	Wave-Coral Mo 2	ountain
SITE SPECIFIC IN	IPUT DATA			N	DISE MOD	EL INPUTS	
Highway Data			Site Con	ditions (	Hard = 10, 3	Soft = 15)	
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	14,400 vehicles 9.30% 1,339 vehicles				Auto cks (2 Axles ks (3+ Axles	s): 15	
Vehicle Speed:	50 mph		Vehicle I	Miv			
Near/Far Lane Distance:	51 feet			icleType	Dav	Evening 1	Vight Daily
Site Data					utos: 77.5		9.6% 97.42%
Barrier Height:	0.0 feet		М	edium Tr	ucks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-Wall, 1-Berm):	0.0			Heavy Tr	ucks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dist. to Barrier:	54.0 feet		Noise Sc	ource Fle	vations (in	feet)	
Centerline Dist. to Observer:	54.0 feet		710700 00	Autos		7001)	
Barrier Distance to Observer:	0.0 feet		Madiu	m Trucks			
Observer Height (Above Pad):	5.0 feet			vy Trucks		Grade Adjus	stment: 0.0
Pad Elevation:	0.0 feet					•	
Road Elevation:	0.0 feet		Lane Eq		Distance (ii	n feet)	
Road Grade:	0.0%			Autos			
Left View:	-90.0 degrees			m Trucks			
Right View:	90.0 degrees		Heav	y Trucks	47.695		
FHWA Noise Model Calculation	s						
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten
Autos: 70.20	-1.14	0.	18	-1.20	-4.6	7 0.00	0.000
Medium Trucks: 81.00	-18.38	0.:	21	-1.20	-4.8	7 0.00	0.000
Heavy Trucks: 85.38	-22.33	0.:	20	-1.20	-5.3	9 0.00	0.000
Unmitigated Noise Levels (with	out Topo and ba	rrier atte	nuation)				
VehicleType Leq Peak Hot			vening	Leq N		Ldn	CNEL
	1.0 66		64.7		58.6	67.3	67.9
	.6 60		54.1		52.5	61.0	61.2
	2.0 60		51.9		53.2	61.5	61.6
Vehicle Noise: 69	0.7 68	1.3	65.3		60.5	69.0	69.5
Centerline Distance to Noise Co	ontour (in feet)						
	<u></u>	1	dBA	65 d		60 dBA	55 dBA
	La		17	10	-	216	465
	CNE	L:	50	10	8	232	500

	FHW	A-RD-77-108	HIGHV	VAY N	IOISE PF	REDICT	ON MO	DEL			
Road Nam	rio: EACP21 ne: Madison St. nt: n/o Avenue 5	58					Name: 'umber:		ave-Coral N	Mountair	n
SITE	SPECIFIC IN	PUT DATA				N	IOISE N	/IODE	L INPUTS	;	
Highway Data					Site Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt): 1:	2,100 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2 A	(xles	15		
Peak H	lour Volume:	1,125 vehicles	3		He	avy Tru	cks (3+ A	(xles	15		
Ve	hicle Speed:	50 mph		-	Vehicle I	Niv					
Near/Far La	ne Distance:	51 feet		F		cleType		Dav	Evening	Night	Daily
Site Data					*0111			77.5%		9.6%	,
Pa	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		54.0 feet		-					-0		
Centerline Dist.	to Observer:	54.0 feet		Ľ	Noise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000 297			
Observer Height	(Above Pad):	5.0 feet				n Truck	o		Crada Adi	o t m o n t	
P	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.	006	Grade Adj	usuneni	. 0.0
Ro	ad Elevation:	0.0 feet		1	Lane Equ	ıivaleni	Distant	e (in	feet)		
	Road Grade:	0.0%				Auto	s: 47.	862			
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 47.	677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47.	695			
FHWA Noise Mode	el Calculations										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresn	el	Barrier Atte	en Ber	rm Atten
Autos:	10.20	-1.90		0.1	8	-1.20		-4.67	0.0	00	0.000
Medium Trucks:	81.00	-19.13		0.2	1	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-23.09		0.2	0	-1.20		-5.39	0.0	00	0.000
Unmitigated Noise	e Levels (witho	ut Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hour	Leq Day	' L	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	67.3	3	65.7		63.9		57.9	1	66.5		67.1
Medium Trucks:	60.9	9	59.7		53.3		51.8		60.2		60.5
Heavy Trucks:			60.2		51.1		52.4		60.8		60.9
Vehicle Noise:	69.0	0	67.6		64.5		59.7	'	68.3		68.7
Centerline Distant	ce to Noise Cor	ntour (in feet,	)								
					dBA		dBA		60 dBA		dBA
			Ldn:	4		-	9		192		114
		C	VEL:	4	5	9	16		207	4	145

	FHW	A-RD-77-108 I	HIGH	WAY N	OISE PF	REDICTIO	N MOD	EL			
Road Nar	rio: EACP21 ne: Monroe St. ent: n/o Avenue 5	0					lame: Ti mber: 12		ave-Coral I	Mountair	1
	SPECIFIC INP	UT DATA							LINPUTS	S	
Highway Data				S	ite Con	ditions (l	Hard = 1	0, So	ft = 15)		
Average Daily	Traffic (Adt): 12	2,900 vehicles					Α	utos:	15		
Peak Hou	Percentage:	9.30%			Me	dium Truc	cks (2 A)	rles):	15		
Peak I	Hour Volume: 1	,200 vehicles			He	avy Truck	(S (3+ A)	rles):	15		
Ve	ehicle Speed:	50 mph		V	ehicle I	Miv					
Near/Far La	ane Distance:	43 feet		ľ		icleType	I	Day	Evening	Night	Daily
Site Data						A	ıtos: 7	7.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0 feet			Me	edium Tru	icks: 8	4.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	-	0.0			F	Heavy Tru	icks: 8	6.5%	2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	64.0 feet			laina Ca	urce Ele	vations	(in fo	041		
Centerline Dist.	to Observer:	64.0 feet		^	oise sc	Autos:			ei)		
Barrier Distance	to Observer:	0.0 feet				m Trucks:	0.0				
Observer Height	(Above Pad):	5.0 feet				y Trucks:			Grade Ad	iustmont	. 0 0
F	Pad Elevation:	0.0 feet			пеач	y Trucks.	0.0	JO	Grade Auj	usunen	. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Equ	uivalent l	Distance	e (in f	eet)		
	Road Grade:	0.0%				Autos:	60.4	88			
	Left View:	-90.0 degrees	s		Mediui	m Trucks:	60.3	41			
	Right View:	90.0 degrees	S		Heav	y Trucks:	60.3	55			
FHWA Noise Mod	el Calculations										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresne	1	Barrier Atte	en Ber	m Atten
Autos:	70.20	-1.62		-1.34		-1.20	-	4.70	0.0	000	0.000
Medium Trucks:	81.00	-18.86		-1.33		-1.20	-	4.88	0.0	000	0.000
Heavy Trucks:	85.38	-22.81		-1.33		-1.20	3	5.31	0.0	000	0.000
Unmitigated Nois	e Levels (withou	ut Topo and b	arrie	r attenu	ation)						
VehicleType	Leq Peak Hour	Leq Day		Leq Ev	ening	Leq N	light		Ldn		VEL
Autos:		-	34.5		62.7		56.6		65.3		65.9
Medium Trucks:			8.4		52.1		50.5		59.0		59.2
Heavy Trucks:	60.0	) 5	8.9		49.9		51.1		59.5	5	59.6
Vehicle Noise:	67.7	' 6	6.3		63.3		58.5		67.0	)	67.5
Centerline Distan	ce to Noise Con	tour (in feet)									
				70 d		65 di		6	0 dBA		dBA
		L	.dn:	41		87			188	4	05

CNEL:

44

Right View: 90.0 degrees VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten -1.20 0.000 Medium Trucks 79 45 -22 51 0.46 -1 20 -4 87 0.000 0.000 Heavy Trucks: -5.42 0.000 84.25 -26.47 0.46 -1.20 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour
Autos: 62.4 Leg Night CNE Leg Day Leg Evening Ldn 60.8 53.0 61.6 62.2 Medium Trucks: 56.2 55.0 48.6 47.1 55.6 55.8 Heavy Trucks: Vehicle Noise: 64.3 62.8 59.7 55.0 63.5 64.0 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA Ldn 19 41 88 189 CNEL: 44 Wednesday, March 25, 2020 FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL Scenario: FACP21 Project Name: The Wave-Coral Mountain Road Segment: n/o Avenue 52 SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS Highway Data Site Conditions (Hard = 10, Soft = 15) Autos: 15 Average Daily Traffic (Adt): 10,800 vehicles Peak Hour Percentage: Medium Trucks (2 Axles): 15

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Project Name: The Wave-Coral Mountain

NOISE MODEL INPUTS

77.5% 12.9%

0.000

2.297

8.006

45 848

45.867

Medium Trucks: 84.8% 4.9% 10.3% 1.84%

Heavy Trucks: 86.5% 2.7% 10.8% 0.74%

15

Day Evening Night Daily

Grade Adjustment: 0.0

Job Number: 12642

Site Conditions (Hard = 10, Soft = 15)

Medium Trucks (2 Axles):

Heavy Trucks (3+ Axles):

Noise Source Elevations (in feet)

Lane Equivalent Distance (in feet)

Heavy Trucks (3+ Axles):

Medium Trucks: 84.8%

Heavy Trucks: 86.5%

Noise Source Elevations (in feet)

Lane Equivalent Distance (in feet)

Autos: 60.488

Autos:

Vehicle Mix

VehicleType

Medium Trucks:

Heavy Trucks:

Medium Trucks:

Finite Road

-1.20

Leq Night 55.9

49.7

50.4

Heavy Trucks:

15

Autos: 77.5% 12.9%

0.000

2 297

8.006

60.341

60.355

-4.70

-4.88

-5.31

Day Evening Night Daily

9.6% 97.42%

2.7% 10.8% 0.74%

Grade Adjustment: 0.0

Barrier Atten Berm Atter

0.000

0.000

65.1

58.4

58.9

66.7

0.000

0.000

58.2

58.7

Autos: 46.041

Autos:

Vehicle Mix

VehicleType

Medium Trucks:

Heavy Trucks:

Medium Trucks:

Heavy Trucks:

Scenario: EACP21

Road Name: Madison St

Road Segment: n/o Avenue 60 SITE SPECIFIC INPUT DATA

Peak Hour Volume:

Vehicle Speed:

Barrier Height

Pad Elevation:

Road Elevation.

Peak Hour Volume:

Near/Far Lane Distance:

Barrier Type (0-Wall, 1-Berm):

Centerline Dist. to Barrier: Centerline Dist. to Observer:

Barrier Distance to Observer.

Observer Height (Above Pad):

FHWA Noise Model Calculations VehicleType REMEL

Autos

Medium Trucks:

Heavy Trucks:

Medium Trucks.

Heavy Trucks:

Vehicle Noise:

Site Data

Vehicle Speed:

Barrier Height

Pad Elevation.

Road Elevation:

Road Grade.

Left View:

70.20

85.38

Unmitigated Noise Levels (without Topo and barrier attenuation) National Individual Property of the Individual P

58.8

59.3

Right View

1,004 vehicles

50 mph

43 feet

0.0 feet

64.0 feet

64.0 feet

0.0 feet

5.0 feet

0.0 feet

0.0 feet

-90.0 degrees

90.0 degrees

-2.39

-23.58

57 7

58.2

65.5

Distance

0.0%

Traffic Flow

0.0

Road Grade:

Left View:

9.30%

465 vehicles

45 mph

45 feet

0.0 feet

0.0 51.0 feet

51.0 feet

0.0 feet

5.0 feet

0.0 feet

0.0%

-90.0 degrees

Average Daily Traffic (Adt): Peak Hour Percentage:

Near/Far Lane Distance:

Barrier Type (0-Wall, 1-Berm). Centerline Dist. to Barrier:

Centerline Dist. to Observer.

Barrier Distance to Observer.

Observer Height (Above Pad):

Highway Data

Site Data

Centerline Distance to Noise Contour (in feet) 55 dBA 70 dBA 65 dBA 60 dBA CNEL: 39 83 180 387

-1.33

Leq Evening

51.3

49.1

Wednesday, March 25, 2020

202

435

	FH	WA-RD-77-108	HIGH	WAY	NOISE P	REDICTI	ON MO	DEL			
Road Nam	io: EACP21 ne: Monroe St. nt: n/o Avenue					.,	Name: ' umber:		ave-Coral	Mountai	in
SITE	SPECIFIC IN	IPUT DATA				N	OISE N	/IODE	L INPUT	S	
Highway Data					Site Cor	ditions (	Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	8,600 vehicles	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	icks (2 A	(xles	15		
Peak H	lour Volume:	800 vehicles	S		He	eavy Truc	ks (3+ A	(xles	15		
Ve	hicle Speed:	50 mph		ł	Vehicle	Miv					
Near/Far La	ne Distance:	51 feet		1		icleTvpe		Dav	Evenina	Niaht	Daily
Site Data						//	utos:	77.5%		9.6%	- /
Ra	rrier Height:	0.0 feet			M	ledium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0 1661				Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		54.0 feet				·		,, ,	-11		
Centerline Dist.	to Observer:	54.0 feet		-	Noise S			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Autos		000			
Observer Height	(Above Pad):	5.0 feet				m Trucks		297	0		4.00
	ad Elevation:	0.0 feet			Hea	vy Trucks	8.0	006	Grade Ad	ustmen	t: 0.0
Ro	ad Elevation:	0.0 feet		İ	Lane Eq	uivalent	Distanc	e (in i	feet)		
	Road Grade:	0.0%		Ī		Autos	: 47.	862			
	Left View:	-90.0 degree	es		Mediu	m Trucks	: 47.	677			
	Right View:	90.0 degree	es		Hea	vy Trucks	: 47.	695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresn	el	Barrier Att	en Be	rm Atten
Autos:	70.20	-3.38		0.1	18	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-20.62		0.2	21	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-24.57		0.2	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	r attei	nuation)						
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq E	vening	Leq	Vight		Ldn	C	NEL
Autos:	65	5.8	64.2		62.5		56.4		65.0	)	65.6
Medium Trucks:	59	9.4	58.2		51.8		50.3		58.8	3	59.0
Heavy Trucks:			58.7		49.7		50.9		59.3		59.4
Vehicle Noise:	67	7.5	66.1		63.0		58.2	!	66.8	3	67.3
Centerline Distant	ce to Noise C	ontour (in feet,	)								
				70	dBA	65 (	IBA	6	60 dBA	55	5 dBA
			Ldn:	;	33	7	1		153		330
		C	NEL:	;	35	7	6		165		354

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIGH	IWAY N	IOISE P	REDICT	ION MO	DEL			
Road Nam	o: EACP21 e: Monroe St. nt: n/o Avenue	58					t Name: Number:		ave-Coral I	Mounta	iin
SITE S	SPECIFIC IN	IPUT DATA				ı	NOISE N	/IODE	L INPUTS	5	
Highway Data					Site Cor	ditions	(Hard =	10, Sc	oft = 15)		
	Traffic (Adt): Percentage: lour Volume:	6,900 vehicle 9.30% 642 vehicle					rucks (2 / rcks (3+ /	,	15		
Vei	hicle Speed:	50 mph			/ehicle	Mix					
Near/Far Lai	ne Distance:	51 feet		F.		icleType	9	Day	Evening	Night	Daily
Site Data					*01.			77.5%		9.69	,
Pos	rier Height:	0.0 feet			M	ledium 7	rucks:	84.8%	4.9%	10.39	
Barrier Type (0-W	all, 1-Berm):	0.0				Heavy 7	rucks:	86.5%	2.7%	10.89	% 0.74%
Centerline Dis		54.0 feet		1	Voise S	ource E	levations	(in fe	eet)		
Centerline Dist.		54.0 feet				Auto	os: 0.0	000			
Barrier Distance		0.0 feet			Mediu	m Truck	ks: 2.:	297			
Observer Height (. Pa	Above Pad): ad Elevation:	5.0 feet 0.0 feet			Hea	vy Truck	rs: 8.0	006	Grade Adj	ustmei	nt: 0.0
Roa	ad Elevation:	0.0 feet		1	Lane Eq	uivalen	t Distand	e (in	feet)		
F	Road Grade:	0.0%				Auto	os: 47.	862			
	Left View:	-90.0 degree	es		Mediu	m Truck	ks: 47.	677			
	Right View:	90.0 degree	es		Hea	vy Truck	(s: 47.	695			
FHWA Noise Mode	el Calculation:	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresn	el	Barrier Atte	en Be	erm Atten
Autos:	70.20	-4.34		0.18	В	-1.20		-4.67	0.0	00	0.000
Medium Trucks:	81.00	-21.57		0.2	1	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-25.53		0.2	0	-1.20		-5.39	0.0	00	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er atten	uation)						
	Leq Peak Hou			Leq E			Night		Ldn		CNEL
Autos:	64		63.3		61.5		55.4		64.1		64.7
Medium Trucks:	58		57.2		50.9		49.3		57.8		58.0
Heavy Trucks:	58		57.7		48.7		50.0		58.3		58.4
Vehicle Noise:	66		65.1		62.1		57.3	1	65.8	1	66.3
Centerline Distance	e to Noise Co	ontour (in feet	)								
				70 c			dBA	6	60 dBA	5	5 dBA
			Ldn:	2	-		61		132		285
		C	NEL:	3	1	(	66		142		306

						TION MO				
	o: EACP21							ave-Coral N	/lountair	ı
	e: Monroe St				Job	Number:	12642			
Road Segmer	it: n/o Airport	BI.								
	SPECIFIC II	NPUT DATA						INPUTS	;	
Highway Data				3	Site Condition:					
Average Daily		6,900 vehicl	es				Autos:	15		
	Percentage:	9.30%			Medium 7		,	15		
	our Volume:	642 vehicl	es		Heavy Tr	ucks (3+ i	Axles):	15		
	hicle Speed:	50 mph		ν	ehicle Mix					
Near/Far Lar	ne Distance:	51 feet			VehicleTyp	e	Day	Evening	Night	Daily
Site Data						Autos:	77.5%	12.9%	9.6%	97.429
Rar	rier Heiaht:	0.0 feet			Medium	Trucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W		0.0			Heavy	Trucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis	t. to Barrier:	54.0 feet		۸	loise Source I	levation	s (in fe	et)		
Centerline Dist.	to Observer:	54.0 feet			Aut		000	/		
Barrier Distance	to Observer:	0.0 feet			Medium Truc		297			
Observer Height (	Above Pad):	5.0 feet			Heavy Truc		006	Grade Adj	ustment.	0.0
Pa	d Elevation:	0.0 feet			ricavy riac	no. 0.	000			
Roa	d Elevation:	0.0 feet		L	ane Equivaler			eet)		
F	Road Grade:	0.0%			Aut		862			
	Left View:	-90.0 degre	ees		Medium Truc		677			
	Right View:	90.0 degre	ees		Heavy Truc	ks: 47.	695			
FHWA Noise Mode										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite Road	Fresi	nel .	Barrier Atte	n Ber	m Atten
Autos:	70.20	-4.3	4	0.18			-4.67	0.0	00	0.00
Medium Trucks:	81.00		-	0.21			-4.87	0.0	00	0.00
Heavy Trucks:	85.38	-25.5	3	0.20	-1.20	)	-5.39	0.0	00	0.00
Unmitigated Noise				er attenu						
	Leq Peak Ho			Leq Ev	-	q Night		Ldn	CI	VEL
Autos:	-	1.9	63.3		61.5	55.4		64.1		64.
Medium Trucks:	-	3.4	57.2		50.9	49.	-	57.8		58.
Heavy Trucks:		3.9	57.7		48.7	50.0		58.3		58.
Vehicle Noise:		5.6	65.1		62.1	57.	3	65.8		66.
Centerline Distanc	e to Noise C	ontour (in fee	et)	70 d	IDA 6	5 dBA		0 dBA		dBA
			!			61	6	0 <i>aBA</i> 132		<i>aBA</i> 85
		,	Ldn:	28		66		142	-	00 06

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGHWA	AY NOISE P	REDICTION	ON MC	ODEL			
	rio: EACP21							ave-Coral	Mountair	1
	ne: Monroe St.				Job Nu	ımber.	12642			
Road Segme	nt: n/o Avenue	60								
SITE	SPECIFIC IN	IPUT DATA						L INPUT	S	
Highway Data				Site Cor	nditions (	Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	6,400 vehicles	3				Autos:	15		
Peak Hour	Percentage:	9.30%		Me	edium Tru	cks (2	Axles):	15		
Peak I	lour Volume:	595 vehicles	3	He	eavy Truc	ks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		Vehicle	Mix					
Near/Far La	ne Distance:	51 feet			nicleType		Day	Evening	Night	Daily
Site Data					A	utos:	77.5%	12.9%	9.6%	97.42%
Ra	rrier Height:	0.0 feet		N.	ledium Tru	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0			Heavy Tro	ıcks:	86.5%	2.7%	10.8%	0.74%
,, ,	ist, to Barrier:	54.0 feet		M-1 0	ource Ele		(:- 6	41		
Centerline Dist.	to Observer:	54.0 feet		NOISE 3	Autos		0.000	eu)		
Barrier Distance	to Observer:	0.0 feet		Modis	Autos ım Trucks		2.297			
Observer Height	(Above Pad):	5.0 feet			vy Trucks		3.006	Grade Ad	liustmont	. 0.0
P	ad Elevation:	0.0 feet							justinent.	0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent	Distai	nce (in i	feet)		
	Road Grade:	0.0%			Autos		7.862			
	Left View:	-90.0 degree	es		ım Trucks		7.677			
	Right View:	90.0 degree	es	Hea	vy Trucks	: 47	7.695			
FHWA Noise Mod	el Calculation	s								
VehicleType	REMEL	Traffic Flow	Distan	ce Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:				0.18	-1.20		-4.67		000	0.000
Medium Trucks:				0.21	-1.20		-4.87		000	0.000
Heavy Trucks:	85.38	-25.86		0.20	-1.20		-5.39	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier a	ttenuation)						
VehicleType	Leq Peak Hou	ır Leq Day	Le	q Evening	Leq N	light		Ldn	CI	VEL
Autos:	64	1.5	62.9	61.2	2	55	.1	63.	7	64.3
Medium Trucks:			56.9	50.6		49		57.		57.7
Heavy Trucks:	58	3.5	57.4	48.4		49	.6	58.	0	58.1
Vehicle Noise:	66	3.2	64.8	61.7	'	57	.0	65.	5	66.0
Centerline Distan	ce to Noise Co	ontour (in feet)								
				70 dBA	65 d		6	60 dBA		dBA
			Ldn:	27	58			126	_	71
		CI	VEL:	29	63	3		135	2	91

	FH	WA-RD-77-108	HIGHV	NAY N	IOISE PI	REDICTI	ON MO	DEL			
Road Nam	io: EACP21 ne: Avenue 50 nt: w/o Jeffers					.,	Name: lumber:		ave-Coral	Mountai	in
SITE	SPECIFIC IN	UDI IT DATA				Λ.	IOISE	MODE	L INPUT	\$	
Highway Data	0. 200				Site Con						
Average Daily	Traffic (Adt):	16,800 vehicle	S					Autos:	15		
	Percentage:	9.30%			Me	edium Tn	ucks (2	Axles):	15		
Peak H	lour Volume:	1,562 vehicle	3		He	avy True	cks (3+ .	Axles):	15		
Ve	hicle Speed:	50 mph		-	Vehicle I	Misc					
Near/Far La	ne Distance:	51 feet		-		icleType		Dav	Evening	Night	Daily
Site Data					VCII		Autos:	77.5%		9.6%	
	rrier Height:	0.0 feet			М	edium T		84.8%		10.3%	
Barrier Type (0-W		0.0			1	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	. ,	54.0 feet		-							
Centerline Dist.		54.0 feet		1	Noise Sc			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000			
Observer Height	(Above Pad):	5.0 feet				m Truck		297	Crodo Ad	iuotmon	4. 0.0
Pi	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.	006	Grade Ad	usunen	ı. U.U
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47	.695			
FHWA Noise Mode	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresi	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-0.47		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-17.71		0.2	1	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-21.66		0.2	0	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	′	Leq E	vening	Leq	Night		Ldn		NEL
Autos:	68	3.7	67.1		65.4		59.	3	67.9	9	68.5
Medium Trucks:			61.1		54.7		53.	2	61.7		61.9
Heavy Trucks:			61.6		52.6		53.	_	62.2		62.3
Vehicle Noise:	70	0.4	69.0		65.9		61.	2	69.7	7	70.2
Centerline Distance	ce to Noise C	ontour (in feet	)								
					dBA		dBA	(	60 dBA	1	5 dBA
			Ldn:		2		11		239		516
		C	NEL:	5	5	1	19		257		554

	FH\	WA-RD-77-108	HIGH	IWAY N	DISE PI	REDICTI	ON MO	DDEL			
	o: EACP21 e: Avenue 50 nt: e/o Monroe	St.						The W 12642	ave-Coral	Mountair	1
SITE S	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	11,100 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tro	ucks (2	Axles):	15		
Peak H	our Volume:	1,032 vehicles	3		He	avy Truc	cks (3+	Axles):	15		
Vei	hicle Speed:	50 mph		V	ehicle i	Miv					
Near/Far Lai	ne Distance:	43 feet		ļ.		icleType		Dav	Evening	Night	Dailv
Site Data							Autos:	77.5%	12.9%	9.6%	97.42%
Rai	rier Heiaht:	0.0 feet			M	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		64.0 feet				ource El		/! #-			
Centerline Dist.	to Observer:	64.0 feet		N	oise so	Auto:		_	et)		
Barrier Distance	to Observer:	0.0 feet				Auto: m Truck:		2.000			
Observer Height (	Above Pad):	5.0 feet				m Truck: vy Truck:		1.006	Grade Ad	i rotmont	
Pa	d Elevation:	0.0 feet			пеа	ry Trucks	s. c	.000	Grade Au	usimeni	. 0.0
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	nce (in i	feet)		
F	Road Grade:	0.0%				Auto	s: 60	.488			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 60	.341			
	Right View:	90.0 degree	es		Hear	y Truck	s: 60	).355			
FHWA Noise Mode	l Calculation	S									
VehicleType	REMEL	Traffic Flow	Dis	tance		Road	Fres		Barrier Att		m Atten
Autos:	70.20	-2.27		-1.34		-1.20		-4.70		000	0.000
Medium Trucks:	81.00	-19.51		-1.33		-1.20		-4.88		000	0.000
Heavy Trucks:	85.38	-23.46		-1.33		-1.20		-5.31	0.0	000	0.000
Unmitigated Noise			barrie	er attenu	ation)			_			
	Leq Peak Hou			Leq Ev		Leq	Night		Ldn		NEL
Autos:	65		63.8		62.0		56		64.6		65.2
Medium Trucks:	59		57.8		51.4		49		58.3		58.6
Heavy Trucks: Vehicle Noise:	67		58.3 65.7		49.2 62.6		50 57		58.8 66.4		59.0 66.8
Centerline Distanc					02.0		31	.0	00	•	00.0
Centernine Distanc	e to Noise Co	intour (In reet)	<u> </u>	70 di	DΛ	ee.	dBA		60 dBA	55	dBA
			Ldn:	37		7		,	170		67

	FH	WA-RD-77-108	HIGHV	VAY N	DISE PREDI	CTION M	ODEL			
	: EACP21	·						ave-Coral M	ountain	
	e: Avenue 50				Jo	b Number	12642			
Road Segmen	t: w/o Madiso	on St.								
	PECIFIC IN	NPUT DATA						L INPUTS		
Highway Data				S	ite Conditio	ns (Hard				
Average Daily 1	. ,		S				Autos:			
Peak Hour F		9.30%				Trucks (2	,			
Peak Ho	our Volume:	1,358 vehicle	S		Heavy	Trucks (3+	- Axles):	15		
	icle Speed:	50 mph		ν	ehicle Mix					
Near/Far Lan	e Distance:	51 feet			VehicleT	ype	Day	Evening I	Vight	Daily
Site Data						Autos:	77.5%	12.9%	9.6% 9	7.429
Ran	rier Heiaht:	0.0 feet			Mediui	n Trucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-Wa		0.0			Heav	y Trucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis	t. to Barrier:	54.0 feet		٨	loise Source	Flevatio	ns (in f	oet)		
Centerline Dist. to	o Observer:	54.0 feet		- "			0.000	501)		
Barrier Distance to	o Observer:	0.0 feet			Medium Tr		2.297			
Observer Height (A	Above Pad):	5.0 feet			Heavy Tr		3.006	Grade Adjus	stment: ()	0
Pa	d Elevation:	0.0 feet							J.111011L. U	
Roa	d Elevation:	0.0 feet		L	ane Equiva	ent Dista	nce (in	feet)		
R	Road Grade:	0.0%					7.862			
	Left View:	-90.0 degre	es		Medium Tr		7.677			
	Right View:	90.0 degre	es		Heavy Tr	ucks: 4	7.695			
FHWA Noise Mode	l Calculation	ıs								
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite Roa	d Fre	snel	Barrier Atter	Berm	Atten
Autos:	70.20	-1.08		0.18			-4.67	0.00	0	0.00
Medium Trucks:	81.00			0.21			-4.87	0.00		0.00
Heavy Trucks:	85.38	-22.27		0.20	-1.	20	-5.39	0.00	0	0.00
Unmitigated Noise										
	Leq Peak Hou			Leq Ev	-	eq Night		Ldn	CNE	
Autos:		3.1	66.5		64.8		.7	67.3		67.
Medium Trucks:	-	1.7	60.5		54.1		1.6	61.1		61.
Heavy Trucks:		2.1	61.0		52.0		.2	61.6		61.
Vehicle Noise:		9.8	68.4		65.3	60	1.5	69.1		69.
Centerline Distance	e to Noise Co	ontour (in feet	)	70 d	DA .	65 dBA	-	60 dBA	55 dE	2.4
			l dn:	70 a.		101	1 (	218	55 dE 470	
		_	Lan: NFI:	47 50		101		218	504	
		C	IVEL:	50	'	109		234	504	

Wednesday, March 25, 2020

FH	WA-RD-77-108 H	IIGHWAY	NOISE PI	REDICTIO	N MODEL		
Scenario: EACP21 Road Name: Avenue 52 Road Segment: w/o Monro					lame: The \ mber: 1264:	Vave-Coral N 2	Mountain
SITE SPECIFIC I	NPUT DATA			N	DISE MOD	EL INPUTS	3
Highway Data			Site Con	ditions (i	Hard = 10, S	Soft = 15)	
Average Daily Traffic (Adt):	11,600 vehicles				Auto	3: 15	
Peak Hour Percentage:	9.30%		Me	edium Tru	cks (2 Axles	): 15	
Peak Hour Volume:	1,079 vehicles		He	avy Truci	s (3+ Axles	): 15	
Vehicle Speed:	50 mph		Vehicle	Miv			
Near/Far Lane Distance:	51 feet			icleType	Dav	Evening	Night Daily
Site Data					utos: 77.5	-	9.6% 97.42%
Barrier Height:	0.0 feet		М	edium Tru	icks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-Wall, 1-Berm):	0.0 1661			Heavy Tru	icks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dist. to Barrier:	54.0 feet			-		• •	
Centerline Dist. to Observer:	54.0 feet		Noise So		vations (in	feet)	
Barrier Distance to Observer:	0.0 feet			Autos.			
Observer Height (Above Pad):	5.0 feet			m Trucks.		O	
Pad Elevation:	0.0 feet		Hear	vy Trucks	8.006	Grade Adju	ustment: 0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent l	Distance (in	feet)	
Road Grade:	0.0%			Autos.	47.862		
Left View:	-90.0 degrees		Mediu	m Trucks	47.677		
Right View:	90.0 degrees		Hear	vy Trucks	47.695		
FHWA Noise Model Calculation	18						
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Berm Atten
Autos: 70.20	-2.08	0.	8	-1.20	-4.67	0.0	0.000
Medium Trucks: 81.00		0.:		-1.20	-4.87		
Heavy Trucks: 85.3		0.:		-1.20	-5.39	9 0.0	0.000
Unmitigated Noise Levels (with							
VehicleType Leq Peak Ho			vening	Leq N		Ldn	CNEL
		5.5	63.8		57.7	66.3	66.9
		9.5	53.1		51.6	60.1	60.3
,		0.0	51.0		52.2	60.6	
		7.4	64.3		59.5	68.1	68.6
Centerline Distance to Noise C	contour (in feet)	70	10.4			00.104	55 104
		1	dBA	65 d	1	60 dBA	55 dBA
	CNI		10 13	87 93		187 201	403 433
	CNI	EL:	13	93		201	433

Wednesday, March 25, 2020

	FHW	/A-RD-77-108	HIGHV	VAY N	IOISE PE	REDICTI	ON MC	DEL			
Road Nan	rio: EACP21 ne: Avenue 54 nt: w/o Madisor	n St.				.,	Name: umber:		/ave-Coral	Mountai	n
SITE	SPECIFIC IN	PUT DATA				N	OISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard =	: 10, S	oft = 15)		
Average Daily	Traffic (Adt): 1	1,100 vehicle	s					Autos	: 15		
Peak Hour	Percentage:	9.30%			Me	dium Tro	ıcks (2	Axles)	: 15		
Peak H	Hour Volume:	1,032 vehicle	s		He	avy Truc	cks (3+	Axles)	: 15		
Ve	ehicle Speed:	50 mph		-	Vehicle I	/liv					
Near/Far La	ne Distance:	51 feet		F		cleType		Dav	Evening	Night	Dailv
Site Data					*011		Autos:	77.59		9.6%	. ,
Pa	rrier Heiaht:	0.0 feet			Me	edium Ti	rucks:	84.89	6 4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			F	leavy Ti	rucks:	86.59	6 2.7%	10.8%	0.74%
Centerline Di		54.0 feet		H	Noise So			- /! 4	41		
Centerline Dist.	to Observer:	54.0 feet		Ľ	Noise Sc				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000 .297			
Observer Height	(Above Pad):	5.0 feet				n Truck		.006	Grade Ad	iuctmon	t: 0.0
P	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.000	Grade Adj	usunen	1. 0.0
Ro	ad Elevation:	0.0 feet		[	Lane Equ	ıivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediui	n Truck	s: 47	.677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47	.695			
FHWA Noise Mod	el Calculations										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-2.27		0.1	-	-1.20		-4.67		000	0.000
Medium Trucks:	01.00	-19.51		0.2	1	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-23.46		0.2	0	-1.20		-5.39	0.0	000	0.000
<b>Unmitigated Noise</b>	e Levels (witho	ut Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hou			Leq E	vening	Leq	Night		Ldn	1	NEL
Autos:		-	65.3		63.6		57.	-	66.1		66.7
Medium Trucks:		-	59.3		52.9		51.		59.9		60.1
Heavy Trucks:		-	59.8 67.2		50.8		52.	_	60.4		60.5 68.4
Vehicle Noise:					64.1		59.	4	67.9	,	68.4
Centerline Distant	ce to Noise Co.	ntour (in feet	)	70			10.4	-		-	
			Lala		dBA	65		1	60 dBA	1	dBA
		_	Ldn:	-	9	-	4		182		391
		C	NEL:	4	2	9	1		195		420

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIG	1 YAWH	NOISE PI	REDICT	ON MC	DEL			
Road Nam	io: EACP21 le: Airport Bl. nt: w/o Monroe	St.					Name: lumber:		ave-Coral	Mountair	ı
SITE :	SPECIFIC IN	PUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data					Site Con	ditions	(Hard =	: 10, So	oft = 15)		
Average Daily	Traffic (Adt):	3,000 vehicle	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	279 vehicle	S		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		-	Vehicle	Miv					
Near/Far La	ne Distance:	51 feet		H		icleType		Dav	Evening	Night	Dailv
Site Data					*0		Autos:	77.5%	-	9.6%	- /
Par	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	. ,	54.0 feet		L							
Centerline Dist.		54.0 feet		L	Noise So				eet)		
Barrier Distance		0.0 feet				Auto		.000			
Observer Height (		5.0 feet				m Truck		.297			
	ad Elevation:	0.0 feet			Hear	y Truck	s: 8	.006	Grade Ad	ustment	0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	Distan	ce (in f	feet)		
1	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree	es		Hear	y Truck	s: 47	.695			
FHWA Noise Mode	el Calculations	;									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresi		Barrier Att	en Ber	m Atten
Autos:	70.20	-7.95		0.1		-1.20		-4.67		000	0.000
Medium Trucks:	81.00	-25.19		0.2		-1.20		-4.87		000	0.000
Heavy Trucks:	85.38	-29.15		0.2	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barri	er atten	nuation)						
	Leq Peak Hou			Leq E	vening		Night		Ldn		VEL
Autos:	61.	_	59.6		57.9		51.		60.5		61.1
Medium Trucks:	54.	-	53.6		47.3		45.		54.2	-	54.4
Heavy Trucks: Vehicle Noise:	55. 62	_	54.1 61.5		45.1 58.4		46. 53.		54.7 62.2		54.8 62.7
		-			56.4		55.	'	02.2	-	02.
Centerline Distand	e to Noise Co	ntour (in feet	,	70	dBA	05	dBA	-	60 dBA		dBA
			Ldn:		и <i>Б</i> А 16		и <i>Б</i> А 15		76	1	63

Barrier Height:   0.0 feet   Heavy Trucks: 84.8%   4.9     Barrier Type (0-Wall, 1-Berm):   0.0     Centerline Dist. to Barrier:   54.0 feet   54.0 feet     Barrier Distance to Observer:   54.0 feet   54.0 feet     Barrier Distance to Observer:   54.0 feet   Autos: 0.000     Choserver Height (Above Pad):   5.0 feet     Choserver Height (Above Pad):   5.0 feet     Road Elevation:   Road Clevation:   0.0 feet     Road Clevation:   0.00 feet     Road Clevation:   0.00 feet     Road Clevation:   0.00 feet     Road Clevation:   0.00 feet     Road Clevation:   0.00 feet     Road Clevation:   0.00 feet     Road Clevation:   0.00 feet     Road Clavetion:   0.00 feet		DEL	TION MODEL	REDICTION	OISE PR	HWAY	HIGH	-RD-77-108	WA	FH	
Average Daily Traffic (Adt): 6,600 vehicles   Peak Hour Volume: 614 vehicles   Vehicle Speed: 50 mph   Vehicle Type   Day   Evenin	Coral Mountain							t.		e: Avenue 54	Road Nam
Average Daily Traffic (Adt): 6,600 vehicles   Peak Hour Percentage: 9,30%   Medium Trucks (2 Axles): 15   15   15   15   15   15   15   15	PUTS	MODEL INPUTS	NOISE MOD	N				JT DATA	NP	SPECIFIC II	SITE S
Peak Hour Percentage:         9.30%         Medium Trucks (2 Axles):         15           Peak Hour Volume:         614 vehicles Vehicles Speed:         Medium Trucks (3+ Axles):         15           Vehicle Speed:         50 mph Near/Far Lane Distance:         51 feet         Vehicle Mix         Vehicle Type         Day         Evenin           Site Data           Barrier Height:         0.0 feet         Medium Trucks:         84.8%         4.9           Barrier Type (0-Wall, 1-Berm):         0.0         Heavy Trucks:         86.5%         2.7           Centerline Dist. to Barrier:         54.0 feet         Autos:         0.00         Medium Trucks:         84.8%         4.9           Barrier Height:         0.0 feet         Autos:         0.00         Medium Trucks:         86.5%         2.2           Centerline Dist. to Observer:         0.0 feet         Autos:         0.000         Medium Trucks:         8.0%         2.0           Observer Height (Above Pad):         0.0 feet         Autos:         0.000         Medium Trucks:         8.006         Grade           Road Elevation:         0.0 feet         Autos:         47.672         Heavy Trucks:         47.673           Right View:         90.0 degrees         Mediu	15)	10, Soft = 15)	(Hard = 10, S	ditions (	Site Cond						Highway Data
Near/Far Lane Distance:   51 feet   Vehicle Type   Day   Evening	5	Axles): 15	rucks (2 Axles,	avy Truc	Hea			9.30% 614 vehicle	-	Percentage: our Volume:	Peak Hour Peak H
Site Data	ning Night Daily	Day Evening Ni	e Dav					51 feet		ne Distance:	Near/Far Lar
Centerline Dist. to Observer: 54.0 feet   Autos: 0.000	2.9% 9.6% 97.429 4.9% 10.3% 1.849	77.5% 12.9% 184.8% 4.9% 1	Autos: 77.5° Trucks: 84.8°	A edium Tr	Ме						Bar
Centerline Dist. to Observer: 54.0 feet   Barrier Distance to Observer: 0.0 feet   Observer Height (Above Pad): 5.0 feet   Heavy Trucks: 2.297   Heavy Trucks: 8.006   Grade: 0.0 feet   Heavy Trucks: 8.006   Grade: 0.0 feet   Heavy Trucks: 8.006   Grade: 0.0 feet   Heavy Trucks: 8.006   Grade: 0.0 feet   Heavy Trucks: 47.685   Heavy Trucks: 47.677   Heavy Trucks: 47.675   Heavy Trucks: 47.695   Heavy Trucks:		s (in feet)	levations (in	urce Ele	loise So			54.0 feet		st. to Barrier:	Centerline Dis
VehicleType	de Adjustment: 0.0	297 006	ks: 2.297 ks: 8.006 <b>tt Distance (in</b> os: 47.862 ks: 47.677	n Trucks y Trucks <b>iivalent</b> Autos n Trucks	Heav ane Equ Mediun			0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre		to Observer: Above Pad): ad Elevation: ad Elevation: Road Grade: Left View:	Barrier Distance of Observer Height (A Pa Roa
Autos: 70.20											FHWA Noise Mode
Medium Trucks:   81.00   -21.77   0.21   -1.20   -4.87     Heavy Trucks:   85.38   -25.72   0.20   -1.20   -5.39     Unmitigated Noise Levels (without Topo and barrier attenuation)   VehicleType									_		
Heavy Trucks: 85.38   -25.72   0.20   -1.20   -5.39	0.000 0.00								-		
Vehicle Type         Leq Peak Hour         Leq Day         Leg Evening         Leq Night         Ldn           Autos:         64.7         63.1         61.3         55.3         65.2         57.0         50.7         49.1         5           Heavy Trucks:         58.2         57.0         48.5         49.8         5           Vehicle Noise:         66.4         64.9         61.9         57.1         6	0.000 0.00 0.000 0.00								-		
VehicleType         Leq Peak Hour         Leq Day         Leg Evening         Leq Night         Ldn           Autos:         64.7         63.1         61.3         55.3         65.3         64.7         65.7         49.1         55.3         65.7         49.1         55.7         50.7         49.1         55.7         50.7         49.1         55.7         50.7         49.1         55.7         50.7         49.1         55.7         50.7         49.1         50.7         49.8         55.7         50.7         49.8         55.7         50.7         49.8         55.7         50.7         49.8         55.7         50.7         49.8         55.7         50.7         49.8         55.7         50.7         49.8         55.7         50.7         49.8         55.7         50.7         49.8         55.7         50.7         49.8         55.7         50.7         49.8         55.7         50.7         49.8         55.7         50.7         49.8         55.7         50.7         49.8         55.7         50.7         49.8         55.7         50.7         50.7         49.8         50.7         50.7         49.8         50.7         50.7         49.8         50.7         50.7         49.8					uation)	or atto	harrie	t Tono and	יוסר	I avals (with	Unmitiaated Noise
Medium Trucks:         58.2         57.0         50.7         49.1         5           Heavy Trucks:         58.7         57.6         48.5         49.8         5           Vehicle Noise:         66.4         64.9         61.9         57.1         6		1 1		Leq N	ening		У		ur	Leq Peak Ho	VehicleType
Heavy Trucks:         58.7         57.6         48.5         49.8         5           Vehicle Noise:         66.4         64.9         61.9         57.1         6	63.9 64.									-	
Vehicle Noise: 66.4 64.9 61.9 57.1 6	57.6 57.									-	
	58.1 58.										· · · · ·
Centerline Distance to Noise Contour (in feet)	65.6 66.	1 65.6	57.1		61.9						
70 dBA	55 dBA 277 297	128	60	60	3		Ldn:	•	ont	e to Noise C	Centerline Distanc

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 H	IIGHWAY	NOISE P	REDICTIO	N MODEL		
Scenario: Road Name: Road Segment:	Avenue 58	n St.				lame: The V mber: 12642	Vave-Coral Mo	untain
SITE SE	PECIFIC IN	PUT DATA			NC	ISE MOD	EL INPUTS	
Highway Data				Site Cor	nditions (H	lard = 10, S	oft = 15)	
Average Daily Tr	affic (Adt):	5,100 vehicles				Autos	: 15	
Peak Hour Pe	ercentage:	9.30%		Me	edium Truc	ks (2 Axles)	: 15	
Peak Hou	ur Volume:	474 vehicles		He	eavy Truck	s (3+ Axles,	: 15	
Vehi	cle Speed:	45 mph		Vehicle	Miv			
Near/Far Lane	Distance:	45 feet			icleType	Day	Evening N	ight Daily
Site Data				V C/		itos: 77.59	-	9.6% 97.42%
	er Heiaht:	0.0 feet		M	ledium Tru			0.3% 1.84%
Barrier Type (0-Wal		0.0 feet			Heavy Tru	cks: 86.5°		0.8% 0.74%
Centerline Dist.	. ,	51.0 feet						
Centerline Dist. to		51.0 feet		Noise S		vations (in	eet)	
Barrier Distance to		0.0 feet			Autos:			
Observer Height (Al		5.0 feet			m Trucks:			
	Elevation:	0.0 feet		Hea	vy Trucks:	8.006	Grade Adjus	tment: 0.0
Road	Elevation:	0.0 feet		Lane Eq	uivalent D	Distance (in	feet)	
Ro	oad Grade:	0.0%			Autos:	46.041		
	Left View:	-90.0 degrees		Mediu	m Trucks:	45.848		
F	Right View:	90.0 degrees		Hea	vy Trucks:	45.867		
FHWA Noise Model	Calculations	6						
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-5.19	0.	43	-1.20	-4.65	0.000	0.000
Medium Trucks:	79.45	-22.43		46	-1.20	-4.87		
Heavy Trucks:	84.25	-26.38	0.	46	-1.20	-5.42	0.000	0.000
Unmitigated Noise L	evels (with	out Topo and b	arrier atte	nuation)				
	eq Peak Hou			vening	Leq Ni		Ldn	CNEL
Autos:	62		0.9	59.2		53.1	61.7	62.3
Medium Trucks:	56		5.1	48.7		47.2	55.6	55.9
Heavy Trucks:	57	.1 50	3.0	47.0	1	48.2	56.6	56.7
Vehicle Noise:	64	.3 62	2.9	59.8		55.1	63.6	64.1
Centerline Distance	to Noise Co	ntour (in feet)						
				dBA	65 dE	BA	60 dBA	55 dBA
		_		19	41		89	192
		CNI	EL:	21	44		96	206

	FHV	VA-RD-77-108	HIGH	NAY N	NOISE PF	REDICT	ION MC	DEL			
Road Nar	rio: EACP21 ne: Avenue 58 ent: w/o Monroe	St.					Name: lumber:		/ave-Coral I	Mountaii	n
SITE	SPECIFIC IN	PUT DATA				N	IOISE	MODE	L INPUTS	5	
Highway Data					Site Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	5,300 vehicles	S					Autos	: 15		
Peak Hou	Percentage:	9.30%			Me	dium Tr	ucks (2	Axles)	: 15		
Peak I	Hour Volume:	493 vehicles	3		He	avy Tru	cks (3+	Axles)	: 15		
Ve	ehicle Speed:	45 mph		-	Vehicle I	/iiv					
Near/Far La	ane Distance:	45 feet		H		cleType	,	Dav	Evening	Niaht	Dailv
Site Data					*****		Autos:	77.59		9.6%	. ,
Rs	rrier Heiaht:	0.0 feet			Me	edium T	rucks:	84.89	6 4.9%	10.3%	1.84%
Barrier Type (0-V		0.0			F	leavy T	rucks:	86.59	6 2.7%	10.8%	0.74%
,,,,	ist. to Barrier:	51.0 feet		L							
Centerline Dist		51.0 feet		-	Noise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000			
Observer Height	(Above Pad):	5.0 feet				n Truck		297	0		
	Pad Elevation:	0.0 feet			Heav	y Truck	s: 8	006	Grade Adj	ustment	: 0.0
Ro	ad Elevation:	0.0 feet			Lane Equ	iivaleni	Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 46	.041			
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 45	.848			
	Right View:	90.0 degree	es		Heav	y Truck	s: 45	.867			
FHWA Noise Mod	el Calculations	5									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresi	nel	Barrier Atte	en Bei	rm Atten
Autos:	00.10	-5.02		0.4	3	-1.20		-4.65	0.0	00	0.000
Medium Trucks:		-22.26		0.4	6	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	84.25	-26.22		0.4	6	-1.20		-5.42	0.0	00	0.000
Unmitigated Nois	e Levels (witho	out Topo and	barrie	atten	uation)						
VehicleType	Leq Peak Hou	r Leq Day	′	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	62	.7	61.1		59.3		53.	3	61.9		62.5
Medium Trucks:	56	.4	55.3		48.9		47.	3	55.8		56.0
Heavy Trucks:	57.	.3	56.2		47.2		48.	4	56.8		56.9
Vehicle Noise:	64	.5	63.1		59.9		55.	3	63.8		64.3
Centerline Distan	ce to Noise Co	ntour (in feet,	)								
				70	dBA	65	dBA		60 dBA	55	dBA
			Ldn:	2	.0	4	12		91	1	197
		Ci	NEL:	2	11	4	16		98	2	211

	FH\	WA-RD-77-108	HIGH	IWAY N	OISE P	REDICTI	ON MC	DEL			
	o: EACP21 e: Avenue 58 nt: e/o Jackson	n St.					Name: umber:		ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							LINPUT	s	
Highway Data				٤	Site Cor	ditions	(Hard =	: 10, So	ft = 15)		
Average Daily	Traffic (Adt):	2,300 vehicle	es.					Autos:	15		
Peak Hour	Percentage:	9.30%				edium Tru	,	,	15		
Peak H	our Volume:	214 vehicle	es.		He	eavy Truc	cks (3+	Axles):	15		
Vel	hicle Speed:	50 mph		1	/ehicle	Mix					
Near/Far Lar	ne Distance:	36 feet		F	Veh	icleType		Day	Evening	Night	Daily
Site Data						-	Autos:	77.5%	12.9%	9.6%	97.429
Bar	rier Height:	0.0 feet			M	ledium Ti	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-Wa	-	0.0				Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis	st. to Barrier:	59.0 feet		,	Jaisa S	ource El	ovation	e (in fo	not)		
Centerline Dist. t	to Observer:	59.0 feet		· ·	voise si	Auto:		.000	ei)		
Barrier Distance t	to Observer:	0.0 feet			Modiu	m Truck		297			
Observer Height (A	Above Pad):	5.0 feet				vy Truck		.006	Grade Ad	iuetmant	. 0 0
Pa	d Elevation:	0.0 feet			i ica	vy Trucks	s. 0	.000	Orauc Au	usunone	. 0.0
Roa	ad Elevation:	0.0 feet		L	.ane Eq	uivalent	Distan	ce (in f	eet)		
F	Road Grade:	0.0%				Auto		.409			
	Left View:	-90.0 degre	es			m Truck	00	.252			
	Right View:	90.0 degre	es		Hea	vy Truck	s: 56	.268			
FHWA Noise Mode	l Calculation	s									
VehicleType	REMEL	Traffic Flow		tance		Road	Fresi		Barrier Att		m Atten
Autos:	70.20	-9.11		-0.89	9	-1.20		-4.69		000	0.00
Medium Trucks:	81.00	-26.34		-0.87		-1.20		-4.88		000	0.00
Heavy Trucks:	85.38	-30.30	)	-0.87	7	-1.20		-5.35	0.0	000	0.00
Unmitigated Noise			barrie	er atteni	uation)						
	Leq Peak Hou			Leq Ev			Night		Ldn		VEL
Autos:	59		57.4		55.7		49.		58.2	-	58.
Medium Trucks:	52		51.4		45.0		43.	-	51.9		52.
Heavy Trucks: Vehicle Noise:	53		51.9 59.3		42.9 56.2		44. 51.		52.5 60.0		52. 60.
					30.2		51.	+	00.0	,	θU.
Centerline Distanc	e to Noise Co	ontour (in fee	1)	70 c	IBA	65	dBA	6	0 dBA	55	dBA
			Ldn:					1		1	27
				10	3	2	/		59	7	

	FH\	WA-RD-77-108	HIGHWA	Y NOISE F	REDICT	TION MODEL		
	e: EACP21 e: Avenue 58 t: w/o Jackso	n St.				t Name: The V Number: 12642	Vave-Coral Mo 2	untain
	PECIFIC IN	IPUT DATA				NOISE MOD		
Highway Data				Site Co.	nditions	(Hard = 10, S	oft = 15)	
Average Daily T	raffic (Adt):	2,900 vehicle	s			Autos	: 15	
Peak Hour F	Percentage:	9.30%				rucks (2 Axles,		
Peak Ho	ur Volume:	270 vehicle	s	Н	eavy Tru	icks (3+ Axles,	): 15	
Veh	icle Speed:	50 mph		Vehicle	Mix			
Near/Far Lan	e Distance:	36 feet			hicleTyp	e Dav	Evening N	ight Daily
Site Data						Autos: 77.5°	-	9.6% 97.429
Rarr	ier Heiaht:	0.0 feet		٨	1edium	Trucks: 84.8°	% 4.9% 1	0.3% 1.84%
Barrier Type (0-Wa		0.0			Heavy 1	Trucks: 86.5°	% 2.7% 1	0.8% 0.74%
Centerline Dist	. ,	59.0 feet		Noise S	ource F	levations (in	foot)	
Centerline Dist. to	Observer:	59.0 feet		140/30 0	Auto		iccij	
Barrier Distance to	Observer:	0.0 feet		Modi	ım Truci			
Observer Height (A	lbove Pad):	5.0 feet			in Truci		Grade Adjus	tment: 0.0
	d Elevation:	0.0 feet						
	d Elevation:	0.0 feet		Lane Ed		t Distance (in	feet)	
R	oad Grade:	0.0%			Auto			
	Left View:	-90.0 degre			ım Truci			
	Right View:	90.0 degre	es	Hea	vy Truci	ks: 56.268		
FHWA Noise Model		-						
VehicleType	REMEL	Traffic Flow	Distan		Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20			0.89	-1.20			
Medium Trucks:	81.00			-0.87	-1.20			
Heavy Trucks:	85.38			0.87	-1.20	-5.35	0.000	0.00
Unmitigated Noise								01/5/
VehicleType L Autos:	eq Peak Hou	ur Leq Day	/   Le 58.4	q Evening 56.		Night 50.6	Ldn 59.2	CNEL
Medium Trucks:		3.6	52.4	56. 46.0		50.6 44.5	53.0	59. 53.
Heavy Trucks:		1.0	52.4	43.9	-	44.5	53.5	53.
Vehicle Noise:		1.7	60.3	57.		52.4	61.0	61.
Centerline Distance	to Noise Co	ontour (in feet	-)					
Contoning Distance	, 10 ,10/36 01	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		70 /04	0.5	dBA	60 dBA	55 dBA
				70 dBA	00	UDA		JJ UDA
			Ldn:	70 aBA 15	1	32	69	148

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGI	HWAY	NOISE PE	REDICT	ION MO	DDEL			
Road Nam	io: EACP21 ne: Avenue 60 nt: w/o Madiso	n St.						The W 12642	ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data					Site Con	ditions	(Hard :				
Average Daily	Traffic (Adt):	900 vehicles	5					Autos:	15		
Peak Hour	Percentage:	9.30%				dium Tr					
Peak F	lour Volume:	84 vehicles	5		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	40 mph			Vehicle I	Mix					
Near/Far La	ne Distance:	23 feet				icleType		Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	- 0	9.6%	
Ra	rrier Height:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			F	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	. ,	40.0 feet									
Centerline Dist.	to Observer:	40.0 feet			Noise Sc				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		0.000			
Observer Height	(Above Pad):	5.0 feet				m Truck		2.297			
	ad Elevation:	0.0 feet			Heav	y Truck	s: E	3.006	Grade Ad	ijustment	: 0.0
Ro	ad Elevation:	0.0 feet			Lane Equ	uivalent	Distar	nce (in t	eet)		
	Road Grade:	0.0%				Auto	s: 38	3.636			
	Left View:	-90.0 degree	s		Mediu	m Truck	s: 38	3.406			
	Right View:	90.0 degree	s		Heav	y Truck	s: 38	3.429			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Bei	m Atten
Autos:	66.51	-12.21		1.5	58	-1.20		-4.59	0.0	000	0.000
Medium Trucks:	77.72	-29.45		1.0	52	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	82.99	-33.41		1.0	31	-1.20		-5.56	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	er atte	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day		Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	54	.7	53.1		51.3		45	.3	53.9	9	54.5
Medium Trucks:	48	3.7	47.5		41.1		39	.6	48.0	0	48.3
Heavy Trucks:	50	0.0	48.9		39.9		41	.1	49.	5	49.6
Vehicle Noise:	56	5.7	55.3		52.0		47	.5	56.0	0	56.4
Centerline Distand	ce to Noise Co	ontour (in feet)									
			П	70	dBA	65	dBA	6	60 dBA	55	dBA
			Ldn:		5	1	0		22		47
		CI	VEL:		5	1	1		23		50

	FH	WA-RD-77-108	HIGH	WAY N	NOISE PI	REDICT	ION MO	DEL			
Road Nam	io: EACP21 ne: Avenue 60 nt: w/o Monro					.,	Name: lumber:		ave-Coral	Mounta	ain
SITE	SPECIFIC IN	IPUT DATA				N	IOISE I	MODE	L INPUT	s	
Highway Data					Site Con	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	5,100 vehicles	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2 .	Axles):	15		
Peak H	lour Volume:	474 vehicles	3		He	avy Truc	cks (3+.	Axles):	15		
Ve	hicle Speed:	45 mph		-	Vehicle i	Miv					
Near/Far La	ne Distance:	45 feet		H		icleType	,	Dav	Evening	Night	Daily
Site Data					*0,,		Autos:	77.5%		9.69	
Ra	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.39	% 1.84%
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.89	% 0.74%
Centerline Di	. ,	51.0 feet		F	M-1 0			- /! #	41		
Centerline Dist.	to Observer:	51.0 feet		Ľ	Noise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000			
Observer Height	(Above Pad):	5.0 feet				m Truck		297	0	E 1	-4: 0.0
	ad Elevation:	0.0 feet			Hear	y Truck	s: 8.	006	Grade Ad	justmei	nt: U.U
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 46	.041			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 45	.848			
	Right View:	90.0 degree	es		Hear	y Truck	s: 45	.867			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresi	nel	Barrier Att	en B	erm Atten
Autos:	68.46	-5.19		0.4	3	-1.20		-4.65	0.0	000	0.000
Medium Trucks:	79.45	-22.43		0.4	6	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	84.25	-26.38		0.4	6	-1.20		-5.42	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	′	Leq E	vening	Leq	Night		Ldn	(	CNEL
Autos:	62	2.5	60.9		59.2		53.	1	61.	7	62.3
Medium Trucks:	56	3.3	55.1		48.7		47.	-	55.	6	55.9
Heavy Trucks:	57	7.1	56.0		47.0		48.	2	56.	6	56.7
Vehicle Noise:	64	1.3	62.9		59.8		55.	1	63.	6	64.1
Centerline Distance	ce to Noise C	ontour (in feet,	)								
					dBA		dBA	6	60 dBA	5	i5 dBA
			Ldn:		9		11		89		192
		Ci	NEL:	2	11	4	14		96		206

	FHW	A-RD-77-108	HIGHV	VAY NO	DISE PI	REDICTI	ON MO	DEL			
Road Nam	o: EAC23 e: Jefferson St. nt: n/o Avenue 8						Name: ' umber: '		ave-Coral I	Mountair	
SITE S	SPECIFIC INF	PUT DATA				N	OISE N	/ODE	L INPUTS	5	
Highway Data				S	ite Con	ditions (	Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt): 3	3,800 vehicles	;					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tru	icks (2 A	Axles):	15		
Peak H	our Volume:	3,143 vehicles	;		He	avy Truc	ks (3+ A	Axles):	15		
Vei	hicle Speed:	55 mph		V	ehicle l	Miv					
Near/Far Lai	ne Distance:	71 feet		-		icleType		Day	Evening	Night	Daily
Site Data								77.5%	v	9.6%	
Rai	rier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	-	0.0 1001			1	Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		64.0 feet				FI		- /! #-	-41		
Centerline Dist.		64.0 feet		N	oise Sc	ource Ele			et)		
Barrier Distance	to Observer:	0.0 feet				Autos		000			
Observer Height (	Above Pad):	5.0 feet				m Trucks		297	Grade Ad	undmand	
Pa	ad Elevation:	0.0 feet			Heav	y Trucks	6.1	006	Grade Adj	usimeni.	0.0
Roa	ad Elevation:	0.0 feet		Li	ane Eq	uivalent	Distanc	ce (in f	eet)		
F	Road Grade:	0.0%				Autos	: 53.	486			
	Left View:	-90.0 degree	:S		Mediu	m Trucks	53.	320			
	Right View:	90.0 degree	:S		Heav	y Trucks	53.	337			
FHWA Noise Mode	el Calculations										
VehicleType		Traffic Flow	Dista		Finite	Road	Fresn		Barrier Atte		m Atten
Autos:	71.78	2.15		-0.54		-1.20		-4.70	0.0		0.00
Medium Trucks:	82.40	-15.09		-0.52		-1.20		-4.88	0.0		0.00
Heavy Trucks:	86.40	-19.04		-0.52		-1.20		-5.31	0.0	00	0.00
Unmitigated Noise			barrier	attenu	ation)						
	Leq Peak Hour			Leq Eve	_	Leq I			Ldn		VEL
Autos:	72.	_	70.6		68.8		62.8		71.4		72.0
Medium Trucks:	65.0	-	64.4		58.0		56.5		65.0		65.2
Heavy Trucks: Vehicle Noise:	65.0 73.1		64.5 72.3		55.5 69.4		56.7 64.5		65.1 73.1		65.: 73.:
Centerline Distanc					00.4		04.0		70.1		73.
Jernerille Distalle	e to Noise Coi	nour (iii ieel)		70 dE	84	65.0	IBA	6	0 dBA	55	dBA
			Ldn:	102		22	20		475		022

Autos: 77.5%   12.9%   9.6%   97.42		FH\	WA-RD-77-108	HIGHW	AY N	DISE PREDIC	TION MODEL		
Average Daily Traffic (Ad):	Road Nam	e: Avenue 60	e St.						ountain
Average Daily Traffic (Adf):	SITE S	SPECIFIC IN	NPUT DATA						
Peak Hour Percentage: 9.30%	Highway Data				S	ite Condition	s (Hard = 10, 3	Soft = 15)	
Near/Far Lane Distance:   48 feet   Vericle Mix   Vericle Type   Day   Evening   Night   Daily   Daily   Site Data   Autos: 77.5%   12.9%   9.8%   97.42   Autos: 77.5%   12.9%   9.8%   97.42   Autos: 77.5%   12.9%   9.8%   97.42   Autos: 77.5%   10.8%   1.74   Autos: 61.7   60.1   58.3   52.3   60.9   61   64.0	Peak Hour Peak H	Percentage: our Volume:	9.30% 428 vehicle				Trucks (2 Axles	s): 15	
Site Data   Autos: 77.5%   12.9%   9.5%   9.742		F			ν	ehicle Mix			
Barrier Height:   0.0 feet   Barrier Type (0-Wall, 1-Berm):   0.0   Centerline Dist. to Barrier:   64.0 feet   Centerline Dist. to Observer:   64.0 feet   Centerline Dist.   Centerline Dist. to Observer:   64.0 feet   Centerline Dist. to Observer:   64.0 feet   Centerline Dist. to Observer:   64.0 feet   Centerline Dist. to Observer:   64.0 feet   Centerline Dist. to Observer:   64.0 feet   Centerline Dist.   Ce	ivear/⊢ar Lar	ne Distance:	48 feet			VehicleTy	pe Day	Evening N	light Daily
Noise Source Elevations (in feet)	Bar						Trucks: 84.8	% 4.9%	10.3% 1.84%
Centerline Dist. to Observer: 64.0 feet Barrier Distance to Observer: 0.0 feet Barrier Distance to Observer: 0.0 feet Pad Elevation: 0.0 feet Ro	,,,,	. ,				Heavy	Trucks: 86.5	70 Z.170	10.8% 0.74%
Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Grade: 0.0%   Carden Advances: 59.540					٨	loise Source	Elevations (in	feet)	
Road Grade: 0.0%	Barrier Distance of Observer Height (A Pa	to Observer: Above Pad): ad Elevation:	0.0 feet 5.0 feet 0.0 feet		,	Medium Tru Heavy Tru	cks: 2.297 cks: 8.006		tment: 0.0
Left View:								i ieet)	
VehicleType	r	Left View:	-90.0 degre			Medium Tru	cks: 59.391		
Autos: 70.20	FHWA Noise Mode	l Calculation	ıs						
Medium Trucks:   81.00   -23.33   -1.22   -1.20   -4.88   0.000   0.0     Heavy Trucks:   85.38   -27.29   -1.23   -1.20   -5.31   0.000   0.0     Unmitigated Noise Levels (without Topo and barrier attenuation)   VehicleType   Leq Peak Hour   Leq Day   Leq Evening   Leq Night   Ldn   CNEL     Autos:   61.7   60.1   58.3   52.3   60.9   61     Medium Trucks:   55.2   54.0   47.7   46.1   54.6   55     Heavy Trucks:   55.7   54.6   45.5   46.8   55.1   55     Vehicle Noise:   63.4   61.9   58.9   54.1   62.6   63     Centerline Distance to Noise Contour (In feet)   70 dBA   65 dBA   60 dBA   55 dBA     Ldn:   21   45   96   207	VehicleType	REMEL	Traffic Flow	Distar	псе	Finite Road	Fresnel	Barrier Atten	Berm Atten
Heavy Trucks:   85.38   -27.29   -1.23   -1.20   -5.31   0.000   0.0	Autos:	70.20	-6.10		-1.24	-1.2	0 -4.7	0.000	0.00
Unmitigated Noise   Levels (without Topo and barrier attenuation)   VehicleType   Leq Peak Hour   Leq Day   Leq Evening   Leq Night   Ldn   CNEL	Medium Trucks:	81.00	-23.33		-1.22	-1.2	0 -4.8	8 0.000	0.000
VehicleType	Heavy Trucks:	85.38	-27.29		-1.23	-1.2	0 -5.3	1 0.000	0.000
Autos:         61.7         60.1         58.3         52.3         60.9         61           Medium Trucks:         55.2         54.0         47.7         46.1         54.6         54.6           Heavy Trucks:         55.7         54.6         45.5         46.8         55.1         55           Vehicle Noise:         63.4         61.9         58.9         54.1         62.6         63           Centerline Distance to Noise Contour (In feet)         70 dBA         65 dBA         60 dBA         55 dBA           Ldn:         21         45         96         207	Unmitigated Noise	Levels (with	out Topo and	barrier a	ttenu	ation)			
Medium Trucks:         55.2         54.0         47.7         46.1         54.6         54.6           Heavy Trucks:         55.7         54.6         45.5         46.8         55.1         55           Vehicle Noise:         63.4         61.9         58.9         54.1         62.6         63           Centerline Distance to Noise Contour (in feet)           70 dBA         65 dBA         60 dBA         55 dBA           Ldn:         21         45         96         207	VehicleType	Leq Peak Hou	ur Leq Da	/ Lo	eq Ev	ening Le	q Night	Ldn	CNEL
Heavy Trucks:	Autos:	61	1.7	60.1		58.3	52.3	60.9	61.5
Vehicle Noise:         63.4         61.9         58.9         54.1         62.6         63           Centerline Distance to Noise Contour (in feet)           70 dBA         65 dBA         60 dBA         55 dBA           Ldn:         21         45         96         207	Medium Trucks:	55	5.2	54.0		47.7	46.1	54.6	54.8
Centerline Distance to Noise Contour (in feet)           70 dBA         65 dBA         60 dBA         55 dBA           Ldn:         21         45         96         207	Heavy Trucks:	55	5.7	54.6		45.5	46.8	55.1	55.0
70 dBA 65 dBA 60 dBA 55 dBA Ldn: 21 45 96 207	Vehicle Noise:	63	3.4	61.9		58.9	54.1	62.6	63.
Ldn: 21 45 96 207	Centerline Distanc	e to Noise C	ontour (in feet	)					
				1 -					
CNEL: 22 48 103 222									
			C	NEL:	22	!	48	103	222

Wednesday, March 25, 2020

FH	WA-RD-77-108 HIC	SHWAY I	NOISE P	REDICTIO	N MODEL		
Scenario: EAC23 Road Name: Jefferson: Road Segment: n/o Avenu					lame: The \ mber: 1264:	Vave-Coral N 2	Mountain
SITE SPECIFIC II	NPUT DATA			N	DISE MOD	EL INPUTS	3
Highway Data			Site Cor	ditions (i	Hard = 10, S	Soft = 15)	
Average Daily Traffic (Adt):	24,000 vehicles				Auto	3: 15	
Peak Hour Percentage:	9.30%		Me	edium Tru	cks (2 Axles	): 15	
Peak Hour Volume:	2,232 vehicles		He	avy Truci	s (3+ Axles	): 15	
Vehicle Speed:	55 mph	ŀ	Vehicle	Miv			
Near/Far Lane Distance:	71 feet	ŀ		icleType	Dav	Evening	Night Daily
Site Data					utos: 77.5	-	9.6% 97.42%
Barrier Height:	0.0 feet		M	edium Tru	icks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-Wall, 1-Berm):	0.0			Heavy Tru	icks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dist. to Barrier:	64.0 feet	ŀ	Noise S	nurce Fle	vations (in	feet)	
Centerline Dist. to Observer:	64.0 feet	ŀ		Autos	•	.001)	
Barrier Distance to Observer:	0.0 feet		Mediu	m Trucks			
Observer Height (Above Pad):	5.0 feet			vy Trucks		Grade Adii	ustment: 0.0
Pad Elevation:	0.0 feet			•			
Road Elevation:	0.0 feet		Lane Eq		Distance (in	feet)	
Road Grade:	0.0%			Autos.	00.100		
Left View:	-90.0 degrees			m Trucks			
Right View:	90.0 degrees		Hea	vy Trucks	53.337		
FHWA Noise Model Calculation							
VehicleType REMEL		Distance		Road	Fresnel	Barrier Atte	
Autos: 71.78		-0.5		-1.20	-4.70		
Medium Trucks: 82.40		-0.5	_	-1.20	-4.88		
Heavy Trucks: 86.40		-0.5		-1.20	-5.3	0.0	0.000
Unmitigated Noise Levels (with		_					_
VehicleType Leq Peak Ho			vening	Leq N		Ldn	CNEL
	0.7 69.		67.4		61.3	69.9	70.5
	4.1 62.9		56.6		55.0	63.5	
	4.1 63.0		54.0		55.2	63.6	
	2.3 70.8	В	67.9		63.0	71.6	72.0
Centerline Distance to Noise C	contour (in feet)	70	dBA	65 d	DA .	60 dBA	55 dBA
	I dr	1	ава 11	17	1	378	55 dBA 814
	CNFI		18	18	-	378 406	875
	CIVEL	. (		10	9	400	0/0

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGHV	NAY N	OISE PF	REDICTION	ом мо	DEL			
Road Na	nrio: EAC23 me: Jefferson s ent: n/o Avenue						Name: ımber:		ave-Coral	Mountai	n
SITE	SPECIFIC II	NPUT DATA				N	OISE I	MODE	L INPUT	s	
Highway Data				S	ite Con	ditions (	Hard =	10, Sc	oft = 15)		
Average Dail	y Traffic (Adt):	19,800 vehicle	s					Autos:	15		
Peak Hou	r Percentage:	9.30%			Me	dium Tru	cks (2	Axles):	15		
Peak	Hour Volume:	1,841 vehicle	s		He	avy Truc	ks (3+ )	Axles):	15		
V	ehicle Speed:	55 mph		1	ehicle I	Miv					
Near/Far L	ane Distance:	71 feet		-		icleType		Dav	Evenina	Niaht	Daily
Site Data					VOII		utos:	77.5%		9.6%	. ,
	arrier Height:	0.0 feet			Me	edium Tr		84.8%		10.3%	
Barrier Type (0-		0.0 feet			F	Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
,, ,	Dist. to Barrier:	64.0 feet									
Centerline Dis		64.0 feet		٨	loise So	ource Ele		•	eet)		
Barrier Distanc		0.0 feet				Autos		000			
Observer Heigh		5.0 feet				m Trucks		297			
	Pad Elevation:	0.0 feet			Heav	y Trucks	: 8.	006	Grade Ad	justmen	f: 0.0
	nad Elevation:	0.0 feet		L	ane Equ	uivalent	Distan	ce (in i	feet)		
	Road Grade:	0.0%				Autos	: 53.	486			
	I eft View:	-90.0 degre	es		Mediui	m Trucks	: 53.	320			
	Right View:	90.0 degre			Heav	y Trucks	: 53.	337			
FHWA Noise Mo	del Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresi	nel	Barrier Att	en Be	rm Atten
Autos		-0.17		-0.54		-1.20		-4.70	0.0	000	0.000
Medium Trucks	82.40	-17.41		-0.52	2	-1.20		-4.88	0.0	000	0.000
Heavy Trucks	86.40	-21.37		-0.52	2	-1.20		-5.31	0.0	000	0.000
Unmitigated Nois	se Levels (with	out Topo and	barrier	attenu	ıation)						
VehicleType	Leq Peak Ho	ur Leq Daj	v .	Leq Ev	ening	Leq I	light		Ldn	С	NEL
Autos	: 6	9.9	68.3		66.5		60.	5	69.	1	69.7
	: 6	3.3	62.1		55.7		54.2	2	62.6	3	62.9
Medium Trucks		3.3	62.2		53.2		54.4		62.8		62.9
Heavy Trucks							62.5	2	70.7		71.2
		1.5	70.0		67.0		02.	_	70.	,	/ 1.2
Heavy Trucks	: 7				67.0		02.		70.		
Heavy Trucks Vehicle Noise	: 7			70 d		65 0			70 60 dBA		i dBA
Heavy Trucks Vehicle Noise	: 7	ontour (in feet		70 d 72 77	BA		IBA 4			55	

	FHV	VA-RD-77-108	HIGH	WAY N	OISE P	REDICT	ION MO	DEL			
	o: EAC23 e: Madison St t: n/o Avenue						t Name: lumber:		ave-Coral	Mounta	in
SITE S	PECIFIC IN	IPUT DATA				ı	IOISE I	ИODE	L INPUT	S	
Highway Data				S	ite Cor	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily T Peak Hour F Peak Ho	. ,	10,900 vehicle 9.30% 1,014 vehicle					ucks (2 i	,	15		
Veh	nicle Speed:	50 mph		V	ehicle	Miv					
Near/Far Lan	ne Distance:	51 feet				icleType		Dav	Evening	Night	Daily
Site Data					*01.		Autos:	77.5%	-	9.69	
Pan	rier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.39	
Barrier Type (0-Wa	all, 1-Berm):	0.0				Heavy T	rucks:	86.5%	2.7%	10.89	
Centerline Dis		54.0 feet		٨	loise S	ource E	levation	s (in fe	eet)		
Centerline Dist. to		54.0 feet				Auto	s: 0.	000			
Barrier Distance to		0.0 feet			Mediu	m Truck	s: 2.	297			
Observer Height (A	Above Pad): d Elevation:	5.0 feet 0.0 feet				vy Truck		006	Grade Ad	justmer	nt: 0.0
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalen	t Distan	ce (in	feet)		
R	Road Grade:	0.0%				Auto	s: 47.	862			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 47.	677			
	Right View:	90.0 degre			Hea	vy Truck	s: 47.	695			
FHWA Noise Model	I Calculation:	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresi	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-2.35		0.18	3	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-19.59		0.21		-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-23.54		0.20	)	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er attenu	ıation)						
	Leq Peak Hοι			Leq Ev			Night		Ldn		CNEL
Autos:	66	.8	65.3		63.5		57.4	1	66.	1	66.7
Medium Trucks:	60		59.2		52.9		51.0	-	59.8	-	60.0
Heavy Trucks:	60		59.7		50.7		51.9		60.3		60.4
Vehicle Noise:	68		67.1		64.1		59.3	3	67.8	3	68.3
Centerline Distance	e to Noise Co	ontour (in feet	)								
				70 d			dBA	6	60 dBA	1	5 dBA
			Ldn:	39			33		179		386
		С	NEL:	42	2	8	39		193		415

	: EAC23				0	ioot No	. The 14	lava Carci I	Anunte:		
	: EAC23 : Madison S					oject ivame ob Numbe		ave-Coral N	nountair	1	
Road Seamen					30	ob ivuilibe	. 12042				
				-							
	PECIFIC II	IPUT DATA						L INPUTS	•		
Highway Data				Si	te Condition	ons (Hard	= 10, S				
Average Daily 1		9,100 vehicle	s				Autos				
Peak Hour F		9.30%				n Trucks (					
	ur Volume:	846 vehicle	S		Heavy	Trucks (3	+ Axles)	15			
	icle Speed:	50 mph		Ve	hicle Mix						
Near/Far Lan	e Distance:	51 feet			Vehicle	ype	Day	Evening	Night	Daily	
Site Data				Autos: 77.5% 12.9% 9.6% 97.4							
Ran	ier Heiaht:	0.0 feet			Mediu	m Trucks:	84.89	4.9%	10.3%	1.849	
Barrier Type (0-Wa	ill, 1-Berm):	0.0			Hea	y Trucks:	86.5%	6 2.7%	10.8%	0.74%	
Centerline Dis		54.0 feet		Noise Source Elevations (in feet)							
Centerline Dist. to		54.0 feet				Autos:	0.000				
Barrier Distance to	Observer:	0.0 feet			Medium T		2.297				
Observer Height (Above Pad): 5.0 feet					Heavy T	ucks:	8.006	Grade Adju	ustment	0.0	
	d Elevation:	0.0 feet		-	,						
	d Elevation:	0.0 feet		La	ne Equiva			feet)			
R	oad Grade:	0.0%			Autos: 47.862 Medium Trucks: 47.677						
	Left View:	-90.0 degre									
	Right View:	90.0 degre	es		Heavy T	rucks: 4	7.695				
FHWA Noise Mode	Calculation	s									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite Roa	nd Fre	snel	Barrier Atte	n Ber	m Atten	
		-3.13		0.18	-1	.20	-4.67	0.0	00	0.00	
Autos:	70.20										
Autos: Medium Trucks:	81.00	-20.37		0.21		.20	-4.87	0.0			
Autos: Medium Trucks: Heavy Trucks:	81.00 85.38	-20.37 -24.33		0.20	-1		-4.87 -5.39	0.0		0.000	
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise	81.00 85.38 <b>Levels (with</b>	-20.37 -24.33 out Topo and	barrier a	0.20	-1	.20 .20		0.0	00	0.00	
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType	81.00 85.38 <b>Levels (with</b> eq Peak Ho	-20.37 -24.33 out Topo and ur Leq Day	barrier a	0.20	-1	.20 .20 Leq Night	-5.39	0.0	00	0.00	
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos:	81.00 85.38 Levels (with eq Peak Ho	-20.37 -24.33 <b>cout Topo and</b> ur Leq Day	barrier a	0.20	-1 ation) ning 62.7	.20 .20 .20 Leq Night	-5.39 6.6	0.00 Ldn 65.3	00	0.00 NEL 65.	
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	81.00 85.38 <b>Levels (with</b> eq Peak Ho 60	-20.37 -24.33 <b>out Topo and</b> ur Leq Day 3.1	barrier a / Lo 64.5 58.4	0.20	-1 ation) ning 62.7 52.1	.20 .20 Leq Night	-5.39 3.6 0.5	0.00 Ldn 65.3 59.0	00	0.000 NEL 65.:	
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	81.00 85.38 <b>Levels (with</b> eq Peak Ho 60 50	-20.37 -24.33 out Topo and ur   Leq Day 3.1 9.6 0.1	barrier a / L 64.5 58.4 58.9	0.20	-1 ation) ning 62.7 52.1 49.9	.20 .20 .20 Leq Night 5 5	-5.39 6.6 0.5 1.2	0.00 Ldn 65.3 59.0 59.5	CI	0.000 NEL 65.: 59.:	
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	81.00 85.38 <b>Levels (with</b> Leq Peak Ho 6i 55 6i	-20.37 -24.33 rout Topo and ur   Leq Day 3.1 9.6 0.1 7.8	barrier a / L 64.5 58.4 58.9 66.3	0.20	-1 ation) ning 62.7 52.1	.20 .20 .20 Leq Night 5 5	-5.39 3.6 0.5	0.00 Ldn 65.3 59.0	CI	0.000 NEL 65.: 59.:	
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	81.00 85.38 <b>Levels (with</b> Leq Peak Ho 6i 55 6i	-20.37 -24.33 rout Topo and ur   Leq Day 3.1 9.6 0.1 7.8	barrier a / L 64.5 58.4 58.9 66.3	0.20 attenua eq Eve	-1 ation) ning   62.7 52.1 49.9 63.3	.20 .20 Leq Night 5 5 5	-5.39 6.6 0.5 1.2	0.00 Ldn 65.3 59.0 59.5 67.0	Ci	0.000 NEL 65.5 59.6 67.6	
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	81.00 85.38 <b>Levels (with</b> Leq Peak Ho 6i 55 6i	-20.37 -24.33 rout Topo and ur   Leq Day 3.1 9.6 0.1 7.8	barrier a / L 64.5 58.4 58.9 66.3	0.20	-1 ation) ning   62.7 52.1 49.9 63.3	.20 .20 .20 Leq Night 5 5	-5.39 6.6 0.5 1.2	0.00 Ldn 65.3 59.0 59.5	00 Ci	0.00 NEL 65. 59.	

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 I	HIGHWAY	NOISE P	REDICTIO	N MODEL					
	o: EAC23 e: Madison St t: n/o Avenue			Project Name: The Wave-Coral Mountain Job Number: 12642							
SITE S	PECIFIC IN	PUT DATA			NC	DISE MOD	EL INPUTS				
Highway Data				Site Cor	nditions (F	lard = 10, 3	Soft = 15)				
Average Daily T	raffic (Adt):	8,600 vehicles				Auto	s: 15				
Peak Hour F	Percentage:	9.30%		Me	edium Truc	cks (2 Axles	:): 15				
Peak Ho	our Volume:	800 vehicles		He	eavy Truck	s (3+ Axles	:): 15				
Veh	icle Speed:	50 mph		Vehicle	Miv						
Near/Far Lan	e Distance:	51 feet			icleType	Day	Evening	Night Daily			
Site Data				VOI		Itos: 77.5		. ,			
	dan Halmba	0.0.64		M	ledium Tru						
Barrier Type (0-Wa	rier Height:	0.0 feet 0.0			Heavy Tru						
Centerline Disi		54.0 feet									
	Centerline Dist. to Observer: 54.0 feet					vations (in	feet)				
Barrier Distance to		0.0 feet			Autos:						
Observer Height (A		5.0 feet			m Trucks:						
	d Flevation:	0.0 feet		Hea	vy Trucks:	8.006	Grade Adju	stment: 0.0			
Road	d Elevation:	0.0 feet		Lane Eq	uivalent E	Distance (ii	ı feet)				
	oad Grade:	0.0%			Autos:	47.862					
	Left View:	-90.0 degrees	s	Mediu	m Trucks:	47.677					
	Right View:	90.0 degrees		Hea	vy Trucks:	47.695					
FHWA Noise Model	Calculation	S		!							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	n Berm Atten			
Autos:	70.20	-3.38	0.	18	-1.20	-4.6	7 0.00	0.000			
Medium Trucks:	81.00	-20.62	0.	21	-1.20	-4.8	7 0.00	0.000			
Heavy Trucks:	85.38	-24.57	0.	20	-1.20	-5.3	9 0.00	0.000			
Unmitigated Noise	Levels (with	out Topo and b	arrier atte	nuation)							
VehicleType [	Leq Peak Hou	r Leq Day	Leq	Evening	Leq N	ight	Ldn	CNEL			
Autos:	65	.8 6	34.2	62.5	i	56.4	65.0	65.6			
Medium Trucks:	59	.4 5	8.2	51.8		50.3	58.8	59.0			
Heavy Trucks:	59	.8 5	8.7	49.7		50.9	59.3	59.4			
Vehicle Noise:	67	.5 6	6.1	63.0	1	58.2	66.8	67.3			
Centerline Distance	e to Noise Co	ntour (in feet)									
				) dBA	65 dE	BA	60 dBA				
	Ldn:			33 71			153	000 0.000 000 0.000 000 0.000 000 0.000 CNEL 0 65.6 3 59.0 3 59.4			
	CNEL:				35 76 165						

	FH\	WA-RD-77-108	HIGH	YAW	NOISE P	REDICT	ION MC	DEL			
Road Nam	io: EAC23 ne: Madison St nt: n/o Airport	-					t Name: lumber:		'ave-Coral	Mountai	in
	SPECIFIC IN	IPUT DATA				N	NOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard =	: 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	15,300 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles).	15		
Peak H	lour Volume:	1,423 vehicle	s		He	eavy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	50 mph		ŀ	Vehicle	Miv					
Near/Far La	ne Distance:	51 feet		l		icleType	9	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	
Ra	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		54.0 feet		-	Noise S	ouroo E	lovetion	o (in f	0041		
Centerline Dist.	to Observer:	54.0 feet		-	Noise 3	Auto		•	eet)		
Barrier Distance	to Observer:	0.0 feet			11-15	m Truck		.000			
Observer Height (	Observer Height (Above Pad): 5,0 feet							.006	Grade Ad	iustmon	<i>t</i> : 0.0
Pa	ad Elevation:	0.0 feet			Hea	vy Truck	is: 8	.006	Grade Au	justinen	1. 0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distar	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	rs: 47	.677			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 47	.695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-0.88		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-18.12		0.2	1	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-22.07		0.2	0	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	r atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn		NEL
Autos:	68	1.3	66.7		65.0		58.	9	67.	5	68.1
Medium Trucks:	61	.9	60.7		54.3		52.	8	61.3	3	61.5
Heavy Trucks:	62		61.2		52.2		53.	_	61.8		61.9
Vehicle Noise:	70	0.0	68.6		65.5		60.	7	69.3	3	69.8
Centerline Distance	e to Noise Co	ontour (in feet	)								
					dBA		dBA	- (	60 dBA	1	5 dBA
			Ldn:		8		04		225		484
		C	NEL:	5	i2	1	12		242		520

	FHV	VA-RD-77-108	HIG	HWAY N	IOISE PI	REDICT	ION MO	DDEL		_			
Road Nam	o: EAC23 e: Madison St. nt: n/o Avenue						t Name: lumber:		ave-Coral	Mountair	1		
	SPECIFIC IN	PUT DATA							L INPUT	S			
Highway Data					Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	5,400 vehicle	S		Autos: 15								
Peak Hour	Percentage:	9.30%			Me	edium Ti	ucks (2	Axles).	15				
Peak H	our Volume:	502 vehicle	S		Heavy Trucks (3+ Axles): 15								
Vei	hicle Speed:	45 mph			Vehicle Mix								
Near/Far Lai	ne Distance:	45 feet		F		icleType		Dav	Evening	Night	Dailv		
Site Data							Autos:	77.5%			97.42%		
Rai	rier Height:	0.0 feet			М	ledium 7	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	-	0.0				Heavy 7	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dis	. ,	51.0 feet		-	Noise Source Elevations (in feet)								
Centerline Dist. to Observer: 51.0 feet					Autos: 0.000								
Barrier Distance to Observer: 0.0 feet													
Observer Height (	Above Pad):	5.0 feet				m Truck		.297	Crada Ad	i rotmont			
Pa	d Elevation:	0.0 feet			Heat	vy Truck	s: e	.006	Grade Ad	usimeni	. 0.0		
Roa	d Elevation:	0.0 feet		1	Lane Eq	uivalen	t Distar	ice (in	feet)				
F	Road Grade:	0.0%			Autos: 46.041								
	Left View:	-90.0 degre	es		Medium Trucks: 45.848								
	Right View:	90.0 degre	es		Hear	vy Truck	s: 45	.867					
FHWA Noise Mode	l Calculations	S											
VehicleType	REMEL	Traffic Flow		stance		Road	Fres		Barrier Att		m Atten		
Autos:	68.46	-4.94		0.43		-1.20		-4.65		000	0.000		
Medium Trucks:	79.45	-22.18		0.4	-	-1.20		-4.87		000	0.000		
Heavy Trucks:	84.25	-26.14		0.4	6	-1.20		-5.42	0.0	000	0.000		
Unmitigated Noise	•		barri	er atten	uation)								
	Leq Peak Hou	- 1 - 2		Leq E			Night		Ldn		VEL		
Autos:	62		61.2		59.4		53		62.0		62.6		
Medium Trucks:	56.		55.3		49.0		47		55.9		56.1		
Heavy Trucks: Vehicle Noise:	57. 64		56.3 63.2		47.2 60.0		48 55	-	56.8 63.9		57.0 64.3		
Centerline Distanc					55.0		- 55	-	55.0	-	04.0		
Jernerille Distalle	e to Noise Co	mour (iii leet	_	70 0	dBA	65	dBA		60 dBA	55	dBA		
			Ldn:	2	0		13		93	. ı	99		

	FH\	WA-RD-77-108	HIGHWA	Y NO	ISE PREDICT	ION MODEL				
Road Nam	io: EAC23 ne: Madison Si nt: n/o Avenue					t Name: The V Number: 12642	Vave-Coral Mo 2	ountain		
SITE	SPECIFIC IN	NPUT DATA				NOISE MOD				
Highway Data				Sit	e Conditions	(Hard = 10, S	oft = 15)			
	Traffic (Adt): Percentage: lour Volume:	12,300 vehicle 9.30% 1,144 vehicle				Autos rucks (2 Axles, icks (3+ Axles,	): 15			
Ve	hicle Speed:	50 mph		Va	hicle Mix					
Near/Far La	ne Distance:	51 feet		Ve	VehicleTyp	e Dav	Evening N	light Daily		
Site Data				+		Autos: 77.5°	-	9.6% 97.42%		
	rrier Heiaht:	0.0 feet		1	Medium 1			10.3% 1.84%		
Barrier Type (0-W		0.0 reet 0.0			Heavy T			10.8% 0.74%		
Centerline Dis		54.0 feet		No	ise Source E	levations (in	feet)			
Ros	to Observer:	54.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree	es	Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.006 Grade Adjustment: 0.0  Lane Equivalent Distance (in feet)  Autos: 47.862 Medium Trucks: 47.677						
FHWA Noise Mode	Right View:	90.0 degree	es		Heavy Truck	ks: 47.695				
VehicleType	REMEL	Traffic Flow	Distanc	e	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	70.20	-1.82	-	0.18	-1.20	-4.67	0.000	0.000		
Medium Trucks:	81.00	-19.06		0.21	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	85.38	-23.02		0.20	-1.20	-5.39	0.000	0.000		
Unmitigated Noise	Levels (with	out Topo and	barrier at	tenua	tion)					
VehicleType	Leq Peak Hou	ur Leq Day	Lec	g Evei	ning Leq	Night	Ldn	CNEL		
Autos:	67	7.4	65.8		64.0	58.0	66.6	67.2		
Medium Trucks:	60	0.9	59.8		53.4	51.8	60.3	60.5		
Heavy Trucks:	61	1.4	60.3		51.2	52.5	60.8	61.0		
Vehicle Noise:	69	9.1	67.6		64.6	59.8	68.3	68.8		
Centerline Distance	e to Noise C	ontour (in feet	)							
		-	7	70 dB.	A 65	dBA	60 dBA	55 dBA		
			Ldn:	42	!	90	194	419		
		С	NEL:	45	!	97	209	450		

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 H	IIGHWAY	NOISE P	REDICTIO	N MODEL					
Scenario Road Name Road Segment	: Monroe St.	50		Project Name: The Wave-Coral Mountain Job Number: 12642							
SITE SI	PECIFIC IN	PUT DATA					EL INPUTS				
Highway Data				Site Cor	nditions (F	lard = 10, S	oft = 15)				
Average Daily Ti	raffic (Adt): 1	13,200 vehicles				Autos	: 15				
Peak Hour P	ercentage:	9.30%		Me	edium Truc	ks (2 Axles	): 15				
Peak Ho	ur Volume:	1,228 vehicles		He	eavy Truck	s (3+ Axles	): 15				
Vehi	icle Speed:	50 mph		Vehicle	Mix						
Near/Far Lane	e Distance:	43 feet			icleType	Day	Evening N	light Daily			
Site Data						itos: 77.5	-	9.6% 97.42%			
Rarr	ier Heiaht:	0.0 feet		M	ledium Tru	cks: 84.8	% 4.9%	10.3% 1.84%			
Barrier Type (0-Wa		0.0			Heavy Tru	cks: 86.5	% 2.7%	10.8% 0.74%			
Centerline Dist.	to Barrier:	64.0 feet		Noisa S	ource Fle	vations (in	foot)				
Centerline Dist. to	Observer:	64.0 feet		110/36 0	Autos:	•	icci)				
Barrier Distance to	Observer:	0.0 feet		Mediu	m Trucks:						
Observer Height (A	bove Pad):	5.0 feet			vy Trucks:		Grade Adjus	tment: 0.0			
Pad	d Elevation:	0.0 feet			*						
Road	d Elevation:	0.0 feet		Lane Eq		Distance (in	feet)				
Re	oad Grade:	0.0%			Autos:	00.100					
	Left View:	-90.0 degrees			m Trucks:						
ı	Right View:	90.0 degrees		Hea	vy Trucks:	60.355					
FHWA Noise Model	Calculations	s									
VehicleType	REMEL	Traffic Flow	Distance		Road	Fresnel	Barrier Atten				
Autos:	70.20	-1.52	-1.		-1.20	-4.70					
Medium Trucks:	81.00	-18.76	-1.		-1.20	-4.88					
Heavy Trucks:	85.38	-22.71	-1.	33	-1.20	-5.31	0.000	0.000			
Unmitigated Noise I	•	-	arrier atte	nuation)							
	eq Peak Hou			ening	Leq N		Ldn	CNEL			
Autos:	66		4.6	62.8		56.7	65.4	66.0			
Medium Trucks:	59		3.5	52.2		50.6	59.1	59.3			
Heavy Trucks:	60		9.0	50.0		51.2	59.6	59.7			
Vehicle Noise:	67		6.4	63.4		58.6	67.1	67.6			
Centerline Distance	to Noise Co	ntour (in feet)	-	10.4	05.5		00 104	55 IDA			
				dBA	65 dE	3A	60 dBA	55 dBA			
		_	u.,.	41 89 191				412			
		CNI	EL:	44	95		205	442			

Wednesday, March 25, 2020

	FHW	A-RD-77-108	HIGHV	VAY N	OISE P	REDICTI	OM MO	DEL			
Scenario: EAC23 Road Name: Monro Road Segment: n/o Av	St.	2				.,	Name: umber:		ave-Coral	Mountai	n
SITE SPECIFI						N	OISE	MODE	L INPUT	c	
Highway Data	O HAF	OIDAIA		S	Site Con	ditions (				<u> </u>	
Average Daily Traffic (A	/+)· 11	700 vehicles				,		Autos			
Peak Hour Percenta	,	9.30%	,		Me	dium Tru					
Peak Hour Volur		.088 vehicles				avy Truc		,			
Vehicle Spe		50 mph		L			(				
Near/Far Lane Distan		43 feet		V	/ehicle l						
		10 1000			Veh	icleType		Day	Evening	Night	Daily
Site Data							utos:	77.5%		9.6%	
Barrier Heig		0.0 feet				edium Tr		84.8%		10.3%	
Barrier Type (0-Wall, 1-Ber	,	0.0			,	Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barr		64.0 feet		٨	Voise Sc	ource Ele	evation	s (in f	eet)		
Centerline Dist. to Observ		64.0 feet				Autos	: 0.	000			
Barrier Distance to Observ		0.0 feet			Mediu	m Trucks	: 2.	297			
Observer Height (Above Pa	,	5.0 feet			Heav	y Trucks	: 8.	006	Grade Ad	justmen	t: 0.0
Pad Elevati		0.0 feet		Ι.			<b>n</b>				
Road Elevati		0.0 feet		L	.ane Eq	uivalent			reet)		
Road Gra		0.0%				Autos		.488			
Left Vi		-90.0 degree				m Trucks		.341			
Right Vi	W:	90.0 degree	:S		Heav	y Trucks	: 60	.355			
FHWA Noise Model Calcula											
VehicleType REME	1 7	raffic Flow	Dista								
			Dista			Road	Fresi		Barrier Att		rm Atten
Autos: 7	0.20	-2.04	Dista	-1.34	1	-1.20	Fresi	-4.70	0.0	000	0.000
Autos: 7 Medium Trucks: 8	0.20 1.00	-2.04 -19.28	Dista	-1.34 -1.33	1	-1.20 -1.20	Fresi	-4.70 -4.88	0.0	000	0.000
Autos: 7 Medium Trucks: 8 Heavy Trucks: 8	0.20 1.00 5.38	-2.04 -19.28 -23.24		-1.34 -1.33 -1.33	4 3 3	-1.20	Fresi	-4.70	0.0	000	0.000 0.000 0.000 0.000
Autos: 7 Medium Trucks: 8 Heavy Trucks: 8 Unmitigated Noise Levels (	0.20 1.00 5.38 withou	-2.04 -19.28 -23.24 at Topo and	barrier	-1.34 -1.33 -1.33	1 3 3 uation)	-1.20 -1.20 -1.20		-4.70 -4.88	0.0 0.0 0.0	000	0.000 0.000 0.000
Autos: 7 Medium Trucks: 8 Heavy Trucks: 8 Unmitigated Noise Levels ( VehicleType Leq Peal	0.20 1.00 5.38 withou Hour	-2.04 -19.28 -23.24 It Topo and I	barrier	-1.34 -1.33 -1.33	1 3 3 uation)	-1.20 -1.20	Vight	-4.70 -4.88 -5.31	0.0 0.0 0.0	000 000 000	0.000 0.000 0.000
Autos: 7 Medium Trucks: 8 Heavy Trucks: 8 Unmitigated Noise Levels ( VehicleType Leq Peal Autos:	0.20 1.00 5.38 withou Hour 65.6	-2.04 -19.28 -23.24 <b>It Topo and I</b> Leq Day	barrier 64.0	-1.34 -1.33 -1.33	uation) rening 62.3	-1.20 -1.20 -1.20	Vight 56.:	-4.70 -4.88 -5.31	0.0 0.0 0.0 <i>Ldn</i>	000 000 000	0.000 0.000 0.000 <i>NEL</i>
Autos: 7 Medium Trucks: 8 Heavy Trucks: 8 Unmitigated Noise Levels ( VehicleType Leq Peal Autos: Medium Trucks:	0.20 1.00 5.38 withou Hour 65.6 59.2	-2.04 -19.28 -23.24 It Topo and I Leq Day	barrier 64.0 58.0	-1.34 -1.33 -1.33	1 3 3 4 4 4 4 4 4 5 4 6 2 .3 5 1 .6 5 5 1 6 7 6 7 7 8 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9	-1.20 -1.20 -1.20	<i>Vight</i> 56.: 50.	-4.70 -4.88 -5.31	0.0 0.0 0.0 Ldn 64.8 58.6	000 000 000 000	0.000 0.000 0.000 0.000 ENEL 65.4 58.8
Autos: 7 Medium Trucks: 8 Heavy Trucks: 8 Unmitigated Noise Levels ( VehicleType Leq Peal Autos:	0.20 1.00 5.38 withou Hour 65.6	-2.04 -19.28 -23.24 <b>It Topo and</b> I	barrier 64.0	-1.34 -1.33 -1.33	uation) rening 62.3	-1.20 -1.20 -1.20	Vight 56.:	-4.70 -4.88 -5.31	0.0 0.0 0.0 <i>Ldn</i>	000 000 000 000 000	0.000 0.000 0.000 ENEL 65.4 58.8 59.2
Autos: 7 Medium Trucks: 8 Heavy Trucks: 8 Unmitigated Noise Levels ( VehicleType Leq Peal Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	0.20 1.00 5.38 withou Hour 65.6 59.2 59.6 67.3	-2.04 -19.28 -23.24 It Topo and Deep Day	64.0 58.0 58.5 65.9	-1.34 -1.33 -1.33	1 3 3 4 4 4 49.5	-1.20 -1.20 -1.20	Night 56.: 50.	-4.70 -4.88 -5.31	0.0 0.0 0.0 <i>Ldn</i> 64.8 58.6 59.	000 000 000 000 000	0.000 0.000 0.000 ENEL 65.4 58.8 59.2
Autos: 7 Medium Trucks: 8 Heavy Trucks: 8 Unmitigated Noise Levels ( VehicleType Leq Peal Autos: Heavy Trucks:	0.20 1.00 5.38 withou Hour 65.6 59.2 59.6 67.3	-2.04 -19.28 -23.24 It Topo and Deep Day	64.0 58.0 58.5 65.9	-1.34 -1.33 -1.33	4 3 3 3 <i>uation)</i> <i>rening</i> 62.3 51.6 49.5 62.8	-1.20 -1.20 -1.20	Vight 56 50. 50. 58.	-4.70 -4.88 -5.31 2 1	0.0 0.0 0.0 <i>Ldn</i> 64.8 58.6 59.	000 000 000 000 000	0.000 0.000 0.000
Autos: 7 Medium Trucks: 8 Heavy Trucks: 8 Unmitigated Noise Levels ( VehicleType Leq Peal Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	0.20 1.00 5.38 withou Hour 65.6 59.2 59.6 67.3	-2.04 -19.28 -23.24 It Topo and It Leq Day	64.0 58.0 58.5 65.9	-1.34 -1.33 -1.33 <b>attenu</b> Leq Ev	4 3 3 3 4 4 49.5 62.8	-1.20 -1.20 -1.20	Night 56.: 50. 50. 58.	-4.70 -4.88 -5.31 2 1	0.0 0.0 0.0 Ldn 64.4 58.6 59.	0000 0000 0000 0000	0.000 0.000 0.000 ENEL 65.4 58.8 59.2 67.1

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGH	WAY NO	DISE P	REDICTION	ON MC	DEL				
	io: EAC23 e: Monroe St. nt: n/o Airport				Project Name: The Wave-Coral Mountain Job Number: 12642							
SITE S	SPECIFIC IN	IPUT DATA				N	OISE	MODE	L INPUT	s		
Highway Data				S	ite Cor	nditions (	Hard =	: 10, Sc	oft = 15)			
	Traffic (Adt): Percentage: our Volume:	9,200 vehicle 9.30% 856 vehicle				edium Tru eavy Truc		,	15			
Ve	hicle Speed:	50 mph		1/	ehicle	Miss						
Near/Far La	ne Distance:	51 feet				icleType		Dav	Evening	Night	Daily	
Site Data					¥ C/		utos:	77.5%		9.6%		
	rier Height:	0.0 feet			N	ledium Tr	ucks:	84.8%		10.3%		
Barrier Type (0-W	all, 1-Berm):	0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8%		
Centerline Dis		54.0 feet		N	oise S	ource Ele	evation	s (in f	eet)			
Centerline Dist.		54.0 feet				Autos	: 0	.000				
Barrier Distance	to Observer:	0.0 feet			Mediu	ım Trucks	. 2	297				
Observer Height (	Above Pad): ad Elevation:	5.0 feet 0.0 feet				vy Trucks		.006	Grade Ad	ljustmen	t: 0.0	
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distan	ce (in	feet)			
ı	Road Grade:	0.0%				Autos	: 47	.862				
	Left View:	-90.0 degre	es		Mediu	ım Trucks	: 47	.677				
	Right View:	90.0 degre	es		Hea	vy Trucks	: 47	.695				
FHWA Noise Mode	el Calculation	s										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresi	nel	Barrier Att	en Be	rm Atten	
Autos:	70.20	-3.09		0.18		-1.20		-4.67	0.0	000	0.000	
Medium Trucks:	81.00	-20.32		0.21		-1.20		-4.87	0.0	000	0.000	
Heavy Trucks:	85.38	-24.28		0.20		-1.20		-5.39	0.0	000	0.000	
<b>Unmitigated Noise</b>	Levels (with	out Topo and	barrie	r attenu	ation)							
VehicleType	Leq Peak Ho			Leq Eve		Leq I			Ldn		NEL	
Autos:		3.1	64.5		62.7		56.	-	65.3	-	65.9	
Medium Trucks:		9.7	58.5		52.1		50.	-	59.0	-	59.3	
Heavy Trucks:		).1	59.0		50.0		51.		59.6		59.7	
Vehicle Noise:		7.8	66.4		63.3	}	58.	5	67.	1	67.6	
Centerline Distance	e to Noise C	ontour (in feet	)									
				70 dl		65 c		(	60 dBA		dBA	
			Ldn:	35		74			160		345	
		С	NEL:	37		80	0		172	;	371	

	FH\	WA-RD-77-108	HIGHW	AY NO	DISE PRED	DICTION	MODEL					
	o: EAC23 e: Monroe St. t: n/o Avenue				Project Name: The Wave-Coral Mountain Job Number: 12642							
SITE S	PECIFIC IN	IPUT DATA				NOI	SE MOD	L INPUTS				
Highway Data				S	ite Conditi	ions (Ha	ard = 10, S	oft = 15)				
	Percentage: our Volume:	9.30% 958 vehicle					Autos s (2 Axles, (3+ Axles,	: 15				
	icle Speed:	50 mph		V	ehicle Mix							
Near/Far Lar	e Distance:	51 feet			VehicleType Day Evening Night Daily							
Site Data  Barrier Type (0-Wa	rier Height: all, 1-Berm):	0.0 feet 0.0				Aut um Truc ivy Truc	ks: 84.8°	6 4.9%	9.6% 97.42% 10.3% 1.84% 10.8% 0.74%			
Centerline Dis	t. to Barrier:	54.0 feet		A	oise Sour	oo Elov	ations (in	innt)				
Roa F	o Observer:	54.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre 90.0 degre		L	Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.006 Grade Adjustment: 0.0  Lane Equivalent Distance (In feet)  Autos: 47.862 Medium Trucks: 47.877 Heavy Trucks: 47.695							
FHWA Noise Mode	l Calculation	s										
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite Ro	ad i	Fresnel	Barrier Atten	Berm Atten			
Autos:	70.20	-2.60		0.18	-1	1.20	-4.67	0.00	0.000			
Medium Trucks:	81.00			0.21		1.20	-4.87					
Heavy Trucks:	85.38	-23.79		0.20	-1	1.20	-5.39	0.00	0.000			
Unmitigated Noise												
	Leq Peak Hou			eq Ev		Leq Nig		Ldn	CNEL			
Autos:		3.6	65.0		63.2		57.2	65.8	66.4			
Medium Trucks:		).2	59.0		52.6		51.1	59.5	59.8			
Heavy Trucks:		).6	59.5		50.5		51.7	60.1	60.2			
Vehicle Noise:		3.3	66.9		63.8		59.0	67.6	68.0			
Centerline Distance	e to Noise Co	ontour (in feet	)	70.0		05.10		00 104	55 104			
			!	70 dl		65 dB	4	60 dBA	55 dBA			
		_	Ldn:	37		80		173	372			
		С	NEL:	40		86		186	400			

Wednesday, March 25, 2020

	FH\	WA-RD-77-	108 HIGH	HWAY	NOISE P	REDICTION	ON M	ODEL			
	io: EAC23								ave-Coral	Mountair	1
	ne: Monroe St.					Job No	ımber	: 12642			
Road Segme	nt: n/o Avenue	58									
	SPECIFIC IN	IPUT DAT	Ά		04- 0				L INPUT	S	
Highway Data					Site Cor	ditions (	Hard				
Average Daily	. ,	9,000 veh	icles		Autos: 15						
	Percentage:	9.30%			Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15						
	lour Volume:	837 veh			He	eavy Truc	ks (3+	- Axles):	15		
	hicle Speed:	50 mpl			Vehicle	Mix					
Near/Far La	ne Distance:	51 feet			Veh	icleType		Day	Evening	Night	Daily
ite Data						Α.	utos:	77.5%	12.9%	9.6%	97.42%
Ra	rrier Height:	0.0 fee	at		M	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	54.0 fee	et		Noise S	ource Ele	vatio	ne (in fa	not)		
Centerline Dist.	to Observer:	54.0 fee	et		140/36 0	Autos		0.000	,,,,		
Barrier Distance	to Observer:	0.0 fee	et		Modiu	m Trucks		2.297			
Observer Height	(Above Pad):	5.0 fee	et			vy Trucks		B.006	Grade Ad	liuetmant	. 0 0
P	ad Elevation:	0.0 fee	et							justinont	0.0
Ro	ad Elevation:	0.0 fee	et		Lane Eq	uivalent	Dista	nce (in i	feet)		
	Road Grade:	0.0%				Autos		7.862			
	Left View:	-90.0 de	grees		Mediu	m Trucks	: 4	7.677			
	Right View:	90.0 de	grees		Hea	vy Trucks	: 4	7.695			
HWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flo		stance		Road	Fre		Barrier At		m Atten
Autos:		-	.18	0.		-1.20		-4.67		000	0.000
Medium Trucks:			.42	0.:		-1.20		-4.87		000	0.000
Heavy Trucks:	85.38	-24	.38	0.:	20	-1.20		-5.39	0.	000	0.000
Inmitigated Noise			nd barri	er atte	nuation)						
VehicleType	Leq Peak Hou			Leq E	vening	Leq I			Ldn		VEL
Autos:		3.0	64.4		62.7		56		65.		65.8
Medium Trucks:		9.6	58.4		52.0			).5	58.	-	59.2
Heavy Trucks:		).0	58.9		49.9		51	.1	59.	5	59.6
Vehicle Noise:	67	7.7	66.3		63.2		58	3.4	67.	0	67.5
enterline Distand	ce to Noise Co	ontour (in f	eet)								
	-	-			dBA	65 c		6	60 dBA		dBA
			Ldn:		34	73	3		158	3	40
	CNE				37	79 170			3	65	

	FH	WA-RD-7	7-108 HIG	HWAY	NOISE P	REDICT	ION MC	DEL			
Road Na	ario: EAC23 ime: Monroe St ient: n/o Avenu					.,	Name: lumber:		ave-Coral	Mountai	n
SITE	SPECIFIC I	NPUT DA	ATA			N	IOISE	MODE	L INPUT	s	
Highway Data	. 0. 20 10 .	0			Site Cor						
Average Dail	y Traffic (Adt):	9.200 ve	hicles					Autos:	15		
	ır Percentage:	9.30%			Me	edium Tn	ucks (2	Axles):	15		
Peak	Hour Volume:	856 ve	hicles		He	eavy True	cks (3+	Axles):	15		
١	/ehicle Speed:	50 m	ph		Vehicle						
Near/Far L	.ane Distance:	51 fe	et .			iviix nicleType		Dav	Evenina	Niaht	Daily
Site Data					Ver		Autos:	77.5%		9.6%	. ,
		006	4		N	1edium T		84.8%		10.3%	
Barrier Type (0-	larrier Height:	0.0 f	eet			Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
,, ,	Dist. to Barrier:	54.0 f	oot								• • • • • • • • • • • • • • • • • • • •
	t. to Observer:	54.0 f			Noise S			•	eet)		
Barrier Distanc		0.0 f				Auto		.000			
Observer Heigh		5.0 f				ım Truck		.297			
	Pad Elevation:	0.0 f			Hea	vy Truck	s: 8	.006	Grade Ad	iustmen	t: 0.0
	oad Elevation:	0.0 f			Lane Eq	uivalent	Distar	ce (in	feet)		
	Road Grade:	0.0%				Auto.	s: 47	.862			
	I eft View:	-90.0 d			Mediu	ım Truck	s: 47	.677			
	Right View:		legrees		Hea	vy Truck	s: 47	.695			
FHWA Noise Mo	del Calculation	าร									
VehicleType	REMEL	Traffic F	low D	istance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Auto		)	-3.09	0.	18	-1.20		-4.67	0.0	000	0.000
Medium Truck	81.00	) -2	20.32	0.3	21	-1.20		-4.87	0.0	000	0.000
Heavy Truck	85.38	3 -2	24.28	0.3	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Noi	se Levels (with	hout Topo	and barr	ier atte	nuation)						
VehicleType	Leq Peak Ho	ur Le	q Day	Leq E	vening	Leq	Night		Ldn	C	NEL
Auto	s: 6	6.1	64.5		62.7	·	56.	7	65.3	3	65.9
Medium Truck	s: 5	9.7	58.5		52.1		50.	6	59.0	)	59.3
Heavy Truck	s: 6	0.1	59.0		50.0	)	51.	2	59.6	3	59.7
Vehicle Noise	e: 6	7.8	66.4		63.3	1	58.	5	67.	I	67.6
Centerline Dista	nce to Noise C	ontour (in	feet)								
				70	dBA	65	dBA	(	60 dBA	55	dBA
			Ldn:		35		4		160		345
			CNEL:		37	8	30		172		371

	FH\	WA-RD-77-108	HIGHW	AY NOIS	SE PR	EDICT	ION MO	DEL			
Road Nan	rio: EAC23 ne: Avenue 50 ent: w/o Madiso	n St.					Name: lumber:		ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data				Site	Conc	litions	(Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	15,700 vehicle	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Med	lium Tr	ucks (2	Axles):	15		
Peak H	Hour Volume:	1,460 vehicles	3		Hea	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		Voh	icle M	liv					
Near/Far La	ne Distance:	51 feet		ven		il <b>x</b> cleType	, 1	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	Ü	9.6%	
Ra	rrier Height:	0.0 feet			Me	dium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			Н	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		54.0 feet		Mai	co So	urco El	ovation	ıs (in fe	not)		
Centerline Dist.	to Observer:	54.0 feet		NOI	36 301	Auto		.000	et)		
Barrier Distance	to Observer:	0.0 feet			4 15	Auto 1 Truck		.000			
Observer Height	(Above Pad):	5.0 feet						.297	Grade Ad	ii ratmant	. 0 0
P	ad Elevation:	0.0 feet			Heavy	/ Truck	s: 8	.006	Grade Ad	justrnent	. 0.0
Ro	ad Elevation:	0.0 feet		Lan	e Equ	ivalent	Distar	ice (in i	feet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es	Λ.	1ediun	n Truck	s: 47	.677			
	Right View:	90.0 degree	es		Heavy	/ Truck	s: 47	.695			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	nce F	Finite F	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	-0.76		0.18		-1.20		-4.67	0.0	000	0.00
Medium Trucks:	81.00	-18.00		0.21		-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	85.38	-21.96		0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	e Levels (with	out Topo and	barrier a	attenuat	ion)						
VehicleType	Leq Peak Hou	-, -,		eq Even		Leq	Night		Ldn		VEL
Autos:			66.8		65.1		59.	-	67.6	-	68.
Medium Trucks:			60.8		54.4		52.		61.4		61.0
Heavy Trucks:			61.3		52.3		53.	-	61.9		62.0
Vehicle Noise:			68.7		65.6		60.	.9	69.4	1	69.
Centerline Distant	ce to Noise Co	ontour (in feet	)	30 IF:			10.4				10.4
			!	70 dBA	1		dBA	1 6	60 dBA	1	dBA
			Ldn:	49			06		229		93
		C	VEL:	53		1	14		246	5	29

	FH\	WA-RD-77-108	HIGHW	AY NO	DISE PREDI	CTION MOI	DEL		
	o: EAC23 e: Avenue 50 at: w/o Jeffers	on St.				ect Name: 1 b Number: 1	The Wave-Cora 12642	al Moun	tain
	SPECIFIC IN	IPUT DATA				NOISE N	ODEL INPU	TS	
Highway Data				S	ite Conditio	ns (Hard =	10, Soft = 15)		
		16,800 vehicle 9.30% 1,562 vehicle 50 mph				Trucks (2 A Trucks (3+ A			
Near/Far Lar		50 mpn 51 feet		V	ehicle Mix				
INEAI/FAI LAI	ie Distance.	31 leet			VehicleT	ype .	Day Evening		nt Daily
Site Data  Barrier Type (0-Wa	rier Height: all, 1-Berm):	0.0 feet 0.0				n Trucks:	77.5% 12.99 84.8% 4.99 86.5% 2.79	6 10.3	
Centerline Dis	t. to Barrier:	54.0 feet		N	oise Source	Flovations	(in foot)		
Roa	to Observer:	54.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre 90.0 degre		L	Medium Tr Heavy Tr ane Equival	ucks: 2.2 ucks: 8.0 ent Distanc utos: 47.8 ucks: 47.8	362 377	Adjustm	ent: 0.0
FHWA Noise Mode	l Calculation	s							
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite Roa	d Fresn	el Barrier A	Atten I	Berm Atten
Autos:	70.20	-0.47		0.18	-1.	20	-4.67	0.000	0.000
Medium Trucks:	81.00			0.21				0.000	0.000
Heavy Trucks:	85.38	-21.66		0.20	-1.	20	-5.39	0.000	0.000
Unmitigated Noise									
	Leq Peak Hοι			.eq Ev	- 1	eq Night	Ldn		CNEL
Autos:		3.7	67.1		65.4	59.3	-	7.9	68.5
Medium Trucks:		2.3	61.1		54.7	53.2	-	1.7	61.9
Heavy Trucks:		2.7	61.6		52.6	53.8	-	2.2	62.3
Vehicle Noise:	70	).4	69.0		65.9	61.2	: 6	9.7	70.2
Centerline Distance	e to Noise Co	ontour (in feet	!)						
				70 dl	Ų.	65 dBA	60 dBA		55 dBA
			Ldn:	52		111	239		516
		С	NEL:	55		119	257		554

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 HI	GHWAY	NOISE PI	REDICTIO	N MODEL		
	o: EAC23 e: Avenue 50 t: e/o Monroe	St.				lame: The V mber: 12642	Vave-Coral Mo	untain
SITE S	PECIFIC IN	IPUT DATA			NC	DISE MODI	EL INPUTS	
Highway Data				Site Con	ditions (F	lard = 10, S	oft = 15)	
Average Daily	Traffic (Adt):	11,900 vehicles				Autos	: 15	
Peak Hour I	Percentage:	9.30%		Me	dium Truc	cks (2 Axles)	: 15	
Peak He	our Volume:	1,107 vehicles		He	avy Truck	is (3+ Axles)	: 15	
Vel	nicle Speed:	50 mph		Vehicle I	Wix			
Near/Far Lar	ne Distance:	43 feet			icleType	Day	Evening N	ight Daily
Site Data					AL	itos: 77.59	% 12.9%	9.6% 97.42%
Bar	rier Heiaht:	0.0 feet		М	edium Tru	icks: 84.89	% 4.9% 1	0.3% 1.84%
Barrier Type (0-Wa		0.0			Heavy Tru	cks: 86.59	% 2.7% 1	0.8% 0.74%
Centerline Dis		64.0 feet		Noise Sc	urce Fle	vations (in i	foot)	
Centerline Dist. t	o Observer:	64.0 feet		110/30 00	Autos:		ccij	
Barrier Distance t	o Observer:	0.0 feet		Mediu	m Trucks:			
Observer Height (/	Above Pad):	5.0 feet			vy Trucks:		Grade Adjus	tment: 0.0
Pa	d Elevation:	0.0 feet						
	d Elevation:	0.0 feet		Lane Eq		Distance (in	feet)	
F	Road Grade:	0.0%			Autos:	00.100		
	Left View:	-90.0 degrees			m Trucks:	00.011		
	Right View:	90.0 degrees		Heav	y Trucks:	60.355		
FHWA Noise Mode	I Calculation:	s						
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	-1.97	-1.3	34	-1.20	-4.70	0.000	0.000
Medium Trucks:	81.00	-19.21	-1.3		-1.20	-4.88		
Heavy Trucks:	85.38	-23.16	-1.3	33	-1.20	-5.31	0.000	0.000
Unmitigated Noise	Levels (with	out Topo and ba	rrier atte	nuation)				
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq N	ight	Ldn	CNEL
Autos:	65			62.3		56.3	64.9	65.5
Medium Trucks:	59			51.7		50.2	58.6	58.9
Heavy Trucks:	59		.6	49.5		50.8	59.1	59.3
Vehicle Noise:	67	.4 66	.0	62.9		58.1	66.7	67.1
Centerline Distanc	e to Noise Co	ontour (in feet)						
			1	dBA	65 di		60 dBA	55 dBA
		Ld		38	83		178	384
		CNE	L:	41	89		192	413

	FH'	WA-RD-77-108	HIGHW	AY N	DISE PR	EDICTIO	ON MO	DEL			
Road Nan	rio: EAC23 ne: Avenue 52 nt: w/o Monro					Project I Job Nu			ave-Coral	Mounta	in
	SPECIFIC II	IPUT DATA							L INPUT	s	
Highway Data				S	ite Con	ditions (l	Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	12,600 vehicle	8					Autos:	15		
Peak Hour	Percentage:	9.30%				dium Tru		,			
Peak F	Hour Volume:	1,172 vehicle	8		He	avy Truci	ks (3+ )	Axles):	15		
Ve	ehicle Speed:	50 mph		ν	ehicle N	Nix					
Near/Far La	ne Distance:	51 feet		Ė		cleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.69	6 97.42%
Ra	rrier Heiaht:	0.0 feet			Me	edium Tru	ıcks:	84.8%	4.9%	10.39	6 1.84%
Barrier Type (0-V		0.0			F	łeavy Tru	ıcks:	86.5%	2.7%	10.89	6 0.74%
Centerline Di	ist. to Barrier:	54.0 feet		A	nisa Sn	urce Ele	vation	e (in f	not)		
Centerline Dist.	to Observer:	54.0 feet		/	0/30 00	Autos		000			
Barrier Distance	to Observer:	0.0 feet			Modium	n Trucks		297			
Observer Height	(Above Pad):	5.0 feet				y Trucks.		006	Grade Ad	liustmar	ı+· ∩ ∩
P	ad Elevation:	0.0 feet			пеач	y Trucks.	. 0.	000	Orade Ad	justinoi	n. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Equ	ıivalent l	Distan	ce (in	feet)		
	Road Grade:	0.0%				Autos.	47.	862			
	Left View:	-90.0 degree	es		Mediur	n Trucks.	47.	677			
	Right View:	90.0 degree	es		Heav	y Trucks.	47.	695			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresi	nel	Barrier Att	ten Be	erm Atten
Autos:	70.20	-1.72		0.18		-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-18.96		0.21		-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-22.91		0.20		-1.20		-5.39	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier a	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Day	' Le	eq Ev	ening	Leq N	light		Ldn	1 .	CNEL
Autos:	67	7.5	65.9		64.1		58.	1	66.	7	67.3
Medium Trucks:	6	1.0	59.9		53.5		51.9	9	60.4	4	60.6
Heavy Trucks:	6	1.5	60.4		51.3		52.6	3	60.	9	61.1
Vehicle Noise:	69	9.2	67.7		64.7		59.9	9	68.	4	68.9
Centerline Distan	ce to Noise C	ontour (in feet	)								
·				70 di	BA	65 d	BA	- 6	60 dBA	5	5 dBA
			Ldn:	43		92	2		198		426
		C	NEL:	46		99	9		212		457

	FHV	VA-RD-77-108	HIGH	1 YAWH	IOISE P	REDICT	ION MC	DEL			
Road Nam	ne: Avenue 54	: St.					Name: lumber:		ave-Coral I	Mountair	1
SITE	SPECIFIC IN	ΙΡΙΙΤ ΠΑΤΑ					IOISE	MODE	L INPUTS		
Highway Data	0. 20				Site Cor						
Average Daily	Traffic (Adt):	7,700 vehicles	8					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak F	lour Volume:	716 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph			Vehicle	Miv					
Near/Far La	ne Distance:	51 feet		F		icleType		Dav	Evening	Night	Dailv
Site Data					¥ C//		Autos:	77.5%	-	9.6%	. ,
	rrier Height:	0.0 feet			M	ledium T		84.8%		10.3%	
Barrier Type (0-W	-	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		54.0 feet		-							
Centerline Dist.		54.0 feet		1	Noise S				eet)		
Barrier Distance		0.0 feet				Auto		.000			
Observer Height		5.0 feet				m Truck		.297			
	ad Elevation:	0.0 feet			Hea	vy Truck	s: 8	.006	Grade Adj	ustment	: 0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivaleni	Distan	ce (in f	feet)		
	Road Grade:	0.0%		T I		Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree			Hea	vy Truck	s: 47	.695			
FHWA Noise Mode	el Calculation:	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres		Barrier Atte	en Ber	m Atten
Autos:	70.20	-3.86		0.1		-1.20		-4.67	0.0		0.000
Medium Trucks:		-21.10		0.2		-1.20		-4.87		000	0.000
Heavy Trucks:	85.38	-25.05		0.2	0	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Hou	.,.,		Leq E	vening		Night		Ldn		NEL
Autos:	65		63.7		62.0		55.		64.5		65.1
Medium Trucks:	58		57.7		51.4		49.		58.3		58.5
Heavy Trucks:	59		58.2 65.6		49.2		50.	_	58.8		58.9
Vehicle Noise:					62.5	'	57.	ŏ	66.3	)	66.8
Centerline Distant	ce to Noise Co	ontour (in feet)	)		10.4		<b>10.4</b>				10.4
					dBA		dBA	6	60 dBA		dBA
			Ldn:	3		-	66 71		142	_	06
		CI	NEL:	3	3	7	1		153	3	29

	FHV	WA-RD-77-108	HIGH	WAY N	OISE PR	EDICT	ION MODEL		
	o: EAC23						Name: The V		Mountain
	e: Avenue 54					Job №	lumber: 12642	2	
Road Segmen	t: w/o Madiso	n St.							
	PECIFIC IN	IPUT DATA					IOISE MOD		S
Highway Data				S	ite Cond	ditions	(Hard = 10, S	oft = 15)	
Average Daily 1	raffic (Adt):	12,400 vehicle	s				Autos		
Peak Hour I	Percentage:	9.30%					ucks (2 Axles,		
	our Volume:	1,153 vehicle	s		Hea	avy Tru	cks (3+ Axles,	): 15	
	icle Speed:	50 mph		ν	ehicle N	lix			
Near/Far Lar	e Distance:	51 feet			Vehi	cleType	Day	Evening	Night Daily
Site Data							Autos: 77.5°	% 12.9%	9.6% 97.42%
Ran	rier Heiaht:	0.0 feet			Me	dium T	rucks: 84.8°	% 4.9%	10.3% 1.84%
Barrier Type (0-Wa		0.0			H	leavy T	rucks: 86.5°	% 2.7%	10.8% 0.74%
Centerline Dis		54.0 feet		٨	loise So	urce E	evations (in	feet)	
Centerline Dist. t		54.0 feet				Auto	s: 0.000		
Barrier Distance t		0.0 feet			Mediun	n Truck	s: 2.297		
Observer Height (A	,	5.0 feet			Heav	y Truck	s: 8.006	Grade Adj	justment: 0.0
	d Elevation: d Flevation:	0.0 feet 0.0 feet		,	ano Eau	iivalon	t Distance (in	foot)	
	a Elevation: Road Grade:	0.0 reet 0.0%		-	ane Lyu	Auto		ieei)	
,	Left View:	-90.0 degree	20		Mediur				
	Right View:	90.0 degree				y Truck			
FHWA Noise Mode	l Calculation	•							
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresnel	Barrier Atte	en Berm Atten
Autos:	70.20	-1.79		0.18		-1.20	-4.67		
Medium Trucks:	81.00	-19.03		0.21		-1.20	-4.87	0.0	0.00
Heavy Trucks:	85.38	-22.98		0.20	1	-1.20	-5.39	0.0	0.00
Unmitigated Noise	Levels (with	out Topo and	barrie	r attenu	ıation)				
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening	Leq	Night	Ldn	CNEL
Autos:	67		65.8		64.0		58.0	66.6	
Medium Trucks:	61		59.8		53.4		51.9	60.3	
Heavy Trucks:	61		60.3		51.3		52.5	60.9	
Vehicle Noise:	69		67.7		64.6		59.8	68.4	1 68.
Centerline Distance	e to Noise Co	ontour (in feet	)						
				70 d			dBA	60 dBA	55 dBA
			Ldn: NEL:	42 45			91	195 210	421
									452

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIGH	WAY N	OISE PI	REDICT	ION MOD	EL			
	o: EAC23 e: Airport Bl. nt: w/o Monroe	s St.					t Name: T lumber: 1		ave-Coral M	ountain	
SITE S	SPECIFIC IN	IPUT DATA					NOISE M	ODE	L INPUTS		
Highway Data				5	Site Con	ditions	(Hard = 1)	0, Sc	ft = 15)		
Average Daily	Traffic (Adt):	3,500 vehicle	S				Α	utos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Ti	rucks (2 A	des):	15		
Peak H	our Volume:	326 vehicle	S		He	avy Tru	cks (3+ A	des):	15		
Vel	hicle Speed:	50 mph		1	/ehicle l	Wix					
Near/Far Lar	ne Distance:	51 feet		F		icleType	e [	)ay	Evening	Night	Daily
Site Data							Autos: 7	7.5%	12.9%	9.6%	97.42%
Bar	rier Heiaht:	0.0 feet			M	edium 7	rucks: 8	4.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			-	Heavy 7	rucks: 8	6.5%	2.7%	10.8%	0.74%
Centerline Dis		54.0 feet		,	loise So	ource E	levations	(in fe	eet)		
Centerline Dist.	to Observer:	54.0 feet				Auto		•	,		
Barrier Distance		0.0 feet			Mediu	m Truck					
Observer Height (		5.0 feet			Heav	y Truck	s: 8.0	06	Grade Adju	stment:	0.0
	d Elevation:	0.0 feet		٠,			4 Di-4				
	d Elevation:	0.0 feet		- '	ane Eq		t Distance	-	eet)		
ŀ	Road Grade:	0.0%			A 4 15	Auto m Truck					
	Left View: Right View:	-90.0 degree				m Truck vy Truck					
FHWA Noise Mode	l Calculation	s									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fresne	1	Barrier Atter	n Beri	n Atten
Autos:	70.20	-7.28		0.18	3	-1.20	-	4.67	0.00	10	0.000
Medium Trucks:	81.00	-24.52		0.21	ı	-1.20	-	4.87	0.00	0	0.000
Heavy Trucks:	85.38	-28.48		0.20	)	-1.20	-	5.39	0.00	10	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	r atteni	uation)						
	Leq Peak Hοι			Leq Ev		Leq	Night		Ldn	CI	IEL
Autos:	61		60.3		58.6		52.5		61.1		61.7
Medium Trucks:	55		54.3		47.9		46.4		54.8		55.1
Heavy Trucks: Vehicle Noise:	55 63		54.8 62.2		45.8 59.1		47.0 54.3		55.4 62.9		55.5 63.4
					39.1		54.3		62.9		63.4
Centerline Distanc	e to Noise Co	ontour (in feet	,	70 c	IRA	65	dBA	-	60 dBA	55	dBA
			Ldn:	18			39		84		31
		С	NEL:	19	-		42		90		95

	FH\	WA-RD-77-108	HIGH	WAY I	NOISE P	REDICT	ION MC	DEL			
Road Nam	io: EAC23 ne: Avenue 58 nt: w/o Madiso	n St.					t Name: lumber:		ave-Coral	Mounta	in
SITE :	SPECIFIC IN	IPUT DATA				ı	NOISE	MODE	L INPUT	s	
Highway Data					Site Cor	nditions	(Hard =	: 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	5,000 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Ti	ucks (2	Axles).	15		
Peak H	lour Volume:	465 vehicle	s		He	eavy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	45 mph		ŀ	Vehicle	Miv					
Near/Far La	ne Distance:	45 feet		ŀ		nicleType	2	Dav	Evening	Night	Daily
Site Data					*0,		Autos:	77.5%		9.69	,
	rrier Height:	0.0 feet			M	ledium 7	rucks:	84.8%	4.9%	10.39	
Barrier Type (0-W		0.0 1661				Heavy T	rucks:	86.5%	2.7%	10.89	6 0.74%
Centerline Dis		51.0 feet									
Centerline Dist.	to Observer:	51.0 feet			Noise S			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (	Above Pad):	5.0 feet				ım Truck		.297	0	E	4. 0.0
	ad Elevation:	0.0 feet			Hea	vy Truck	s: 8	.006	Grade Ad	justmer	it: 0.0
	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distan	ce (in	feet)		
1	Road Grade:	0.0%				Auto	s: 46	.041			
	Left View:	-90.0 degree	es		Mediu	ım Truck	s: 45	.848			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 45	.867			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	68.46	-5.28		0.4	13	-1.20		-4.65	0.0	000	0.000
Medium Trucks:	79.45	-22.51		0.4	16	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	84.25	-26.47		0.4	16	-1.20		-5.42	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn	(	CNEL
Autos:	62	.4	8.00		59.1		53.	0	61.	6	62.2
Medium Trucks:	56	i.2	55.0		48.6		47.	1	55.	6	55.8
Heavy Trucks:	57	.0	55.9		46.9	)	48.	1	56.	5	56.6
Vehicle Noise:	64	.3	62.8		59.7		55.	0	63.	5	64.0
Centerline Distance	e to Noise Co	ontour (in feet	)								
				70	dBA	65	dBA	- (	60 dBA	55	5 dBA
			Ldn:		19	4	41		88		189
		C	NEL:	2	20	4	14		94		203

	FHV	VA-RD-77-108	HIGH	WAY N	OISE P	REDICTI	ON MC	DEL			
Road Nam	o: EAC23 e: Avenue 58 nt: w/o Jackson	n St.					Name: umber:		ave-Coral	Mountair	ı
	SPECIFIC IN	PUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard =	: 10, So	ft = 15)		
Average Daily	Traffic (Adt):	3,600 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	icks (2	Axles):	15		
Peak H	our Volume:	335 vehicles	3		He	avy Truc	cks (3+	Axles):	15		
Vei	hicle Speed:	50 mph		V	ehicle l	Miv					
Near/Far Lai	ne Distance:	36 feet		ľ		icleType		Day	Evening	Night	Daily
Site Data						-	Autos:	77.5%	12.9%	9.6%	97.429
Rai	rier Height:	0.0 feet			M	edium Ti	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W	-	0.0			ı	Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis	st. to Barrier:	59.0 feet		۸	loise Sc	ource El	evation	s (in fe	et)		
Centerline Dist.	to Observer:	59.0 feet				Auto		.000	,		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s· 2	297			
Observer Height (	Above Pad):	5.0 feet				vy Truck		.006	Grade Ad	iustment	0.0
	nd Elevation:	0.0 feet		<u> </u>		•					
	nd Elevation:	0.0 feet		L	ane Eq	uivalent			eet)		
F	Road Grade:	0.0%				Auto	00	.409			
	Left View:	-90.0 degree				m Truck		.252			
	Right View:	90.0 degree	es		Heav	y Truck	s: 56	.268			
FHWA Noise Mode				'							
VehicleType	REMEL	Traffic Flow	Dist	ance		Road	Fresi		Barrier Att		m Atten
Autos:	70.20	-7.16		-0.89		-1.20		-4.69	0.0		0.00
Medium Trucks:	81.00	-24.40		-0.87		-1.20		-4.88		000	0.00
Heavy Trucks:	85.38	-28.35		-0.87		-1.20		-5.35	0.0	000	0.00
Unmitigated Noise								_			
	Leq Peak Hou	.,.,		Leq Ev			Night	_	Ldn		VEL 60
Autos: Medium Trucks:	61 54		59.4 53.3		57.6 47.0		51. 45.	-	60.2 53.9		54.
			53.8		47.0		46.		54.4		
Heavy Trucks: Vehicle Noise:	55 62		61.2		58.2		46. 53.		61.9		54. 62.
Centerline Distanc	e to Noise Co	ntour (in feet)	)								
		. ,,		70 d	'BA	65	dBA	6	i0 dBA	55	dBA
			Ldn:	17	, '	3	7		79	1	71
			VFI:		3				85		84

	FHV	VA-RD-77-108	HIGHWA	Y NOISE	PREDICT	ION MOD	EL		
	o: EAC23 e: Avenue 58 t: w/o Monroe	St.			.,	Name: Th lumber: 12	ne Wave-Coral 1642	Mountain	
SITE S	PECIFIC IN	PUT DATA			N	IOISE MO	ODEL INPUT	s	
Highway Data				Site 0	Conditions	(Hard = 1	0, Soft = 15)		
Average Daily 1	raffic (Adt):	5,200 vehicles				A	ıtos: 15		
Peak Hour I	Percentage:	9.30%			Medium Tr	ucks (2 Ax	les): 15		
Peak Ho	our Volume:	484 vehicles			Heavy True	cks (3+ Ax	les): 15		
Veh	icle Speed:	45 mph		Vehic	le Mix				_
Near/Far Lar	e Distance:	45 feet			/ehicleType	D	ay Evening	Night Da	aily
Site Data							7.5% 12.9%	9.6% 97.4	
Par	rier Heiaht:	0.0 feet			Medium T	rucks: 8	4.8% 4.9%	10.3% 1.8	.849
Barrier Type (0-Wa		0.0			Heavy T	rucks: 8	6.5% 2.7%	10.8% 0.7	749
Centerline Dis	. ,	51.0 feet							
Centerline Dist. t		51.0 feet		Noise	Source El		· '		
Barrier Distance t	o Observer:	0.0 feet			Auto				
Observer Height (A	Above Pad):	5.0 feet			dium Truck			di	
	d Elevation:	0.0 feet		h	leavy Truck	s: 8.00	6 Grade Ad	djustment: 0.0	
Roa	d Elevation:	0.0 feet		Lane	Equivalent	Distance	(in feet)		
F	Road Grade:	0.0%			Auto	s: 46.04	11		
	Left View:	-90.0 degree	s	Me	dium Truck	s: 45.84	18		
	Right View:	90.0 degree	s	H	leavy Truck	s: 45.86	37		
FHWA Noise Mode	l Calculation:	s		-1					
VehicleType	REMEL	Traffic Flow	Distant	e Fii	nite Road	Fresne		ten Berm Att	ten
Autos:	68.46	-5.11		0.43	-1.20				0.00
Medium Trucks:	79.45	-22.34		0.46	-1.20				0.00
Heavy Trucks:	84.25	-26.30		0.46	-1.20	- 5	5.42 0.	000 0	0.00
Unmitigated Noise								1	
,,	Leq Peak Hou			g Evenin		Night	Ldn	CNEL	
Autos:	62		51.0	-	9.2	53.2	61.	-	62.
Medium Trucks:	56		55.2		8.8	47.3	55.		56.0
Heavy Trucks:	57		56.1		7.1	48.3	56.		56.
Vehicle Noise:	64	• •	63.0	5	9.9	55.2	63.	1	64.
Centerline Distance	e to Noise Co	ntour (in feet)		70 dBA	e.	dBA	60 dBA	55 dBA	_
			Ldn:	19		2 2	90 90	194	
			Lan: JFI :	19 21		.5	90 97	194 209	
			VLL.	41	4		91		

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 I	HIGHWAY	NOISE P	REDICTIO	N MODEL		
Scenario: E Road Name: A Road Segment: e	venue 58	ı St.				lame: The V mber: 12642	Vave-Coral Mo 2	untain
SITE SPE	CIFIC IN	PUT DATA			NC	ISE MOD	EL INPUTS	
Highway Data				Site Cor	nditions (F	lard = 10, S	oft = 15)	
Average Daily Traff	ic (Adt):	2,500 vehicles				Autos	: 15	
Peak Hour Perd	entage:	9.30%		Me	edium Truc	ks (2 Axles)	): 15	
Peak Hour	Volume:	233 vehicles		He	eavy Truck	s (3+ Axles)	): 15	
Vehicle	Speed:	50 mph		Vehicle	Mix			
Near/Far Lane D	istance:	36 feet			icleType	Day	Evening N	light Daily
Site Data						itos: 77.59	-	9.6% 97.42%
Rarrior	Heiaht:	0.0 feet		M	ledium Tru	cks: 84.8	% 4.9% 1	0.3% 1.84%
Barrier Type (0-Wall, 1		0.0			Heavy Tru	cks: 86.5°	% 2.7% 1	0.74%
Centerline Dist. to	Barrier:	59.0 feet		Noise S	nurce Fle	vations (in	feet)	
Centerline Dist. to O	bserver:	59.0 feet		110,00 0	Autos:			
Barrier Distance to O	bserver:	0.0 feet		Mediu	m Trucks:			
Observer Height (Abov	ve Pad):	5.0 feet			vy Trucks:		Grade Adjus	tment: 0.0
Pad El	evation:	0.0 feet			*			
Road El	evation:	0.0 feet		Lane Eq		Distance (in	feet)	
Road	Grade:	0.0%			Autos:	00.100		
Le	eft View:	-90.0 degrees	s		m Trucks:			
Rig	ht View:	90.0 degrees	s	Hea	vy Trucks:	56.268		
FHWA Noise Model Ca	lculations	3		1				
VehicleType R	EMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	-8.74	-0	.89	-1.20	-4.69	0.000	0.000
Medium Trucks:	81.00	-25.98	-0	.87	-1.20	-4.88	0.000	0.000
Heavy Trucks:	85.38	-29.94	-0	.87	-1.20	-5.35	0.000	0.000
Unmitigated Noise Lev	els (with	out Topo and b	arrier atte	enuation)				
VehicleType Leq	Peak Hou	r Leq Day	Leq	Evening	Leq N	ight	Ldn	CNEL
Autos:	59		57.8	56.0		50.0	58.6	59.2
Medium Trucks:	52		51.8	45.4		43.8	52.3	52.5
Heavy Trucks:	53	.4 5	52.3	43.2		44.5	52.8	53.0
Vehicle Noise:	61	.1 5	59.6	56.6		51.8	60.4	60.8
Centerline Distance to	Noise Co	ntour (in feet)						
			- 1	0 dBA	65 dl	BA	60 dBA	55 dBA
			.dn:	13	29		62	134
		CN	IEL:	14	31		67	144

	FH\	WA-RD-77-108	HIGH	WAY I	NOISE P	REDICT	ION MC	DEL			
Road Nam	io: EAC23 le: Avenue 60 nt: w/o Madiso	n St.					t Name: lumber:		'ave-Coral	Mounta	in
SITE	SPECIFIC IN	IPUT DATA				N	NOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard =	: 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	800 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles).	15		
Peak H	lour Volume:	74 vehicle	S		He	eavy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	40 mph		ŀ	Vehicle	Miv					
Near/Far La	ne Distance:	23 feet		-		icleType	9	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.69	,
Pa	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.39	6 1.84%
Barrier Type (0-W		0.0 1661				Heavy T	rucks:	86.5%	2.7%	10.89	6 0.74%
Centerline Di		40.0 feet		-							
Centerline Dist.		40.0 feet		-	Noise S			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (	Above Pad):	5.0 feet				m Truck		.297			
	ad Elevation:	0.0 feet			Hea	vy Truck	s: 8	.006	Grade Ad	justmer	it: 0.0
	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distar	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 38	.636	-		
	Left View:	-90.0 degree	es		Mediu	m Truck	rs: 38	.406			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 38	.429			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	66.51	-12.72		1.5	58	-1.20		-4.59	0.0	000	0.000
Medium Trucks:	77.72	-29.96		1.6	32	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	82.99	-33.92		1.6	31	-1.20		-5.56	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn	(	CNEL
Autos:	54	.2	52.6		50.8		44.	8	53.4	4	54.0
Medium Trucks:	48	1.2	47.0		40.6		39.	1	47.	5	47.8
Heavy Trucks:	49		48.4		39.3		40.	_	48.		49.1
Vehicle Noise:	56	5.2	54.8		51.5		46.	9	55.	5	55.9
Centerline Distance	e to Noise Co	ontour (in feet	)								
		-	$\neg$		dBA		dBA	- (	60 dBA	55	5 dBA
			Ldn:		4		9		20		43
		C	NEL:		5	1	10		21		46

Wednesday, March 25, 2020

	FH	WA-RD-77-108	B HIGH	HWAY N	IOISE P	REDICT	ION MC	DEL			
Road Nar	rio: EAC23 me: Avenue 60 ent: e/o Monroe	e St.					Name: lumber:		ave-Coral	Mountair	1
	SPECIFIC II	NPUT DATA							L INPUT	s	
	Traffic (Adt): r Percentage:	4,800 vehicle 9.30% 446 vehicle			Me	edium Trueavy True	ucks (2	Autos: Axles):	15 15		
	ehicle Speed:	50 mph	-	-	/ehicle						
Near/Far La	ane Distance:	48 feet		F		icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Barrier Type (0-V	arrier Height: Vall, 1-Berm):	0.0 feet 0.0				ledium T Heavy T		84.8% 86.5%		10.3% 10.8%	
	ist. to Barrier:	64.0 feet		1	Voise S	ource El	evation	s (in fe	eet)		
Centerline Dist Barrier Distance Observer Height	to Observer:	64.0 feet 0.0 feet 5.0 feet 0.0 feet			Mediu	Auto m Truck vy Truck	s: 0 s: 2	.000 .297 .006	Grade Ad,	iustment	: 0.0
	ad Elevation:	0.0 feet		L	Lane Eq	uivaleni	Distan	ce (in	feet)		
	Road Grade: Left View: Right View:	0.0% -90.0 degre 90.0 degre			Autos: 59.540 Medium Trucks: 59.391 Heavy Trucks: 59.406						
FHWA Noise Mod	lel Calculation	IS									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos.				-1.24		-1.20		-4.70		000	0.00
Medium Trucks. Heavy Trucks.				-1.22 -1.23	_	-1.20 -1.20		-4.88 -5.31		000	0.00
						-1.20		-0.31	0.0	J00	0.00
Unmitigated Nois VehicleType	Leg Peak Ho			er atteni Leg Ev		Loa	Night	Т	Ldn		VEL
Autos		1.9	60.3	Ley L	58.5		52.	4	61.1		61.
Medium Trucks	5.	5.4	54.2		47.9		46.	3	54.8	3	55.
Heavy Trucks.	: 55	5.8	54.7		45.7		47.	0	55.3	3	55.
Vehicle Noise	6	3.6	62.1		59.1		54.	3	62.8	3	63.
Centerline Distan	ce to Noise C	ontour (in fee	t)								
				70 c			dBA	6	60 dBA	1	dBA
			Ldn:	2			16		99	_	13
		C	NEL:	23	3	4	19		106	2	29

	E1000							T. 14				
	o: EAC23								ave-Cora	l Mou	ıntaın	
	e: Avenue 60					JOD I	lumber:	12642				
Road Segmer	it: w/o ivionro	e St.										
	SPECIFIC II	NPUT DATA							L INPU	ΓS		
Highway Data					Site Con	ditions	(Hard =	= 10, S	oft = 15)			
Average Daily	Traffic (Adt):	5,400 vehicle	s					Autos	15			
Peak Hour	Percentage:	9.30%			Me	edium Ti	rucks (2	Axles)	15			
Peak H	our Volume:	502 vehicle	S		He	eavy Tru	cks (3+	Axles)	15			
Ve	hicle Speed:	45 mph		H	Vehicle	Mix						
Near/Far Lai	ne Distance:	45 feet		H		icleType	9	Day	Evening	Nic	ght	Daily
Site Data							Autos:	77.59	_	_ `	9.6%	97.429
Par	rier Heiaht:	0.0 feet			М	ledium 7	rucks:	84.89	6 4.9%	10	0.3%	1.849
Barrier Type (0-W		0.0				Heavy 7	rucks:	86.5%	6 2.7%	10	0.8%	0.74%
Centerline Dis	st. to Barrier:	51.0 feet		-	Noise So	ource F	lovation	ne (in f	oot)			
Centerline Dist.	to Observer:	51.0 feet		F	WOISE SC	Auto		.000	cei)			
Barrier Distance	to Observer:	0.0 feet			Modiu	m Truck		.297				
Observer Height (.	Above Pad):	5.0 feet				vy Truck		.006	Grade A	dineti	mont.	0.0
Pa	ad Elevation:	0.0 feet			пеа	vy Truck	18. 0	.000	Grade A	ujusti	non.	0.0
Roa	ad Elevation:	0.0 feet		L	Lane Eq	uivalen	t Distan	ce (in	feet)			
I	Road Grade:	0.0%				Auto	s: 46	.041				
	Left View:	-90.0 degre	es		Mediu	m Truck	rs: 45	.848				
	Right View:	90.0 degre	es		Hear	vy Truck	s: 45	.867				
FHWA Noise Mode	el Calculation	IS										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier A	tten	Berr	n Atten
Autos:	68.46	-4.94		0.4	3	-1.20		-4.65	C	.000		0.00
Medium Trucks:	79.45	-22.18		0.4	6	-1.20		-4.87	C	.000		0.00
Heavy Trucks:	84.25	-26.14		0.4	6	-1.20		-5.42	C	.000		0.00
Unmitigated Noise	Levels (with	out Topo and	barrie	er atten	uation)							
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq E	vening	Leq	Night		Ldn		C٨	IEL
Autos:	62	2.8	61.2		59.4		53.	3	62	.0		62.
Medium Trucks:	56	6.5	55.3		49.0		47.	4	55	.9		56.
Heavy Trucks:	5	7.4	56.3		47.2	!	48.	5	56	i.8		57.
Vehicle Noise:	6-	4.6	63.2		60.0		55.	3	63	.9		64.
Centerline Distanc	e to Noise C	ontour (in feet	t)					,				
					dBA		dBA	1 '	60 dBA		55 (	
			Ldn:		.0	4	43		93		19	
			NFI:	2			46		99			14

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	A YAW	IOISE PI	REDICT	ON M	DDEL			
Road Nam	io: EACP23 ne: Jefferson S nt: n/o Avenue							The W 12642	ave-Coral	Mountai	n
SITE	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	33,900 vehicles	6					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	3,153 vehicles	3		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	55 mph		-	Vehicle I	Miv					
Near/Far La	ne Distance:	71 feet		H		icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	-	9.6%	
Ra	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			1	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		64.0 feet		-							
Centerline Dist.	to Observer:	64.0 feet		-	Noise So				eet)		
Barrier Distance		0.0 feet				Auto		0.000			
Observer Height (	(Above Pad):	5.0 feet				m Truck		2.297			
	ad Elevation:	0.0 feet			Heav	vy Truck	s: 6	3.006	Grade Ad	justmeni	.: 0.0
Roa	ad Elevation:	0.0 feet		1	Lane Eq	uivalent	Dista	nce (in	feet)		
	Road Grade:	0.0%				Auto	s: 50	3.486			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 50	3.320			
	Right View:	90.0 degree	es		Heav	vy Truck	s: 50	3.337			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Bei	rm Atten
Autos:	71.78	2.16		-0.5	4	-1.20		-4.70	0.0	000	0.000
Medium Trucks:	82.40	-15.07		-0.5	2	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	86.40	-19.03		-0.5	2	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Hot			Leq E	vening		Night		Ldn		NEL
Autos:			70.6		68.9		62		71.4		72.0
Medium Trucks:			64.4		58.1		56		65.0	-	65.2
Heavy Trucks:			64.5		55.5		56		65.1		65.2
Vehicle Noise:	73	3.8	72.3		69.4		64	.5	73.	1	73.
Centerline Distand	ce to Noise Co	ontour (in feet,	)								
				70 (			dBA	(	60 dBA	1	dBA
			Ldn:		)2	_	21		475		024
	CNEL:				110 237 511 1,102				102		

	FH\	WA-RD-77-108	HIGH	WAY N	DISE P	REDICT	ION MO	DEL			
Road Nam	io: EACP23 ne: Jefferson S nt: n/o Avenue						t Name: lumber:		ave-Coral	Mountai	n
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data				S	ite Cor	nditions	(Hard =	: 10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	24,100 vehicle	S					Autos:	15		
Peak Hour	Percentage:	9.30%				edium Ti		,	15		
Peak H	lour Volume:	2,241 vehicle	S		He	eavy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	55 mph		ν	ehicle	Mix					
Near/Far La	ne Distance:	71 feet				icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	0	9.6%	
Pa	rrier Heiaht:	0.0 feet			N	ledium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	/all, 1-Berm):	0.0				Heavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		64.0 feet		Ν	oise S	ource E	levation	s (in fe	et)		
Centerline Dist.		64.0 feet				Auto	as: O	.000			
Barrier Distance	to Observer:	0.0 feet			Mediu	ım Truck		.297			
Observer Height (	,	5.0 feet			Hea	vy Truck	rs: 8	.006	Grade Ad	justmen	t: 0.0
	ad Elevation:	0.0 feet		<u> </u>		•					
	ad Elevation:	0.0 feet		L	ane Eq	uivalen			eet)		
	Road Grade:	0.0%				Auto		.486			
	Left View:	-90.0 degree	es			ım Truck		.320			
	Right View:	90.0 degree	es		Hea	vy Truck	is: 53	.337			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	71.78	0.68		-0.54		-1.20		-4.70	0.0	000	0.000
Medium Trucks:	82.40	-16.56		-0.52		-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	86.40	-20.51		-0.52		-1.20		-5.31	0.0	000	0.000
Unmitigated Noise											
VehicleType	Leq Peak Hou			Leq Ev			Night		Ldn	-	NEL
Autos:			69.1		67.4		61.	-	69.9	-	70.5
Medium Trucks:	64		62.9		56.6		55.	-	63.5	-	63.7
Heavy Trucks:	-	-	63.1		54.0		55.		63.6		63.7
Vehicle Noise:			70.9		67.9	)	63.	0	71.6	3	72.1
Centerline Distant	ce to Noise Co	ontour (in feet	)	70.			10.4			1	
				70 di			dBA	6	i0 dBA		dBA
			Ldn:	82			76		379		316
		C	NEL:	88		1	89		407		378

		A-RD-77-108	HIGHV	VAY NO	JISE PI						
	o: EACP23								ave-Coral I	Mountain	
	e: Madison St. nt: n/o Avenue :	50				JOD IV	umber:	12642			
Highway Data	SPECIFIC IN	PUIDAIA		s	ite Con	N ditions			L INPUTS ft = 15)	<u> </u>	
Average Daily	Traffic (Adt):	9.200 vehicles	:					Autos:	15		
,	Percentage:	9.30%	,		Me	edium Tru			15		
	our Volume:	856 vehicles				avy Truc	,	,	15		
	hicle Speed:	50 mph		_			(				
Near/Far Lai		51 feet		V	ehicle l						
					Veh	icleType		Day	Evening	Night	Daily
Site Data								77.5%		9.6%	
Bar	rier Height:	0.0 feet				edium Tr		84.8%		10.3%	1.84%
Barrier Type (0-W	'all, 1-Berm):	0.0			- 1	Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	st. to Barrier:	54.0 feet		N	oise Sc	ource Ele	evations	s (in fe	et)		
Centerline Dist.	to Observer:	54.0 feet				Autos		000	,		
Barrier Distance		0.0 feet			Mediu	m Trucks	: 2:	297			
Observer Height (.		5.0 feet			Heav	vy Trucks	: 8.0	006	Grade Ad	ustment.	0.0
	ad Elevation:	0.0 feet		_		•					
	ad Elevation:	0.0 feet		L	ane Eq	uivalent			eet)		
F	Road Grade:	0.0%				Autos		862			
	Left View:	-90.0 degree				m Trucks		677			
	Right View:	90.0 degree	:S		Heav	y Trucks	s: 47.	695			
FHWA Noise Mode	el Calculations										
VehicleType	REMEL	Traffic Flow	Dista			Road	Fresn		Barrier Atte		m Atten
Autos:	70.20	-3.09		0.18		-1.20		-4.67	0.0		0.000
Medium Trucks:	81.00	-20.32		0.21		-1.20		-4.87	0.0		0.000
Heavy Trucks:	85.38	-24.28		0.20		-1.20		-5.39	0.0	00	0.000
Unmitigated Noise	•										
	Leq Peak Hour			Leq Eve	_	_	Night = -	<u> </u>	Ldn		VEL
Autos:	66.		64.5		62.7		56.7		65.3		65.9
Medium Trucks:	59.	-	58.5		52.1		50.6		59.0		59.3
Heavy Trucks: Vehicle Noise:	60. 67.		59.0 66.4		50.0 63.3		51.2 58.5		59.6 67.1		59.7 67.6
Centerline Distance	***	-			30.0		00.0		07.1		07.0
Contenine Distant	e to Noise Col	noar (iii ieet)		70 dl	DA.	65.	dBA	6	0 dBA	55	dBA
				70 UL	DA	00 0			O UDA	- 00	
			Ldn:	35		7		, ,	160		45

	FH\	WA-RD-77-108	HIGH	WAY N	OISE PI	REDICT	ION MODEL		
Scenario	o: EACP23					Projec	t Name: The \	Vave-Coral N	Mountain
Road Name	e: Jefferson S	St.				Job I	Vumber: 1264:	2	
Road Segmen	t: n/o Avenue	: 54							
	SPECIFIC IN	IPUT DATA					NOISE MOD		3
Highway Data				S	ite Con	ditions	(Hard = 10, S)	Soft = 15)	
Average Daily	Traffic (Adt):	20,000 vehicle	s				Auto		
Peak Hour I	Percentage:	9.30%					rucks (2 Axles		
Peak H	our Volume:	1,860 vehicle	s		He	avy Tru	icks (3+ Axles	): 15	
Vel	nicle Speed:	55 mph		v	ehicle	Wix			
Near/Far Lar	ne Distance:	71 feet		Ė	Veh	icleTyp	e Day	Evening	Night Daily
Site Data							Autos: 77.5	% 12.9%	9.6% 97.42%
Ran	rier Heiaht:	0.0 feet			М	edium 1	rucks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-Wa	all, 1-Berm):	0.0				Heavy T	rucks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dis		64.0 feet		٨	loise So	ource E	levations (in	feet)	
Centerline Dist. t		64.0 feet				Auto	os: 0.000		
Barrier Distance t		0.0 feet			Mediu	m Truck	ks: 2.297		
Observer Height (/	,	5.0 feet			Hear	y Truck	ks: 8.006	Grade Adj	ustment: 0.0
	d Elevation:	0.0 feet		١.		•			
	d Elevation:	0.0 feet		L	ane Eq		t Distance (in	reet)	
F	Road Grade:	0.0%				Auto			
	Left View:	-90.0 degree				m Truci			
	Right View:	90.0 degree	es		Hea	ry Truck	ks: 53.337		
FHWA Noise Mode									
VehicleType	REMEL	Traffic Flow		ance		Road	Fresnel	Barrier Atte	
Autos:	71.78			-0.54		-1.20	-4.70		
Medium Trucks:	82.40			-0.52		-1.20			
Heavy Trucks:	86.40	-21.32		-0.52	!	-1.20	-5.3	0.0	0.00
Unmitigated Noise									ONE
	Leq Peak Hou		68.3	Leq Ev	ening 66.6	Leq	Night 60.5	Ldn 69.1	CNEL
Autos:			62.1					69.1	
Medium Trucks:			62.1		55.8		54.2		
Heavy Trucks: Vehicle Noise:		3.4 1.5			53.2		54.5	62.8	
			70.0		67.1		62.2	70.8	71.
Centerline Distanc	e to Noise C	ontour (in feet	)	70 d	RΔ	65	dBA	60 dBA	55 dBA
			I dn:	70 0			55	334	721
		0	NFI:	78	-		67	360	775
		C	W.L.	7.0	,			500	113

Wednesday, March 25, 2020

F	HWA-RD	)-77-108 H	IGHWAY	NOISE P	REDICTION	ON MOE	EL			
Scenario: EACP23 Road Name: Madison Road Segment: n/o Aven						Vame: T mber: 1		ave-Coral M	Mountain	ı
SITE SPECIFIC	INPUT	DATA			N	DISE M	ODE	L INPUTS	5	
Highway Data				Site Cor	nditions (	Hard = 1	10, So	ft = 15)		
Average Daily Traffic (Adt).	11,000	vehicles				A	lutos:	15		
Peak Hour Percentage.	9.30	1%		Me	edium Tru	cks (2 A	xles):	15		
Peak Hour Volume.	1,023	vehicles		He	eavy Truc	ks (3+ A	xles):	15		
Vehicle Speed.	50	) mph		Vehicle	Mix					
Near/Far Lane Distance.	51	feet			nicleType	1	Dav	Evening	Night	Daily
Site Data						utos: 7	77.5%	0	9.6%	97.42%
Barrier Height		0 feet		I.	ledium Tru	icks: 8	34.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)					Heavy Tro	icks: 8	36.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier	54.	0 feet		Noise S	ource Ele	vations	(in fe	et)		
Centerline Dist. to Observer	54.	0 feet			Autos		•	/		
Barrier Distance to Observer	0.	0 feet		Mediu	ım Trucks					
Observer Height (Above Pad)		0 feet		Hea	vy Trucks	8.0	06	Grade Adj	ustment:	0.0
Pad Elevation	٥.	0 feet			•					
Road Elevation		0 feet		Lane Eq	uivalent		•	eet)		
Road Grade	٠.	0%			Autos					
Left View	00.	0 degrees			ım Trucks					
Right View	90.	0 degrees		Hea	vy Trucks	47.6	95			
FHWA Noise Model Calculation	ns									
VehicleType REMEL	Traffi	ic Flow	Distance	Finite	Road	Fresne	el	Barrier Atte	en Ber	m Atten
Autos: 70.2		-2.31	0.		-1.20		4.67	0.0		0.000
Medium Trucks: 81.0	-	-19.55	0.:		-1.20		4.87	0.0		0.000
Heavy Trucks: 85.3		-23.50	0.:		-1.20		5.39	0.0	00	0.000
Unmitigated Noise Levels (wi		po and ba								
VehicleType Leq Peak H		Leq Day		vening	Leq N			Ldn		VEL
	66.9		5.3	63.5		57.5		66.1		66.7
	60.5		9.3	52.9		51.4		59.8		60.1
	60.9		9.8	50.7		52.0		60.3		60.5
	68.6		7.1	64.1		59.3		67.9		68.3
Centerline Distance to Noise	Contour	(in feet)	70	-10.4	05 -	D4		10 -1D4		-10.4
			1	dBA 39	65 d		6	0 dBA 180		dBA 89
		CNE		39 42	90			194	-	89 18
		CIVE	L.	+2	90			194	4	10

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIGHV	WAY N	IOISE PF	REDICT	ION MO	DEL			
Road Nan	rio: EACP23 ne: Madison St. ent: n/o Avenue						Name: lumber:		/ave-Coral I	Mountaii	n
SITE	SPECIFIC IN	IPUT DATA				N	IOISE I	MODE	L INPUTS	5	
Highway Data					Site Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	8,900 vehicles	3					Autos.	: 15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2 .	Axles)	: 15		
Peak F	Hour Volume:	828 vehicles	3		He	avy Tru	cks (3+.	Axles)	: 15		
Ve	ehicle Speed:	50 mph			Vehicle I	Miss.					
Near/Far La	ane Distance:	51 feet				u <b>x</b> cleType	.	Dav	Evening	Niaht	Dailv
Site Data					*0111		Autos:	77.5%		9.6%	. ,
Da Da	rrier Heiaht:	0.0 feet			Me	edium T	rucks:	84.89	6 4.9%	10.3%	1.84%
Barrier Type (0-V		0.0 feet			F	leavy T	rucks:	86.5%	6 2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	54.0 feet		H				,, ,			
Centerline Dist.		54.0 feet		Ľ	Noise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000			
Observer Height	(Above Pad):	5.0 feet				n Truck		297			
	Pad Elevation:	0.0 feet			Heav	y Truck	s: 8.	006	Grade Adj	ustment	r: 0.0
Ro	ad Elevation:	0.0 feet		1	Lane Equ	iivaleni	Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 47	.677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47	.695			
FHWA Noise Mod	el Calculations	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresi	nel	Barrier Atte	en Bei	rm Atten
Autos:	10.20	-3.23		0.1	8	-1.20		-4.67	0.0	00	0.000
Medium Trucks:	81.00	-20.47		0.2	1	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-24.42		0.2	0	-1.20		-5.39	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	′	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	66	.0	64.4		62.6		56.	6	65.2		65.8
Medium Trucks:	59	.5	58.3		52.0		50.	4	58.9		59.1
Heavy Trucks:	60	.0	58.9		49.8		51.	1	59.4		59.5
Vehicle Noise:	67	.7	66.2		63.2		58.	4	66.9		67.4
Centerline Distan	ce to Noise Co	ontour (in feet,	)								
				70 d	dBA	65	dBA	-	60 dBA	55	dBA
			Ldn:	3	4	7	'3		157	3	338
		Ci	NEL:	3	6	7	'8		168	3	363

	FHV	WA-RD-77-108	HIGHV	VAY NO	DISE PI	REDICT	ION MC	DEL			
Road Nan	rio: EACP23 ne: Madison St ent: n/o Avenue	-					t Name: lumber:		ave-Coral	Mountair	1
SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard =	: 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	13,300 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak F	Hour Volume:	1,237 vehicles	8		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		V	ehicle i	Mix					
Near/Far La	ane Distance:	51 feet		_		icleType	,	Dav	Evening	Night	Dailv
Site Data							Autos:	77.5%	-	9.6%	97.429
Ra	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-V		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749
	ist. to Barrier:	54.0 feet		A/	laina C	ource El	lovation	o (in fe	2041		
Centerline Dist.	to Observer:	54.0 feet		N	oise so	Auto		.000	et)		
Barrier Distance	to Observer:	0.0 feet				Auto m Truck		.000			
Observer Height	(Above Pad):	5.0 feet				m rruck vy Truck		.006	Grade Ad	ii iatmant	
P	Pad Elevation:	0.0 feet			пеа	ry Truck	s. o	.000	Grade Au,	usunen	. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent	t Distan	ce (in t	feet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree	es		Hear	y Truck	s: 47	.695			
FHWA Noise Mod	el Calculation:	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres		Barrier Att	en Ber	m Atten
Autos:	70.20	-1.49		0.18		-1.20		-4.67	0.0	000	0.00
Medium Trucks:	81.00	-18.72		0.21		-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	85.38	-22.68		0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Nois	e Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Hou	- 1 - 7		Leq Eve		- 1	Night		Ldn		VEL
Autos:			66.1		64.3		58.	-	66.9		67.
Medium Trucks:			60.1		53.7		52.		60.6		60.
Heavy Trucks:			60.6		51.6		52.	-	61.2		61.
Vehicle Noise:			68.0		64.9		60.	1	68.7		69.
Centerline Distan	ce to Noise Co	ontour (in feet,	)	70 -	D.A	er.	AD A		O ADA		ADA
			Lelen	70 dl 44			dBA 95	1 6	0 dBA 205	1	dBA 41
			Ldn: NFI:	44		-	15 02		205		74
		C	VEL.	47		- 1	UZ		220	4	14

	FH	WA-RD-77-108	HIGHV	VAY NO	DISE PR	REDICT	ION MOI	DEL			
Scenario. Road Name. Road Segment							Name: 1		ave-Coral	Mountai	n
	PECIFIC II	NPUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard =	10, So	ft = 15)		
Average Daily Ti	raffic (Adt):	16,000 vehicle	s					Autos:	15		
Peak Hour P		9.30%					ucks (2 A		15		
	ur Volume:	1,488 vehicle	:S		He	avy Tru	cks (3+ A	(xles	15		
	cle Speed:	50 mph		V	ehicle N	/lix					
Near/Far Lane	e Distance:	51 feet			Vehi	сІеТуре	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Barr	ier Heiaht:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-Wa	II, 1-Berm):	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dist.		54.0 feet		N	oise So	urce El	evations	(in fe	et)		
Centerline Dist. to		54.0 feet				Auto	s: 0.0	000			
Barrier Distance to		0.0 feet			Mediur	n Truck	s: 2.1	297			
Observer Height (A	,	5.0 feet			Heav	v Truck	s: 8.0	006	Grade Ad	justmeni	t: 0.0
	l Elevation:	0.0 feet		-							
	l Elevation:	0.0 feet		Li	ane Equ		Distanc		eet)		
R	oad Grade:	0.0%				Auto					
	Left View:	-90.0 degre				n Truck					
,	Right View:	90.0 degre	es		пеач	y Truck	8. 47.	090			
FHWA Noise Model											
VehicleType	REMEL	Traffic Flow	Dista		Finite		Fresn		Barrier Att		rm Atten
Autos:	70.20			0.18		-1.20		-4.67		000	0.00
Medium Trucks:	81.00			0.21		-1.20		-4.87		000	0.00
Heavy Trucks:	85.38			0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise											
VehicleType L Autos:	eq Peak Ho	ur Leq Da	66.9	Leq Eve	ening   65.2	Leq	Night 59.1	I	Ldn 67.7	1	NEL 68.:
Medium Trucks:		5.5 2.1	60.9		54.5		53.0		61.4		61.
Heavy Trucks:		2.1	61.4		52.4		53.6		62.0		62.
_		1.2	68.8		65.7		60.9		69.5		70.
Vehicle Noise:	, ,										
		ontour (in fee	t)								
		ontour (in fee	t)	70 dl	BA	65	dBA	6	0 dBA	55	dBA
Vehicle Noise:  Centerline Distance		ontour (in fee	t) Ldn:	70 dE	ВА		dBA 08	6	0 dBA 232	1	dBA 199

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIGHW	AY N	OISE PI	REDICT	ION MODEL					
	o: EACP23 e: Madison St t: n/o Avenue						t Name: The Number: 1264		Mountain			
	PECIFIC IN	IPUT DATA					NOISE MOD		S			
Highway Data				S	ite Con	ditions	(Hard = 10,					
Average Daily T Peak Hour I Peak Ho	. ,	5,800 vehicles 9.30% 539 vehicles					Auto rucks (2 Axles icks (3+ Axles	:): 15				
Veh	icle Speed:	45 mph		ν	ehicle l	Vix						
Near/Far Lar	e Distance:	45 feet		F		icleType	e Day	Evening	Night Daily			
Site Data							Autos: 77.5	% 12.9%	9.6% 97.42%			
Ban	rier Heiaht:	0.0 feet			М	edium 7	Frucks: 84.8	% 4.9%	10.3% 1.84%			
Barrier Type (0-Wa		0.0			- 1	Heavy 7	rucks: 86.5	% 2.7%	10.8% 0.74%			
Centerline Dis	t. to Barrier:	51.0 feet			loise Sr	ource F	levations (in	feet)				
Barrier Distance t Observer Height (A	Centerline Dist. to Observer: 51.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.006 Grade Adjustment: 0.0						
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalen	t Distance (ii	ı feet)				
F	Road Grade:	0.0%				Auto	os: 46.041					
	Left View: Right View:	-90.0 degree				m Truck vy Truck						
FHWA Noise Mode	l Calculation:	s										
VehicleType	REMEL	Traffic Flow	Distar	се	Finite	Road	Fresnel	Barrier Atte	en Berm Atten			
Autos:	68.46	-4.63		0.43		-1.20	-4.6		0.000			
Medium Trucks:	79.45	-21.87		0.46		-1.20			0.000			
Heavy Trucks:	84.25	-25.83		0.46	i	-1.20	-5.4	2 0.0	0.000			
<b>Unmitigated Noise</b>	Levels (with	out Topo and	barrier a	ttenu	ıation)							
	Leq Peak Hοι			eq Ev	ening	Leq	Night	Ldn	CNEL			
Autos:	63		61.5		59.7		53.7	62.3				
Medium Trucks:	56		55.6		49.3		47.7	56.2				
Heavy Trucks:	57		56.6		47.5		48.8	57.1				
Vehicle Noise:	64		63.5		60.3		55.7	64.2	2 64.6			
Centerline Distance	e to Noise Co	ontour (in feet)	)									
			!	70 d			dBA	60 dBA	55 dBA			
			Ldn:	21				209				
		CI	NEL:	22	!	4	48	104	224			

E1944	DD ## 400			0105.05	EDIOT					
	-RD-77-108	HIGHW	/AY N	IOISE PI	KEDICI	ON MC	DEL			
Scenario: EACP23								/ave-Coral	Mount	ain
Road Name: Monroe St.					Job №	lumber:	12642	!		
Road Segment: n/o Avenue 50	)									
SITE SPECIFIC INP	JT DATA							L INPUT	S	
Highway Data				Site Con	ditions	(Hard =	: 10, S	oft = 15)		
Average Daily Traffic (Adt): 13,	300 vehicles						Autos	: 15		
Peak Hour Percentage:	9.30%			Me	dium Tr	ucks (2	Axles)	: 15		
Peak Hour Volume: 1,	237 vehicles			He	avy Tru	cks (3+	Axles)	: 15		
Vehicle Speed:	50 mph		-	Vehicle I	/liv					
Near/Far Lane Distance:	43 feet		H.		cleType		Dav	Evening	Niaht	Daily
Site Data						Autos:	77.59		9.6	. ,
Barrier Height:	0.0 feet			Me	edium T	rucks:	84.89	6 4.9%	10.3	% 1.84%
Barrier Type (0-Wall, 1-Berm):	0.0			F	leavy T	rucks:	86.59	6 2.7%	10.8	% 0.74%
Centerline Dist. to Barrier:	64.0 feet		١,	Voise Sc	urco E	ovation	se (in t	ioot)		
Centerline Dist. to Observer:	64.0 feet		,	voise sc				eet)		
Barrier Distance to Observer:	0.0 feet				Auto		.000			
Observer Height (Above Pad):	5.0 feet				n Truck			0		-4: 0.0
Pad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	ustme	nt: U.U
Road Elevation:	0.0 feet		I	Lane Equ	iivalen	Distan	ce (in	feet)		
Road Grade:	0.0%				Auto	s: 60	.488			
Left View:	-90.0 degree	:S		Mediui	n Truck	s: 60	.341			
Right View:	90.0 degree	es.		Heav	y Truck	s: 60	.355			
FHWA Noise Model Calculations										
	raffic Flow	Dista	nce	Finite	Road	Fres	nel	Barrier Att	en B	erm Atten
Autos: 70.20	-1.49		-1.3	4	-1.20		-4.70		000	0.000
Medium Trucks: 81.00	-18.72		-1.3	3	-1.20		-4.88		000	0.000
Heavy Trucks: 85.38	-22.68		-1.3	3	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise Levels (withou	t Tono and	harrior :	ətton	uation)						
VehicleType Leg Peak Hour	Leg Day			/ening	Lea	Night	Т	Ldn		CNEL
Autos: 66.2		64.6		62.8		56.	8	65.4	ľ	66.0
Medium Trucks: 59.7		58.6		52.2		50.	6	59.1		59.3
Heavy Trucks: 60.2		59.1		50.0		51.	3	59.6	6	59.8
Vehicle Noise: 67.9		66.4		63.4		58.	6	67.2	2	67.6
Centerline Distance to Noise Cont	our (in feet)									
	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		70 c	IBA	65	dBA		60 dBA		55 dBA
		Ldn:	4	1 '	8	9		192		414
	CI	VEL:	4	4	9	16		206		444

	FH\	WA-RD-77-108	HIGHV	VAY N	OISE PI	REDICT	ON MO	DDEL			
Road Nam	io: EACP23 ne: Monroe St. nt: n/o Avenue	54					Name: lumber:		ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	10,400 vehicles	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	967 vehicles	3		He	avy Truc	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		V.	/ehicle	Miv					
Near/Far La	ne Distance:	51 feet		F.		icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Rai	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	-	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	st. to Barrier:	54.0 feet		٨	loise So	nurce Fl	evation	ıs (in f	oet)		
Centerline Dist.	to Observer:	54.0 feet		F	.0.00 0	Auto		.000	,,,,		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck		.297			
Observer Height (	Above Pad):	5.0 feet				y Truck		.006	Grade Ad	iustment	0.0
	ad Elevation:	0.0 feet		L		•					
	ad Elevation:	0.0 feet		L	ane Eq				feet)		
	Road Grade:	0.0%				Auto.		.862			
	Left View:	-90.0 degree				m Truck		.677			
	Right View:	90.0 degree	es		Hear	y Truck	s: 47	.695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista			Road	Fres	-	Barrier Att		m Atten
Autos:	70.20	-2.55		0.18		-1.20		-4.67		000	0.00
Medium Trucks:	81.00	-19.79		0.21		-1.20		-4.87		000	0.000
Heavy Trucks:	85.38	-23.75		0.20	)	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	•									1	
VehicleType	Leq Peak Hou	- 1 - 7		Leq Ev		Leq	Night		Ldn		VEL
Autos:	66		65.0		63.3		57.	_	65.8		66.
Medium Trucks:	60		59.0		52.7		51.		59.6		59.
Heavy Trucks: Vehicle Noise:	60		59.5 66.9		50.5 63.8		51. 59.		60.1 67.6		60.3
Centerline Distance					30.0				07.0		00.
Contonine Distant	10 110/36 00	mour (m reet)		70 d	IBA .	65	dBA	(	60 dBA	55	dBA
			Ldn:	37	7	8	1	1	174	' 3	74
	Ldn: CNFI:				40 87 187 402						

	FH	WA-RD-77-108	HIGHV	VAY NO	DISE PREDIC	TION MODE		
	o: EACP23 e: Monroe St. t: n/o Avenue					ct Name: The Number: 126	Wave-Coral N 42	lountain
	SPECIFIC IN	IPUT DATA					DEL INPUTS	
Highway Data				S	ite Condition	s (Hard = 10,	Soft = 15)	
	Percentage: our Volume:	9.30% 1,097 vehicle				Aut Trucks (2 Axle rucks (3+ Axle	s): 15	
ver Near/Far Lar	nicle Speed:	50 mph 43 feet		V	ehicle Mix			
iveai/Fai Lai	ie Distance.	43 1661			VehicleTy			Night Daily
Site Data  Barrier Type (0-Wa	rier Height: all, 1-Berm):	0.0 feet 0.0			Medium Heavy	Autos: 77. Trucks: 84. Trucks: 86.	8% 4.9%	9.6% 97.42% 10.3% 1.84% 10.8% 0.74%
Centerline Dis	t. to Barrier:	64.0 feet		N	oise Source	Elevations (ii	ı feet)	
Roa	o Observer: Above Pad): d Elevation: d Elevation: Road Grade: Left View:	64.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre		L	Medium Tru Heavy Tru ane Equivale	cks: 8.006  nt Distance ( tos: 60.488 cks: 60.341	in feet)	istment: 0.0
FHWA Noise Mode	Right View:	90.0 degre			ricavy ria	JAG. 00.000		
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite Road	Fresnel	Barrier Atte	n Berm Atten
Autos:	70.20	-2.00		-1.34	-1.2	0 -4.		
Medium Trucks:	81.00	-19.24		-1.33	-1.2	0 -4.8	38 0.00	0.000
Heavy Trucks:	85.38	-23.20		-1.33	-1.2	0 -5.	31 0.00	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier	attenu	ation)			
VehicleType	Leq Peak Ho	ır Leq Daj	/	Leq Eve	ening Le	q Night	Ldn	CNEL
Autos:		5.7	64.1		62.3	56.3	64.9	65.5
Medium Trucks:		9.2	58.0		51.7	50.1	58.6	58.8
Heavy Trucks:		9.6	58.5		49.5	50.8	59.1	59.2
Vehicle Noise:		7.4	65.9		62.9	58.1	66.6	67.1
Centerline Distance	e to Noise Co	ontour (in feet	)	70 di	DA 4	5 dBA	60 dBA	55 dBA
			I dn:	70 ai	1 -	82	177	382
		0	NFI:	38 41		88	190	382 410
		C	IVLL.	41		00	150	410

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	HWAY	NOISE P	REDICTI	ON M	ODEL			
	io: EACP23								ave-Coral	Mountair	1
	ne: Monroe St.					Job Ni	umbei	: 12642			
Road Segme	nt: n/o Airport	BI.									
	SPECIFIC IN	IPUT DATA			0': 0				L INPUT	s	
Highway Data					Site Cor	iditions (	Hard				
Average Daily	Traffic (Adt):	9,300 vehicle	S					Autos:			
Peak Hour	Percentage:	9.30%				edium Tru					
Peak F	lour Volume:	865 vehicle	S		He	eavy Truc	ks (3-	- Axles):	15		
Ve	hicle Speed:	50 mph			Vehicle	Mix					
Near/Far La	ne Distance:	51 feet				icleType		Dav	Evening	Night	Daily
Site Data							lutos:	77.5%		9.6%	
Ra	rrier Height:	0.0 feet			M	ledium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	54.0 feet			Noise S	ource Fla	ovatio	ne (in fa	not)		
Centerline Dist.	to Observer:	54.0 feet			NOISE S	Autos		0.000	ei)		
Barrier Distance	to Observer:	0.0 feet			Modis	m Trucks		2.297			
Observer Height	(Above Pad):	5.0 feet				vy Trucks		B.006	Grade Ad	liustmont	. 0 0
P	ad Elevation:	0.0 feet								justinon	. 0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalent	Dista	nce (in i	feet)		
	Road Grade:	0.0%				Autos	: 4	7.862			
	Left View:	-90.0 degre	es		Mediu	m Trucks	3: 4	7.677			
	Right View:	90.0 degre	es		Hea	vy Trucks	s: 4	7.695			
HWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance		Road	Fre		Barrier At		m Atten
Autos:	70.20			0.		-1.20		-4.67		000	0.000
Medium Trucks:	81.00			0.:		-1.20		-4.87		000	0.000
Heavy Trucks:	85.38	-24.23		0.:	20	-1.20		-5.39	0.	000	0.000
Inmitigated Noise			barri	er atte	nuation)						
VehicleType	Leq Peak Hou			Leq E	vening	Leq I			Ldn		NEL
Autos:		3.1	64.6		62.8			5.7	65.		66.0
Medium Trucks:		9.7	58.5		52.2			0.6	59.		59.3
Heavy Trucks:	60	).1	59.0		50.0	1	51	.3	59.	6	59.7
Vehicle Noise:	67	7.8	66.4		63.4		58	3.6	67.	1	67.6
Centerline Distant	ce to Noise Co	ontour (in feet	)								
				70	dBA	65 (	iBA	6	60 dBA	55	dBA
			Ldn:		35	7	5		161	3	48
		С	NEL:		37	8	0		173	3	73

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	WAY I	NOISE P	REDICT	ION MC	DEL			
Road Nam	io: EACP23 ne: Monroe St. nt: n/o Avenue	58					t Name: lumber:		ave-Coral	Mounta	in
SITE :	SPECIFIC IN	IPUT DATA				N	NOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard =	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	9,300 vehicle	s					Autos.	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles)	15		
Peak H	lour Volume:	865 vehicle	s		He	eavy Tru	cks (3+	Axles)	15		
Ve	hicle Speed:	50 mph		ŀ	Vehicle	Miv					
Near/Far La	ne Distance:	51 feet		-		icleType	9	Dav	Evening	Night	Daily
Site Data							Autos:	77.59		9.69	,
Par	rrier Height:	0.0 feet			M	ledium T	rucks:	84.89	4.9%	10.39	6 1.84%
Barrier Type (0-W		0.0 1661				Heavy T	rucks:	86.5%	2.7%	10.89	6 0.74%
Centerline Dis		54.0 feet		-							
Centerline Dist.	to Observer:	54.0 feet		-	Noise S			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (	Above Pad):	5.0 feet				m Truck		.297	0		4. 0.0
	ad Elevation:	0.0 feet			Hea	vy Truck	rs: 8	.006	Grade Ad	justmer	it: 0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distar	ice (in	feet)		
1	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 47	.695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-3.04		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-20.28		0.2	21	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-24.23		0.2	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn	(	CNEL
Autos:	66	i.1	64.6		62.8		56.	.7	65.4	4	66.0
Medium Trucks:	59	1.7	58.5		52.2		50.	.6	59.	1	59.3
Heavy Trucks:	60		59.0		50.0		51.		59.6		59.7
Vehicle Noise:	67	'.8	66.4		63.4		58.	.6	67.	1	67.6
Centerline Distance	e to Noise Co	ontour (in feet	)								
					dBA		dBA	1 '	60 dBA	1	5 dBA
			Ldn:		35		75		161		348
		C	NEL:	3	37	8	30		173		373

	FHV	VA-RD-77-108	HIGH	WAY N	OISE P	REDICT	ON MC	DEL			
	o: EACP23								ave-Coral I	Mountain	1
Road Nam	e: Avenue 50					Job N	lumber:	12642			
Road Segmer	nt: w/o Jefferso	on St.									
	SPECIFIC IN	IPUT DATA							L INPUTS	6	
Highway Data				٥	site Con	ditions	•	_			
Average Daily	. ,		3					Autos:	15		
	Percentage:	9.30%				edium Tn	,	,	15		
	our Volume:	1,572 vehicles	3		He	avy True	cks (3+	Axles):	15		
	hicle Speed:	50 mph		ν	/ehicle l	Mix					
Near/Far Lai	ne Distance:	51 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						,	Autos:	77.5%	12.9%	9.6%	97.429
Bai	rier Height:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W	all, 1-Berm):	0.0			1	Heavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis		54.0 feet		٨	loise Sc	ource El	evation	s (in fe	et)		
Centerline Dist.		54.0 feet				Auto.	s: 0.	.000			
Barrier Distance		0.0 feet			Mediu	m Truck	s: 2	297			
Observer Height (		5.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	ustment.	0.0
	d Elevation:	0.0 feet		<u> </u>		•					
	d Elevation:	0.0 feet		L	ane Eq	uivalent			eet)		
F	Road Grade:	0.0%				Auto		.862			
	Left View:	-90.0 degree				m Truck		.677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47	.695			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Dist	tance		Road	Fresi		Barrier Atte		m Atten
Autos:	70.20	-0.44		0.18		-1.20		-4.67	0.0		0.00
Medium Trucks:	81.00	-17.68		0.21		-1.20		-4.87	0.0		0.00
Heavy Trucks:	85.38	-21.64		0.20		-1.20		-5.39	0.0	00	0.00
Unmitigated Noise								_			
VehicleType Autos:	Leq Peak Hou	. , . ,	67.2	Leq Ev	ening 65.4		Night 59.	1	Ldn 68.0		VEL 68.
Medium Trucks:	62		61.1		54.8		53.	-	61.7		61.
Heavy Trucks:	62		61.6		52.6		53.	_	62.2		62.
Vehicle Noise:	70		69.0		66.0		61.		69.7		70.
Centerline Distanc	e to Noise Co	ontour (in feet	)								
		, , ,		70 d	IBA	65	dBA	6	0 dBA	55	dBA
			Ldn:	52	2	1	12	1	240	5	18

Scenario:	EACP23				Project N	ame: The V	Vave-Coral	Mountair	1
Road Name:	Monroe St.				Job Nur	nber: 12642	2		
Road Segment.	n/o Avenue	60							
SITE SI	PECIFIC IN	PUT DATA			NO	ISE MOD	EL INPUT	s	
Highway Data				Site Cor	nditions (H	lard = 10, S	oft = 15)		
Average Daily Tr	affic (Adt):	9,200 vehicles				Autos	: 15		
Peak Hour P	ercentage:	9.30%		Me	edium Truc	ks (2 Axles,	: 15		
Peak Ho	ur Volume:	856 vehicles		He	eavy Truck	s (3+ Axles,	: 15		
Vehi	cle Speed:	50 mph		Vehicle	Miv				
Near/Far Lane	Distance:	51 feet			icleType	Dav	Evening	Night	Daily
Site Data				70		tos: 77.5°		9.6%	,
Rarri	er Heiaht:	0.0 feet		M	ledium Tru	cks: 84.8°	% 4.9%	10.3%	1.84%
Barrier Type (0-Wai		0.0			Heavy Tru	cks: 86.5°	% 2.7%	10.8%	0.74%
Centerline Dist.		54.0 feet		Noise S	ource Elev	ations (in	foot)		
Centerline Dist. to	Observer:	54.0 feet		NOISE S	Autos:	0.000	eet)		
Barrier Distance to	Observer:	0.0 feet		Modis	m Trucks:	2.297			
Observer Height (A	bove Pad):	5.0 feet			vy Trucks:	8.006	Grade Ad	iustment	. 0 0
Pad	Elevation:	0.0 feet		rica	vy Trucks.	0.000	Ordao ria,	dotimoni	. 0.0
Road	Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)		
Ro	oad Grade:	0.0%			Autos:	47.862			
	Left View:	-90.0 degrees			m Trucks:	47.677			
F	Right View:	90.0 degrees		Hea	vy Trucks:	47.695			
FHWA Noise Model	Calculations	i		1					
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	70.20	-3.09	0	.18	-1.20	-4.67	0.0	000	0.00
Medium Trucks:	81.00	-20.32		.21	-1.20	-4.87		000	0.000
Heavy Trucks:	85.38	-24.28	0	.20	-1.20	-5.39	0.0	000	0.00
Unmitigated Noise L	evels (with	out Topo and ba	rrier atte	enuation)					
	eq Peak Hou			Evening	Leq Ni	~ ,	Ldn	1	NEL
Autos:	66.			62.7		56.7	65.3		65.9
Medium Trucks:	59.			52.1		50.6	59.0		59.3
Heavy Trucks:	60.			50.0		51.2	59.6		59.
Vehicle Noise:	67.	.8 66	.4	63.3		58.5	67.	1	67.
Centerline Distance	to Noise Co	ntour (in feet)							
			- 1	0 dBA	65 dE	3A	60 dBA		dBA
		Lo		35	74		160		45
		CNE	:L:	37	80		172	3	71

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Wednesday, March 25, 2020

	FH	WA-RD-77	7-108 HIG	HWAY	NOISE P	REDICTI	ON M	ODEL			
	rio: EACP23 ne: Avenue 50							: The W : 12642	ave-Coral	Mountair	1
Road Segme	nt: w/o Madiso	on St.									
SITE	SPECIFIC IN	NPUT DA	TA			N	OISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions (	Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	15,700 ve	hicles					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	icks (2	Axles):	15		
Peak F	Hour Volume:	1,460 ve	hicles		He	avy Truc	ks (3-	- Axles):	15		
Ve	hicle Speed:	50 m	ph		Vehicle	Miv					
Near/Far La	ne Distance:	51 fe	et			icleType		Dav	Evening	Night	Daily
Site Data					*0.		utos:	77.5%	Ü	9.6%	
Pa	rrier Height:	0.0 fe	not		M	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0	eet.			Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	. ,	54.0 fe	et								
Centerline Dist.		54.0 fe			Noise S				eet)		
Barrier Distance	to Observer:	0.0 fe	eet			Autos		0.000			
Observer Height	(Above Pad):	5.0 fe	eet			m Trucks		2.297	Crada As	livotmont	
P	ad Elevation:	0.0 fe	eet		Hea	vy Trucks		8.006	Grade Ad	justrnent.	0.0
Ro	ad Elevation:	0.0 fe	eet		Lane Eq	uivalent	Dista	nce (in i	feet)		
	Road Grade:	0.0%				Autos	: 4	7.862			
	Left View:	-90.0 d	egrees		Mediu	m Trucks	: 4	7.677			
	Right View:	90.0 d	egrees		Hea	vy Trucks	: 4	7.695			
FHWA Noise Mod	el Calculation	ıs									
VehicleType	REMEL	Traffic F		stance		Road	Fre		Barrier Att		m Atten
Autos:	70.20		0.76		18	-1.20		-4.67		000	0.000
Medium Trucks:			8.00		21	-1.20		-4.87		000	0.000
Heavy Trucks:	85.38	-2	1.96	0.:	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Nois			and barri	ier atte	nuation)						
VehicleType	Leq Peak Ho		g Day	Leq E	Evening	Leq I			Ldn		VEL
Autos:		3.4	66.8		65.1			0.0	67.		68.2
Medium Trucks:		2.0	60.8		54.4		-	2.9	61.		61.6
Heavy Trucks:		2.4	61.3		52.3		-	3.5	61.		62.0
Vehicle Noise:		0.1	68.7		65.6		60	).9	69.	4	69.9
Centerline Distan	ce to Noise C	ontour (in	feet)								
					dBA	65 (		6	60 dBA		dBA
			Ldn:		49	10	-		229		93 29
			CNEL:		53	11	4		246	5	29

Wednesday, March 25, 2020

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	WAY I	NOISE P	REDICT	ION M	DDEL			
Road Nam	io: EACP23 ne: Avenue 50 nt: e/o Monroe	St.					t Name. lumber.		ave-Coral	Mountair	1
SITE	SPECIFIC IN	IPUT DATA				ı	IOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard:	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	11,900 vehicle	s					Autos	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles).	15		
Peak H	lour Volume:	1,107 vehicle	s		He	eavy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	50 mph		H	Vehicle	Miv					
Near/Far La	ne Distance:	43 feet		ŀ		icleType	9	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	,
Pa	rrier Height:	0.0 feet			N	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0 1661				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		64.0 feet		- 1	Noise S			(! 6	41		
Centerline Dist.	to Observer:	64.0 feet			Noise S				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		2.000			
Observer Height (	(Above Pad):	5.0 feet				m Truck	-		Grade Ad	ii ratmant	. 0 0
Pa	ad Elevation:	0.0 feet			Hea	vy Truck	s: t	1.006	Grade Ad	justrnent	. 0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distai	nce (in	feet)		
1	Road Grade:	0.0%				Auto	s: 60	.488			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 60	.341			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 60	).355			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	-1.97		-1.3	14	-1.20		-4.70	0.0	000	0.000
Medium Trucks:	81.00	-19.21		-1.3	13	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	85.38	-23.16		-1.3	13	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	er atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	65	5.7	64.1		62.3		56	.3	64.9	9	65.5
Medium Trucks:	59	.3	58.1		51.7		50	.2	58.6	3	58.9
Heavy Trucks:	59		58.6		49.5		50		59.		59.3
Vehicle Noise:	67	.4	66.0		62.9		58	.1	66.7	7	67.1
Centerline Distance	ce to Noise Co	ontour (in feet	)								
				70	dBA	65	dBA	-	60 dBA	55	dBA
			Ldn:	3	88	8	33		178	3	84
		C	NEL:	4	11	8	39		192	4	13

	FHW	A-RD-77-108	HIGHV	NAY N	OISE P	REDICTI	ом мо	DEL			
Road Name	o: EACP23 e: Avenue 54 nt: w/o Madisor	ı St.					Name: ' ımber:		ave-Coral I	Mountain	
SITE S	SPECIFIC IN	PUT DATA							LINPUTS	S	
Highway Data				S	Site Con	ditions (	Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt): 1	2,600 vehicles						Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tru	cks (2 )	Axles):	15		
Peak H	our Volume:	1,172 vehicles			He	avy Truc	ks (3+ /	Axles):	15		
Vel	hicle Speed:	50 mph		V	/ehicle l	Wiv					
Near/Far Lar	ne Distance:	51 feet		F		icleType		Day	Evening	Night	Daily
Site Data							utos:	77.5%	12.9%	9.6%	
Rar	rier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	-	0.0			1	Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	. ,	54.0 feet		-					-1		
Centerline Dist. I		54.0 feet		^	ioise Sc	ource Ele			et)		
Barrier Distance t	to Observer:	0.0 feet				Autos		000			
Observer Height (	Above Pad):	5.0 feet				m Trucks		297 006	Grade Ad	i rotmont	0.0
Pa	nd Elevation:	0.0 feet			Heat	y Trucks	. 8.	000	Grade Adj	usuneni.	0.0
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalent	Distan	ce (in f	eet)		
F	Road Grade:	0.0%				Autos	: 47.	862			
	Left View:	-90.0 degree	S		Mediu	m Trucks	: 47.	677			
	Right View:	90.0 degree	s		Heav	y Trucks	: 47.	695			
FHWA Noise Mode	l Calculations										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresr	-	Barrier Atte	en Ber	m Atten
Autos:	70.20	-1.72		0.18		-1.20		-4.67	0.0		0.00
Medium Trucks:	81.00	-18.96		0.21		-1.20		-4.87	0.0		0.000
Heavy Trucks:	85.38	-22.91		0.20	)	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	Levels (witho	ut Topo and I	barrier	attenu	uation)						
	Leq Peak Hou			Leq Ev	_	Leq I			Ldn		VEL
Autos:	67.	-	35.9		64.1		58.1		66.7		67.3
	61.	-	59.9		53.5		51.9		60.4		60.6
Medium Trucks:			30.4		51.3		52.6	3	60.9	)	61.1
Heavy Trucks:	61.		27.7		647		EO (		60 /		60
Heavy Trucks: Vehicle Noise:	69.	2	67.7		64.7		59.9	9	68.4	l	68.
Heavy Trucks:	69.	2	67.7	70 d		65 (			68.4 0 dBA		68.9 dBA
Heavy Trucks: Vehicle Noise:	69.	2 ntour (in feet)	67.7 Ldn:	70 d	IBA	65 (	iBA			55	

	FH\	WA-RD-77-108	HIGH	WAY N	DISE PRE	DICT	ION MODEL		
	o: EACP23 e: Avenue 52 t: w/o Monroe						t Name: The \ lumber: 1264:		lountain
	PECIFIC IN	IPUT DATA					NOISE MOD		i
Highway Data				S	ite Condi	tions	(Hard = 10, 3)	Soft = 15)	
	Percentage: our Volume:	9.30% 1,181 vehicle					Autos ucks (2 Axles cks (3+ Axles	): 15	
	icle Speed:	50 mph		V	ehicle Mix	(			
Near/Far Lan	e Distance:	51 feet			Vehicle	•Туре	e Day	Evening	Night Daily
Site Data  Barrier Type (0-Wa	rier Height: all, 1-Berm):	0.0 feet 0.0				ium T	Autos: 77.5 rucks: 84.8 rucks: 86.5	% 4.9%	9.6% 97.42% 10.3% 1.84% 10.8% 0.74%
Centerline Dis	t. to Barrier:	54.0 feet		N	loise Sou	rco F	levations (in	foot)	
Roa R	o Observer:	54.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre		L	Medium Heavy <b>ane Equiv</b> Medium Heavy	Truck ralen Auto Truck	s: 2.297 s: 8.006 t Distance (in s: 47.862 s: 47.677		ustment: 0.0
FHWA Noise Model	l Calculation	s							
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite Ro	oad	Fresnel	Barrier Atte	n Berm Atten
Autos:	70.20	-1.69		0.18		1.20	-4.67	7 0.00	0.000
Medium Trucks:	81.00	-18.92		0.21		1.20	-4.87	7 0.00	0.000
Heavy Trucks:	85.38	-22.88		0.20		1.20	-5.39	9 0.00	0.000
Unmitigated Noise									
,,	Leq Peak Hou			Leq Eve	- 1	Leq	Night	Ldn	CNEL
Autos:		7.5	65.9		64.1		58.1	66.7	67.3
Medium Trucks:	-	1.1	59.9		53.5		52.0	60.4	60.7
Heavy Trucks:	-	1.5	60.4		51.4		52.6	61.0	61.1
Vehicle Noise:		9.2	67.8		64.7		59.9	68.5	69.0
Centerline Distance	e to Noise Co	ontour (in feet	)	70.0		0.5	10.4	00 104	55 104
			!	70 dl			dBA	60 dBA	55 dBA
		_	Ldn:	43			92	199	428
		C	NEL:	46	'	٤	99	213	460

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGHV	VAY N	DISE PI	REDICTION	ON M	ODEL			
Road Nar	rio: EACP23 ne: Avenue 54 ent: w/o Monroe	e St.						: The W : 12642	ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data				5	ite Con	ditions (	Hard				
Average Daily		7,800 vehicles						Autos:			
	Percentage:	9.30%				edium Tru					
	lour Volume:	725 vehicles			He	eavy Truc	ks (3-	- Axles):	15		
	ehicle Speed:	50 mph		ν	ehicle i	Mix					
Near/Far La	ne Distance:	51 feet		F	Veh	icleType		Day	Evening	Night	Daily
Site Data						Α	utos:	77.5%	12.9%	9.6%	97.42%
Ra	rrier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	54.0 feet			laina C	ource Ele	watio	no (in f	2041		
Centerline Dist.	to Observer:	54.0 feet			oise so	Autos		0.000	ei)		
Barrier Distance	to Observer:	0.0 feet			A 415-	Autos m Trucks		2.297			
Observer Height	(Above Pad):	5.0 feet						2.297 B.006	Grade Ad	livotmont	. 0 0
F	ad Elevation:	0.0 feet			Hea	vy Trucks		8.006	Grade Ad	justrnent	. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Dista	nce (in i	feet)		
	Road Grade:	0.0%				Autos	: 4	7.862			
	Left View:	-90.0 degree	s		Mediu	m Trucks	: 4	7.677			
	Right View:	90.0 degree	s		Hear	vy Trucks	: 4	7.695			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista			Road	Fre		Barrier Att		m Atten
Autos:				0.18		-1.20		-4.67		000	0.000
Medium Trucks.				0.21		-1.20		-4.87		000	0.000
Heavy Trucks:	85.38	-25.00		0.20		-1.20		-5.39	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and I	arrier	attenu	ation)						
VehicleType	Leq Peak Hou	ır Leq Day	1	Leq Ev	ening	Leq N	light		Ldn	C	NEL
Autos:	65	5.4	33.8		62.0		56	6.0	64.	6	65.2
Medium Trucks.	59	9.0	57.8		51.4		49	9.9	58.	-	58.6
Heavy Trucks:	59	).4	58.3		49.2		50	).5	58.	8	59.0
Vehicle Noise:	67	7.1	65.6		62.6		57	.8	66.	4	66.8
Centerline Distan	ce to Noise Co	ontour (in feet)									
				70 d	BA	65 d	IBA	6	60 dBA	55	dBA
			Ldn:	31		67			143	-	09
		CI	IEL:	33		72	2		154	3	32

	FH	WA-RD-77-108	HIGH	IWAY I	NOISE P	REDICTI	ON MO	DEL			
Road Nam	io: EACP23 ne: Airport Bl. nt: w/o Monro	e St.				.,	Name: umber:		ave-Coral	Mounta	ain
SITE	SPECIFIC IN	IPUT DATA				N	OISE N	ИODE	L INPUT	S	
Highway Data					Site Cor	ditions (	Hard =	10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	3,600 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	icks (2 i	Axles):	15		
Peak H	lour Volume:	335 vehicles	3		He	eavy Truc	ks (3+ )	Axles):	15		
Ve	hicle Speed:	50 mph		1	Vehicle	Miv					
Near/Far La	ne Distance:	51 feet				icleTvpe		Dav	Evening	Niaht	Dailv
Site Data						- /	lutos:	77.5%		9.6	% 97.42%
Ra	rrier Height:	0.0 feet			M	ledium Tr	ucks:	84.8%	4.9%	10.3	% 1.84%
Barrier Type (0-W		0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8	% 0.74%
Centerline Di		54.0 feet		ł	Noise S	ourco El	ovation	c (in fe	not)		
Centerline Dist.	to Observer:	54.0 feet		-	NOISE 3	Autos		000	ei)		
Barrier Distance	to Observer:	0.0 feet				m Trucks		000 297			
Observer Height (	Above Pad):	5.0 feet						297 006	Grade Ad	iuctmo	nt: 0 0
Pa	ad Elevation:	0.0 feet			неа	vy Trucks	s. 8.	000	Grade Au,	usune	n. 0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalent	Distan	ce (in i	eet)		
	Road Grade:	0.0%				Autos	s: 47.	862			
	Left View:	-90.0 degree	es		Mediu	m Trucks	s: 47.	677			
	Right View:	90.0 degree	es		Hea	vy Trucks	s: 47.	695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresr	nel	Barrier Att	en B	erm Atten
Autos:	70.20	-7.16		0.1	18	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-24.40		0.2	21	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-28.35		0.2	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er attei	nuation)						
VehicleType	Leq Peak Ho			Leq E	vening	Leq			Ldn	1	CNEL
Autos:	62	2.0	60.4		58.7		52.6	3	61.2	2	61.8
Medium Trucks:			54.4		48.1		46.5		55.0		55.2
Heavy Trucks:			54.9		45.9		47.1		55.5		55.6
Vehicle Noise:	63	3.7	62.3		59.2		54.5	5	63.0	)	63.5
Centerline Distance	e to Noise C	ontour (in feet,	)								
					dBA	65 (		6	i0 dBA	5	i5 dBA
			Ldn:		18	4	-		86		185
		Ci	NEL:	- :	20	4	3		92		198

FHV	VA-RD-77-108	HIGHWA	AY NOISE F	REDICT	ON MC	DEL			
o: EACP23 e: Avenue 58 nt: w/o Monroe	St.						ave-Coral	Mountair	ı
SPECIFIC IN	PUT DATA			N	IOISE	MODE	L INPUT	S	
			Site Co	nditions	(Hard =	: 10, So	ft = 15)		
Traffic (Adt):	5,800 vehicles	;				Autos:	15		
Percentage:	9.30%		M	edium Tr	ucks (2	Axles):	15		
our Volume:	539 vehicles		Н	eavy Tru	cks (3+	Axles):	15		
hicle Speed:	45 mph		Vehicle	Miv					
ne Distance:	45 feet					Day	Evening	Night	Daily
					Autos:	77.5%	12.9%	9.6%	97.429
rier Heiaht:	0.0 feet		/	∕ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
at. to Barrier:	51.0 feet								
to Observer:	51.0 feet		Noise S				et)		
to Observer:	0.0 feet								
Above Pad):						0			
ad Elevation:	0.0 feet		Hea	ivy iruck	s: 8	.006	Grade Ad,	ustment	0.0
ad Elevation:	0.0 feet		Lane E	quivalent	Distan	ce (in f	eet)		
Road Grade:	0.0%			Auto	s: 46	.041			
Left View:	-90.0 degree	es.	Medi	um Truck	s: 45	.848			
Right View:	90.0 degree	:S	Hea	vy Truck	s: 45	.867			
l Calculation:	S								
REMEL	Traffic Flow	Distan	ce Finit		Fresi		Barrier Att	en Ber	m Atten
									0.00
79.45	-21.87		0.46	-1.20					0.00
84.25	-25.83		0.46	-1.20		-5.42	0.0	000	0.00
Levels (with	out Topo and I	barrier a	ttenuation)						
							Ldn		VEL
						-			62.
		55.6	49.	-	47.		56.2	-	56.
	.7	56.6	47.		48.		57.1		57.
57	0	C2 E	00						
64		63.5	60.	3	55.	/	64.2	2	64.
64	.9 Intour (in feet)								
64	ntour (in feet)		70 dBA	65	dBA		0 dBA	55	64. dBA 09
	o: EACP23 e: Avenue 58 eit wio Monroe SPECIFIC IN Traffic (Adt): Percentage rich (Adt): Percentage rich (Barrier, 10) eit (Barrier, 10) ei	o: EACP23 e: Avenue 58 et: wito Monroe St.  SPECIFIC INPUT DATA  Traffic (Adt): 5,800 vehicles Percentage: 9.30% 539 vehicles hicle Speed: 45 mph ne Distance: 45 feet  rier Height: 0.0 feet all, 1-Berm): 0.0 t. to Barrier: 51.0 feet to Observer: 0.0 feet to Observer: 0.0 feet do Elevation: 0.0 feet dd Elevation: 0.0 feet dd Elevation: 90.0 degree right View: 90.0 degree Right View: 90.0 degree Right View: 90.0 degree Right View: 90.0 degree dd Calculations  REMEL Traffic Flow 68.46 -4.63 79.45 -2.187 18.425 -25.83 Levels (without Topo and I Leq Peak Hour Leq Day 63.1	o: EACP23 e: Avenue 58 et: wio Monroe St.  SPECIFIC INPUT DATA  Traffic (Adt): 5,800 vehicles Percentage: 9.30% 000 vehicles 1539 vehicles hicle Speed: 45 mph 100 ne Distance: 45 feet  Traffic (Adt): 0.0 feet 101 all, 1-Berm): 0.0 102 to Deserver: 51.0 feet 103 observer: 0.0 feet 104 observer: 0.0 feet 105 observer: 0.0 feet 106 delevation: 0.0 feet 107 observer: 0.0 feet 108 delevation: 0.0 feet 109 degrees 109 degrees 109 degrees 109 degrees 101 calculations  REMEL Traffic Flow Distant 108 68.46 -4.63 109 45 -21.87 109 45 -21.87 109 45 -25.83 11 calculations 120 63.1 61.5	SPECIFIC INPUT DATA	Section   Sect	Distance   Section   Sec	e: Avenue 58  tt win Monroe St.  SPECIFIC INPUT DATA  Site Conditions (Hard = 10, 50 Autos: Autos: 70, 50 Medium Trucks (2 Axles): Medium Trucks (3 Axles): Medium Trucks (3 Axles): Medium Trucks (3 Axles): Medium Trucks (3 Axles): Medium Trucks (3 Axles): Medium Trucks (3 Axles): Medium Trucks (3 Axles): Medium Trucks (3 Axles): Medium Trucks (3 Axles): Medium Trucks (3 Axles): Medium Trucks (3 Axles): Medium Trucks: 84, 84, 81, 81, 81, 81, 81, 81, 81, 81, 81, 81	Project Name: The Wave-Coral Job Number: 12642   Job Number: 126	Project Name: The Wave-Coral Mountain   Project Name: The Wave-Coral Mountain   Job Number: 12642   Job

	FHV	VA-RD-77-108	HIGHWAY	NOISE PE	REDICT	ION MODEL		
	: EACP23 : Avenue 58 : w/o Madiso	n St.				t Name: The V Number: 12642		untain
SITE S	PECIFIC IN	IPUT DATA			ı	NOISE MODI	EL INPUTS	
Highway Data				Site Con	ditions	(Hard = 10, S	oft = 15)	
Average Daily T	raffic (Adt):	5,500 vehicles	3			Autos	: 15	
Peak Hour P	Percentage:	9.30%		Me	dium Ti	rucks (2 Axles)	: 15	
Peak Ho	ur Volume:	512 vehicles	3	He	avy Tru	icks (3+ Axles)	: 15	
Veh	icle Speed:	45 mph		Vehicle I	Miv			
Near/Far Land	e Distance:	45 feet			icleType	e Dav	Evening N	ight Daily
Site Data				1011		Autos: 77.59		9.6% 97.42%
Parr	ier Height:	0.0 feet		М	edium 7	rucks: 84.89	6 4.9% 1	0.3% 1.84%
Barrier Type (0-Wa		0.0		I 1	Heavy 7	rucks: 86.59	6 2.7% 1	0.8% 0.74%
Centerline Dist		51.0 feet						
Centerline Dist. to	Observer:	51.0 feet		Noise Sc		levations (in t	eet)	
Barrier Distance to	Observer:	0.0 feet			Auto			
Observer Height (A	bove Pad):	5.0 feet			m Truck		Grade Adjus	tmont: 0.0
Pac	d Elevation:	0.0 feet		Heav	ry Truck	ks: 8.006	Grade Adjus	inent. 0.0
Road	d Elevation:	0.0 feet		Lane Equ	uivalen	t Distance (in	feet)	
R	oad Grade:	0.0%			Auto	os: 46.041		
	Left View:	-90.0 degree	es	Mediu	m Truck	ks: 45.848		
	Right View:	90.0 degree	es	Heav	y Truck	ks: 45.867		
FHWA Noise Model	Calculation	-		1				
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-4.86	-	).43	-1.20	-4.65		
Medium Trucks:	79.45	-22.10	-	).46	-1.20	-4.87		
Heavy Trucks:	84.25	-26.06		).46	-1.20	-5.42	0.000	0.000
Unmitigated Noise								
	eq Peak Hou			Evening	Leq	Night	Ldn	CNEL
Autos:	62		61.2	59.5		53.4	62.0	62.7
Medium Trucks:	56		55.4	49.1		47.5	56.0	56.2
Heavy Trucks:	57		56.3	47.3		48.6	56.9	57.0
Vehicle Noise:	64	.,	63.2	60.1		55.4	64.0	64.4
Centerline Distance	to Noise Co	ontour (in feet)		0 404	05	-/D4	00 -ID4	FF -IDA
			1	0 dBA		1	60 dBA 94	55 dBA
			Ldn: VFI:	20		43 47	94 101	202 217
		Ci	VEL.	22	4	41	101	21/

Wednesday, March 25, 2020

FH	WA-RD-77-108 HI	GHWAY	NOISE PI	REDICTION	ON MODEL		
Scenario: EACP23 Road Name: Avenue 58 Road Segment: w/o Jackso	n St.				Vame: The Imber: 1264	Wave-Coral M 2	ountain
SITE SPECIFIC IN	IPUT DATA			N	DISE MOD	EL INPUTS	
Highway Data			Site Con	ditions (	Hard = 10,	Soft = 15)	
Average Daily Traffic (Adt):	3,800 vehicles				Auto	s: 15	
Peak Hour Percentage:	9.30%		Me	dium Tru	cks (2 Axles	s): 15	
Peak Hour Volume:	353 vehicles		He	avy Truc	ks (3+ Axle	s): 15	
Vehicle Speed:	50 mph		Vehicle I	Miv			
Near/Far Lane Distance:	36 feet			icleType	Dav	Evening	Night Daily
Site Data					utos: 77.5	-	9.6% 97.42%
Barrier Height:	0.0 feet		М	edium Tr	ucks: 84.8	1% 4.9%	10.3% 1.84%
Barrier Type (0-Wall, 1-Berm):	0.0			Heavy Tr	ucks: 86.5	5% 2.7%	10.8% 0.74%
Centerline Dist. to Barrier:	59.0 feet		Noise Sc	ource Fle	vations (in	feet)	
Centerline Dist. to Observer:	59.0 feet		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Autos	-	7001)	
Barrier Distance to Observer:	0.0 feet		Madiu	m Trucks			
Observer Height (Above Pad):	5.0 feet			vy Trucks		Grade Adju	stment: 0.0
Pad Elevation:	0.0 feet						
Road Elevation:	0.0 feet		Lane Eq		Distance (i	n feet)	
Road Grade:	0.0%			Autos	00.100		
Left View:	-90.0 degrees			m Trucks	. 00.202		
Right View:	90.0 degrees		Heav	y Trucks	56.268		
FHWA Noise Model Calculation	s						
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atter	Berm Atten
Autos: 70.20	-6.93	-0.	39	-1.20	-4.6	9 0.00	0.000
Medium Trucks: 81.00	-24.16	-0.	37	-1.20	-4.8	8 0.00	0.000
Heavy Trucks: 85.38	-28.12	-0.8	37	-1.20	-5.3	5 0.00	0.000
Unmitigated Noise Levels (with	out Topo and ba	rrier atte	nuation)				
VehicleType Leq Peak Ho			vening	Leq N		Ldn	CNEL
	.2 59		57.8		51.8	60.4	61.0
	.8 53		47.2		45.7	54.1	54.4
	5.2 54		45.0		46.3	54.6	54.8
Vehicle Noise: 62	2.9 61	.5	58.4		53.6	62.2	62.6
Centerline Distance to Noise C	ontour (in feet)						
		1	dBA	65 d		60 dBA	55 dBA
	Ld		18	38		82	177
	CNE	L:	19	41		88	191

	FH\	WA-RD-77-108	HIGH	IWAY I	NOISE P	REDICT	ION MC	DEL			
Road Nam	io: EACP23 ne: Avenue 58 nt: e/o Jackson	n St.					t Name: lumber:		ave-Coral	Mountai	n
SITE :	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard =	: 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	2,700 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles).	15		
Peak H	lour Volume:	251 vehicle	s		He	eavy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	50 mph		H	Vehicle	Miv					
Near/Far La	ne Distance:	36 feet		ŀ		icleType	,	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
Par	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		59.0 feet			Noise S	ouroo E	lovestion	o (in f	004)		
Centerline Dist.	to Observer:	59.0 feet			Noise S			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (	Above Pad):	5.0 feet				m Truck	-	.006	Grade Ad	iustmon	t: 0.0
Pa	ad Elevation:	0.0 feet			Hea	vy Truck	S: 8	.000	Grade Ad	justin <del>e</del> n	1. 0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distan	ce (in	feet)		
ı	Road Grade:	0.0%				Auto	s: 56	.409			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 56	.252			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 56	.268			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-8.41		-0.8	19	-1.20		-4.69	0.0	000	0.000
Medium Trucks:	81.00	-25.65		-0.8		-1.20		-4.88		000	0.000
Heavy Trucks:	85.38	-29.60		-0.8	37	-1.20		-5.35	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn	1 .	NEL
Autos:	59		58.1		56.4		50.		58.		59.5
Medium Trucks:	53		52.1		45.7		44.	_	52.	-	52.9
Heavy Trucks:	53		52.6		43.6		44.	_	53.		53.3
Vehicle Noise:	61	.4	60.0		56.9		52.	1	60.	/	61.2
Centerline Distance	e to Noise Co	ontour (in feet	)								
					dBA		dBA	(	60 dBA	1	dBA
		_	Ldn:		14		30		66		141
		C	NEL:	1	15	3	33		70		152

	FHV	VA-RD-77-108	HIGH	WAY N	IOISE P	REDICT	ION MO	DDEL			
Road Nam	io: EACP23 ne: Avenue 60 nt: w/o Monroe	: St.						The W 12642	ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data					Site Cor	ditions	(Hard :	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	5,900 vehicle	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	549 vehicle	S		He	eavy True	cks (3+	Axles):	15		
Ve	hicle Speed:	45 mph			Vehicle	Mix					
Near/Far La	ne Distance:	45 feet		H		icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Rai	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W	-	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis	st. to Barrier:	51.0 feet		-	Noise S	ourco El	ovatio	as (in fo	not)		
Centerline Dist.	to Observer:	51.0 feet		Ľ.	WOISE SI	Auto.		0.000	ei)		
Barrier Distance	Barrier Distance to Observer: 0.0 feet							297			
Observer Height (			m Truck vy Truck		.006	Grade Ad	iustmant	. 0 0			
Pa	ad Elevation:	0.0 feet			i ica	vy Truck	s. c	.000	Orade Ad	Justinone	. 0.0
Roa	ad Elevation:	0.0 feet		1	Lane Eq	uivalent	Distar	nce (in t	eet)		
ı	Road Grade:	0.0%				Auto.	s: 46	6.041			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 45	.848			
	Right View:	90.0 degre	es		Hea	vy Truck	s: 45	.867			
FHWA Noise Mode	el Calculation:	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	68.46	-4.56		0.4	3	-1.20		-4.65	0.0	000	0.00
Medium Trucks:	79.45	-21.80		0.4	6	-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	84.25	-25.75		0.4	6	-1.20		-5.42	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barri	er atten	uation)						
	Leq Peak Hou			Leq E			Night		Ldn		VEL
Autos:	63		61.6		59.8		53		62.4		63.
Medium Trucks:	56		55.7		49.4		47		56.3		56.
Heavy Trucks:	57		56.7		47.6		48		57.2		57.
Vehicle Noise:	65		63.6		60.4		55	./	64.3	3	64.
Centerline Distanc	e to Noise Co	ontour (in feet	)	70	-ID 4	05	-10.4	1 .	0 -104		-10.4
			L do:	70 0	dBA		dBA 16	1 6	0 dBA 98	1	dBA 12
		_	Ldn: NFI:	2			19 19		98 105	_	27
		C	IVEL:	2	.5	4	19		105	2	21

	FHV	VA-RD-77-108	HIGHWAY	NOISE P	REDICTI	ON MODEL			
	rio: EACP23 ne: Avenue 60					Name: The W umber: 12642		lountair	n
Road Segme	nt: w/o Madiso	n St.							
SITE	SPECIFIC IN	PUT DATA			N	OISE MODE	L INPUTS		
Highway Data				Site Cor	ditions	Hard = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	1,000 vehicles	s			Autos:	15		
Peak Hour	Percentage:	9.30%		Me	edium Tru	icks (2 Axles):	15		
Peak F	lour Volume:	93 vehicles	S	He	avy Truc	ks (3+ Axles):	15		
Ve	hicle Speed:	40 mph		Vehicle	Miss				
Near/Far La	ne Distance:	23 feet			icleType	Day	Evening	Night	Daily
Site Data						Autos: 77.5%		9.6%	,
Pa	rrier Heiaht:	0.0 feet		M	edium Tı	ucks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			Heavy Ti	ucks: 86.5%	2.7%	10.8%	0.74%
Centerline Di	. ,	40.0 feet		M-1 0	F1		41		
Centerline Dist.	to Observer:	40.0 feet		Noise S		evations (in fe	eet)		
Barrier Distance	to Observer:	0.0 feet			Autos				
Observer Height	(Above Pad):	5.0 feet			m Truck		Grade Adju	otmont	
P	ad Elevation:	0.0 feet		Hea	vy Trucks	s: 8.006	Grade Adju	sunen	. 0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent	Distance (in	feet)		
	Road Grade:	0.0%			Autos	s: 38.636			
	Left View:	-90.0 degree	es	Mediu	m Trucks	s: 38.406			
	Right View:	90.0 degree	es	Hea	vy Trucks	s: 38.429			
FHWA Noise Mode	el Calculation:	S							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	n Bei	m Atten
Autos:	66.51	-11.75	1.	58	-1.20	-4.59	0.00	00	0.000
Medium Trucks:	77.72	-28.99	1.	62	-1.20	-4.87	0.00	00	0.000
Heavy Trucks:	82.99	-32.95	1.	61	-1.20	-5.56	0.00	00	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Hou	r Leq Day	/ Leq	Evening	Leq	Night	Ldn	C	NEL
Autos:	55	.1	53.5	51.8		45.7	54.4		55.0
Medium Trucks:	49	.1	47.9	41.6		40.0	48.5		48.7
Heavy Trucks:	50	.5	49.4	40.3		41.6	49.9		50.0
Vehicle Noise:	57	.2	55.7	52.5		47.9	56.4		56.9
Centerline Distant	ce to Noise Co	ntour (in feet							
				ADA	CE.		ADA OS		AD A

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 I	HIGHWAY	NOISE P	REDICTIO	N MODEL					
Scenario: Road Name: Road Segment:	Avenue 60	St.				lame: The V mber: 12642	Vave-Coral Mo 2	untain			
SITE SP	ECIFIC IN	PUT DATA			NC	ISE MOD	EL INPUTS				
Highway Data				Site Cor	nditions (F	lard = 10, S	oft = 15)				
Average Daily Tra	affic (Adt):	5,100 vehicles		Autos: 15							
Peak Hour Pe	rcentage:	9.30%		Me	edium Truc	ks (2 Axles)	): 15				
Peak Houl	r Volume:	474 vehicles		He	eavy Truck	s (3+ Axles)	): 15				
Vehic	le Speed:	50 mph		Vehicle	Miv						
Near/Far Lane	Distance:	48 feet			icleType	Day	Evening N	light Daily			
Site Data				VOI		itos: 77.59	-	9.6% 97.42%			
	r Heiaht:	0.0 feet		M	ledium Tru			0.3% 1.84%			
Barrier Type (0-Wall,		0.0 reet			Heavy Tru			0.8% 0.74%			
Centerline Dist. t		64.0 feet									
Centerline Dist. to 0		64.0 feet		Noise S		vations (in	feet)				
Barrier Distance to 0		0.0 feet			Autos:						
Observer Height (Ab		5.0 feet			m Trucks:						
	Flevation:	0.0 feet		Hea	vy Trucks:	8.006	Grade Adjus	tment: 0.0			
Road I	Elevation:	0.0 feet		Lane Eq	uivalent E	Distance (in	feet)				
	ad Grade:	0.0%			Autos:	59.540					
	Left View:	-90.0 degrees		Mediu	m Trucks:	59.391					
Ri	ight View:	90.0 degrees		Hea	vy Trucks:	59.406					
FHWA Noise Model C	Calculations	5									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	70.20	-5.65	-1.	24	-1.20	-4.70	0.000	0.000			
Medium Trucks:	81.00	-22.89	-1.	22	-1.20	-4.88	0.000	0.000			
Heavy Trucks:	85.38	-26.84	-1.	23	-1.20	-5.31	0.000	0.000			
Unmitigated Noise Le	evels (with	out Topo and b	arrier atte	nuation)							
VehicleType Le	q Peak Hou	r Leq Day	Leq	Evening	Leq N	ight	Ldn	CNEL			
Autos:	62	.1 6	0.5	58.8		52.7	61.3	61.9			
Medium Trucks:	55	.7 5	4.5	48.1		46.6	55.1	55.3			
Heavy Trucks:	56	.1 5	5.0	46.0	1	47.2	55.6	55.7			
Vehicle Noise:	63	.8 6	2.4	59.3		54.5	63.1	63.6			
Centerline Distance t	o Noise Co	ntour (in feet)									
				dBA	65 dl	BA	60 dBA	55 dBA			
		_	dn:	22	48		103	222			
		CN	EL:	24	51		111	238			

	FHW	A-RD-77-108	HIGHV	NAY N	IOISE PF	REDICT	ION MOI	DEL			
Road Nam	rio: EAC26 ne: Jefferson St. nt: n/o Avenue 5						Name: 1		ave-Coral I	Mountai	n
SITE	SPECIFIC INF	PUT DATA				N	IOISE N	/IODE	L INPUTS	5	
Highway Data					Site Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt): 36	3,500 vehicles	3				,	Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2 A	(xles	15		
Peak H	lour Volume:	3,395 vehicles	3		He	avy Tru	cks (3+ A	(xles	15		
Ve	hicle Speed:	55 mph			Vehicle I	Niv					
Near/Far La	ne Distance:	71 feet		-		cleType		Dav	Evening	Night	Daily
Site Data					*011			77.5%		9.6%	-
Pa	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0 1001			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		64.0 feet		- 1	M-! 0-			. /! 6	41		
Centerline Dist.	to Observer:	64.0 feet		Ľ	Noise Sc			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000 297			
Observer Height	(Above Pad):	5.0 feet				n Truck	o		Crada Adi	o.tmon	4.00
P	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.0	006	Grade Adj	usunen	i. 0.0
Ro	ad Elevation:	0.0 feet		1	Lane Equ	ıivaleni	Distanc	e (in	feet)		
	Road Grade:	0.0%				Auto	s: 53.4	486			
	Left View:	-90.0 degree	es		Mediui	n Truck	s: 53.	320			
	Right View:	90.0 degree	es		Heav	y Truck	s: 53.	337			
FHWA Noise Mode	el Calculations										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresn	el	Barrier Atte	en Be	rm Atten
Autos:	7 1 0	2.49		-0.5	4	-1.20		-4.70	0.0	00	0.000
Medium Trucks:	82.40	-14.75		-0.5	2	-1.20		-4.88	0.0	00	0.000
Heavy Trucks:	86.40	-18.71		-0.5	2	-1.20		-5.31	0.0	00	0.000
Unmitigated Noise	e Levels (witho	ut Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hour	Leq Day	'   '	Leq E	vening	Leq	Night		Ldn	1	NEL
Autos:	72.5	5	70.9		69.2		63.1		71.7		72.3
Medium Trucks:	65.9	9	64.7		58.4		56.8		65.3		65.5
Heavy Trucks:	66.0	)	64.9		55.8		57.1		65.4		65.6
Vehicle Noise:	74.	1	72.7		69.7		64.8	3	73.4		73.9
Centerline Distant	ce to Noise Cor	ntour (in feet)	)								
					dBA		dBA		60 dBA		5 dBA
			Ldn:	10		_	32		499		,076
		CI	VEL:	11	16	2	49		537	1,	,158

Wednesday, March 25, 2020

Scenario: EAC26		ave-Coral	Mountair	
SITE SPECIFIC INPUT DATA NOISE				1
		L INPUT	S	
Highway Data Site Conditions (Hard	= 10, So	ft = 15)		
Average Daily Traffic (Adt): 21,700 vehicles	Autos:	15		
Peak Hour Percentage: 9.30% Medium Trucks (2	Axles):	15		
Peak Hour Volume: 2,018 vehicles Heavy Trucks (34	- Axles):	15		
Vehicle Speed: 55 mph				
Near/Far Lane Distance: 71 feet Vehicle Type	Day	Evening	Night	Daily
Site Data Autos:	77.5%	0	9.6%	
Barrier Height: 0.0 feet Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks:	86.5%	2.7%	10.8%	0.74%
Contagling Diet to Bossiess 84.0 feet	/ 6-	-41		
Contorlino Diet to Observer: 64.0 feet		et)		
Parrier Distance to Observer: 0.0 feet	0.000			
Observer Height (Above Pad): 5.0 feet	2.297	0		
Pad Elevation: 0,0 feet Heavy Trucks:	8.006	Grade Ad	ustment	0.0
Road Elevation: 0.0 feet Lane Equivalent Dista	nce (in f	eet)		
Road Grade: 0.0% Autos: 5.	3.486			
Left View: -90.0 degrees Medium Trucks: 5:	3.320			
Right View: 90.0 degrees Heavy Trucks: 5.	3.337			
FHWA Noise Model Calculations				
VehicleType REMEL Traffic Flow Distance Finite Road Free		Barrier Att	en Ber	m Atten
Autos: 71.78 0.23 -0.54 -1.20	-4.70	0.0	000	0.000
Medium Trucks: 82.40 -17.01 -0.52 -1.20	-4.88		000	0.000
Heavy Trucks: 86.40 -20.97 -0.52 -1.20	-5.31	0.0	000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)				
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night		Ldn		VEL
Autos: 70.3 68.7 66.9 60		69.5		70.1
		63.0		63.3
Medium Trucks: 63.7 62.5 56.1 54		63.2		63.3
Heavy Trucks: 63.7 62.6 53.6 54				71.6
Heavy Trucks:         63.7         62.6         53.6         54           Vehicle Noise:         71.8         70.4         67.4         62		71.1		7 1.
Heavy Trucks:         63.7         62.6         53.6         54           Vehicle Noise:         71.8         70.4         67.4         62           Centerline Distance to Noise Contour (in feet)	2.6			
Heavy Trucks:         63.7         62.6         53.8         54           Vehicle Noise:         71.8         70.4         67.4         62           Centerline Distance to Noise Contour (in feet)         70 dBA         65 dBA	2.6	0 dBA	55	dBA
Heavy Trucks:         63.7         62.6         53.6         54           Vehicle Noise:         71.8         70.4         67.4         62           Centerline Distance to Noise Contour (in feet)	2.6		55	

	FHV	WA-RD-77-108	HIGH	WAY N	DISE PREDIC	TION MODEL						
Scenario: E Road Name: J Road Segment: n	lefferson S					ct Name: The Number: 1264		ountain				
SITE SPE	CIFIC IN	IPUT DATA				NOISE MOD	EL INPUTS					
Highway Data				S	ite Condition	s (Hard = 10, 3	Soft = 15)					
Average Daily Traf Peak Hour Per Peak Hour	centage: Volume:	9.30% 2,399 vehicle				Auto Frucks (2 Axles rucks (3+ Axles	s): 15					
	e Speed:	55 mph		ν	ehicle Mix							
Near/Far Lane D	Jistance:	71 feet			VehicleTy <sub>i</sub>	oe Day	Evening I	Night Daily				
Site Data Barrier	r Height:	0.0 feet			Medium		% 4.9%	9.6% 97.42% 10.3% 1.84%				
Barrier Type (0-Wall,	1-Berm):	0.0			Heavy	Trucks: 86.5	% 2.7%	10.8% 0.74%				
Centerline Dist. to	Barrier:	64.0 feet		۸	oise Source	Elevations (in	feet)					
Centerline Dist. to Observer: 64.0 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				L	Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.006 Grade Adjustment: 0.0  Lane Equivalent Distance (in feet) Autos: 53.486 Medium Trucks: 53.320							
Rig FHWA Noise Model Ca	ght View:	90.0 degre	es		Heavy True	ks: 53.337						
	REMEL	Traffic Flow	Dist	ance	Finite Road	Fresnel	Barrier Atter	Berm Atten				
Autos:	71.78	0.98		-0.54	-1.2							
Medium Trucks:	82.40	-16.26		-0.52								
Heavy Trucks:	86.40	-20.22		-0.52	-1.2	-5.3	1 0.00	0.000				
Unmitigated Noise Le	vels (with	out Topo and	barrie	r attenu	ation)							
VehicleType Leq	η Peak Hoι	ır Leq Daj		Leq Ev	ening Le	q Night	Ldn	CNEL				
Autos:	71	.0	69.4		67.7	61.6	70.2	70.8				
Medium Trucks:	64		63.2		56.9	55.3	63.8	64.0				
Heavy Trucks:	64		63.4		54.3	55.6	63.9	64.0				
Vehicle Noise:	72		71.2		68.2	63.3	71.9	72.4				
Centerline Distance to	Noise Co	ontour (in feet	)									
			Ldn:	70 di 85	ų.	5 dBA 184	60 dBA 396	55 dBA 854				
		C	NEL:	92		198	426	919				

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	FH\	WA-RD-77	-108 HIGI	HWAY	NOISE P	REDICTION	ON M	ODEL			
Road Nan	rio: EAC26 ne: Madison St nt: n/o Avenue							: The W : 12642	ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DA	TA						L INPUT	s	
Highway Data					Site Cor	nditions (	Hard	= 10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	10,800 ve	hicles					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	icks (2	Axles):	15		
Peak F	lour Volume:	1,004 ve	hicles		He	eavy Truc	ks (3+	- Axles):	15		
Ve	hicle Speed:	50 mp	bh		Vehicle	Miv					
Near/Far La	ne Distance:	51 fee	et			icleType		Dav	Evening	Night	Daily
Site Data					Autos: 77.5% 12.9% 9.6%						
Do.	rrier Height:	0.0 fe	not.		M	ledium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0 16	et			Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	. ,	54.0 fe	ot								• • • • • • • • • • • • • • • • • • • •
Centerline Dist.		54.0 fe			Noise S	ource Ele			eet)		
Barrier Distance		0.0 fe				Autos		0.000			
Observer Height			m Trucks		2.297						
		Hea	vy Trucks	: 1	8.006	Grade Ad	ljustment.	0.0			
	ad Elevation: ad Elevation:	0.0 fe			Lane Eq	uivalent	Dista	nce (in i	eet)		
	Road Grade:	0.0%				Autos		7.862	,		
	Left View:	-90.0 de	earees		Mediu	m Trucks		7.677			
	Right View:	90.0 de	9		Hea	vy Trucks	: 4	7.695			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Fi	low Di	stance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten
Autos:	70.20	-	2.39	0.	18	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-1	9.63	0.:	21	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-2	3.58	0.:	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo	and barri	er atte	nuation)						
VehicleType	Leq Peak Hou	ur Lec	Day Day	Leq E	vening	Leq I	Vight		Ldn	CI	VEL
Autos:	66	6.8	65.2		63.4		57	'.4	66.	0	66.6
Medium Trucks:	60	).4	59.2		52.8		51	.3	59.	7	60.0
Heavy Trucks:	60	).8	59.7		50.7		51	.9	60.	3	60.4
Vehicle Noise:	68	3.5	67.1		64.0		59	9.2	67.	8	68.2
Centerline Distan	ce to Noise C	ontour (in	feet)								
				70	dBA	65 c	IBA	6	0 dBA	55	dBA
			Ldn:		38	8	3		178	3	84
			CNEL:		41	89	9		191	4	13

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FH	WA-RD-77-108	HIGHW	AY NOISE P	REDICTIO	N MOE	EL			
Scenario: EAC26 Road Name: Madison S Road Segment: n/o Avenue					lame: T mber: 1		ave-Coral	Mountair	1
SITE SPECIFIC II	IPUT DATA						INPUT	s	
Highway Data			Site Co	nditions (I	lard = 1	10, So	ft = 15)		
Average Daily Traffic (Adt):	13,300 vehicle	S				utos:	15		
Peak Hour Percentage:	9.30%			edium Tru	,	,	15		
Peak Hour Volume:	1,237 vehicle	S	Н	eavy Truci	ıs (3+ A	xles):	15		
Vehicle Speed:	50 mph		Vehicle	Mix					
Near/Far Lane Distance:	51 feet			nicleType		Dav	Evening	Night	Daily
Site Data					ıtos:	77.5%	12.9%	9.6%	,
Barrier Height:	0.0 feet		٨	fedium Tru	icks: 1	34.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0			Heavy Tru	icks: 8	36.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	54.0 feet		Noise S	ource Ele	vations	(in fe	et)		
Centerline Dist. to Observer:	54.0 feet			Autos:	0.0	00			
Barrier Distance to Observer:	0.0 feet		Mediu	ım Trucks.	2.2	97			
Observer Height (Above Pad):	5.0 feet		Hea	vy Trucks.	8.0	06	Grade Ad	iustment	: 0.0
Pad Elevation:	0.0 feet						-1		
Road Elevation:	0.0 feet		Lane Ed	uivalent l			eet)		
Road Grade:	0.0%			Autos.					
Left View:	-90.0 degre			ım Trucks.					
Right View:	90.0 degre	es	Hea	vy Trucks.	47.6	95			
FHWA Noise Model Calculation									
VehicleType REMEL	Traffic Flow	Distar		Road	Fresne	_	Barrier Att		m Atten
Autos: 70.20			0.18	-1.20		4.67		000	0.000
Medium Trucks: 81.00			0.21	-1.20		4.87		000	0.000
Heavy Trucks: 85.38	-22.68		0.20	-1.20		5.39	0.0	000	0.000
Unmitigated Noise Levels (with			,						
VehicleType Leq Peak Ho			eq Evening	Leq N			Ldn	1	NEL
	7.7	66.1	64.3		58.3		66.9		67.5
	1.3	60.1	53.7		52.2		60.6		60.9
	1.7	68.0	51.6 64.9		52.8 60.1		61.2		61.3
Centerline Distance to Noise C	***		04.8	,	UU. I		00.1	1	03.2
	untour (in reet	,	70 104	05.1		_	0 -/D4		dBA
Centernine Distance to Noise O			70 dBA	65 d	BA	0	0 dBA	55	UDM
Ochiennie Distance to Noise o		Ldn:	70 dBA 44	95 95			205		41

	FH\	WA-RD-77-108	HIGH	IWAY N	IOISE PI	REDICTI	ом мо	DEL			
	o: EAC26 e: Madison St nt: n/o Airport						Name: umber:		ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data					Site Con	ditions	Hard =	10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	18,200 vehicle	S					Autos:	15		
Peak Hour	Percentage:	9.30%				edium Tru	,	,	15		
Peak H	our Volume:	1,693 vehicle	S		He	avy Truc	ks (3+ .	Axles):	15		
Vel	hicle Speed:	50 mph		- 1	/ehicle	Mix					
Near/Far Lar	ne Distance:	51 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data							lutos:	77.5%	12.9%	9.6%	97.429
Rar	rier Height:	0.0 feet			М	edium Ti	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	-	0.0				Heavy Ti	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	st. to Barrier:	54.0 feet		7	Voise So	ource El	evation	s (in fe	et)		
Centerline Dist. t	to Observer:	54.0 feet				Auto	s: 0.	000	,		
Barrier Distance t	to Observer:	0.0 feet			Mediu	m Truck		297			
Observer Height (		5.0 feet			Hear	y Truck	s: 8.	006	Grade Ad	justment	0.0
	ad Elevation:	0.0 feet		L		•					
	ad Elevation:	0.0 feet		1	Lane Eq	uivalent			eet)		
F	Road Grade:	0.0%				Auto		.862			
	Left View:	-90.0 degre				m Truck		.677			
	Right View:	90.0 degre	es		Hear	y Truck:	s: 47.	.695			
FHWA Noise Mode	l Calculation										
VehicleType	REMEL	Traffic Flow		stance		Road	Fresi		Barrier Att		m Atten
Autos:	70.20	-0.12		0.1	-	-1.20		-4.67		000	0.00
Medium Trucks:	81.00	-17.36		0.2		-1.20		-4.87		000	0.000
Heavy Trucks:	85.38	-21.32		0.20	0	-1.20		-5.39	0.0	000	0.00
Unmitigated Noise										1	
	Leq Peak Hou			Leg E			Night		Ldn		VEL
Autos:	69		67.5		65.7		59.		68.		68.
Medium Trucks:	62		61.5		55.1		53.	-	62.	-	62.2
Heavy Trucks: Vehicle Noise:	63		62.0		52.9 66.3		54.: 61.		62. 70.		62. <sup>-</sup>
Centerline Distanc					50.0		01.		70.		70.
Contonino Distant	0.07.0/36 00	mour (m ree	,	70 c	iBA	65	dBA	6	i0 dBA	55	dBA
			Ldn:	5	4	1.	17		252	5	44

	FH\	WA-RD-77-108	HIGHW	AY NO	ISE PR	REDICTION	ON MO	DEL			
Scenario:	EAC26					Project i	Name:	The W	ave-Coral I	Mountai	n
Road Name:	Madison St					Job Nu	ımber:	12642			
Road Segment:	n/o Avenue	54									
	PECIFIC IN	IPUT DATA							L INPUTS	S	
Highway Data				S	te Cond	ditions (	Hard =	10, So	ft = 15)		
Average Daily Tr	affic (Adt):	10,400 vehicle	S					Autos:	15		
Peak Hour Pe	ercentage:	9.30%			Med	dium Tru	icks (2 /	Axles):	15		
Peak Hou	ır Volume:	967 vehicle	S		Hea	avy Truc	ks (3+ A	(xles	15		
Vehi	cle Speed:	50 mph		V	ehicle N	Nix					
Near/Far Lane	Distance:	51 feet				cleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	97.429
Rarri	er Heiaht:	0.0 feet			Ме	edium Tr	ucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-Wal	I, 1-Berm):	0.0			H	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.749
Centerline Dist.		54.0 feet		N	oise So	urce Ele	evation	s (in fe	et)		
Centerline Dist. to		54.0 feet				Autos	: 0.0	000			
Barrier Distance to		0.0 feet			Mediur	n Trucks	: 2.:	297			
Observer Height (Al	,	5.0 feet			Heav	y Trucks	: 8.	006	Grade Adj	iustmeni	t: 0.0
	Elevation:	0.0 feet		-							
	Elevation:	0.0 feet		Li	ne Equ	iivalent		_	eet)		
Ro	ad Grade:	0.0%				Autos		862			
	Left View:	-90.0 degree				n Trucks		677			
F	Right View:	90.0 degree	es		Heav	y Trucks	: 47.	695			
FHWA Noise Model											
VehicleType	REMEL	Traffic Flow	Dista		Finite I		Fresn		Barrier Atte		rm Atten
Autos:	70.20			0.18		-1.20		-4.67		000	0.00
Medium Trucks:	81.00			0.21		-1.20		-4.87		000	0.00
Heavy Trucks:	85.38			0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise L											
VehicleType L	eq Peak Hou 66		65.0	.eq Eve	63.3	Leq N	vignt 57.2	!	Ldn 65.8	1	NEL 66
Medium Trucks:	60		59.0		52.7		51.1		59.6		59
	60		59.0 59.5		50.5		51.7		59.6 60.1		59. 60.
Heavy Trucks: Vehicle Noise:	68		66.9		63.8		51.7		67.6		68.
					03.0		59.		67.0	,	
Centerline Distance	to Noise Co	ontour (in feet	,	70 dE	RA I	65 0	IRA	6	0 dBA	55	dBA
			l dn:	37	<i>"</i> ·	8		1	174		374
		C	NFI:	40		87	-		187		102
		0		40		0.					

Wednesday, March 25, 2020

	HWA	A-RD-77-108 I	HIGHWA	AY NO	DISE PI	REDICTION	OM MC	ODEL			
Scenario: EAC26 Road Name: Madisor Road Segment: n/o Ave		В						The W 12642	ave-Coral	Mountai	1
SITE SPECIFIC	INP	UT DATA				N	OISE	MODE	L INPUT	s	
Highway Data				S	ite Con	ditions (	Hard:	= 10, S	oft = 15)		
Average Daily Traffic (Add	): 14	,300 vehicles						Autos:	15		
Peak Hour Percentage	e: 9	9.30%			Me	dium Tru	cks (2	Axles).	15		
Peak Hour Volum	e: 1,	,330 vehicles			He	avy Truc	ks (3+	Axles).	15		
Vehicle Spee	d:	50 mph		V	ehicle l	Miv					
Near/Far Lane Distance	e:	51 feet		-		icleType		Dav	Evening	Night	Daily
Site Data							utos:	77.5%		9.6%	
Barrier Heigh	4.	0.0 feet			М	edium Tr	ucks:	84.8%	6 4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Bern		0.0			1	Heavy Tr	ucks:	86.5%	6 2.7%	10.8%	0.74%
Centerline Dist. to Barrie	r:	54.0 feet		N	nise Sr	ource Ele	vatio	ns (in f	eet)		
Centerline Dist. to Observe	r:	54.0 feet		-	0,00 00	Autos		0.000	001)		
Barrier Distance to Observe	r:	0.0 feet			Mediu	m Trucks		297			
Observer Height (Above Pac	):	5.0 feet				vy Trucks	-	3.006	Grade Ad	iustmeni	: 0.0
Pad Elevation		0.0 feet		_		•					
Road Elevation		0.0 feet		Li	ane Eq	uivalent			feet)		
Road Grad		0.0%				Autos		7.862			
Left Vie		-90.0 degrees	S			m Trucks		7.677			
Right Vie	V:	90.0 degrees	S		Heav	y Trucks	: 47	7.695			
FHWA Noise Model Calculat											
VehicleType REMEL		raffic Flow	Distan		Finite	Road	Fres		Barrier Atte		m Atten
	.20	-1.17		0.18		-1.20		-4.67		000	0.000
	.00	-18.41		0.21		-1.20		-4.87		000	0.000
	.38	-22.36		0.20		-1.20		-5.39	0.0	000	0.000
Unmitigated Noise Levels (v	_	•									
VehicleType Leq Peak		Leq Day		q Eve		Leq N		_	Ldn		NEL
Autos:	68.0	-	6.4		64.7		58		67.2		67.8
Medium Trucks:	61.6		0.4		54.0		52		61.0		61.2
Heavy Trucks:	62.0		0.9		51.9		53		61.5		61.6
Vehicle Noise:	69.7		8.3		65.2		60	.5	69.0	)	69.5
Centerline Distance to Noise	Cont	tour (in feet)		70 dE	24	65 d	ID A		60 dBA		dBA
		,	dn:	70 at	J/4	10		1 '	215	1	63
		_	.an: IFI :	50		10	-		231		197
		CN	EL.	50		10	1		231	2	181

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	B HIGH	WAY N	OISE PE	REDICTI	ON MO	DEL			
Road Nam	io: EAC26 ne: Madison St nt: n/o Avenue						Name: umber:		ave-Coral	Mountair	1
SITE S	SPECIFIC IN	IPUT DATA				N	OISE I	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	6,600 vehicle	es					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	icks (2	Axles):	15		
Peak H	lour Volume:	614 vehicle	es		He	avy Truc	cks (3+ .	Axles):	15		
Ve	hicle Speed:	45 mph			/ehicle l	Misc					
Near/Far La	ne Distance:	45 feet		-		icleType		Dav	Evenina	Niaht	Dailv
Site Data					¥ C//		Autos:	77.5%		9.6%	. ,
		0.0.54			М	edium Ti		84.8%		10.3%	
Barrier Type (0-W	rrier Height:	0.0 feet 0.0				Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		51.0 feet									•
Centerline Dist.		51.0 feet		٨	loise Sc	ource El	evation	s (in fe	eet)		
Barrier Distance		0.0 feet				Auto		000			
Observer Height (		5.0 feet				m Truck		297			
• ,	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.	006	Grade Ad	iustment	: 0.0
	ad Elevation:	0.0 feet		L	ane Ea	uivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto		.041	,		
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 45	.848			
	Right View:	90.0 degre			Heav	y Truck	s: 45	.867			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresi	nel	Barrier Att	en Ber	m Atten
Autos:	68.46	-4.07	7	0.43	3	-1.20		-4.65	0.0	000	0.000
Medium Trucks:	79.45	-21.31		0.46	3	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	84.25	-25.26	6	0.46	3	-1.20		-5.42	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	r attenu	uation)						
VehicleType	Leq Peak Hou	ur Leq Da	y	Leq Ev	ening	Leq	Night		Ldn	CI	NEL
Autos:	63	3.6	62.0		60.3		54.	2	62.8	3	63.4
Medium Trucks:	57	7.4	56.2		49.8		48.	3	56.8	3	57.0
Heavy Trucks:	58	3.2	57.1		48.1		49.	4	57.7	7	57.8
Vehicle Noise:	65	5.5	64.0		60.9		56.	2	64.8	3	65.2
Centerline Distance	e to Noise Co	ontour (in fee	t)								
				70 d	IBA .	65	dBA	(	60 dBA	55	dBA
			Ldn:	23	3	4	9		106	2	28

	FHV	VA-RD-77-108	HIGH	IWAY N	OISE PI	REDICT	ON MC	DDEL			
Road Nam	io: EAC26 ie: Monroe St. nt: n/o Avenue	52						The W 12642	ave-Coral	Mountair	1
	SPECIFIC IN					N	IOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	13,100 vehicles	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	1,218 vehicles	3		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		1	/ehicle	Miv					
Near/Far La	ne Distance:	43 feet				icleType		Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	
Par	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	-	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis	st. to Barrier:	64.0 feet		_	loise So	ource El	evation	ıs (in f	oet)		
Centerline Dist.	to Observer:	64.0 feet		- F	.0.00 0	Auto		.000	,,,,		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck		297			
Observer Height (	Above Pad):	5.0 feet				vy Truck		.006	Grade Ad	iustment	0.0
Pa	ad Elevation:	0.0 feet				•					
Ros	ad Elevation:	0.0 feet		L	.ane Eq	uivalent		ice (in i	feet)		
I	Road Grade:	0.0%				Auto	00	.488			
	Left View:	-90.0 degree	es			m Truck	-	.341			
	Right View:	90.0 degree	es		Hear	y Truck	s: 60	.355			
FHWA Noise Mode	el Calculation:	S									
VehicleType	REMEL	Traffic Flow	Dis	tance		Road	Fres		Barrier Att		m Atten
Autos:	70.20	-1.55		-1.34		-1.20		-4.70		000	0.00
Medium Trucks:	81.00	-18.79		-1.33		-1.20		-4.88		000	0.00
Heavy Trucks:	85.38	-22.75		-1.33	3	-1.20		-5.31	0.0	000	0.00
Unmitigated Noise	•							_			
VehicleType Autos:	Leq Peak Hou		64.5	Leq Ev	ening 62.8		Night 56.	7	Ldn 65.3		VEL 65.
Medium Trucks:	59		58.5		52.1		50.		59.0		59.
Heavy Trucks:	60		59.0		50.0		51.	-	59.6		59.
Vehicle Noise:	67		66.4		63.3		58.		67.1		67.
Centerline Distance	e to Noise Co	ontour (in feet)	)								
		, , ,		70 d	IBA	65	dBA	- 6	60 dBA	55	dBA
			Ldn:	41	I	8	8		190	4	09
			NFI:	44					204		40

		WA-RD-77-108	- III GIII	WAT IN								
	: EAC26								/ave-Cora	al Mou	ntain	
	: Monroe St.					Job No	ımber.	12642				
Road Segmen	: n/o Avenue	e 50										
	PECIFIC IN	NPUT DATA							L INPU	TS		
Highway Data				S	ite Cond	itions (	Hard :	= 10, S	oft = 15)			
Average Daily T	raffic (Adt):	13,800 vehicle	s					Autos	: 15			
Peak Hour F	Percentage:	9.30%			Med	ium Tru	cks (2	Axles)	: 15			
Peak Ho	ur Volume:	1,283 vehicle	s		Hea	vy Truc	ks (3+	Axles)	: 15			
Veh	icle Speed:	50 mph		v	ehicle M	iy						
Near/Far Lan	e Distance:	43 feet		F		leType		Day	Evenino	Nig	ıht	Daily
Site Data						A	utos:	77.59	6 12.99		.6%	97.429
Ran	ier Heiaht:	0.0 feet			Me	dium Tr	ucks:	84.89	6 4.99	6 10	.3%	1.84%
Barrier Type (0-Wa	ıll, 1-Berm):	0.0			Н	eavy Tr	ucks:	86.59	6 2.79	6 10	.8%	0.74%
Centerline Dist		64.0 feet		٨	loise Sou	ırce Ele	vatio	ns (in f	eet)			
Centerline Dist. to		64.0 feet				Autos	: (	0.000				
Barrier Distance to		0.0 feet			Medium	Trucks	: 2	2.297				
Observer Height (A	,	5.0 feet			Heavy	Trucks	: 8	3.006	Grade A	djustr	nent:	0.0
	d Elevation:	0.0 feet		١.								
	d Elevation:	0.0 feet		L	ane Equ				teet)			
R	oad Grade:	0.0%				Autos		0.488				
	Left View:	-90.0 degre			Medium			0.341				
	Right View:	90.0 degre	es		Heavy	Trucks	: 60	0.355				
FHWA Noise Model												
VehicleType	REMEL	Traffic Flow	Dista		Finite F		Fres		Barrier A		Berr	n Atten
Autos:	70.20			-1.34		-1.20		-4.70		0.000		0.00
Medium Trucks:	81.00			-1.33		-1.20		-4.88		0.000		0.00
Heavy Trucks:	85.38	-22.52		-1.33		-1.20		-5.31	(	0.000		0.00
•												
								_				
VehicleType I	eq Peak Ho	ur Leq Daj	/	attenu Leq Ev	ening	Leq I			Ldn	- 0	C١	
VehicleType L Autos:	eq Peak Ho	ur Leq Day	64.8		ening 63.0	Leq I	56		65	5.6	CN	66.
VehicleType L Autos: Medium Trucks:	eq Peak Ho. 66 59	ur Leq Day 6.3 9.9	64.8 58.7		63.0 52.4	Leq I	56 50	.8	65 59	9.3	CN	66. 59.
VehicleType I Autos: Medium Trucks: Heavy Trucks:	eq Peak Ho. 66 59 60	Leq Day 3.3 9.9 ).3	64.8 58.7 59.2		63.0 52.4 50.2	Leq I	56 50 51	.8 .4	65 59 59	9.3 9.8	CN	66. 59. 59.
VehicleType I Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	eq Peak Hot 66 59 60	Leq Daj 3.3 9.9 0.3	64.8 58.7 59.2 66.6		63.0 52.4	Leq I	56 50	.8 .4	65 59 59	9.3	CN	66. 59. 59.
Autos: Medium Trucks: Heavy Trucks:	eq Peak Hot 66 59 60	Leq Daj 3.3 9.9 0.3	64.8 58.7 59.2 66.6	Leq Ev	ening 63.0 52.4 50.2 63.6		56 50 51 58	.8	65 59 59 67	9.3 9.8		66 59 59 67
VehicleType I Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	eq Peak Hot 66 59 60	Leq Daj 3.3 9.9 0.3	64.8 58.7 59.2 66.6		ening 63.0 52.4 50.2 63.6	Leq I	56 50 51 58 (BA	.8	65 59 59	9.3 9.8	55 (	66.: 59.: 59.: 67.:

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FI	WA-RD-77-108	HIGHWAY	NOISE P	REDICTIO	N MODEL		
Scenario: EAC26 Road Name: Monroe S Road Segment: n/o Avenu					lame: The V mber: 12642	Vave-Coral N	Mountain
SITE SPECIFIC	NPUT DATA			N	DISE MODI	EL INPUTS	3
Highway Data			Site Cor	nditions (l	Hard = 10, S	oft = 15)	
Average Daily Traffic (Adt):	12,900 vehicles				Autos	: 15	
Peak Hour Percentage:	9.30%		Me	edium Tru	cks (2 Axles)	): 15	
Peak Hour Volume:	1,200 vehicles		He	eavy Truck	s (3+ Axles)	): 15	
Vehicle Speed:	50 mph		Vehicle	Miv			
Near/Far Lane Distance:	51 feet			icleType	Dav	Evening	Night Daily
Site Data			Ver		utos: 77.59	-	9.6% 97.42%
				ledium Tru			10.3% 1.84%
Barrier Height:	0.0 feet			Heavy Tru			10.8% 0.74%
Barrier Type (0-Wall, 1-Berm):	0.0 54.0 feet			nouty m	00.0	70 2.170	10.070 0.7470
Centerline Dist. to Barrier: Centerline Dist. to Observer:	54.0 feet		Noise S	ource Ele	vations (in	feet)	
Barrier Distance to Observer:	0.0 feet			Autos.	0.000		
Observer Height (Above Pad):	5.0 feet		Mediu	m Trucks	2.297		
Pad Flevation:	0.0 feet		Hea	vy Trucks	8.006	Grade Adju	ustment: 0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent	Distance (in	feet)	
Road Grade:				Autos		,	
Left View:	0.070	e	Mediu	m Trucks			
Right View:	90.0 degree			vy Trucks			
FHWA Noise Model Calculatio	ns						
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Berm Atten
Autos: 70.2	0 -1.62	0.	18	-1.20	-4.67	0.0	0.000
Medium Trucks: 81.0			21	-1.20	-4.87		
Heavy Trucks: 85.3	8 -22.81	0.	20	-1.20	-5.39	0.0	0.000
Unmitigated Noise Levels (wit	hout Topo and I	parrier atte	nuation)				
VehicleType Leq Peak H			Evening	Leq N		Ldn	CNEL
		66.0	64.2		58.2	66.8	67.4
		30.0	53.6		52.1	60.5	
		30.5	51.4		52.7	61.0	
		67.8	64.8		60.0	68.6	69.0
Centerline Distance to Noise (	Contour (in feet)	-	10.4	05.		00 104	55 104
			dBA	65 d		60 dBA	55 dBA
	-		43	93		201	432
	CN	IEL:	46	10	J	216	464

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Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	YAW	NOISE P	REDICT	ION MO	DDEL			
Road Nam	io: EAC26 ne: Monroe St. nt: n/o Airport					.,	t Name: lumber:		ave-Coral	Mounta	in
SITE	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data					Site Cor	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	12,600 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%				edium Tr					
Peak H	lour Volume:	1,172 vehicle	s		He	eavy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		F	Vehicle	Miv					
Near/Far La	ne Distance:	51 feet		F		icleType	,	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	-	9.69	,
Pa	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.39	6 1.84%
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.89	% 0.74%
Centerline Di		54.0 feet		-	Noise S	ouroo E	lovetio	aa (in f	2041		
Centerline Dist.	to Observer:	54.0 feet		-	Noise 3				ei)		
Barrier Distance	to Observer:	0.0 feet				Auto		2.000			
Observer Height	(Above Pad):	5.0 feet				m Truck	-		Grade Ad	licotmo	o4: 0 0
Pi	ad Elevation:	0.0 feet			Hea	vy Truck	s: e	1.006	Grade Ad	justriei	и. О.О
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distar	ice (in	feet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degre	es		Hea	vy Truck	s: 47	.695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Be	erm Atten
Autos:	70.20	-1.72		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-18.96		0.2	1	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-22.91		0.2	.0	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	r atten	uation)						
VehicleType	Leq Peak Hou	ur Leq Day	/	Leq E	vening	Leq	Night		Ldn	(	CNEL
Autos:	67	7.5	65.9		64.1		58	.1	66.	7	67.3
Medium Trucks:	61	1.0	59.9		53.5		51	.9	60.4	4	60.6
Heavy Trucks:	61	1.5	60.4		51.3		52	.6	60.		61.1
Vehicle Noise:	69	9.2	67.7		64.7		59	.9	68.	4	68.9
Centerline Distant	ce to Noise Co	ontour (in feet	)								
				70	dBA	65	dBA	6	60 dBA	5	5 dBA
			Ldn:	4	3	9	92		198		426
		C	NEL:	4	6	9	99		212		457

	FHV	WA-RD-77-108	HIGHV	VAY NO	DISE PI	REDICT	ION MC	DDEL			
Road Nan	rio: EAC26 ne: Monroe St. nt: n/o Avenue	60					Name: lumber:		ave-Coral	Mountair	ı
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard =	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	12,600 vehicle	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	Hour Volume:	1,172 vehicle	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		1/	ehicle i	Miv					
Near/Far La	ne Distance:	51 feet				icleType	,	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	-	9.6%	
Ra	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749
	ist. to Barrier:	54.0 feet		A/	laica Sa	ource El	lovation	ne (in fe	not)		
Centerline Dist.	to Observer:	54.0 feet		/4	Uise st	Auto		.000	ei)		
Barrier Distance	to Observer:	0.0 feet			Modiu	m Truck		.000			
Observer Height	(Above Pad):	5.0 feet				n Truck vy Truck		.006	Grade Ad	iuctmont	. 0 0
P	ad Elevation:	0.0 feet			пеа	y Huck	s. o	.000	Grade Au	usunen	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent	t Distan	ice (in f	eet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree	es		Hear	y Truck	s: 47	.695			
FHWA Noise Mod	el Calculation:	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	-1.72		0.18		-1.20		-4.67	0.0	000	0.00
Medium Trucks:	81.00	-18.96		0.21		-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	85.38	-22.91		0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Hou	-, -,		Leq Eve	ening	Leq	Night		Ldn		VEL
Autos:			65.9		64.1		58.		66.7		67.
Medium Trucks:			59.9		53.5		51.	-	60.4		60.
Heavy Trucks:			60.4		51.3		52.	-	60.9		61.
Vehicle Noise:			67.7		64.7		59.	.9	68.4	1	68.
Centerline Distan	ce to Noise Co	ontour (in feet	)	70 -	D.4	05	-/D.4		0 -104		dBA
			Later	70 dl			dBA	6	198		
			Ldn:	43		-	92				26
		C	NEL:	46		٤	99		212	4	57

	FH\	WA-RD-77-108	HIGH	VAY NO	DISE PR	EDICT	ION MODEL		
	: EAC26 :: Monroe St. t: n/o Avenue						t Name: The V Number: 1264		ountain
	PECIFIC IN	IPUT DATA					NOISE MOD		
Highway Data				S	ite Cond	litions	(Hard = 10, S	Soft = 15)	
		12,000 vehicle 9.30% 1,116 vehicle 50 mph			Hea	avy Tru	Autos rucks (2 Axles icks (3+ Axles	): 15	
Near/Far Lan		51 feet		V	ehicle N				T
Site Data	o Biotarioo.	011000					Autos: 77.5	% 12.9%	9.6% 97.42%
	ier Height:	0.0 feet					Frucks: 84.8'		10.3% 1.84% 10.8% 0.74%
Barrier Type (0-Wa	. ,	0.0			n	ieavy i	Frucks: 86.5	% Z.1%	10.8% 0.74%
Centerline Dist		54.0 feet 54.0 feet		N	oise So	urce E	levations (in	feet)	
Road R		0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre 90.0 degre		L	<b>ane Equ</b> Mediun	y Truck ivalen Auto	ks: 2.297 ks: 8.006 t Distance (in os: 47.862 ks: 47.677	Grade Adju feet)	stment: 0.0
FHWA Noise Model	Calculation								
VehicleType	REMEL	Traffic Flow		ance	Finite I		Fresnel	Barrier Atter	
Autos:	70.20			0.18		-1.20	-4.67		
Medium Trucks:	81.00			0.21		-1.20	-4.87		
Heavy Trucks:	85.38	-23.13		0.20		-1.20	-5.39	0.00	0 0.000
Unmitigated Noise									
	eq Peak Hou			Leq Eve	-	Leq	Night	Ldn	CNEL
Autos:		7.3	65.7		63.9		57.8	66.5	67.
Medium Trucks:		).8	59.6		53.3		51.7	60.2	60.4
Heavy Trucks: Vehicle Noise:		1.3	67.5		51.1 64.5		52.4 59.7	60.7	60.8
					04.5		39.7	00.2	00.
Centerline Distance	to Noise Co	ontour (in feet	)	70 di	ВА	65	dBA	60 dBA	55 dBA
			Ldn:	41			89	191	412
		С	NEL:	44			95	205	443

Wednesday, March 25, 2020

Fl	IWA-RD-77-108 H	IIGHWAY	NOISE PI	REDICTIO	N MODEL		
Scenario: EAC26 Road Name: Avenue 51 Road Segment: w/o Jeffer					lame: The V mber: 1264:	Vave-Coral I 2	Mountain
SITE SPECIFIC I	NPUT DATA			N	DISE MOD	EL INPUTS	3
Highway Data			Site Con	ditions (i	Hard = 10, S	Soft = 15)	
Average Daily Traffic (Adt):	17,000 vehicles				Autos	3: 15	
Peak Hour Percentage:	9.30%		Me	edium Tru	cks (2 Axles	): 15	
Peak Hour Volume:	1,581 vehicles		He	eavy Truci	s (3+ Axles	): 15	
Vehicle Speed:	50 mph		Vehicle	Mix			
Near/Far Lane Distance:	51 feet			icleType	Dav	Evening	Night Daily
Site Data					utos: 77.5	-	9.6% 97.42%
Barrier Height:	0.0 feet		М	edium Tru	icks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-Wall, 1-Berm):	0.0			Heavy Tru	icks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dist. to Barrier:	54.0 feet		Noise So	ource Ele	vations (in	feet)	
Centerline Dist. to Observer:	54.0 feet			Autos		,	
Barrier Distance to Observer:	0.0 feet		Mediu	m Trucks	2.297		
Observer Height (Above Pad):	5.0 feet		Hear	vy Trucks	8.006	Grade Adj	ustment: 0.0
Pad Elevation:	0.0 feet			•			
Road Elevation:	0.0 feet		Lane Eq		Distance (in	feet)	
Road Grade:	0.0%			Autos.	11.002		
Left View:	-90.0 degrees			m Trucks			
Right View:	90.0 degrees		Hear	vy Trucks	47.695		
FHWA Noise Model Calculation							
VehicleType REMEL	Traffic Flow	Distance		Road	Fresnel	Barrier Atte	
Autos: 70.2		0.		-1.20	-4.67		
Medium Trucks: 81.0		0.:		-1.20	-4.87		
Heavy Trucks: 85.3		0.:		-1.20	-5.39	9 0.0	0.000
Unmitigated Noise Levels (with							
VehicleType Leq Peak Ho			vening	Leg N		Ldn	CNEL
		7.2	65.4		59.4	68.0	
		1.2	54.8		53.3	61.7	
		1.7	52.6		53.9	62.2	
		9.0	66.0		61.2	69.7	70.2
Centerline Distance to Noise C	Contour (in feet)	70	dBA	65 d	DA .	60 dBA	55 dBA
	1.		ава 52	11:	U.	241	520 520
	CNE		56	12	_	259	520 558
	CIVE	_L.	00	12	,	209	330

	FH	WA-RD-77-108	HIGHW	AY NO	DISE PR	EDICTIO	N MODEL			
	o: EAC26 e: Avenue 50 nt: w/o Madiso					,	ame: The N	Vave-Coral	Mountair	1
SITE S	SPECIFIC IN	NPUT DATA				NO	ISE MOD	EL INPUT	S	
Highway Data				S	ite Con	ditions (H	lard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	17,400 vehicle	s				Autos	3: 15		
Peak Hour	Percentage:	9.30%			Med	dium Truc	ks (2 Axles	): 15		
Peak H	our Volume:	1,618 vehicle	S		He	avy Truck	s (3+ Axles	): 15		
Vei	hicle Speed:	50 mph		V	ehicle N	lix				
Near/Far Lai	ne Distance:	51 feet				cleType	Day	Evening	Night	Daily
Site Data						Au	tos: 77.5	% 12.9%	9.6%	97.42%
Rai	rier Height:	0.0 feet			Me	edium True	cks: 84.8	% 4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			F	leavy True	cks: 86.5	% 2.7%	10.8%	0.74%
Centerline Dis	st. to Barrier:	54.0 feet		N	oise So	urce Elev	ations (in	feet)		
Centerline Dist.	to Observer:	54.0 feet				Autos:	0.000	/		
Barrier Distance		0.0 feet			Mediur	n Trucks:	2.297			
Observer Height (	,	5.0 feet				y Trucks:	8.006	Grade Ad	iustment	0.0
	d Elevation:	0.0 feet		-						
	d Elevation:	0.0 feet		Li	ane Equ		istance (in	feet)		
ļ ,	Road Grade:	0.0%				Autos:				
	Left View:	-90.0 degre				n Trucks:				
	Right View:	90.0 degre	es		Heav	y Trucks:	47.695			
FHWA Noise Mode	l Calculation	-								
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	70.20			0.18		-1.20	-4.67		000	0.000
Medium Trucks:	81.00			0.21		-1.20	-4.87		000	0.000
Heavy Trucks:	85.38	-21.51		0.20		-1.20	-5.39	0.0	000	0.000
Unmitigated Noise										
	Leq Peak Ho			.eq Eve	- 1	Leq Ni	- 1	Ldn	1	VEL
Autos:		3.9	67.3		65.5		59.5	68.1		68.7
Medium Trucks:		2.5	61.3		54.9		53.4	61.8		62.0
Heavy Trucks:		2.9	61.8		52.7		54.0	62.3		62.5
Vehicle Noise:		0.6	69.1		66.1		61.3	69.9	9	70.3
Centerline Distance	e to Noise C	ontour (in fee	)							
			!	70 dE	ЗА	65 dE	U.	60 dBA	1	dBA
		_	Ldn:	53		114		245	_	28
		C	NEL:	57		122		263	5	67

	FH\	WA-RD-77-108	HIGHV	VAY N	OISE PI	REDICT	ION MC	DEL			
Road Nar	rio: EAC26 me: Avenue 52 ent: w/o Monroe	e St.					Name: lumber:		ave-Coral	Mountain	ı
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard =	: 10, So	ft = 15)		
Average Daily	Traffic (Adt):	14,200 vehicle	s					Autos:	15		
Peak Hou	r Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak	Hour Volume:	1,321 vehicle	s		He	avy Tru	cks (3+	Axles):	15		
V	ehicle Speed:	50 mph		V	ehicle i	Miv					
Near/Far L	ane Distance:	51 feet		-		icleType		Dav	Evening	Night	Dailv
Site Data							Autos:	77.5%	-	9.6%	
D.	arrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-V		0.0 1661				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749
	ist to Barrier:	54.0 feet		-							
Centerline Dist		54.0 feet		٨	loise So	ource El			et)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height		5.0 feet				m Truck		.297			
	Pad Elevation:	0.0 feet			Hear	y Truck	s: 8	.006	Grade Ad	iustment.	0.0
Ro	oad Elevation:	0.0 feet		L	ane Eq	uivalen	Distan	ce (in f	eet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degre	es		Hear	y Truck	s: 47	.695			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresi	nel	Barrier Att	en Ber	m Atten
Autos	70.20	-1.20		0.18	3	-1.20		-4.67	0.0	000	0.00
Medium Trucks	: 81.00	-18.44		0.21		-1.20		-4.87	0.0	000	0.00
Heavy Trucks	85.38	-22.40		0.20	)	-1.20		-5.39	0.0	000	0.00
Unmitigated Nois	e Levels (with	out Topo and	barrier	attenu	ıation)						
VehicleType	Leq Peak Hou			Leq Ev			Night		Ldn		VEL
Autos		3.0	66.4		64.6		58.	-	67.2	-	67.
Medium Trucks			60.4		54.0		52.	-	60.9		61.
Heavy Trucks			60.9		51.8		53.		61.4		61.
Vehicle Noise	-		68.2		65.2		60.	4	69.0	J	69.
Centerline Distan	ice to Noise Co	ontour (in feet	)	70 -	ID A	er.	AD A	1 -	O ADA		AD A
			Leles	70 d			dBA	6	0 dBA 214	1	dBA 61
			Ldn: NFI:	46 50		-	9 07		214		61 95
		C	IVEL:	50	,	1	U/		230	4	95

	FH\	WA-RD-77-108	HIGH	NAY N	DISE PREDI	CTION MOD	)EL	
Scenario	o: EAC26				Proj	ect Name: T	he Wave-Coral	Mountain
Road Name	e: Avenue 50				Joi	Number: 1	2642	
Road Segmen	t: e/o Monroe	St.						
	PECIFIC IN	IPUT DATA					ODEL INPUT	s
Highway Data				S	ite Conditio	ns (Hard = 1	10, Soft = 15)	
Average Daily 1	raffic (Adt):	13,300 vehicle	S				lutos: 15	
Peak Hour I	Percentage:	9.30%				Trucks (2 A	,	
Peak Ho	our Volume:	1,237 vehicle	S		Heavy T	rucks (3+ A	xles): 15	
	icle Speed:	50 mph		ν	ehicle Mix			
Near/Far Lar	e Distance:	43 feet			VehicleTy	pe L	Day Evening	Night Daily
Site Data					-	Autos:	77.5% 12.9%	9.6% 97.42%
Ban	rier Heiaht:	0.0 feet			Mediun	Trucks: 8	34.8% 4.9%	10.3% 1.84%
Barrier Type (0-Wa		0.0			Heavy	Trucks: 8	36.5% 2.7%	10.8% 0.74%
Centerline Dis	t. to Barrier:	64.0 feet		۸	loise Source	Elevations	(in feet)	
Centerline Dist. t	o Observer:	64.0 feet				itos: 0.0	, ,	
Barrier Distance t	o Observer:	0.0 feet			Medium Tri			
Observer Height (A	,	5.0 feet			Heavy Tru			djustment: 0.0
	d Elevation:	0.0 feet			,			·
	d Elevation:	0.0 feet		L	ane Equival		, ,	
F	Road Grade:	0.0%				itos: 60.4		
	Left View:	-90.0 degree			Medium Tru			
	Right View:	90.0 degree	es		Heavy Tru	cks: 60.3	55	
FHWA Noise Mode	l Calculation							
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite Road	Fresne	el Barrier At	ten Berm Atten
Autos:	70.20			-1.34		-		.000 0.00
Medium Trucks:	81.00			-1.33		-		.000 0.00
Heavy Trucks:	85.38	-22.68		-1.33	-1.2	.0 -	5.31 0.	.000 0.00
Unmitigated Noise								
,,	Leq Peak Ho			Leq Ev	-	eq Night	Ldn	CNEL
Autos:			64.6		62.8	56.8	65.	
Medium Trucks:		9.7	58.6		52.2	50.6	59.	
Heavy Trucks:		).2	59.1		50.0	51.3	59.	
Vehicle Noise:	-	7.9	66.4		63.4	58.6	67.	.2 67.
Centerline Distance	e to Noise Co	ontour (in feet	)	70 -	DA .	E ADA	60 dB4	EE dDA
			l dn:	70 d		85 dBA 89	60 dBA 192	55 dBA 414
		_	Lan: NFI:	41		96	192 206	414 444
		C	IVEL:	44		90	206	444

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGHWA	Y NOISE	E PREDICTION	ON MODE	EL				
Road Na	nrio: EAC26 me: Avenue 54 ent: w/o Madisc	on St.				Name: Th ımber: 12	e Wave-Coral 642	Mountair	1		
SITE	SPECIFIC IN	IPUT DATA					DEL INPUT	'S			
Highway Data				Site C	Conditions (	Hard = 10	0, Soft = 15)				
Average Dail	/ Traffic (Adt):	14,700 vehicles	5		Autos: 15						
Peak Hou	r Percentage:	9.30%			Medium Tru	cks (2 Ax	les): 15				
Peak	Hour Volume:	1,367 vehicles	3		Heavy Truc	ks (3+ Ax	les): 15				
ν	ehicle Speed:	50 mph		Vehic	le Mix						
Near/Far L	ane Distance:	51 feet			VehicleType	D	ay Evening	Night	Daily		
Site Data							7.5% 12.9%		,		
R	arrier Height:	0.0 feet			Medium Tr	ucks: 84	1.8% 4.9%	10.3%	1.84%		
Barrier Type (0-		0.0			Heavy Tr	ucks: 86	3.5% 2.7%	10.8%	0.74%		
Centerline L	Dist. to Barrier:	54.0 feet		Noise	Source Ele	vations (	in foot)				
Centerline Dis	to Observer:	54.0 feet		,,,,,,,	Autos						
Barrier Distance	e to Observer:	0.0 feet		Me	edium Trucks						
Observer Height		5.0 feet			leavy Trucks			diustment	: 0.0		
	Pad Elevation:	0.0 feet						,			
R	oad Elevation:	0.0 feet		Lane	Equivalent		. ,				
	Road Grade:	0.0%			Autos						
	Left View:	-90.0 degree			edium Trucks		-				
	Right View:	90.0 degree	s	Н	leavy Trucks	47.69	5				
FHWA Noise Mod	del Calculation	s		-							
VehicleType	REMEL	Traffic Flow	Distanc	e Fir	nite Road	Fresnel	Barrier At	ten Ber	m Atten		
Autos	70.20	-1.05		0.18	-1.20	-4	.67 0.	.000	0.000		
Medium Trucks	: 81.00	-18.29		0.21	-1.20	-4	.87 0.	.000	0.000		
Heavy Trucks	: 85.38	-22.24		0.20	-1.20	-5	i.39 0.	.000	0.000		
Unmitigated Nois	se Levels (with	out Topo and I	barrier at	tenuatio	n)						
VehicleType	Leq Peak Hou	ur Leq Day	Lec	Evenin	g Leq I	light	Ldn	C	NEL		
Autos	: 68	3.1 (	66.6	6	4.8	58.7	67.	.4	68.0		
Medium Trucks	: 61	1.7	60.5	5	4.2	52.6	61.	.1	61.3		
Heavy Trucks			61.0	5	2.0	53.2	61.	.6	61.7		
Vehicle Noise	: 69	9.8	68.4	6	5.4	60.6	69.	.1	69.6		
Centerline Distar	nce to Noise Co	ontour (in feet)									
				70 dBA	65 d	IBA	60 dBA	55	dBA		
			Ldn:	47	10	_	219		72		
		CI	VEL:	51	10	9	235	5	507		

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGHV	VAY NO	DISE PR	EDICTIO	N MODEL			
	o: EAC26 e: Avenue 54 nt: w/o Monro	e St.				.,	ame: The V	Vave-Coral I	Mountair	1
SITE S	SPECIFIC IN	IPUT DATA				NO	ISE MOD	EL INPUTS	S	
Highway Data				Si	ite Cond	ditions (H	ard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	9,300 vehicle	s				Autos	s: 15		
Peak Hour i	Percentage:	9.30%			Med	dium Truci	ks (2 Axles	): 15		
Peak Ho	our Volume:	865 vehicle	s		Hea	avy Trucks	3+ Axles	): 15		
Vel	nicle Speed:	50 mph		V	ehicle N	lix				
Near/Far Lar	ne Distance:	51 feet				cleType	Day	Evening	Night	Daily
Site Data						Au	tos: 77.5°	% 12.9%	9.6%	97.42%
Ran	rier Height:	0.0 feet			Me	dium Truc	ks: 84.8	% 4.9%	10.3%	1.84%
Barrier Type (0-Wa		0.0			H	leavy Truc	ks: 86.5	% 2.7%	10.8%	0.74%
Centerline Dis	t. to Barrier:	54.0 feet		N	oise So	urce Elev	ations (in	feet)		
Centerline Dist. t	o Observer:	54.0 feet		H		Autos:	0.000	,		
Barrier Distance t	o Observer:	0.0 feet			Mediun	n Trucks:	2.297			
Observer Height (/	Above Pad):	5.0 feet				y Trucks:	8.006	Grade Ad	ustment	0.0
	d Elevation:	0.0 feet								
	d Elevation:	0.0 feet		Li	ane Equ		istance (in	feet)		
F	Road Grade:	0.0%				Autos:	47.862			
	Left View:	-90.0 degre				n Trucks:				
	Right View:	90.0 degre	es		Heav	y Trucks:	47.695			
FHWA Noise Mode		-								
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite I	Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos:	70.20			0.18		-1.20	-4.67		000	0.000
Medium Trucks:	81.00			0.21		-1.20	-4.87		000	0.000
Heavy Trucks:	85.38	-24.23		0.20		-1.20	-5.39	0.0	000	0.000
<b>Unmitigated Noise</b>	Levels (with			attenu	ation)					
	Leq Peak Ho			Leq Eve	- 1	Leq Ni		Ldn		VEL
Autos:		3.1	64.6		62.8		56.7	65.4		66.0
Medium Trucks:	59	9.7	58.5		52.2		50.6	59.1		59.3
Heavy Trucks:		).1	59.0		50.0		51.3	59.6		59.7
Vehicle Noise:	67	7.8	66.4		63.4		58.6	67.1		67.6
Centerline Distance	e to Noise C	ontour (in feet	)							
				70 dE	3A	65 dB	Α	60 dBA		dBA
			Ldn:	35		75		161	-	48
		С	NEL:	37		80		173	3	73

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIGI	1 YAWH	IOISE PI	REDICT	ION MO	DDEL			
	o: EAC26 e: Avenue 58 nt: w/o Madiso	n St.					Name: lumber:		ave-Coral	Mountair	1
SITE S	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data					Site Con	ditions	(Hard :	= 10, So	oft = 15)		
Average Daily	Traffic (Adt):	5,700 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	our Volume:	530 vehicles	3		He	avy Tru	cks (3+	Axles):	15		
Vel	hicle Speed:	45 mph			Vehicle i	Miv					
Near/Far Lar	ne Distance:	45 feet		H		icleType	,	Dav	Evening	Night	Daily
Site Data					*0		Autos:	77.5%	-	9.6%	
	rier Height:	0.0 feet			М	edium T	rucks:	84.8%		10.3%	
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		51.0 feet		L							
Centerline Dist. 1		51.0 feet			Noise So				eet)		
Barrier Distance t		0.0 feet				Auto		.000			
Observer Height (		5.0 feet				m Truck		.297			
	d Elevation:	0.0 feet			Hear	y Truck	s: 8	1.006	Grade Ad	iustment	: 0.0
Roa	d Elevation:	0.0 feet			Lane Eq	uivaleni	Distar	nce (in f	feet)		
F	Road Grade:	0.0%				Auto	s: 46	6.041			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 45	.848			
	Right View:	90.0 degree	es		Hear	y Truck	s: 45	5.867			
FHWA Noise Mode	l Calculation:	s									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	68.46	-4.71		0.4	3	-1.20		-4.65	0.0	000	0.00
Medium Trucks:	79.45	-21.95		0.4	6	-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	84.25	-25.90		0.4	6	-1.20		-5.42	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	′	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	63		61.4		59.6		53		62.2	-	62.
Medium Trucks:	56		55.6		49.2		47		56.1		56.4
Heavy Trucks:	57		56.5		47.5		48		57.1		57.:
Vehicle Noise:	64	.8	63.4		60.2		55	.6	64.1	I	64.
Centerline Distanc	e to Noise Co	ontour (in feet,	)								
				70	dBA	65	dBA	6	60 dBA	55	dBA
			Ldn: NFI:	_	1 2		15 18		96 103	_	.07 .22

	FHV	VA-RD-77-108	HIGHWAY	NOISE P	REDICTIO	ON MODEL			
Scenar	io: EAC26				Project I	Vame: The W	ave-Coral N	/lountair	1
	ne: Airport Bl.				Job Nu	mber: 12642			
Road Segme	nt: w/o Monroe	St.							
	SPECIFIC IN	PUT DATA				DISE MODE		i	
Highway Data				Site Cor	nditions (i	Hard = 10, So	oft = 15)		
Average Daily		4,400 vehicles	3			Autos.			
Peak Hour	Percentage:	9.30%		M	edium Tru	cks (2 Axles).	15		
Peak F	lour Volume:	409 vehicles	3	H	eavy Truci	ks (3+ Axles).	15		
Ve	hicle Speed:	50 mph		Vehicle	Mix				
Near/Far La	ne Distance:	51 feet			nicleType	Day	Evening	Night	Daily
Site Data					A	utos: 77.5%	6 12.9%	9.6%	97.42%
Ra	rrier Heiaht:	0.0 feet		Λ.	ledium Tru	icks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			Heavy Tru	icks: 86.5%	6 2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	54.0 feet		Noise S	ource Fle	vations (in f	eet)		
Centerline Dist.	to Observer:	54.0 feet		110,000	Autos				
Barrier Distance	to Observer:	0.0 feet		Modi	ım Trucks				
Observer Height	(Above Pad):	5.0 feet			vy Trucks.		Grade Adju	ıstment	0.0
P	ad Elevation:	0.0 feet						3011110111	0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent l	Distance (in	feet)		
	Road Grade:	0.0%			Autos.	47.862			
	Left View:	-90.0 degree	s	Mediu	ım Trucks	47.677			
	Right View:	90.0 degree	es .	Hea	vy Trucks	47.695			
FHWA Noise Mod	el Calculations	s							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	n Ber	m Atten
Autos:	70.20	-6.29	0.	.18	-1.20	-4.67	0.0	00	0.000
Medium Trucks:	81.00	-23.53	0.	21	-1.20	-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-27.48	0.	20	-1.20	-5.39	0.0	00	0.000
Unmitigated Noise	e Levels (with	out Topo and I	barrier atte	nuation)					
VehicleType	Leq Peak Hou	r Leq Day	Leq	Evening	Leq N	light	Ldn	C	VEL
Autos:	62	.9 (	61.3	59.5	i	53.5	62.1		62.7
Medium Trucks:	56	.5	55.3	48.9	)	47.4	55.8		56.1
Heavy Trucks:	56	.9	55.8	46.8	3	48.0	56.4		56.5
Vehicle Noise:	64	.6	63.2	60.1		55.3	63.9	,	64.3
Centerline Distant	ce to Noise Co	ntour (in feet)							
			7/	ADA	CE A	DA I	en ada	EE	AD A

Wednesday, March 25, 2020

FH	WA-RD-77-108 H	HIGHWAY	NOISE PE	REDICTION	ON MODEL		
Scenario: EAC26 Road Name: Avenue 58 Road Segment: w/o Monro					Vame: The Imber: 1264	Wave-Coral M 2	ountain
SITE SPECIFIC II	NPUT DATA			N	DISE MOD	EL INPUTS	
Highway Data			Site Con	ditions (	Hard = 10,	Soft = 15)	
Average Daily Traffic (Adt):	5,900 vehicles				Auto	s: 15	
Peak Hour Percentage:	9.30%		Me	dium Tru	cks (2 Axles	:): 15	
Peak Hour Volume:	549 vehicles		He	avy Truc	ks (3+ Axles	;): 15	
Vehicle Speed:	45 mph		Vehicle I	Wix			
Near/Far Lane Distance:	45 feet			icleType	Dav	Evening I	Night Daily
Site Data					utos: 77.5		9.6% 97.42%
Barrier Height:	0.0 feet		M	edium Tru	ucks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-Wall, 1-Berm):	0.0		F	Heavy Tru	ucks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dist. to Barrier:	51.0 feet		Noise Sc	ource Fle	vations (in	feet)	
Centerline Dist. to Observer:	51.0 feet		710,00 00	Autos	-	7001)	
Barrier Distance to Observer:	0.0 feet		Mediu	m Trucks			
Observer Height (Above Pad):	5.0 feet			vy Trucks		Grade Adju	stment: 0.0
Pad Elevation:	0.0 feet						
Road Elevation:	0.0 feet		Lane Equ		Distance (ii	n feet)	
Road Grade:	0.0%			Autos			
Left View:	-90.0 degrees	3		m Trucks	. 10.010		
Right View:	90.0 degrees	3	Heav	y Trucks	45.867		
FHWA Noise Model Calculation	ıs						
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atter	Berm Atten
Autos: 68.46	-4.56	0.	43	-1.20	-4.6	5 0.00	0.000
Medium Trucks: 79.45	-21.80	0.	46	-1.20	-4.8	7 0.00	0.000
Heavy Trucks: 84.25	-25.75	0.	46	-1.20	-5.4	2 0.00	0.000
Unmitigated Noise Levels (with	out Topo and b	arrier atte	nuation)				
VehicleType Leq Peak Ho			ening	Leg N		Ldn	CNEL
		1.6	59.8		53.7	62.4	63.0
		5.7	49.4		47.8	56.3	56.5
		6.7	47.6		48.9	57.2	57.3
Vehicle Noise: 6	5.0 6	3.6	60.4		55.7	64.3	64.7
Centerline Distance to Noise C	ontour (in feet)						
			dBA	65 d		60 dBA	55 dBA
	_	arr.	21	46		98	212
	CN	EL:	23	49	9	105	227

	FH\	WA-RD-77-108	HIGH	1 YAW	NOISE P	REDICT	ION MC	DEL			
Road Nam	io: EAC26 ne: Avenue 58 nt: w/o Jackso	n St.					Name: lumber:		ave-Coral	Mounta	in
SITE S	SPECIFIC IN	IPUT DATA				ı	IOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard =	: 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	4,900 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles).	15		
Peak H	lour Volume:	456 vehicle	S		He	eavy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	50 mph		F	Vehicle	Miv					
Near/Far La	ne Distance:	36 feet		F		icleType	,	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.69	,
Par	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.39	6 1.84%
Barrier Type (0-W		0.0 1661				Heavy T	rucks:	86.5%	2.7%	10.89	6 0.74%
Centerline Dis		59.0 feet		-	M-! 0	5		- /! 6	41		
Centerline Dist.	to Observer:	59.0 feet		F	Noise S			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (	Above Pad):	5.0 feet				m Truck	-	.006	Grade Ad	liustmor	#: 0 0
Pa	ad Elevation:	0.0 feet			Hea	vy Truck	s: 8	.006	Grade Ad	justiner	n. 0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distan	ce (in	feet)		
I	Road Grade:	0.0%				Auto	s: 56	.409			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 56	.252			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 56	.268			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-5.82		-0.8	19	-1.20		-4.69	0.0	000	0.000
Medium Trucks:	81.00	-23.06		-0.8		-1.20		-4.88		000	0.000
Heavy Trucks:	85.38	-27.02		-0.8	37	-1.20		-5.35	0.0	000	0.000
Unmitigated Noise											
VehicleType	Leq Peak Hou			Leq E	vening		Night		Ldn	1 .	CNEL
Autos:	62		60.7		58.9		52.		61.		62.1
Medium Trucks:			54.7		48.3		46.	-	55.	_	55.5
Heavy Trucks: Vehicle Noise:	56 64		55.2 62.6		46.1 59.5		47. 54.		55.i		55.9 63.7
Centerline Distance	-				00.0		04.		00.		00.1
Centernile Distant	e to Moise Co	miour (iii leet	,	70	dBA	65	dBA	т,	60 dBA	5	5 dBA
			Ldn:		21		15	,	98	1	210
		C	NEL:	_	23	4	19		105		226

	FH\	WA-RD-77-108	HIGHV	VAY NO	OISE PI	REDICT	ION MC	DDEL			
Road Nan	rio: EAC26 ne: Avenue 60 ent: w/o Madiso	n St.					Name: lumber:		ave-Coral	Mountain	ı
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard =	= 10, So	oft = 15)		
Average Daily	Traffic (Adt):	1,100 vehicles	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	Hour Volume:	102 vehicle	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	40 mph		V	ehicle l	Miv					
Near/Far La	ne Distance:	23 feet		-		icleType	, 1	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	Ü	9.6%	
Pa	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W		0.0 1661			1	Heavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Di		40.0 feet		_					-1		
Centerline Dist.	to Observer:	40.0 feet		N	ioise Sc	ource El			eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height		5.0 feet				m Truck		.297			
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	justment.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivaleni	Distar	ice (in f	feet)		
	Road Grade:	0.0%				Auto	s: 38	.636			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 38	.406			
	Right View:	90.0 degree	es		Heav	y Truck	s: 38	.429			
FHWA Noise Mod	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	66.51	-11.34		1.58		-1.20		-4.59	0.0	000	0.00
Medium Trucks:	77.72	-28.58		1.62		-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	82.99	-32.53		1.61		-1.20		-5.56	0.0	000	0.00
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Hou	ır Leq Day	′ L	eq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	55	.5	54.0		52.2		46.	.1	54.8	3	55.
Medium Trucks:	49	1.6	48.4		42.0		40.	.5	48.9	9	49.
Heavy Trucks:			49.8		40.7		42.	-	50.3		50.
Vehicle Noise:	57	'.6	56.2		52.9		48.	.3	56.9	9	57.
Centerline Distan	ce to Noise Co	ontour (in feet	)								
				70 di	BA	65	dBA	6	60 dBA	55	dBA
			Ldn:	5			1		25		53
		_	NFI:	6		- 1	2		26		57

	FHV	VA-RD-77-108	HIGHV	VAY N	OISE P	REDICT	ION M	ODEL			
Road Nan	rio: EAC26 ne: Avenue 58 nt: e/o Jacksor	n St.						The W	ave-Coral	Mountair	n
	SPECIFIC IN	PUT DATA			O				L INPUT	s	
Highway Data				3	ite Cor	ditions	(Hara :				
Average Daily		3,300 vehicles	3					Autos:			
	Percentage:	9.30%				edium Tr		,			
	lour Volume:	307 vehicles	3		He	eavy Tru	cks (3+	Axles):	15		
	hicle Speed:	50 mph		ν	ehicle	Mix					
Near/Far La	ne Distance:	36 feet			Veh	icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.42%
Ва	rrier Heiaht:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	59.0 feet			Inisa Si	ource El	lovatio	ne (in f	oot)		
Centerline Dist.	to Observer:	59.0 feet		- F	10/30 0	Auto		0.000	,01)		
Barrier Distance	to Observer:	0.0 feet			Modiu	m Truck		2.297			
Observer Height	(Above Pad):	5.0 feet				vy Truck		3.006	Grade Ad	iustmant	. 0 0
P	ad Elevation:	0.0 feet			пеа	vy Truck	.s. c	5.006	Orado Ad	ustrion	. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distai	nce (in	feet)		
	Road Grade:	0.0%				Auto	is: 56	6.409			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 56	5.252			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 56	5.268			
FHWA Noise Mod	el Calculation:	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	snel	Barrier Att	en Bei	m Atten
Autos:	70.20	-7.54		-0.89	)	-1.20		-4.69	0.0	000	0.000
Medium Trucks:	81.00	-24.78		-0.87	,	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	85.38	-28.73		-0.87	,	-1.20		-5.35	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	ıation)						
VehicleType	Leq Peak Hou	r Leq Day	' 1	Leq Ev	ening	Leq	Night		Ldn	C	NEL
Autos:	60	.6	59.0		57.2		51	.2	59.8	3	60.4
Medium Trucks:	54	.2	53.0		46.6		45	.1	53.5	5	53.7
Heavy Trucks:	54	.6	53.5		44.4		45	.7	54.0	)	54.2
Vehicle Noise:	62	.3	60.8		57.8		53	.0	61.6	3	62.0
Centerline Distan	ce to Noise Co	ntour (in feet)	)								
			1 -	70 d	RA .	65	dRΔ	1	SO dBA	55	dRΔ

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	WAY	NOISE PI	REDICTI	ON M	ODEL			
	io: EAC26								ave-Coral	Mountair	1
	ne: Avenue 60					Job N	umbei	: 12642			
Road Segme	nt: w/o Monroe	e St.									
	SPECIFIC IN	IPUT DATA			04- 0				L INPUT	S	
Highway Data					Site Con	aitions	Hard				
Average Daily	. ,	6,900 vehicles	3					Autos:			
	Percentage:	9.30%				edium Tru		,			
Peak F	lour Volume:	642 vehicles	3		He	eavy Truc	ks (3-	+ Axles):	15		
Ve	hicle Speed:	45 mph		ŀ	Vehicle	Mix					
Near/Far La	ne Distance:	45 feet				icleType		Day	Evening	Night	Daily
Site Data						- /	lutos:	77.5%	12.9%	9.6%	97.42%
Ra	rrier Height:	0.0 feet			М	edium Ti	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy Ti	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	51.0 feet		ŀ	Noise So	nurce Flo	vatio	ns (in fe	oet)		
Centerline Dist.	to Observer:	51.0 feet		ŀ	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Autos		0.000	,,,		
Barrier Distance	to Observer:	0.0 feet			Madiu	m Truck		2.297			
Observer Height	(Above Pad):	5.0 feet				vy Trucks		8.006	Grade Ad	liuetmant	. 0 0
P	ad Elevation:	0.0 feet								gustinon	. 0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalent	Dista	nce (in i	feet)		
	Road Grade:	0.0%				Autos	: 4	6.041			
	Left View:	-90.0 degree	es		Mediu	m Trucks	8: 4	5.848			
	Right View:	90.0 degree	es		Hear	vy Trucks	8: 4	5.867			
HWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance		Road	Fre		Barrier At		m Atten
Autos:	68.46	-3.88		0.4	43	-1.20		-4.65	0.	000	0.000
Medium Trucks:	79.45			0.4		-1.20		-4.87		000	0.000
Heavy Trucks:	84.25	-25.07		0.4	46	-1.20		-5.42	0.	000	0.000
Inmitigated Noise			_								
VehicleType	Leq Peak Hou			Leq E	vening	Leq			Ldn		NEL
Autos:	63		62.2		60.5		-	1.4	63.		63.6
Medium Trucks:			56.4		50.0			3.5	57.	-	57.2
Heavy Trucks:	58	3.4	57.3		48.3		49	9.5	57.	9	58.0
Vehicle Noise:	65	5.7	64.2		61.1		56	6.4	64.	9	65.4
enterline Distant	ce to Noise Co	ontour (in feet,	)								
		-	Т	70	dBA	65 (	1BA	6	60 dBA	55	dBA
			Ldn:		23	5			109		35
		C	VEL:		25	5	4		117	2	52

	FH\	WA-RD-77-108	HIGH	WAY	NOISE P	REDICT	ION MC	DEL			
Road Nam	io: EAC26 le: Avenue 60 nt: e/o Monroe	St.					t Name: lumber:		'ave-Coral	Mounta	in
SITE :	SPECIFIC IN	IPUT DATA				ı	NOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard =	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	5,700 vehicles	s					Autos	15		
Peak Hour	Percentage:	9.30%			Me	edium Ti	ucks (2	Axles)	15		
Peak H	lour Volume:	530 vehicle	s		He	eavy Tru	cks (3+	Axles)	15		
Ve	hicle Speed:	50 mph		-	Vehicle	Miv					
Near/Far La	ne Distance:	48 feet		ł		icleType	9	Dav	Evening	Night	Daily
Site Data							Autos:	77.59		9.69	,
Par	rrier Height:	0.0 feet			M	ledium 7	rucks:	84.89	4.9%	10.39	6 1.84%
Barrier Type (0-W		0.0 1661				Heavy 7	rucks:	86.5%	2.7%	10.89	6 0.74%
Centerline Dis		64.0 feet									
Centerline Dist.	to Observer:	64.0 feet		-	Noise S			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (	Above Pad):	5.0 feet				m Truck		.297	0		4. 0.0
	ad Elevation:	0.0 feet			Hea	vy Truck	s: 8	.006	Grade Ad	justmer	it: 0.0
	ad Elevation:	0.0 feet		İ	Lane Eq	uivalen	t Distar	ce (in	feet)		
	Road Grade:	0.0%		İ		Auto	s: 59	.540			
	Left View:	-90.0 degree	es		Mediu	m Truck	rs: 59	.391			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 59	.406			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-5.17		-1.2	24	-1.20		-4.70	0.0	000	0.000
Medium Trucks:	81.00	-22.40		-1.2	22	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	85.38	-26.36		-1.2	23	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er attei	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn	(	CNEL
Autos:	62	6	61.0		59.2		53.	2	61.	3	62.4
Medium Trucks:	56	i.2	55.0		48.6		47.	1	55.	5	55.8
Heavy Trucks:	56		55.5		46.5		47.		56.		56.2
Vehicle Noise:	64	.3	62.9		59.8		55.	0	63.	3	64.0
Centerline Distance	e to Noise Co	ontour (in feet	)								
				70	dBA	65	dBA		60 dBA	55	5 dBA
			Ldn:	:	24		51		111		239
		C	NEL:		26		55		119		257

Scenario: EACP26 Project Name: The Wave-Coral Mo Road Name: Jefferson St. Road Segment: n/o Avenue 52  SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS Highway Data  Ste Conditions (Hard = 10, Soft = 15)	ountain						
Highway Data Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt): 26,500 vehicles Autos: 15							
Peak Hour Percentage: 9.30% Medium Trucks (2 Axles): 15							
Peak Hour Volume: 2,465 vehicles Heavy Trucks (3+ Axles): 15							
Vehicle Speed: 55 mph Vehicle Mix							
Near/Far Lane Distance: 71 feet VehicleType Day Evening N	light Daily						
Site Data Autos: 77.5% 12.9%	9.6% 97.42%						
Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 1	10.3% 1.84%						
	10.8% 0.74%						
Centerline Dist. to Barrier: 64.0 feet Noise Source Elevations (in feet)							
Centerline Dist. to Observer: 64.0 feet Autos: 0.000							
Barrier Distance to Observer: 0.0 feet Medium Trucks: 2.297							
Observer Height (Above Pad): 5.0 feet Heavy Trucks: 8.006 Grade Adjus	stment: 0.0						
Pad Elevation: 0.0 feet							
Road Elevation: 0.0 feet Lane Equivalent Distance (in feet)							
Road Grade: 0.0% Autos: 53.486							
Left View: -90.0 degrees Medium Trucks: 53.320							
Right View: 90.0 degrees Heavy Trucks: 53.337							
FHWA Noise Model Calculations							
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten							
Autos: 71.78 1.09 -0.54 -1.20 -4.70 0.000							
Medium Trucks: 82.40 -16.14 -0.52 -1.20 -4.88 0.000							
Heavy Trucks: 86.40 -20.10 -0.52 -1.20 -5.31 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 69.5 67.8 61.7 70.4	71.0						
Medium Trucks: 64.5 63.3 57.0 55.4 63.9	64.1						
Heavy Trucks:         64.6         63.5         54.4         55.7         64.0           Vehicle Noise:         72.7         71.3         68.3         63.4         72.0	64.2 72.5						
Centerline Distance to Noise Contour (in feet)	12.0						
. ,	55 dBA						
70 dBA 65 dBA 60 dBA							
70 dBA   65 dBA   60 dBA   Ldn: 87 187 403	869						

		WA-RD-77-108								
	: EACP26							ave-Coral N	/lountair	1
	: Jefferson S				Job	Numbe	: 12642			
Road Segment	: n/o Avenue	: 50								
	PECIFIC IN	IPUT DATA						L INPUTS	;	
Highway Data				S	ite Condition	s (Hard	= 10, Se	oft = 15)		
Average Daily Ti	raffic (Adt):	37,000 vehicle	s				Autos.	15		
Peak Hour P	ercentage:	9.30%			Medium	Trucks (2	2 Axles).	15		
Peak Ho	ur Volume:	3,441 vehicle	s		Heavy T	rucks (3-	+ Axles).	15		
	icle Speed:	55 mph		V	ehicle Mix					
Near/Far Lane	Distance:	71 feet	-	VehicleTy	pe	Dav	Evening	Night	Dailv	
Site Data						Autos:	77.5%		9.6%	97.429
Rarr	ier Heiaht:	0.0 feet			Medium	Trucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-Wa	II, 1-Berm):	0.0			Heavy	Trucks:	86.5%	2.7%	10.8%	0.749
Centerline Dist.		64.0 feet		N	loise Source	Elevatio	ns (in f	eet)		
Centerline Dist. to		64.0 feet			Au	tos:	0.000			
Barrier Distance to		0.0 feet			Medium Tru	cks:	2.297			
Observer Height (A	,	5.0 feet			Heavy Tru	cks:	8.006	Grade Adju	ustment.	0.0
	l Elevation:	0.0 feet		-						
	l Elevation:	0.0 feet		Li	ane Equivale			reet)		
Re	oad Grade:	0.0%					3.486 3.320			
	Left View:	-90.0 degre			Medium Tru					
,	Right View:	90.0 degre	es		Heavy Tru	CKS: 5	3.337			
FHWA Noise Model										
VehicleType	REMEL	Traffic Flow	Distan		Finite Road		snel	Barrier Atte	_	m Atten
				-0.54	-1.2		-4.70	0.0		0.00
Autos:	71.78					-			nn	
Autos: Medium Trucks:	82.40	-14.69		-0.52	-1.2	0	-4.88	0.0		
Autos: Medium Trucks: Heavy Trucks:	82.40 86.40	-14.69 -18.65		-0.52 -0.52	-1.2 -1.2	0		0.0		
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise I	82.40 86.40 <b>Levels (with</b>	-14.69 -18.65 <b>out Topo and</b>	barrier a	-0.52 -0.52 ttenu	-1.2 -1.2	0	-4.88	0.0	00	0.00
Autos:  Medium Trucks:  Heavy Trucks:  Unmitigated Noise I  VehicleType L	82.40 86.40 Levels (with eq Peak Hou	-14.69 -18.65 <b>out Topo and</b> Ir Leq Day	<b>barrier a</b>	-0.52 -0.52 ttenu	-1.2 -1.2 ration)	0 0 oq Night	-4.88 -5.31	0.0	00	0.00 VEL
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise I VehicleType L Autos:	82.40 86.40 Levels (with eq Peak Hou	-14.69 -18.65 <b>out Topo and</b> Ir Leq Day	barrier a / Le	-0.52 -0.52 ttenu	-1.2 -1.2 <b>ration)</b> ening Le	o 0 10 10 10 10 10 10 10 10 10 10 10 10 1	-4.88 -5.31	0.00 Ldn 71.8	00	0.00 VEL 72.
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise I VehicleType L Autos: Medium Trucks:	82.40 86.40 <b>Levels (with</b> eq Peak Hou 72	-14.69 -18.65 <b>out Topo and</b> <i>ur</i>   Leq Day	barrier a / Le 71.0 64.8	-0.52 -0.52 ttenu	-1.2 -1.2 lation) ening Le 69.2 58.4	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-4.88 -5.31 3.2 3.9	0.00 Ldn 71.8 65.3	00	0.00 VEL 72. 65.
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise I VehicleType L Autos: Medium Trucks: Heavy Trucks:	82.40 86.40 <b>Levels (with</b> eq Peak Hou 72 66	-14.69 -18.65 <b>out Topo and</b> <i>Ir</i>   Leq Daj 2.6 6.0	barrier a / Le 71.0 64.8 64.9	-0.52 -0.52 ttenu	-1.2 -1.2 <b>ration)</b> ening Le 69.2 58.4 55.9	o Night 65	-4.88 -5.31 3.2 3.9 7.1	0.00 Ldn 71.8 65.3 65.5	CI	0.00 VEL 72. 65. 65.
Autos: Medium Trucks: Heavy Trucks: Heavy Trucks: VehicleType L Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	82.40 86.40 Levels (with eq Peak Hou 72 66 66	-14.69 -18.65 out Topo and ir Leq Day 2.6 5.0 5.0	barrier a 71.0 64.8 64.9 72.7	-0.52 -0.52 ttenu	-1.2 -1.2 lation) ening Le 69.2 58.4	o Night 65	-4.88 -5.31 3.2 3.9	0.00 Ldn 71.8 65.3	CI	0.00 VEL 72. 65.
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise I VehicleType L Autos: Medium Trucks: Heavy Trucks:	82.40 86.40 Levels (with eq Peak Hou 72 66 66	-14.69 -18.65 out Topo and ir Leq Day 2.6 5.0 5.0	barrier a 71.0 64.8 64.9 72.7	-0.52 -0.52 ttenu	-1.2 -1.2 -1.2 lation) ening	o Night 65	-4.88 -5.31 3.2 3.9 7.1	0.00 Ldn 71.8 65.3 65.5	CI	0.00 VEL 72. 65. 65.
Autos: Medium Trucks: Heavy Trucks: Heavy Trucks: VehicleType L Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	82.40 86.40 Levels (with eq Peak Hou 72 66 66	-14.69 -18.65 out Topo and ir Leq Day 2.6 5.0 5.0	barrier a 71.0 64.8 64.9 72.7	-0.52 -0.52 <b>ttenu</b> eq Eve	-1.2 -1.2 -1.2 lation) ening	9 Night 65 56	-4.88 -5.31 3.2 3.9 7.1	0.00 Ldn 71.8 65.3 65.5 73.4	CI 555	0.00 VEL 72. 65. 65. 73.

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 H	IGHWAY	NOISE PI	REDICTIO	N MODEL						
	o: EACP26 e: Jefferson S t: n/o Avenue					lame: The V mber: 12642	Vave-Coral Mo	ountain				
SITE S	PECIFIC IN	IPUT DATA			NO	DISE MODI	EL INPUTS					
Highway Data				Site Con	ditions (l	lard = 10, S	oft = 15)					
Average Daily	raffic (Adt): 2	22,500 vehicles		Autos: 15								
Peak Hour I	Percentage:	9.30%		Me	edium Truc	cks (2 Axles)	: 15					
Peak He	our Volume:	2,093 vehicles		He	eavy Truck	is (3+ Axles,	: 15					
Vel	icle Speed:	55 mph	ł	Vehicle	Mix							
Near/Far Lar	e Distance:	71 feet			icleType	Dav	Evening N	light Daily				
Site Data						itos: 77.5		9.6% 97.42%				
Rar	rier Heiaht:	0.0 feet		М	edium Tru	icks: 84.8°	% 4.9% ·	10.3% 1.84%				
Barrier Type (0-Wa		0.0		Heavy Trucks: 86.5% 2.7% 10.8% 0.74%								
Centerline Dis		64.0 feet		Noise Source Elevations (in feet)								
Centerline Dist. t	o Observer:	64.0 feet	ł	Autos: 0.000								
Barrier Distance t	o Observer:	0.0 feet		Mediu	m Trucks:							
Observer Height (/	Above Pad):	5.0 feet			vy Trucks:		Grade Adjus	tment: 0.0				
	d Elevation:	0.0 feet			•							
	d Elevation:	0.0 feet		Lane Eq		Distance (in	feet)					
F	Road Grade:	0.0%			Autos:	00.100						
	Left View:	-90.0 degrees			m Trucks:	00.020						
	Right View:	90.0 degrees		Hea	vy Trucks.	53.337						
FHWA Noise Mode	l Calculation:	s	ı									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten				
Autos:	71.78	0.38	-0.		-1.20	-4.70						
Medium Trucks:	82.40	-16.85	-0.4		-1.20	-4.88						
Heavy Trucks:	86.40	-20.81	-0.	52	-1.20	-5.31	0.000	0.000				
<b>Unmitigated Noise</b>	Levels (with	out Topo and ba	rrier atte	nuation)								
	Leq Peak Hou			vening	Leq N		Ldn	CNEL				
Autos:	70			67.1		61.0	69.6	70.2				
Medium Trucks:	63			56.3		54.7	63.2	63.4				
Heavy Trucks:	63			53.7		55.0	63.3	63.5				
Vehicle Noise:	72		0.6	67.6		62.7	71.3	71.8				
Centerline Distanc	e to Noise Co	ontour (in feet)										
			1	dBA	65 d		60 dBA	55 dBA				
	Ldn:				10 100 002 1			779				
	CNEL:					84 181 389 83						

	FH	WA-RD-77-108	HIGH	IWAY	NOISE P	REDICTI	ON MO	DEL			
Road Nam	io: EACP26 ne: Madison S nt: n/o Avenue					.,	Name: ' umber:		ave-Coral	Mountai	n
SITE	SPECIFIC II	NPUT DATA				N	OISE N	/ODE	L INPUT	S	
Highway Data					Site Cor	ditions (	Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	11,300 vehicle	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	icks (2 A	(xles	15		
Peak H	lour Volume:	1,051 vehicle	S		He	eavy Truc	ks (3+ A	(xles	15		
Ve	hicle Speed:	50 mph		-	Vehicle	Miss					
Near/Far La	ne Distance:	51 feet				icleTvpe		Dav	Evenina	Niaht	Dailv
Site Data					*01.	//		77.5%		9.6%	. ,
	rrier Height:	0.0 feet			M	ledium Tr	ucks:	84.8%		10.3%	
Barrier Type (0-W		0.0 leet				Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		54.0 feet									
Centerline Dist.		54.0 feet			Noise S			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Autos		000			
Observer Height		5.0 feet				m Trucks		297			
	ad Elevation:	0.0 feet			Hea	vy Trucks	8.0	006	Grade Ad	ustmen	t: 0.0
Ro	ad Elevation:	0.0 feet		İ	Lane Eq	uivalent	Distanc	e (in i	feet)		
	Road Grade:	0.0%		ĺ		Autos	: 47.	862			
	Left View:	-90.0 degree	es		Mediu	m Trucks	: 47.	677			
	Right View:	90.0 degree	es		Hea	vy Trucks	: 47.	695			
FHWA Noise Mode	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresn	el	Barrier Att	en Be	rm Atten
Autos:	70.20	-2.19		0.1	18	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-19.43		0.2	21	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-23.39		0.2	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	er attei	nuation)						
VehicleType	Leq Peak Ho	ur Leq Day	′	Leq E	vening	Leq	Vight		Ldn	С	NEL
Autos:	67	7.0	65.4		63.6		57.6	i	66.2	2	66.8
Medium Trucks:	60	0.6	59.4		53.0		51.5	,	59.9	9	60.2
Heavy Trucks:		1.0	59.9		50.9		52.1		60.5		60.6
Vehicle Noise:	6	3.7	67.3		64.2		59.4		68.0	)	68.4
Centerline Distant	ce to Noise C	ontour (in feet	)								
				70	dBA	65 (	IBA	6	60 dBA	55	dBA
			Ldn:	4	40	8	5		184	;	396
		C	NEL:	4	43	9	2		197	4	425

	FH\	WA-RD-77-108	HIGHV	VAY N	OISE PI	REDICT	ION MC	DDEL				
Road Nan	rio: EACP26 ne: Madison St ent: n/o Avenue	-					Name: lumber:		ave-Coral	Mountain	ı	
	SPECIFIC IN	IPUT DATA							L INPUT	S		
Highway Data				S	ite Con	ditions	(Hard =	= 10, So	ft = 15)			
Average Daily	Traffic (Adt):	11,700 vehicle	S					Autos:	15			
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15			
Peak H	Hour Volume:	1,088 vehicle	S		He	avy Tru	cks (3+	Axles):	15			
Ve	ehicle Speed:	50 mph		1/	ehicle i	Miv						
Near/Far La	ne Distance:	51 feet		V		icleType	,	Dav	Evening	Night	Daily	
Site Data							Autos:	77.5%	-	9.6%		
Pa	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%		10.3%	1.849	
Barrier Type (0-W		0.0 1661				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749	
Centerline Di		54.0 feet			·- ·- · · ·			/! #-	-41			
Centerline Dist.	to Observer:	54.0 feet		N	ioise Sc	ource El			et)			
Barrier Distance	to Observer:	0.0 feet				Auto		.000				
Observer Height	Observer Height (Above Pad): 5.0 feet					m Truck		.297	0			
	ad Elevation:	0.0 feet			Hear	y Truck	s: 8	.006	Grade Ad	ustment.	0.0	
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	Distan	ice (in f	eet)			
	Road Grade:	0.0%			Autos: 47.862							
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677				
	Right View:	90.0 degree	es		Hear	y Truck	s: 47	.695				
FHWA Noise Mod	el Calculation	S										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	70.20	-2.04		0.18		-1.20		-4.67	0.0	000	0.00	
Medium Trucks:	81.00	-19.28		0.21		-1.20		-4.87	0.0	000	0.00	
Heavy Trucks:	85.38	-23.24		0.20		-1.20		-5.39	0.0	000	0.00	
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	ation)							
VehicleType	Leq Peak Hou	-, -,		Leq Ev	ening	Leq	Night		Ldn		VEL	
Autos:			65.6		63.8		57.	.7	66.4		67.	
Medium Trucks:			59.5		53.2		51.	-	60.1		60.	
Heavy Trucks:			60.0		51.0		52.	-	60.6		60.	
Vehicle Noise:			67.4		64.4		59.	.6	68.1	l	68.	
Centerline Distan	ce to Noise Co	ontour (in feet	)									
				70 di			dBA	6	i0 dBA		dBA	
			Ldn:	41		-	37		188		05	
		C	NEL:	44		5	94		202	4	35	

	FHW	/A-RD-77-108	HIGH	WAY N	DISE PRED	CTION MOI	DEL				
Scenario: E/ Road Name: M: Road Segment: n/	adison St.	52				ject Name: <sup>-</sup> b Number: <sup>-</sup>		e-Coral Moi	untain		
SITE SPE	CIFIC IN	PUT DATA				NOISE N	ODEL I	INPUTS			
Highway Data				S	ite Conditio	ns (Hard =	10, Soft	= 15)			
Average Daily Traffi Peak Hour Perc Peak Hour V Vehicle	entage: /olume:	4,000 vehicle 9.30% 1,302 vehicle 50 mph			Heavy	Trucks (2 A Trucks (3+ A	,	15 15 15			
Near/Far Lane Di		51 feet		V	ehicle Mix						
Site Data	starioc.	01 1001			Vehicle1		Day E 77.5%	-	ght Daily 9.6% 97.42%		
Barrier	Hoiaht:	0.0 feet			Mediu	n Trucks:	84.8%	4.9% 1	0.3% 1.84%		
Barrier Type (0-Wall, 1		0.0			Heav	y Trucks:	86.5%	2.7% 1	0.8% 0.74%		
Centerline Dist. to	,	54.0 feet		N	oise Sourc	Elevations	s (in feet	)			
Centerline Dist. to Observer: 54,0 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: 8.006 Grade Adjustment: 0.0  Lane Equivalent Distance (in feet) Autos: 47.862 Medium Trucks: 47.677 Heavy Trucks: 47.695						
FHWA Noise Model Car	lculations	;									
	EMEL	Traffic Flow	Dist	ance	Finite Roa	d Fresn	el Ba	rrier Atten	Berm Atten		
Autos:	70.20	-1.26		0.18	-1.	20	-4.67	0.000	0.00		
Medium Trucks:	81.00	-18.50		0.21	-1.	20	-4.87	0.000	0.00		
Heavy Trucks:	85.38	-22.46		0.20	-1.	20	-5.39	0.000	0.00		
Unmitigated Noise Lev											
	Peak Houi			Leq Eve	-	.eq Night		dn	CNEL		
Autos:	67.	-	66.3		64.6	58.5		67.1	67.		
Medium Trucks:	61.	-	60.3		54.0	52.4		60.9	61.		
Heavy Trucks:	61.	•	60.8		51.8	53.0		61.4	61.		
Vehicle Noise:	69.		68.2		65.1	60.4		68.9	69.		
Centerline Distance to	Noise Co	ntour (in feet	)	70 di	ВА	65 dBA	60 (	dBA	55 dBA		
			Ldn:	46		98	21	12	457		
		C	NEL:	49		106	22	28	490		

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 H	IIGHWAY	AY NOISE PREDICTION MODEL							
	EACP26 : Madison St t: n/o Airport I					lame: The \ mber: 1264:	Wave-Coral Mo 2	ountain			
SITE S	PECIFIC IN	PUT DATA			NC	DISE MOD	EL INPUTS				
Highway Data				Site Cor	nditions (F	lard = 10, S	Soft = 15)				
Average Daily T	raffic (Adt): 2	20,700 vehicles		Autos: 15							
Peak Hour F	Percentage:	9.30%		Me	edium Truc	cks (2 Axles	): 15				
Peak Ho	ur Volume:	1,925 vehicles		He	eavy Truck	s (3+ Axles	): 15				
Veh	icle Speed:	50 mph		Vehicle	Miv						
Near/Far Lan	e Distance:	51 feet			icleType	Day	Evening I	light Daily			
Site Data				V C/		Itos: 77.5	-	9.6% 97.42%			
	ier Heiaht:	0.0 feet		M	ledium Tru			10.3% 1.84%			
Barrier Type (0-Wa		0.0 feet		Heavy Trucks: 86.5% 2.7% 10.8% 0.74%							
Centerline Dis		54.0 feet									
Centerline Dist. to		54.0 feet		Noise Source Elevations (in feet)							
Barrier Distance to		0.0 feet		Autos: 0.000							
Observer Height (A		5.0 feet			m Trucks:						
	d Elevation:	0.0 feet		Hea	vy Trucks:	8.006	Grade Adjus	stment: 0.0			
Road	d Elevation:	0.0 feet		Lane Eq	uivalent E	Distance (in	feet)				
R	oad Grade:	0.0%			Autos:	47.862					
	Left View:	-90.0 degrees		Mediu	m Trucks:	47.677					
	Right View:	90.0 degrees		Hea	vy Trucks:	47.695					
FHWA Noise Model	Calculations	s									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atter	Berm Atten			
Autos:	70.20	0.44	0.	18	-1.20	-4.67	7 0.00	0.000			
Medium Trucks:	81.00	-16.80	0.	21	-1.20	-4.87	7 0.00	0.000			
Heavy Trucks:	85.38	-20.76	0.	20	-1.20	-5.39	9 0.00	0.000			
Unmitigated Noise	Levels (with	out Topo and b	arrier atte	nuation)							
VehicleType [	.eq Peak Hou	r Leq Day	Leq	Evening	Leq N	ight	Ldn	CNEL			
Autos:	69	.6 6	8.0	66.3		60.2	68.8	69.4			
Medium Trucks:	63	.2 6	2.0	55.7		54.1	62.6	62.8			
Heavy Trucks:	63	.6 6	2.5	53.5		54.7	63.1	63.2			
Vehicle Noise:	71	.3 6	9.9	66.8		62.1	70.6	71.1			
Centerline Distance	e to Noise Co	ntour (in feet)									
			1 -	dBA	65 dl		60 dBA	55 dBA			
	Ldn:							593			
	CNEL:					64 137 295 637					

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGH	WAY N	IOISE PR	EDICTI	ON MO	DDEL			
	o: EACP26 e: Madison S t: n/o Avenue							The W 12642	ave-Coral	Mounta	in
SITE S	PECIFIC IN	IPUT DATA				N	OISE	MODE	L INPUT	s	
Highway Data					Site Cond	ditions (	Hard :	= 10, So	ft = 15)		
Average Daily	raffic (Adt):	17,400 vehicle	S					Autos:	15		
Peak Hour I	Percentage:	9.30%			Med	dium Tru	icks (2	Axles):	15		
Peak Ho	our Volume:	1,618 vehicle	s		Hea	avy Truc	ks (3+	Axles):	15		
Vel	nicle Speed:	50 mph		-	Vehicle N	lix					
Near/Far Lar	ne Distance:	51 feet		F		cleType		Day	Evening	Night	Daily
Site Data							lutos:	77.5%		9.69	
Rar	rier Height:	0.0 feet			Me	dium Tr	ucks:	84.8%	4.9%	10.39	6 1.84%
Barrier Type (0-Wa	all, 1-Berm):	0.0			H	leavy Tr	ucks:	86.5%	2.7%	10.89	6 0.74%
Centerline Dis		54.0 feet		7	Noise So	urce Ele	evatio	ns (in fe	et)		
Centerline Dist. t		54.0 feet				Autos	s: C	.000			
Barrier Distance t		0.0 feet			Mediun	n Trucks	s: 2	.297			
	Observer Height (Above Pad): 5.0 feet					y Trucks	s: 8	.006	Grade Ad	justmer	nt: 0.0
	d Elevation:	0.0 feet		H			D				
	d Elevation:	0.0 feet		Ľ	Lane Equ				eet)		
F	Road Grade:	0.0%				Autos		7.862 7.677			
	Left View:	-90.0 degre				n Trucks		.695			
	Right View:	90.0 degre	es		Heav	y Trucks	5: 41	.695			
FHWA Noise Mode		-									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite I		Fres		Barrier Att		rm Atten
Autos:	70.20			0.1	-	-1.20		-4.67		000	0.000
Medium Trucks:	81.00			0.2		-1.20		-4.87		000	0.000
Heavy Trucks:	85.38			0.2	-	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise							Made		Late		N/E/
VehicleType Autos:	Leq Peak Ho	ur Leq Day 3.9	67.3	Leq E	vening 65.5	Leq I	vignt 59	_	Ldn 68.1	1	68.7
Medium Trucks:		2.5	61.3		54.9		53		61.8		62.0
Heavy Trucks:		2.5	61.8		52.7		54		62.3	-	62.5
Vehicle Noise:	-	0.6	69.1		66.1		61		69.9		70.3
Centerline Distance	e to Noise C	ontour (in feet	)								
				70 0	dBA	65 (	dBA	6	0 dBA	55	5 dBA
			Ldn:	5	3	11	14	,	245	1	528
		С	NEL:	5	7	12	22		263		567

	FHW	/A-RD-77-108	HIGHV	VAY NO	DISE PI	REDICT	ION MC	DDEL					
Road Nam	io: EACP26 ne: Monroe St. nt: n/o Avenue	50					Name: umber:		ave-Coral	Mountair	1		
SITE	SPECIFIC IN	PUT DATA				N	IOISE	MODE	L INPUT	S			
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt): 1	4,300 vehicles	3					Autos:	15				
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15				
Peak H	lour Volume:	1,330 vehicles	S		He	avy Truc	cks (3+	Axles):	15				
Ve	hicle Speed:	50 mph		V	ehicle i	Miv							
Near/Far La	ne Distance:	43 feet				icleType		Day	Evening	Night	Daily		
Site Data	Site Data						Autos:	77.5%	12.9%	9.6%	97.429		
Ra	rrier Heiaht:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.849		
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749		
Centerline Di	. ,	64.0 feet						/! #-	41				
Centerline Dist.	to Observer:	64.0 feet		N	oise so	ource El			et)				
Barrier Distance	to Observer:	0.0 feet				Auto		.000					
Observer Height (	(Above Pad):	5.0 feet				m Truck		.297	0				
	ad Elevation:	0.0 feet			Hea	y Truck	s: 8	.006	Grade Ad	ustment	0.0		
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distan	ice (in i	feet)				
	Road Grade:	0.0%			Autos: 60.488								
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 60	.341					
	Right View:	90.0 degree	es		Hear	y Truck	s: 60	.355					
FHWA Noise Mode	el Calculations	}											
VehicleType	REMEL	Traffic Flow	Dista	ance		Road	Fres		Barrier Att	en Ber	m Atten		
Autos:	70.20	-1.17		-1.34		-1.20		-4.70	0.0	000	0.00		
Medium Trucks:	81.00	-18.41		-1.33		-1.20		-4.88	0.0	000	0.00		
Heavy Trucks:	85.38	-22.36		-1.33		-1.20		-5.31	0.0	000	0.00		
Unmitigated Noise	e Levels (witho	out Topo and	barrier	attenu	ation)								
VehicleType	Leq Peak Hou			Leq Eve		Leq	Night		Ldn		VEL		
Autos:	66.	-	64.9		63.1		57.		65.7		66.		
Medium Trucks:	60.	-	58.9		52.5		51.	-	59.4		59.		
Heavy Trucks: Vehicle Noise:	60.		59.4 66.8		50.3 63.7		51. 58		59.9 67.5		60. 67.		
					63.7		58.	.9	67.5	)	67.		
Centerline Distanc	ce to Noise Co	ntour (in feet,	)	70 dl	DΛ	65	dBA	-	60 dBA	FE	dBA		
			I dn:	70 at			ава 14	1 0	201		ава 34		
			Lan: NFI:	43 47			00		216		34 66		
		C	VEL.	47		10	UU		210	4	UU		

	FHWA-RD-	77-108 HIGH	WAY N	DISE PREDIC	TION MODEL					
Scenario: EACI Road Name: Madi Road Segment: n/o A	son St.				et Name: The V Number: 12642	Vave-Coral Mou	untain			
SITE SPECIF	IC INPUT D	ATA			NOISE MODI					
Highway Data			S	ite Conditions	(Hard = 10, S	oft = 15)				
Average Daily Traffic (/ Peak Hour Percent Peak Hour Volu	age: 9.30% me: 707 v	rehicles			Autos rucks (2 Axles) ucks (3+ Axles)	: 15				
Vehicle Sp			ν	ehicle Mix						
Near/Far Lane Dista	nce: 45 f	eet		VehicleTyp	e Day	Evening Ni	ght Daily			
Site Data					Autos: 77.59	% 12.9% 9	9.6% 97.42%			
Barrier Hei	aht. 0.0	feet		Medium Trucks: 84.8% 4.9% 10.3% 1.84						
Barrier Type (0-Wall, 1-Be	g			Heavy	Trucks: 86.59	% 2.7% 10	0.74%			
Centerline Dist. to Bar	rier: 51.0	feet		loise Source F	levations (in f	feet)				
Centerline Dist. to Obse. Barrier Distance to Obse. Observer Height (Above F. Pad Eleva Road Eleva Road Gr Left V. Right V. FHWA Noise Model Calcu VehicleType REM	ver: 0.0 Pad): 5.0 tion: 0.0 tion: 0.0 ade: 0.0 Tiew: -90.0 Tiew: 90.0	feet feet feet feet % degrees degrees	L	Aut Medium Truc Heavy Truc ane Equivaler Aut Medium Truc Heavy Truc Finite Road	ks: 2.297 ks: 8.006 at Distance (in os: 46.041 ks: 45.848	Grade Adjustifeet)  Barrier Atten	ment: 0.0  Berm Atten			
Autos:	68.46	-3.46	0.43	-1.20	-4.65	0.000	0.000			
Medium Trucks:	79.45	-20.70	0.46	-1.20	-4.87	0.000	0.000			
Heavy Trucks:	84.25	-24.65	0.46	-1.20	-5.42	0.000	0.000			
Unmitigated Noise Levels	(without Top	o and barrie	er attenu	ation)						
		eq Day	Leg Ev		Night	Ldn	CNEL			
Autos:	64.2	62.7		60.9	54.8	63.5	64.			
Medium Trucks:	58.0	56.8		50.5	48.9	57.4	57.6			
Heavy Trucks:	58.9	57.8		48.7	50.0	58.3	58.4			
Vehicle Noise:	66.1	64.7		61.5	56.8	65.4	65.8			
Centerline Distance to No	ise Contour (i	in feet)								
	,	Ldn: CNEL:	70 di 25 27	,	5 dBA 54 58	60 dBA 116 125	55 dBA 250 269			

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	FH\	WA-RD-77-108	HIGHV	VAY N	OISE PI	REDICT	ION MODEL					
	p: EACP26 e: Monroe St. t: n/o Avenue						t Name: The I Number: 1264		Mountain			
	PECIFIC IN	IPUT DATA					NOISE MOD		•			
Highway Data				S	ite Con	ditions	(Hard = 10, 3	Soft = 15)				
	Percentage: our Volume:	9.30% 1,283 vehicles					Auto rucks (2 Axles rcks (3+ Axles	:): 15				
	icle Speed:	50 mph		ν	ehicle l	VIIX						
Near/Far Lar	e Distance:	43 feet			VehicleType Day Evening Night Daily							
Site Data					Autos: 77.5% 12.9% 9.6% 97.42%							
Ban	rier Heiaht:	0.0 feet			Medium Trucks: 84.8% 4.9% 10.3% 1.849							
Barrier Type (0-Wa		0.0			-	Heavy 7	rucks: 86.5	% 2.7%	10.8% 0.74%			
Centerline Dis	t. to Barrier:	64.0 feet		۸	loise So	urce E	levations (in	feet)				
Centerline Dist. to Observer: 64.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.006 Grade Adjustment: 0.0							
Roa	d Elevation:	0.0 feet		L	ane Eq		t Distance (ii	ı feet)				
F	Road Grade:	0.0%				Auto	- 00.100					
	Left View: Right View:	-90.0 degree			Medium Trucks: 60.341 Heavy Trucks: 60.355							
FHWA Noise Mode	l Calculation	s										
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresnel	Barrier Atte	n Berm Atten			
Autos:	70.20	-1.32		-1.34		-1.20	-4.7	0.0	0.000			
Medium Trucks:	81.00	-18.56		-1.33		-1.20	-4.8	8 0.0	0.000			
Heavy Trucks:	85.38	-22.52		-1.33		-1.20	-5.3	1 0.0	0.000			
Unmitigated Noise	Levels (with	out Topo and	barrier	attenu	ıation)							
VehicleType	Leq Peak Hou			Leq Ev	ening	Leq	Night	Ldn	CNEL			
Autos:	66		64.8		63.0		56.9	65.6				
Medium Trucks:	59		58.7		52.4		50.8	59.3				
Heavy Trucks:			59.2		50.2		51.4	59.8				
Vehicle Noise:	68	3.0	66.6		63.6		58.8	67.3	67.8			
Centerline Distance	e to Noise Co	ontour (in feet)	)									
				70 d			dBA	60 dBA	55 dBA			
	Ldn:							424				
	CNEL:					46 98 211 45						

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	FH\	WA-RD-77-108	HIGH	WAY I	NOISE P	REDICT	ION MC	DEL			
Road Nam	io: EACP26 ne: Monroe St. nt: n/o Avenue	54					Name: lumber:		ave-Coral	Mountai	n
SITE	SPECIFIC IN	IPUT DATA				ı	IOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard =	: 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	13,600 vehicle	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles).	15		
Peak H	lour Volume:	1,265 vehicle	3		He	eavy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	50 mph		ŀ	Vehicle	Miv					
Near/Far La	ne Distance:	51 feet		H		icleType	9	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
Ra	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0 1661				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		54.0 feet		-	Noise S	ouroo E	lovestion	o (in f	0041		
Centerline Dist.	to Observer:	54.0 feet		ŀ	Noise 3			•	eet)		
Barrier Distance	to Observer:	0.0 feet			14-45	Auto m Truck		.000			
Observer Height (	Above Pad):	5.0 feet					-	.006	Grade Ad	iustmon	t: 0.0
Pa	ad Elevation:	0.0 feet			Hea	vy Truck	S: 8	.000	Grade Au	justin <del>e</del> n	1. 0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 47	.695			
FHWA Noise Mode	el Calculation	s		-							
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-1.39		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-18.63		0.2	21	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-22.58		0.2	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	r atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	′	Leq E	vening	Leq	Night		Ldn	1 .	NEL
Autos:	67	.8	66.2		64.4		58.	4	67.0	)	67.6
Medium Trucks:	61		60.2		53.8		52.	-	60.7		61.0
Heavy Trucks:	61		60.7		51.7		52.		61.3		61.4
Vehicle Noise:	69	1.5	68.1		65.0		60.	2	68.8	3	69.2
Centerline Distance	e to Noise Co	ontour (in feet	)								
			Г		dBA		dBA	1	60 dBA	55	5 dBA
			Ldn:		15		96		208		148
		C	NEL:	4	18	1	04		223	4	481

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	FHV	VA-RD-77-108	HIGH	WAY N	IOISE PI	REDICTI	ON MC	DEL			
	o: EACP26								ave-Coral	Mountai	n
	e: Monroe St.					Job Ni	umber:	12642			
Road Segmer	nt: n/o Avenue	58									
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data					Site Con	ditions (	Hard =	: 10, So	ft = 15)		
Average Daily	Traffic (Adt):	13,100 vehicle	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	icks (2	Axles):	15		
Peak H	our Volume:	1,218 vehicle	3		He	avy Truc	ks (3+	Axles):	15		
Vei	hicle Speed:	50 mph		-	Vehicle I	Miv					
Near/Far Lai	ne Distance:	51 feet		H		icleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	97.429
Rai	rier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	st. to Barrier:	54.0 feet		-	Naisa Si	ource Ele	vation	e (in fa	of)		
Centerline Dist.	to Observer:	54.0 feet		ŕ	10/30 00	Autos		.000	ici)		
Barrier Distance	to Observer:	0.0 feet			Modiu	m Trucks		297			
Observer Height (	Above Pad):	5.0 feet				vy Trucks		.006	Grade Ad	iuetmani	. 0 0
Pa	ad Elevation:	0.0 feet		L	i icai	ry Trucks	. 0	.000	Orace Au	ustricii	. 0.0
Roa	ad Elevation:	0.0 feet		I	Lane Eq	uivalent	Distan	ce (in f	eet)		
F	Road Grade:	0.0%				Autos	: 47	.862			
	Left View:	-90.0 degree	es			m Trucks		.677			
	Right View:	90.0 degree	es		Hear	y Trucks	: 47	.695			
FHWA Noise Mode	el Calculation:	s									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fres		Barrier Att	en Bei	rm Atten
Autos:	70.20	-1.55		0.1	8	-1.20		-4.67	0.0	000	0.00
Medium Trucks:	81.00	-18.79		0.2	1	-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	85.38	-22.75		0.2	0	-1.20		-5.39	0.0	000	0.00
Unmitigated Noise			_							_	
	Leq Peak Hou	.,.,		Leq E		Leq I			Ldn		NEL
Autos:	67		66.1		64.3		58.	_	66.9		67.
Medium Trucks:	61		60.0		53.7		52.		60.6		60.
Heavy Trucks: Vehicle Noise:	61		60.5 67.9		51.5 64.9		52.	_	61.1 68.6		61.
					04.9		60.	1	08.6	)	ъ9.
Centerline Distanc	e to Noise Co	ontour (in feet	,	70.	1BA	65.0	HRΔ	6	i0 dBA	55	dBA
			I dn:	4		9,		1	203	1	137
			NFI:	4		10			218		169
		C	VLL.	4	,	10			210	-	103

FHWA-RD-77-108 HIGH	WAY NOISE PREDICTION MODEL
Scenario: EACP26 Road Name: Monroe St. Road Segment: n/o Airport Bl.	Project Name: The Wave-Coral Mountain Job Number: 12642
SITE SPECIFIC INPUT DATA	NOISE MODEL INPUTS
Highway Data	Site Conditions (Hard = 10, Soft = 15)
Average Daily Traffic (Adt): 13,300 vehicles	Autos: 15
Peak Hour Percentage: 9.30%	Medium Trucks (2 Axles): 15
Peak Hour Volume: 1,237 vehicles	Heavy Trucks (3+ Axles): 15
Vehicle Speed: 50 mph	Vehicle Mix
Near/Far Lane Distance: 51 feet	VehicleType Day Evening Night Daily
Site Data	Autos: 77.5% 12.9% 9.6% 97.42%
	Medium Trucks: 84.8% 4.9% 10.3% 1.849
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0	Heavy Trucks: 86.5% 2.7% 10.8% 0.749
Centerline Dist. to Barrier: 54.0 feet	,
Centerline Dist. to Observer: 54.0 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: 8.006 Grade Adjustment: 0.0
Road Elevation: 0.0 feet	Lane Equivalent Distance (in feet)
Road Grade: 0.0%	Autos: 47.862
Left View: -90.0 degrees	Medium Trucks: 47.677
Right View: 90.0 degrees	Heavy Trucks: 47.695
FHWA Noise Model Calculations	
VehicleType REMEL Traffic Flow Dist	ance Finite Road Fresnel Barrier Atten Berm Atten
Autos: 70.20 -1.49	0.18 -1.20 -4.67 0.000 0.00
Medium Trucks: 81.00 -18.72	0.21 -1.20 -4.87 0.000 0.00
Heavy Trucks: 85.38 -22.68	0.20 -1.20 -5.39 0.000 0.00
Unmitigated Noise Levels (without Topo and barrie	
VehicleType Leq Peak Hour Leq Day	Leq Evening Leq Night Ldn CNEL
Autos: 67.7 66.1	64.3 58.3 66.9 67.
Medium Trucks: 61.3 60.1	53.7 52.2 60.6 60.
Heavy Trucks: 61.7 60.6	51.6 52.8 61.2 61.
Vehicle Noise: 69.4 68.0	64.9 60.1 68.7 69.
Centerline Distance to Noise Contour (in feet)	70 /04   05 /04   00 /04   :-:
	70 dBA 65 dBA 60 dBA 55 dBA
Ldn:	44 95 205 441
CNEL:	47 102 220 474

Wednesday, March 25, 2020

Scenario: EACP26 Project Name: The Wave-Coral Mc Road Name: Monroe St. Job Number: 12642 Road Segment: no Avenue 60	ountain							
-								
SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS								
Highway Data Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (Adt): 12,800 vehicles Autos: 15								
Peak Hour Percentage: 9.30% Medium Trucks (2 Axles): 15 Peak Hour Volume: 1.190 vehicles Heavy Trucks (3+ Axles): 15								
real real relation (1,100 relations)								
Vehicle Speed: 50 mph Near/Far Lane Distance: 51 feet								
Venicle Type Day Evening N	light Daily							
Site Data Autos: 77.5% 12.9%	9.6% 97.42%							
Darrier neight. 0.0 feet	10.3% 1.84%							
Barrier Type (6-VVaii, 1-Berrii).	10.8% 0.74%							
Centerline Dist. to Barrier: 54.0 feet Noise Source Elevations (in feet)								
Centerline Dist. to Observer: 54.0 feet Autos: 0.000								
Barrier Distance to Observer: 0.0 feet Medium Trucks: 2.297								
Observer Height (Above Pad): 5.0 feet Heavy Trucks: 8.006 Grade Adjus	stment: 0.0							
Pad Elevation: 0.0 feet  Road Elevation: 0.0 feet  Lane Equivalent Distance (in feet)								
Road Elevation: 0.0 feet Lane Equivalent Distance (in feet)  Road Grade: 0.0% Autos: 47,862								
Left View: -90.0 degrees Medium Trucks: 47.677								
Right View: 90.0 degrees Heavy Trucks: 47.695								
FHWA Noise Model Calculations								
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten	Berm Atten							
Autos: 70.20 -1.65 0.18 -1.20 -4.67 0.000	0.000							
Medium Trucks: 81.00 -18.89 0.21 -1.20 -4.87 0.000								
Heavy Trucks: 85.38 -22.85 0.20 -1.20 -5.39 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 66.0 64.2 58.1 66.8	67.4							
Medium Trucks: 61.1 59.9 53.6 52.0 60.5	60.7							
Heavy Trucks: 61.5 60.4 51.4 52.6 61.0	61.1							
Vahiala Najasi 60.2 67.9 64.7 60.0 69.5	69.0							
Vehicle Noise:         69.2         67.8         64.7         60.0         68.5								
Centerline Distance to Noise Contour (in feet)	55 dBA							
	55 dBA 430							

	FH	WA-RD-77-108	HIGHV	VAY NO	DISE PR	EDICTIO	ом ис	DDEL			
Road Nam	io: EACP26 e: Avenue 50 nt: w/o Jeffers					.,		The W 12642	ave-Coral	Mountai	n
SITE :	SPECIFIC IN	IPUT DATA				N	OISE	MODE	L INPUT	S	
Highway Data				S	ite Cond	litions (	Hard :	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	17,500 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Med	lium Tru	cks (2	Axles):	15		
Peak H	our Volume:	1,628 vehicle	S		Hea	vy Truc	ks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		v	ehicle M	lix					
Near/Far La	ne Distance:	51 feet				leType		Day	Evening	Night	Daily
Site Data							utos:	77.5%	Ü	9.6%	,
Rai	rier Height:	0.0 feet			Me	dium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	all, 1-Berm):	0.0			Н	eavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		54.0 feet		N	oise Soi	ırce Ele	vatio	ns (in fe	et)		
Centerline Dist.		54.0 feet				Autos	: C	.000			
Barrier Distance		0.0 feet			Mediun	Trucks	: 2	.297			
Observer Height (	,	5.0 feet			Heavy	/ Trucks	: 8	.006	Grade Ad	iustment	: 0.0
	ad Elevation:	0.0 feet		-			<b>.</b>				
	ad Elevation:	0.0 feet		L	ane Equ				eet)		
,	Road Grade:	0.0%			A decellina	Autos		.862			
	Left View:	-90.0 degre				Trucks		7.677			
	Right View:	90.0 degre	es		Heavy	/ Trucks	: 41	7.695			
FHWA Noise Mode		-									
VehicleType	REMEL	Traffic Flow	Dista		Finite F		Fres		Barrier Att		rm Atten
Autos:	70.20			0.18		-1.20		-4.67		000	0.000
Medium Trucks:	81.00			0.21		-1.20		-4.87		000	0.000
Heavy Trucks:	85.38			0.20		-1.20		-5.39	0.0	000	0.000
Unmitigated Noise								1		_	
VehicleType Autos:	Leq Peak Ho	ur Leq Day 3.9	67.3	Leq Eve	ening 65.5	Leq N	iignt 59	_	Ldn 68.1	1	NEL 68.7
Medium Trucks:		2.5	61.3		54.9		59 53		61.8		62.1
			61.8		52.8		53 54		62.4	-	
Heavy Trucks: Vehicle Noise:		2.9	69.2		52.8 66.1		54 61		69.9		62.5 70.3
Centerline Distance					00.1		01	.0	05.	,	70.0
Centerline Distanc	e to Noise C	ontour (in feet	,	70 dl	24	65 a	IRΔ	6	0 dBA	55	dBA
			I dn:	53		11		1	246	1	30
		C	NEL:	57		12			264	-	569
		O	****	01		12	-		20.	,	,,,,

	FHW	/A-RD-77-108	HIGHW	AY NC	DISE PI	REDICTI	ON MC	DEL				
Road Nam	o: EACP26 e: Avenue 50 nt: e/o Monroe	St.		Project Name: The Wave-Coral Mountain Job Number: 12642								
	SPECIFIC IN	PUT DATA							L INPUTS	S		
Highway Data				Si	ite Con	ditions (	Hard =	: 10, So	ft = 15)			
Average Daily	Traffic (Adt): 1	3,500 vehicles						Autos:	15			
Peak Hour	Percentage:	9.30%			Me	dium Tru	icks (2	Axles):	15			
Peak H	our Volume:	1,256 vehicles			He	avy Truc	ks (3+	Axles):	15			
Vei	hicle Speed:	50 mph		Ve	ehicle l	Miv						
Near/Far Lai	ne Distance:	43 feet		-		icleType		Day	Evening	Night	Daily	
Site Data						A	lutos:	77.5%	12.9%	9.6%	97.429	
Bar	rier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	1.849	
Barrier Type (0-W	-	0.0			1	Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.749	
Centerline Dis	st. to Barrier:	64.0 feet		No	oise Sc	ource Ele	evation	s (in fe	et)			
Centerline Dist.	to Observer:	64.0 feet				Autos		000				
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks	3: 2	297				
Observer Height (.		5.0 feet			Heav	y Trucks	: 8	.006	Grade Ad	ustment	0.0	
	ad Elevation:	0.0 feet		-		•						
	ad Elevation:	0.0 feet		Lá	ane Eq	uivalent			eet)			
F	Road Grade:	0.0%				Autos	00	.488				
	Left View:	-90.0 degree				m Trucks		.341				
	Right View:	90.0 degree	:S		Heav	y Trucks	s: 60	.355				
FHWA Noise Mode												
VehicleType	REMEL	Traffic Flow	Distai		Finite	Road	Fresi		Barrier Atte		m Atten	
Autos:	70.20	-1.42		-1.34		-1.20		-4.70	0.0		0.00	
Medium Trucks:	81.00	-18.66		-1.33		-1.20		-4.88		000	0.00	
Heavy Trucks:	85.38	-22.61		-1.33		-1.20		-5.31	0.0	000	0.00	
Unmitigated Noise								1		1 -		
	Leq Peak Hou	., .,		eq Eve		Leq	Night		Ldn		VEL	
Autos:	66.	_	64.7		62.9		56.	-	65.5		66.	
Medium Trucks:	59.		58.6		52.3		50.	-	59.2		59.	
Heavy Trucks: Vehicle Noise:	60.		59.1 66.5		50.1 63.5		51. 58.		59.7 67.2		59. 67.	
Centerline Distanc		-			50.0				07.12	•		
		(111 1001)		70 dE	ВА	65 (	dBA	6	i0 dBA	55	dBA	
			Ldn:	42		9	0	1	194	4	18	
			VFI:	45					208		49	

	FHV	VA-RD-77-108	HIGHWAY	NOISE	PREDICTION	ON MODE	EL			
Road Nam	io: EACP26 e: Avenue 50 nt: w/o Madiso	n St.				Vame: Th Imber: 12	e Wave-C 642	oral Mou	ıntain	
SITE	SPECIFIC IN	PUT DATA			N	DISE MO	DEL INF	PUTS		
Highway Data				Site Co	nditions (	Hard = 10	), Soft = 1	5)		
Average Daily	Traffic (Adt):	17,600 vehicles				AL	itos: 15			
Peak Hour	Percentage:	9.30%		٨	1edium Tru	cks (2 Ax	les): 15			
Peak H	our Volume:	1,637 vehicles		F	leavy Truc	ks (3+ Ax	les): 15			
Ve	hicle Speed:	50 mph		Vehicle	Miv					
Near/Far La	ne Distance:	51 feet			hicleType		ay Ever	ina Mi	ght	Daily
Site Data				_ ve			,	,	_	97.42%
		0.0 feet		1 /	Medium Tri				0.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 reet			Heavy Tru	ucks: 86	3.5% 2		0.8%	0.74%
Centerline Dis	. ,	54.0 feet								
Centerline Dist.		54.0 feet		Noise S	Source Ele					
Barrier Distance		0.0 feet			Autos					
Observer Height (		5.0 feet			ium Trucks					
	ad Flevation:	0.0 feet		He	avy Trucks	: 8.00	6 Grad	e Adjusti	ment:	0.0
Ros	ad Elevation:	0.0 feet		Lane E	quivalent	Distance	(in feet)			
	Road Grade:	0.0%			Autos	47.86	2			
	Left View:	-90.0 degree	s	Med	ium Trucks	: 47.67	7			
	Right View:	90.0 degree	s	He	avy Trucks	47.69	5			
FHWA Noise Mode	el Calculation:	S								
VehicleType	REMEL	Traffic Flow	Distance	Finit	e Road	Fresnel	Barrie	er Atten	Bern	Atten
Autos:	70.20	-0.27	C	).18	-1.20	-4	.67	0.000		0.000
Medium Trucks:	81.00	-17.51	C	).21	-1.20	-4	.87	0.000		0.000
Heavy Trucks:	85.38	-21.46	C	).20	-1.20	-5	i.39	0.000		0.000
Unmitigated Noise										
VehicleType	Leq Peak Hou			Evening	Leq N	-	Ldn		CN	
Autos:	68		37.3	65.	-	59.5		68.1		68.7
Medium Trucks:	62		31.3	54.	-	53.4		61.9		62.1
Heavy Trucks:	62		61.8	52.		54.0		62.4		62.5
Vehicle Noise:	70		9.2	66.	.1	61.4		69.9		70.4
Centerline Distance	e to Noise Co	ntour (in feet)								
			- 1	0 dBA	65 d		60 dBA	4	55 a	
			.dn:	53	11		247		53	
		CN	IEL:	57	12	3	265		57	1

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 I	HIGHWAY	NOISE PI	REDICTIO	N MODEL						
Scenario: EA Road Name: Av Road Segment: wh	enue 52	St.				Vame: The Vamber: 1264	Vave-Coral Mo 2	ountain				
SITE SPEC	CIFIC IN	PUT DATA			N	DISE MOD	EL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic	c (Adt): 1	14,600 vehicles				Auto	s: 15					
Peak Hour Perce	entage:	9.30%		Me	edium Tru	cks (2 Axles	): 15					
Peak Hour V	olume:	1,358 vehicles		He	avy Truci	ks (3+ Axles	): 15					
Vehicle -	Speed:	50 mph		Vehicle	Miv							
Near/Far Lane Dis	stance:	51 feet			icleType	Dav	Evening I	Vight Daily				
Site Data						utos: 77.5		9.6% 97.42%				
Barrier I	Join ht.	0.0 feet		М	edium Tru			10.3% 1.84%				
Barrier Type (0-Wall, 1-		0.0 reet			Heavy Tru	icks: 86.5		10.8% 0.74%				
Centerline Dist. to		54.0 feet										
Centerline Dist. to Oh		54.0 feet		Noise So		vations (in	feet)					
Barrier Distance to Ob		0.0 feet			Autos.							
Observer Height (Abov		5.0 feet			m Trucks							
Pad Ele		0.0 feet		Hear	vy Trucks	8.006	Grade Adjus	stment: 0.0				
Road Ele	evation:	0.0 feet		Lane Eq	uivalent l	Distance (ir	feet)					
Road	Grade:	0.0%			Autos.	47.862						
Lei	ft View:	-90.0 degrees	3	Mediu	m Trucks	47.677						
Righ	t View:	90.0 degrees	3	Hear	vy Trucks	47.695						
FHWA Noise Model Cal	culations	S										
VehicleType RE	MEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atter	Berm Atten				
Autos:	70.20	-1.08	0.	18	-1.20	-4.6	7 0.00	0.000				
Medium Trucks:	81.00	-18.32	-	21	-1.20	-4.8						
Heavy Trucks:	85.38	-22.27		20	-1.20	-5.3	9 0.00	0.000				
Unmitigated Noise Leve						-						
	Peak Hou			Evening	Leg N		Ldn	CNEL				
Autos:	68		6.5	64.8		58.7	67.3	67.9				
Medium Trucks:	61		0.5	54.1		52.6	61.1	61.3				
Heavy Trucks:	62		1.0	52.0		53.2	61.6	61.7				
Vehicle Noise:	69		8.4	65.3		60.5	69.1	69.6				
Centerline Distance to	Noise Co	ntour (in feet)	7/	-/0.4	05.4	D4	00 -ID4	55 dDA				
		,	dn:	dBA 47	65 d	U.	60 dBA 218	55 dBA 470				
		_	.an: FI:	47 50	10		218	470 504				
		CN	CL.	30	10:	9	234	504				

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIGHW	AY NO	ISE PR	REDICTION	ом ис	DEL			
	o: EACP26 e: Avenue 54 et: w/o Madiso	n St.				.,	Name: ımber:		ave-Coral	Mountai	n
	PECIFIC IN			T		N	OISE I	MODE	L INPUT	2	
Highway Data	PECIFIC III	FUIDAIA		Si	te Con	ditions (					
Average Daily	Fraffic (Adt):	15.500 vehicles						Autos:	15		
Peak Hour I	. ,	9.30%			Me	dium Tru	cks (2 .	Axles):	15		
	our Volume:	1.442 vehicles				avy Truc		,	15		
Vel	nicle Speed:	50 mph									
Near/Far Lar		51 feet		Ve	hicle N			Dav	Evenina	Niaht	D-#-
Site Data					veni	cleType ^	utos:	77.5%		9.6%	Daily 97.42%
					1.40	edium Tr		84.8%		10.3%	
	rier Height:	0.0 feet				leavy Tr		86.5%		10.8%	
Barrier Type (0-Wa	. ,	0.0			,	icavy iii	JUNG.	00.070	2.170	10.07	0.1470
Centerline Dis Centerline Dist. t		54.0 feet		No	oise So	urce Ele	vation	s (in fe	et)		
Barrier Distance t		54.0 feet 0.0 feet				Autos	: 0.	000			
Observer Height (/		5.0 feet			Mediur	n Trucks	: 2.	297			
	d Elevation:	0.0 feet			Heav	y Trucks	: 8.	006	Grade Ad	iustmen	t: 0.0
	d Elevation:	0.0 feet		1 2	ne Fai	iivalent	Nietan	co (in i	oot)		
	u Elevalion. Road Grade:	0.0%		Lu	ne Equ	Autos		862	ccij		
r	Left View:	-90.0 degree			Madiur	n Trucks		677			
	Right View:	90.0 degree				y Trucks		695			
			:5		nouv	y Trucks	. 4/	000			
FHWA Noise Mode		-									
VehicleType	REMEL	Traffic Flow	Dista		Finite		Fresi		Barrier Att		rm Atten
Autos: Medium Trucks:	70.20	-0.82		0.18		-1.20		-4.67		000	0.000
ivieaium i rucks:	81.00	-18.06		0.21		-1.20		-4.87		000	0.000
Hanna Taratan	05.00					4.00					
Heavy Trucks:	85.38	-22.01		0.20		-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and		attenua				-5.39			
Unmitigated Noise VehicleType	Levels (with	out Topo and Ir Leq Day	L		ning	-1.20 Leq I		T	Ldn	C	NEL
Unmitigated Noise  VehicleType  Autos:	Levels (with Leq Peak Hou 68	out Topo and Ir Leq Day	66.8	attenua	ening 65.0		59.	)	Ldn 67.6	C	NEL 68.2
Unmitigated Noise VehicleType Autos: Medium Trucks:	Levels (without Leq Peak Hound 68	out Topo and Ir Leq Day .4	66.8 60.8	attenua	65.0 54.4		59. 52.	0	Ldn 67.6 61.3	C	NEL 68.2 61.5
Unmitigated Noise  VehicleType  Autos:	Levels (with Leq Peak Hou 68	out Topo and Ir Leq Day .4 .9	66.8	attenua	ening 65.0		59.	) 3 5	Ldn 67.6	C C C C C C C C C C C C C C C C C C C	NEL 68.2 61.5 62.0
VehicleType  Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	Levels (without Leg Peak Hound 68 61 62 70	out Topo and Ir Leq Day .4 .9 .4	66.8 60.8 61.3 68.6	attenua	65.0 54.4 52.2		59. 52. 53.	) 3 5	Ldn 67.6 61.3	C C C C C C C C C C C C C C C C C C C	NEL 68.2 61.5 62.0
Unmitigated Noise  VehicleType  Autos:  Medium Trucks:  Heavy Trucks:	Levels (without Leg Peak Hound 68 61 62 70	out Topo and Ir Leq Day .4 .9 .4	66.8 60.8 61.3 68.6	attenua	65.0 54.4 52.2 65.6		59.0 52.0 53.0 60.0	) 3 5 8	Ldn 67.6 61.3	C	
VehicleType  Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	Levels (without Leg Peak Hound 68 61 62 70	out Topo and ir Leq Day 4 9 .4 .1	66.8 60.8 61.3 68.6	attenua eq Eve	65.0 54.4 52.2 65.6	Leq I	59. 52. 53. 60.	) 3 5 8	Ldn 67.6 61.3 69.3	C S S S S S S S S S S S S S S S S S S S	NEL 68.2 61.5 62.0 69.8

	FH\	WA-RD-77-10	HIGH	WAY NO	OISE PI	REDICT	ION MO	DEL			
Road Nam	io: EACP26 ne: Airport Bl. nt: w/o Monroe	e St.					t Name: lumber:		ave-Coral I	Mountair	ı
	SPECIFIC IN	IPUT DATA							L INPUT	5	
Highway Data				S	ite Con	ditions	(Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	4,800 vehicle	es					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2 )	Axles):	15		
Peak H	lour Volume:	446 vehicle	es		He	avy Tru	cks (3+ i	Axles):	15		
Ve	hicle Speed:	50 mph		V	ehicle i	Miv					
Near/Far La	ne Distance:	51 feet		ľ		icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Rai	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W	'all, 1-Berm):	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis		54.0 feet		Ν	loise So	ource E	levation	s (in fe	et)		
Centerline Dist.		54.0 feet				Auto	s: 0.	000			
Barrier Distance to Observer: 0.0 feet					Mediu	m Truck	s: 2.	297			
Observer Height (		5.0 feet			Hear	y Truck	s: 8.	006	Grade Adj	ustment	0.0
	ad Elevation:	0.0 feet					. Di-t	/! 4	41		
	ad Elevation:	0.0 feet		L	ane Eq		t Distan		eet)		
ı	Road Grade:	0.0%				Auto		862			
	Left View:	-90.0 degre				m Truck		677			
	Right View:	90.0 degre	es		Heat	vy Truck	S: 47.	695			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow		stance		Road	Fresi		Barrier Atte		m Atten
Autos:	70.20			0.18		-1.20		-4.67	0.0		0.00
Medium Trucks:	81.00			0.21		-1.20		-4.87	0.0		0.00
Heavy Trucks:	85.38			0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	•										
VehicleType	Leq Peak Hou		<i>y</i> 61.7	Leq Ev			Night		Ldn 62.5		VEL 63.
Autos: Medium Trucks:	63 56		55.7		59.9 49.3		53.9 47.8		56.2		56.
Heavy Trucks:	57		56.2		49.3		48.4	-	56.7		56.
Vehicle Noise:	65		63.5		60.5		55.		64.3		64.
Centerline Distance	e to Noise Co	ontour (in fee	t)								
		•		70 di	BA	65	dBA	6	0 dBA	55	dBA
			Ldn:	22	!	4	18		104	2	24

Fi	IWA-RD-77-108	HIGHWA	Y NC	ISE PR	EDICTIO	N MOD	EL				
Scenario: EACP26					Project N	lame: T	he Wa	ave-Coral I	Mountai	1	
Road Name: Avenue 5			Job Number: 12642								
Road Segment: w/o Monro	e St.										
SITE SPECIFIC I	NPUT DATA							INPUT	S		
Highway Data			Si	te Cond	litions (l	Hard = 1	0, So	ft = 15)			
Average Daily Traffic (Adt):	9,700 vehicles	3				Α	utos:	15			
Peak Hour Percentage:	9.30%				dium Trud		,	15			
Peak Hour Volume:	902 vehicles	3		Hea	avy Truck	rs (3+ A.	xles):	15			
Vehicle Speed:	50 mph		Ve	ehicle N	lix						
Near/Far Lane Distance:	51 feet			Vehic	cleType	[	Day	Evening	Night	Daily	
Site Data					A	ıtos: 7	7.5%	12.9%	9.6%	97.429	
Barrier Height:	0.0 feet			Me	dium Tru	icks: 8	34.8%	4.9%	10.3%	1.849	
Barrier Type (0-Wall, 1-Berm):	0.0			Н	leavy Tru	icks: 8	86.5%	2.7%	10.8%	0.749	
Centerline Dist. to Barrier:	54.0 feet		No	oise So	urce Ele	vations	(in fe	et)			
Centerline Dist. to Observer:	54.0 feet				Autos:	0.0	00				
Barrier Distance to Observer:	0.0 feet			Mediun	n Trucks:						
Observer Height (Above Pad):	5.0 feet			Heav	/ Trucks:	8.0	06	Grade Ad	iustmeni	: 0.0	
Pad Elevation:	0.0 feet										
Road Elevation:	0.0 feet		La	ne Equ	ivalent l		_	eet)			
Road Grade:	0.0%				Autos:						
Left View:	-90.0 degree	es			n Trucks:						
Right View:	90.0 degree	es		Heav	y Trucks:	47.6	95				
FHWA Noise Model Calculatio											
VehicleType REMEL	Traffic Flow	Distant		Finite I		Fresne	_	Barrier Atte		m Atten	
Autos: 70.2			0.18		-1.20		4.67	0.0		0.00	
Medium Trucks: 81.0			0.21		-1.20		4.87		000	0.00	
Heavy Trucks: 85.3			0.20		-1.20	-	5.39	0.0	000	0.00	
Unmitigated Noise Levels (wit											
VehicleType Leq Peak He			q Eve	- 1	Leq N	-		Ldn	1	NEL	
		64.7		63.0		56.9		65.5		66.	
		58.7		52.4		50.8		59.3		59.	
Heavy Trucks: 6		59.2		50.2		51.4		59.8		59.	
	8.0	66.6		63.5		58.8		67.3	3	67.	
Vehicle Noise: 6			TO /-							10.4	
	Contour (in feet		70 dE	BA	65 d	- 1	6	0 dBA		dBA	
	Contour (in feet		70 dE 36 38	ВА	65 da 77 83	'	6	0 dBA 166 178	3	dBA 357	

Wednesday, March 25, 2020

	FH\	WA-RD-77-10	HIGH	HWAY	NOISE P	REDICTI	ON M	ODEL			
Scenar	io: EACP26					Project	Name	: The W	ave-Coral	Mountair	1
	ne: Avenue 58					Job N	umbei	: 12642			
Road Segme	nt: w/o Madiso	on St.									
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data					Site Cor	ditions	Hard				
Average Daily	Traffic (Adt):	6,200 vehicle	s					Autos:			
Peak Hour	Percentage:	9.30%				edium Tri		,			
Peak F	lour Volume:	577 vehicle	s		He	eavy Truc	ks (3-	+ Axles):	15		
Ve	hicle Speed:	45 mph			Vehicle Mix						
Near/Far La	ne Distance:	45 feet				icleType		Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	
Ra	rrier Height:	0.0 feet			Medium Trucks: 84,8% 4,9% 10,3%						
Barrier Type (0-W		0.0				Heavy Ti	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	51.0 feet			Noise S	ource Fl	evatio	ns (in fe	oet)		
Centerline Dist.	to Observer:	51.0 feet			710,00	Auto		0.000	,,,		
Barrier Distance	to Observer:	0.0 feet			Modiu	m Truck		2.297			
Observer Height	(Above Pad):	5.0 feet				vy Truck		8.006	Grade Ad	liuetmant	. 0 0
P	ad Elevation:	0.0 feet								justinon	0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalent	Dista	nce (in i	feet)		
	Road Grade:	0.0%				Auto		6.041			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 4	5.848			
	Right View:	90.0 degre	es		Hea	vy Truck	s: 4	5.867			
FHWA Noise Mod	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow		stance		Road	Fre		Barrier At		m Atten
Autos:				0.4		-1.20		-4.65		000	0.000
Medium Trucks:				0.4		-1.20		-4.87		000	0.000
Heavy Trucks:	84.25	-25.54	1	0.4	46	-1.20		-5.42	0.	000	0.000
Unmitigated Nois											
VehicleType	Leq Peak Hou			Leg E	vening		Night		Ldn		VEL
Autos:	63		61.8		60.0			3.9	62.		63.2
Medium Trucks:		7.1	55.9		49.6			3.0	56.	-	56.7
Heavy Trucks:		3.0	56.9		47.8		49	9.1	57.	4	57.6
Vehicle Noise:	65	5.2	63.8		60.6	i	55	5.9	64.	5	64.9
Centerline Distan	ce to Noise Co	ontour (in fee	t)								
			T		dBA		dBA	6	60 dBA		dBA
			Ldn:		22		7		101	_	19
		C	NEL:		23	5	1		109	2	35

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGHW	/AY N	OISE PI	REDICTION	ом мо	DEL			
Road Nan	io: EACP26 ne: Avenue 58 nt: w/o Monro	e St.					Name: umber:		ave-Coral	Mountai	n
SITE	SPECIFIC IN	IPUT DATA				N	OISE I	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions (	Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	7,800 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tru	cks (2	Axles):	15		
Peak H	lour Volume:	725 vehicles	3		He	avy Truc	ks (3+ )	Axles):	15		
Ve	hicle Speed:	45 mph		,	/ehicle l	Miv					
Near/Far La	ne Distance:	45 feet		١,		icleType		Dav	Evening	Night	Daily
Site Data							utos:	77.5%		9.6%	
Ra	rrier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			1	Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	. ,	51.0 feet		١.	/ O-	F1-		- /! #	41		
Centerline Dist.	to Observer:	51.0 feet		,	ioise sc	ource Ele		•	eet)		
Barrier Distance	to Observer:	0.0 feet				Autos		000			
Observer Height	(Above Pad):	5.0 feet				m Trucks		297	0		
	ad Elevation:	0.0 feet			Heav	vy Trucks	: 8.	006	Grade Ad	ustment	: 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distan	ce (in :	feet)		
	Road Grade:	0.0%				Autos	: 46.	041			
	Left View:	-90.0 degree	es		Mediu	m Trucks	: 45.	848			
	Right View:	90.0 degree	es		Heav	y Trucks	: 45.	867			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresi	nel	Barrier Att	en Bei	rm Atten
Autos:	68.46	-3.35		0.43	3	-1.20		-4.65	0.0	000	0.000
Medium Trucks:	79.45	-20.58		0.46	3	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	84.25	-24.54		0.46	3	-1.20		-5.42	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	atteni	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	L	.eq Ev	rening	Leq I	Vight		Ldn	C	NEL
Autos:	64	1.3	62.8		61.0		54.9	9	63.6	3	64.2
Medium Trucks:	58	3.1	56.9		50.6		49.0	)	57.5		57.7
Heavy Trucks:	59	9.0	57.9		48.8		50.	1	58.4	1	58.6
Vehicle Noise:	66	3.2	64.8		61.6		56.9	9	65.5	5	65.9
Centerline Distant	ce to Noise C	ontour (in feet,	1								
·				70 a		65 c		6	60 dBA	1	dBA
			Ldn:	25		5			118	_	255
		C	VEL:	27	7	59	9		127	2	273

0						Day in a		T1 14/			
	o: EACP26 e: Avenue 58						: Name: lumber:		ave-Coral I	Mountair	1
Road Segmen		n St				JOD I	iumber:	12042			
	SPECIFIC IN	IPUT DATA			o: 0				L INPUTS	5	
Highway Data					Site Con	aitions	(Hard =				
Average Daily	. ,	3,900 vehicle	es					Autos:	15		
	Percentage:	9.30%				edium Tr		,	15		
	our Volume:	363 vehicle	es		He	avy Tru	cks (3+	Axles):	15		
	hicle Speed:	50 mph		<u> </u>	Vehicle I	Mix					
Near/Far La	ne Distance:	36 feet		T I	Veh	icleType	)	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Bai	rier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	-	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	. ,	59.0 feet		-	N-: 0			- /! #-	-41		
Centerline Dist.	to Observer:	59.0 feet		H.	Noise So				et)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (	Above Pad):	5.0 feet				m Truck		.297	Crada Ad	undennnend	
Pa	ad Elevation:	0.0 feet			Heat	y Truck	S: 8	.006	Grade Adj	usuneni	. 0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distan	ce (in f	eet)		
1	Road Grade:	0.0%				Auto	s: 56	.409			
	Left View:	-90.0 degre	ees		Mediu	m Truck	s: 56	.252			
	Right View:	90.0 degre	ees		Hear	y Truck	s: 56	.268			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow		stance		Road	Fres		Barrier Atte		m Atten
Autos:	70.20			-0.8		-1.20		-4.69	0.0		0.00
Medium Trucks:	81.00	-24.0	5	-0.8	7	-1.20		-4.88	0.0	00	0.00
Heavy Trucks:	85.38		•	-0.8		-1.20		-5.35	0.0	00	0.00
Unmitigated Noise								1			
VehicleType	Leq Peak Hou		59.7	Leq E	vening		Night		Ldn		VEL C4
Autos: Medium Trucks:	54	.3	53.7		58.0 47.3		51. 45.		60.5 54.2		61. 54.
	55		54.2		47.3		45. 46.	-	54.2 54.8		54. 54.
Heavy Trucks: Vehicle Noise:		3.0	61.6		45.2 58.5		53.	-	62.3		62.
Centerline Distance	e to Noise Co	ontour (in fee	et)								
			_	70	dBA	65	dBA	6	0 dBA	55	dBA
			I dn:	1	8		39		84	່ 1	80

FH	WA-RD-77-108	HIGHWA`	/ NC	ISE PR	EDICTIO	N MOE	EL			
Scenario: EACP26 Road Name: Avenue 58 Road Segment: w/o Jacks					Project N Job Nur			ave-Coral I	Mountai	n
SITE SPECIFIC I	NPUT DATA				NO	ISE M	ODE	L INPUTS	6	
Highway Data			Si	te Cond	ditions (H	lard = 1	10, So	ft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume: Vehicle Speed:	5,700 vehicles 9.30% 530 vehicles 50 mph		V		dium Truc avy Truck	ks (2 A	,	15 15 15		
Near/Far Lane Distance:	36 feet		Ė		cleType	1	Dav	Evening	Night	Dailv
Site Data			t				77.5%	12.9%	9.6%	. ,
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0				edium Trui leavy Trui		34.8% 36.5%	4.9% 2.7%	10.3%	
Centerline Dist. to Barrier:	59.0 feet		L.		·					
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation:	59.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet			Mediun Heav	Autos: n Trucks: y Trucks: iivalent D	0.0 2.2 8.0	00 97 06	Grade Adj	ustmeni	t: 0.0
Road Grade:	0.0%		-	ne Lqu	Autos:	56.4		cci)		
Left View: Right View:	-90.0 degree 90.0 degree				n Trucks: y Trucks:	56.2 56.2	52			
FHWA Noise Model Calculation	ns									
VehicleType REMEL	Traffic Flow	Distanc	е	Finite I	Road	Fresne		Barrier Atte	en Bei	rm Atten
Autos: 70.20			0.89		-1.20		4.69	0.0		0.000
Medium Trucks: 81.00 Heavy Trucks: 85.33			).87 ).87		-1.20 -1.20		4.88 5.35	0.0		0.000
* * * * * * * * * * * * * * * * * * * *					-1.20		0.50	0.0	100	0.000
Unmitigated Noise Levels (with					1 10	andrea I		Ldn		NEL
VehicleType Leq Peak Ho		1 Leq	EVE	ning 59.6	Leq Ni	gnt   53.5		Lan 62.2		NEL 62.8
		55.3		49.0		47.4		55.9		56.1
		55.8		46.8		48.1		56.4		56.5
	4.6	63.2		60.2		55.4		63.9	)	64.4
Centerline Distance to Noise C	Contour (in feet)									
		Ldn:	0 dE 23	3A	65 dE 50	3A	6	0 dBA 108	2	dBA 232
	CI	VEL:	25		54			116	2	250

Wednesday, March 25, 2020

	FHW	/A-RD-77-108	HIGH	WAY	NOISE P	REDICTI	ON MO	DEL			
Scenario: EACI Road Name: Aven Road Segment: w/o N	ue 60	n St.						The W 12642	'ave-Coral	Mountai	n
SITE SPECIF	IC IN	PUT DATA				N	OISE	MODE	L INPUT	s	
Highway Data					Site Cor	nditions	Hard =	= 10, Sc	oft = 15)		
Average Daily Traffic (/	Adt):	2,300 vehicles	3					Autos:	15		
Peak Hour Percent	age:	9.30%			Me	edium Tru	icks (2	Axles):	15		
Peak Hour Volu	ıme:	214 vehicles	6		He	eavy Truc	ks (3+	Axles):	15		
Vehicle Sp	eed:	40 mph		1	Vehicle	Miv					
Near/Far Lane Dista	nce:	23 feet		-		nicleType		Dav	Evening	Night	Daily
Site Data							utos:	77.5%	-	9.6%	,
Barrier Hei	aht.	0.0 feet			N	ledium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Be		0.0				Heavy Ti	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Bai	rrier:	40.0 feet		ł	Noise S	ource Ele	vation	s (in f	oet)		
Centerline Dist. to Obse	rver:	40.0 feet		ŀ	710,00	Autos		.000	,,,,		
Barrier Distance to Obse	rver:	0.0 feet			Medii	ım Truck:		.297			
Observer Height (Above F	Pad):	5.0 feet				vy Trucks		.006	Grade Ad	iustmen	· 0 0
Pad Eleva	tion:	0.0 feet								,	
Road Eleva	tion:	0.0 feet			Lane Eq	uivalent		ice (in :	feet)		
Road Gr		0.0%				Autos	00	.636			
Left V		-90.0 degree	s			ım Trucks		.406			
Right V	iew:	90.0 degree	s		Hea	vy Trucks	38	.429			
FHWA Noise Model Calcu				'							
VehicleType REM		Traffic Flow	Dis	stance		Road	Fres		Barrier Att		rm Atten
	66.51	-8.14		1.5		-1.20		-4.59		000	0.000
	77.72	-25.38		1.6	-	-1.20		-4.87		000	0.000
	82.99	-29.33		1.6		-1.20		-5.56	0.0	000	0.000
Unmitigated Noise Levels	•										
VehicleType Leq Pea				Leq E	vening		Vight		Ldn		NEL
Autos:	58.	-	57.2		55.4		49	-	58.0		58.6
Medium Trucks:	52.		51.6		45.2		43		52.1		52.3
Heavy Trucks:	54.		53.0		43.9		45		53.5		53.7
Vehicle Noise:	60.	-	59.4		56.1		51	5	60.	1	60.5
Centerline Distance to No	ise Co	ntour (in feet)		70	dBA	65 (	4DA	1 4	60 dBA	55	dBA
			l dn:		9 9	1		1 '	40	1	87
			VFI:		9	2	-		43		93
		Ci	*LL.		9				40		55

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	WAY N	NOISE P	REDICT	ION M	ODEL			
Road Nam	io: EACP26 ne: Avenue 60 nt: w/o Monroe	e St.					t Name. lumber.		/ave-Coral	Mountai	n
SITE S	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard:	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	8,200 vehicle	s					Autos	: 15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles)	: 15		
Peak H	lour Volume:	763 vehicle	s		He	eavy Tru	cks (3+	Axles)	: 15		
Ve	hicle Speed:	45 mph		F	Vehicle	Miv					
Near/Far Lai	ne Distance:	45 feet		-		icleType		Dav	Evening	Night	Daily
Site Data					¥ C//		Autos:	77.59		9.6%	,
	rrier Height:	0.0 feet			M	ledium T	rucks:	84.89	6 4.9%	10.3%	
Barrier Type (0-W		0.0 1661				Heavy T	rucks:	86.59	6 2.7%	10.8%	0.74%
Centerline Dis		51.0 feet		_ L							
Centerline Dist.		51.0 feet		1	Noise S				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		0.000			
Observer Height (	Above Pad):	5.0 feet				m Truck	-	2.297			
	ad Elevation:	0.0 feet			Hea	vy Truck	s: 8	3.006	Grade Ad	justment	: 0.0
	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distai	nce (in	feet)		
ŀ	Road Grade:	0.0%		Ī		Auto	s: 46	3.041			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 45	5.848			
	Right View:	90.0 degree			Hea	vy Truck	s: 45	5.867			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	snel	Barrier Att	en Bei	rm Atten
Autos:	68.46	-3.13		0.4	3	-1.20		-4.65	0.0	000	0.000
Medium Trucks:	79.45	-20.37		0.4	6	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	84.25	-24.32		0.4	6	-1.20		-5. <i>4</i> 2	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	64	.6	63.0		61.2		55	.2	63.8	В	64.4
Medium Trucks:	58	.3	57.2		50.8		49	.2	57.	7	57.9
Heavy Trucks:	59	.2	58.1		49.0		50	.3	58.7	7	58.8
Vehicle Noise:	66	i.4	65.0		61.8		57	.2	65.	7	66.2
Centerline Distance	e to Noise Co	ontour (in feet	)								
				70	dBA	65	dBA		60 dBA	55	dBA
			Ldn:	2	16	5	57		122	2	263
		C	NEL:	2	18	6	31		131	2	283

	FHV	VA-RD-77-108	HIGH	HWAY N	OISE PI	REDICT	ION MO	DDEL			
Road Nam	io: EAC26SE e: Jefferson Si nt: n/o Avenue						t Name: lumber:		/ave-Coral	Mountair	1
	SPECIFIC IN	PUT DATA							L INPUT	s	
Highway Data					Site Con	ditions	(Hard :	= 10, S	oft = 15)		
Average Daily	Traffic (Adt): 3	6,500 vehicle	s					Autos.	: 15		
Peak Hour	Percentage:	9.30%			Me	edium Ti	ucks (2	Axles)	: 15		
Peak H	our Volume:	3,395 vehicle	s		He	eavy Tru	cks (3+	Axles)	: 15		
Ve	hicle Speed:	55 mph		1	/ehicle	Mix					
Near/Far La	ne Distance:	71 feet			Veh	icleType	е	Day	Evening	Night	Daily
Site Data							Autos:	77.59	6 12.9%	9.6%	97.42%
Rai	rier Height:	0.0 feet			М	ledium 7	rucks:	84.89	6 4.9%	10.3%	1.84%
Barrier Type (0-W	-	0.0				Heavy 7	rucks:	86.59	6 2.7%	10.8%	0.74%
Centerline Dis	. ,	64.0 feet		١.	/- / O			/! 6	41		
Centerline Dist.	to Observer:	64.0 feet		- '	Voise So			٠,	eet)		
Barrier Distance	to Observer:	0.0 feet			11-15	Auto		0.000			
Observer Height (	Above Pad):	5.0 feet				m Truck		.297	Crada Ad	i rotmont	
Pa	ad Elevation:	0.0 feet			Heat	vy Truck	is: e	1.006	Grade Ad	usimeni	. 0.0
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distar	nce (in	feet)		
1	Road Grade:	0.0%				Auto	s: 53	3.486			
	Left View:	-90.0 degree	es		Mediu	m Truck	rs: 53	3.320			
	Right View:	90.0 degree	es		Hear	vy Truck	rs: 53	3.337			
FHWA Noise Mode	el Calculations										
VehicleType	REMEL	Traffic Flow	Dis	stance		Road	Fres		Barrier Att		m Atten
Autos:	71.78	2.49		-0.54		-1.20		-4.70		000	0.000
Medium Trucks:	82.40	-14.75		-0.52	_	-1.20		-4.88		000	0.000
Heavy Trucks:	86.40	-18.71		-0.52	2	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	•							_			
	Leq Peak Hou			Leg Ev			Night		Ldn		VEL 70.
Autos:	72		70.9		69.2		63		71.7		72.3
Medium Trucks:	65		64.7 64.9		58.4 55.8		56 57		65.3 65.4		65.5
Heavy Trucks: Vehicle Noise:	66. 74		72.7		69.7		64		73.4		65.6 73.9
Centerline Distanc	e to Noise Co	ntour (in feet	)								
		( 100)		70 c	IBA	65	dBA	1	60 dBA	55	dBA
			Ldn:	10	8	2	32		499	1,	076

	FHV	VA-RD-77-108	HIGHV	VAY NO	DISE PREDICT	TION MODEL		
Scenario: E Road Name: A Road Segment: e	venue 60	St.				t Name: The V Number: 1264	Vave-Coral Mo 2	untain
SITE SPE	CIFIC IN	IPUT DATA				NOISE MOD	EL INPUTS	
Highway Data				S	ite Conditions	(Hard = 10, S	Soft = 15)	
Average Daily Trafi Peak Hour Perd Peak Hour	centage: Volume:	6,400 vehicle 9.30% 595 vehicle				Autos rucks (2 Axles ıcks (3+ Axles	): 15	
	Speed:	50 mph		V	ehicle Mix			
Near/Far Lane D	vistance:	48 feet			VehicleTyp	e Day	Evening N	light Daily
Site Data						Autos: 77.5	% 12.9%	9.6% 97.42%
Barrier	Heiaht:	0.0 feet			Medium	Frucks: 84.8	% 4.9% 1	0.3% 1.84%
Barrier Type (0-Wall,	1-Berm):	0.0			Heavy	Trucks: 86.5	% 2.7% 1	0.749
Centerline Dist. to	Barrier:	64.0 feet		N	loise Source E	levations (in	feet)	
Centerline Dist. to O	bserver:	64.0 feet		-	Auto			
Barrier Distance to O	bserver:	0.0 feet			Medium Truci			
Observer Height (Abo	ve Pad):	5.0 feet			Heavy Truci		Grade Adjus	tment: 0 0
Pad E	levation:	0.0 feet			neavy Truci	18. 0.000	Orace Aujus	tment. 0.0
Road E	levation:	0.0 feet		L	ane Equivalen	t Distance (in	feet)	
Road	d Grade:	0.0%			Auto	os: 59.540		
Le	eft View:	-90.0 degree	es		Medium Truci	ks: 59.391		
Rig	nht View:	90.0 degree	es		Heavy Truci	ks: 59.406		
FHWA Noise Model Ca	alculation	s						
VehicleType R	REMEL	Traffic Flow	Dista	ance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	-4.66		-1.24	-1.20	-4.70	0.000	0.00
Medium Trucks:	81.00	-21.90		-1.22	-1.20	-4.88	0.000	0.00
Heavy Trucks:	85.38	-25.86		-1.23	-1.20	-5.31	0.000	0.00
Unmitigated Noise Le	vels (with	out Topo and	barrier	attenu	ation)			
VehicleType Leq	Peak Hou	ır Leq Day	/ 1	Leq Eve	ening Leq	Night	Ldn	CNEL
Autos:	63	.1	61.5		59.8	53.7	62.3	62.
Medium Trucks:	56	.7	55.5		49.1	47.6	56.0	56.3
Heavy Trucks:	57	.1	56.0		47.0	48.2	56.6	56.
Vehicle Noise:	64	.8	63.4		60.3	55.5	64.1	64.
Centerline Distance to	Noise Co	ontour (in feet	)					
				70 di	BA 65	dBA	60 dBA	55 dBA
			Ldn: NFI:	26 28		56 60	120 129	258 277

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 H	IGHWAY	NOISE P	REDICTIO	N MODEL		
	o: EAC26SE e: Jefferson S t: n/o Avenue					lame: The \ mber: 1264:	Wave-Coral Mo 2	ountain
SITE S	PECIFIC IN	IPUT DATA			NC	DISE MOD	EL INPUTS	
Highway Data				Site Cor	nditions (F	lard = 10, S	Soft = 15)	
Average Daily 7	raffic (Adt): 2	25,800 vehicles				Auto	s: 15	
Peak Hour F	Percentage:	9.30%		Me	edium Truc	cks (2 Axles	): 15	
Peak Ho	our Volume:	2,399 vehicles		He	eavy Truck	s (3+ Axles	): 15	
Veh	icle Speed:	55 mph		Vehicle	Miv			
Near/Far Lan	e Distance:	71 feet			icleType	Day	Evening 1	light Daily
Site Data				Ver		Itos: 77.5	-	9.6% 97.42%
				M	ledium Tru			10.3% 1.84%
	rier Height:	0.0 feet			Heavy Tru			10.8% 0.74%
Barrier Type (0-Wa	. ,	0.0						10.070 0.7470
Centerline Dist. to		64.0 feet 64.0 feet		Noise S	ource Ele	vations (in	feet)	
Barrier Distance to		0.0 feet			Autos:	0.000		
		5.0 feet		Mediu	m Trucks:	2.297		
Observer Height (A	d Flevation:	0.0 feet		Hea	vy Trucks:	8.006	Grade Adjus	stment: 0.0
	d Elevation:	0.0 feet		I ane Fo	uivalent [	Distance (in	feet)	
	a Elevation. Road Grade:	0.0%		Lairo Lq	Autos:		.,,,,	
	Left View:	-90.0 degrees		Mediu	m Trucks:	00.100		
	Right View:	90.0 degrees			vy Trucks:			
				7100	, , , , , , , , , , , , , , , , , , ,	00.007		
FHWA Noise Mode								
VehicleType	REMEL	Traffic Flow	Distance		Road	Fresnel	Barrier Atten	
Autos:	71.78	0.98	-0.		-1.20	-4.70		
Medium Trucks:	82.40	-16.26	-0.		-1.20	-4.88		
Heavy Trucks:	86.40	-20.22	-0.	52	-1.20	-5.3	0.00	0.000
Unmitigated Noise	•		arrier atte	nuation)				
	Leq Peak Hou			vening	Leq N		Ldn	CNEL
Autos:	71		9.4	67.7		61.6	70.2	70.8
Medium Trucks:	64		3.2	56.9		55.3	63.8	64.0
Heavy Trucks:	64		3.4	54.3		55.6	63.9	64.0
Vehicle Noise:	72	6 71	1.2	68.2	!	63.3	71.9	72.4
Centerline Distance	e to Noise Co	ontour (in feet)						
			1	dBA	65 dE		60 dBA	55 dBA
				B5	184		396	854
		CNE	EL:	92	198	3	426	919

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	YAW	NOISE P	REDICT	ION MC	DEL			
Road Nan	io: EAC26SE ne: Jefferson S nt: n/o Avenue						Name: lumber:		ave-Coral	Mounta	in
	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard =	: 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	21,700 vehicles	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles).	15		
Peak H	lour Volume:	2,018 vehicles	3		He	eavy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	55 mph		ŀ	Vehicle	Miv					
Near/Far La	ne Distance:	71 feet		F		icleType	,	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.69	,
Pa	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.39	6 1.84%
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.89	6 0.74%
Centerline Di		64.0 feet		-	Noise S	ouroo E	lovestion	o (in f	0041		
Centerline Dist.	to Observer:	64.0 feet		-	Noise 3			•	eet)		
Barrier Distance	to Observer:	0.0 feet			11-15	Auto m Truck		.000			
Observer Height	(Above Pad):	5.0 feet					-	.006	Grade Ad	iuetmor	#· 0.0
P	ad Elevation:	0.0 feet			Hea	vy Truck	S: 8	.000	Grade Au	justinei	n. 0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 53	.486			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 53	.320			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 53	.337			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres		Barrier Att	en Be	rm Atten
Autos:	71.78	0.23		-0.5	4	-1.20		-4.70	0.0	000	0.000
Medium Trucks:	82.40	-17.01		-0.5	2	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	86.40	-20.97		-0.5	2	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	r atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	′	Leq E	vening	Leq	Night		Ldn	1 .	CNEL
Autos:	70	.3	68.7		66.9		60.	9	69.	5	70.1
Medium Trucks:	63	1.7	62.5		56.1		54.	6	63.0	)	63.3
Heavy Trucks:	63		62.6		53.6		54.		63.2		63.3
Vehicle Noise:	71	.8	70.4		67.4		62.	6	71.	1	71.6
Centerline Distance	ce to Noise Co	ontour (in feet,	)								
·			Т		dBA		dBA	-	60 dBA	1	5 dBA
			Ldn:		6		64		353		761
		C	NEL:	8	12	1	76		380		818

	FH\	WA-RD-77-108	HIGH	WAY N	OISE PI	REDICT	ION MO	DDEL			
Road Nam	io: EAC26SE ne: Madison St nt: n/o Avenue	-						The W 12642	ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data				S	ite Con	ditions	(Hard :	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	13,300 vehicle	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	1,237 vehicle	3		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		V	ehicle i	Miv					
Near/Far La	ne Distance:	51 feet				icleType	,	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Ra	rrier Heiaht:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Di	. ,	54.0 feet			·- ·- · · ·			/! 6-	-41		
Centerline Dist.	to Observer:	54.0 feet		N	ioise so	ource El			et)		
Barrier Distance	to Observer:	0.0 feet				Auto m Truck		297			
Observer Height (	(Above Pad):	5.0 feet						297	Grade Ad	ii ratmant	
Pa	ad Elevation:	0.0 feet			Heat	y Truck	S: 6	1.006	Grade Ad	justrnent	. 0.0
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	nce (in f	eet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree	es		Hear	y Truck	s: 47	.695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	-1.49		0.18		-1.20		-4.67	0.0	000	0.00
Medium Trucks:	81.00	-18.72		0.21		-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	85.38	-22.68		0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	e Levels (with	out Topo and	barrie	r attenu	ıation)						
VehicleType	Leq Peak Hou			Leq Ev		_	Night		Ldn		VEL
Autos:	67		66.1		64.3		58		66.9	-	67.
Medium Trucks:	61		60.1		53.7		52	-	60.6	-	60.
Heavy Trucks:	61		60.6		51.6		52		61.2		61.
Vehicle Noise:	69		68.0		64.9		60	.1	68.7	′	69.
Centerline Distanc	ce to Noise Co	ontour (in feet	)	70 4	D.4	05	dBA		0 -104		dBA
			I do	70 di 44			ава 95	1 6	0 dBA 205	1	ава 41
			Ldn:			-	-				
		C	NEL:	47		1	02		220	4	74

	FHV	VA-RD-77-108	HIGHWA	Y NO	ISE PF	REDICTION	ON MC	DEL			
Scenario	: EAC26SE					Project I	Vame:	The W	ave-Cora	l Mounta	ain
	e: Madison St					Job Nu	mber:	12642			
Road Segmen	t: n/o Avenue	50									
	PECIFIC IN	IPUT DATA							L INPU	ΓS	
Highway Data				Sit	te Con	ditions (i	Hard =	10, S	oft = 15)		
Average Daily 1	raffic (Adt):	10,800 vehicles	3					Autos.	15		
Peak Hour I	Percentage:	9.30%				dium Tru		,			
Peak Ho	our Volume:	1,004 vehicles	3		He	avy Truci	ks (3+	Axles).	15		
Veh	icle Speed:	50 mph		Ve	hicle N	Nix					
Near/Far Lar	e Distance:	51 feet			Vehi	cleType		Day	Evening	Night	Dail
Site Data						A	utos:	77.5%	12.9%	9.6	% 97.42
Ban	rier Heiaht:	0.0 feet			Ме	edium Tru	ıcks:	84.8%	4.9%	10.39	% 1.84
Barrier Type (0-Wa		0.0			F	łeavy Tru	icks:	86.5%	2.7%	10.89	% 0.74
Centerline Dis		54.0 feet		No	oise So	urce Ele	vation	s (in f	eet)		
Centerline Dist. t		54.0 feet				Autos.	: 0	.000			
Barrier Distance t		0.0 feet			Mediur	n Trucks	. 2	297			
Observer Height (A	,	5.0 feet			Heav	y Trucks	: 8	.006	Grade A	djustme	nt: 0.0
	d Elevation:	0.0 feet		-						-	
	d Elevation:	0.0 feet		La	ne Equ	iivalent i			reet)		
F	Road Grade:	0.0%				Autos.		.862			
	Left View:	-90.0 degree				n Trucks.		.677			
	Right View:	90.0 degree	es		Heav	y Trucks.	47	.695			
HWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Distanc	_	Finite		Fres		Barrier A		erm Atte
Autos:	70.20	-2.39		0.18		-1.20		-4.67		.000	0.0
Medium Trucks:	81.00	-19.63		0.21		-1.20		-4.87		.000	0.0
Heavy Trucks:	85.38	-23.58		0.20		-1.20		-5.39	0	.000	0.0
Inmitigated Noise						/ A	E-let		Late		ONE
	Leq Peak Hou		65.2	g Eve	63.4	Leq N	iignt 57	1	Ldn 66	- 1	CNEL 6
	cc				03.4		57.				6
Autos:	66				E2 0		54		EO		
Autos: Medium Trucks:	60	.4	59.2		52.8		51.	-	59		-
Autos:		.4			50.7		51.	9	60	.3	6
Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	60 60 68	.4 .8	59.2 59.7 67.1					9		.3	6
Autos: Medium Trucks: Heavy Trucks:	60 60 68	.4 .8	59.2 59.7 67.1	70 dB	50.7 64.0	65 d	51. 59.	9	60	.8	6
Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	60 60 68	.8 .5 ontour (in feet	59.2 59.7 67.1	70 dB 38	50.7 64.0	65 d 83	51. 59. BA	9	60	.8	68

Wednesday, March 25, 2020

FH	WA-RD-77-108 H	IGHWAY	NOISE PI	REDICTIO	N MODEL		
Scenario: EAC26SE Road Name: Madison S Road Segment: n/o Avenu					lame: The \ mber: 1264:	Vave-Coral Mo 2	ountain
SITE SPECIFIC II	NPUT DATA			NC	DISE MOD	EL INPUTS	
Highway Data			Site Con	ditions (F	lard = 10, S	Soft = 15)	
Average Daily Traffic (Adt):	10,400 vehicles				Auto	s: 15	
Peak Hour Percentage:	9.30%		Me	dium Truc	ks (2 Axles	): 15	
Peak Hour Volume:	967 vehicles		He	avy Truck	s (3+ Axles	): 15	
Vehicle Speed:	50 mph		Vehicle	Wix			
Near/Far Lane Distance:	51 feet	ł		icleType	Dav	Evening 1	light Daily
Site Data					itos: 77.5		9.6% 97.42%
Barrier Height:	0.0 feet		М	edium Tru	cks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-Wall, 1-Berm):	0.0			Heavy Tru	cks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dist. to Barrier:	54.0 feet		Noise So	ource Ele	vations (in	feet)	
Centerline Dist. to Observer:	54.0 feet			Autos	-		
Barrier Distance to Observer:	0.0 feet		Mediu	m Trucks:	2.297		
Observer Height (Above Pad):	5.0 feet		Hear	y Trucks:	8.006	Grade Adjus	stment: 0.0
Pad Elevation:	0.0 feet						
Road Elevation:	0.0 feet		Lane Eq		Distance (in	feet)	
Road Grade:	0.0%			Autos:	11.002		
Left View:	-90.0 degrees			m Trucks:			
Right View:	90.0 degrees		Hear	y Trucks:	47.695		
FHWA Noise Model Calculation	18						
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten
Autos: 70.20		0.		-1.20	-4.67		
Medium Trucks: 81.00		0.2		-1.20	-4.87		
Heavy Trucks: 85.38		0.2		-1.20	-5.39	0.00	0.000
Unmitigated Noise Levels (with							_
VehicleType Leq Peak Ho			vening	Leq N		Ldn	CNEL
	6.6 65		63.3		57.2	65.8	66.5
	0.2 59		52.7		51.1	59.6	59.8
· · · · · · · · · · · · · · · · · · ·		1.5	50.5		51.7	60.1	60.2
		i.9	63.8		59.1	67.6	68.1
Centerline Distance to Noise C	ontour (in feet)	70	dD A	6E -	DA .	60 dB4	EE ADA
		1	dBA 17	65 dl 81		60 dBA 174	55 dBA 374
	CNE		10	81 87		174	374 402
	CINE	L. 4	·U	87		187	402

	FH\	WA-RD-77-108	HIGH	WAY I	NOISE P	REDICT	ION MC	DEL			
Road Nam	io: EAC26SE ne: Madison St nt: n/o Airport	-					t Name: lumber:		'ave-Coral	Mountai	n
	SPECIFIC IN	IPUT DATA				ľ	NOISE	MODE	L INPUT	S	
Highway Data					Site Cor	ditions	(Hard =	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	18,200 vehicle	s					Autos.	15		
Peak Hour	Percentage:	9.30%			Me	edium Ti	ucks (2	Axles)	15		
Peak H	lour Volume:	1,693 vehicle	S		He	eavy Tru	cks (3+	Axles)	15		
Ve	hicle Speed:	50 mph		H	Vehicle	Mix					
Near/Far La	ne Distance:	51 feet		H		icleType	9	Dav	Evening	Night	Daily
Site Data							Autos:	77.59		9.6%	-
Rai	rrier Height:	0.0 feet			M	ledium 7	rucks:	84.89	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		54.0 feet			Noise S	E	lovetion	o (in f	0041		
Centerline Dist.	to Observer:	54.0 feet			Noise 3			•	eet)		
Barrier Distance	to Observer:	0.0 feet			14-45	Auto m Truck		.000			
Observer Height (	Above Pad):	5.0 feet						.006	Grade Ad	iustmon	t: 0.0
Pa	Pad Elevation:				Hea	vy Truck	is: 8	.000	Grade Au	justinen	1. 0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distar	ice (in	feet)		
ı	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	rs: 47	.677			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 47	.695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-0.12		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-17.36		0.2	21	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-21.32		0.2	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn		NEL
Autos:	69	.1	67.5		65.7		59.	.7	68.3	3	68.9
Medium Trucks:	62	1.6	61.5		55.1		53.	.5	62.0	)	62.2
Heavy Trucks:	63		62.0		52.9		54.		62.5		62.7
Vehicle Noise:	70	1.8	69.3		66.3		61.	.5	70.0	)	70.5
Centerline Distance	e to Noise Co	ontour (in feet	)								
·		-	$\neg$		dBA		dBA		60 dBA	55	dBA
			Ldn:	-	54		17		252		544
		C	NEL:	5	8	1	26		271		584

	FH\	WA-RD-77-108	HIGH	WAY N	OISE PI	REDICTI	ON MC	DEL			
	o: EAC26SE e: Madison St nt: n/o Avenue						Name: umber:		ave-Coral	Mountair	ı
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard =	: 10, So	ft = 15)		
Average Daily	Traffic (Adt):	6,600 vehicle	S					Autos:	15		
Peak Hour	Percentage:	9.30%				edium Tru					
Peak H	our Volume:	614 vehicle	S		He	avy Truc	cks (3+	Axles):	15		
Vel	hicle Speed:	45 mph		ı	ehicle l	Miv					
Near/Far Lar	ne Distance:	45 feet		-		icleType		Day	Evening	Night	Daily
Site Data						-	Autos:	77.5%	12.9%	9.6%	97.429
Rar	rier Height:	0.0 feet			М	edium Ti	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W	all, 1-Berm):	0.0				Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis		51.0 feet		٨	loise So	ource El	evation	s (in fe	et)		
Centerline Dist. t		51.0 feet			Autos: 0.000						
Barrier Distance to Observer: 0.0 feet					Mediu	m Truck	s: 2	.297			
Observer Height (Above Pad): 5.0 feet						vy Truck		.006	Grade Ad	iustment	0.0
Pad Elevation: 0.0 feet						•					
	ad Elevation:	0.0 feet		L	ane Eq	uivalent			eet)		
F	Road Grade:	0.0%				Auto	0	.041			
	Left View:	-90.0 degre	es			m Truck		.848			
	Right View:	90.0 degre	es		Hear	y Truck:	s: 45	.867			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow		stance		Road	Fresi		Barrier Att		m Atten
Autos:	68.46	-4.07		0.43		-1.20		-4.65		000	0.00
Medium Trucks:	79.45			0.46		-1.20		-4.87		000	0.00
Heavy Trucks:	84.25	-25.26		0.46	5	-1.20		-5.42	0.0	000	0.00
Unmitigated Noise											
	Leq Peak Hou	-, -,		Leq Ev			Night		Ldn		VEL
Autos:	63		62.0		60.3		54.		62.8		63.
Medium Trucks: 57.4 56.2					49.8		48.	-	56.8		57.
Heavy Trucks: Vehicle Noise:	58 65	-	57.1 64.0		48.1 60.9		49. 56.	•	57.1 64.8		57. 65.
Centerline Distanc									21.1		50.
Constille Distanc	J.J 110/38 00	Jui (iii leet		70 d	BA	65	dBA	6	0 dBA	55	dBA
			Ldn:	23	3	4	9		106	2	28
		_	NFI:	24			3		113		45

	FHWA-F	RD-77-108 HIGH	WAY N	OISE PR	EDICT	ION MODEL			
Road Name	e: EAC26SE e: Madison St. t: n/o Avenue 58					t Name: The V Number: 12642	Vave-Coral Mo	untain	
SITE S	PECIFIC INPU	T DATA				NOISE MODI			
Highway Data			S	ite Cond	ditions	(Hard = 10, S)	oft = 15)		
Peak Hour F Peak Ho Veh	our Volume: 1,33	30% 30 vehicles 50 mph	V		avy Tru	Autos rucks (2 Axles) rcks (3+ Axles)	: 15		
Near/Far Lan	e Distance:	51 feet		Vehi	cleType	e Day	Evening N	ight Daily	
Site Data Barri Barrier Type (0-Wa		<b>0.0 feet</b> 0.0			edium 1 leavy 1		% 4.9% 1	9.6% 97.42% 0.3% 1.84% 0.8% 0.74%	
Centerline Dis	t. to Barrier: 5	4.0 feet	^	loise So	urce E	levations (in t	feet)		
Centerline Dist. ti Barrier Distance ti Observer Height (A Pa Roa R	L	Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.006 Grade Adjustment: 0.0  Lane Equivalent Distance (in feet) Autos: 47.862 Medium Trucks: 47.677 Heavy Trucks: 47.695							
FHWA Noise Mode			-						
VehicleType			stance	Finite		Fresnel	Barrier Atten	Berm Atten	
Autos:	70.20	-1.17	0.18		-1.20	-4.67			
Medium Trucks: Heavy Trucks:	81.00 85.38	-18.41 -22.36	0.21		-1.20 -1.20	-4.87 -5.39			
Unmitigated Noise	Levels (without	Topo and barrie	er attenu	ıation)					
VehicleType I	Leq Peak Hour	Leq Day	Leq Ev	ening	Leq	Night	Ldn	CNEL	
Autos:	68.0	66.4		64.7		58.6	67.2	67.8	
Medium Trucks:	61.6	60.4		54.0		52.5	61.0	61.2	
Heavy Trucks:	62.0	60.9		51.9		53.1	61.5	61.6	
Vehicle Noise:	69.7	68.3		65.2		60.5	69.0	69.5	
Centerline Distance	e to Noise Conto	ur (in feet)							
		Ldn:	70 d 46			dBA 00	60 dBA 215	55 dBA 463	
		CNEL:	50	)	1	07	231	497	

Wednesday, March 25, 2020

F	HWA-RD-77-1	08 HIGH	IWAY N	OISE PE	REDICTIO	ON MOE	DEL			
Scenario: EAC26S Road Name: Monroe S Road Segment: n/o Aven	St.					Vame: 1 Imber: 1		ave-Coral	Mountair	1
SITE SPECIFIC	INPUT DATA	١			N	DISE N	IODE	L INPUT	s	
Highway Data			S	ite Con	ditions (i	Hard =	10, Sc	ft = 15)		
Average Daily Traffic (Adt)	: 13,800 vehic	les				/	Autos:	15		
Peak Hour Percentage	9.30%			Me	dium Tru	cks (2 A	xles):	15		
Peak Hour Volume	1,283 vehic	les		He	avy Truci	ks (3+ A	xles):	15		
Vehicle Speed	50 mph		,	'ehicle l	Miv					
Near/Far Lane Distance	43 feet		-		icleType		Dav	Evening	Night	Daily
Site Data				VCII			77.5%	-	9.6%	
				M	edium Tru		84.8%		10.3%	1.84%
Barrier Height					Heavy Tru		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm) Centerline Dist. to Barrier									10.070	0.7 170
Centerline Dist. to Barrier			٨	loise Sc	urce Ele	vations	(in fe	eet)		
Barrier Distance to Observer					Autos.	0.0	000			
Observer Height (Above Pad)					m Trucks					
Pad Flevation				Heav	y Trucks.	: 8.0	006	Grade Ad	iustment	0.0
Road Elevation	0.0 1001		L	ane Eq	uivalent l	Distanc	e (in t	eet)		
Road Grade					Autos.					
I eft View		'ees		Mediu	m Trucks.	60.3	341			
Right View				Heav	y Trucks	60.3	355			
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flov	/ Dis	stance	Finite	Road	Fresn	e/	Barrier Att	en Ber	m Atten
Autos: 70.2	20 -1.0	32	-1.34		-1.20		-4.70	0.0	000	0.000
Medium Trucks: 81.0	00 -18.5	56	-1.33		-1.20		-4.88	0.0	000	0.000
Heavy Trucks: 85.3	38 -22.5	52	-1.33		-1.20		-5.31	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo an	d barrie	er attenu	ıation)						
VehicleType Leq Peak F	lour Leq D		Leg Ev	ening	Leq N			Ldn		VEL
	66.3	64.8		63.0		56.9		65.6		66.2
	59.9	58.7		52.4		50.8		59.3		59.5
	60.3	59.2		50.2		51.4		59.8		59.9
Vehicle Noise:	68.0	66.6		63.6		58.8		67.3	3	67.8
Centerline Distance to Noise	Contour (in fe	et)								
			70 d		65 d		6	60 dBA	1	dBA
		Ldn:	42		91			197		24
		CNEL:	46	i	98	1		211	4	55

	FHV	VA-RD-77-108	HIGHV	VAY N	IOISE PR	REDICT	ON MO	DEL			
Road Nan	rio: EAC26SE ne: Monroe St. ent: n/o Avenue	52					Name: lumber:		'ave-Coral N	Mountai	n
SITE	SPECIFIC IN	IPUT DATA				N	IOISE N	ИODE	L INPUTS	5	
Highway Data					Site Cond	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	13,100 vehicles	S					Autos.	15		
Peak Hour	Percentage:	9.30%			Med	dium Tr	ucks (2 )	Axles)	15		
Peak H	Hour Volume:	1,218 vehicles	3		He	avy Truc	cks (3+ )	Axles)	15		
Vé	ehicle Speed:	50 mph		١.	Vehicle N	Niv					
Near/Far La	ane Distance:	43 feet		H		cleType		Dav	Evening	Niaht	Dailv
Site Data					*0111		Autos:	77.5%		9.6%	. ,
Da Da	rrier Heiaht:	0.0 feet			Me	edium T	rucks:	84.89	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	64.0 feet		١.	M-! 0-			- /! 6	41		
Centerline Dist.	to Observer:	64.0 feet		,	Noise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000 297			
Observer Height	(Above Pad):	5.0 feet				n Truck			Grade Adj	o.tmon	
P	Pad Elevation:	0.0 feet			Heav	y Truck	s: 8.	006	Grade Adj	usunen	. 0.0
Ro	ad Elevation:	0.0 feet		I	Lane Equ	iivalent	Distant	ce (in	feet)		
	Road Grade:	0.0%				Auto.	s: 60.	488			
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 60.	341			
	Right View:	90.0 degree	es		Heav	y Truck	s: 60.	355			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresr	nel	Barrier Atte	en Be	rm Atten
Autos:	10.20	-1.55		-1.3		-1.20		-4.70	0.0	00	0.000
Medium Trucks:		-18.79		-1.3	3	-1.20		-4.88	0.0	00	0.000
Heavy Trucks:	85.38	-22.75		-1.3	3	-1.20		-5.31	0.0	00	0.000
<b>Unmitigated Nois</b>	e Levels (with	out Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	' I	Leq E	vening	Leq	Night		Ldn	С	NEL
Autos:	66	.1	64.5		62.8		56.7	7	65.3		65.9
Medium Trucks:	59	.7	58.5		52.1		50.6	3	59.0		59.3
Heavy Trucks:			59.0		50.0		51.2		59.6		59.7
Vehicle Noise:	67	.8	66.4		63.3		58.5	5	67.1		67.6
Centerline Distan	ce to Noise Co	ontour (in feet,	)								
-				70 c	dBA	65	dBA		60 dBA	55	dBA
			Ldn:	4			8		190		109
		C	NEL:	4	4	9	15		204	4	140

	FHV	VA-RD-77-108	HIGI	HWAY N	OISE P	REDICT	ION MO	DDEL					
Road Nam	io: EAC26SE ne: Monroe St. nt: n/o Airport I	BI.						The W 12642	ave-Coral	Mountair	1		
SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	s			
Highway Data				5	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	12,600 vehicles	3					Autos:	15				
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15				
Peak H	lour Volume:	1,172 vehicles	3		He	eavy Tru	cks (3+	Axles):	15				
Ve	hicle Speed:	50 mph		١	Vehicle Mix								
Near/Far La	ne Distance:	51 feet				icleType	,	Dav	Evening	Night	Dailv		
Site Data							Autos:	77.5%		9.6%	97.42%		
Ra	rrier Heiaht:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Di	. ,	54.0 feet			Noise Source Elevations (in feet)								
Centerline Dist.	to Observer:	54.0 feet		,	ioise S	Auto		_	eet)				
Barrier Distance to Observer: 0.0 feet						Auto ım Truck		0.000 0.297					
Observer Height (Above Pad): 5.0 feet								3.006	Grade Ad	ii ratmant			
Pad Elevation: 0.0 feet					неа	vy Truck	S: 6	3.006	Grade Ad	justrnent	. 0.0		
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalen	Distai	nce (in	feet)				
	Road Grade:	0.0%				Auto	s: 47	7.862					
	Left View:	-90.0 degree	es		Mediu	ım Truck	s: 47	7.677					
	Right View:	90.0 degree	es		Hea	vy Truck	s: 47	7.695					
FHWA Noise Mode	el Calculation:	S		1									
VehicleType	REMEL	Traffic Flow	Di	stance		Road	Fres	-	Barrier Att	en Ber	m Atten		
Autos:	70.20	-1.72		0.18	3	-1.20		-4.67	0.0	000	0.000		
Medium Trucks:	81.00	-18.96		0.21	l	-1.20		-4.87	0.0	000	0.000		
Heavy Trucks:	85.38	-22.91		0.20	)	-1.20		-5.39	0.0	000	0.000		
Unmitigated Noise	e Levels (with	out Topo and	barri	er atteni	uation)								
VehicleType	Leq Peak Hou			Leq Ev			Night		Ldn		NEL		
Autos:	67		65.9		64.1		58		66.7		67.3		
Medium Trucks:	61		59.9		53.5		51		60.4		60.6		
Heavy Trucks:	61		60.4		51.3		52		60.9		61.		
Vehicle Noise:	69	.2	67.7		64.7	'	59	.9	68.4	1	68.9		
Centerline Distanc	ce to Noise Co	ontour (in feet,	١ .										
				70 a			dBA	6	60 dBA	1	dBA		
			Ldn:	43			92		198		26		
		Ci	VEL:	46	3	9	9		212	4	57		

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION	MODEL						
	ame: The Wave-Coral Mountain liber: 12642						
	SE MODEL INPUTS						
Highway Data Site Conditions (Ha	ard = 10, Soft = 15)						
Average Daily Traffic (Adt): 12,900 vehicles	Autos: 15						
Peak Hour Percentage: 9.30% Medium Truck:	s (2 Axles): 15						
Peak Hour Volume: 1,200 vehicles Heavy Trucks	(3+ Axles): 15						
Vehicle Speed: 50 mph Vehicle Mix							
Near/Far Lane Distance: 51 feet VehicleType	Day Evening Night Daily						
Site Data Auto							
Barrier Height: 0.0 feet Medium Truck	ks: 84.8% 4.9% 10.3% 1.84%						
Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Truck	ks: 86.5% 2.7% 10.8% 0.74%						
Controlling Diet to Dominion 54.0 feet							
Centerline Diet to Observer: 54.0 feet	· '						
Barrier Distance to Observer: 0.0 feet Autos:	0.000						
Observer Height (Above Pad): 5,0 feet Medium Trucks:	2.297 8.006 Grade Adjustment: 0.0						
Pad Elevation: 0.0 feet Heavy Trucks:	8.006 Grade Adjustment: 0.0						
Road Elevation: 0.0 feet Lane Equivalent Dis	stance (in feet)						
Road Grade: 0.0% Autos:	47.862						
Left View: -90.0 degrees Medium Trucks:							
Right View: 90.0 degrees Heavy Trucks:	47.695						
FHWA Noise Model Calculations							
	Fresnel Barrier Atten Berm Atten						
Autos: 70.20 -1.62 0.18 -1.20	-4.67 0.000 0.000						
Medium Trucks: 81.00 -18.86 0.21 -1.20	-4.87 0.000 0.000						
Heavy Trucks: 85.38 -22.81 0.20 -1.20	-5.39 0.000 0.00						
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType   Leq Peak Hour   Leq Day   Leq Evening   Leq Nig.  Autos: 67.6 66.0 64.2	tht Ldn CNEL 58.2 66.8 67.						
Autos: 67.6 66.0 64.2  Medium Trucks: 61.2 60.0 53.6	52.1 60.5 60.7						
	JZ.1 UU.3 UU.						
Heavy Trucks: 61.6 60.5 51.4	52.7 61.0 61.1						
Heavy Trucks:         61.6         60.5         51.4           Vehicle Noise:         69.3         67.8         64.8	52.7 61.0 61.3 60.0 68.6 69.						
Vehicle Noise: 69.3 67.8 64.8							
	60.0 68.6 69.						
Vehicle Noise: 69.3 67.8 64.8  Centerline Distance to Noise Contour (in feet)	60.0 68.6 69.						

Wednesday, March 25, 2020

F	HWA-RD-77	-108 HIGH	IWAY N	OISE PI	REDICTIO	ON MO	DEL			
Scenario: EAC26S Road Name: Monroe S Road Segment: n/o Aven	St.				Project I Job Nu			ave-Coral I	Mountain	ı
SITE SPECIFIC	INPUT DA	TA			NO	DISE N	/IODE	L INPUTS	S	
Highway Data				Site Con	ditions (l	Hard =	10, Sc	oft = 15)		
Average Daily Traffic (Adt)	12,000 veh	nicles					Autos:	15		
Peak Hour Percentage	9.30%			Me	dium Trud	cks (2 /	Axles):	15		
Peak Hour Volume	1,116 vel	nicles		He	avy Truck	(S (3+ A	Axles):	15		
Vehicle Speed	50 mp	h	1	/ehicle l	Mix					
Near/Far Lane Distance	51 fee	t	F		icleType		Dav	Evening	Night	Daily
Site Data							77.5%		9.6%	97.42%
Barrier Height	: 0.0 fe	ot		М	edium Tru	icks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)				1	Heavy Tru	icks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier	54.0 fe	et	,	loise Sc	urce Ele	vation	s (in fe	opt)		
Centerline Dist. to Observer	54.0 fe	et	F.	.0.00 00	Autos		000	,,,		
Barrier Distance to Observer	0.0 fe	et		Mediu	m Trucks:		297			
Observer Height (Above Pad)	5.0 fe	et			y Trucks:		006	Grade Adj	iustment	0.0
Pad Elevation	0.0 fe	et								
Road Elevation	0.0 fe	et	I	ane Eq	uivalent l		ce (in i	feet)		
Road Grade	0.0%				Autos:		862			
Left View	-90.0 de	egrees			m Trucks:		677			
Right View	90.0 de	egrees		Heav	y Trucks:	47.	695			
FHWA Noise Model Calculation										
VehicleType REMEL	Traffic FI		stance		Road	Fresn		Barrier Atte		m Atten
Autos: 70.2		1.93	0.18		-1.20		-4.67	0.0		0.000
Medium Trucks: 81.0		9.17	0.2		-1.20		-4.87		000	0.000
Heavy Trucks: 85.3		3.13	0.20		-1.20		-5.39	0.0	000	0.000
Unmitigated Noise Levels (wi										
VehicleType Leq Peak F		Day	Leq E		Leq N		<u> </u>	Ldn		VEL
	67.3	65.7		63.9		57.8		66.5		67.1
	60.8	59.6		53.3		51.7		60.2		60.4
	61.3	60.1		51.1		52.4		60.7		60.8
	69.0	67.5		64.5		59.7	7	68.2	2	68.7
Centerline Distance to Noise	Contour (in	feet)	70 c	ID A	65 d	D/		60 dBA		dBA
		l dn:	70 c		65 a		1 6	191		ава   12
		CNFI:	4	•	95			191 205		12 43
		CIVEL:	4	+	95			205	4	43

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	YAW	NOISE P	REDICT	ION M	ODEL			
Road Nan	rio: EAC26SE ne: Monroe St. ent: n/o Avenue					.,		: The W : 12642	ave-Coral	Mountair	1
SITE	SPECIFIC IN	IPUT DATA				ı	IOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	12,600 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak F	Hour Volume:	1,172 vehicle	s		He	eavy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		F	Vehicle	Miv					
Near/Far La	ane Distance:	51 feet		F		icleType	,	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	-	9.6%	,
D-	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	54.0 feet		-	Noise S	ouroo E	lovetio	no (in f	2041		
Centerline Dist.	to Observer:	54.0 feet		-	Noise 3				ei)		
Barrier Distance	to Observer:	0.0 feet				Auto		0.000 2.297			
Observer Height	(Above Pad):	5.0 feet				m Truck			Grade Ad	ii ratmant	. 0 0
P	ad Elevation:	0.0 feet			Hea	vy Truck	s: 8	3.006	Grade Ad	justrnent	. 0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in :	feet)		
	Road Grade:	0.0%				Auto	s: 4	7.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 4	7.677			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 4	7.695			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	70.20	-1.72		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-18.96		0.2	1	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-22.91		0.2	.0	-1.20		-5.39	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	r atten	uation)						
VehicleType	Leq Peak Hou	ur Leq Day	/	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	67	7.5	65.9		64.1		58	.1	66.7	7	67.3
Medium Trucks:	61	1.0	59.9		53.5		51	.9	60.4	4	60.6
Heavy Trucks:	61	1.5	60.4		51.3		52	.6	60.9	9	61.1
Vehicle Noise:	69	9.2	67.7		64.7		59	.9	68.4	4	68.9
Centerline Distan	ce to Noise Co	ontour (in feet	)								
				70	dBA	65	dBA	6	60 dBA	55	dBA
			Ldn:		3		92		198		26
		C	NEL:	4	6	9	99		212	4	57

	FH	WA-RD-77-108	HIGH	WAY N	OISE PI	REDICT	ION MODEL		
	p: EAC26SE e: Avenue 50 et: w/o Madiso						t Name: The \ Number: 1264:		ountain
SITE S	PECIFIC II	NPUT DATA					NOISE MOD	EL INPUTS	
Highway Data				S	ite Con	ditions	(Hard = 10, S	Soft = 15)	
	Percentage: our Volume:	9.30% 1,618 vehicles					Autos rucks (2 Axles icks (3+ Axles	): 15	
	nicle Speed:	50 mph		V	ehicle l	Mix			
Near/Far Lar	e Distance:	51 feet			Veh	icleType	e Day	Evening	Night Daily
Site Data							Autos: 77.5	% 12.9%	9.6% 97.42%
Ran	rier Height:	0.0 feet			М	edium 7	rucks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-Wa	all, 1-Berm):	0.0				Heavy 7	rucks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dis		54.0 feet		٨	loise So	ource E	levations (in	feet)	
Centerline Dist. t		54.0 feet				Auto	os: 0.000		
Barrier Distance t	o Observer:	0.0 feet			Mediu	m Truck	ks: 2.297		
Observer Height (Above Pad): 5.0 feet						vy Truck		Grade Adju	stment: 0.0
Pad Elevation: 0.0 feet						•			
	d Elevation:	0.0 feet		L	ane Eq		t Distance (in	feet)	
F	Road Grade:	0.0%				Auto			
	Left View:	-90.0 degree				m Truck			
	Right View:	90.0 degree	es		Hear	y Truck	s: 47.695		
FHWA Noise Mode	I Calculation	IS							
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresnel	Barrier Atter	Berm Atten
Autos:	70.20	-0.32		0.18	3	-1.20	-4.67	7 0.00	0.000
Medium Trucks:	81.00	-17.56		0.21		-1.20	-4.87	7 0.00	0.000
Heavy Trucks:	85.38	-21.51		0.20	)	-1.20	-5.39	9 0.00	0.000
Unmitigated Noise	•		barrie						
	Leq Peak Ho			Leq Ev			Night	Ldn	CNEL
Autos:	-		67.3		65.5		59.5	68.1	68.7
Medium Trucks:			61.3		54.9		53.4	61.8	62.0
Heavy Trucks:	62	2.9	61.8		52.7		54.0	62.3	62.5
Vehicle Noise:			69.1		66.1		61.3	69.9	70.3
Centerline Distance	e to Noise C	ontour (in feet,	)	70 d	DA.	65	dBA	60 dBA	55 dBA
			I dn:	70 a			aBA 14	245	55 aBA 528
				57			22	263	528 567
		Ci	NEL:	5/		1	22	203	207

FHWA	-RD-77-108 HIGH	IWAY N	OISE PREDIC	TION MODEL						
Scenario: EAC26SE Road Name: Avenue 50				ot Name: The N Number: 1264	Wave-Coral Mo 2	ountain				
Road Segment: w/o Jefferson	St.									
SITE SPECIFIC INPU	JT DATA			NOISE MOD						
Highway Data		S	Site Conditions	(Hard = 10, \$	Soft = 15)					
Average Daily Traffic (Adt): 17,	000 vehicles			Auto	s: 15					
Peak Hour Percentage: 9	9.30%			rucks (2 Axles						
	581 vehicles		Heavy Tr	ucks (3+ Axles	): 15					
Vehicle Speed:	50 mph	ν	ehicle Mix							
Near/Far Lane Distance:	51 feet		VehicleTyp	e Day	Evening N	light Daily				
Site Data				Autos: 77.5	% 12.9%	9.6% 97.42%				
Barrier Height:	0.0 feet		Medium	Trucks: 84.8	% 4.9%	10.3% 1.849				
Barrier Type (0-Wall, 1-Berm):	0.0		Heavy	Trucks: 86.5	% 2.7%	10.8% 0.749				
	54.0 feet	٨	loise Source E	levations (in	feet)					
	54.0 feet		Aut	os: 0.000	,					
Barrier Distance to Observer:	0.0 feet		Medium Truc	ks: 2.297						
Observer Height (Above Pad):	5.0 feet		Heavy Truc	ks: 8.006	Grade Adjus	tment: 0.0				
Pad Elevation:	0.0 feet	,	ane Equivaler	4 Diotomos (in	foot)					
Road Elevation: Road Grade:	0.0 feet		ane Equivaler. Aut		rreet)					
	0.0% 90.0 degrees		Medium Trucks: 47.677							
	90.0 degrees		Heavy Truc							
FHWA Noise Model Calculations										
VehicleType REMEL T	raffic Flow Dis	tance	Finite Road	Fresnel	Barrier Atten	Berm Atten				
Autos: 70.20	-0.42	0.18	-1.20	-4.6	7 0.000	0.00				
Medium Trucks: 81.00	-17.66	0.21	-1.20	-4.8	7 0.000	0.00				
Heavy Trucks: 85.38	-21.61	0.20	-1.20	-5.3	9 0.000	0.00				
Unmitigated Noise Levels (without										
VehicleType Leq Peak Hour	Leq Day	Leq Ev	- 1	Night	Ldn	CNEL				
Autos: 68.8	67.2		65.4	59.4	68.0	68.				
Medium Trucks: 62.3	61.2		54.8	53.3	61.7	61.				
Heavy Trucks: 62.8	61.7		52.6	53.9	62.2	62.				
			66.0	61.2	69.7	70.				
Vehicle Noise: 70.5	69.0									
		70 d	IBA 6º	i dBA	60 dBA	55 dBA				
Vehicle Noise: 70.5		70 d		i dBA	60 dBA 241	55 dBA 520				

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	WAY N	OISE PI	REDICT	ION MODEL		
	o: EAC26SE e: Avenue 50 t: e/o Monroe	St.					t Name: The Volumber: 1264	Wave-Coral N 2	lountain
	PECIFIC IN	IPUT DATA						EL INPUTS	
Highway Data  Average Daily 1	raffic (Adt):	13.300 vehicle	s	S	ite Con	ditions	(Hard = 10, 3		
Peak Hour I	. ,	9.30%			Ме	dium Ti	ucks (2 Axles	): 15	
Peak Ho	our Volume:	1,237 vehicle	s		He	avy Tru	cks (3+ Axles	): 15	
Vel	icle Speed:	50 mph		v	'ehicle l	Miv			
Near/Far Lar	e Distance:	43 feet		F.		icleType	e Dav	Evening	Night Daily
Site Data							Autos: 77.5	-	9.6% 97.42%
Ban	rier Heiaht:	0.0 feet			М	edium 7	rucks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-Wa		0.0			1	Heavy 7	rucks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dis	t. to Barrier:	64.0 feet		٨	loise Sr	ource F	levations (in	feet)	
Centerline Dist. t	o Observer:	64.0 feet			0.00 00	Auto	-	1001)	
Barrier Distance t		0.0 feet			Mediu	m Truck			
Observer Height (A		5.0 feet			Heav	y Truck	s: 8.006	Grade Adju	stment: 0.0
	d Elevation:	0.0 feet		,	ono Fa	uivalan	t Distance (ii	s foot)	
	d Elevation: Road Grade:	0.0 feet 0.0%			ane Eq	Auto		i ieei)	
,	Left View:	-90.0 degree	20		Mediu	m Truck	- 00.100		
	Right View:	90.0 degree				y Truck			
FHWA Noise Mode	l Calculation	s							
VehicleType	REMEL	Traffic Flow		tance	Finite		Fresnel	Barrier Atte	
Autos:	70.20	-1.49		-1.34		-1.20	-4.7		
Medium Trucks:	81.00	-18.72		-1.33		-1.20	-4.8		
Heavy Trucks:	85.38	-22.68		-1.33		-1.20	-5.3	1 0.00	0.000
Unmitigated Noise VehicleType	<b>Levels (with</b> Leg Peak Hou			<b>r attenι</b> Leg Eν		1.00	Night	l dn	CNEL
Autos:	66 66		64.6	Ley Lv	62.8	Ley	56.8	65.4	66.0
Medium Trucks:	59	0.7	58.6		52.2		50.6	59.1	59.3
Heavy Trucks: 60.2 59.					50.0		51.3	59.6	59.8
Vehicle Noise:	67	'.9	66.4		63.4		58.6	67.2	67.6
Centerline Distance	e to Noise Co	ontour (in feet	)						
				70 d			dBA	60 dBA	55 dBA
			Ldn:	41			39	192	414
		C	NEL:	44		9	96	206	444

	FH	WA-RD-77-108	HIGHV	VAY NO	DISE PR	EDICTIO	N MODEL			
	o: EAC26SE e: Avenue 52 nt: w/o Monro					.,	ame: The V nber: 12642	Vave-Coral	Mountair	1
SITE S	SPECIFIC IN	NPUT DATA				NO	ISE MODI	L INPUT	S	
Highway Data				S	ite Cond	ditions (H	lard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	14,200 vehicle	s				Autos	: 15		
Peak Hour	Percentage:	9.30%			Med	dium Truc	ks (2 Axles)	: 15		
Peak H	our Volume:	1,321 vehicle	s		Hea	avy Truck	s (3+ Axles)	: 15		
Vei	hicle Speed:	50 mph		V	ehicle N	lix				
Near/Far Lai	ne Distance:	51 feet				cleType	Day	Evening	Night	Daily
Site Data						Au	tos: 77.5°	6 12.9%	9.6%	97.42%
Rai	rier Height:	0.0 feet			Me	dium Tru	cks: 84.89	% 4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			H	leavy Tru	cks: 86.5°	% 2.7%	10.8%	0.74%
Centerline Dis	st. to Barrier:	54.0 feet		N	oise So	urce Elev	ations (in	eet)		
Centerline Dist.	to Observer:	54.0 feet		-		Autos:	0.000	,		
Barrier Distance		0.0 feet			Mediur	n Trucks:	2.297			
Observer Height (	,	5.0 feet				y Trucks:	8.006	Grade Ad	ustment	: 0.0
	d Elevation:	0.0 feet		_						
	d Elevation:	0.0 feet		Li	ane Equ		istance (in	feet)		
l l	Road Grade:	0.0%				Autos:				
	Left View:	-90.0 degre				n Trucks:				
	Right View:	90.0 degre	es		Heav	y Trucks:	47.695			
FHWA Noise Mode	l Calculation	-								
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite I	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	70.20			0.18		-1.20	-4.67		000	0.000
Medium Trucks:	81.00			0.21		-1.20	-4.87		000	0.000
Heavy Trucks:	85.38	-22.40		0.20		-1.20	-5.39	0.0	000	0.000
Unmitigated Noise										
	Leq Peak Ho			Leq Eve	- 1	Leq Ni	~ ,	Ldn		NEL
Autos:		3.0	66.4		64.6		58.6	67.2	-	67.8
Medium Trucks:	-	1.6	60.4		54.0		52.5	60.9		61.2
Heavy Trucks:		2.0	60.9		51.8		53.1	61.4		61.6
Vehicle Noise:		9.7	68.2		65.2		60.4	69.0	)	69.4
Centerline Distance	e to Noise C	ontour (in fee	t)							
			!	70 dE	ЗА	65 dE	3A	60 dBA		dBA
		_	Ldn:	46		99		214		61
		C	NEL:	50		107		230	4	95

	FH\	WA-RD-77-108	HIGH	WAY N	OISE P	REDICT	ION MO	DDEL			
Road Nam	io: EAC26SE ne: Avenue 54 nt: w/o Monroe	e St.						The W 12642	ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data				S	ite Cor	ditions	(Hard :	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	9,300 vehicles	8					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	865 vehicle	S		Heavy Trucks (3+ Axles): 15						
Ve	hicle Speed:	50 mph		v	Vehicle Mix						
Near/Far La	ne Distance:	51 feet		ľ		icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Ra	rrier Heiaht:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Di	. ,	54.0 feet		l-							
Centerline Dist.		54.0 feet		^	loise S	ource El			et)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (Above Pad): 5.0 feet						m Truck		.297			
	ad Elevation:	0.0 feet			Hea	y Truck	s: 8	1.006	Grade Ad	justment	0.0
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	nce (in f	eet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree	es		Hea	y Truck	s: 47	.695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	-3.04		0.18	3	-1.20		-4.67	0.0	000	0.00
Medium Trucks:	81.00	-20.28		0.21		-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	85.38	-24.23		0.20	)	-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barrie	r attenu	ıation)						
VehicleType	Leq Peak Hou			Leq Ev			Night		Ldn		VEL
Autos:	66		64.6		62.8		56		65.4		66.
Medium Trucks:	59		58.5		52.2		50		59.		59.
Heavy Trucks:	60		59.0		50.0		51		59.6		59.
Vehicle Noise:	67		66.4		63.4		58	.0	67.	ı	67.
Centerline Distanc	e to Noise Co	ontour (in feet	)	70 d	DA.	er.	dBA		i0 dBA		dBA
			Ldn:	70 a			аВА '5	1 6	161	1	ава 48
			Lan: NFI:	37			30		173	-	48 73
		C.	VEL:	31			U		1/3	3	13

FHWA-RD-77-108 HIGI	HWAY N	OISE PREDICT	ION MODEL						
Scenario: EAC26SE Road Name: Avenue 54 Road Segment: w/o Madison St.			t Name: The V Number: 12642	/ave-Coral Mo	untain				
SITE SPECIFIC INPUT DATA			NOISE MODE						
Highway Data	S	ite Conditions	(Hard = 10, S	oft = 15)					
Average Daily Traffic (Adt): 14,700 vehicles			Autos	: 15					
Peak Hour Percentage: 9.30%			rucks (2 Axles)						
Peak Hour Volume: 1,367 vehicles		Heavy Tru	icks (3+ Axles)	: 15					
Vehicle Speed: 50 mph	ν	ehicle Mix							
Near/Far Lane Distance: 51 feet		VehicleType	e Day	Evening N	ight Daily				
Site Data			Autos: 77.5%	6 12.9%	9.6% 97.42%				
Barrier Height: 0.0 feet		Medium T	Frucks: 84.89	6 4.9% 1	0.3% 1.84%				
Barrier Type (0-Wall, 1-Berm): 0.0		Heavy T	Frucks: 86.59	6 2.7% 1	0.8% 0.74%				
Centerline Dist. to Barrier: 54.0 feet	۸	loise Source E	levations (in f	eet)					
Centerline Dist. to Observer: 54.0 feet	-	Auto		,					
Barrier Distance to Observer: 0.0 feet		Medium Truck							
Observer Height (Above Pad): 5.0 feet		Heavy Trucks: 8.006 Grade Adjustment: 0.0							
Pad Elevation: 0.0 feet									
Road Elevation: 0.0 feet	L	ane Equivalen		reet)					
Road Grade: 0.0%									
Left View: -90.0 degrees Right View: 90.0 degrees		Medium Trucks: 47.677 Heavy Trucks: 47.695							
FHWA Noise Model Calculations									
VehicleType REMEL Traffic Flow Dis	stance	Finite Road	Fresnel	Barrier Atten	Berm Atten				
Autos: 70.20 -1.05	0.18		-4.67						
Medium Trucks: 81.00 -18.29	0.21		-4.87						
Heavy Trucks: 85.38 -22.24	0.20	-1.20	-5.39	0.000	0.00				
Unmitigated Noise Levels (without Topo and barri									
	Leg Ev	enina Leo	Night	Ldn	CNEL				
VehicleType Leq Peak Hour Leq Day	. ,			07.4					
Autos: 68.1 66.6		64.8	58.7	67.4	68.				
Autos: 68.1 66.6 Medium Trucks: 61.7 60.5	,	64.8 54.2	52.6	61.1	61.				
Autos:         68.1         66.6           Medium Trucks:         61.7         60.5           Heavy Trucks:         62.1         61.0		64.8 54.2 52.0	52.6 53.2	61.1 61.6	61. 61.				
Autos:         68.1         66.6           Medium Trucks:         61.7         60.5           Heavy Trucks:         62.1         61.0           Vehicle Noise:         69.8         68.4		64.8 54.2	52.6	61.1					
Autos:         68.1         66.6           Medium Trucks:         61.7         60.5           Heavy Trucks:         62.1         61.0	70 d	64.8 54.2 52.0 65.4	52.6 53.2 60.6	61.1 61.6	61. 61.				
Autos:         68.1         66.6           Medium Trucks:         61.7         60.5           Heavy Trucks:         62.1         61.0           Vehicle Noise:         69.8         68.4		64.8 54.2 52.0 65.4 BA 65	52.6 53.2 60.6	61.1 61.6 69.1	61. 61. 69.				

Wednesday, March 25, 2020

	FH'	WA-RD-77-108	HIGI	HWAY	NOISE PI	REDICT	ION MO	DDEL					
Road Nan	rio: EAC26SE ne: Airport Bl. ent: w/o Monro	e St.			Project Name: The Wave-Coral Mountain Job Number: 12642								
	SPECIFIC IN	IPUT DATA							L INPUT	s			
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	ft = 15)				
Average Daily	Traffic (Adt):	4,400 vehicles	S					Autos:	15				
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15				
Peak I	Hour Volume:	409 vehicles	S		Heavy Trucks (3+ Axles): 15								
Ve	ehicle Speed:	50 mph		-	Vehicle	Miv							
Near/Far La	ne Distance:	51 feet				icleType	)	Dav	Evening	Night	Daily		
Site Data							Autos:	77.5%	- 0	9.6%			
Ra	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-V		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
,, ,	Centerline Dist. to Barrier: 54.0 feet												
Centerline Dist. to Observer: 54.0 feet					Noise Source Elevations (in feet)								
Barrier Distance to Observer: 0.0 feet					Autos: 0.000 Medium Trucks: 2.297								
Observer Height (Above Pad): 5.0 feet													
	ad Elevation:	0.0 feet			Hear	vy Truck	s: 8	.006	Grade Ad	ljustment	: 0.0		
	ad Flevation:	0.0 feet		İ	Lane Eq	uivalen	t Distar	ice (in t	eet)				
	Road Grade:	0.0%				Auto	s: 47	.862					
	Left View:	-90.0 degree	25		Medium Trucks: 47.677								
	Right View:	90.0 degree			Heavy Trucks: 47.695								
FHWA Noise Mod	el Calculation	s											
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos:		-6.29		0.	-	-1.20		-4.67	0.0	000	0.000		
Medium Trucks:	81.00	-23.53		0.2	21	-1.20		-4.87	0.0	000	0.000		
Heavy Trucks:	85.38	-27.48		0.2	20	-1.20		-5.39	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barri	er atte	nuation)								
VehicleType	Leq Peak Ho			Leq E	vening		Night		Ldn		NEL		
Autos:			61.3		59.5		53		62.		62.7		
Medium Trucks:			55.3		48.9		47		55.8	-	56.1		
Heavy Trucks:	56	3.9	55.8		46.8		48	.0	56.4	4	56.5		
Vehicle Noise:	64	1.6	63.2		60.1		55	.3	63.9	9	64.3		
Centerline Distan	ce to Noise C	ontour (in feet,	)										
		-		70	dBA	65	dBA	6	60 dBA	55	dBA		
			Ldn:		21		15		98	_	11		
		C	NEL:		23	4	19		105	2	27		

	FH\	WA-RD-77-108	HIGH	WAY I	NOISE P	REDICT	ION MC	DEL					
Road Nam	io: EAC26SE ne: Avenue 58 nt: w/o Madiso	n St.					t Name: lumber:		ave-Coral	Mountai	in		
SITE	SPECIFIC IN	IPUT DATA				1	NOISE	MODE	L INPUT	s			
Highway Data					Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	5,700 vehicle	s					Autos:	15				
Peak Hour	Percentage:	9.30%			Me	edium Ti	ucks (2	Axles).	15				
Peak H	lour Volume:	530 vehicle	s		He	eavy Tru	cks (3+	Axles).	15				
Ve	hicle Speed:	45 mph		ŀ	Vehicle	Miv							
Near/Far La	ne Distance:	45 feet		ŀ		icleType	2	Dav	Evening	Night	Daily		
Site Data					*0,		Autos:	77.5%		9.6%	,		
	rrier Height:	0.0 feet			M	ledium 7	rucks:	84.8%	4.9%	10.3%			
Barrier Type (0-W		0.0 1661				Heavy 7	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Di		51.0 feet											
Centerline Dist.		51.0 feet			Noise S			•	eet)				
Barrier Distance	to Observer:	0.0 feet				Auto		.000					
Observer Height (	(Above Pad):	5.0 feet				m Truck		.297					
	ad Elevation:	0.0 feet			Hea	vy Truck	s: 8	.006	Grade Ad	justmen	t: 0.0		
	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distan	ce (in	feet)				
	Road Grade:	0.0%				Auto	s: 46	.041					
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 45	.848					
	Right View:	90.0 degree	es		Hea	vy Truck	s: 45	.867					
FHWA Noise Mode	el Calculation	s											
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten		
Autos:	68.46	-4.71		0.4	13	-1.20		-4.65	0.0	000	0.000		
Medium Trucks:	79.45	-21.95		0.4		-1.20		-4.87		000	0.000		
Heavy Trucks:	84.25	-25.90		0.4	16	-1.20		-5.42	0.0	000	0.000		
Unmitigated Noise	e Levels (with	out Topo and	barrie	er atter	nuation)								
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn	C	NEL		
Autos:	63	1.0	61.4		59.6		53.	6	62.:	2	62.8		
Medium Trucks:	56	i.8	55.6		49.2		47.	7	56.	1	56.4		
Heavy Trucks:	57		56.5		47.5		48.		57.		57.2		
Vehicle Noise:	64	.8	63.4		60.2		55.	6	64.	1	64.6		
Centerline Distance	ce to Noise Co	ontour (in feet	)										
				70	dBA	65	dBA	-	60 dBA	55	5 dBA		
			Ldn:	_	21		45		96		207		
		C	NEL:	2	22	4	48		103		222		

Scenario: EAC26SE Project Name: The Wa Road Name: Avenue 58 Job Number: 12642 Road Segment: wlo Jackson St.									
	ave-Coral I	Mountair	1						
Road Sedment: W/o Jackson St.									
	NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)								
	, , ,								
Average Daily Traffic (Adt): 4,900 vehicles Autos:	15								
Peak Hour Percentage: 9.30% Medium Trucks (2 Axles):	15								
	Heavy Trucks (3+ Axles): 15								
Vehicle Speed: 50 mph									
Near/Far Lane Distance: 36 feet VehicleType Day	Evening	Night	Daily						
Site Data Autos: 77.5%	12.9%	9.6%	97.42%						
Barrier Height: 0.0 feet Medium Trucks: 84.8%	4.9%	10.3%	1.84%						
Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5%	2.7%	10.8%	0.74%						
Controlling Diet to Bossies 50.0 feet	-1								
Contarling Diet to Observer: 50.0 feet	et)								
Parriar Distance to Observer: 0.0 feet	Autos: 0.000								
Observer Height (Above Red): 5.0 feet Medium Trucks: 2.297									
Pad Elevation: 0.0 feet Heavy Trucks: 8.006	Grade Adj	iustment	: 0.0						
Road Elevation: 0.0 feet Lane Equivalent Distance (in fe	eet)								
Road Grade: 0.0% Autos: 56,409									
Left View: -90.0 degrees Medium Trucks: 56.252									
Right View: 90.0 degrees Heavy Trucks: 56.268									
FHWA Noise Model Calculations									
FRIVA NOISE WOULD CAICUIATIONS	Barrier Atte	en Ber	m Atten						
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel E									
	0.0	000	0.000						
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel E	0.0	000							
VehicleType         REMEL         Traffic Flow         Distance         Finite Road         Fresnel         E           Autos:         70.20         -5.82         -0.89         -1.20         -4.69	0.0		0.000						
VehicleType         REMEL         Traffic Flow         Distance         Finite Road         Fresnel         E           Autos:         70.20         -5.82         -0.89         -1.20         -4.69           Medium Trucks:         81.00         -23.06         -0.87         -1.20         -4.88           Heavy Trucks:         85.38         -27.02         -0.87         -1.20         -5.35	0.0	000	0.000						
VehicleType         REMEL         Traffic Flow         Distance         Finite Road         Fresnel         I           Autos:         70.20         -5.82         -0.89         -1.20         -4.69           Medium Trucks:         81.00         -23.06         -0.87         -1.20         -4.88           Heavy Trucks:         85.38         -27.02         -0.87         -1.20         -5.35           Ummitigated Noise Levels (without Topo and barrier attenuation)           VehicleType         Leq Peak Hour         Leq Day         Leq Evening         Leq Night	0.0 0.0 0.0	000 000 C/	0.000 0.000 VEL						
VehicleType   REMEL   Traffic Flow   Distance   Finite Road   Fresnel   E	0.0 0.0 0.0 <i>Ldn</i>	000 000 C/	0.000 0.000 VEL 62.1						
VehicleType	0.0 0.0 0.0 <i>Ldn</i> 61.5 55.2	000 000 C/	0.000 0.000 VEL 62.1 55.5						
VehicleType	0.0 0.0 0.0 <i>Ldn</i> 61.5 55.2	000 000 C/ 5 2	0.000 0.000 VEL 62.: 55.8						
VehicleType	0.0 0.0 0.0 <i>Ldn</i> 61.5 55.2	000 000 C/ 5 2	0.000 0.000 VEL 62.: 55.8						
VehicleType	0.0 0.0 0.0 Ldn 61.5 55.2 55.8 63.3	000 000 C/ 5 2 3	0.000 0.000 VEL 62.1 55.8 55.9						
VehicleType	0.0 0.0 0.0 61.5 55.2 55.8 63.3	000 000 C/ 5 2 3 3	0.000 0.000 NEL 62.1 55.5 63.7						
VehicleType	0.0 0.0 0.0 Ldn 61.5 55.2 55.8 63.3	000 000 C/ 55 2 3 3 3	62.1 55.5 55.9 63.7						

	FH\	WA-RD-77-108	HIGHV	VAY NO	DISE PR	EDICTION	ом мо	DEL			
	: EAC26SE								ave-Coral	Mountair	n
	e: Avenue 58					Job Nu	mber:	12642			
Road Segmen	t: w/o Monro	e St.									
	PECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions (	Hard =	10, So	ft = 15)		
Average Daily 1	raffic (Adt):	5,900 vehicle	s					Autos:	15		
Peak Hour I	Percentage:	9.30%				dium Tru		,	15		
Peak Ho	our Volume:	549 vehicle	S		He	avy Truc	ks (3+ /	Axles):	15		
	icle Speed:	45 mph		V	ehicle N	lix					
Near/Far Lar	e Distance:	45 feet			Vehi	cleType		Day	Evening	Night	Daily
Site Data						Α	utos:	77.5%	12.9%	9.6%	97.429
Ban	rier Heiaht:	0.0 feet			Me	dium Tri	ıcks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-Wa		0.0			F	leavy Tro	ıcks:	86.5%	2.7%	10.8%	0.749
Centerline Dis	t. to Barrier:	51.0 feet		N	oise So	urce Ele	vation	s (in fe	et)		
Centerline Dist. t	o Observer:	51.0 feet				Autos		000	- /		
Barrier Distance t	o Observer:	0.0 feet			Mediur	n Trucks		297			
Observer Height (A	Above Pad):	5.0 feet				y Trucks		006	Grade Ad	iustment	t: 0.0
Pa	d Elevation:	0.0 feet									
	d Elevation:	0.0 feet		L	ane Equ	ivalent			eet)		
F	Road Grade:	0.0%				Autos		.041			
	Left View:	-90.0 degre				n Trucks		848			
	Right View:	90.0 degre	es		Heav	y Trucks	45.	867			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Dista		Finite		Fresr		Barrier Att		rm Atten
Autos:	68.46			0.43		-1.20		-4.65		000	0.00
Medium Trucks:	79.45			0.46		-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	84.25	-25.75		0.46		-1.20		-5.42	0.0	000	0.00
Unmitigated Noise											
	Leq Peak Ho			Leq Ev	- 1	Leq N			Ldn	1	NEL
Autos:		3.1	61.6		59.8		53.7		62.4		63.
Medium Trucks:		3.9	55.7		49.4		47.8	-	56.3	-	56.
Heavy Trucks:		7.8	56.7		47.6		48.9		57.2		57.
Vehicle Noise:		5.0	63.6		60.4		55.7	7	64.	3	64.
Centerline Distance	e to Noise Co	ontour (in feet	)	70 "		05	D4	1 -	10 -ID 4		-/04
			!	70 di	SA	65 d		6	0 dBA	1	dBA
			Ldn: NFI:	21 23		46			98 105	_	212

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGHWA	AY NO	DISE PI	REDICTION	ON MOI	DEL				
Road Nar	rio: EAC26SE me: Avenue 58 ent: e/o Jackso	n St.					Vame: <sup>-</sup> ımber: <sup>-</sup>		'ave-Coral	Mounta	in	
SITE	SPECIFIC IN	IPUT DATA							L INPUT	S		
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	3,300 vehicles	3					Autos:	15			
Peak Hou	r Percentage:	9.30%			Ме	edium Tru	cks (2 A	(xles	15			
Peak I	Hour Volume:	307 vehicles	3		He	avy Truc	ks (3+ A	(xles	15			
V	ehicle Speed:	50 mph		V	ehicle	Miv						
Near/Far La	ane Distance:	36 feet		-		icleType		Dav	Evening	Night	Daily	
Site Data								77.5%	-	9.69		
D.	arrier Heiaht:	0.0 feet		_	М	edium Tru	ucks:	84.8%	4.9%	10.39		
Barrier Type (0-V		0.0				Heavy Tru	ıcks:	86.5%	2.7%	10.89	6 0.74%	
,, ,	ist. to Barrier:	59.0 feet		<b>-</b>								
Centerline Dist		59.0 feet		N	oise So	ource Ele Autos		3 ( <i>III) te</i> 300	eet)			
Barrier Distance	to Observer:	0.0 feet										
Observer Height	(Above Pad):	5.0 feet				m Trucks		297 006	Grade Ad	iuotma	4.00	
F	Pad Elevation:	0.0 feet			Hea	vy Trucks	: 8.0	JU6	Grade Ad,	justinei	и. 0.0	
Ro	oad Elevation:	0.0 feet		Li	ane Eq	uivalent	Distand	e (in	feet)			
	Road Grade:	0.0%				Autos	56.	409				
	Left View:	-90.0 degree	es		Mediu	m Trucks	: 56.:	252				
	Right View:	90.0 degree	s		Hear	vy Trucks	56.	268				
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fresn	el	Barrier Att	en Be	erm Atten	
Autos	70.20	-7.54		-0.89		-1.20		-4.69	0.0	000	0.000	
Medium Trucks		-24.78		-0.87		-1.20		-4.88	0.0	000	0.000	
Heavy Trucks	85.38	-28.73		-0.87		-1.20		-5.35	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barrier a	ttenu	ation)							
VehicleType	Leq Peak Hou	ır Leq Day	Le	q Eve	ening	Leq N			Ldn		CNEL	
Autos			59.0		57.2		51.2		59.8	-	60.4	
Medium Trucks			53.0		46.6		45.1		53.5		53.7	
Heavy Trucks			53.5		44.4		45.7		54.0		54.2	
Vehicle Noise	: 62	2.3	60.8		57.8		53.0	)	61.6	3	62.0	
Centerline Distan	ce to Noise Co	ontour (in feet)										
				70 dE		65 d			60 dBA	5	5 dBA	
			Ldn:	16		35			75		161	
		CI	VEL:	17		37	7		81		173	

Wednesday, March 25, 2020

	Fŀ	IWA-RD-7	7-108 HIG	HWAY	NOISE P	REDICTI	ON MC	DEL					
Road Na	ario: EAC26SE me: Avenue 60 ent: w/o Madis	)					Name: umber:		ave-Coral	Mounta	in		
SITE	SPECIFIC I	NPUT DA	ΔΤΔ			N	OISE	MODE	L INPUT	s			
Highway Data	. 0. 200 .	0 . 5.			Site Cor								
Average Dai	y Traffic (Adt):	1.100 ve	ehicles					Autos:	15				
	ır Percentage:	9.30%			Me	edium Tru	ıcks (2	Axles):	15				
Peak	Hour Volume:	102 ve	ehicles		He	avy Truc	ks (3+	Axles):	15				
١	/ehicle Speed:	40 m	ph		Vehicle	Miss							
Near/Far L	ane Distance:	23 fe	et			icleType		Dav	Evenina	Niaht	Daily		
Site Data					Ver		Autos:	77.5%		9.69			
	arrier Height:	0.0 1			N	Iedium Ti		84.8%		10.39			
Barrier Type (0-		0.0	eet			Heavy Ti	rucks:	86.5%	2.7%	10.89	6 0.74%		
,, ,	Dist. to Barrier:	40.0 f	oot										
	t. to Observer:	40.0 f			Noise S			•	eet)				
						Auto		.000					
	Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet					Medium Trucks: 2.297 Heavy Trucks: 8.006 Grade Adjustment: 0.0							
	Pad Elevation:	0.0 f			Hea	vy Truck	s: 8	.006	Grade Ad	justmer	nt: 0.0		
	oad Elevation:	0.0 f			Lane Eq	uivalent	Distan	ce (in	feet)				
	Road Grade:	0.0%				Auto	s: 38	.636					
	I eft View:		degrees		Mediu	m Truck	s: 38	.406					
	Right View:		degrees		Hea	vy Truck	s: 38	.429					
FHWA Noise Mo	del Calculatio	ns											
VehicleType	REMEL	Traffic I	low D	istance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten		
Auto	00.0		11.34	1.5	58	-1.20		-4.59	0.0	000	0.000		
Medium Truck		2 -:	28.58	1.0	32	-1.20		-4.87	0.0	000	0.000		
Heavy Truck	82.9	9 -	32.53	1.0	31	-1.20		-5.56	0.0	000	0.000		
Unmitigated Noi	se Levels (wit	hout Topo	and barr	ier atte	nuation)								
VehicleType	Leq Peak Ho	our Le	q Day	Leq E	vening	Leq	Night		Ldn	(	CNEL		
Auto	5: 5	5.5	54.0		52.2		46.	1	54.8	3	55.4		
Medium Truck	s: 4	9.6	48.4		42.0		40.	5	48.9	9	49.1		
Heavy Truck		0.9	49.8		40.7		42.	_	50.0		50.5		
Vehicle Noise	e: 5	7.6	56.2		52.9	1	48.	3	56.9	9	57.3		
Centerline Dista	nce to Noise C	Contour (ii	ı feet)										
					dBA		dBA	6	60 dBA	55	5 dBA		
			Ldn.		5		1		25		53		
			CNEL:		6	1	2		26		57		

	FHV	VA-RD-77-108	HIGHV	VAY N	OISE PI	REDICT	ION MC	DDEL					
Road Nam	io: EAC26SE ne: Avenue 60 nt: e/o Monroe	St.			Project Name: The Wave-Coral Mountain Job Number: 12642								
	SPECIFIC IN	IPUT DATA							L INPUT	S			
Highway Data				S	ite Con	ditions	(Hard =	= 10, So	ft = 15)				
Average Daily	Traffic (Adt):	5,700 vehicle	3					Autos:	15				
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15				
Peak H	lour Volume:	530 vehicle	3		He	avy Tru	cks (3+	Axles):	15				
Ve	hicle Speed:	50 mph		1/	Vehicle Mix								
Near/Far La	ne Distance:	48 feet		-	VehicleType Day Evening Night						Daily		
Site Data					Autos: 77.5% 12.9% 9.6%								
Ra	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Di		64.0 feet			·- ·- · · ·			/! 6-	-41				
Centerline Dist.	to Observer:	64.0 feet		^	ioise so	ource El			et)				
Barrier Distance	to Observer:	0.0 feet				Auto m Truck		297					
Observer Height	(Above Pad):	5.0 feet						297	Crada Ad	i rotmont			
Pi	ad Elevation:	0.0 feet			Heat	y Truck	s: 8	1.006	Grade Ad	usuneni	0.0		
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	nce (in f	eet)				
	Road Grade:	0.0%				Auto	s: 59	.540					
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 59	.391					
	Right View:	90.0 degree	es		Hear	y Truck	s: 59	0.406					
FHWA Noise Mode	el Calculation:	S											
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos:	70.20	-5.17		-1.24		-1.20		-4.70	0.0	000	0.00		
Medium Trucks:	81.00	-22.40		-1.22	2	-1.20		-4.88	0.0	000	0.00		
Heavy Trucks:	85.38	-26.36		-1.23	3	-1.20		-5.31	0.0	000	0.00		
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	ıation)								
VehicleType	Leq Peak Hou	.,.,		Leq Ev			Night		Ldn		VEL		
Autos:	62		61.0		59.2		53.	-	61.8		62.4		
Medium Trucks:	56		55.0		48.6		47.		55.5		55.		
Heavy Trucks:	56		55.5		46.5		47.		56.1		56.		
Vehicle Noise:	64		62.9		59.8		55.	.0	63.6	3	64.		
Centerline Distand	ce to Noise Co	ontour (in feet	)										
				70 d			dBA	6	i0 dBA		dBA		
			Ldn:	24		-	51		111	_	39		
		C	NEL:	26	j .	5	55		119	2	57		

	FH\	WA-RD-77-108	HIGHV	VAY NO	DISE PREDICT	ION MODEL		
Scenario: Road Name: Road Segment:		e St.				t Name: The V Number: 1264	Vave-Coral Mo 2	untain
SITE SP	ECIFIC IN	IPUT DATA			ı	NOISE MOD	EL INPUTS	
Highway Data				S	ite Conditions	(Hard = 10, S	oft = 15)	
Average Daily Tra	affic (Adt):	6,900 vehicle	s			Autos	: 15	
Peak Hour Pe	rcentage:	9.30%			Medium T	rucks (2 Axles	): 15	
Peak Hou	r Volume:	642 vehicle	s		Heavy Tru	icks (3+ Axles	): 15	
Vehic	le Speed:	45 mph		V	ehicle Mix			
Near/Far Lane	Distance:	45 feet			VehicleTyp	e Dav	Evening N	light Daily
Site Data					V011101011 yp	Autos: 77.5	-	9.6% 97.42%
	er Heiaht:	0.0 feet			Medium			0.3% 1.84%
Barrier Type (0-Wall,		0.0 feet			Heavy	Frucks: 86.5	% 2.7% 1	0.74%
Centerline Dist.		51.0 feet						
Centerline Dist. to		51.0 feet		N	oise Source E		feet)	
Barrier Distance to		0.0 feet			Auto			
Observer Height (Ab			Medium Truci					
Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet					Heavy Truci	ks: 8.006	Grade Adjus	tment: 0.0
Road	Elevation:	0.0 feet		L	ane Equivalen	t Distance (in	feet)	
Ro	ad Grade:	0.0%			Auto	os: 46.041		
	Left View:	-90.0 degree	es		Medium Truci	ks: 45.848		
R	ight View:	90.0 degree	es		Heavy Truci	ks: 45.867		
FHWA Noise Model (		-						
	REMEL	Traffic Flow	Dista		Finite Road	Fresnel	Barrier Atten	
Autos:	68.46	-3.88		0.43		-4.65		
Medium Trucks:	79.45			0.46		-4.87		
Heavy Trucks:	84.25			0.46		-5.42	0.000	0.000
Unmitigated Noise L						A Contra	Ldn	CNEL
VehicleType Le	q Peak Hou		62.2	Leq Eve	ening   Leq 60.5	Night 54.4	63.0	63.6
Medium Trucks:		.o '.6	56.4		50.0	48.5	57.0	57.2
Heavy Trucks:	58		57.3		48.3	49.5	57.9	58.0
Vehicle Noise:		5.7	64.2		61.1	56.4	64.9	65.4
Centerline Distance	to Noise Co	ontour (in feet	)					
				70 di	BA 65	dBA	60 dBA	55 dBA
			Ldn:	23		51	109	235
						0.		200

Wednesday, March 25, 2020

Fl	IWA-RD-77-108	HIGHWAY	NOISE P	REDICTIO	N MODEL		
Scenario: EAPC26S Road Name: Jefferson Road Segment: n/o Avenu	St.				lame: The \ mber: 1264:	Vave-Coral Mo 2	ountain
SITE SPECIFIC I	NPUT DATA			NO	DISE MOD	EL INPUTS	
Highway Data			Site Cor	ditions (l	Hard = 10, S	Soft = 15)	
Average Daily Traffic (Adt):	37,000 vehicles	3			Auto	s: 15	
Peak Hour Percentage:	9.30%		Me	edium Truc	cks (2 Axles	): 15	
Peak Hour Volume:	3,441 vehicles	3	He	avy Truck	s (3+ Axles	): 15	
Vehicle Speed:	55 mph		Vehicle	Miv			
Near/Far Lane Distance:	71 feet			icleType	Dav	Evening N	light Daily
Site Data			V C//		utos: 77.5	-	9.6% 97.42%
	0.0.64		_ M	edium Tru			10.3% 1.84%
Barrier Height:	0.0 feet 0.0			Heavy Tru			10.8% 0.74%
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:	0.0 64.0 feet						10:070 0:1 170
Centerline Dist. to Observer:	64.0 feet		Noise S		vations (in	feet)	
Barrier Distance to Observer:	0.0 feet			Autos:			
Observer Height (Above Pad):	5.0 feet			m Trucks:			
Pad Flevation:	0.0 feet		Hea	vy Trucks:	8.006	Grade Adjus	stment: 0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent l	Distance (in	feet)	
Road Grade:	0.0%			Autos:	53.486		
Left View:	-90.0 degree	20	Mediu	m Trucks:	53.320		
Right View:	90.0 degree		Hea	vy Trucks.	53.337		
FHWA Noise Model Calculatio	ns		1				
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten
Autos: 71.7	8 2.54	-0	.54	-1.20	-4.70	0.000	0.000
Medium Trucks: 82.4	0 -14.69	-0	.52	-1.20	-4.88	0.000	0.000
Heavy Trucks: 86.4	0 -18.65	-0	.52	-1.20	-5.3	0.000	0.000
Unmitigated Noise Levels (wit							
VehicleType Leq Peak He			Evening	Leq N		Ldn	CNEL
		71.0	69.2		63.2	71.8	72.4
		64.8	58.4		56.9	65.3	65.6
		64.9	55.9		57.1	65.5	65.6
		72.7	69.8		64.9	73.4	73.9
Centerline Distance to Noise (	Contour (in feet)						
		- 1	) dBA	65 d	1	60 dBA	55 dBA
		Ldn:	109	234		504	1,086
	CI	VEL:	117	252	2	542	1,168

Centerline Dist. to Barrier: 64.0 feet   Centerline Dist. to Observer: 64.0 feet   Genterline Dist. to Observer: 0.0 feet   Centerline Dist. to Observer: 0.0		FH\	WA-RD-77-108	HIGHV	VAY N	OISE PF	REDICTION	ом ис	DEL			
Site Conditions (Hard = 10, Soft = 15)	Road Nam	e: Jefferson S	it.							ave-Coral	Mountair	n
Average Daily Traffic (Adt): 26,500 vehicles   Peak Hour Percentage: 9,30%   Medium Trucks (2 Axles): 15	SITE S	SPECIFIC IN	IPUT DATA								S	
Peak Hour Percentage: 9,30%   Medium Trucks (2 Axles): 15   Peak Hour Volume: 2,465 vehicles   Vehicle Speed: 55 mph   Near/Far Lane Distance: 71 feet   Vehicle Mix   V	Highway Data				S	ite Con	ditions (	Hard =	10, Sc	oft = 15)		
Peak Hour Volume: 2,465 vehicles   Vehicle Speed: Neat/Far Lane Distance: 71 feet   Vehicle Mix	Average Daily	Traffic (Adt):	26,500 vehicle	S					Autos:	15		
Vehicle Speed: Near/Far Lane Distance: 71 feet   Vehicle Mix   Vehicle Type   Day   Evening   Night   Daily	Peak Hour	Percentage:	9.30%			Me	dium Tru	icks (2 i	Axles):	15		
Near/Far Lane Distance: 71 feet   Vehicle Type   Day   Evening   Night   Daily	Peak H	our Volume:	2,465 vehicle	S		He	avy Truc	ks (3+ i	Axles):	15		
Site Data					ν	ehicle I	Лix					
Barrier Height:   0.0   feet   Barrier Type (0-Wall, 1-Berm):   0.0   Centerline Dist. to Barrier:   64.0   feet   Centerline Dist. to Observer:   64.0   feet   Centerline Dist. to Observer:   64.0   feet   Centerline Dist. to Observer:   64.0   feet   Centerline Dist. to Observer:   64.0   feet   Centerline Dist. to Observer:   64.0   feet   Centerline Dist. to Observer:   64.0   feet   Centerline Dist. to Observer:   64.0   feet   Centerline Dist. to Observer:   64.0   feet   Centerline Dist. to Observer:   64.0   feet   Centerline Dist. to Observer:   64.0   feet   Centerline Dist. to Observer:   64.0   feet   Centerline Dist. to Observer:   64.0   feet   Centerline Dist. to Observer:   64.0   feet   Centerline Distance   Centerline	Near/Far Lai	ne Distance:	71 feet			Veh	cleType		Day	Evening	Night	Daily
Barrier Type   Contentine Dist. to Barrier: 64.0 feet   Get Centerline Dist. to Observer: 64.0 feet   Get Centerline Dist. to Observer: 64.0 feet   Get Centerline Dist. to Observer: 64.0 feet   Get Centerline Dist. to Observer: 64.0 feet   Get Centerline Dist. to Observer: 64.0 feet   Get Centerline Dist. to Observer: 64.0 feet   Get Centerline Dist. to Observer: 64.0 feet   Get Centerline Dist. to Observer: 64.0 feet   Get Centerline Dist. to Observer: 64.0 feet   Get Centerline Dist. to Observer: 64.0 feet   Get Centerline Dist. to Observer: 64.0 feet   Get Centerline Dist. to Observer: 64.0 feet   Get Centerline Dist. to Observer: 64.0 feet   Get Centerline Distance to Observer: 64.0 feet   Get Centerline Dis	Site Data						Α	utos:	77.5%	12.9%	9.6%	97.42%
Barrier Type (0-Wall, 1-Berm):	Bai	rier Heiaht:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Centerline Dist. to Observer: 64.0 feet   Autos: 0.0000   Autos: 0.0000   Medium Trucks: 2.297   Heavy Trucks: 8.006   Grade Adjustment: 0.0   Grade Adjustment: 0.0   Grade Adjustment: 0.0   Medium Trucks: 8.006   Grade Adjustment: 0.0   Medium Trucks: 8.006   Grade Adjustment: 0.0   Medium Trucks: 8.006   Grade Adjustment: 0.0   Medium Trucks: 8.006   Grade Adjustment: 0.0   Medium Trucks: 8.006   Grade Adjustment: 0.0   Medium Trucks: 53.320   Medium Trucks: 53.320   Medium Trucks: 53.337   Medium Trucks: 53.337   Medium Trucks: 53.337   Medium Trucks: 82.40   -16.14   -0.52   -1.20   -4.70   0.000   0.000   Medium Trucks: 82.40   -16.14   -0.52   -1.20   -4.70   0.000   0.000   Medium Trucks: 86.40   -2.010   -0.52   -1.20   -4.88   0.000   0.000   Medium Trucks: 80.40   Medium Trucks: 80.40   Medium Trucks: 80.40   -16.14   -0.52   -1.20   -4.88   0.000   0.000   Medium Trucks: 80.40   -16.14   -0.52   -1.20   -5.31   0.000   0.000   Medium Trucks: 80.40   -16.14   -0.52   -1.20   -5.31   0.000   0.000   Medium Trucks: 80.45   -1.20   -4.70   -4.70   0.000   0.000   Medium Trucks: 80.45   -1.20   -4.70   -4.70   0.000   0.000   Medium Trucks: 80.45   -1.20   -4.70   0.000   0.000   0.000   Medium Trucks: 80.45   -1.20   -4.70   0.000   0.000   0.000   Medium Trucks: 80.45   -1.20   -4.70   0.000   0			0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Observer: Barrier Distance to Observer: 0.0 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	Centerline Dis	st. to Barrier:	64.0 feet			loise Sc	urce Fle	vation	s (in f	oet)		
Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.	Centerline Dist.	to Observer:	64.0 feet		F				•	/		
Diserver Height (Above Pad):	Barrier Distance	to Observer:	0.0 feet			Madiu						
Pad Elevation: 0.0 feet   Canada Elevation: 0.0 feet   Road Grade: 0.0%   Lane Equivalent Distance (in feet)   Autos: 53.486   Autos: 53.486   Medium Trucks: 53.320   Heavy Trucks: 53.337   Heavy Trucks: 53.337   Heavy Trucks: 53.337   Heavy Trucks: 53.337   Heavy Trucks: 53.337   Heavy Trucks: 53.337   Heavy Trucks: 53.337   Heavy Trucks: 53.337   Heavy Trucks: 53.337   Heavy Trucks: 53.337   Heavy Trucks: 53.337   Heavy Trucks: 53.337   Heavy Trucks: 63.337   Heavy Trucks: 63.337   Heavy Trucks: 63.337   Heavy Trucks: 63.337   Heavy Trucks: 63.300   Heavy Trucks: 63.300   Heavy Trucks: 63.300   Heavy Trucks: 63.300   Heavy Trucks: 64.500   Heavy Trucks:		,								Grade Ad	iustment	: 0.0
Road Grade:							<i>'</i>					
Left View: -90.0 degrees   Medium Trucks: 53.320					L	ane Equ				feet)		
Heavy Trucks: 53.337     Heavy Trucks: 53.337     Heavy Trucks: 53.337     Heavy Trucks: 53.337   Heavy Trucks: 53.337   Heavy Trucks: 53.337   Heavy Trucks: 53.337   Heavy Trucks: 53.337   Heavy Trucks: 53.337   Heavy Trucks: 54.34   Heavy	F											
VehicleType   REMEL   Traffic Flow   Distance   Finite Road   Fresnel   Barrier Atten   Berm Atten												
VehicleType		Right View:	90.0 degre	es		Heav	y Trucks	: 53.	337			
Autos: 71.78 1.09 -0.54 -1.20 -4.70 0.000 0.000  Medium Trucks: 82.40 -16.14 -0.52 -1.20 -4.88 0.000 0.000  Heavy Trucks: 86.40 -20.10 -0.52 -1.20 -5.31 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 69.5 67.8 61.7 70.4 71.0  Medium Trucks: 64.5 63.3 57.0 55.4 63.9 64.1  Heavy Trucks: 64.6 63.5 54.4 55.7 64.0 64.2  Vehicle Noise: 72.7 71.3 68.3 63.4 72.0 72.5  Centerline Distance to Noise Contour (in feet)	FHWA Noise Mode	l Calculation	s									
Medium Trucks: 82.40   -16.14   -0.52   -1.20   -4.88   0.000   0.000	VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresi	nel	Barrier Att	en Ber	rm Atten
Heavy Trucks: 86.40												
Unmitigated Noise Levels (without Topo and barrier attenuation)   VehicleType												
VehicleType         Leq Peak Hour         Leq Day         Leq Evening         Leq Night         Ldn         CNEL           Autos:         71.1         69.5         67.8         61.7         70.4         71.0           Medium Trucks:         64.5         63.3         57.0         55.4         63.9         64.1           Heavy Trucks:         64.6         63.5         54.4         55.7         64.0         64.2           Vehicle Noise:         72.7         71.3         68.3         63.4         72.0         72.5           Centerline Distance to Noise Contour (in feet)         70 dBA         65 dBA         60 dBA         55 dBA	Heavy Trucks:	86.40	-20.10		-0.52	2	-1.20		-5.31	0.0	000	0.000
Autos: 71.1 69.5 67.8 61.7 70.4 71.0  Medium Trucks: 64.5 63.3 57.0 55.4 63.9 64.1  Heavy Trucks: 64.6 63.5 54.4 55.7 64.0 64.2  Vehicle Noise: 72.7 71.3 68.3 63.4 72.0 72.5  Centerline Distance to Noise Contour (in feet)  70 dBA 65 dBA 60 dBA 55 dBA												
Medium Trucks:         64.5         63.3         57.0         55.4         63.9         64.1           Heavy Trucks:         64.6         63.5         54.4         55.7         64.0         64.2           Vehicle Noise:         72.7         71.3         68.3         63.4         72.0         72.5           Centerline Distance to Noise Contour (in feet)         70 dBA         65 dBA         60 dBA         55 dBA					Leq Ev		Leq I				1	
Heavy Trucks: 64.6   63.5   54.4   55.7   64.0   64.2   Vehicle Noise:   72.7   71.3   68.3   63.4   72.0   72.5												
Vehicle Noise:         72.7         71.3         68.3         63.4         72.0         72.5           Centerline Distance to Noise Contour (in feet)         70 dBA         65 dBA         60 dBA         55 dBA		-										
Centerline Distance to Noise Contour (in feet)         70 dBA         65 dBA         60 dBA         55 dBA	· · ·	-										
70 dBA 65 dBA 60 dBA 55 dBA						00.3		03.4	+	72.0	,	12.0
	Centerline Distanc	e to Noise Co	ontour (in feet	)	70 d	'BA	65.0	IRA		SO dBA	55	dBA
24 07 107 400 000				I dn:		,			1 ,			
CNEL: 94 201 434 935			_								_	

	FHW	/A-RD-77-108	HIGH	IWAY N	OISE PI	REDICTI	ON MOI	DEL			
Road Nam	o: EAPC26SE e: Madison St. nt: n/o Avenue						Name: 1 Imber: 1		ave-Coral I	Mountain	1
SITE S	SPECIFIC IN	PUT DATA				N	OISE N	IODE	LINPUTS	S	
Highway Data				S	ite Con	ditions (	Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt): 1	1,300 vehicles	3				,	Autos:	15		
Peak Hour	Percentage:	9.30%				edium Tru	,	,	15		
Peak H	our Volume:	1,051 vehicles	3		He	avy Truc	ks (3+ A	(xles	15		
Ve	hicle Speed:	50 mph		ν	ehicle	Mix					
Near/Far Lai	ne Distance:	51 feet		F	Veh	icleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	97.429
Bai	rier Height:	0.0 feet			M	edium Tr	ucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W	-	0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis	st. to Barrier:	54.0 feet			laica Sa	ource Ele	wation	(in fo	ot)		
Centerline Dist.	to Observer:	54.0 feet			ioise st	Autos		000	et)		
Barrier Distance	to Observer:	0.0 feet			Modiu	m Trucks		97			
Observer Height (	Above Pad):	5.0 feet				vy Trucks			Grade Ad	ivetmant	. 0 0
Pa	nd Elevation:	0.0 feet				•				doti//io/it.	0.0
Roa	nd Elevation:	0.0 feet		L	ane Eq	uivalent		e (in f	eet)		
F	Road Grade:	0.0%				Autos		862			
	Left View:	-90.0 degree	es			m Trucks		677			
	Right View:	90.0 degree	es		Hear	y Trucks	: 47.0	695			
FHWA Noise Mode	l Calculations	;									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresn		Barrier Atte	en Ber	m Atten
Autos:	70.20	-2.19		0.18		-1.20		-4.67	0.0		0.00
Medium Trucks:	81.00	-19.43		0.21		-1.20		-4.87	0.0		0.00
Heavy Trucks:	85.38	-23.39		0.20	)	-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	•		barrie	er attenu	ıation)					,	
	Leq Peak Hou	- 1 - 7		Leq Ev		Leq I			Ldn		VEL
Autos:	67.		65.4		63.6		57.6		66.2		66.
Medium Trucks:	60.	-	59.4		53.0		51.5		59.9		60.
Heavy Trucks: Vehicle Noise:	61.		59.9 67.3		50.9 64.2		52.1 59.4		60.5		60. 68.
Centerline Distanc					04.2		55.4	•	00.0	•	50.
Jernerille Distalle	e to Noise CO	mour (iii ieet)	, 	70 d	'BA	65 (	lBA	6	0 dBA	55	dBA
			- 1								
			Ldn:	40	)	8	5		184	3	96

	FHV	VA-RD-77-108	HIGHW	AY NO	DISE PR	REDICTI	ON MO	DEL			
Scenario:	EAPC26SE					Project	Name:	The W	ave-Coral I	Mountai	n
Road Name:						Job N	umber:	12642			
Road Segment:	n/o Avenue	54									
	ECIFIC IN	IPUT DATA							L INPUTS	S	
Highway Data				S	te Con	ditions (	Hard =	10, Sc	oft = 15)		
Average Daily Tra	affic (Adt):	22,600 vehicle	s					Autos:	15		
Peak Hour Pe	ercentage:	9.30%				dium Tru		,			
Peak Hou	ır Volume:	2,102 vehicle	s		He	avy Truc	ks (3+ )	Axles):	15		
	le Speed:	55 mph		V	ehicle N	1ix					
Near/Far Lane	Distance:	71 feet			Vehi	cleType		Day	Evening	Night	Daily
Site Data							utos:	77.5%	12.9%	9.6%	97.429
Barrie	er Heiaht:	0.0 feet			Ме	edium Tr	ucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-Wall		0.0			F	łeavy Tr	ucks:	86.5%	2.7%	10.8%	0.749
Centerline Dist.	to Barrier:	64.0 feet		N	oise So	urce Ele	evation	s (in fe	eet)		
Centerline Dist. to	Observer:	64.0 feet		-		Autos		000	,		
Barrier Distance to		0.0 feet			Mediur	n Trucks		297			
Observer Height (Ab	ove Pad):	5.0 feet				y Trucks		006	Grade Adj	iustmen	t: 0.0
Pad	Elevation:	0.0 feet									
Road	Elevation:	0.0 feet		Li	ane Equ	ıivalent			feet)		
Ro	ad Grade:	0.0%				Autos		486			
	Left View:	-90.0 degre	es			n Trucks		320			
R	Right View:	90.0 degre	es		Heav	y Trucks	s: 53.	.337			
FHWA Noise Model (	Calculation										
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresi	nel	Barrier Atte	en Be	rm Atten
Autos:	71.78	0.40		-0.54		-1.20		-4.70	0.0		0.00
Medium Trucks:	82.40	-16.83		-0.52		-1.20		-4.88	0.0		0.00
Heavy Trucks:	86.40	-20.79		-0.52		-1.20		-5.31	0.0	000	0.00
Unmitigated Noise L											
	eq Peak Hou			eq Eve	-	Leq I			Ldn	1	NEL
Autos:	70		68.9		67.1		61.0	-	69.7		70.
Medium Trucks:	63		62.7		56.3		54.		63.2	-	63.
Heavy Trucks:	63		62.8		53.7		55.0		63.3		63.
Vehicle Noise:	72	.0	70.6		67.6		62.	7	71.3	3	71.
Centerline Distance	to Noise Co	ontour (in feet	)					,			
			!	70 dE	3A	65 (		(	60 dBA		dBA
			Ldn:	78		16	-		363		782
		C	NEL:	84		18	57		390	8	341

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGH	I YAWH	NOISE PI	REDICT	ION MO	DDEL			
Road Nan	rio: EAPC26SI ne: Madison S ent: n/o Avenue	t.						The W 12642	ave-Coral	Mountair	1
	SPECIFIC II	NPUT DATA							L INPUT	s	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	14,000 vehicles	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2	Axles):	15		
Peak F	Hour Volume:	1,302 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		H	Vehicle I	Wix					
Near/Far La	ne Distance:	51 feet		ŀ		icleType		Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	- 0	9.6%	
Ra	rrier Height:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			1	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	54.0 feet		-					.,		
Centerline Dist.	to Observer:	54.0 feet		-	Noise Sc				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		0.000			
Observer Height	(Above Pad):	5.0 feet				m Truck		2.297			
	ad Elevation:	0.0 feet			Heav	y Truck	s: E	3.006	Grade Ad	justment.	0.0
Ro	ad Elevation:	0.0 feet		Ī	Lane Eq	uivalent	Distar	nce (in t	eet)		
	Road Grade:	0.0%		Ī		Auto	s: 47	7.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	7.677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47	7.695			
FHWA Noise Mod	el Calculation	IS									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	-1.26		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-18.50		0.2	21	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-22.46		0.2	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er atter	nuation)						
VehicleType	Leq Peak Ho			Leq E	vening		Night		Ldn		VEL
Autos:			66.3		64.6		58		67.		67.7
Medium Trucks:			60.3		54.0		52		60.9	-	61.1
Heavy Trucks:			8.00		51.8		53	.0	61.4	4	61.5
Vehicle Noise:	6	9.6	68.2		65.1		60	.4	68.9	9	69.4
Centerline Distan	ce to Noise C	ontour (in feet,	)								
		-	$\neg$		dBA		dBA	6	0 dBA		dBA
			Ldn:		16	_	8		212		57
		C	NEL:	4	19	1	06		228	4	90

Wednesday, March 25, 2020

	FHW	A-RD-77-108	HIGHV	NAY N	NOISE PE	REDICT	ION MO	DEL			
Road Nam	io: EAPC26SE ne: Madison St. nt: n/o Avenue s	54					Name: ' lumber:		ave-Coral N	Mountai	n
SITE	SPECIFIC IN	PUT DATA				N	IOISE N	/IODE	L INPUTS	5	
Highway Data					Site Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt): 1	1,800 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2 A	(xles	15		
Peak H	lour Volume:	1,097 vehicles	3		He	avy Tru	cks (3+ A	(xles	15		
Ve	hicle Speed:	50 mph		H	Vehicle I	Niv					
Near/Far La	ne Distance:	51 feet		H		cleType	,	Dav	Evening	Night	Daily
Site Data					-			77.5%		9.6%	,
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		54.0 feet		F	Noise Sc			. /! 6	41		
Centerline Dist.	to Observer:	54.0 feet		F	Noise 30			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000 297			
Observer Height	(Above Pad):	5.0 feet				n Truck	o		Grade Adj	o.tmon	4.00
P	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.	006	Grade Adj	usunen	. 0.0
Ro	ad Elevation:	0.0 feet			Lane Equ	ıivaleni	Distant	e (in	feet)		
	Road Grade:	0.0%				Auto	s: 47.	862			
	Left View:	-90.0 degree	es		Mediui	n Truck	s: 47.	677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47.	695			
FHWA Noise Mode	el Calculations										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresn	el	Barrier Atte	en Be	rm Atten
Autos:	70.20	-2.00		0.1	8	-1.20		-4.67	0.0	00	0.000
Medium Trucks:	81.00	-19.24		0.2	1	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-23.20		0.2	0	-1.20		-5.39	0.0	00	0.000
Unmitigated Noise	e Levels (witho	ut Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hour	Leq Day		Leq E	vening	Leq	Night		Ldn	1	NEL
Autos:	67.2	2	65.6		63.8		57.8		66.4		67.0
Medium Trucks:	60.8	В	59.6		53.2		51.7	'	60.1		60.4
Heavy Trucks:	61.3	2	60.1		51.0		52.3		60.6	i	60.8
Vehicle Noise:	68.9	9	67.4		64.4		59.6	i	68.2		68.6
Centerline Distant	ce to Noise Cor	ntour (in feet,	)								
					dBA		dBA		60 dBA		dBA
			Ldn:		1	-	88		189		107
		C	VEL:	4	4	9	)4		203	4	138

	FHV	VA-RD-77-108	HIGH	WAY N	OISE P	REDICT	ION MC	DDEL			
Road Nam	io: EAPC26SE ne: Madison St. nt: n/o Avenue						Name: lumber:		ave-Coral	Mountair	1
SITE	SPECIFIC IN	PUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	Site Cor	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 1	8,000 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	1,674 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		v	/ehicle	Mix					
Near/Far La	ne Distance:	51 feet		F		icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Ra	rrier Heiaht:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	. ,	54.0 feet			laisa S	ource El	lovation	ac (in fe	not)		
Centerline Dist.	to Observer:	54.0 feet		,	ioise si	Auto		.000	ei)		
Barrier Distance	to Observer:	0.0 feet			Modiu	Auto m Truck		.000			
Observer Height (	(Above Pad):	5.0 feet				n Truck vy Truck		.006	Grade Ad	iuctmont	. 0 0
Pa	ad Elevation:	0.0 feet			пеа	ry Truck	s. o	.006	Grade Au	usunen	. 0.0
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distan	ice (in i	feet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree	es		Hea	y Truck	s: 47	.695			
FHWA Noise Mode	el Calculations	5									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	-0.17		0.18		-1.20		-4.67		000	0.00
Medium Trucks:	81.00	-17.41		0.21		-1.20		-4.87		000	0.00
Heavy Trucks:	85.38	-21.37		0.20	)	-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	e Levels (witho	out Topo and	barrie	r attenu	uation)						
VehicleType	Leq Peak Hou			Leq Ev			Night		Ldn		VEL
Autos:	69	-	67.4		65.7		59.	-	68.2	-	68.
Medium Trucks:	62	-	61.4		55.0		53.	-	62.0		62.:
Heavy Trucks:	63		61.9		52.9		54.		62.		62.0
Vehicle Noise:	70	-	69.3		66.2		61.	.4	70.0	)	70.
Centerline Distanc	ce to Noise Co	ntour (in feet,	)	70	·D.4		10.4				10.4
			!	70 d			dBA	1 6	60 dBA		dBA
			Ldn:	54			16		251	-	40
		C	NEL:	58	3	1.	25		269	5	80

	FHV	VA-RD-77-108	HIGHWAY	NOISE P	REDICT	ION MODEL		
	: EAPC26SE : Madison St : n/o Airport I					t Name: The V Number: 12642	Vave-Coral Mo	untain
SITE SI	PECIFIC IN	IPUT DATA				NOISE MOD		
Highway Data				Site Con	ditions	(Hard = 10, S	oft = 15)	
Average Daily Tr	raffic (Adt): 2	21,000 vehicles	S			Autos	: 15	
Peak Hour P	ercentage:	9.30%		Me	edium T	rucks (2 Axles,	: 15	
Peak Ho	ur Volume:	1,953 vehicles	S	He	avy Tru	icks (3+ Axles,	: 15	
Vehi	icle Speed:	50 mph		Vehicle	Mix			
Near/Far Lane	e Distance:	51 feet			icleTyp	e Dav	Evening N	ight Daily
Site Data				1011		Autos: 77.5	-	9.6% 97.42%
Parri	ier Heiaht:	0.0 feet		М	edium 1	rucks: 84.89	% 4.9% 1	0.3% 1.84%
Barrier Type (0-Wai		0.0 feet			Heavy 1	rucks: 86.5°	% 2.7% 1	0.8% 0.74%
Centerline Dist.		54.0 feet						
Centerline Dist. to		54.0 feet		Noise So		levations (in	eet)	
Barrier Distance to		0.0 feet			Auto			
Observer Height (A	bove Pad):	5.0 feet			m Truci		0	
	Elevation:	0.0 feet		Hear	vy Truck	ks: 8.006	Grade Adjus	tment: 0.0
Road	l Elevation:	0.0 feet		Lane Eq	uivalen	t Distance (in	feet)	
Ro	oad Grade:	0.0%			Auto	os: 47.862		
	Left View:	-90.0 degree	es	Mediu	m Truck	ks: 47.677		
F	Right View:	90.0 degree	es	Hear	vy Truck	ks: 47.695		
FHWA Noise Model	Calculations	-						
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	0.50	-	.18	-1.20	-4.67		
Medium Trucks:	81.00	-16.74	-	.21	-1.20	-4.87		
Heavy Trucks:	85.38	-20.70		.20	-1.20	-5.39	0.000	0.000
Unmitigated Noise L								
	eq Peak Hou			Evening		Night	Ldn	CNEL
Autos:	69		68.1	66.3		60.3	68.9	69.5
Medium Trucks:	63		62.1	55.7		54.2	62.6	62.9
Heavy Trucks:	63		62.6	53.5		54.8	63.1	63.3
Vehicle Noise:	71	***	69.9	66.9		62.1	70.7	71.1
Centerline Distance	to Noise Co	ontour (in feet				10.4	00 104	55 104
			1	0 dBA			60 dBA	55 dBA
	Ldn:				60 129 278 598 64 138 298 643			
		Ci	NEL:	64	1	38	298	643

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIG	HWAY	NOISE PI	REDICT	ION M	DDEL			
Road Nam	io: EAPC26SE ne: Madison Si nt: n/o Avenue	t.						The W 12642	ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	7,900 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	735 vehicle	s		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	45 mph		-	Vehicle I	Miv					
Near/Far La	ne Distance:	45 feet				icleType		Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	- 0	9.6%	
Ra	rrier Height:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			1	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	. ,	51.0 feet									
Centerline Dist.		51.0 feet			Noise So				eet)		
Barrier Distance		0.0 feet				Auto		0.000			
Observer Height (		5.0 feet				m Truck		2.297			
	ad Elevation:	0.0 feet			Heav	ry Truck	s: 8	3.006	Grade Ad	ljustment	: 0.0
	ad Flevation:	0.0 feet		İ	Lane Eq	uivalent	Dista	nce (in t	eet)		
	Road Grade:	0.0%				Auto	s: 46	6.041			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 4	5.848			
	Right View:	90.0 degree			Heav	y Truck	s: 4	5.867			
FHWA Noise Mode	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	68.46	-3.29		0.4	43	-1.20		-4.65	0.0	000	0.000
Medium Trucks:	79.45	-20.53		0.4	46	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	84.25	-24.48		0.4	46	-1.20		-5.42	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	er atte	nuation)						
VehicleType	Leq Peak Hou	ur Leq Day	/	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	64	1.4	62.8		61.1		55	.0	63.0	6	64.2
Medium Trucks:	58	3.2	57.0		50.6		49	.1	57.	5	57.8
Heavy Trucks:	59	9.0	57.9		48.9		50	.1	58.	5	58.6
Vehicle Noise:	66	3.2	64.8		61.7		57	.0	65.	5	66.0
Centerline Distanc	ce to Noise Co	ontour (in feet	)								
				70	dBA	65	dBA	6	0 dBA	55	dBA
			Ldn:		26	5	5		119	2	57
	CNEL:				28	5	9		128	2	76

	FH\	WA-RD-77-108	HIGH	1 YAW	NOISE P	REDICT	ION MC	DEL			
Road Nam	io: EAPC26SE ne: Monroe St. nt: n/o Avenue						t Name: lumber:		ave-Coral	Mountai	n
SITE S	SPECIFIC IN	IPUT DATA				ı	IOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard =	: 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	14,300 vehicle	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles).	15		
Peak H	lour Volume:	1,330 vehicle	3		He	eavy Tru	cks (3+	Axles).	15		
Ve	hicle Speed:	50 mph		F	Vehicle	Miv					
Near/Far La	ne Distance:	43 feet				icleType	,	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
Rai	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		64.0 feet		-	Noise S	ouroo E	lovestion	o (in f	0041		
Centerline Dist.	to Observer:	64.0 feet		-	Noise 3			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (	Above Pad):	5.0 feet				m Truck	-		Grade Ad	ii io4mon	4.00
Pa	ad Elevation:	0.0 feet			Hea	vy Truck	s: 8	.006	Grade Ad	justinen	i. U.U
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distan	ce (in	feet)		
1	Road Grade:	0.0%				Auto	s: 60	.488			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 60	.341			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 60	.355			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres		Barrier Att	en Be	rm Atten
Autos:	70.20	-1.17		-1.3		-1.20		-4.70		000	0.000
Medium Trucks:	81.00	-18.41		-1.3	-	-1.20		-4.88		000	0.000
Heavy Trucks:	85.38	-22.36		-1.3	3	-1.20		-5.31	0.0	000	0.000
<b>Unmitigated Noise</b>	Levels (with	out Topo and	barrie	r atten	uation)						
VehicleType	Leq Peak Hou			Leq E	vening		Night		Ldn	1 .	NEL
Autos:	66		64.9		63.1		57.		65.7		66.3
Medium Trucks:	60		58.9		52.5		51.	-	59.4	-	59.7
Heavy Trucks:	60		59.4		50.3		51.		59.9		60.1
Vehicle Noise:	68		66.8		63.7		58.	9	67.5	0	67.9
Centerline Distance	e to Noise Co	ontour (in feet	)								
					dBA		dBA	(	60 dBA		dBA
		_	Ldn:		3		94		201		434
		C	NEL:	4	7	1	00		216	4	466

	FHV	VA-RD-77-108	HIGHWA	AY NOISE	PREDICT	ION MC	DEL			
Road Nam	io: EAPC26SE e: Monroe St. nt: n/o Avenue					t Name: lumber:		ave-Coral	Mountain	
SITE S	SPECIFIC IN	PUT DATA			Г	NOISE	MODE	L INPUT	S	
Highway Data				Site Co	onditions	(Hard =	: 10, So	ft = 15)		
Average Daily	Traffic (Adt):	13,600 vehicles	3				Autos:	15		
Peak Hour	Percentage:	9.30%		٨	1edium Ti	ucks (2	Axles):	15		
Peak H	our Volume:	1,265 vehicles	3	F	leavy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		Vehicle	Miv					
Near/Far La	ne Distance:	51 feet			ehicleType	9	Dav	Evening	Night	Daily
Site Data				-		Autos:	77.5%	0	9.6%	
Rai	rier Height:	0.0 feet			Medium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			Heavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	st. to Barrier:	54.0 feet		Noise !	Source E	levation	s (in fe	et)		
Centerline Dist.	to Observer:	54.0 feet		710,00	Auto		.000	01/		
Barrier Distance	to Observer:	0.0 feet		Med	ium Truck		297			
Observer Height (	Above Pad):	5.0 feet			avy Truck		.006	Grade Ad	iustment	0.0
	ad Elevation:	0.0 feet			•					
Ros	ad Elevation:	0.0 feet		Lane E	quivalen	t Distan	ce (in f	eet)		
ı	Road Grade:	0.0%			Auto		.862			
	Left View:	-90.0 degree	es		ium Truck		.677			
	Right View:	90.0 degree	es	He	avy Truck	s: 47	.695			
FHWA Noise Mode	el Calculation	-								
VehicleType	REMEL	Traffic Flow	Distan		te Road	Fresi		Barrier Att		m Atten
Autos:	70.20	-1.39		0.18	-1.20		-4.67	0.0		0.00
Medium Trucks:	81.00	-18.63		0.21	-1.20		-4.87		000	0.000
Heavy Trucks:	85.38	-22.58		0.20	-1.20		-5.39	0.0	000	0.00
Unmitigated Noise		-			_					
VehicleType	Leq Peak Hou	.,.,		eq Evening		Night		Ldn		VEL
Autos:	67		66.2	64.		58.		67.0		67.
Medium Trucks:	61		60.2	53.		52.		60.7		61.0
Heavy Trucks: Vehicle Noise:	61		60.7 68.1	51. 65.		52. 60.		61.3		61.4
				03.		00.	-	00.0		03.
		micour (III leet)	'							
Centerline Distanc				70 dBA	65	dBA	6	0 dBA	55	dBA
Centerline Distanc			Ldn:	70 dBA 45		dBA 96	6	0 dBA 208		dBA 48

	FHV	VA-RD-77-108	HIGHWAY	/ NOISE P	REDICT	ION MODEL			
Road Nan	rio: EAPC26SE ne: Monroe St. ent: n/o Avenue					Name: The W lumber: 12642		Mountair	1
	SPECIFIC IN	PUT DATA		04- 0-		IOISE MODE		5	
Highway Data				Site Co.	naitions	(Hard = 10, S			
	Traffic (Adt): 1		3			Autos			
	Percentage:	9.30%				ucks (2 Axles)			
	lour Volume:	1,283 vehicles	3	Н	eavy Iru	cks (3+ Axles)	: 15		
	ehicle Speed:	50 mph		Vehicle	Mix				
Near/Far La	ne Distance:	43 feet		Vei	nicleType	e Day	Evening	Night	Daily
Site Data						Autos: 77.5%	6 12.9%	9.6%	97.42%
Ва	rrier Heiaht:	0.0 feet		٨	1edium T	rucks: 84.89	6 4.9%	10.3%	1.84%
Barrier Type (0-V		0.0			Heavy T	rucks: 86.5%	6 2.7%	10.8%	0.74%
Centerline Di	ist. to Barrier:	64.0 feet		Noise S	ource Fi	evations (in f	eet)		
Centerline Dist.	to Observer:	64.0 feet		140/36 0	Auto		ccij		
Barrier Distance	to Observer:	0.0 feet		Modis	ım Truck				
Observer Height	(Above Pad):	5.0 feet			vy Truck		Grade Adj	ustment	. 0 0
P	ad Elevation:	0.0 feet		1100	vy IIuck	3. 0.000	Orado riaj	uotimom	. 0.0
Ro	ad Elevation:	0.0 feet		Lane Ed	uivalen	t Distance (in	feet)		
	Road Grade:	0.0%			Auto	s: 60.488			
	Left View:	-90.0 degree	es	Media	ım Truck	s: 60.341			
	Right View:	90.0 degree	s	Hea	vy Truck	s: 60.355			
FHWA Noise Mod	el Calculations	S		1					
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Atte	en Bei	m Atten
Autos:	70.20	-1.32	-1	1.34	-1.20	-4.70	0.0	00	0.000
Medium Trucks:	81.00	-18.56	-1	1.33	-1.20	-4.88	0.0	00	0.000
Heavy Trucks:	85.38	-22.52	-1	1.33	-1.20	-5.31	0.0	00	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier att	enuation)					
VehicleType	Leq Peak Hou	r Leq Day	Leq	Evening	Leq	Night	Ldn	C	NEL
Autos:	66	.3	64.8	63.0	)	56.9	65.6	i	66.2
Medium Trucks:	59	.9	58.7	52.4	ı	50.8	59.3	1	59.5
Heavy Trucks:	60	.3	59.2	50.2	2	51.4	59.8	1	59.9
Vehicle Noise:	68	.0	66.6	63.6	3	58.8	67.3		67.8
Centerline Distant	ce to Noise Co	ntour (in feet)							
			1 7	'O dRA	65	dRA	60 dR4	55	dRA

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGHW	/AY N	OISE PI	REDICT	ION MODEL		
	p: EAPC26SE e: Monroe St. et: n/o Airport	=					t Name: The Number: 1264		Mountain
	PECIFIC IN	IPUT DATA					NOISE MOD		5
Highway Data				S	ite Con	ditions	(Hard = 10, \$	Soft = 15)	
	Percentage: our Volume:	9.30% 1,237 vehicles					Auto rucks (2 Axles icks (3+ Axles	:): 15	
	nicle Speed:	50 mph		ν	ehicle l	Wix			
Near/Far Lar	ne Distance:	51 feet			Veh	icleTyp	e Day	Evening	Night Daily
Site Data							Autos: 77.5	% 12.9%	9.6% 97.42%
Bar	rier Heiaht:	0.0 feet			М	edium 1	Frucks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-Wa		0.0			-	Heavy 1	rucks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dis	t. to Barrier:	54.0 feet		۸	loise So	ource E	levations (in	feet)	
Centerline Dist. t Barrier Distance t Observer Height (, Pa	o Observer:	54.0 feet 0.0 feet 5.0 feet 0.0 feet			Mediu	Auto m Truci y Truci	os: 0.000 ks: 2.297	Í	ustment: 0.0
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalen	t Distance (ir	ı feet)	
F	Road Grade:	0.0%				Auto	os: 47.862		
	Left View: Right View:	-90.0 degree				m Truck vy Truck			
FHWA Noise Mode	I Calculation	s							
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresnel	Barrier Atte	en Berm Atten
Autos:	70.20	-1.49		0.18	1	-1.20	-4.6	7 0.0	0.000
Medium Trucks:	81.00			0.21		-1.20	-4.8		
Heavy Trucks:	85.38	-22.68		0.20	1	-1.20	-5.3	9 0.0	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier	attenu	ıation)				
	Leq Peak Ho	, ,	_	.eq Ev		Leq	Night	Ldn	CNEL
Autos:			66.1		64.3		58.3	66.9	
Medium Trucks:			60.1		53.7		52.2	60.6	
Heavy Trucks:			60.6		51.6		52.8	61.2	
Vehicle Noise:		•••	68.0		64.9		60.1	68.7	69.2
Centerline Distance	e to Noise Co	ontour (in feet)	)						
				70 d			dBA	60 dBA	55 dBA
	Ldn:							441	
	CNEL:				,	1	02	220	474

Wednesday, March 25, 2020

	FHV	WA-RD-77-108	HIGHW	AY N	IOISE PR	EDICT	ION MOI	DEL			
Road Nam	io: EAPC26SE ne: Monroe St. nt: n/o Avenue						t Name: T		/ave-Coral	Mounta	ain
SITE	SPECIFIC IN	IPUT DATA				N	NOISE N	/IODE	L INPUT	s	
Highway Data					Site Cond	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	13,200 vehicles	;				,	Autos.	: 15		
Peak Hour	Percentage:	9.30%			Med	dium Tr	ucks (2 A	(xles	: 15		
Peak H	lour Volume:	1,228 vehicles	;		Hea	avy Tru	cks (3+ A	(xles	: 15		
Ve	hicle Speed:	50 mph		١,	Vehicle N	liv					
Near/Far La	ne Distance:	51 feet		H		oleType	,	Dav	Evening	Night	Daily
Site Data					10111			77.5%		9.69	
Pa	rrier Height:	0.0 feet			Ме	dium T	rucks:	84.89	6 4.9%	10.39	% 1.84%
Barrier Type (0-W		0.0 feet			H	leavy T	rucks:	86.5%	6 2.7%	10.89	% 0.74%
Centerline Di	. ,	54.0 feet		١.				,, ,	1		
Centerline Dist.		54.0 feet		1	Voise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000			
Observer Height (	Above Pad):	5.0 feet			Mediun			297			
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.0	006	Grade Ad	justmei	nt: 0.0
Roa	ad Elevation:	0.0 feet		1	Lane Equ	ivalent	t Distanc	e (in	feet)		
	Road Grade:	0.0%				Auto	s: 47.	862			
	Left View:	-90.0 degree	:S		Mediun	n Truck	s: 47.	677			
	Right View:	90.0 degree	:S		Heav	y Truck	s: 47.	695			
FHWA Noise Mode	el Calculation:	s		_							
VehicleType	REMEL	Traffic Flow	Distar	псе	Finite I	Road	Fresn	el	Barrier Att	en B	erm Atten
Autos:	70.20	-1.52		0.1	В	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-18.76		0.2	1	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-22.71		0.2	D	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier a	tten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	Le	eq E	/ening	Leq	Night		Ldn	(	CNEL
Autos:	67	.7	66.1		64.3		58.3		66.	9	67.5
Medium Trucks:	61	.3	60.1		53.7		52.2		60.	6	60.8
Heavy Trucks:	61	.7	60.6		51.5		52.8		61.	1	61.3
Vehicle Noise:	69	).4	67.9		64.9		60.1		68.	7	69.1
Centerline Distance	e to Noise Co	ontour (in feet)									
		-		70 c	IBA	65	dBA	-	60 dBA	5	5 dBA
			Ldn:	4	4	9	95		204		439
		CI	VEL:	4	7	1	02		219		472

	FH\	WA-RD-77-108	HIGH	WAY N	OISE PI	REDICT	ION M	DDEL				
	o: EAPC26SE e: Avenue 50 at: w/o Jeffers				Project Name: The Wave-Coral Mountain Job Number: 12642							
	SPECIFIC IN	IPUT DATA							L INPUT	S		
Highway Data				5	Site Con	ditions	(Hard :	= 10, S	oft = 15)			
Average Daily 1	Traffic (Adt):	17,500 vehicle	s					Autos				
Peak Hour I	Percentage:	9.30%				edium Tr	,	,				
Peak Ho	our Volume:	1,628 vehicle	S		He	avy Tru	cks (3+	Axles)	: 15			
	nicle Speed:	50 mph		١	/ehicle	Mix						
Near/Far Lar	ne Distance:	51 feet			Veh	icleType	,	Day	Evening	Night	Daily	
Site Data							Autos:	77.59	6 12.9%	9.6%	97.42%	
Ran	rier Height:	0.0 feet			М	edium T	rucks:	84.89	6 4.9%	10.3%	1.84%	
Barrier Type (0-Wa	all, 1-Berm):	0.0				Heavy T	rucks:	86.5%	6 2.7%	10.8%	0.74%	
Centerline Dis		54.0 feet		1	loise So	ource E	levatio	ns (in f	eet)			
Centerline Dist. t		54.0 feet				Auto	s: C	0.000				
Barrier Distance t		0.0 feet			Mediu	m Truck	s: 2	2.297				
Observer Height (/ Pa	Above Pad): d Elevation:	5.0 feet 0.0 feet			Hear	y Truck	s: 8	3.006	Grade Ad	ustment	: 0.0	
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalen	t Distai	nce (in	feet)			
F	Road Grade:	0.0%				Auto	s: 47	7.862				
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	7.677				
	Right View:	90.0 degree	es		Hear	y Truck	s: 47	7.695				
FHWA Noise Mode												
VehicleType	REMEL	Traffic Flow	Dis	tance		Road	Fres		Barrier Att		rm Atten	
Autos:	70.20	-0.29		0.18		-1.20		-4.67			0.000	
Medium Trucks:	81.00			0.21		-1.20		-4.87			0.000	
Heavy Trucks:	85.38			0.20		-1.20		-5.39	0.0	000	0.000	
Unmitigated Noise							A Contra		Lata		NE	
VehicleType Autos:	Leq Peak Hou	.,.,	67.3	Leq Ev	ening 65.5		Night 59	5	Ldn 68.1		NEL 68.7	
Medium Trucks:		9.5	61.3		54.9		53		61.8		62.	
Heavy Trucks:	62		61.8		52.8		54		62.4		62.	
Vehicle Noise:	70		69.2		66.1		61		69.9		70.	
Centerline Distance	e to Noise Co	ontour (in feet	)									
		•		70 a	IBA .	65	dBA		60 dBA	55	dBA	
			Ldn:	53	3	1	14		246	5	30	
		С										

	FHV	VA-RD-77-108 I	HIGHWAY	NOISE P	REDICTIO	ON MODEL			
Road Nan	io: EAPC26SE ne: Monroe St. nt: n/o Avenue				.,	Vame: The W Imber: 12642		Mountair	1
	SPECIFIC IN	PUT DATA				DISE MODE		S	
Highway Data				Site Con	ditions (i	Hard = 10, Se	oft = 15)		
Average Daily	Traffic (Adt): 1	12,900 vehicles				Autos:	15		
Peak Hour	Percentage:	9.30%		Me	dium Tru	cks (2 Axles).	15		
Peak F	lour Volume:	1,200 vehicles		He	avy Truci	ks (3+ Axles).	15		
	hicle Speed:	50 mph		Vehicle	Mix				
Near/Far La	ne Distance:	51 feet			icleType	Day	Evening	Night	Daily
Site Data					A	utos: 77.5%	6 12.9%	9.6%	97.42%
Ra	rrier Heiaht:	0.0 feet		М	edium Tru	icks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			Heavy Tru	icks: 86.5%	6 2.7%	10.8%	0.74%
Centerline Di	. ,	54.0 feet		Noice S	urco Elo	vations (in f	not)		
Centerline Dist.	to Observer:	54.0 feet		Noise 30	Autos		eet)		
Barrier Distance	to Observer:	0.0 feet		A 4 45 - 1	Autos. m Trucks				
Observer Height	(Above Pad):	5.0 feet					Grade Ad	liuctmont	. 0.0
P	ad Elevation:	0.0 feet		Hea	y Trucks	8.006	Grade Ad,	justinent	. 0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent l	Distance (in	feet)		
	Road Grade:	0.0%			Autos.	47.862			
	Left View:	-90.0 degrees	S	Mediu	m Trucks.	47.677			
	Right View:	90.0 degrees	S	Hear	y Trucks	47.695			
FHWA Noise Mod	el Calculations								
VehicleType	REMEL	Traffic Flow	Distance		Road	Fresnel	Barrier Att		m Atten
Autos:	70.20	-1.62	-	.18	-1.20	-4.67		000	0.000
Medium Trucks:	81.00	-18.86	-	21	-1.20	-4.87		000	0.000
Heavy Trucks:	85.38	-22.81	0.	20	-1.20	-5.39	0.0	000	0.000
Unmitigated Noise	e Levels (witho	out Topo and b	arrier atte	nuation)					
VehicleType	Leq Peak Hou			Evening	Leq ∧		Ldn		NEL
Autos:	67.		6.0	64.2		58.2	66.8	-	67.4
Medium Trucks:	61.	-	0.0	53.6		52.1	60.5	-	60.7
Heavy Trucks:	61.		0.5	51.4		52.7	61.0		61.2
Vehicle Noise:	69.	.3 6	7.8	64.8		60.0	68.6	6	69.0
Centerline Distant	ce to Noise Co	ntour (in feet)							

Wednesday, March 25, 202

	FHV	VA-RD-77-108 H	IGHWAY	NOISE P	REDICTIO	N MODEL					
	EAPC26SE E: Avenue 50 E: w/o Madiso					lame: The V mber: 1264:	Vave-Coral Mo 2	untain			
SITE S	PECIFIC IN	PUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily T	raffic (Adt):	17,700 vehicles		Autos: 15							
Peak Hour F	Percentage:	9.30%		Me	edium Truc	ks (2 Axles	): 15				
Peak Ho	ur Volume:	1,646 vehicles		He	avy Truck	s (3+ Axles	): 15				
Veh	icle Speed:	50 mph		Vehicle	Miv						
Near/Far Lan	e Distance:	51 feet			icleType	Day	Evening N	ight Daily			
Site Data						itos: 77.5	-	9.6% 97.42%			
Pare	ier Heiaht:	0.0 feet		M	edium Tru	cks: 84.8	% 4.9% 1	0.3% 1.84%			
Barrier Type (0-Wa		0.0			Heavy Tru	cks: 86.5	% 2.7% 1	0.8% 0.74%			
Centerline Dist	t. to Barrier:	54.0 feet		Noise S	ource Fle	vations (in	feet)				
Centerline Dist. to	Observer:	54.0 feet		110,00	Autos:	•					
Barrier Distance to	Observer:	0.0 feet		Mediu	m Trucks:						
Observer Height (A	lbove Pad):	5.0 feet			vy Trucks:		Grade Adjus	tment: 0.0			
	d Elevation:	0.0 feet			,		,				
	d Elevation:	0.0 feet		Lane Eq		Distance (in	feet)				
R	oad Grade:	0.0%			Autos:						
	Left View:	-90.0 degrees			m Trucks:						
	Right View:	90.0 degrees		Hea	vy Trucks:	47.695					
FHWA Noise Model	Calculations	s									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten			
Autos:	70.20	-0.24	0.	18	-1.20	-4.67	0.000	0.000			
Medium Trucks:	81.00	-17.48	0.	21	-1.20	-4.87	0.000	0.000			
Heavy Trucks:	85.38	-21.44	0.	20	-1.20	-5.39	0.000	0.000			
Unmitigated Noise	Levels (with	out Topo and ba	rrier atte	nuation)							
VehicleType [	.eq Peak Hou	r Leq Day	Leq I	vening	Leq N	ight	Ldn	CNEL			
Autos:	68			65.6		59.5	68.2	68.8			
Medium Trucks:	62			55.0		53.4	61.9	62.1			
Heavy Trucks:	62	.9 61	1.8	52.8		54.1	62.4	62.5			
Vehicle Noise:	70	.6 69	9.2	66.2		61.4	69.9	70.4			
Centerline Distance	to Noise Co	ntour (in feet)									
				dBA	65 dl		60 dBA	55 dBA			
		Lo					534				
	L:	57 124 266 573				573					

	FH\	WA-RD-77-108	HIGHWA	ΥN	OISE PR	EDICT	TION MC	DEL			
Road Nam	io: EAPC26SE ne: Avenue 50 nt: e/o Monroe						t Name: Number:		Vave-Coral	Mounta	ain
SITE	SPECIFIC IN	IPUT DATA				ı	NOISE	MODE	L INPUT	s	
Highway Data					Site Cond	ditions	(Hard =	: 10, S	oft = 15)		
Average Daily	Traffic (Adt):	13,600 vehicles	;					Autos	: 15		
Peak Hour	Percentage:	9.30%			Med	dium Ti	rucks (2	Axles)	: 15		
Peak H	lour Volume:	1,265 vehicles	;		Hea	avy Tru	icks (3+	Axles)	: 15		
Ve	hicle Speed:	50 mph		١,	/ehicle N	Ni.v					
Near/Far La	ne Distance:	43 feet		H,		ii <b>x</b> cleType	ρ	Dav	Evening	Night	Daily
Site Data				+	*0///		Autos:	77.59		9.6	,
Pa	rrier Height:	0.0 feet		_	Ме	dium 7	Trucks:	84.89	6 4.9%	10.3	% 1.84%
Barrier Type (0-W		0.0			H	leavy 7	Trucks:	86.59	% 2.7%	10.8	% 0.74%
Centerline Dis	. ,	64.0 feet		١.	/ O-			- /! /	41		
Centerline Dist.	to Observer:	64.0 feet			Voise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (	Above Pad):	5.0 feet			Mediun			.297	0	E t	-4: 0.0
	ad Elevation:	0.0 feet			Heav	y Truck	ks: 8	.006	Grade Ad	ijustme	nt: U.U
Roa	ad Elevation:	0.0 feet		L	ane Equ	ivalen	t Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	os: 60	.488			
	Left View:	-90.0 degree	es.		Mediun	n Truck	ks: 60	.341			
	Right View:	90.0 degree	:S		Heav	y Truck	ks: 60	.355			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distant	се	Finite I	Road	Fres	nel	Barrier At	ten B	erm Atten
Autos:	70.20	-1.39		-1.34	1	-1.20		-4.70	0.	000	0.000
Medium Trucks:	81.00	-18.63		-1.33	3	-1.20		-4.88	0.	000	0.000
Heavy Trucks:	85.38	-22.58		-1.33	3	-1.20		-5.31	0.	000	0.000
Unmitigated Noise	Levels (with	out Topo and I	barrier at	tten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	Le	q Eı	ening	Leq	Night		Ldn		CNEL
Autos:	66	.3	64.7		62.9		56.	9	65.	5	66.1
Medium Trucks:	59	.8	58.7		52.3		50.	7	59.	2	59.4
Heavy Trucks:	60	.3	59.2		50.1		51.	4	59.	7	59.9
Vehicle Noise:	68	3.0	66.5		63.5		58.	7	67.	3	67.7
Centerline Distance	e to Noise Co	ontour (in feet)									
-				70 c	IBA	65	dBA		60 dBA		55 dBA
			Ldn:	42	2	9	90		195		420
		CI	VEL:	4	5	9	97		209		451

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIGH	NAY N	DISE PI	REDICT	ION MO	DDEL					
Road Nam	io: EAPC26SE ne: Avenue 54 nt: w/o Madisor	n St.					Name: lumber:		ave-Coral	Mountair	1		
SITE	SPECIFIC IN	PUT DATA			NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt): 1	5,600 vehicle	3					Autos:	15				
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15				
Peak H	lour Volume:	1,451 vehicle	S		He	avy Tru	cks (3+	Axles):	15				
Ve	hicle Speed:	50 mph		ν	ehicle i	Mix							
Near/Far La	ne Distance:	51 feet		- F		icleType	,	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%	12.9%	9.6%	97.429		
Rai	rrier Heiaht:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Di	. ,	54.0 feet			laisa Sa	ource El	lovatio	ne (in fe	not)				
Centerline Dist.	to Observer:	54.0 feet		N	0156 20	Auto		0.000	ei)				
Barrier Distance	to Observer:	0.0 feet			Modiu	Auto m Truck		.297					
Observer Height (	(Above Pad):	5.0 feet				n Truck vy Truck		.006	Grade Ad	iuctmont	. 0 0		
Pa	ad Elevation:	0.0 feet			пеа	ry Truck	S. C	.000	Grade Au	usunen	. 0.0		
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	nce (in i	feet)				
	Road Grade:	0.0%				Auto	s: 47	.862					
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677					
	Right View:	90.0 degree	es		Hear	y Truck	s: 47	.695					
FHWA Noise Mode	el Calculations	;											
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos:	70.20	-0.79		0.18		-1.20		-4.67		000	0.00		
Medium Trucks:	81.00	-18.03		0.21		-1.20		-4.87		000	0.00		
Heavy Trucks:	85.38	-21.99		0.20		-1.20		-5.39	0.0	000	0.00		
Unmitigated Noise	e Levels (witho	out Topo and	barrier	attenu	ation)								
VehicleType	Leq Peak Hou			Leq Ev			Night		Ldn		VEL		
Autos:	68		66.8		65.0		59		67.6		68.		
Medium Trucks:	62	-	60.8		54.4		52		61.3		61.0		
Heavy Trucks:	62		61.3		52.3		53		61.9		62.0		
Vehicle Noise:	70		68.7		65.6		60	.8	69.4	1	69.		
Centerline Distanc	ce to Noise Co	ntour (in feet	)				10.4				10.4		
			!	70 d			dBA	6	60 dBA		dBA		
			Ldn:	49			06		228		91		
		C	NEL:	53		1	14		245	5	27		

FHV	VA-RD-77-108	HIGHWA'	/ NOISE	PREDICTIO	N MODEL					
Scenario: EAPC26SE Road Name: Avenue 52 Road Segment: w/o Monroe			Project Name: The Wave-Coral Mountain Job Number: 12642							
SITE SPECIFIC IN	PUT DATA			NC	ISE MODE	L INPUTS				
Highway Data			Site C	onditions (H	lard = 10, S	oft = 15)				
Average Daily Traffic (Adt): 1 Peak Hour Percentage: Peak Hour Volume:	9.30% 1,358 vehicles			Medium Truc Heavy Truck		: 15				
Vehicle Speed:	50 mph		Vehicl	le Mix						
Near/Far Lane Distance:	51 feet		V	ehicleType	Day	Evening N	light Daily			
Site Data				Au	tos: 77.59	6 12.9%	9.6% 97.42%			
Barrier Height:	0.0 feet			Medium Tru	cks: 84.89	6 4.9% ·	0.3% 1.84%			
Barrier Type (0-Wall, 1-Berm):	0.0			Heavy Tru	cks: 86.5%	6 2.7% °	0.74%			
Centerline Dist. to Barrier:	54.0 feet		Noise	Source Elev	ations (in f	eet)				
Centerline Dist. to Observer:	54.0 feet			Autos:	0.000					
Barrier Distance to Observer:	0.0 feet		Med	dium Trucks:	2.297					
Observer Height (Above Pad):	5.0 feet			eavy Trucks:	8.006	Grade Adjus	tment: 0.0			
Pad Elevation:	0.0 feet			•						
Road Elevation:	0.0 feet		Lane E	Equivalent D		feet)				
Road Grade:	0.0%			Autos:	47.862					
Left View:	-90.0 degree			dium Trucks:	47.677 47.695					
Right View:	90.0 degree	es	HE	eavy Trucks:	47.095					
FHWA Noise Model Calculations										
VehicleType REMEL	Traffic Flow	Distanc		ite Road	Fresnel	Barrier Atten	Berm Atten			
Autos: 70.20	-1.08		).18	-1.20	-4.67					
Medium Trucks: 81.00	-18.32		).21	-1.20	-4.87					
Heavy Trucks: 85.38	-22.27		0.20	-1.20	-5.39	0.000	0.000			
Unmitigated Noise Levels (with							01/5/			
VehicleType Leq Peak Hou Autos: 68		'   Leq 66.5	Evening 64		gnt   58.7	Ldn 67.3	CNEL 67.9			
Medium Trucks: 61		60.5	54		52.6	61.1	61.3			
Heavy Trucks: 62		61.0	52		53.2	61.6	61.7			
		68.4	65		60.5	69.1	69.6			
Vehicle Noise: 69										
	ntour (in feet	)								
Vehicle Noise: 69  Centerline Distance to Noise Co	ntour (in feet)		'0 dBA	65 dE	BA .	60 dBA	55 dBA			
	, ,		0 dBA 47	65 dE 101	Ų.	60 dBA 218	55 dBA 470			

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIGHWA	Y NOISE I	PREDICTION	ON MODEL					
Scenario: E Road Name: A Road Segment: w	venue 54					Vame: The Imber: 126	Wave-Coral N 12	Mountain			
SITE SPE	CIFIC IN	PUT DATA					DEL INPUTS	i			
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traff	fic (Adt):	9,700 vehicles				Auto	os: 15				
Peak Hour Perd	entage:	9.30%		٨	ledium Tru	cks (2 Axle	s): 15				
Peak Hour	Volume:	902 vehicles		F	leavy Truc	ks (3+ Axle	s): 15				
Vehicle	Speed:	50 mph		Vehicle	Miv						
Near/Far Lane D	istance:	51 feet			hicleType	Day	Evening	Night Daily			
Site Data						utos: 77.		9.6% 97.42%			
Barrier	Halada.	0.0 feet		٠,	Лedium Tr			10.3% 1.84%			
Barrier Type (0-Wall, 1		0.0 reet			Heavy Tr			10.8% 0.74%			
Centerline Dist. to	,	54.0 feet									
Centerline Dist. to O		54.0 feet		Noise S		vations (ir	feet)				
Barrier Distance to O		0.0 feet			Autos						
Observer Height (Abov		5.0 feet			um Trucks						
	levation:	0.0 feet		He	avy Trucks	: 8.006	Grade Adju	ustment: 0.0			
	levation:	0.0 feet		Lane E	guivalent	Distance (i	n feet)				
	Grade:	0.0%			Autos	47.862	,				
16	eft View:	-90.0 degree	s	Med	um Trucks	: 47.677					
Rig	ht View:	90.0 degree		He	avy Trucks	47.695					
FHWA Noise Model Ca	lculation	S		-							
VehicleType R	EMEL	Traffic Flow	Distanc	e Finit	e Road	Fresnel	Barrier Atte	n Berm Atten			
Autos:	70.20	-2.86		0.18	-1.20	-4.6	7 0.0	0.000			
Medium Trucks:	81.00	-20.09		0.21	-1.20	-4.8	7 0.0	0.000			
Heavy Trucks:	85.38	-24.05		0.20	-1.20	-5.3	0.0	0.000			
Unmitigated Noise Lev	els (with	out Topo and L	barrier at	tenuation	)						
VehicleType Leq	Peak Hou	r Leq Day	Lei	q Evening	Leq N	light	Ldn	CNEL			
Autos:	66		64.7	63.	-	56.9	65.5	66.2			
Medium Trucks:	59		58.7	52.		50.8	59.3	59.5			
Heavy Trucks:	60	.3 5	59.2	50.	2	51.4	59.8	59.9			
Vehicle Noise:	68	.0 6	66.6	63.	5	58.8	67.3	67.8			
Centerline Distance to	Noise Co	ntour (in feet)									
				70 dBA	65 d		60 dBA	55 dBA			
		-	Ldn:	36	77		166	357			
		CN	VEL:	38	83	3	178	384			

	FH\	WA-RD-77-108	HIGH	IWAY I	NOISE P	REDICT	ION MC	DEL			
Road Nam	io: EAPC26SE le: Airport Bl. nt: w/o Monroe						t Name: lumber:		/ave-Coral	Mountai	in
	SPECIFIC IN	IPUT DATA				N	NOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard =	: 10, S	oft = 15)		
Average Daily	Traffic (Adt):	4,800 vehicles	s					Autos.	: 15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles)	: 15		
Peak H	lour Volume:	446 vehicle	s		He	eavy Tru	cks (3+	Axles)	: 15		
Ve	hicle Speed:	50 mph		ŀ	Vehicle	Miv					
Near/Far La	ne Distance:	51 feet		H		icleType	9	Dav	Evening	Night	Daily
Site Data							Autos:	77.59		9.6%	,
Rai	rrier Height:	0.0 feet			M	ledium T	rucks:	84.89	6 4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	6 2.7%	10.8%	0.74%
Centerline Dis		54.0 feet			Noise S	ouroo E	lovetion	o (in f	004)		
Centerline Dist.	to Observer:	54.0 feet			Noise S			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (	Above Pad):	5.0 feet				m Truck			Grade Ad	ii iotmon	4: 0.0
Pa	ad Elevation:	0.0 feet			Hea	vy Truck	is: 8	.006	Grade Ad	justrieri	ı. U.U
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distar	ce (in	feet)		
1	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	rs: 47	.677			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 47	.695			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-5.91		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-23.15		0.2	21	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-27.11		0.2	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn		NEL
Autos:	63	.3	61.7		59.9	1	53.	9	62.	5	63.1
Medium Trucks:			55.7		49.3		47.	-	56.	_	56.5
Heavy Trucks:	57		56.2		47.1		48.	_	56.		56.9
Vehicle Noise:	65		63.5		60.5		55.	7	64.	3	64.7
Centerline Distance	e to Noise Co	ontour (in feet	)					_			
					dBA		dBA	1 '	60 dBA	1	5 dBA
		_	Ldn:	-	22		48		104		224
		C	NEL:	2	24		52		112		240

	FH\	WA-RD-77-108	HIGHW	VAY NO	DISE PI	REDICTI	ON MC	DDEL			
	o: EAPC26SE e: Avenue 58 nt: w/o Monroe	-					Name: umber:		ave-Coral	Mountain	1
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data				S	ite Con	ditions	(Hard =	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	8,200 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tro	ıcks (2	Axles):	15		
Peak H	our Volume:	763 vehicle	s		He	avy Truc	cks (3+	Axles):	15		
Ve	hicle Speed:	45 mph		V	ehicle l	Wix					
Near/Far Lai	ne Distance:	45 feet		- F		icleType		Day	Evening	Night	Daily
Site Data						- /	Autos:	77.5%	12.9%	9.6%	97.429
Rai	rier Heiaht:	0.0 feet			М	edium Ti	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W		0.0			1	Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis		51.0 feet						/! 6-	-41		
Centerline Dist.	to Observer:	51.0 feet		N	oise sc	ource El			et)		
Barrier Distance	to Observer:	0.0 feet			Mar allia	Auto: m Truck:		.000			
Observer Height (	Above Pad):	5.0 feet						.297	Grade Ad	i rotmont	
Pa	d Elevation:	0.0 feet			Heat	y Truck	s: 8	.006	Grade Ad	usuneni	0.0
Roa	ad Elevation:	0.0 feet		Li	ane Eq	uivalent	Distan	ice (in f	eet)		
F	Road Grade:	0.0%				Auto	s: 46	.041			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 45	.848			
	Right View:	90.0 degre	es		Heav	y Truck	s: 45	.867			
FHWA Noise Mode	l Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres		Barrier Att	en Ber	m Atten
Autos:	68.46	-3.13		0.43		-1.20		-4.65		000	0.00
Medium Trucks:	79.45			0.46		-1.20		-4.87		000	0.00
Heavy Trucks:	84.25	-24.32		0.46		-1.20		-5.42	0.0	000	0.00
Unmitigated Noise			barrier	attenu	ation)						
	Leq Peak Hou			Leq Eve		Leq	Night		Ldn		VEL
Autos:	64		63.0		61.2		55.	_	63.8		64.
Medium Trucks:	58		57.2		50.8		49.	_	57.		57.
Heavy Trucks: Vehicle Noise:	59		58.1 65.0		49.0 61.8		50. 57.		58.1 65.1		58. 66
Centerline Distanc					01.0		31.		00.		00.
Joinelline Distant	e to Noise Cl	moui (iii leet	,	70 dE	BA I	65	dBA	6	i0 dBA	55	dBA
			Ldn:	26			7	1	122		63

	FH	WA-RD-77-108	HIGHWA	Y NC	DISE PREDICT	TION MODEL						
	o: EAPC26SE e: Avenue 58 nt: w/o Madiso					ot Name: The \ Number: 1264:	Wave-Coral Mo 2	untain				
	SPECIFIC IN	NPUT DATA				NOISE MOD						
Highway Data				Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	6,700 vehicle	s			Auto	s: 15					
Peak Hour	Percentage:	9.30%			Medium T	rucks (2 Axles	): 15					
Peak H	our Volume:	623 vehicle	·S		Heavy Tro	ıcks (3+ Axles	): 15					
Vel	hicle Speed:	45 mph		V	ehicle Mix							
Near/Far Lar	ne Distance:	45 feet		-	VehicleTyp	e Dav	Evening N	light Daily				
Site Data						Autos: 77.5	-	9.6% 97.429				
Rar	rier Heiaht:	0.0 feet			Medium	Trucks: 84.8	% 4.9% 1	0.3% 1.849				
Barrier Type (0-W		0.0			Heavy	Trucks: 86.5	% 2.7% 1	0.8% 0.74%				
Centerline Dis		51.0 feet		A/-	oise Source E	lovotiono (in	foot)					
Centerline Dist.	to Observer:	51.0 feet		/4	Aut		reet)					
Barrier Distance	to Observer:	0.0 feet			Medium Truc							
Observer Height (	Above Pad):	5.0 feet			Heavy Truc		Grade Adjus	tment: 0 0				
Pa	d Elevation:	0.0 feet						tmerk. 0.0				
Roa	d Elevation:	0.0 feet		Lá	ane Equivaler	•	feet)					
F	Road Grade:	0.0%			Aut							
	Left View:	-90.0 degre	es		Medium Truc							
	Right View:	90.0 degre	es		Heavy Truc	ks: 45.867						
FHWA Noise Mode		-										
VehicleType	REMEL	Traffic Flow	Distan		Finite Road	Fresnel	Barrier Atten	Berm Atten				
Autos:	68.46			0.43	-1.20							
Medium Trucks:	79.45			0.46	-1.20							
Heavy Trucks:	84.25			0.46	-1.20	-5.42	2 0.000	0.00				
Unmitigated Noise												
	Leq Peak Ho			q Eve		Night	Ldn	CNEL				
Autos:		3.7	62.1 56.3		60.3 49.9	54.3 48.4	62.9	63. 57.				
Medium Trucks:		7.5	56.3 57.2		49.9 48.2	48.4 49.4	56.8 57.8					
Heavy Trucks: Vehicle Noise:		5.5	64.1		61.0	49.4 56.3	64.8	57. 65.				
					01.0	56.3	64.8	65.				
Centerline Distanc	e to Noise C	ontour (in feet		70 dE	BA 65	i dBA	60 dBA	55 dBA				
			Ldn:	23		50	107	230				
		C	NFI:	25		53	115	247				
		O		20								

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 H	IGHWAY	NOISE PI	REDICTIO	N MODEL					
	o: EAPC26SE e: Avenue 58 et: w/o Jacksor			Project Name: The Wave-Coral Mountain Job Number: 12642							
SITE S	PECIFIC IN	PUT DATA			NC	DISE MOD	EL INPUTS				
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	5,800 vehicles				Autos	: 15				
Peak Hour	Percentage:	9.30%		Me	dium Truc	cks (2 Axles	): 15				
Peak He	our Volume:	539 vehicles		He	avy Truck	s (3+ Axles	): 15				
Vel	nicle Speed:	50 mph	-	Vehicle I	Miv						
Near/Far Lar	ne Distance:	36 feet			icleType	Day	Evening I	Vight Daily			
Site Data					Au	itos: 77.5	% 12.9%	9.6% 97.42%			
Bar	rier Heiaht:	0.0 feet		М	edium Tru	icks: 84.8	% 4.9%	10.3% 1.84%			
Barrier Type (0-Wa		0.0		-	Heavy Tru	cks: 86.5	% 2.7%	10.8% 0.74%			
Centerline Dis	t. to Barrier:	59.0 feet		Noise So	ource Ele	vations (in	feet)				
Centerline Dist. t	o Observer:	59.0 feet			Autos	•	,				
Barrier Distance t	o Observer:	0.0 feet		Mediu	m Trucks:						
Observer Height (/	Above Pad):	5.0 feet			vy Trucks:		Grade Adju	stment: 0.0			
	d Elevation:	0.0 feet									
	d Elevation:	0.0 feet		Lane Eq		Distance (in	feet)				
F	Road Grade:	0.0%			Autos:	00.100					
	Left View:	-90.0 degrees			m Trucks:	00.202					
	Right View:	90.0 degrees		Heav	y Trucks:	56.268					
FHWA Noise Mode	I Calculations	5									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atter	Berm Atten			
Autos:	70.20	-5.09	-0.8	39	-1.20	-4.69	0.00	0.000			
Medium Trucks:	81.00	-22.33	-0.8		-1.20	-4.88					
Heavy Trucks:	85.38	-26.28	-0.8	37	-1.20	-5.35	0.00	0.000			
Unmitigated Noise	Levels (with	out Topo and ba	rrier atte	nuation)							
VehicleType	Leq Peak Hou			vening	Leq N	ight	Ldn	CNEL			
Autos:	63	.0 61	.4	59.7		53.6	62.2	62.8			
Medium Trucks:	56			49.0		47.5	56.0	56.2			
Heavy Trucks:	57			46.9		48.1	56.5	56.6			
Vehicle Noise:	64	.7 63	1.3	60.2		55.5	64.0	64.5			
Centerline Distanc	e to Noise Co	ntour (in feet)									
			1	dBA	65 di	BA	60 dBA	55 dBA			
		La		24	51		109	235			
		CNE	L: :	25	54		117	253			

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	IWAY I	NOISE P	REDICT	ION MC	DEL			
Road Nam	io: EAPC26SE le: Avenue 58 nt: e/o Jacksol						t Name: lumber:		ave-Coral	Mountai	in
SITE :	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data					Site Cor	ditions	(Hard =	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	4,000 vehicles	s					Autos.	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles)	15		
Peak H	lour Volume:	372 vehicle	s		He	eavy Tru	cks (3+	Axles)	15		
Ve	hicle Speed:	50 mph		ŀ	Vehicle	Mix					
Near/Far La	ne Distance:	36 feet		ŀ		icleType	9	Dav	Evening	Night	Daily
Site Data							Autos:	77.59		9.6%	,
Rai	rrier Height:	0.0 feet			M	ledium T	rucks:	84.89	4.9%	10.3%	6 1.84%
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	6 0.74%
Centerline Dis		59.0 feet			Noise S	ouroo E	lovestion	o (in f	004)		
Centerline Dist.	to Observer:	59.0 feet			Noise 3	Auto		•	eet)		
Barrier Distance	to Observer:	0.0 feet			14-45	m Truck		.000			
Observer Height (	Above Pad):	5.0 feet				m Truck vy Truck	-	.006	Grade Ad	liuetmon	#· 0.0
Pa	ad Elevation:	0.0 feet		L	пеа	vy Truck	s. o	.000	Orade Ad	justinon	n. 0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distan	ce (in	feet)		
ı	Road Grade:	0.0%				Auto	s: 56	.409			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 56	.252			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 56	.268			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	-6.70		-0.8	19	-1.20		-4.69	0.0	000	0.000
Medium Trucks:	81.00			-0.8		-1.20		-4.88		000	0.000
Heavy Trucks:	85.38	-27.90		-0.8	37	-1.20		-5.35	0.0	000	0.000
<b>Unmitigated Noise</b>	Levels (with	out Topo and	barrie	er atter	nuation)						
VehicleType	Leq Peak Hou			Leq E	vening		Night		Ldn	1	CNEL
Autos:	61		59.8		58.1		52.		60.		61.2
Medium Trucks:			53.8		47.4		45.	-	54.	-	54.6
Heavy Trucks: Vehicle Noise:	55 63		54.3 61.7		45.3 58.6		46. 53.	_	54.1 62.4		55.0 62.9
			01		30.0	'	55.	U	02.	•	02.8
Centerline Distance	e to Noise Co	ontour (in feet	<i>,</i>	70	dBA	65	dBA	т.	60 dBA	E	5 dBA
			Ldn:		18 18		10 10	1 '	85	1	184
		G	NFI:		20		12		92		197
		C.	*			-			32		

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	FH	WA-RD-77-108	HIGH	WAY N	OISE P	REDICT	ION MO	DEL			
Road Nar	rio: EAPC26SE ne: Avenue 60 ent: w/o Monro						t Name: lumber:		ave-Coral	Mounta	in
SITE	SPECIFIC IN	NPUT DATA				ı	IOISE I	MODE	L INPUT	s	
Highway Data				S	ite Cor	ditions	(Hard =	10, S	oft = 15)		
	Traffic (Adt): Percentage: Hour Volume:	8,500 vehicle 9.30% 791 vehicle				edium Tr eavy Tru	ucks (2	,	15		
Ve	ehicle Speed:	45 mph		ν	ehicle	Mix					
Near/Far La	ane Distance:	45 feet		F.		icleType	,	Dav	Evening	Night	Daily
Site Data					*01.		Autos:	77.5%		9.69	
D-	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.39	
Barrier Type (0-V	Vall, 1-Berm):	0.0				Heavy T	rucks:	86.5%	2.7%	10.89	6 0.74%
	ist. to Barrier:	51.0 feet		٨	loise S	ource E	levation	s (in f	eet)		
Centerline Dist.		51.0 feet				Auto	s: 0.	000			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s: 2	297			
Observer Height F	(Above Pad): Pad Elevation:	5.0 feet 0.0 feet				vy Truck		006	Grade Ad	justmer	nt: 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 46	.041			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 45	.848			
	Right View:	90.0 degre	es		Hea	vy Truck	s: 45	.867			
FHWA Noise Mod	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresi	nel	Barrier Att	en Be	rm Atten
Autos:	68.46	-2.97		0.43	3	-1.20		-4.65	0.0	000	0.000
Medium Trucks:	79.45	-20.21		0.46	6	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	84.25	-24.17		0.46	5	-1.20		-5.42	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	er attenu	ıation)						
VehicleType	Leq Peak Ho			Leq Ev			Night		Ldn		NEL
Autos:	-	4.7	63.1		61.4		55.	-	63.9	-	64.5
Medium Trucks:		3.5	57.3		50.9		49.		57.9	-	58.1
Heavy Trucks:		9.3	58.2 65.1		49.2		50. 57.	_	58.8		58.9 66.3
Vehicle Noise:		3.6			62.0	1	57.	3	65.9	9	66.3
Centerline Distan	ce to Noise C	ontour (in feet	)	70 d	DΛ	e =	dBA		60 dBA	E	5 dBA
			Ldn:	70 a.			ав <i>н</i> 58	1 '	125	1	270
			NEL:	29			58 52		134		270 289
		C	IVEL:	29	,		)2		134		209

	FH\	WA-RD-77-108	HIGH	VAY N	DISE PF	REDICT	ION M	ODEL			
	: EAPC26SE								ave-Coral	Mountai	n
	e: Avenue 60	- 04				Job N	lumber	12642			
Road Segmen	t: w/o iviadiso	n St.									
	PECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard	= 10, S	oft = 15)		
Average Daily 1	raffic (Adt):	2,300 vehicle	S					Autos.			
Peak Hour I	Percentage:	9.30%						Axles).			
	our Volume:	214 vehicle	S		He	avy Tru	cks (3+	- Axles).	15		
	icle Speed:	40 mph		ν	ehicle I	Лix					
Near/Far Lar	e Distance:	23 feet			Vehi	cleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Ban	rier Heiaht:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-Wa	all, 1-Berm):	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis		40.0 feet		٨	oise So	urce E	levatio	ns (in f	eet)		
Centerline Dist. t		40.0 feet				Auto	os: (	0.000			
Barrier Distance t		0.0 feet			Mediui	n Truck	s: 2	2.297			
Observer Height (A	,	5.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	ljustmen	t: 0.0
	d Elevation: d Elevation:	0.0 feet		,	ane Equ	ilizatan	4 Dioto	naa (in	foot)		
	a Elevation: Road Grade:	0.0 feet		-	ane Lyt	Auto		8.636	ieei)		
,	Left View:	0.0% -90.0 degre			Modiuu	n Truck		8.406			
	Right View:	90.0 degre				y Truck		B.429			
FHWA Noise Mode	l Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	snel	Barrier Att	en Be	rm Atter
Autos:	66.51	-8.14		1.58		-1.20		-4.59	0.0	000	0.00
Medium Trucks:	77.72	-25.38		1.62		-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	82.99	-29.33		1.61		-1.20		-5.56	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Hou	ır Leq Daj	/	Leq Ev	ening	Leq	Night		Ldn	C	NEL
Autos:	58		57.2		55.4		49		58.	-	58
Medium Trucks:	52		51.6		45.2		43		52.		52.
Heavy Trucks:	54		53.0		43.9		45		53.		53.
Vehicle Noise:	60		59.4		56.1		51	.5	60.	1	60
Centerline Distance	e to Noise Co	ontour (in feet	)	70 d	DA	65	dBA		SO dBA		dBA
			I dn:	70 a	J/4		ава 19	1 '	40	1 50	87
		0	NFI:	9			19 20		40		93
		C	1422.	9		-			70		55

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F	HWA-RD-77-108	HIGHWAY	NOISE P	REDICTIO	N MODEL					
Scenario: EAPC26 Road Name: Avenue 6 Road Segment: e/o Monr	60		Project Name: The Wave-Coral Mountain Job Number: 12642							
SITE SPECIFIC	INPUT DATA			NO	DISE MOD	EL INPUTS				
Highway Data			Site Cor	nditions (l	lard = 10, S	oft = 15)				
Average Daily Traffic (Adt)	6,600 vehicle	·S			Autos	: 15				
Peak Hour Percentage	9.30%		Me	edium Truc	cks (2 Axles	): 15				
Peak Hour Volume	614 vehicle	s	He	eavy Truck	s (3+ Axles	): 15				
Vehicle Speed	50 mph		Vehicle	Miv						
Near/Far Lane Distance	48 feet			icleType	Dav	Evening 1	light Daily			
Site Data					itos: 77.5	-	9.6% 97.42%			
Barrier Height	. 0.0 feet		M	ledium Tru	icks: 84.8	% 4.9%	10.3% 1.84%			
Barrier Type (0-Wall, 1-Berm)				Heavy Tru	cks: 86.5		10.8% 0.74%			
Centerline Dist. to Barrier			Noise S	ource Fle	vations (in	foot)				
Centerline Dist. to Observer	64.0 feet		110/36 01	Autos:	•	icci)				
Barrier Distance to Observer	0.0 feet		Modiu	m Trucks:						
Observer Height (Above Pad)	5.0 feet			vy Trucks:		Grade Adjus	stment: 0.0			
Pad Elevation	0.0 feet			*		•	ALTIOTAL G.G			
Road Elevation	0.0 feet		Lane Eq	uivalent l	Distance (in	feet)				
Road Grade	0.0%			Autos:	00.010					
Left View	-90.0 degre	es		m Trucks:						
Right View	90.0 degre	es	Hea	vy Trucks.	59.406					
FHWA Noise Model Calculation	ons		1							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten			
Autos: 70.	20 -4.53	-1	.24	-1.20	-4.70	0.00	0.000			
Medium Trucks: 81.0	00 -21.77	-1	.22	-1.20	-4.88	0.00	0.000			
Heavy Trucks: 85.3	38 -25.72	-1	.23	-1.20	-5.31	0.00	0.000			
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)							
VehicleType Leq Peak H			Evening	Leq N		Ldn	CNEL			
	63.2	61.7	59.9		53.8	62.5	63.1			
	56.8	55.6	49.3		47.7	56.2	56.4			
	57.2	56.1	47.1		48.3	56.7	56.8			
Vehicle Noise:	64.9	63.5	60.4		55.7	64.2	64.7			
Centerline Distance to Noise	Contour (in feet									
			0 dBA	65 d		60 dBA	55 dBA			
		Ldn:	26	57		122	263			
	С	:NEL:	28	61		131	283			

	FH\	WA-RD-77-108	HIGH	IWAY N	NOISE P	REDICT	ION M	ODEL			
Road Nam	io: GP40 ne: Jefferson S nt: n/o Avenue						t Name. lumber.		ave-Coral	Mountai	n
SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data					Site Cor	ditions	(Hard:	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	51,500 vehicle	3					Autos.	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles)	15		
Peak H	lour Volume:	4,790 vehicle	3		He	avy Tru	cks (3+	Axles)	15		
Ve	hicle Speed:	55 mph		H	Vehicle	Miv					
Near/Far La	ne Distance:	71 feet		-		icleType		Dav	Evening	Night	Daily
Site Data					*01.		Autos:	77.5%		9.6%	,
Po-	rrier Height:	0.0 feet			M	ledium T	rucks:	84.89	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0 1661				Heavy T	rucks:	86.59	2.7%	10.8%	0.74%
Centerline Di		64.0 feet			M-! 0			/! 6	41		
Centerline Dist.	to Observer:	64.0 feet		Ľ	Noise S				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		0.000 0.297			
Observer Height	(Above Pad):	5.0 feet				m Truck	-		Crodo Ad	i rotmoni	
	ad Elevation:	0.0 feet			Hea	vy Truck	s: t	3.006	Grade Ad	ustment	: 0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distai	nce (in	feet)		
	Road Grade:	0.0%				Auto	s: 53	3.486			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 53	3.320			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 53	3.337			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	snel	Barrier Att	en Bei	rm Atten
Autos:	71.78	3.98		-0.5	4	-1.20		-4.70	0.0	000	0.000
Medium Trucks:	82.40	-13.26		-0.5	2	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	86.40	-17.21		-0.5	2	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	er atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	′	Leq E	vening	Leq	Night		Ldn	С	NEL
Autos:	74	.0	72.4		70.7		64	.6	73.2	2	73.8
Medium Trucks:	67	.4	66.2		59.9		58	.3	66.8	3	67.0
Heavy Trucks:	67		66.4		57.3		58		66.9		67.0
Vehicle Noise:	75	i.6	74.2		71.2		66	.3	74.9	9	75.4
Centerline Distance	ce to Noise Co	ontour (in feet	)								
		-	-T		dBA		dBA		60 dBA	1	dBA
			Ldn:		35	_	92		628		354
		C	NEL:	14	46	3	14		676	1,	456

Wednesday,	March	25.	2020

	FH\	WA-RD-77-108	HIGHV	VAY N	OISE PI	REDICT	ON MC	DEL			
Road Nam	io: GP40 e: Jefferson S nt: n/o Avenue						Name: umber:		ave-Coral I	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUTS	S	
Highway Data				S	ite Con	ditions	(Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	32,200 vehicle	s					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ıcks (2	Axles):	15		
Peak H	our Volume:	2,995 vehicle	S		He	avy Truc	cks (3+	Axles):	15		
Vei	hicle Speed:	55 mph		V	ehicle l	Miv					
Near/Far Lai	ne Distance:	71 feet		ľ		icleType		Day	Evening	Night	Daily
Site Data						,	Autos:	77.5%	12.9%	9.6%	97.429
Rai	rier Height:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W	-	0.0			ı	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74
Centerline Dis		64.0 feet		۸	loise Sc	ource El	evation	s (in fe	et)		
Centerline Dist.	to Observer:	64.0 feet				Auto		000	,		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s: 2	297			
Observer Height (		5.0 feet			Heav	y Truck	s: 8.	006	Grade Ad	ustment	0.0
	ad Elevation:	0.0 feet		-		•					
	ad Elevation:	0.0 feet		L	ane Eq	uivalent			eet)		
F	Road Grade:	0.0%				Auto	00	.486			
	Left View:	-90.0 degree				m Truck		.320			
	Right View:	90.0 degree	es		Heav	y Truck	s: 53	.337			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Dista	ance		Road	Fresi		Barrier Atte		m Atten
Autos:	71.78	1.94		-0.54		-1.20		-4.70	0.0		0.00
Medium Trucks:	82.40	-15.30		-0.52	-	-1.20		-4.88		000	0.00
Heavy Trucks:	86.40	-19.25		-0.52		-1.20		-5.31	0.0	100	0.00
Unmitigated Noise							A Contra	1	Lata		
VehicleType Autos:	Leq Peak Hou	-, -,	70.4	Leq Ev	ening 68.6		Night 62	0	Ldn 71.2		VEL 71.
Medium Trucks:	65		64.2		57.8		56	-	64.7		65
Heavy Trucks:	65		64.3		55.3		56.	-	64.9		65.
Vehicle Noise:	73		72.1		69.2		64.	_	72.8		73.
Centerline Distanc	e to Noise Co	ontour (in feet	)								
				70 d	'BA	65	dBA	6	0 dBA	55	dBA
			Ldn:	99	)	2	13		459	. 9	90
		_	NFI:	10			29		494		065

Wednesday, March 25, 2020	Wednesday, March 25, 2020

Scenari	o: GP40			· ·	Project	Name: TI	ne Wa	ve-Coral N	Mountair	,
	e: Jefferson S	,			,,,,,,	umber: 12		ve=Corar i	viouritaii	
	nt: n/o Avenue				00014	arriber. 12	-02			
	SPECIFIC IN			_		OICE M	ODEL	INPUTS		
Highway Data	SPECIFIC IN	PUIDAIA		Site C	onditions i				•	
Average Daily	Traffic (Adt): 1	R4 300 vehicles					utos:	15		
	Percentage:	9.30%			Medium Tru	icks (2 A)	des):	15		
	our Volume:	3.190 vehicles			Heavy Truc		,	15		
Ve	hicle Speed:	55 mph				- (-	/			
Near/Far I a		71 feet		Vehic						
				V	'ehicleType		7.5%	Evening 12.9%	Night	Daily
Site Data					Medium Ti		7.5% 4.8%	4.9%	10.3%	97.42
	rier Height:	0.0 feet			Heavy Ti		4.8% 6.5%	2.7%	10.3%	
Barrier Type (0-W	. ,	0.0			neavy II	ucks. o	0.570	2.170	10.070	0.74
Centerline Dis		64.0 feet		Noise	Source Ele	evations	(in fee	et)		
Centerline Dist.		64.0 feet			Autos	3: 0.00	00			
Barrier Distance		0.0 feet		Med	dium Trucks	3: 2.29	97			
Observer Height (		5.0 feet		He	eavy Trucks	8: 8.00	06 (	Grade Adj	ustment	0.0
	d Elevation:	0.0 feet		Long	Equivalent	Diotonos	/in fo	-041		
	ad Elevation: Road Grade:	0.0 feet		Lane	Equivalent Autos		•	ei)		
,		0.0%			Auto: dium Truck:					
	Left View:	-90.0 degree			aum Truck: eavy Truck:					
	Right View:	90.0 degree	S	п	savy Trucks	s. 33.3	31			
FHWA Noise Mode										
VehicleType	REMEL	Traffic Flow	Distan		ite Road	Fresne		Barrier Atte		m Atter
Autos:	71.78	2.22		-0.54	-1.20		4.70	0.0		0.00
Medium Trucks:	82.40	-15.02		-0.52	-1.20		4.88	0.0		0.00
Heavy Trucks:	86.40	-18.98		-0.52	-1.20		5.31	0.0	00	0.00
Unmitigated Noise						T			_	
	Leq Peak Hou			eq Evening				Ldn		NEL
Autos:	72		70.7		3.9	62.8		71.5		72
Medium Trucks:	65 65		64.5 64.6		3.1 5.6	56.6 56.8		65.0 65.2		65
Unaver Tarreton			72.4		9.4	64.6		73.1		65 73
Heavy Trucks: Vehicle Noise:				0.		50		. 5.1		, 0
Vehicle Noise:		mtaur (in foot)								
· · · · ·		ntour (in feet)		70 dBA	65 (	iBA	60	) dBA	55	dBA
Vehicle Noise:		, ,	Ldn:	70 dBA 103	65 0	1		) dBA 479		<i>dBA</i> 032

		A-RD-77-108 H								
	io: GP40 ne: Madison St.						e Wave-Co	oral Mou	untain	
	ne: Madison St. nt: n/o Avenue 50				JOD IVU	mber: 126	042			
Road Segine	ni. 11/0 Avenue 30	,								
	SPECIFIC INP	UT DATA					DEL INP			
Highway Data				Site Con	ditions (F	lard = 10	, Soft = 15	5)		
Average Daily	Traffic (Adt): 22	,500 vehicles				Au	tos: 15			
Peak Hour	Percentage:	9.30%		Me	dium Truc	ks (2 Axl	es): 15			
Peak F	lour Volume: 2,	,093 vehicles		He	avy Truck	s (3+ Axl	es): 15			
Ve	hicle Speed:	50 mph		Vehicle I	Лix					
Near/Far La	ne Distance:	51 feet			cleType	De	y Even	ina Ni	ight	Daily
Site Data							,		9.6%	97.42%
Po-	rrier Height:	0.0 feet		М	edium Tru	cks: 84	8% 4	9% 1	0.3%	1.84%
Barrier Type (0-W	-	0.0 feet		F	leavy Tru	cks: 86	.5% 2.	7% 1	0.8%	0.74%
Centerline Di		54.0 feet								
Centerline Dist.		54.0 feet		Noise Sc						
Barrier Distance		0.0 feet			Autos:		-			
Observer Height		5.0 feet			n Trucks:					
	ad Flevation:	0.0 feet		Heav	y Trucks:	8.006	Grade	e Adjust	ment:	0.0
	ad Elevation:	0.0 feet		Lane Equ	ıivalent L	Distance	(in feet)			
	Road Grade:	0.0%			Autos:	47.86	2			
	Left View:	-90.0 degrees		Mediu	n Trucks:	47.67	7			
	Right View:	90.0 degrees		Heav	y Trucks:	47.69	5			
	ŭ									
FHWA Noise Mod										
VehicleType		raffic Flow	Distance			Fresnel		r Atten	Berr	n Atten
Autos:	70.20	0.80	-	.18	-1.20		67	0.000		0.000
Medium Trucks:	81.00	-16.44	-	.21	-1.20		.87	0.000		0.000
Heavy Trucks:	85.38	-20.40	0	.20	-1.20	-5.	.39	0.000		0.000
Unmitigated Noise	e Levels (withou	t Topo and ba	rrier atte	enuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq	Evening	Leq N	ight	Ldn		C٨	IEL
Autos:	70.0	68	1.4	66.6		60.6		69.2		69.8
Medium Trucks:	63.6	62	2.4	56.0		54.5		62.9		63.2
Heavy Trucks:	64.0	62	1.9	53.8		55.1		63.4		63.6
Vehicle Noise:	71.7	70	1.2	67.2		62.4		71.0		71.4
Centerline Distant	ce to Noise Cont	tour (in feet)								
			70	) dBA	65 dl	ВА	60 dBA	ı	55 (	dBA
		Lo	In:	63	135	5	291		62	26

	FH	WA-RD-77-108	HIGH	WAY I	NOISE PI	REDICTI	ON MO	DEL			
Road Nam	io: GP40 ne: Madison S nt: n/o Avenue					.,	Name: ' umber:		ave-Coral	Mounta	in
SITE	SPECIFIC II	NPUT DATA				N	OISE N	/IODE	L INPUT	S	
Highway Data					Site Con	ditions (	Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	32,300 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	icks (2 A	Axles):	15		
Peak H	lour Volume:	3,004 vehicles	3		He	avy Truc	ks (3+ A	Axles):	15		
Ve	hicle Speed:	50 mph		ŀ	Vehicle i	Miv					
Near/Far La	ne Distance:	51 feet		ŀ		icleTvpe		Dav	Evening	Niaht	Dailv
Site Data						A	utos:	77.5%		9.69	6 97.42%
Ra	rrier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.39	6 1.84%
Barrier Type (0-W		0.0				Heavy Tr	ucks:	86.5%	2.7%	10.89	6 0.74%
Centerline Di	. ,	54.0 feet		ŀ	Noise So	urco Ek	vation	r (in fe	201		
Centerline Dist.	to Observer:	54.0 feet		-	NOISE SC	Autos		000	ei)		
Barrier Distance	to Observer:	0.0 feet			Modiu	m Trucks		297			
Observer Height (	(Above Pad):	5.0 feet				vy Trucks		006	Grade Ad	iuetmai	nt: 0 0
P	ad Elevation:	0.0 feet		L	i ica	ry Trucks	. 0.1	000	Orado riaj	dottiioi	n. 0.0
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalent	Distanc	ce (in t	feet)		
	Road Grade:	0.0%				Autos	: 47.	862			
	Left View:	-90.0 degree	es			m Trucks		677			
	Right View:	90.0 degree	es		Hear	y Trucks	: 47.	695			
FHWA Noise Mode	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresn	iel .	Barrier Att	en Be	erm Atten
Autos:	70.20			0.1	-	-1.20		-4.67		000	0.000
Medium Trucks:	81.00			0.2		-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-18.83		0.2	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	r atter	nuation)						
VehicleType	Leq Peak Ho			Leq E	vening	Leq I			Ldn		CNEL
Autos:	7	1.6	70.0		68.2		62.1		70.8	3	71.4
Medium Trucks:	-		63.9		57.6		56.0		64.5		64.7
Heavy Trucks:			64.4		55.4		56.7		65.0		65.1
Vehicle Noise:	7	3.3	71.8		68.8		64.0	)	72.5	5	73.0
Centerline Distant	ce to Noise C	ontour (in feet,	)							_	
					dBA	65 (		6	60 dBA	5	5 dBA
			Ldn:	-	30	17	-		370		797
		Ci	VEL:	8	36	18	15		398		856

	FHW	/A-RD-77-108	HIGH	WAY N	OISE PI	REDICTI	ON MC	DEL			
Road Name	o: GP40 e: Madison St. nt: n/o Airport E						Name: lumber:		ave-Coral	Mountair	1
	SPECIFIC IN	PUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard =	: 10, So	ft = 15)		
Average Daily	Traffic (Adt): 4	2,500 vehicles	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tru	ucks (2	Axles):	15		
Peak H	our Volume:	3,953 vehicles	3		He	avy Truc	cks (3+	Axles):	15		
Vel	hicle Speed:	50 mph		ν	ehicle i	Mix					
Near/Far Lar	ne Distance:	51 feet		, i		icleType		Day	Evening	Night	Daily
Site Data						- /	Autos:	77.5%	12.9%	9.6%	97.429
Rar	rier Height:	0.0 feet			М	edium Ti	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W	all, 1-Berm):	0.0				Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis		54.0 feet		Ν	loise So	ource El	evation	s (in fe	et)		
Centerline Dist. t		54.0 feet				Auto	s: 0.	.000			
Barrier Distance t		0.0 feet			Mediu	m Truck	s: 2	.297			
Observer Height (A		5.0 feet			Hear	vy Truck	s: 8	.006	Grade Ad	iustment	0.0
	d Elevation:	0.0 feet		-		•					
	d Elevation:	0.0 feet		L	ane Eq	uivalent			eet)		
F	Road Grade:	0.0%				Auto		.862			
	Left View:	-90.0 degree				m Truck		.677			
	Right View:	90.0 degree	es		Hear	y Truck:	s: 47	.695			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Dis	tance		Road	Fresi		Barrier Att		m Atten
Autos:	70.20	3.56		0.18		-1.20		-4.67		000	0.00
Medium Trucks:	81.00	-13.68		0.21		-1.20		-4.87		000	0.00
Heavy Trucks:	85.38	-17.63		0.20	1	-1.20		-5.39	0.0	000	0.00
Unmitigated Noise											
	Leq Peak Hou			Leq Ev		Leq	Night		Ldn		VEL
Autos:	72.		71.2		69.4		63.		72.0		72.
Medium Trucks:	66.	-	65.1		58.8		57.	_	65.7		65.
Heavy Trucks: Vehicle Noise:	66. 74		65.6 73.0		56.6 70.0		57. 65.		66.2 73.7		66. 74
Centerline Distanc											
Contonino Distant	0.07.0136 00	mour (m reet)	T	70 di	BA	65	dBA	6	i0 dBA	55	dBA
			Ldn:	96		20	06		444	9	57
			NFI:	103			22		477		028

	FHV	VA-RD-77-108	HIGH	IWAY N	OISE PI	REDICTI	ON MOD	EL			
Road Nan	rio: GP40 ne: Madison St ent: n/o Avenue						Name: T umber: 1		ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				5	Site Con	ditions (	Hard = 1	0, Sc	ft = 15)		
Peak Hour	Traffic (Adt): :	9.30%					icks (2 A.		15 15		
	Hour Volume: chicle Speed:	2,204 vehicles 50 mph	6				ks (3+ A.	xies):	15		
	ne Distance:	51 feet		1	/ehicle	<b>Mix</b> icleType	- 1	Dav	Evening	Night	Daily
Site Data					V C//			7.5%	- 0	9.6%	,
Ba Barrier Type (0-V	rrier Height: Vall, 1-Berm):	0.0 feet 0.0				edium Tr Heavy Tr		34.8% 36.5%		10.3% 10.8%	
Centerline Dist.	ist. to Barrier:	54.0 feet 54.0 feet		1	Voise So	ource Ele	evations	(in fe	et)		
Barrier Distance Observer Height	to Observer:	0.0 feet 5.0 feet				Autos m Trucks	3: 2.2	97	Grade Ad	i i otmont	
	ad Elevation:	0.0 feet		١,		y Trucks				usunen	. 0.0
	ad Elevation: Road Grade:	0.0 feet 0.0%				Autos		62	eet)		
	Left View: Right View:	-90.0 degree 90.0 degree				m Trucks vy Trucks					
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresne	e/	Barrier Att	en Bei	m Atten
Autos:	. 0.20	1.02		0.18		-1.20		4.67		000	0.00
Medium Trucks: Heavy Trucks:	01.00	-16.21 -20.17		0.21		-1.20 -1.20		4.87 5.39		000	0.00
Unmitigated Nois	e Levels (with	out Topo and	barrie	er atteni	uation)						
VehicleType	Leg Peak Hou		_	Leg Ev		Leq I	Vight		Ldn	C	NEL
Autos:	70	.2	68.6		66.9		60.8		69.4	1	70.
Medium Trucks:	63	.8	62.6		56.2		54.7		63.2	2	63.
Heavy Trucks:	64	.2	63.1		54.1		55.3		63.7	7	63.
Vehicle Noise:	71	.9	70.5		67.4		62.6		71.	2	71.
Centerline Distan	ce to Noise Co	ontour (in feet)									
				70 c	1BA	65.0	7BA	- 6	iO dBA	1 55	dBA

Wednesday, March 25, 2020

	FH\	WA-RD-77-10	8 HIGH	HWAY	NOISE P	REDICTI	ON M	ODEL			
Scenar	io: GP40					Project	Name	: The W	ave-Coral	Mountair	1
	ne: Madison St					Job N	umbei	: 12642			
Road Segme	nt: n/o Avenue	: 58									
	SPECIFIC IN	IPUT DATA			04- 0				L INPUT	S	
Highway Data					Site Cor	aitions (	Hard				
Average Daily	Traffic (Adt):	31,000 vehicle	es					Autos:	15		
Peak Hour	Percentage:	9.30%				edium Tru		,			
Peak F	lour Volume:	2,883 vehicle	es		He	eavy Truc	ks (3-	- Axles):	15		
Ve	hicle Speed:	50 mph			Vehicle	Mix					
Near/Far La	ne Distance:	51 feet				icleType		Day	Evening	Night	Daily
Site Data							lutos:	77.5%	12.9%	9.6%	97.42%
Ra	rrier Height:	0.0 feet			M	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	54.0 feet			Noise S	nurce Fle	vatio	ns (in fe	et)		
Centerline Dist.	to Observer:	54.0 feet			710,00 0	Autos		0.000	,01,		
Barrier Distance	to Observer:	0.0 feet			Madii	m Trucks		2.297			
Observer Height	(Above Pad):	5.0 feet				vy Trucks		B.006	Grade Ad	liustment	0.0
P	ad Elevation:	0.0 feet								juotimom	0.0
Ro	ad Elevation:	0.0 feet			Lane Eq				eet)		
	Road Grade:	0.0%				Autos	8: 4	7.862			
	Left View:	-90.0 degre	ees		Mediu	m Trucks	8: 4	7.677			
	Right View:	90.0 degre	ees		Hea	vy Trucks	8: 4	7.695			
HWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow		stance		Road	Fre		Barrier Att		m Atten
Autos:	70.20		-	0.		-1.20		-4.67		000	0.000
Medium Trucks:	81.00			0.:		-1.20		-4.87		000	0.000
Heavy Trucks:	85.38	-19.0	)	0.:	20	-1.20		-5.39	0.0	000	0.000
Inmitigated Noise	e Levels (with	out Topo and	l barri	er atte	nuation)						
VehicleType	Leq Peak Hou			Leq E	vening	Leq I			Ldn		VEL
Autos:		1.4	69.8		68.0			2.0	70.		71.2
Medium Trucks:		5.0	63.8		57.4			5.9	64.	-	64.6
Heavy Trucks:	65	5.4	64.3		55.2		56	6.5	64.	-	65.0
Vehicle Noise:	73	3.1	71.6		68.6		63	3.8	72.	4	72.8
enterline Distand	ce to Noise Co	ontour (in fee	t)								
					dBA	65 (		6	0 dBA		dBA
			Ldn:		78	16	37		360	7	76
		(	ONEL:		83	18	30		387	8	33

Wednesday, March 25, 2020

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGHV	VAY NO	DISE P	REDICTI	ON MO	DEL			
	io: GP40 e: Madison Si nt: n/o Avenue						Name: umber:		ave-Coral	Mountai	n
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data				S	ite Con	ditions (	Hard =	10, S	oft = 15)		
Average Daily	. ,		S					Autos:			
	Percentage:	9.30%				dium Tru		,			
	our Volume:	1,767 vehicle	S		He	avy Truc	ks (3+ )	Axles).	15		
	hicle Speed:	45 mph		ν	ehicle l	Wix					
Near/Far La	ne Distance:	45 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	97.42%
Bai	rier Heiaht:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			1	Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	st. to Barrier:	51.0 feet		N	oise So	ource Ele	evation	s (in f	eet)		
Centerline Dist.	to Observer:	51.0 feet		F		Autos		000	,		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks		297			
Observer Height (	Above Pad):	5.0 feet				y Trucks		006	Grade Ad	iustment	: 0.0
	ad Elevation:	0.0 feet				•					
	ad Elevation:	0.0 feet		L	ane Eq	uivalent			feet)		
1	Road Grade:	0.0%				Autos		.041			
	Left View:	-90.0 degre				m Trucks		.848			
	Right View:	90.0 degre	es		Heav	y Trucks	: 45.	.867			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresi	nel	Barrier Att	en Bei	rm Atten
Autos:	68.46	0.52		0.43		-1.20		-4.65	0.0	000	0.000
Medium Trucks:	79.45	-16.72		0.46		-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	84.25	-20.67		0.46		-1.20		-5.42	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier	attenu	ation)						
	Leq Peak Hou			eq Ev		Leq I			Ldn		NEL
Autos:		3.2	66.6		64.9		58.8	-	67.4	-	68.0
Medium Trucks:		2.0	60.8		54.4		52.9	-	61.4	-	61.6
Heavy Trucks:		2.8	61.7		52.7		53.9	_	62.3		62.4
Vehicle Noise:		0.1	68.6		65.5		60.8	8	69.3	3	69.8
Centerline Distance	e to Noise Co	ontour (in feet	)				10.4				
			!	70 d		65 0		1 6	60 dBA	1	dBA
			Ldn:	46		9:	-		214		161
		C	NEL:	49		10	17		230	2	195

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	IWAY N	OISE P	REDICTI	ON MC	DEL			
	o: GP40 e: Monroe St. nt: n/o Avenue							The W 12642	ave-Coral	Mountair	n
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data					Site Cor	ditions (	Hard =				
Average Daily	. ,		S					Autos:			
	Percentage:	9.30%				edium Tru					
	our Volume:	1,795 vehicle	S		He	eavy Truc	KS (3+	Axies).	15		
Vel Near/Far I ar	hicle Speed:	50 mph 43 feet		١	/ehicle	Mix					
ivear/Far Lar	ne Distance:	43 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data							utos:	77.5%	12.9%	9.6%	97.429
Bar	rier Height:	0.0 feet				ledium Tr		84.8%	4.9%	10.3%	1.849
Barrier Type (0-W	all, 1-Berm):	0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis	st. to Barrier:	64.0 feet		,	Voise Si	ource Ele	vation	s (in f	pet)		
Centerline Dist. t	to Observer:	64.0 feet		F.	.0.00 0	Autos		.000	501)		
Barrier Distance t	to Observer:	0.0 feet			Mediu	m Trucks		.297			
Observer Height (		5.0 feet				vy Trucks		.006	Grade Ad	liustment	: 0.0
	nd Elevation:	0.0 feet		L.						,	
	d Elevation:	0.0 feet		1	.ane Eq	uivalent			feet)		
F	Road Grade:	0.0%				Autos	. 00	.488			
	Left View:	-90.0 degre				m Trucks	00	.341			
	Right View:	90.0 degre	es		неа	vy Trucks	:: 6U	.355			
FHWA Noise Mode	l Calculation	s		•							
VehicleType	REMEL	Traffic Flow		stance		Road	Fres		Barrier Att		rm Atten
Autos:	70.20			-1.34		-1.20		-4.70		000	0.00
Medium Trucks:	81.00			-1.33	-	-1.20		-4.88		000	0.00
Heavy Trucks:	85.38			-1.33		-1.20		-5.31	0.0	000	0.00
Unmitigated Noise	•										
	Leq Peak Hou			Leq Ev		Leq I			Ldn		NEL
Autos:	67		66.2		64.4		58.		67.	-	67.
Medium Trucks:	61		60.2		53.8		52. 52.	-	60.1 61.1		61.
Heavy Trucks: Vehicle Noise:	61		68.1		51.6 65.0		60.	-	68.		61. 69.
Centerline Distanc									30.	-	50.
		( 1000	,	70 c	IBA	65 0	iBA		60 dBA	55	dBA
			Ldn:	50	3	11	4		246	5	530
		С	NEL:	57	7	12	23		264	5	570

	FH\	WA-RD-77-108	HIGHWA	Y NOI	SE PREDICT	TION MODEL		
	o: GP40 e: Monroe St. nt: n/o Avenue					t Name: The \ Number: 1264:	Vave-Coral Mo 2	untain
	SPECIFIC IN	IPUT DATA				NOISE MOD	EL INPUTS	
Highway Data				Site	<b>Conditions</b>	(Hard = 10, S	Soft = 15)	
Peak H	Percentage: our Volume:	9.30% 1,404 vehicle				Auto: rucks (2 Axles ıcks (3+ Axles	): 15	
	hicle Speed:	50 mph		Vel	nicle Mix			
Near/Far Lar	ne Distance:	43 feet			VehicleTyp	e Day	Evening N	ight Daily
Site Data  Bar Barrier Type (0-W	rier Height: all, 1-Berm):	0.0 feet 0.0			Medium T		% 4.9% 1	9.6% 97.42% 0.3% 1.84% 0.8% 0.74%
Centerline Dis	st. to Barrier:	64.0 feet		No	se Source F	levations (in	feet)	
Roa	to Observer:	64.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree		Lar	Auto Medium Truci Heavy Truci The Equivalen Auto Medium Truci Heavy Truci	ks: 2.297 ks: 8.006 at Distance (in ps: 60.488 ks: 60.341	Grade Adjus	tment: 0.0
FHWA Noise Mode	l Calculation	s						
VehicleType	REMEL	Traffic Flow	Distanc	e	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	-0.93	-	1.34	-1.20	-4.70	0.000	0.000
Medium Trucks:	81.00			1.33	-1.20			
Heavy Trucks:	85.38	-22.13	-	1.33	-1.20	-5.3	0.000	0.000
Unmitigated Noise								
	Leq Peak Hou			g Ever		Night	Ldn	CNEL
Autos:			65.1		63.4	57.3	65.9	66.5
Medium Trucks:		).3	59.1		52.7	51.2	59.7	59.9
Heavy Trucks:		).7	59.6		50.6	51.8	60.2	60.3
Vehicle Noise:		•••	67.0		63.9	59.2	67.7	68.2
Centerline Distanc	e to Noise Co	ontour (in feet		70 dB/		dBA	60 dBA	55 dBA
		_	Ldn: NFI:	45 48		97 104	209 224	450 484
		C	IVEL:	48	1	104	224	484

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIGHWAY	NOISE P	REDICTION	ON MODEL						
Scenario: G Road Name: N Road Segment: n	∕lonroe St.	54		Project Name: The Wave-Coral Mountain Job Number: 12642								
SITE SPE	CIFIC IN	PUT DATA					EL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)								
Average Daily Trafi Peak Hour Pero Peak Hour	centage:	31,300 vehicles 9.30% 2,911 vehicles				Auto cks (2 Axles ks (3+ Axles	:): 15					
Vehicle	e Speed:	50 mph		Vehicle	Miv							
Near/Far Lane D	Distance:	51 feet			icleType	Dav	Evening 1	light Daily				
Site Data						utos: 77.5		9.6% 97.42%				
Rarrier	Heiaht:	0.0 feet		M	ledium Tr	ucks: 84.8	% 4.9%	10.3% 1.84%				
Barrier Type (0-Wall,		0.0			Heavy Tr	ucks: 86.5	% 2.7%	10.8% 0.74%				
Centerline Dist. to	Barrier:	54.0 feet		Noise S	ource Fle	vations (in	feet)					
Centerline Dist. to O	bserver:	54.0 feet		710,00	Autos	•	7001)					
Barrier Distance to O	bserver:	0.0 feet		Madiu	m Trucks							
Observer Height (Abo	ve Pad):	5.0 feet			vy Trucks		Grade Adjus	stment: 0.0				
Pad E	levation:	0.0 feet					•					
Road E	levation:	0.0 feet		Lane Eq		Distance (ii	ı feet)					
	d Grade:	0.0%			Autos							
Le	eft View:	-90.0 degree	s		m Trucks							
Rig	ght View:	90.0 degree	S	Hea	vy Trucks	47.695						
FHWA Noise Model Ca	alculations	3		1								
VehicleType R	REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Atten	Berm Atten				
Autos:	70.20	2.23	C	).18	-1.20	-4.6	7 0.00	0.000				
Medium Trucks:	81.00	-15.01	C	).21	-1.20	-4.8	7 0.00	0.000				
Heavy Trucks:	85.38	-18.96	C	).20	-1.20	-5.3	9 0.00	0.000				
Unmitigated Noise Le	vels (with	out Topo and b	arrier att	enuation)								
VehicleType Leq	Peak Hou		Leq	Evening	Leq I	light	Ldn	CNEL				
Autos:	71.		9.8	68.1		62.0	70.6	71.2				
Medium Trucks:	65.		3.8	57.4		55.9	64.4	64.6				
Heavy Trucks:	65.		34.3	55.3		56.5	64.9	65.0				
Vehicle Noise:	73.	.1 7	71.7	68.6		63.9	72.4	72.9				
Centerline Distance to	Noise Co	ntour (in feet)										
			7	0 dBA	65 c	IBA	60 dBA	55 dBA				
		-	dn:	78	16	-	362	781				
		CN	IEL:	84	18	1	389	839				

	FHW	/A-RD-77-108	HIGHV	VAY N	NOISE PE	REDICTI	ION MC	DEL			
Road Nan	rio: GP40 ne: Monroe St. nt: n/o Airport B	II.				.,	Name: lumber:		/ave-Coral	Mounta	in
SITE	SPECIFIC IN	PUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard =	: 10, S	oft = 15)		
Average Daily	Traffic (Adt): 3	4,300 vehicles	S					Autos	: 15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2	Axles)	: 15		
Peak H	lour Volume:	3,190 vehicles	S		He	avy Truc	cks (3+	Axles)	: 15		
Ve	hicle Speed:	50 mph		H	Vehicle I	Miv					
Near/Far La	ne Distance:	51 feet		ŀ		icleType		Dav	Evening	Night	Dailv
Site Data					*011		Autos:	77.59		9.69	
Pa	rrier Heiaht:	0.0 feet		=	Me	edium T	rucks:	84.89	6 4.9%	10.39	6 1.84%
Barrier Type (0-W		0.0			F	leavy T	rucks:	86.59	6 2.7%	10.89	6 0.74%
Centerline Di	. ,	54.0 feet		-				,, ,			
Centerline Dist.		54.0 feet		-	Noise Sc			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height	(Above Pad):	5.0 feet				m Truck		.297	0		4.00
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	ustmer	it: 0.0
Ro	ad Elevation:	0.0 feet			Lane Equ	uivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%		Γ		Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediui	m Truck	s: 47	.677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47	.695			
FHWA Noise Mod	el Calculations			-							
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	70.20	2.63		0.1	8	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-14.61		0.2	1	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-18.56		0.2	0	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	e Levels (witho	ut Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hou	r Leq Day	' I	Leq E	vening	Leq	Night		Ldn	(	NEL
Autos:	71.	8	70.2		68.5		62.	4	71.0	)	71.6
Medium Trucks:	65.	4	64.2		57.8		56.	3	64.8	3	65.0
Heavy Trucks:		-	64.7		55.7		56.	9	65.3	3	65.4
Vehicle Noise:	73.	5	72.1		69.0		64.	3	72.8	3	73.3
Centerline Distant	ce to Noise Co.	ntour (in feet,	)								
					dBA		dBA	1	60 dBA	1	5 dBA
			Ldn:	-	13		79		385		830
		Ci	NEL:	8	19	19	92		414		891

Wednesday, March 25, 2020

Site Data         Autos:         77.5%         12.9%           Barrier Height:         0.0 feet         Medium Trucks:         84.8%         4.9%	Night Daily
Highway Data   Site Conditions (Hard = 10, Soft = 15)	Night Daily
Average Daily Traffic (Adt): 26,800 vehicles   Peak Hour Percentage: 9,30%   Medium Trucks (2 Axles): 15	,
Peak Hour Percentage: 9.30%   Medium Trucks (2 Axles): 15	,
Peak Hour Volume: 2,492 vehicles   Heavy Trucks (3+ Axles): 15	,
Vehicle Speed:         50 mph         Vehicle Mix         Vehicle Type         Day         Evening           Site Data         Autos:         77.5%         12.9%           Barrier Height:         0.0 feet         Medium Trucks:         84.8%         4.9%	,
Near/Far Lane Distance:   51 feet     Vehicle Mix   Vehicle Fype   Day   Evening	,
Vehicle type   Day   Evening	,
Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9%	
Barrier Height: 0.0 feet	9.6% 97.42%
11 T1 00 F0/ 0 70/	10.3% 1.84%
Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5% 2.7%	10.8% 0.74%
Centerline Dist. to Barrier: 54.0 feet Noise Source Elevations (in feet)	
Centerline Dist. to Observer: 54.0 feet Autos: 0.000	
Barrier Distance to Observer: 0.0 feet Medium Trucks: 2,297	
Observer Height (Above Pad): 5.0 feet Heavy Trucks: 8.006 Grade Adju	ustment: 0.0
Pad Elevation: 0.0 feet	
Road Elevation: 0.0 feet Lane Equivalent Distance (in feet)	
Road Grade: 0.0% Autos: 47.862	
Left View: -90.0 degrees Medium Trucks: 47.677	
Right View: 90.0 degrees Heavy Trucks: 47.695	
FHWA Noise Model Calculations	
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atte	
Autos: 70.20 1.56 0.18 -1.20 -4.67 0.00	
Medium Trucks: 81.00 -15.68 0.21 -1.20 -4.87 0.00	
Heavy Trucks: 85.38 -19.64 0.20 -1.20 -5.39 0.00	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 69.2 67.4 61.3 70.0	
Medium Trucks: 64.3 63.1 56.8 55.2 63.7	
Heavy Trucks: 64.7 63.6 54.6 55.9 64.2  Vehicle Noise: 72.4 71.0 68.0 63.2 71.7	
Centerline Distance to Noise Contour (in feet)	72.7
Contonino Diotanto to noise Contour (in reet)	55 dBA
70 dBA 65 dBA 60 dBA	
70 dBA 65 dBA 60 dBA Ldn: 70 152 327	704

	FH	WA-RD-77-108	HIGHW	AY NO	DISE PR	REDICT	ION MO	DEL			
Scenario: Road Name: Road Segment:	Monroe St.						t Name: lumber:		ave-Coral	Mountai	n
	PECIFIC II	NPUT DATA							L INPUT	S	
Highway Data				S	te Cond	ditions	(Hard =	10, Sc	ft = 15)		
Average Daily Tr	affic (Adt):	24,900 vehicle	s					Autos:			
Peak Hour Pe		9.30%					rucks (2 )	,			
	ır Volume:	2,316 vehicle	s		Hea	avy Tru	icks (3+ )	4xles):	15		
	cle Speed:	50 mph		V	ehicle N	/lix					
Near/Far Lane	Distance:	51 feet			Vehi	cleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Barri	er Heiaht:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-Wal	I, 1-Berm):	0.0			H	leavy 7	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dist.		54.0 feet		N	oise So	urce E	levation	s (in fe	eet)		
Centerline Dist. to		54.0 feet				Auto	s: 0.	000			
Barrier Distance to		0.0 feet			Mediur	n Truck	s: 2.	297			
Observer Height (Al	,	5.0 feet			Heav	y Truck	rs: 8.	006	Grade Ad	justmen	t: 0.0
	Elevation:	0.0 feet		-							
	Elevation:	0.0 feet		Li	ane Equ		t Distan		eet)		
Ro	ad Grade:	0.0%				Auto		862			
_	Left View:	-90.0 degre			Mediur			677 695			
F	Right View:	90.0 degre	es		Heav	y Truck	(S: 47.	695			
FHWA Noise Model											
VehicleType	REMEL	Traffic Flow	Dista		Finite		Fresr		Barrier Att		rm Atten
Autos:	70.20			0.18		-1.20		-4.67		000	0.00
Medium Trucks:	81.00			0.21		-1.20		-4.87		000	0.00
Heavy Trucks:	85.38			0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise L										1 -	
	eq Peak Ho			eq Eve		Leq	Night	ļ	Ldn	1	NEL
Autos: Medium Trucks:		0.4 1.0	68.8 62.8		67.1 56.5		61.0 54.9	-	69.6	-	70.: 63.:
Heavy Trucks:	-	1.4	63.3		54.3		55.5	-	63.9		64.
	04	t.**									71.
Vehicle Noise:	72	2.1	70.7		67.6		62.9	9	71.4	4	71.
Vehicle Noise:					67.6		62.9	,	/1.4	4	/1.
_				70 dl		65	62.9 dBA		71.4 60 dBA		71. 5 dBA
Vehicle Noise:				70 dE						55	

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGHWA	Y NOISE PF	REDICTIO	ON M	DDEL			
	io: GP40							ave-Coral	Mountair	1
	e: Avenue 50				Job Nu	mber.	12642			
Road Segme	nt: w/o Jeffers	on St.								
	SPECIFIC IN	NPUT DATA						L INPUT	S	
Highway Data				Site Con	ditions (l	Hard:	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	17,200 vehicles	3				Autos:	15		
Peak Hour	Percentage:	9.30%		Me	dium Trud	cks (2	Axles):	15		
Peak H	lour Volume:	1,600 vehicles	3	He	avy Truck	(S (3+	Axles):	15		
Ve	hicle Speed:	50 mph		Vehicle I	Mix					
Near/Far La	ne Distance:	51 feet			icleType		Day	Evening	Night	Daily
Site Data					A	ıtos:	77.5%	12.9%	9.6%	97.42%
Ra	rrier Height:	0.0 feet		Me	edium Tru	icks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0		F	Heavy Tru	icks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	. ,	54.0 feet		Noise So	uraa Ela	rotio	na (in f	2041		
Centerline Dist.	to Observer:	54.0 feet		Noise 30	Autos:		0.000	ei)		
Barrier Distance	to Observer:	0.0 feet		Modium	m Trucks:		2.297			
Observer Height (	Above Pad):	5.0 feet			v Trucks:	_	3.006	Grade Ad	liustmont	. 0.0
P	ad Elevation:	0.0 feet		пеач	y Trucks.		0.000	Grade Ad	ijusti nent.	0.0
Roa	ad Elevation:	0.0 feet		Lane Equ	uivalent l	Distai	nce (in i	feet)		
	Road Grade:	0.0%			Autos:		7.862			
	Left View:	-90.0 degree	es		m Trucks:		7.677			
	Right View:	90.0 degree	s	Heav	y Trucks:	47	7.695			
FHWA Noise Mode	el Calculation	ıs								
VehicleType	REMEL	Traffic Flow	Distanc	e Finite	Road	Fres	nel	Barrier Att	ten Ber	m Atten
Autos:	70.20	-0.37	-	0.18	-1.20		-4.67	0.	000	0.000
Medium Trucks:	81.00	-17.61	(	0.21	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-21.56		0.20	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier at	tenuation)						
VehicleType	Leq Peak Hot	ur Leq Day	Lec	Evening	Leq N	light		Ldn	CI	VEL
Autos:			67.2	65.5		59		68.		68.6
Medium Trucks:			61.2	54.8		53		61.		62.0
Heavy Trucks:	62		61.7	52.7		53		62.		62.4
Vehicle Noise:			69.1	66.0		61	.3	69.	8	70.3
Centerline Distand	ce to Noise Co	ontour (in feet)								
				70 dBA	65 d		1 6	60 dBA	1	dBA
			Ldn:	52	113			243	-	24
		CI	VEL:	56	12	1		261	5	63

	FH	WA-RD-77-108	HIGHV	VAY NO	DISE PR	EDICTIO	N MODEL			
	io: GP40 e: Avenue 50 nt: w/o Madiso					.,	ame: The V	Vave-Coral I	Mountair	1
SITE S	SPECIFIC II	NPUT DATA				NO	ISE MOD	EL INPUTS	S	
Highway Data				Si	ite Cond	ditions (H	lard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	27,800 vehicle	s				Autos	s: 15		
Peak Hour	Percentage:	9.30%			Med	dium Truc	ks (2 Axles,	): 15		
Peak H	our Volume:	2,585 vehicle	s		Hea	avy Truck	s (3+ Axles	): 15		
	hicle Speed:	50 mph		V	ehicle N	lix				
Near/Far Lai	ne Distance:	51 feet			Vehi	cleType	Day	Evening	Night	Daily
Site Data						Au	tos: 77.5	% 12.9%	9.6%	97.42%
Rai	rier Height:	0.0 feet			Me	dium Tru	cks: 84.8	% 4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			H	leavy Tru	cks: 86.5°	% 2.7%	10.8%	0.74%
Centerline Dis		54.0 feet		N	oise So	urce Elev	ations (in	feet)		
Centerline Dist.		54.0 feet				Autos:	0.000			
Barrier Distance		0.0 feet			Mediun	n Trucks:	2.297			
Observer Height (	,	5.0 feet				y Trucks:	8.006	Grade Adj	ustment	0.0
	ad Elevation:	0.0 feet		-						
	ad Elevation:	0.0 feet		Li	ane Equ		istance (in	feet)		
F	Road Grade:	0.0%				Autos:				
	Left View:	-90.0 degre				n Trucks:				
	Right View:	90.0 degre	es		Heav	y Trucks:	47.695			
FHWA Noise Mode		-								
VehicleType	REMEL	Traffic Flow	Dista		Finite I		Fresnel	Barrier Atte	_	m Atten
Autos:	70.20			0.18		-1.20	-4.67		000	0.000
Medium Trucks:	81.00			0.21		-1.20	-4.87		000	0.000
Heavy Trucks:	85.38	-19.48		0.20		-1.20	-5.39	0.0	000	0.000
Unmitigated Noise										
	Leq Peak Ho			Leq Eve	- 1	Leq Ni		Ldn		VEL
Autos:		0.9	69.3		67.6		61.5	70.1		70.7
Medium Trucks:	-	4.5	63.3		56.9		55.4	63.8		64.1
Heavy Trucks:		4.9	63.8		54.8		56.0	64.4		64.5
Vehicle Noise:		2.6	71.2		68.1		63.3	71.9	)	72.4
Centerline Distance	e to Noise C	ontour (in fee	)							
				70 dE	3A	65 dE		60 dBA		dBA
		_	Ldn:	72		155		335		21
		C	NEL:	77		167		360	7	75

	FHV	WA-RD-77-108	HIGHV	VAY NO	DISE PI	REDICT	ION MO	DDEL			
Road Nam	io: GP40 ne: Avenue 52 nt: w/o Monroe	e St.						The W 12642	ave-Coral	Mountair	1
SITE :	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard :	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	25,700 vehicle	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,390 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		V	ehicle i	Miv					
Near/Far La	ne Distance:	51 feet				icleType	,	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Rai	rrier Heiaht:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Dis	. ,	54.0 feet						/! 6-	-41		
Centerline Dist.	to Observer:	54.0 feet		N	oise so	ource El Auto		1 <b>S (III TE</b>	et)		
Barrier Distance	to Observer:	0.0 feet			14-15-	Auto m Truck		.297			
Observer Height (	Above Pad):	5.0 feet						297	Grade Ad	li rotmont	
Pa	ad Elevation:	0.0 feet			Heat	y Truck	S: 6	1.006	Grade Ad	justrnent	. 0.0
Ros	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	nce (in f	eet)		
I	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree	es		Hear	y Truck	s: 47	.695			
FHWA Noise Mode	el Calculation:	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	1.38		0.18		-1.20		-4.67	0.0	000	0.00
Medium Trucks:	81.00	-15.86		0.21		-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	85.38	-19.82		0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Hou			Leq Eve			Night		Ldn		VEL
Autos:	70		69.0		67.2		61	-	69.8	-	70.
Medium Trucks:	64		63.0		56.6		55		63.5	-	63.
Heavy Trucks:	64		63.5		54.4		55		64.0		64.
Vehicle Noise:	72		70.8		67.8		63	.0	71.	)	72.
Centerline Distanc	e to Noise Co	ontour (in feet	)	70 -	24	er.	dBA		O ADA		dBA
			Ldn:	70 dl 68			ава 47	1 6	0 dBA	1	ава 85
									318	-	
		C	NEL:	74		1	58		341	7	35

FHWA-RD-77-108 HIGHW	VAY NO	DISE PREDICT	ION MODEL							
Scenario: GP40 Road Name: Avenue 50 Road Segment: e/o Monroe St.			t Name: The V Number: 12642		untain					
SITE SPECIFIC INPUT DATA			NOISE MODI	EL INPUTS						
Highway Data	S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (Adt): 20,800 vehicles Peak Hour Percentage: 9.30% Peak Hour Volume: 1,934 vehicles Vehicle Speed: 50 mph			Autos rucks (2 Axles) ıcks (3+ Axles)	: 15						
Near/Far Lane Distance: 43 feet		VehicleTyp	e Day	Evening N	light Daily					
Site Data   Barrier Height: 0.0 feet			Autos: 77.59 rucks: 84.89	% 12.9% % 4.9%	9.6% 97.42% 10.3% 1.84% 10.8% 0.74%					
Centerline Dist. to Barrier: 64.0 feet	N	oise Source E	levations (in t	feet)						
Centerline Dist. to Observer:  Barrier Distance to Observer:  Observer Height (Above Pad):  Pad Elevation:  Road Grade:  Left View:  Pol. 0 feet  0.0 feet  0.0 feet  0.0%  Left View:  90.0 degrees  Right View:  90.0 degrees	L	Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.006 Grade Adjustment: 0.0  Lane Equivalent Distance (In feet) Autos: 60.488 Medium Trucks: 60.341 Heavy Trucks: 60.355								
FHWA Noise Model Calculations										
VehicleType REMEL Traffic Flow Dista		Finite Road	Fresnel	Barrier Atten						
Autos: 70.20 0.46  Medium Trucks: 81.00 -16.78	-1.34	-1.20	-4.70							
Medium Trucks: 81.00 -16.78 Heavy Trucks: 85.38 -20.74	-1.33 -1.33		-4.88 -5.31							
Unmitigated Noise Levels (without Topo and barrier	0440.01	otion)								
	Leg Eve		Night	Ldn	CNEL					
Autos: 68.1 66.5		64.8	58.7	67.3	67.9					
Medium Trucks: 61.7 60.5		54.1	52.6	61.1	61.3					
Heavy Trucks: 62.1 61.0		52.0	53.2	61.6	61.7					
Vehicle Noise: 69.8 68.4		65.3	60.5	69.1	69.6					
Centerline Distance to Noise Contour (in feet)										
Ldn: CNEL:	70 di 56 60	1	dBA 20 29	60 dBA 259 278	55 dBA 557 599					

Wednesday, March 25, 2020

F	HWA-RD-77-108	B HIGHWAY	/ NOISE PI	REDICTIO	N MODEL					
Scenario: GP40 Road Name: Avenue 5 Road Segment: w/o Madi			Project Name: The Wave-Coral Mountain Job Number: 12642							
SITE SPECIFIC	INPUT DATA			NC	ISE MODI	EL INPUTS	;			
Highway Data			Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt)	: 30,200 vehicle	es			Autos	: 15				
Peak Hour Percentage	9.30%		Me	dium Truc	ks (2 Axles)	: 15				
Peak Hour Volume	2,809 vehicle	es	He	avy Truck	s (3+ Axles)	: 15				
Vehicle Speed	: 50 mph		Vehicle I	Miv						
Near/Far Lane Distance	: 51 feet			icleType	Dav	Evening	Night Daily			
Site Data					itos: 77.59	-	9.6% 97.42%			
Barrier Height	: 0.0 feet		М	edium Tru	cks: 84.89	% 4.9%	10.3% 1.84%			
Barrier Type (0-Wall, 1-Berm)				Heavy Tru	cks: 86.59	% 2.7%	10.8% 0.74%			
Centerline Dist. to Barrier			M-/ 0-			r4)				
Centerline Dist. to Observer	: 54.0 feet		Noise Sc		vations (in t	eet)				
Barrier Distance to Observer	: 0.0 feet		A deceller	Autos: m Trucks:						
Observer Height (Above Pad)	: 5.0 feet			m Trucks: /y Trucks:		Grado Adii	ustment: 0.0			
Pad Elevation	: 0.0 feet		пеан	ry Trucks.	0.000	Grade Aujo	istinent. 0.0			
Road Elevation	: 0.0 feet		Lane Equivalent Distance (in feet)							
Road Grade	: 0.0%			Autos:	47.862					
Left View	: -90.0 degre	es		m Trucks:						
Right View	90.0 degre	es	Heav	y Trucks:	47.695					
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Atte	n Berm Atten			
Autos: 70.2	20 2.08	3 (	).18	-1.20	-4.67	0.0	0.000			
Medium Trucks: 81.0			).21	-1.20	-4.87					
Heavy Trucks: 85.3	38 -19.12	2 (	0.20	-1.20	-5.39	0.0	0.000			
Unmitigated Noise Levels (wi	thout Topo and	l barrier att	enuation)							
VehicleType Leq Peak F			Evening	Leq N		Ldn	CNEL			
Autos:	71.3	69.7	67.9		61.9	70.5	71.1			
	64.8	63.7	57.3		55.7	64.2				
	65.3	64.2	55.1		56.4	64.7				
Vehicle Noise:	73.0	71.5	68.5		63.7	72.2	72.7			
Centerline Distance to Noise	Contour (in fee									
		1	0 dBA	65 dE		60 dBA	55 dBA			
	_	Ldn:	76 164 354 762 82 176 380 819							
	CNEL:					380	819			

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	FH	WA-RD-77-108	HIGHV	VAY NO	DISE PR	EDICTIO	N MODEL			
	o: GP40 e: Avenue 54 nt: w/o Monro	e St.				.,	ame: The V	Vave-Coral N	Mountair	ı
	SPECIFIC IN	IPUT DATA						EL INPUTS	;	
Highway Data				S	ite Cond	ditions (H	lard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	17,700 vehicle	s				Autos	: 15		
Peak Hour	Percentage:	9.30%			Med	dium Truc	ks (2 Axles)	: 15		
Peak H	our Volume:	1,646 vehicle	s		Hea	avy Truck	s (3+ Axles)	: 15		
Ve	hicle Speed:	50 mph		V	ehicle N	lix				
Near/Far Lai	ne Distance:	51 feet				cleType	Dav	Evening	Night	Dailv
Site Data							tos: 77.5°		9.6%	97.42%
Rai	rier Height:	0.0 feet			Me	dium Tru	cks: 84.89	% 4.9%	10.3%	1.84%
Barrier Type (0-W	all, 1-Berm):	0.0			H	leavy Tru	cks: 86.59	% 2.7%	10.8%	0.74%
Centerline Dis		54.0 feet		N	oise So	urce Elev	ations (in	eet)		
Centerline Dist.		54.0 feet				Autos:	0.000			
Barrier Distance		0.0 feet			Mediun	n Trucks:	2.297			
Observer Height (	,	5.0 feet			Heav	y Trucks:	8.006	Grade Adj	ustment	0.0
	ad Elevation:	0.0 feet		-						
	ad Elevation:	0.0 feet		Li	ane Equ		istance (in	teet)		
· ·	Road Grade:	0.0%				Autos:				
	Left View:	-90.0 degre				n Trucks:				
	Right View:	90.0 degre	es		Heav.	y Trucks:	47.695			
FHWA Noise Mode		-								
VehicleType	REMEL	Traffic Flow	Dista		Finite I		Fresnel	Barrier Atte		m Atten
Autos:	70.20			0.18		-1.20	-4.67			0.000
Medium Trucks:	81.00			0.21		-1.20	-4.87			0.000
Heavy Trucks:	85.38			0.20		-1.20	-5.39	0.0	00	0.000
Unmitigated Noise									-	
	Leq Peak Ho			Leq Eve	- 1	Leq Ni	~ ,	Ldn		VEL
Autos:		3.9	67.4		65.6		59.5	68.2		68.8
Medium Trucks:		2.5	61.3		55.0		53.4	61.9		62.1
Heavy Trucks:		2.9	61.8		52.8		54.1	62.4		62.5
Vehicle Noise:		0.6	69.2		66.2		61.4	69.9		70.4
Centerline Distance	e to Noise C	ontour (in feet	)	70 -11	24	GE -IF	24	60 4B4		dDA
			Ldn:	70 dE 53	DM	65 dE 115		60 dBA 248		dBA 34
			Lan: NFI:	53 57		115		248 266	-	73
		C	IVEL:	5/		124		200	5	13

	FH	WA-RD-77-108	B HIGH	A YAWH	IOISE P	REDICT	ON MC	DEL					
Road Nan	rio: GP40 ne: Avenue 58 nt: w/o Madiso				Project Name: The Wave-Coral Mountain Job Number: 12642								
	SPECIFIC IN	NPUT DATA							L INPUT	s			
Highway Data					Site Cor	ditions	(Hard =						
Average Daily	. ,		es			-#: T-		Autos:					
	Percentage: Hour Volume:	9.30% 1.107 vehicle				edium Tri eavy True							
	hicle Speed:	45 mph	es.				JKS (3+	Axies).	15				
	ne Distance:	45 feet			Vehicle								
	ino Biolarioo.	10 1001			Veh	icleType		Day	Evening	Night	Daily		
Site Data						ledium T	Autos:	77.5%		9.6%			
	rrier Height:	0.0 feet				eaium T Heavy T		84.8%		10.3%			
Barrier Type (0-VI	. ,	0.0				neavy I	ucks.	86.5%	2.7%	10.8%	0.749		
	ist. to Barrier:	51.0 feet		7	Noise S	ource El	evation	ıs (in fe	eet)				
Centerline Dist.		51.0 feet 0.0 feet				Auto.	s: 0	.000					
Barrier Distance		5.0 feet			Mediu	m Truck	s: 2	.297					
Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet					Hea	vy Truck	s: 8	.006	Grade Ad	justment	: 0.0		
	ad Elevation:	0.0 feet		1	Lane Eq	uivalent	Distan	ce (in	feet)				
	Road Grade:	0.0%		Ī		Auto	s: 46	.041					
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 45	.848					
	Right View:	90.0 degre	es		Hea	vy Truck	s: 45	.867					
FHWA Noise Mod	el Calculation	ıs											
VehicleType	REMEL	Traffic Flow		stance		Road	Fres		Barrier Att		m Atten		
Autos:				0.4	-	-1.20		-4.65		000	0.00		
Medium Trucks:				0.4	-	-1.20		-4.87		000	0.00		
Heavy Trucks:				0.4		-1.20		-5.42	0.0	000	0.00		
Unmitigated Noise VehicleType	e Levels (with Leg Peak Ho					100	Nicelat	T	Ldn		NEL		
Autos:		ur Leq Da	64.6	Ley E	vening 62.8		Night 56	R	65.4		66.		
Medium Trucks:		0.0	58.8		52.4		50.	-	59.3		59.		
Heavy Trucks:		0.8	59.7		50.7		51.	-	60.3	-	60.		
Vehicle Noise:		3.0	66.6		63.4		58.	8	67.3	3	67.		
Centerline Distan	ce to Noise C	ontour (in fee	t)										
				70 d	dBA	65	dBA	6	60 dBA	55	dBA		
			Ldn:	3			3		157	_	38		
		C	NEL:	3	6	7	8		168	3	62		

	FH'	WA-RD-77-108	HIGHW	AY NO	DISE PREDIC	TION MODEL						
Scenario Road Namo Road Segmen	e: Airport Bl.	e St.				ot Name: The Number: 1264		ountain				
SITE S	PECIFIC IN	IPUT DATA				NOISE MOD	EL INPUTS					
Highway Data				Si	te Condition:	s (Hard = 10, \$	Soft = 15)					
Average Daily i Peak Hour I Peak Ho	. ,	16,700 vehicle 9.30% 1,553 vehicle			Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15							
Vel	nicle Speed:	50 mph		V	ehicle Mix							
Near/Far Lar	ne Distance:	51 feet			Vehicle Typ	ie Dav	Evening	Night Daily				
Site Data					,,	Autos: 77.5		9.6% 97.42%				
Rar	rier Heiaht:	0.0 feet			Medium	Trucks: 84.8	% 4.9%	10.3% 1.84%				
Barrier Type (0-Wa	all, 1-Berm):	0.0			Heavy	Trucks: 86.5	% 2.7%	10.8% 0.74%				
Centerline Dis		54.0 feet		N	oise Source L	levations (in	feet)					
Centerline Dist. t		54.0 feet			Aut	os: 0.000	-					
Barrier Distance t		0.0 feet			Medium Truc	ks: 2.297						
Observer Height (	,	5.0 feet			Heavy Truc	ks: 8.006	Grade Adju	stment: 0.0				
	d Elevation:	0.0 feet			no Faulusia	nt Distance (ir	foot)					
	d Elevation: Road Grade:	0.0 feet		Le	Aut		i ieet)					
,	Left View:	0.0% -90.0 degre			Medium Truc							
	Right View:	90.0 degre			Heavy Truc							
FHWA Noise Mode	I Calculation	ıs										
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite Road	Fresnel	Barrier Atter	n Berm Atten				
Autos:	70.20	-0.50		0.18	-1.20	-4.6	7 0.00	0.00				
Medium Trucks:	81.00			0.21	-1.20							
Heavy Trucks:	85.38			0.20	-1.20	-5.3	9 0.00	0.00				
Unmitigated Noise						Mindel	I do	ONE				
VehicleType Autos:	Leq Peak Ho	ur Leq Daj 3.7	7   L 67.1	eq Eve	ening Lei 65.3	Night 59.3	Ldn 67.9	CNEL 68.				
Medium Trucks:		2.3	61.1		54.7	53.2	61.6	61.				
Heavy Trucks:		2.7	61.6		52.5	53.8	62.2	62.				
Vehicle Noise:		0.4	69.0		65.9	61.1	69.7	70.				
		ontour (in foot	+)									
Centerline Distanc	e to Noise C											
Centerline Distanc	e to Noise C	ontour (in leet	_	70 dE	BA 65	5 dBA	60 dBA	55 dBA				
Centerline Distanc	e to Noise C	ontour (in leet	Ldn:	70 dE 51	1	5 dBA 111	60 dBA 238	55 dBA 514				

Wednesday, March 25, 2020

	FHW	/A-RD-77-108	HIGH	WAY I	IOISE P	REDICTION	ON MC	DEL					
Scenario: GP40 Road Name: Avent Road Segment: w/o N	ue 58	St.				Project I Job Nu			'ave-Coral	Mountai	n		
SITE SPECIF	IC IN	PUT DATA				N	OISE	MODE	L INPUT	s			
Highway Data					Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (A	\dt): 1	2,200 vehicles						Autos:	15				
Peak Hour Percenta	age:	9.30%			Me	edium Tru	cks (2	Axles):	15				
Peak Hour Volu	me:	1,135 vehicles			He	eavy Truc	ks (3+	Axles):	15				
Vehicle Spe	eed:	45 mph		ŀ	Vehicle	Miv							
Near/Far Lane Distar	nce:	45 feet		H		icleType		Dav	Evening	Night	Daily		
Site Data							utos:	77.5%		9.6%			
Barrier Hei	mb4.	0.0 feet			M	ledium Tr		84.8%		10.3%			
Barrier Type (0-Wall, 1-Be	,	0.0 feet				Heavy Tr	icks:	86.5%	2.7%	10.8%			
Centerline Dist. to Bar	,	51.0 feet		Ļ									
Centerline Dist. to Obser		51.0 feet		L	Noise S	ource Ele			eet)				
Barrier Distance to Obser		0.0 feet				Autos		.000					
Observer Height (Above P		5.0 feet				m Trucks	. –	.297					
Pad Fleva		0.0 feet			Hea	vy Trucks	: 8	.006	Grade Ad	justmen	t: 0.0		
Road Eleva		0.0 feet		Lane Equivalent Distance (in feet)									
Road Gra	ade:	0.0%		Ī		Autos	: 46	.041					
Left V	ïew:	-90.0 degree	s		Mediu	m Trucks	: 45	.848					
Right V	ïew:	90.0 degree			Hea	vy Trucks	: 45	.867					
FHWA Noise Model Calcul	ations	i											
VehicleType REMI	-L	Traffic Flow	Dist	tance	Finite	Road	Fres	nel	Barrier Att	en Bei	rm Atten		
Autos:	68.46	-1.40		0.4	3	-1.20		-4.65	0.0	000	0.000		
	79.45	-18.64		0.4	-	-1.20		-4.87		000	0.000		
	84.25	-22.60		0.4		-1.20		-5.42	0.0	000	0.000		
Unmitigated Noise Levels	•												
VehicleType Leq Pea				Leq E	vening	Leq N			Ldn		NEL		
Autos:	66.		64.7		62.9		56.	-	65.5		66.1		
Medium Trucks:	60.		58.9		52.5		51.		59.4		59.7		
Heavy Trucks:	60.		59.8		50.8		52.		60.4		60.5		
Vehicle Noise:	68.		66.7		63.6	i	58.	9	67.4	4	67.9		
Centerline Distance to Noi	se Co	ntour (in feet)		70	dBA	65 d	ID A		60 dBA		dBA		
			l dn:		з <i>в</i> а 4	74		1 '	159	1	343		
		-	IFI:	-	7	79			171		368		
		Ch	*LL.		'	/3	,		17.1		,00		

Wednesday, March 25, 2020

	=	/A DD == /AA			010E D			D.E.			
		VA-RD-77-108	HIGHWA	AY NO	OISE PE	REDICT	ION MO	DEL			
	rio: GP40								/ave-Coral I	Mounta	ain
	ne: Avenue 58					Job ∧	lumber:	12642			
Road Segme	ent: w/o Jacksor	n St.									
	SPECIFIC IN	PUT DATA							L INPUTS	S	
Highway Data				S	ite Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt): 1	8,200 vehicles	3					Autos	: 15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2 .	Axles)	: 15		
Peak F	Hour Volume:	1,693 vehicles	3		He	avy Tru	cks (3+.	Axles)	: 15		
Ve	ehicle Speed:	50 mph		V	ehicle I	Miv					
Near/Far La	ane Distance:	36 feet		-		icleType		Dav	Evening	Night	Dailv
Site Data							Autos:	77.59		9.6	
Ra	rrier Heiaht:	0.0 feet			Me	edium T	rucks:	84.89	6 4.9%	10.3	% 1.84%
Barrier Type (0-V		0.0			F	leavy T	rucks:	86.5%	6 2.7%	10.89	% 0.74%
Centerline Di	ist. to Barrier:	59.0 feet			loise Sc	urco El	lovation	c (in f	innt)		
Centerline Dist.	to Observer:	59.0 feet		/	oise su	Auto		•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto m Truck		000 297			
Observer Height	(Above Pad):	5.0 feet						006	Grade Ad	iuctmo	nt: 0.0
P	ad Elevation:	0.0 feet			Heav	y Truck	S: 8.	000	Grade Auj	usune	и. О.О
Ro	ad Elevation:	0.0 feet		L	ane Equ	uivalent	. Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 56	409			
	Left View:	-90.0 degree	es		Mediui	m Truck	s: 56	252			
	Right View:	90.0 degree	es		Heav	y Truck	s: 56	.268			
FHWA Noise Mod	el Calculations	;									
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite	Road	Fresi	nel	Barrier Atte	en B	erm Atten
Autos:	70.20	-0.12		-0.89		-1.20		-4.69	0.0	000	0.000
Medium Trucks:		-17.36		-0.87		-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	85.38	-21.32		-0.87		-1.20		-5.35	0.0	000	0.000
<b>Unmitigated Nois</b>	e Levels (witho	out Topo and	barrier a	ttenu	ation)						
VehicleType	Leq Peak Hou	r Leq Day	Le	q Ev	ening	Leq	Night		Ldn	1	CNEL
Autos:	68.	.0	66.4		64.6		58.	6	67.2	2	67.8
Medium Trucks:		-	60.4		54.0		52.	-	60.9		61.2
Heavy Trucks:			60.9		51.8		53.	_	61.5		61.6
Vehicle Noise:	69.	.7	68.3		65.2		60.	4	69.0	)	69.4
Centerline Distan	ce to Noise Co	ntour (in feet,	)								
·	-			70 di			dBA		60 dBA	5	5 dBA
			Ldn:	50			09		234		504
		C	VEL:	54		1	17		251		541

	FH\	WA-RD-77-108	HIGH	IWAY N	OISE PI	REDICT	ION M	ODEL						
	io: GP40 e: Avenue 60 nt: w/o Madiso	n St.						: The W : 12642	/ave-Coral	Mounta	ain			
	SPECIFIC IN	IPUT DATA							L INPUT	s				
Highway Data					Site Conditions (Hard = 10, Soft = 15)									
Average Daily	. ,		S					Autos						
	Percentage:	9.30%				edium Tr	,	,						
	our Volume:	1,934 vehicle	s		He	avy Tru	cks (3+	- Axles)	: 15					
	hicle Speed:	40 mph		١	/ehicle	Mix								
Near/Far Lar	ne Distance:	23 feet			Veh	icleType	,	Day	Evening	Night	Daily			
Site Data							Autos:	77.59	6 12.9%	9.6	% 97.42%			
Bar	rier Height:	0.0 feet			М	edium T	rucks:	84.89	6 4.9%	10.3	% 1.84%			
Barrier Type (0-W	all, 1-Berm):	0.0			Heavy Trucks: 86.5% 2.7% 10.8% 0.74%									
Centerline Dis		40.0 feet		1	Voise So	ource E	levatio	ns (in f	eet)					
Centerline Dist. t		40.0 feet				Auto	s: (	0.000						
Barrier Distance to Observer: 0.0 feet					Mediu	m Truck	s: :	2.297						
Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet					Hear	y Truck	s: l	3.006	Grade Ad	ljustme	nt: 0.0			
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in	feet)					
F	Road Grade:	0.0%				Auto	s: 3	8.636						
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 3	8.406						
	Right View:	90.0 degree	es		Hear	y Truck	s: 3	8.429						
FHWA Noise Mode		-												
VehicleType	REMEL	Traffic Flow	Dis	stance		Road	Fre		Barrier At		erm Atten			
Autos:	66.51	1.43		1.58		-1.20		-4.59		000	0.00			
Medium Trucks:	77.72	-15.81		1.62	_	-1.20		-4.87		000	0.000			
Heavy Trucks:	82.99	-19.77		1.6		-1.20		-5.56	0.	000	0.000			
Unmitigated Noise VehicleType	Lea Peak Hou			er atteni Leg Ev		Log	Night		Ldn		CNEL			
Autos:	Ley reak not	-, -,	66.7	LOY E	65.0			1.9	67.		68.1			
Medium Trucks:	62		61.1		54.8		53		61.	-	61.9			
Heavy Trucks:	63	.6	62.5		53.5		54	.7	63.	1	63.2			
Vehicle Noise:	70	1.3	68.9		65.6		61	.1	69.	6	70.			
Centerline Distanc	e to Noise Co	ontour (in feet	)											
				70 c	lBA	65	dBA		60 dBA		i5 dBA			
			Ldn:	38	-		31		175		378			
		C	NEL:	40	)	8	37		188		404			

	FHWA-R	D-77-108 HIGI	HWAY N	OISE PREDIC	HON MODEL		
Scenario: GP40 Road Name: Aven Road Segment: e/o J	ue 58				ct Name: The \ Number: 1264	Wave-Coral Mo 2	ountain
SITE SPECIF	IC INPUT	DATA			NOISE MOD	EL INPUTS	
Highway Data			S	ite Conditions	s (Hard = 10, S	Soft = 15)	
Average Daily Traffic (, Peak Hour Percent Peak Hour Volu	age: 9.3	0 vehicles 0% 4 vehicles			Auto rucks (2 Axles ucks (3+ Axles	:): 15	
Vehicle Sp		0 mph	ν	ehicle Mix			
Near/Far Lane Dista	nce: 3	6 feet	F	Vehicle Typ	e Dav	Evening N	light Daily
Site Data					Autos: 77.5		9.6% 97.429
Barrier He	iaht. I	.0 feet		Medium	Trucks: 84.8	% 4.9%	10.3% 1.849
Barrier Type (0-Wall, 1-Be	erm): (	0.0		Heavy	Trucks: 86.5	% 2.7%	10.8% 0.749
Centerline Dist. to Ba		0.0 feet	٨	loise Source E	levations (in	feet)	
Centerline Dist. to Obse		0.0 feet		Aut	os: 0.000		
Barrier Distance to Obse		).0 feet		Medium Truc	ks: 2.297		
Observer Height (Above F Pad Eleva	i.0 feet		Heavy Truc	ks: 8.006	Grade Adjus	tment: 0.0	
Road Eleva	tion:	0.0 feet	L	ane Equivaler	nt Distance (ir	ı feet)	
Road Gr	ade: (	0.0%		Aut	os: 56.409		
Left V	/iew: -90	0.0 degrees		Medium Truc	ks: 56.252		
Right \	/iew: 90	0.0 degrees		Heavy Truc	ks: 56.268		
FHWA Noise Model Calcu	lations						
VehicleType REM	EL Trat	fic Flow Dis	stance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	-2.99	-0.89				
	81.00	-20.23	-0.87				
	85.38	-24.19	-0.87		-5.3	5 0.000	0.00
Unmitigated Noise Levels							01/5/
VehicleType Leq Pea	ak Hour 65.1	Leq Day 63.5	Leq Ev	ening Led	Night 55.7	Ldn 64.3	CNEL 64
Medium Trucks:	58.7	57.5		51.1	49.6	58.1	58.
	58.7 59.1	58.0		49.0	49.6 50.2	58.1	58. 58.
Heavy Trucks:	66.8	65.4		62.3	57.6	66.1	66.
Vehicle Noise:							
	ise Contou	ır (in feet)					
	ise Contou	r (in feet)	70 d	BA 65	5 dBA	60 dBA	55 dBA
Venicie Noise:  Centerline Distance to No	ise Contou	r (in feet)	70 d		5 dBA 70	60 dBA 151	55 dBA 324

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIGHW	AY N	OISE PI	REDICT	ION MODEL		
Scenario Road Name Road Segmen	e: Avenue 60	St.					t Name: The \ lumber: 1264		Mountain
	PECIFIC IN	PUT DATA					NOISE MOD		;
Highway Data				S	ite Con	ditions	(Hard = 10, \$	Soft = 15)	
	Percentage: our Volume:	9.30% 2,111 vehicles					Auto rucks (2 Axles rcks (3+ Axles	): 15	
	icle Speed:	45 mph		ν	ehicle l	Vix			
Near/Far Lan	e Distance:	45 feet			Veh	icleType	e Day	Evening	Night Daily
Site Data							Autos: 77.5	% 12.9%	9.6% 97.42%
Barı	rier Heiaht:	0.0 feet			М	edium 7	rucks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-Wa	all, 1-Berm):	0.0			- 1	Heavy 7	rucks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dis	t. to Barrier:	51.0 feet			laisa Sa	urco E	levations (in	foot)	
Centerline Dist. to	o Observer:	51.0 feet			ioise sc	Auto		ieei)	
Barrier Distance to	o Observer:	0.0 feet			Modiu	m Truck			
Observer Height (Above Pad): 5.0 feet						vy Truck		Grade Adi	ustment: 0.0
Pa	d Elevation:	0.0 feet			•			astmont. 0.0	
Roa	d Elevation:	0.0 feet		L	ane Eq		t Distance (ir	ı feet)	
R	Road Grade:	0.0%				Auto	10.011		
	Left View:	-90.0 degree	es			m Truck			
	Right View:	90.0 degree	es		Heav	y Truck	s: 45.867		
FHWA Noise Model	l Calculations	S							
VehicleType	REMEL	Traffic Flow	Distar	псе	Finite	Road	Fresnel	Barrier Atte	n Berm Atten
Autos:	68.46	1.29		0.43		-1.20	-4.6	5 0.0	0.000
Medium Trucks:	79.45	-15.94		0.46	i	-1.20	-4.8	7 0.0	0.000
Heavy Trucks:	84.25	-19.90		0.46	i	-1.20	-5.42	2 0.0	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier a	attenu	ıation)				
VehicleType I	Leq Peak Hou			eq Ev	ening	Leq	Night	Ldn	CNEL
Autos:	69		67.4		65.6		59.6	68.2	
Medium Trucks:	62		61.6		55.2		53.7	62.1	62.4
Heavy Trucks:	63		62.5		53.5		54.7	63.1	63.2
Vehicle Noise:	70	.8	69.4		66.3		61.6	70.1	70.6
Centerline Distance	e to Noise Co	ntour (in feet)						-	
				70 d			dBA	60 dBA	55 dBA
		Ldn: 5							519
		CI	56	i	120 259 557				

	FH	WA-RD-77-108	HIGHW	AY NO	DISE PR	EDICTI	ON M	ODEL					
	o: GP40 e: Avenue 60 nt: e/o Monroe			Project Name: The Wave-Coral Mountain Job Number: 12642									
SITE S	SPECIFIC IN	NPUT DATA				N	OISE	MODE	L INPUT	s			
Highway Data				Si	ite Cond	litions (	Hard:	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	14,300 vehicle	s					Autos:	15				
Peak Hour	Percentage:	9.30%			Med	lium Tru	icks (2	Axles):	15				
Peak H	our Volume:	1,330 vehicle	S		Hea	vy Truc	ks (3+	Axles):	15				
Vel	nicle Speed:	50 mph		V	ehicle N	lix							
Near/Far Lar	ne Distance:	48 feet				leType		Dav	Evening	Night	Daily		
Site Data						Α	utos:	77.5%	12.9%	9.6%	97.42%		
Rar	rier Height:	0.0 feet			Me	dium Tr	ucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	all, 1-Berm):	0.0			Н	eavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dis		64.0 feet		N	oise So	urce Ele	evatio	ns (in fe	eet)				
Centerline Dist. t		64.0 feet				Autos	i: (	0.000					
Barrier Distance t		0.0 feet			Mediun	Trucks	s: 2	2.297					
Observer Height (	,	5.0 feet			Heav	/ Trucks	:: 8	3.006	Grade Ad	justment	: 0.0		
	d Elevation:	0.0 feet			ane Equ	iralans	Dioto	ann (in	[aa4]				
	d Elevation: Road Grade:	0.0 feet 0.0%		L	ane Lyu	Autos		9.540	eei)				
,	l eft View:	-90.0 degre			Modium	Trucks		9.391					
	Right View:	90.0 degre				/ Trucks		9.406					
FHWA Noise Mode	l Calculation	IS											
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite I	Road	Fres	inel	Barrier Att	en Ber	m Atten		
Autos:	70.20	-1.17		-1.24		-1.20		-4.70	0.0	000	0.000		
Medium Trucks:	81.00	-18.41		-1.22		-1.20		-4.88	0.0	000	0.000		
Heavy Trucks:	85.38			-1.23		-1.20		-5.31	0.0	000	0.000		
Unmitigated Noise								_					
	Leq Peak Ho			eq Eve	-	Leq I			Ldn	1	NEL		
Autos:		5.6	65.0		63.2		57	-	65.8	-	66.4		
Medium Trucks:		0.2	59.0		52.6		51		59.	-	59.8		
Heavy Trucks:		0.6	59.5		50.4		51	••	60.0		60.2		
Vehicle Noise:		3.3	66.9		63.8		59	.0	67.6	j .	68.0		
Centerline Distanc	e to Noise C	ontour (in feet	)	70 -11	D4	05.	/D 4		20 -ID4		-IDA		
			I dn:	70 dE 44	- 1	65 d		1 6	0 dBA 205	1	dBA 41		
		0	Lan: NEL:	44 47		10	-		205		41 74		
		C	IVEL:	47		10	12		220	4	14		

	FH\	WA-RD-77-108	HIGH	IWAY N	OISE PI	REDICT	ION MODEL				
	o: GPP40 e: Jefferson S nt: n/o Avenue						t Name: The Number: 126		al Mo	untain	
	SPECIFIC IN	IPUT DATA					NOISE MOI				
Highway Data				5	Site Con	ditions	(Hard = 10,	Soft = 15)			
Average Daily T Peak Hour I	. ,	35,000 vehicle: 9.30% 3.255 vehicle:					Auto rucks (2 Axle rcks (3+ Axle	s): 15			
	nicle Speed:	55 mph	5				ichs (ST Akie	3). 10			
Near/Far Lar		71 feet		١	<b>/ehicle</b> I Veh	<b>Mix</b> icleType	e Day	/ Evenin	ıg Ni	ight Daily	
Site Data							Autos: 77.	5% 12.9	%	9.6% 97.42%	
Ran	rier Height:	0.0 feet			М	ledium 7	rucks: 84.	8% 4.9	% 1	0.3% 1.84%	
Barrier Type (0-Wa	-	0.0				Heavy 1	rucks: 86.	5% 2.7	% 1	0.8% 0.74%	
Centerline Dis	t. to Barrier:	64.0 feet			loise So	ource E	levations (ir	feet)			
Centerline Dist. t Barrier Distance t Observer Height (	o Observer: Above Pad):	64.0 feet 0.0 feet 5.0 feet		Autos: 0.000  Medium Trucks: 2.297  Heavy Trucks: 8.006 Grade Adjustment: 0.0							
	d Elevation:	0.0 feet		-		·					
	d Elevation:	0.0 feet		1	.ane Eq		t Distance (i	n teet)			
F	Road Grade:	0.0%				Auto					
	Left View: Right View:	-90.0 degree				m Truck vy Truck					
FHWA Noise Mode	l Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresnel	Barrier .	Atten	Berm Atten	
Autos:	71.78	2.30		-0.54	1	-1.20	-4.7	70	0.000	0.000	
Medium Trucks:	82.40	-14.94		-0.52	2	-1.20	-4.8	38	0.000	0.000	
Heavy Trucks:	86.40	-18.89		-0.52	2	-1.20	-5.3	31	0.000	0.000	
Unmitigated Noise	Levels (with	out Topo and	barrie	er atteni	uation)						
	Leq Peak Hou			Leg Ev			Night	Ldn		CNEL	
Autos:		2.3	70.8		69.0		62.9		1.6	72.2	
Medium Trucks:		5.7	64.6		58.2		56.6	-	5.1	65.3	
Heavy Trucks: Vehicle Noise:		5.8	64.7 72.5		55.6 69.5		56.9 64.6		3.2	65.4 73.7	
Centerline Distance					33.0		34.0		U.L	10.1	
Centernine Distanc	e to Moise Co	omour (iii leet	,	70 a	IBA	65	dBA	60 dBA		55 dBA	
			Ldn:	10	5	1	225	486		1,046	
		C	11	3	,,,,,,				1,126		

	FH'	WA-RD-77-108	HIGHWA	Y NC	ISE PR	REDICTIO	IOM N	DEL			
	o: GPP40 e: Jefferson S at: n/o Avenue					Project N Job Nui			ave-Coral I	Mountai	n
SITE S	SPECIFIC II	NPUT DATA				NC	ISE N	10DE	L INPUTS	5	
Highway Data				Si	te Cond	ditions (F	lard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	52,000 vehicle	s				,	Autos:	15		
Peak Hour	Percentage:	9.30%			Med	dium Truc	ks (2 A	(xles	15		
Peak H	our Volume:	4,836 vehicle	s		Hea	avy Truck	s (3+ A	(xles	15		
Vei	hicle Speed:	55 mph		1/4	ehicle N	Niv					
Near/Far Lar	ne Distance:	71 feet		-		cleType		Dav	Evening	Night	Daily
Site Data				+	VCIII			77.5%	0	9.6%	-
	rier Heiaht:	0.0 feet		-	Me	edium Tru		84.8%		10.3%	
Barrier Type (0-W		0.0			H	leavy Tru	cks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		64.0 feet				·					
Centerline Dist.		64.0 feet		N	oise So	urce Ele		•	et)		
Barrier Distance	to Observer:	0.0 feet				Autos:		000			
Observer Height (	Above Pad):	5.0 feet				n Trucks:		297	Grade Adj	uotmon	
Pa	d Elevation:	0.0 feet			Heav	y Trucks:	8.0	006	Grade Adj	usunem	. 0.0
Roa	d Elevation:	0.0 feet		Lá	ane Equ	ıivalent E	Distanc	e (in f	eet)		
F	Road Grade:	0.0%				Autos:	53.4	486			
	Left View:	-90.0 degre	es		Mediun	n Trucks:	53.3	320			
	Right View:	90.0 degre	es		Heav	y Trucks:	53.0	337			
FHWA Noise Mode	l Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Distan	е	Finite I	Road	Fresn	el	Barrier Atte	en Bei	rm Atten
Autos:	71.78	4.02		0.54		-1.20		-4.70	0.0	00	0.000
Medium Trucks:	82.40			0.52		-1.20		-4.88	0.0		0.000
Heavy Trucks:	86.40	-17.17		0.52		-1.20		-5.31	0.0	00	0.000
Unmitigated Noise											
	Leq Peak Ho			q Eve	ening	Leq N			Ldn		NEL
Autos:	-	4.1	72.5		70.7		64.7		73.3		73.9
Medium Trucks:	-	7.5	66.3		59.9		58.4		66.8		67.1
Heavy Trucks:		7.5	66.4		57.4		58.6		67.0		67.1
Vehicle Noise:		5.6	74.2		71.2		66.4		74.9	)	75.4
Centerline Distance	e to Noise C	ontour (in feet		70 "							10.4
			1	70 dE		65 dE		6	0 dBA		dBA
		_	Ldn:	136		294			632		362
		C	NEL:	147		316	)		680	1,	466

Wednesday, March 25, 2020

FH	WA-RD-77-108 H	IGHWAY	NOISE PI	REDICTION	ON MODEL		
Scenario: GPP40 Road Name: Jefferson S Road Segment: n/o Avenue					Name: The \ umber: 1264:	Wave-Coral Mo 2	untain
SITE SPECIFIC II	NPUT DATA					EL INPUTS	
Highway Data			Site Con	ditions (	Hard = 10, S	Soft = 15)	
Average Daily Traffic (Adt):	33,000 vehicles				Auto	s: 15	
Peak Hour Percentage:	9.30%		Me	dium Tru	icks (2 Axles	): 15	
Peak Hour Volume:	3,069 vehicles		He	avy Truc	ks (3+ Axles	): 15	
Vehicle Speed:	55 mph		Vehicle I	Wix			
Near/Far Lane Distance:	71 feet			icleType	Day	Evening N	ight Daily
Site Data					utos: 77.5	% 12.9%	9.6% 97.42%
Barrier Height:	0.0 feet		М	edium Tr	ucks: 84.8	% 4.9% 1	0.3% 1.84%
Barrier Type (0-Wall, 1-Berm):	0.0			Heavy Tr	ucks: 86.5	% 2.7% 1	0.8% 0.74%
Centerline Dist. to Barrier:	64.0 feet		Noise Sc	ource Fle	evations (in	feet)	
Centerline Dist. to Observer:	64.0 feet		,,,,,,,,	Autos	-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Barrier Distance to Observer:	0.0 feet		Mediu	m Trucks			
Observer Height (Above Pad):	5.0 feet			v Trucks		Grade Adjus	tment: 0.0
Pad Elevation:	0.0 feet					•	
Road Elevation:	0.0 feet		Lane Eq		Distance (in	r feet)	
Road Grade:	0.0%			Autos	. 00.100		
Left View:	-90.0 degrees			m Trucks	. 00.020		
Right View:	90.0 degrees		Heav	y Trucks	53.337		
FHWA Noise Model Calculation	ıs						
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atten	Berm Atten
Autos: 71.78		-0.		-1.20	-4.70		
Medium Trucks: 82.40		-0.		-1.20	-4.88		
Heavy Trucks: 86.40	-19.15	-0.	52	-1.20	-5.3	0.000	0.000
Unmitigated Noise Levels (with	out Topo and ba	arrier atte	nuation)				
VehicleType Leq Peak Ho			vening	Leq I		Ldn	CNEL
		0.5	68.7		62.7	71.3	71.9
		1.3	57.9		56.4	64.9	65.1
		1.4	55.4		56.6	65.0	65.1
		2.2	69.3		64.4	72.9	73.4
Centerline Distance to Noise C	ontour (in feet)						
		1	dBA	65 c		60 dBA	55 dBA
			01	21	•	467	1,006
	CNE	=L: 1	08	23	13	502	1,082

Wednesday, March 25, 2020

	FHV	VA-RD-77-108	HIGHV	VAY N	IOISE PR	EDICT	ON MO	DEL			
Road Nan	rio: GPP40 ne: Madison St. ent: n/o Avenue						Name: lumber:		/ave-Coral I	Mountaii	n
SITE	SPECIFIC IN	PUT DATA				N	IOISE I	MODE	L INPUTS	5	
Highway Data					Site Cond	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt): 2	23,000 vehicles	3					Autos.	: 15		
Peak Hour	Percentage:	9.30%			Med	dium Tr	ucks (2	Axles)	: 15		
Peak H	Hour Volume:	2,139 vehicles	3		He	avy Truc	cks (3+.	Axles)	: 15		
Vé	ehicle Speed:	50 mph		١,	Vehicle N	liv					
Near/Far La	ane Distance:	51 feet		H		cleType		Dav	Evening	Niaht	Dailv
Site Data				-	VOIII		Autos:	77.5%		9.6%	. ,
	rrier Heiaht:	0.0 feet			Me	dium T		84.89		10.3%	
Barrier Type (0-V		0.0 feet			F	leavy T	rucks:	86.5%	6 2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	54.0 feet		- 1				,, ,			
Centerline Dist.		54.0 feet		-	Noise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000			
Observer Height	(Above Pad):	5.0 feet				n Truck		297	0		
	Pad Elevation:	0.0 feet			Heav	y Truck	s: 8.	006	Grade Adj	ustment	: 0.0
Ro	ad Elevation:	0.0 feet		1	Lane Equ	iivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%		Γ		Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 47	.677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47	.695			
FHWA Noise Mod	el Calculations	5									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresi	nel	Barrier Atte	en Bei	rm Atten
Autos:	70.20	0.89		0.18	8	-1.20		-4.67	0.0	00	0.000
Medium Trucks:	81.00	-16.34		0.2	1	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-20.30		0.2	0	-1.20		-5.39	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hou	r Leq Day	' L	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	70	.1	68.5		66.7		60.	7	69.3		69.9
Medium Trucks:	63	.7	62.5		56.1		54.	6	63.0	1	63.3
Heavy Trucks:	64	.1	63.0		53.9		55.	2	63.5	,	63.7
Vehicle Noise:	71	.8	70.3		67.3		62.	5	71.1		71.5
Centerline Distan	ce to Noise Co	ntour (in feet,	)								
				70 c	dBA	65	dBA		60 dBA	55	dBA
			Ldn:	6			37		295		36
		C	VEL:	6	8	14	47		317	6	883

	FH	WA-RD-77-108	HIGHW	AY NO	ISE PI	REDICT	ON MO	DDEL			
Road Nan	io: GPP40 ne: Madison S nt: n/o Avenue							The W 12642	ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data				Sit	e Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	25,000 vehicles	S					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak F	lour Volume:	2,325 vehicles	3		He	avy Truc	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		Ve	hicle i	Mix					
Near/Far La	ne Distance:	51 feet				icleType		Day	Evening	Night	Daily
Site Data						,	Autos:	77.5%	12.9%	9.6%	97.429
Ra	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Di	. ,	54.0 feet		Ma	ioo C	ource El	ovetio	an lin fe	2041		
Centerline Dist.	to Observer:	54.0 feet		NO	156 30	Auto.		0.000	ei)		
Barrier Distance	to Observer:	0.0 feet			Madiu	Auto. m Truck		.297			
Observer Height	(Above Pad):	5.0 feet				vy Truck		297	Grade Ad	liustmont	. 0 0
P	ad Elevation:	0.0 feet			пеа	y muck	s. c	.000	Grade Ad	justinent	. 0.0
Ro	ad Elevation:	0.0 feet		La	ne Eq	uivalent	Distar	ice (in i	feet)		
	Road Grade:	0.0%				Auto.	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree	es		Hear	y Truck	s: 47	.695			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20			0.18		-1.20		-4.67		000	0.00
Medium Trucks:	81.00			0.21		-1.20		-4.87		000	0.00
Heavy Trucks:	85.38	-19.94		0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	e Levels (with	out Topo and	barrier a	attenua	tion)						
VehicleType	Leq Peak Ho			eq Ever		Leq	Night		Ldn		VEL
Autos:			68.9		67.1		61		69.		70
Medium Trucks:	-		62.8		56.5		54		63.4		63.
Heavy Trucks:			63.3		54.3		55		63.		64.
Vehicle Noise:			70.7		67.7		62	.9	71.	4	71
Centerline Distan	ce to Noise C	ontour (in feet,	)								
			!	70 dB	Α		dBA	6	60 dBA	1	dBA
			Ldn:	67			45		312	-	72
		C	NEL:	72		1	56		335	7	22

	FHV	WA-RD-77-108	HIGHV	VAY NO	DISE PR	EDICTION	ON MO	DEL			
Scenario:	GPP40					Project I	Vame:	The Wa	ave-Coral	Mountai	n
Road Name:	Madison St					Job Nu	ımber: 1	12642			
Road Segment:	n/o Avenue	: 52									
	PECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	te Cond	ditions (	Hard =	10, So	ft = 15)		
Average Daily Tr	affic (Adt):	33,000 vehicle	S				,	Autos:	15		
Peak Hour Pe	ercentage:	9.30%			Med	dium Tru	cks (2 A	lxles):	15		
Peak Hou	ır Volume:	3,069 vehicle	S		Hea	avy Truc	ks (3+ A	lxles):	15		
Vehi	cle Speed:	50 mph		V	ehicle N	lix					
Near/Far Lane	Distance:	51 feet				cleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	97.429
Rarri	er Heiaht:	0.0 feet			Me	edium Tru	ucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-Wal	I, 1-Berm):	0.0			H	leavy Tro	ıcks:	86.5%	2.7%	10.8%	0.749
Centerline Dist.		54.0 feet		N	oise So	urce Ele	vations	(in fe	et)		
Centerline Dist. to		54.0 feet				Autos	: 0.0	000			
Barrier Distance to		0.0 feet			Mediur	n Trucks	: 2.2	297			
Observer Height (Al	,	5.0 feet			Heav	y Trucks	: 8.0	006	Grade Ad	justmeni	: 0.0
	Elevation:	0.0 feet		_							
	Elevation:	0.0 feet		Li	ane Equ	ivalent		_	eet)		
Ro	ad Grade:	0.0%				Autos					
	Left View:	-90.0 degree				n Trucks					
F	Right View:	90.0 degree	es		Heav	y Trucks	: 47.6	695			
FHWA Noise Model											
VehicleType	REMEL	Traffic Flow	Dista		Finite I		Fresn		Barrier Att		rm Atten
Autos:	70.20			0.18		-1.20		-4.67		000	0.00
Medium Trucks:	81.00			0.21		-1.20		-4.87		000	0.00
Heavy Trucks:	85.38			0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise L										_	
VehicleType L	eq Peak Hou 71		70.1	Leq Eve	68.3	Leq N	lignt 62.2	ļ	Ldn 70.9		NEL 71.
Medium Trucks:	65		64.0		57.7		56.1		64.6	-	64.
Heavy Trucks:	65		64.5		55.5		56.8		65.1	-	65.
Vehicle Noise:	73		71.9		68.9		64.1		72.6		73.
					00.5		07.1		, 2.0		13.
Centerline Distance	to Noise Co	ontour (in feet	,	70 dE	8.4	65 d	'RA	6	0 dBA	55	dBA
			I dn:	81		17			375	1	309
		C	NFI:	87		18			403	-	369
		C		31		10			.55		,00

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGH	I YAWH	NOISE PI	REDICT	ION MO	DDEL			
Road Nan	rio: GPP40 ne: Madison S ent: n/o Airport							The W 12642	ave-Coral	Mountair	1
	SPECIFIC II	NPUT DATA							L INPUT	s	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	45,000 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2	Axles):	15		
Peak I	lour Volume:	4,185 vehicles	3		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		H	Vehicle	Miv					
Near/Far La	ne Distance:	51 feet		ŀ		icleType		Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	- 0	9.6%	,
Ra	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	54.0 feet									
Centerline Dist.		54.0 feet			Noise So				eet)		
Barrier Distance		0.0 feet				Auto		0.000			
Observer Height		5.0 feet				m Truck		2.297			
	ad Elevation:	0.0 feet			Hear	ry Truck	s: 8	3.006	Grade Ad	justment	: 0.0
	ad Flevation:	0.0 feet		İ	Lane Eq	uivalent	Distar	nce (in t	eet)		
	Road Grade:	0.0%		ľ		Auto	s: 47	7.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	7.677			
	Right View:	90.0 degree			Hear	y Truck	s: 47	7.695			
FHWA Noise Mod	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	inel	Barrier Att	en Ber	m Atten
Autos:	70.20	3.81		0.1	18	-1.20		-4.67	0.0	000	0.000
Medium Trucks:	81.00	-13.43		0.2	21	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	85.38	-17.39		0.2	20	-1.20		-5.39	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er atter	nuation)						
VehicleType	Leq Peak Ho	ur Leq Day	,	Leq E	vening	Leq	Night		Ldn		NEL
Autos:	7:	3.0	71.4		69.6		63	.6	72.2	2	72.8
Medium Trucks:	6	3.6	65.4		59.0		57	.5	65.9	9	66.2
Heavy Trucks:	6	7.0	65.9		56.9		58	.1	66.	5	66.6
Vehicle Noise:	7-	4.7	73.3		70.2		65	.4	74.0	)	74.4
Centerline Distan	ce to Noise C	ontour (in feet	)								
				70	dBA	65	dBA	6	0 dBA	55	dBA
			Ldn:	9	99	2	14		462	9	94
		C	VEL:	1	07	2	30		496	1,	068

	FHW	A-RD-77-108	HIGHW	AY NOIS	E PREDICT	ION MO	DEL			
Scenario: ( Road Name: N Road Segment: r	Madison St.	8			.,	t Name: lumber:		ave-Coral	Mountai	n
SITE SPE	ECIFIC INP	UT DATA			1	NOISE I	MODE	L INPUT	s	
Highway Data				Site	Conditions	(Hard =	10, So	ft = 15)		
Average Daily Trai	ffic (Adt): 34	.000 vehicles					Autos:	15		
Peak Hour Per	centage:	9.30%			Medium Tr	ucks (2	Axles):	15		
Peak Hour	· Volume: 3	,162 vehicles			Heavy Tru	cks (3+.	Axles):	15		
Vehicle	e Speed:	50 mph		1/-61	cle Mix					
Near/Far Lane I	Distance:	51 feet			vehicleType		Dav	Evenina	Niaht	Dailv
Site Data						Autos:	77.5%	- 3	9.6%	. ,
				-	Medium 7		84.8%		10.3%	
	r Height:	0.0 feet			Heavy 7		86.5%		10.8%	
Barrier Type (0-Wall,	,	0.0			ricavy i	rucks.	00.070	2.170	10.070	0.1470
Centerline Dist. to		54.0 feet		Nois	e Source E	levation	s (in fe	et)		
Centerline Dist. to C Barrier Distance to C		54.0 feet			Auto	s: 0.	000			
		0.0 feet		Me	edium Truck	rs: 2.	297			
Observer Height (Abo		5.0 feet		F	leavy Truck	rs: 8.	006	Grade Ad	justment	t: 0.0
	Elevation: Elevation:	0.0 feet		Lano	Equivalen	t Dietan	co (in t	inat)		
	:ievation: id Grade:	0.0 feet 0.0%		Laire	Auto		862	eei)		
			_		Auto edium Truck		677			
_	aht View:	-90.0 degree			leavy Truck		695			
`		90.0 degree	5	,	leavy Truck	13. 47	.033			
FHWA Noise Model C										
		raffic Flow	Distar		nite Road	Fresi		Barrier Att		rm Atten
Autos: Medium Trucks:	70.20	2.59		0.18	-1.20		-4.67		000	0.000
Heavy Trucks:	81.00	-14.65		0.21	-1.20		-4.87		000	0.000
,	85.38	-18.60		0.20	-1.20		-5.39	0.0	000	0.000
Unmitigated Noise Le						A Contra		Ldn	1 0	NEL
VehicleType Lec	q Peak Hour 71.8		70.2	eq Evenir	19   Leq 18.4	Night 62		Lan 71.0	1	NEL 71.6
Medium Trucks:	65.4	-	34.2		8.4 57.8	56.		64.7	-	65.0
Heavy Trucks:	65.8	-	54.Z 54.7		57.8 55.6	56.	-	65.2		65.4
	73.5		72.0		9.0	64.	_	72.8		73.2
Vehicle Noise:	73.5									
Vehicle Noise:		tour (in feet)								
		tour (in feet)		70 dBA	65	dBA	6	i0 dBA	55	i dBA
Vehicle Noise:		, ,	_dn:	70 dBA 82		dBA 78	6	60 dBA 383	1	i dBA 325

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGH	HWAY N	IOISE P	REDICT	ION MC	DEL			
Road Nam	io: GPP40 ne: Monroe St. nt: n/o Avenue						Name: lumber:		ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data  Average Daily	Traffic (Adt):	15,600 vehicle	s		Site Cor	ditions	(Hard =	= <b>10, S</b> c :Autos:			
	Percentage: lour Volume:	9.30% 1.451 vehicle	_			edium Tr eavy Tru					
	hicle Speed:	50 mph	s	1	/ehicle		UKS (3+	Axies).	15		
Near/Far La	ne Distance:	43 feet		F.		icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	
Barrier Type (0-W	rrier Height: /all, 1-Berm):	0.0 feet 0.0				edium T Heavy T		84.8% 86.5%		10.3% 10.8%	
Centerline Di	st. to Barrier:	64.0 feet		,	Voise S	urce Fl	ovation	e (in f	not)		
Centerline Dist. Barrier Distance		64.0 feet 0.0 feet		,		Auto m Truck	s: 0	.000	<del>30</del> 1)		
Observer Height (			Heavy Trucks: 8.006 Grade Adjustment: 0.0						0.0		
Roa	ad Elevation:	0.0 feet		L	Lane Eq	uivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	00	.488			
	Left View: Right View:	-90.0 degre				m Truck vy Truck	00	.341 .355			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow		stance		Road	Fres		Barrier Att		m Atten
Autos:	70.20			-1.34		-1.20		-4.70		000	0.00
Medium Trucks:	81.00			-1.33	-	-1.20		-4.88		000	0.00
Heavy Trucks:	85.38			-1.33		-1.20		-5.31	0.0	000	0.00
Unmitigated Noise VehicleType	Leg Peak Ho			er atteni Leg Ev		100	Night	1	Ldn		VEL
Autos:			65.3	Ley E	63.5		ivigrit 57.	5	66.1		VEL 66.
Medium Trucks:		1.4	59.2		52.9		51.	-	59.8		60.
Heavy Trucks:	60	).9	59.8		50.7		52.	0	60.3	3	60.
Vehicle Noise:	68	3.6	67.1		64.1		59.	3	67.8	3	68.
Centerline Distance	ce to Noise C	ontour (in feet	:)								
				70 c	IBA	65	dBA	6	60 dBA	55	dBA
			Ldn:	46	-	-	99		214		60
		С	NEL:	49	9	1	06		229	4	94

		WA-RD-77-108	лиону	VAT N	DISE PREDIC	HON MC	DEE.			
	o: GPP40							ave-Coral I	Mountair	ı
	e: Madison S				Job	Number:	12642			
Road Segmer	nt: n/o Avenu	e 60								
	SPECIFIC II	NPUT DATA						L INPUTS	5	
Highway Data				S	ite Condition	s (Hard =	= 10, Sc			
Average Daily	Traffic (Adt):	20,000 vehicle	es				Autos:			
Peak Hour	Percentage:	9.30%			Medium	rucks (2	Axles):			
Peak H	our Volume:	1,860 vehicle	es		Heavy Ti	ucks (3+	Axles):	15		
Ve	hicle Speed:	45 mph		v	ehicle Mix					
Near/Far Lai	ne Distance:	45 feet		F	VehicleTy	ре	Day	Evening	Night	Daily
Site Data						Autos:	77.5%	12.9%	9.6%	97.429
Rai	rier Heiaht:	0.0 feet			Medium	Trucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	all, 1-Berm):	0.0			Heavy	Trucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		51.0 feet		٨	loise Source	Elevation	ıs (in fe	eet)		
Centerline Dist.		51.0 feet			Au	tos: 0	.000			
Barrier Distance		0.0 feet			Medium Truc	ks: 2	.297			
Observer Height (	,	5.0 feet			Heavy Truc		.006	Grade Adj	ustment	0.0
	ad Elevation:	0.0 feet			F	-4 Di-4	//	r4\		
	d Elevation:	0.0 feet			ane Equivale			eet)		
,	Road Grade:	0.0%			Medium Truc		5.041 5.848			
	Left View:	-90.0 degre								
	Right View:	90.0 degre	es		Heavy Truc	:KS: 45	5.867			
FHWA Noise Mode										
VehicleType	REMEL	Traffic Flow	Dista		Finite Road	Fres		Barrier Atte		m Atten
Autos:	68.46			0.43		-	-4.65	0.0		0.00
Medium Trucks:	79.45			0.46			-4.87	0.0		0.00
Heavy Trucks:	84.25	-20.45	5	0.46	-1.20	)	-5.42	0.0	100	0.00
Unmitigated Noise										
	Leq Peak Ho		- 1	Leq Ev	-	q Night	-	Ldn		NEL
Autos:	-	8.4	66.9		65.1	59	-	67.7		68.
Medium Trucks:	-	2.2	61.0		54.7	53.		61.6		61.
Heavy Trucks:		3.1	62.0		52.9	54.		62.5		62.
	7	0.3	68.9		65.7	61.	.0	69.6	i	70.
Vehicle Noise:										
Vehicle Noise: Centerline Distanc	e to Noise C	ontour (in fee	t)	70 ~	DA 6	E ADA	-	n dBA	FE	AD A
	e to Noise C	contour (in fee		70 d		5 dBA	6	60 dBA		dBA
	e to Noise C	,	Ldn:	70 d 48	3	5 dBA 103 110	6	60 dBA 222 238	4	dBA 77

Wednesday, March 25, 2020

	FH'	WA-RD-77-108	HIGH	WAY N	IOISE PI	REDICTI	ON MO	DDEL			
Road Nan	rio: GPP40 ne: Monroe St. ent: n/o Avenue							The W 12642	ave-Coral	Mountair	1
	SPECIFIC IN	NPUT DATA							L INPUT	s	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	20,000 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tri	ıcks (2	Axles):	15		
Peak I	lour Volume:	1,860 vehicles	6		He	avy Truc	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph			Vehicle I	Mix					
Near/Far La	ane Distance:	43 feet		F		icleType		Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	- 0	9.6%	
Ra	rrier Height:	0.0 feet			М	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0			- 1	Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
,, ,	ist. to Barrier:	64.0 feet		L.							
Centerline Dist.		64.0 feet		1	Voise So				eet)		
Barrier Distance		0.0 feet				Auto		0.000			
Observer Height		5.0 feet				m Truck		2.297			
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	ljustment	0.0
	ad Flevation:	0.0 feet		1	Lane Eq	uivalent	Distar	nce (in t	eet)		
	Road Grade:	0.0%				Auto	s: 60	0.488			
	Left View:	-90.0 degree	24		Mediu	m Truck	s: 60	341			
	Right View:	90.0 degree			Heav	y Truck	s: 60	0.355			
FHWA Noise Mod	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	0.29		-1.3	4	-1.20		-4.70	0.0	000	0.000
Medium Trucks:	81.00	-16.95		-1.3	3	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	85.38	-20.91		-1.3	3	-1.20		-5.31	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	r atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Day		Leq E	vening	Leq	Night		Ldn	C	VEL
Autos:	67	7.9	66.4		64.6		58	.5	67.2	2	67.8
Medium Trucks:	6	1.5	60.3		54.0		52	.4	60.9	9	61.1
Heavy Trucks:	6	1.9	8.06		51.8		53	.0	61.4	4	61.5
Vehicle Noise:	69	9.6	68.2		65.2		60	.4	68.9	9	69.4
Centerline Distan	ce to Noise C	ontour (in feet)									
				70 c	IBA	65	dBA	6	0 dBA	55	dBA
			Ldn:	5	4	11	17		252	5	43
		CI	VEL:	5	8	12	26		271	5	83

	FI	IWA-R	RD-77-108	HIGH	WAY	NOISE P	REDICT	ION MO	ODEL			
Road Na	ario: GPP40 ame: Monroe S aent: n/o Avenu						.,		: The W : 12642	ave-Coral	Mounta	in
SITI	SPECIFIC	NPU	T DATA				- 1	IOISE	MODE	L INPUT	s	
Highway Data	. 0. 200		. 5/11/11			Site Co						
Average Dai	ly Traffic (Adt):	32.00	00 vehicles						Autos:	15		
	ur Percentage:		30%			М	edium Tr	ucks (2	Axles).	15		
Peak	Hour Volume:	2.97	76 vehicles			Н	eavy Tru	cks (3+	Axles).	15		
	/ehicle Speed:		50 mph									
	ane Distance:		51 feet		-	Vehicle			Dav	Evenina	Niaht	D-76
Site Data						vei	nicleType	Autos:	77.5%		9.69	Daily 6 97.42%
							1edium T		84.8%		10.39	
	Barrier Height:		0.0 feet			//	Heavy T				10.89	
Barrier Type (0-	. ,		0.0				neavy i	rucks.	00.57	0 2.170	10.67	0 0.7470
	Dist. to Barrier:	-	4.0 feet		İ	Noise S	ource E	levatio	ns (in f	eet)		
	t. to Observer:		4.0 feet		İ		Auto	s: C	0.000			
Barrier Distance			0.0 feet			Mediu	ım Truck	s: 2	2.297			
Observer Heigh	,		5.0 feet			Hea	vy Truck	s: 8	3.006	Grade Ad	justmer	nt: 0.0
	Pad Elevation:		0.0 feet		-	/ F-		. Di	//	f4\		
F	Road Elevation:		0.0 feet		}	Lane Ec	uivalen			reet)		
	Road Grade:		0.0%				Auto		7.862			
	Left View:	0.	0.0 degree				ım Truck		7.677			
	Right View:	90	0.0 degree	s		Hea	vy Truck	s: 47	7.695			
FHWA Noise Mo												
VehicleType	REMEL		ffic Flow	Dis	tance		Road	Fres		Barrier Att		erm Atten
Auto		-	2.33		0.1		-1.20		-4.67		000	0.000
Medium Truck		-	-14.91		0.2		-1.20		-4.87		000	0.000
Heavy Truck	s: 85.3	8	-18.87		0.2	20	-1.20		-5.39	0.0	000	0.000
Unmitigated No.			•	_							,	
VehicleType	Leq Peak H	our	Leq Day	- 1	Leq E	vening		Night		Ldn		CNEL
Auto		71.5		39.9		68.2	-	62		70.		71.3
Medium Truck		55.1		33.9		57.5		56		64.	-	64.7
Heavy Truck		55.5		34.4		55.4		56		65.		65.1
Vehicle Nois	9:	73.2		71.8		68.7	<u></u>	63	.9	72.	5	73.0
Centerline Dista	nce to Noise (	Conto	ur (in feet)									
						dBA		dBA	-	60 dBA	1	5 dBA
				Ldn:		79		71		368		792
			CI	IEL:	1	35	1	83		395		851

	FHV	VA-RD-77-108	HIGH	WAY N	OISE PI	REDICT	ION MC	DDEL			
Road Nam	io: GPP40 ne: Monroe St. nt: n/o Avenue	58					Name: lumber:		ave-Coral	Mountair	1
SITE	SPECIFIC IN	PUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 2	26,000 vehicle	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,418 vehicle	3		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		v	ehicle	Mix					
Near/Far La	ne Distance:	51 feet		F		icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.429
Rai	rrier Heiaht:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	. ,	54.0 feet			laina C	ource El	lovetion	an (in fe	2041		
Centerline Dist.	to Observer:	54.0 feet		^	ioise so	Auto		.000	et)		
Barrier Distance	to Observer:	0.0 feet			11-15	Auto m Truck		.000			
Observer Height (	(Above Pad):	5.0 feet						.297	Grade Ad	ii iatmant	. 0 0
Pa	ad Elevation:	0.0 feet			Heat	y Truck	s: 8	.006	Grade Ad	usunen	. 0.0
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	ice (in i	feet)		
	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 47	.677			
	Right View:	90.0 degree	es		Hear	y Truck	s: 47	.695			
FHWA Noise Mode	el Calculations	5		-							
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	1.43		0.18		-1.20		-4.67		000	0.00
Medium Trucks:	81.00	-15.81		0.21		-1.20		-4.87		000	0.00
Heavy Trucks:	85.38	-19.77		0.20	)	-1.20		-5.39	0.0	000	0.00
Unmitigated Noise	e Levels (witho	out Topo and	barrie	r attenu	ıation)						
VehicleType	Leq Peak Hou			Leq Ev		_	Night		Ldn		VEL
Autos:	70	-	69.0		67.3		61.	_	69.8		70.4
Medium Trucks:	64	_	63.0		56.6		55.		63.6		63.
Heavy Trucks:	64		63.5		54.5		55.		64.		64.
Vehicle Noise:	72		70.9		67.8		63.	.0	71.6	ò	72.
Centerline Distanc	ce to Noise Co	ntour (in feet	)	70	10.4		10.4				10.4
			🗀	70 d			dBA	1 6	60 dBA		dBA
		_	Ldn:	69			49		320	-	90
		C	NEL:	74	ŀ	1	60		344	7	41

	FH\	WA-RD-77-108	HIGHWA	Y NO	DISE PREDICT	TION MODEL		
	o: GPP40 e: Monroe St. t: n/o Airport					t Name: The Number: 1264	Wave-Coral Mo 2	ountain
	PECIFIC IN	IPUT DATA				NOISE MOD		
Highway Data				S	ite Conditions	(Hard = 10, 3	Soft = 15)	
Average Daily 1 Peak Hour F Peak Ho	. ,	35,000 vehicle 9.30% 3,255 vehicle				Auto rucks (2 Axles icks (3+ Axles	:): 15	
Veh	icle Speed:	50 mph		V	ehicle Mix			
Near/Far Lan	e Distance:	51 feet			VehicleTyp	e Dav	Evening 1	light Daily
Site Data					,,	Autos: 77.5		9.6% 97.42%
Ran	rier Height:	0.0 feet			Medium	Trucks: 84.8	% 4.9%	10.3% 1.84%
Barrier Type (0-Wa		0.0			Heavy	Trucks: 86.5	% 2.7%	10.8% 0.74%
Centerline Dis		54.0 feet		M	oise Source E	lovations (in	foot)	
Centerline Dist. to	o Observer:	54.0 feet		/4	Auto		reer)	
Barrier Distance to	o Observer:	0.0 feet			Medium Truc			
Observer Height (A	Above Pad):	5.0 feet			Heavy Truc		Grade Adjus	etment: 0.0
Pa	d Elevation:	0.0 feet						stinont. 0.0
Roa	d Elevation:	0.0 feet		L	ane Equivaler	•	ı feet)	
R	load Grade:	0.0%			Aut			
	Left View:	-90.0 degree			Medium Truc			
	Right View:	90.0 degree	es		Heavy Truc	ks: 47.695		
FHWA Noise Mode	Calculation	s						
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	2.72		0.18	-1.20	-4.6	7 0.00	0.00
Medium Trucks:	81.00			0.21				
Heavy Trucks:	85.38	-18.48		0.20	-1.20	-5.3	9 0.00	0.000
Unmitigated Noise	Levels (with			ttenu				
	Leq Peak Ho			q Eve	- 1	Night	Ldn	CNEL
Autos:			70.3		68.6	62.5	71.1	71.
Medium Trucks:			64.3		57.9	56.4	64.8	65.
Heavy Trucks:			64.8		55.8	57.0	65.4	65.
Vehicle Noise:	73	3.6	72.2		69.1	64.3	72.9	73.
Centerline Distance	e to Noise Co	ontour (in feet	)					
				70 dE	1	dBA	60 dBA	55 dBA
			Ldn:	84		181	390	841
			NFI:	90		195	419	904

Wednesday, March 25, 2020

	FHV	VA-RD-77-108 I	HIGHWAY	NOISE P	REDICTION	ON MODEL						
	o: GPP40 e: Monroe St. nt: n/o Avenue	60				Name: The Imber: 1264	Wave-Coral M 12	ountain				
SITE S	SPECIFIC IN	IPUT DATA					DEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)								
	Traffic (Adt): : Percentage: our Volume:	27,000 vehicles 9.30% 2,511 vehicles		1		Auto cks (2 Axle ks (3+ Axle	s): 15					
Vel	hicle Speed:	50 mph		Vehicle	Miv							
Near/Far Lar	ne Distance:	51 feet			icleType	Dav	Evening I	Vight Daily				
Site Data						utos: 77.		9.6% 97.42%				
Rar	rier Heiaht:	0.0 feet		М	edium Tr	ucks: 84.	3% 4.9%	10.3% 1.84%				
Barrier Type (0-Wa		0.0			Heavy Tr	ucks: 86.	5% 2.7%	10.8% 0.74%				
Centerline Dis	t. to Barrier:	54.0 feet		Noise St	ource Fle	vations (ir	feet)					
Centerline Dist. t	to Observer:	54.0 feet		710,00 0	Autos		7001)					
Barrier Distance t	to Observer:	0.0 feet		Madiu	m Trucks							
Observer Height (/	Above Pad):	5.0 feet			vy Trucks		Grade Adju	stment: 0.0				
Pa	d Elevation:	0.0 feet					•					
Roa	d Elevation:	0.0 feet		Lane Eq		Distance (i	n feet)					
F	Road Grade:	0.0%			Autos							
	Left View:	-90.0 degrees	S		m Trucks							
	Right View:	90.0 degrees	S	Hear	vy Trucks	47.695						
FHWA Noise Mode	l Calculation	S										
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atter	Berm Atten				
Autos:	70.20	1.59	0.	18	-1.20	-4.6	7 0.00	0.000				
Medium Trucks:	81.00	-15.65	0.	21	-1.20	-4.8	7 0.00	0.000				
Heavy Trucks:	85.38	-19.60	0.	20	-1.20	-5.3	0.00	0.000				
Unmitigated Noise	Levels (with	out Topo and b	arrier atte	nuation)								
VehicleType	Leq Peak Hou	ır Leq Day	Leq	Evening	Leq I	light	Ldn	CNEL				
Autos:	70		9.2	67.4		61.4	70.0	70.6				
Medium Trucks:	64		3.2	56.8		55.3	63.7	64.0				
Heavy Trucks:	64		3.7	54.6		55.9	64.2	64.4				
Vehicle Noise:	72	.5 7	1.0	68.0		63.2	71.8	72.2				
Centerline Distanc	e to Noise Co	ontour (in feet)										
			70	) dBA	65 c	IBA	60 dBA	55 dBA				
		L	dn:	71	15	2	328	707				
		CN	IEL:	76	16	4	353	760				

	FHW	/A-RD-77-108	HIGHV	WAY N	NOISE PE	REDICT	ION MO	DEL			
Road Nam	rio: GPP40 ne: Avenue 50 nt: w/o Jefferso	n St.					Name: ' lumber:		ave-Coral I	Mounta	in
SITE	SPECIFIC IN	PUT DATA				N	IOISE N	/IODE	L INPUTS	5	
Highway Data					Site Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt): 1	7,700 vehicles	3					Autos:	15		
Peak Hour	Percentage:	9.30%			Me	dium Tr	ucks (2 A	(xles	15		
Peak H	lour Volume:	1,646 vehicles	S		He	avy Tru	cks (3+ A	(xles	15		
Ve	hicle Speed:	50 mph		H	Vehicle I	Niv					
Near/Far La	ne Distance:	51 feet		H		cleType	,	Dav	Evening	Night	Daily
Site Data								77.5%		9.69	
Pa	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.39	6 1.84%
Barrier Type (0-W		0.0			F	leavy T	rucks:	86.5%	2.7%	10.89	6 0.74%
Centerline Di		54.0 feet		F	M-! 0-			. /! 6	41		
Centerline Dist.	to Observer:	54.0 feet		Ľ	Noise Sc			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000			
Observer Height	(Above Pad):	5.0 feet				n Truck	o	297	Crode Adi	o.tmo. r	4.00
P	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.	006	Grade Adj	usunen	n. 0.0
Ro	ad Elevation:	0.0 feet			Lane Equ	ıivaleni	Distanc	e (in	feet)		
	Road Grade:	0.0%				Auto	s: 47.	862			
	Left View:	-90.0 degree	es		Mediui	n Truck	s: 47.	677			
	Right View:	90.0 degree	es		Heav	y Truck	s: 47.	695			
FHWA Noise Mode	el Calculations										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresn	el	Barrier Atte	en Be	rm Atten
Autos:		-0.24		0.1	8	-1.20		-4.67	0.0	00	0.000
Medium Trucks:	81.00	-17.48		0.2	1	-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-21.44		0.2	0	-1.20		-5.39	0.0	00	0.000
Unmitigated Noise	e Levels (witho	ut Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hour	r Leq Day	′	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	68.	9	67.4		65.6		59.5	,	68.2	!	68.8
Medium Trucks:	62.	5	61.3		55.0		53.4		61.9	)	62.1
Heavy Trucks:	62.	9	61.8		52.8		54.1		62.4		62.5
Vehicle Noise:	70.	6	69.2		66.2		61.4		69.9	1	70.4
Centerline Distance	ce to Noise Co	ntour (in feet,	)								
	-				dBA	65	dBA	-	60 dBA	58	5 dBA
			Ldn:	-	i3		15		248		534
		C	NEL:	5	7	1	24		266		573

	FHW	A-RD-77-108	HIGHW	AY NOISE P	REDICT	ION MO	DEL			
	c: GPP40 e: Avenue 50 t: e/o Monroe \$	St.				Name: lumber:		ave-Coral I	Mountain	1
SITE S	PECIFIC INF	UT DATA			N	IOISE I	MODE	INPUT	S	
Highway Data				Site Co.	nditions	(Hard =	10, So	ft = 15)		
Average Daily T	raffic (Adt): 2	1,000 vehicles	3				Autos:	15		
Peak Hour F	Percentage:	9.30%		M	edium Tr	ucks (2 i	Axles):	15		
Peak Ho	our Volume:	1,953 vehicles	3	Н	eavy Tru	cks (3+ )	Axles):	15		
Veh	icle Speed:	50 mph		Vehicle	Miv					
Near/Far Lan	e Distance:	43 feet			hicleType	,	Dav	Evening	Night	Dailv
Site Data						Autos:	77.5%	12.9%	9.6%	97.42%
Rarr	rier Height:	0.0 feet		٨	1edium T	rucks:	84.8%	4.9%	10.3%	
Barrier Type (0-Wa		0.0			Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist	. ,	64.0 feet		M-1 0			- /! #-	-41		
Centerline Dist. to	Observer:	64.0 feet		Noise S	ource El			et)		
Barrier Distance to	Observer:	0.0 feet		14-45	Auto ım Truck		000 297			
Observer Height (A	Above Pad):	5.0 feet					297 006	Grade Ad	iuotmont	. 0 0
Pac	d Elevation:	0.0 feet		Hea	vy Truck	S. 8.	006	Grade Adj	usimeni.	. 0.0
Road	d Elevation:	0.0 feet		Lane Eq	quivalent	Distan	ce (in f	eet)		
R	load Grade:	0.0%			Auto	s: 60.	488			
	Left View:	-90.0 degree	es	Mediu	ım Truck	s: 60.	341			
	Right View:	90.0 degree	es	Hea	vy Truck	s: 60.	355			
FHWA Noise Model										
VehicleType		Traffic Flow	Dista		Road	Fresi		Barrier Atte		m Atten
Autos:	70.20	0.50		-1.34	-1.20		-4.70	0.0		0.000
Medium Trucks:	81.00	-16.74		-1.33	-1.20		-4.88	0.0		0.000
Heavy Trucks:	85.38	-20.70		-1.33	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	•		barrier a	attenuation)					,	
	Leq Peak Hour			eq Evening		Night		Ldn		VEL
Autos:	68.2	-	66.6	64.8	-	58.8	-	67.4		68.0
Medium Trucks:	61.7		60.5	54.2	-	52.6	-	61.1		61.3
Heavy Trucks:	62.2		61.0 68.4	52.0 65.4		53.0		61.6		61.7
_			···	00.4	*	00.0	,	09.1		09.0
Vehicle Noise:	69.9									
_				70 dBA	65	dBA	6	0 dBA	55	dBA
Vehicle Noise:		ntour (in feet,	Ldn:	70 dBA 56	1	dBA 21	6	0 dBA 260		dBA 61

		WA-RD-77-108									
	o: GPP40								/ave-Coral	Mountai	n
	e: Avenue 50					Job N	umber	12642			
Road Segmen	t: w/o Madiso	on St.									
	SPECIFIC II	NPUT DATA							L INPUT	s	
Highway Data				S	ite Cond	litions	(Hard	= 10, S	oft = 15)		
Average Daily 1	Traffic (Adt):	28,000 vehicle	s					Autos	: 15		
Peak Hour I	Percentage:	9.30%			Med	dium Tr	ucks (2	Axles)	: 15		
Peak Ho	our Volume:	2,604 vehicle	s		Hea	avy Tru	cks (3+	Axles)	: 15		
Veh	nicle Speed:	50 mph		V	ehicle M	liy					
Near/Far Lar	ne Distance:	51 feet		Ė		cleType		Dav	Evening	Night	Dailv
Site Data							Autos:	77.59		9.6%	97.42%
Ran	rier Heiaht:	0.0 feet			Me	dium T	rucks:	84.89	6 4.9%	10.3%	1.84%
Barrier Type (0-Wa	all, 1-Berm):	0.0			Н	leavy T	rucks:	86.5%	6 2.7%	10.8%	0.74%
Centerline Dis		54.0 feet		Ν	loise So	urce El	evatio	ns (in f	eet)		
Centerline Dist. t		54.0 feet				Auto	s: (	0.000			
Barrier Distance t		0.0 feet			Mediun	n Truck	s: 2	2.297			
Observer Height (A	,	5.0 feet			Heav	V Truck	s: 8	3.006	Grade A	djustmen	t: 0.0
	d Elevation:	0.0 feet					Dista	/!	£4\		
	d Elevation:	0.0 feet		L	ane Equ	Auto		7.862	reet)		
F	Road Grade:	0.0%			Mediun			7.677			
	Left View:	-90.0 degre				n Truck y Truck		7.695			
	Right View:	90.0 degre	es		neav	y Truck	5. 4	7.093			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Dista		Finite F		Fres		Barrier At		rm Atten
Autos:	70.20			0.18		-1.20		-4.67	-	000	0.00
Medium Trucks:	81.00			0.21		-1.20		-4.87	-	000	0.00
Heavy Trucks:	85.38			0.20		-1.20		-5.39	0.	000	0.00
						100	Night		l dn		NEL
Unmitigated Noise		ur Loa Do			ening	Leq	ivigfit	_	Lan 70		NEL 70.1
VehicleType	Leq Peak Ho			.eq Ev	-		61				
VehicleType Autos:	70	0.9	69.3	.ey Ev	67.6		61			0	64
VehicleType Autos: Medium Trucks:	70 64	).9 1.5	69.3 63.3	.еч Еи	67.6 57.0		55	.4	63.	-	
VehicleType Autos:	70 64 64	0.9	69.3	ey Ev	67.6			.4		4	64. 64. 72.
VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	70 64 64 73	0.9 4.5 4.9 2.6	69.3 63.3 63.8 71.2	ey Ev	67.6 57.0 54.8		55 56	.4	63. 64.	4	64.
VehicleType Autos: Medium Trucks: Heavy Trucks:	70 64 64 73	0.9 4.5 4.9 2.6	69.3 63.3 63.8 71.2	70 di	67.6 57.0 54.8 68.1	65	55 56	.4	63. 64.	9	64.
VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	70 64 64 73	0.9 4.5 4.9 2.6	69.3 63.3 63.8 71.2		67.6 57.0 54.8 68.1		55 56 63	.4	63. 64. 71.	9 55	64. 72.

Wednesday, March 25, 2020

	FHW	A-RD-77-108 I	HIGH	YAW	IOISE P	REDICTI	ON MO	DDEL				
Scenario: GPP40 Road Name: Avenue Road Segment: w/o Mo		St.						The W 12642	ave-Coral	Mountai	1	
SITE SPECIFIC	INP	UT DATA				N	OISE	MODE	L INPUT	s		
Highway Data					Site Cor	ditions	Hard :	= 10, Sc	oft = 15)			
Average Daily Traffic (Ad	t): 26	3,000 vehicles			Autos: 15							
Peak Hour Percentag	e:	9.30%			Me	edium Tru	icks (2	Axles).	15			
Peak Hour Volum	e: 2	2,418 vehicles			He	eavy Truc	ks (3+	Axles).	15			
Vehicle Spee	d:	50 mph		-	Vehicle	Miv						
Near/Far Lane Distant	e:	51 feet		H		icleType		Dav	Evening	Night	Daily	
Site Data							lutos:	77.5%	-	9.6%	,	
Barrier Heigi		0.0 feet			M	ledium Tr	ucks:	84.8%	6 4.9%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berri		0.0				Heavy Ti	ucks:	86.5%	6 2.7%	10.8%	0.74%	
Centerline Dist. to Barri	er:	54.0 feet		- t	Voise S	ource Ele	evatio	ns (in f	eet)			
Centerline Dist. to Observe	er:	54.0 feet		F		Autos		0.000	,			
Barrier Distance to Observe	er:	0.0 feet			Mediu	m Truck		297				
Observer Height (Above Pa		5.0 feet			Hea	vy Trucks	: 8	3.006	Grade Ad	iustmen	: 0.0	
Pad Elevation		0.0 feet		L		•				,		
Road Elevation		0.0 feet			Lane Eq	uivalent			feet)			
Road Grad		0.0%				Autos		7.862				
Left Vie		-90.0 degrees	S			m Trucks		7.677				
Right Vie	W:	90.0 degrees	S		Hea	vy Trucks	s: 47	7.695				
FHWA Noise Model Calcula												
VehicleType REMEL		Traffic Flow	Dist	ance	Finite	Road	Fres	nel	Barrier Att	en Bei	m Atten	
	.20	1.43		0.1		-1.20		-4.67		000	0.000	
	.00	-15.81		0.2		-1.20		-4.87		000	0.000	
,	.38	-19.77		0.2		-1.20		-5.39	0.0	000	0.000	
Unmitigated Noise Levels (v										1		
VehicleType Leq Peak				Leq E		Leq			Ldn		NEL	
Autos:	70.6		9.0		67.3		61	-	69.8	-	70.4	
Medium Trucks:	64.2		3.0		56.6		55		63.6		63.8	
Heavy Trucks:	64.6		3.5		54.5		55		64.		64.2	
Vehicle Noise:	72.3	•	0.9		67.8	i	63	.0	71.0	3	72.1	
Centerline Distance to Nois	Con	tour (in feet)	_	70	/DA	0=	/D /		CO -/D 4		-10.4	
			et er	70		65		1 '	60 dBA	1	dBA	
		_	.dn:	6	-	14	-		320		90	
		CN	EL:	7	4	16	U		344	7	41	

	EU\	WA-RD-77-108	HICHW/	AV N	OISE DE	EDICT	ION MO	DEI		_	
	o: GPP40 e: Avenue 54		THISTING	AI N	OBEFR	Project		The W	/ave-Coral	Mountai	in
SITE S	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data				5	Site Cond	ditions	(Hard =	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	31,000 vehicles	;					Autos	: 15		
Peak Hour	Percentage:	9.30%			Med	dium Tr	ucks (2	Axles)	: 15		
Peak H	our Volume:	2,883 vehicles	;		He	avy Tru	cks (3+	Axles)	: 15		
Vei	hicle Speed:	50 mph		,	Vehicle N	liv					
Near/Far Lai	ne Distance:	51 feet		ď		cleType	,	Dav	Evening	Night	Dailv
Site Data							Autos:	77.59		9.6%	- /
Rai	rier Height:	0.0 feet			Me	dium T	rucks:	84.89	6 4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			F	leavy T	rucks:	86.59	6 2.7%	10.8%	0.74%
Centerline Dis		54.0 feet		١.	v-' 0-			(! 1	41		
Centerline Dist.	to Observer:	54.0 feet		,	Voise So				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (	Above Pad):	5.0 feet			Mediur		· -		Crada As	livotmon	4. 0.0
Pa	ad Elevation:	0.0 feet			Heav	y Truck	'S.' 8	.006	Grade Ad	justrnen	ı. U.U
Roa	ad Elevation:	0.0 feet		L	Lane Equ	ivalen	t Distar	ice (in	feet)		
F	Road Grade:	0.0%				Auto	s: 47	.862			
	Left View:	-90.0 degree	:S		Mediur	n Truck	s: 47	.677			
	Right View:	90.0 degree	:S		Heav	y Truck	s: 47	.695			
FHWA Noise Mode	el Calculation	s		_							
VehicleType	REMEL	Traffic Flow	Distar	се	Finite	Road	Fres	nel	Barrier At	en Be	rm Atten
Autos:	70.20	2.19		0.18	В	-1.20		-4.67	0.	000	0.000
Medium Trucks:	81.00	-15.05		0.2	1	-1.20		-4.87	0.	000	0.000
Heavy Trucks:	85.38	-19.00		0.20	0	-1.20		-5.39	0.	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier a	tten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	Le	eq Ev	/ening	Leq	Night		Ldn	C	NEL
Autos:	71	.4	69.8		68.0		62.	.0	70.	6	71.2
Medium Trucks:	65	5.0	63.8		57.4		55.	.9	64.	3	64.6
Heavy Trucks:	65	5.4	64.3		55.2		56.	.5	64.	В	65.0
Vehicle Noise:	73	3.1	71.6		68.6		63.	.8	72.	4	72.8
Centerline Distance	e to Noise Co	ontour (in feet)									
				70 c			dBA		60 dBA		5 dBA
			Ldn:	78	-		67		360		776
		CI	VEL:	83	3	1	80		387		833

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGH	IWAY N	OISE P	REDICTION	OM MO	DEL			
	o: GPP40 e: Airport Bl. at: w/o Monroe	e St.					Name: umber:		ave-Coral	Mountair	1
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data					Site Cor	ditions (					
Average Daily	. ,	17,000 vehicle 9.30%	:S			edium Tru		Autos:			
	Percentage: our Volume:	9.30% 1.581 vehicle				eavy Truc					
	nicle Speed:	50 mph	:5				no (0+)	HAICS).	10		
Near/Far I ar		51 feet		١	/ehicle						
					Veh	icleType		Day	Evening	Night	Daily
Site Data						A ledium Tr	utos:	77.5% 84.8%		9.6%	
	rier Height:	0.0 feet				Heavy Tr		86.5%		10.3% 10.8%	
Barrier Type (0-W	. ,	0.0				nouvy in	ucno.	00.57	2.170	10.070	0.747
Centerline Dist. t		54.0 feet 54.0 feet		^	Voise S	ource Ele	evation	s (in fe	eet)		
Barrier Distance		0.0 feet				Autos		000			
Observer Height (		5.0 feet				m Trucks		297			
	d Flevation:	0.0 feet			Hea	vy Trucks	: 8.	006	Grade Ad	iustment	: 0.0
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalent	Distan	ce (in :	feet)		
F	Road Grade:	0.0%				Autos	: 47.	862			
	Left View:	-90.0 degre	es		Mediu	m Trucks	: 47.	677			
	Right View:	90.0 degre	es		Hea	vy Trucks	: 47.	695			
FHWA Noise Mode	l Calculation	s									
VehicleType	REMEL	Traffic Flow		tance		Road	Fresi		Barrier Att		m Atten
Autos:	70.20	-0.42		0.18		-1.20		-4.67		000	0.00
Medium Trucks:	81.00			0.21		-1.20		-4.87		000	0.00
Heavy Trucks:	85.38			0.20		-1.20		-5.39	0.0	000	0.00
Unmitigated Noise								1			
VehicleType Autos:	Leq Peak Hou	ur Leq Daj	67.2	Leq Ev	ening 65.4	Leq I	Vight 59.4		Ldn 68.0		VEL 68.
Medium Trucks:		2.3	61.2		54.8		53.		61.7		61.
Heavy Trucks:		2.8	61.7		52.6		53.9	-	62.3		62.
Vehicle Noise:		).5	69.0		66.0		61.2		69.7		70.
Centerline Distanc	e to Noise Co	ontour (in feet	t)								
		, ,		70 a	IBA	65 c	lBA	6	60 dBA	55	dBA
			Ldn: NEL:	52 56	_	11 12	-		241 259	-	20 58

	FHV	VA-RD-77-108	HIGHWA'	Y NOISE P	REDICTIO	N MODEL			
Road Nan	rio: GPP40 ne: Avenue 54 nt: w/o Monroe	St.				lame: The W mber: 12642		Mountair	1
	SPECIFIC IN	PUT DATA		0" 0		DISE MODE		5	
Highway Data				Site Coi	nditions (I	Hard = 10, So			
	Traffic (Adt): 1		3			Autos.			
	Percentage:	9.30%				cks (2 Axles).			
	lour Volume:	1,674 vehicles	3	H	eavy Truck	rs (3+ Axles).	15		
	hicle Speed:	50 mph		Vehicle	Mix				
Near/Far La	ne Distance:	51 feet			nicleType	Day	Evening	Night	Daily
Site Data					A	utos: 77.5%	12.9%	9.6%	97.42%
Ba	rrier Heiaht:	0.0 feet		Λ.	ledium Tru	icks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0			Heavy Tru	icks: 86.5%	2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	54.0 feet		Noise S	ource Fle	vations (in f	oot)		
Centerline Dist.	to Observer:	54.0 feet		710,000	Autos:		001)		
Barrier Distance	to Observer:	0.0 feet		Modi	im Trucks:				
Observer Height	(Above Pad):	5.0 feet			vy Trucks:		Grade Adj	ustment	. 0 0
P	ad Elevation:	0.0 feet		1 Ica	vy Trucks.	0.000	Orado riaj	dotmont	. 0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent l	Distance (in	feet)		
	Road Grade:	0.0%			Autos:	47.862			
	Left View:	-90.0 degree	es	Mediu	ım Trucks:	47.677			
	Right View:	90.0 degree	es	Hea	vy Trucks.	47.695			
FHWA Noise Mod	el Calculations	s		1					
VehicleType	REMEL	Traffic Flow	Distanc	e Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos:	70.20	-0.17	-	0.18	-1.20	-4.67	0.0	00	0.000
Medium Trucks:	81.00	-17.41		0.21	-1.20	-4.87	0.0	00	0.000
Heavy Trucks:	85.38	-21.37		0.20	-1.20	-5.39	0.0	00	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier att	tenuation)					
VehicleType	Leq Peak Hou	r Leq Day	Lec	Evening	Leq N	light	Ldn	C	NEL
Autos:	69	.0	67.4	65.7	,	59.6	68.2		68.8
Medium Trucks:	62	.6	61.4	55.0	)	53.5	62.0		62.2
Heavy Trucks:	63	.0	61.9	52.9	)	54.1	62.5		62.6
Vehicle Noise:	70	.7	69.3	66.2		61.4	70.0		70.5
Centerline Distant	ce to Noise Co	ntour (in feet)							
			1 7	70 dR4	65 d	RA I	SO ARA	55	dRΔ

Wednesday, March 25, 2020

FHWA	A-RD-77-108 HIG	1 YAWH	IOISE PI	REDICTIO	N MODEL					
Scenario: GPP40 Road Name: Avenue 58 Road Segment: w/o Madison \$	St.				lame: The \ mber: 1264:	Vave-Coral Mo 2	ountain			
SITE SPECIFIC INP	UT DATA					EL INPUTS				
Highway Data			Site Con	ditions (F	lard = 10, S	Soft = 15)				
Average Daily Traffic (Adt): 12	,500 vehicles		Autos: 15							
Peak Hour Percentage:	9.30%		Me	dium Truc	ks (2 Axles	): 15				
Peak Hour Volume: 1,	,163 vehicles		He	avy Truck	s (3+ Axles	): 15				
Vehicle Speed:	45 mph		Vehicle	Wix						
Near/Far Lane Distance:	45 feet	H		icleType	Dav	Evening 1	light Daily			
Site Data					itos: 77.5		9.6% 97.42%			
Barrier Height:	0.0 feet		М	edium Tru	icks: 84.8	% 4.9%	10.3% 1.84%			
Barrier Type (0-Wall, 1-Berm):	0.0			Heavy Tru	cks: 86.5	% 2.7%	10.8% 0.74%			
Centerline Dist. to Barrier:	51.0 feet		Noise So	ource Ele	vations (in	feet)				
Centerline Dist. to Observer:	51.0 feet	Ī		Autos	-					
Barrier Distance to Observer:	0.0 feet		Mediu	m Trucks:	2.297					
Observer Height (Above Pad):	5.0 feet		Hear	y Trucks:	8.006	Grade Adjus	stment: 0.0			
Pad Elevation:	0.0 feet	L								
Road Elevation:	0.0 feet	L	Lane Eq		Distance (in	reet)				
Road Grade:	0.0%			Autos:	10.011					
	-90.0 degrees			m Trucks:						
Right View:	90.0 degrees		Hear	y Trucks:	45.867					
FHWA Noise Model Calculations		•								
// .		istance		Road	Fresnel	Barrier Atten				
Autos: 68.46	-1.30	0.4	-	-1.20	-4.65					
Medium Trucks: 79.45	-18.54	0.4	-	-1.20	-4.87					
Heavy Trucks: 84.25	-22.49	0.4		-1.20	-5.42	2 0.00	0.000			
Unmitigated Noise Levels (withou	•						ONE!			
VehicleType Leq Peak Hour  Autos: 66.4	Leq Day 64.8		vening 63.0	Leq N	1ght 57.0	Ldn 65.6	CNEL 66.2			
Medium Trucks: 60.2			52.6		57.0	59.5	59.8			
Heavy Trucks: 61.0			50.9		52.1	60.5	60.6			
Vehicle Noise: 68.2			63.7		59.0	67.5	68.0			
Centerline Distance to Noise Cont	tour (in feet)									
		70	dBA	65 di	BA	60 dBA	55 dBA			
			-	7.5		100	0.40			
	Ldn:		5	75		162	349			

	FH\	WA-RD-77-108	HIGH	WAY N	OISE PI	REDICTION	ON MO	DEL			
Road Nam	io: GPP40 le: Avenue 58 nt: w/o Monroe	e St.					Name: umber:		ave-Coral	Mountair	n
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data				S	ite Con	ditions (	Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	14,000 vehicle	S					Autos:	15		
Peak Hour	Percentage:	9.30%				dium Tru		,			
Peak H	lour Volume:	1,302 vehicle	S		He	avy Truc	ks (3+ .	Axles).	15		
	hicle Speed:	45 mph		ν	'ehicle l	Mix					
Near/Far La	ne Distance:	45 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						Α	utos:	77.5%	12.9%	9.6%	97.42%
Rai	rrier Heiaht:	0.0 feet			M	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			1	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	st. to Barrier:	51.0 feet		۸	loise Sc	urce Ele	vation	s (in f	pet)		
Centerline Dist.	to Observer:	51.0 feet		-	0.00 00	Autos		000	501)		
Barrier Distance	to Observer:	0.0 feet			Madiu	m Trucks		297			
Observer Height (	Above Pad):	5.0 feet				v Trucks		006	Grade Ad	iustment	: 0.0
Pa	ad Elevation:	0.0 feet				•					
	ad Elevation:	0.0 feet		L	ane Eq	uivalent			feet)		
1	Road Grade:	0.0%				Autos		.041			
	Left View:	-90.0 degre				m Trucks		.848			
	Right View:	90.0 degre	es		Heav	y Trucks	: 45	.867			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fresi	nel	Barrier Att	en Ber	rm Atten
Autos:	68.46	-0.80		0.43	3	-1.20		-4.65	0.0	000	0.000
Medium Trucks:	79.45	-18.04		0.46	6	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	84.25	-22.00		0.46	6	-1.20		-5.42	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	r attenu	ıation)						
VehicleType	Leq Peak Hou	ır Leq Daj	/	Leq Ev	ening	Leq I	Vight		Ldn	C	NEL
Autos:	66	5.9	65.3		63.5		57.	5	66.	1	66.7
Medium Trucks:		).7	59.5		53.1		51.	-	60.0	-	60.3
Heavy Trucks:	-	.5	60.4		51.4		52.	_	61.0		61.1
Vehicle Noise:	68	3.7	67.3		64.2		59.	5	68.0	)	68.5
Centerline Distance	e to Noise Co	ontour (in feet	)								
				70 d		65 c			60 dBA	1	dBA
			Ldn:	38		8			175	_	376
		С	NEL:	40	)	87	7		187	4	104

FH\	WA-RD-77-108	HIGHWA	Y NOISE P	REDICTIO	N MOE	DEL			
o: GPP40 e: Avenue 58 nt: e/o Jackson	n St.						ave-Coral	Mountain	1
SPECIFIC IN	IPUT DATA							s	
			Site Cor	nditions (H	ard = 1	10, So	ft = 15)		
Traffic (Adt):	10,000 vehicles	3			A	Autos:	15		
Percentage:	9.30%		Me	edium Truc	ks (2 A	xles):	15		
our Volume:	930 vehicles	3	He	eavy Truck	s (3+ A	xles):	15		
hicle Speed:	50 mph		Vehicle	Mix					
ne Distance:	36 feet				- 1	Day	Evening	Night	Daily
				Au	tos:	77.5%	12.9%	9.6%	97.429
rier Heiaht	0.0 feet		M	ledium Tru	cks: (	84.8%	4.9%	10.3%	1.849
				Heavy True	cks: 8	86.5%	2.7%	10.8%	0.749
st. to Barrier:	59.0 feet		Maina C	ouree Flee	otiono	/in fo	041		
to Observer:	59.0 feet		Noise S			•	et)		
to Observer:	0.0 feet		A de elle						
Above Pad):	5.0 feet						Crodo Ad	i rotmont	
d Elevation:	0.0 feet		неа	vy Trucks:	8.0	000	Grade Adj	usuneni	0.0
ad Elevation:	0.0 feet		Lane Eq	uivalent D	istanc	e (in f	eet)		
Road Grade:	0.0%			Autos:	56.4	109			
Left View:	-90.0 degree	es	Mediu	ım Trucks:	56.2	252			
Right View:	90.0 degree	es	Hea	vy Trucks:	56.2	268			
l Calculation	s								
REMEL	Traffic Flow						Barrier Att	en Ber	m Atten
70.20	-2.72		0.89	-1.20		-4.69	0.0	000	0.00
81.00	-19.96		0.87	-1.20		-4.88	0.0	000	0.00
85.38	-23.92		0.87	-1.20		-5.35	0.0	000	0.00
Levels (with	out Topo and	barrier a	tenuation)						
							Ldn		VEL
									65.
									58.
		58.3 65.7	49.2 62.6		50.5 57.8		58.8 66.4		59. 66.
		UU./	02.6		57.8		06.4	+	66.
	ontour (in feet	)	70 ADA	65 dE	ν.Α.	6	0 dB1	55	ADA
	ontour (in feet,	Ldn:	70 dBA 34	65 dE	:A	6	0 dBA 157		dBA 38
	o: GPP40 e: Avenue S8 ht: e/o Jackson SPECIFIC IN Traffic (Adt): Percentage: our Volume: our Volume: our Volume: our Distance:  rier Height: all, 1-Berm): to Observer: to Observer: to Observer: to Observer: de Elevation: de Elevation: de Elevation: REMEL 70.20 81.00 85.38 c Levels (with Leq Peak Hote 55	o: GPP40 e: Avenue 58 at: e/o Jackson St.  SPECIFIC INPUT DATA  Traffic (Adt): 10,000 vehicles Percentage: 9,30% our Volume: 930 vehicles incle Speed: 50 mph ne Distance: 36 feet  Trier Height: 0.0 feet all, 1-Berm): 0.0 feet 10 Observer: 59.0 feet 10 Observer: 59.0 feet 10 Observer: 0.0 feet ald Elevation: 0.0 feet ald Elevation: 0.0 feet ald Elevation: 0.0 feet ald Elevation: 0.0 feet ald Elevation: 0.0 feet ald Elevation: Remeta Fight View: 90.0 degree ald Calculations  REMEL Traffic Fiow 70.20 -2.72 81.00 -19.96 85.38 -23.92  Let Veels (without Topo and Leq Peak Hour Leq Day 65.4 59.0	o: GPP40 e: Avenue 58 at: e/o Jackson St.  SPECIFIC INPUT DATA  Traffic (Adt): 10,000 vehicles Percentage: 9,30% our Volume: 930 vehicles incle Speed: 50 mph ne Distance: 36 feet  Trier Height: 0.0 feet all, 1-Berm): 0.0 ti, to Barrier: 59,0 feet to Observer: 59,0 feet to Observer: 0.0 feet ald Elevation: 0.0 feet ald Elevation: 0.0 feet de Elevation: 0.0 feet de Elevation: 0.0 feet de Elevation: 90,0 degrees Right View: 90,0 degrees Right View: 90,0 degrees Right View: 90,0 degrees Right View: 90,0 degrees de Calculations  REMEL Traffic Flow Distance To 20 -2.72 81,00 -19,96 85,38 -23,92 -  Leevels (without Topo and barrier at Leq Peak Hour Leq Dey Le 65,4 63,8 59,0 57,8	Section   Sect	Project N   Proj	Project Name: Tob Number: 1	e: Ävenue 58  ### de Jackson St.    SPECIFIC INPUT DATA	Project Name: The Wave-Coral   Job Number: 12642	Project Name: The Wave-Coral Mountain   Job Number: 12642   Job

	FH\	WA-RD-77-108	HIGHWA	AY NO	ISE PR	EDICTION	ON MODE	-			
Scenario	: GPP40					Project	Name: The	Wave-Co	ral Mou	ıntain	
Road Name	: Avenue 58					Job No	ımber: 126	42			
Road Segment	: w/o Jackso	n St.									
	PECIFIC IN	IPUT DATA					OISE MO				
Highway Data				Si	te Cond	ditions (	Hard = 10,		)		
Average Daily T	raffic (Adt):	19,000 vehicle	s				Aut				
Peak Hour F	Percentage:	9.30%					cks (2 Axle				
Peak Ho	ur Volume:	1,767 vehicle	s		Hea	avy Truc	ks (3+ Axle	s): 15			
Veh	icle Speed:	50 mph		V	ehicle N	lix					
Near/Far Lan	e Distance:	36 feet		F	Vehic	cleType	Da	y Evenii	ng Ni	ght	Daily
Site Data						Α	utos: 77.	5% 12.9	9% 9	9.6%	97.42
Barr	ier Heiaht:	0.0 feet			Me	edium Tr	ucks: 84.	8% 4.9	9% 10	0.3%	1.84
Barrier Type (0-Wa		0.0			Н	leavy Tr	ucks: 86.	5% 2.7	7% 10	0.8%	0.74
Centerline Dist		59.0 feet		N	oise So	urce Ele	vations (i	n feet)			
Centerline Dist. to		59.0 feet				Autos	: 0.000				
Barrier Distance to		0.0 feet			Mediun	n Trucks					
Observer Height (A	,	5.0 feet			Heav	y Trucks	: 8.006	Grade	Adjusti	ment:	0.0
	d Elevation:	0.0 feet									
	d Elevation:	0.0 feet		Lá	ane Equ		Distance (				
R	oad Grade:	0.0%				Autos					
	Left View:	-90.0 degre				n Trucks					
	Right View:	90.0 degre	es		Heav	y Trucks	: 56.268				
FHWA Noise Model	Calculation	s									
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite I	Road	Fresnel	Barrier	Atten	Bern	n Atter
Autos:	70.20	0.06		-0.89		-1.20	-4.	59	0.000		0.00
Medium Trucks:	81.00			-0.87		-1.20	-4.		0.000		0.00
Heavy Trucks:	85.38	-21.13		-0.87		-1.20	-5.	35	0.000		0.00
Unmitigated Noise											
	eq Peak Hou			eq Eve	-	Leq I	-	Ldn		CN	
Autos:	68		66.6		64.8		58.8		67.4		68
Medium Trucks:	61		60.6		54.2		52.7		61.1		61
Heavy Trucks:	62	·· <del>-</del>	61.1		52.0		53.3		61.6		61
Vehicle Noise:	69	).9	68.4		65.4		60.6		69.2		69
Centerline Distance	to Noise Co	ontour (in feet	)								
			1	70 dE	2.4	65 c	IDΛ	60 dBA	1	55 c	iΒA
					<i>)</i> /1				- 1		
			Ldn: NFI:	52 56	2/1	11	2	241 259	,	51 55	-

Wednesday, March 25, 2020

	FH\	WA-RD-77-108	HIGHW	AY NO	ISE PF	REDICTI	ON MOD	DEL				
	io: GPP40 e: Avenue 60 nt: w/o Madiso						Name: ٦ umber: 1		'ave-Coral	Mountair	1	
SITE	SPECIFIC IN	NPUT DATA				N	OISE N	10DE	L INPUT	s		
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	22,000 vehicles	S				/	Autos.	15			
Peak Hour	Percentage:	9.30%			Me	dium Tru	icks (2 A	(xles	15			
Peak H	our Volume:	2,046 vehicles	S		He	avy Truc	ks (3+ A	(xles	15			
Ve	hicle Speed:	40 mph		V	ehicle I	Aiv						
Near/Far La	ne Distance:	23 feet				cleType		Dav	Evening	Night	Daily	
Site Data								77.5%		9.6%		
Rai	rier Heiaht:	0.0 feet			Me	edium Ti	ucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W		0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dis		40.0 feet		M	nisa Sn	urce Ele	ovations	(in f	not)			
Centerline Dist.	to Observer:	40.0 feet		/*	0,30 00	Autos		000	JC1)			
Barrier Distance	to Observer:	0.0 feet			Madiuu	n Truck		97				
Observer Height (	Above Pad):	5.0 feet				y Trucks		006	Grade Ad	liuetmant	. 0 0	
Pa	ad Elevation:	0.0 feet								justinoni	. 0.0	
Roa	ad Elevation:	0.0 feet		Li	ane Equ	ıivalent	Distanc	e (in	feet)			
	Road Grade:	0.0%				Autos	38.6	36				
	Left View:	-90.0 degree	es			n Trucks		406				
	Right View:	90.0 degree	es		Heav	y Trucks	38.4	129				
FHWA Noise Mode	el Calculation	ıs										
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresn	el	Barrier Att	en Bei	m Atten	
Autos:	66.51	1.67		1.58		-1.20		-4.59	0.0	000	0.000	
Medium Trucks:	77.72	-15.57		1.62		-1.20		-4.87	0.0	000	0.000	
Heavy Trucks:	82.99	-19.52		1.61		-1.20		-5.56	0.0	000	0.000	
Unmitigated Noise	Levels (with	out Topo and	barrier a	attenu	ation)							
VehicleType	Leq Peak Hou	ur Leq Day	' L	eq Eve	ening	Leq	Vight		Ldn	C	NEL	
Autos:	68	3.6	67.0		65.2		59.2		67.8	В	68.4	
Medium Trucks:			61.4		55.0		53.5		61.9	-	62.2	
Heavy Trucks:	63	3.9	62.8		53.7		55.0	1	63.3	3	63.5	
Vehicle Noise:	70	0.6	69.2		65.9		61.3		69.9	9	70.3	
Centerline Distand	e to Noise C	ontour (in feet	)									
				70 dE	3A	65 (	IBA	- (	60 dBA	55	dBA	
			Ldn:	39		8			182	-	92	
		C	NEL:	42		9	0		195	4	20	

Wednesday, March 25, 2020

	FH	WA-RD-77-108	HIGHW	AY NOISE	PREDIC	TION MOD	EL	
	o: GPP40 e: Avenue 60 nt: w/o Monro					ct Name: TI Number: 12	ne Wave-Coral 2642	Mountain
SITE S	SPECIFIC IN	NPUT DATA				NOISE M	ODEL INPUT	S
Highway Data				Site 0	Conditions	(Hard = 1	0, Soft = 15)	
Peak H	Traffic (Adt): Percentage: our Volume: hicle Speed:	24,000 vehicle: 9.30% 2,232 vehicle: 45 mph				A rucks (2 Ax ucks (3+ Ax	,	
Near/Far Lar	ne Distance:	45 feet				- 1 -	[=	Mintel Daile
Site Data					VehicleTyp Medium	Autos: 7	7.5% 12.9% 4.8% 4.9%	Night Daily 9.6% 97.42% 10.3% 1.84%
	rier Height:	0.0 feet			Heavy		6.5% 2.7%	10.8% 0.74%
Barrier Type (0-W		0.0			ricavy	ITUCKS. O	0.570 2.170	10.070 0.7470
Centerline Dist.		51.0 feet		Noise	Source E	levations	(in feet)	
Barrier Distance to Observer Height (A	to Observer: Above Pad): ad Elevation:	51.0 feet 0.0 feet 5.0 feet 0.0 feet		F	Aut dium Truc leavy Truc	ks: 2.29	97 06 <i>Grade Ad</i>	iustment: 0.0
	d Elevation:	0.0 feet		Lane	Equivaler Aut		, ,	
F	Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree			Aut dium Truc leavy Truc	ks: 45.8	48	
FHWA Noise Mode	l Calculation	ıs						
VehicleType	REMEL	Traffic Flow	Distar	ice Fi	nite Road	Fresne	I Barrier Att	en Berm Atten
Autos:	68.46	1.54		0.43	-1.20		4.65 0.0	0.000
Medium Trucks:	79.45	-15.70		0.46	-1.20		4.87 0.0	0.000
Heavy Trucks:	84.25	-19.66		0.46	-1.20	۱ - ۱	5.42 0.0	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier a	ttenuatio	n)			
VehicleType	Leq Peak Ho	ur Leq Day	/ Le	eq Evenin	g Led	Night	Ldn	CNEL
Autos:	69	9.2	67.6	6	5.9	59.8	68.4	69.1
Medium Trucks:	63	3.0	61.8	5	5.5	53.9	62.4	62.6
Heavy Trucks:	63	3.9	62.7	5	3.7	55.0	63.3	63.4
Vehicle Noise:	71	1.1	69.6	6	6.5	61.8	70.4	70.8
Centerline Distanc	e to Noise C	ontour (in feet	)					
				70 dBA	65	5 dBA	60 dBA	55 dBA
			Ldn:	54		116	250	539
		C	NEL:	58		125	268	578

	FH'	WA-RD-77-10	8 HIGH	A YAW	IOISE PR	EDICT	ION MO	DDEL			
	io: GPP40								ave-Coral	Mountair	1
	e: Avenue 60					Job N	lumber:	12642			
Road Segme	nt: e/o Monroe	e St.									
	SPECIFIC II	NPUT DATA							LINPUT	S	
Highway Data					Site Cond	litions	(Hard :				
Average Daily	Traffic (Adt):	15,000 vehicle	es					Autos:	15		
Peak Hour	Percentage:	9.30%						Axles):	15		
Peak H	lour Volume:	1,395 vehicle	es		Hea	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph			Vehicle N	lix					
Near/Far La	ne Distance:	48 feet			Vehic	cleType	,	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%		97.429
Ra	rier Heiaht:	0.0 feet			Me	dium T	rucks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-W		0.0			H	leavy T	rucks:	86.5%	2.7%	10.8%	0.749
Centerline Di	st. to Barrier:	64.0 feet		-	Noise So	uraa E	lovetio	no (in fo	n41		
Centerline Dist.	to Observer:	64.0 feet		H.	V0/36 30	Auto		0.000	et)		
Barrier Distance	to Observer:	0.0 feet			Mediun			297			
Observer Height (	Above Pad):	5.0 feet					o. –	1.006	Grade Ad	iustmont	. 0.0
Pa	ad Elevation:	0.0 feet			Heav	y Truck	s: e	3.006	Grade Ad,	usimeni	0.0
Ros	ad Elevation:	0.0 feet		1	Lane Equ	ivalen	t Distar	nce (in f	eet)		
	Road Grade:	0.0%				Auto	s: 59	9.540			
	Left View:	-90.0 degre	ees		Mediun	n Truck	s: 59	9.391			
	Right View:	90.0 degre	ees		Heav	y Truck	s: 59	9.406			
FHWA Noise Mode	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite I	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	-0.96	6	-1.2	4	-1.20		-4.70	0.0	000	0.00
Medium Trucks:	81.00	-18.20	0	-1.2	2	-1.20		-4.88	0.0	000	0.00
Heavy Trucks:	85.38	-22.16	6	-1.2	3	-1.20		-5.31	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	d barrie	er atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	ay .	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	66	3.8	65.2		63.5		57	.4	66.0	)	66.
Medium Trucks:	60	0.4	59.2		52.8		51	.3	59.7	7	60.
Heavy Trucks:	60	0.8	59.7		50.7		51	.9	60.3	3	60.
Vehicle Noise:	68	3.5	67.1		64.0		59	.2	67.8	3	68.
Centerline Distand	e to Noise C	ontour (in fee	t)								
					dBA		dBA	6	0 dBA		dBA
				4			98		211		55
			Ldn:	4	-	-	98 05		227		89

# APPENDIX 8.1:

**ON-SITE TRAFFIC NOISE LEVEL CALCULATIONS** 



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F	HWA-RD-77-1	08 HIGHWAY	NOISE	PRED	ICTION	MODEL	(CALVE	NO) -	10/1/2012		
Road Nar	rio: Backyard I ne: Avenue 58 No: Planning A					Job N	t Name: ' lumber: ' Analyst: I	12462			
SITE	SPECIFIC II	NPUT DATA				ı	NOISE N	/IODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	12,500 vehicle	s				,	Autos:	15		
Peak Hou	r Percentage:	10%			Me	dium Tı	ucks (2 A	(xles	15		
Peak I	Hour Volume:	1,250 vehicle	s		He	avy Tru	cks (3+ A	(xles	15		
Ve	ehicle Speed:	45 mph		-	Vehicle I	Mix					
Near/Far La	ane Distance:	45 feet		F		icleTyp	9	Dav	Evening	Night	Daily
Site Data				-	*011			77.5%		9.6%	
D.	arrier Height:	0.0 feet			М	edium 1	rucks:	84.8%	4.9%	10.3%	
Barrier Type (0-V	-	1.0				Heavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
	ist, to Barrier:	51.0 feet		<u> </u>							
Centerline Dist		61.0 feet		-	Noise So		levation		eet)		
Barrier Distance	to Observer:	10.0 feet				Auto		.000			
Observer Height	(Above Pad):	5.0 feet				m Truck		.297	0		
F	Pad Elevation:	0.0 feet			Heav	y Truck	is: 8	.006	Grade Adj	usunem	. 0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distand	e (in i	feet)		
Ban	rier Elevation:	0.0 feet				Auto	s: 56	.919			
	Road Grade:	0.0%			Mediu	m Truck	rs: 56	.763			
					Heav	y Truck	rs: 56	.778			
FHWA Noise Mod	del Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresn	el	Barrier Atte	en Bei	m Atten
Autos.	: 69.34	-0.98		-0.9	5	-1.20		-0.95	0.0	000	0.000
Medium Trucks.	77.62	-18.22		-0.9	3	-1.20		-1.15	0.0	000	0.000
Heavy Trucks.	82.14	-22.18		-0.9	3	-1.20		-1.69	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	er atter	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos		3.2	64.3		62.5		56.5		65.1		65.7
Medium Trucks.	-		55.8		49.4		47.9		56.3		56.6
Heavy Trucks.	5	7.8	56.4		47.4		48.6	i	57.0	)	57.1
Vehicle Noise.	: 67	7.3	65.5		62.9		57.6		66.2	2	66.7
Mitigated Noise L	evels (with To	ppo and barrie	r atter	nuation	1)						
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq E	vening	Leq	Night		Ldn	С	NEL
Autos.	: 66	3.2	64.3		62.5		56.5	_	65.1		65.7
Medium Trucks.	: 5	7.3	55.8		49.4		47.9		56.3	3	56.6
Heavy Trucks.			56.4		47.4		48.6	i	57.0	)	57.1
Vehicle Noise	: 6	7.3	65.5		62.9		57.6		66.2	2	66.7

Monday, November 11, 2019	Monday,	November	11,	2019
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F	HWA-RD-77-1	08 HIGHWAY	NOIS	E PRED	ICTION	MODEL	. (CALV	ENO) -	10/1/2012			
Road Nar	rio: Backyard \ ne: Avenue 58 No: Planning A	3				Job №	t Name: lumber: Analyst:	12462				
SITE	SPECIFIC II	NPUT DATA				ı	IOISE	MODE	L INPUT	s		
Highway Data					Site Con	ditions	(Hard =	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	12,500 vehicle	s					Autos:	15			
Peak Hou	r Percentage:	10%			Medium Trucks (2 Axles): 15							
Peak	Hour Volume:	1,250 vehicle	s		He	avy Tru	cks (3+	Axles):	15			
V	ehicle Speed:	45 mph		-	Vehicle I	Mix						
Near/Far La	ane Distance:	45 feet		-		icleTvpe	9	Dav	Evening	Night	Dailv	
Site Data						//-	Autos:	77.5%		9.6%	97.42%	
D.	arrier Height:	6.0 feet			М	edium 7		84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-V		1.0			Heavy Trucks: 86.5% 2.7%						0.74%	
,, ,	ist, to Barrier:	51.0 feet		_	,							
Centerline Dist		61.0 feet		_	Noise Source Elevations (in feet)							
Barrier Distance	to Observer:	10.0 feet			Autos: 0.000 Medium Trucks: 2.297							
	Observer Height (Above Pad): 5.0 feet				Heavy Trucks: 2.297  Heavy Trucks: 8.006 Grade Adju							
Pad Elevation: 0.0 feet				Heav	y Truck	s:	8.006	Grade Ad	justment.	0.0		
Ro	Road Elevation: 0.0 feet  Road Elevation: 0.0 feet				Lane Eq	uivalen	t Distar	ice (in i	feet)			
Bar	rier Elevation:	0.0 feet				Auto	s: 5	6.210				
	Road Grade:	0.0%			Mediu	m Truck	s: 5	5.968				
					Heav	y Truck	s: 5	5.862				
FHWA Noise Mod	del Calculation	18										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos	69.34	-0.98		-0.8	7	-1.20		0.19	-6.7	720	-9.720	
Medium Trucks	77.62	-18.22		-0.8	4	-1.20		0.12	-6.1	160	-9.160	
Heavy Trucks	82.14	-22.18		-0.8	3	-1.20		0.01	-5.1	100	-8.100	
Unmitigated Nois	e Levels (with	out Topo and	barri	er atten	uation)							
VehicleType	Leq Peak Ho	ur Leq Daj	/	Leq E	vening	Leq	Night		Ldn		VEL	
Autos		6.3	64.4		62.6		56.	6	65.2	-	65.8	
Medium Trucks	-	7.4	55.9		49.5		48.	-	56.4	1	56.6	
Heavy Trucks		7.9	56.5		47.5		48.	7	57.1	I	57.2	
Vehicle Noise	: 61	7.3	65.5		63.0		57.	7	66.3	3	66.8	
Mitigated Noise L	itigated Noise Levels (with Topo and barrier attenua											
VehicleType			Leq E	vening	Leq	Night		Ldn		VEL		
Autos		6.6	54.7		52.9		46.	-	55.5		56.1	
Medium Trucks		8.2	46.7		40.3		38.	-	47.3		47.5	
Heavy Trucks		9.8	48.4		39.4		40.	_	49.0		49.1	
Vehicle Noise	: 5	7.9	56.1		53.3		48.	3	56.9	9	57.4	

F	HWA-RD-77-10	8 HIGHWAY NO	DISE PRE	EDICTION	MODEL (	CALVE	NO) -	10/1/2012		
Road Nar	rio: Backyard No ne: Madison Str Vo: Planning Are	eet			Project N Job Nui An		2462			
SITE	SPECIFIC IN	PUT DATA			NC	ISE N	IODEL	INPUTS	5	
Highway Data				Site Con	ditions (F	lard =	10, So	ft = 15)		
Average Daily	Traffic (Adt): 2	0,000 vehicles				A	Autos:	15		
Peak Hou	r Percentage:	10%		Me	dium Truc	ks (2 A	xles):	15		
Peak I	Hour Volume:	2,000 vehicles		He	avy Truck	s (3+ A	xles):	15		
Ve	ehicle Speed:	45 mph		Vehicle I	Mix					
Near/Far La	ane Distance:	45 feet			icleTvpe		Dav	Evening	Night	Dailv
Site Data				1011	,,		77.5%	12.9%	9.6%	
D.	rrier Height:	0.0 feet		Me	edium Tru	cks:	84.8%	4.9%	10.3%	1.849
Barrier Type (0-V		1.0		F	Heavy Tru	cks:	86.5%	2.7%	10.8%	0.749
	ist. to Barrier:	51.0 feet								
Centerline Dist.		61.0 feet		Noise Sc	ource Ele		•	et)		
Barrier Distance		10.0 feet			Autos:		.000			
Observer Height		5.0 feet			m Trucks:		.297			
	ad Elevation:	0.0 feet		Heav	y Trucks:	8	.006	Grade Adj	ustment:	0.0
Ro	ad Elevation:	0.0 feet		Lane Equ	uivalent E	istanc	e (in f	eet)		
Barr	rier Elevation:	0.0 feet			Autos:	56	919			
	Road Grade:	0.0%		Mediui	m Trucks:	56	763			
				Heav	y Trucks:	56	.778			
FHWA Noise Mod				1						
VehicleType	REMEL	Traffic Flow	Distance			Fresn		Barrier Atte		m Atten
Autos:		1.06		.95	-1.20		-0.95	0.0		0.000
Medium Trucks:		-16.18	-	.93	-1.20		-1.15	0.0		0.000
Heavy Trucks:		-20.13		.93	-1.20		-1.69	0.0	00	0.00
Unmitigated Nois			_							
VehicleType Autos:	Leq Peak Houi		Leq	Evening 64.6	Leq N	ght 58.5		Ldn 67.2		VEL 67.1
Medium Trucks			7.8	51.4		49.9		58.4		58.6
Heavy Trucks			.o 3.5	49.4		50.7		59.0		59.
Vehicle Noise:				64.9		59.7		68.2		68.
	evels (with Tor	oo and barrier a	ttenuatio	on)						
Mitigated Noise L				Evening	Leg N	ght		Ldn	CN	IEL
Mitigated Noise L VehicleType	Leg Peak Hou	Leg Day								
	Leq Peak Hou		6.4	64.6		58.5		67.2		67.8
,,, .	Leq Peak Houi 68.	3 66				58.5 49.9		67.2 58.4		67.8 58.6
VehicleType Autos:	Leq Peak Hour 68. 59.	3 66 3 57	6.4	64.6	-					

Monday, November 11, 2019

FHWA-RD-77-	108 HIGHWAY I	NOISE	PREDI	CTION	MODEL	. (CALVE	NO) -	10/1/2012		
Scenario: Backyard Road Name: Madison S Lot No: Planning	Street				Job ∧	Name: T lumber: Analyst: E	12462			
SITE SPECIFIC I	NPUT DATA				I.	IOISE N	IODE	L INPUT	S	
Highway Data			S	ite Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily Traffic (Adt):	20,000 vehicle	3				,	Autos:	15		
Peak Hour Percentage:	10%			Me	dium Tr	ucks (2 A	(xles	15		
Peak Hour Volume:	2,000 vehicles	3		He	avy Tru	cks (3+ A	(xles	15		
Vehicle Speed:	45 mph		ν	ehicle i	Vix					
Near/Far Lane Distance:	45 feet		-	Veh	icleType	9	Day	Evening	Night	Daily
Site Data							77.5%		9.6%	,
Barrier Height:	6.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	1.0				Heavy T	rucks:	86.5%	6 2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	51.0 feet		-							
Centerline Dist. to Observer:	61.0 feet		N	oise So		levations	•	eet)		
Barrier Distance to Observer:	10.0 feet			14-40-	Auto		.000			
Observer Height (Above Pad):	5.0 feet				m Truck		.297	Grade Ad	iuotmant	
Pad Elevation:	0.0 feet			Heat	y Truck	S. 8	.000	Grade Ad	usunem	. 0.0
Road Elevation:	0.0 feet		L	ane Eq	uivalen	t Distand	e (in	feet)		
Barrier Elevation:	0.0 feet				Auto	s: 56	.210			
Road Grade:	0.0%			Mediu	m Truck	s: 55	.968			
				Heav	y Truck	s: 55	.862			
FHWA Noise Model Calculatio										
VehicleType REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresn	ام	Barrier Att	on Ror	m Atten
Autos: 69.3		Dio	-0.87	Titille	-1.20	110311	0.19	-6.7		-9.720
Medium Trucks: 77.6			-0.84		-1.20		0.12	-6.1		-9.160
Heavy Trucks: 82.1			-0.83		-1.20		0.01	-5.1		-8.100
Unmitigated Noise Levels (with								Ldn		
VehicleType Leq Peak He Autos:	, ,	66.4	Leq Ev	ening 64.7	Leq	Night 58.6		Lan 67.2		NEL 67.8
		57.9		51.5		50.0		58.5		58.7
		58.6		49.5		50.0		59.1		59.3
,		67.6		65.0		59.8		68.3		68.8
						33.0	•	00.0	,	00.0
Mitigated Noise Levels (with 1										
VehicleType Leq Peak He	, ,		Leq Ev		Leq	Night		Ldn		NEL
		56.7		55.0		48.9		57.5		58.1
		48.7 50.5		42.4 41.4		40.8 42.7		49.3 51.0		49.5 51.2
,	U.9	JU.5		41.4		42.7		51.0	,	
Vehicle Noise:	9.9	58.2		55.4		50.3		58.9	)	59.4

Monday, November 11, 2019 Monday, Novem

F	HWA-RD-77-1	08 HIGHWAY N	OISE PR	EDICTION	MODEL	(CALVE	NO) - 1	10/1/2012		
Road Nan	io: First Floor 1 ne: Avenue 58 lo: Planning A					Name: 1 imber: 1 nalyst: E	12462			
SITE	SPECIFIC IN	IPUT DATA						. INPUTS	6	
Highway Data				Site Cor	nditions (	Hard =	10, Sof	ft = 15)		
Average Daily	Traffic (Adt):	12,500 vehicles				,	Autos:	15		
Peak Hour	Percentage:	10%		Me	edium Tru	cks (2 A	lxles):	15		
Peak F	lour Volume:	1,250 vehicles		He	eavy Truc	ks (3+ A	lxles):	15		
Ve	hicle Speed:	45 mph		Vehicle	Mix					
Near/Far La	ne Distance:	45 feet		Veh	icleType		Dav	Evening	Night	Daily
Site Data							77.5%	12.9%	9.6%	97.42%
Pa	rrier Height:	6.0 feet		M	ledium Tr		84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	-	1.0			Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		51.0 feet								
Centerline Dist.		71.0 feet		Noise S	ource Ele		•	et)		
Barrier Distance		20.0 feet			Autos		.000			
Observer Height		5.0 feet			m Trucks		.297			
	ad Elevation:	0.0 feet		Hea	vy Trucks	: 8	.006	Grade Adj	ustment:	0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent	Distanc	e (in fe	eet)		
Barr	ier Elevation:	0.0 feet			Autos	: 66	.185			
	Road Grade:	0.0%		Mediu	m Trucks	: 65	.943			
				Hea	vy Trucks	: 65	.837			
FHWA Noise Mod	el Calculation	s		1						
VehicleType	REMEL	Traffic Flow	Distanc	e Finite	Road	Fresn	el E	Barrier Atte	en Beri	n Atten
Autos:	69.34	-0.98	-1	.93	-1.20		0.20	-6.8	00	-9.800
Medium Trucks:		-18.22		.91	-1.20		0.11	-6.0		-9.080
Heavy Trucks:	82.14	-22.18	-1	.90	-1.20		0.00	-4.9	00	-7.900
Unmitigated Noise	e Levels (with	out Topo and b	arrier att	enuation)						
VehicleType	Leq Peak Hou			Evening	Leq N			Ldn		IEL
Autos:	65		3.3	61.6		55.5		64.1		64.7
Medium Trucks:			4.8	48.4		46.9		55.3		55.6
Heavy Trucks:			5.4	46.4		47.7		56.0		56.1
Vehicle Noise:	66	i.3 6	4.5	61.9	1	56.7		65.2	!	65.7
Mitigated Noise L	evels (with To	po and barrier	attenuati	on)						
VehicleType	Leq Peak Hou	ır Leq Day	Leq	Evening	Leq N	light		Ldn		IEL
Autos:	55		3.5	51.8		45.7		54.3		54.9
Medium Trucks:			5.7	39.3		37.8		46.3		46.5
Heavy Trucks:			7.5	38.5		39.8		48.1		48.2
Vehicle Noise:	56	i.8 5	5.0	52.2		47.2		55.8	1	56.3

Monday, November 11, 2019

F	HWA-RD-77-1	08 HIGHWAY I	NOISE	E PREC	OICTION	MODEL	(CALV	ENO) -	- 10/1/2012				
Road Na	nio: Second Flome: Avenue 58 No: Planning A	3					Name: umber: Inalyst:	12462					
	SPECIFIC II	NPUT DATA							L INPUT	S			
Highway Data					Site Cor	ditions	(Hard =	: 10, S	oft = 15)				
Average Daily	/ Traffic (Adt):	12,500 vehicles	S		Autos: 15								
Peak Hou	r Percentage:	10%				dium Tru		/					
Peak	Hour Volume:	1,250 vehicles	S		He	avy Truc	cks (3+ .	Axles).	15				
	ehicle Speed:	45 mph			Vehicle	Mix							
Near/Far L	ane Distance:	45 feet			Veh	icleType		Day	Evening	Night	Daily		
Site Data							Autos:	77.59	6 12.9%	9.6%	97.42%		
R	arrier Height:	6.0 feet			М	edium Ti	rucks:	84.89	6 4.9%	10.3%	1.84%		
Barrier Type (0-1		1.0				Heavy Ti	rucks:	86.5%	6 2.7%	10.8%	0.74%		
., .	ist, to Barrier:	51.0 feet		ŀ	Noise S			- /! #	41				
Centerline Dist	to Observer:	71.0 feet		-	Noise 3	Autos		0.000	eet)				
Barrier Distance	e to Observer:	20.0 feet			Modiu	Autos m Trucks		2.297					
Observer Height	bserver Height (Above Pad): 14.0 feet					vy Trucks		8.006	Grade Ad	iuetmant	. 0.0		
-	Pad Elevation: 0.0 feet			L	пеа	y mucks	S. (	5.000	Grade Au	usunem	0.0		
Re	Road Elevation: 0.0 feet				Lane Eq	uivalent	Distan	ce (in	feet)				
Bar	rier Elevation:	0.0 feet				Autos	s: 6	8.780					
	Road Grade:	0.0%				m Trucks		8.350					
					Hear	y Trucks	s: 6	7.607					
FHWA Noise Mod	del Calculation	18											
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresi	nel	Barrier Att	en Ber	m Atten		
Autos	: 69.34	-0.98		-2.1		-1.20		-0.51	0.0	000	0.000		
Medium Trucks				-2.1		-1.20		-0.70		000	0.000		
Heavy Trucks	: 82.14	-22.18		-2.0	7	-1.20		-1.30	0.0	000	0.000		
Unmitigated Nois	<del> </del>		_	er atter	nuation)								
VehicleType	Leq Peak Ho	. , .,	_	Leq E	vening	,	Night		Ldn		VEL		
Autos			63.1		61.3		55.		63.9		64.5		
Medium Trucks			54.6		48.2		46.		55.1		55.3		
Heavy Trucks			55.3		46.2		47.	_	55.8		56.0		
Vehicle Noise			64.2		61.6		56.	4	65.0	)	65.5		
Mitigated Noise I													
VehicleType	Leq Peak Ho		_	Leq E	vening	,	Night		Ldn		VEL		
Autos			63.1		61.3		55.		63.9		64.5		
Medium Trucks			54.6		48.2		46.	-	55.1		55.3		
Heavy Trucks			55.3		46.2		47.	_	55.8		56.0		
Vehicle Noise	: 60	6.0	64.2		61.6		56.	4	65.0	J	65.5		

F	HWA-RD-77-10	8 HIGHWAY I	NOISE	PREC	DICTION	MODEL	. (CALVENO	D) - 10/1/2012	2	
Road Nar	rio: First Floor V ne: Madison Str Vo: Planning Ar	reet				Job ∧	Name: The lumber: 124 Analyst: B. L	62		
	SPECIFIC IN	PUT DATA			04- 0			DEL INPUT	S	
Highway Data	T#:- (A-#). (	0 000			Site Con	aitions	(Hard = 10, Aut			
	Traffic (Adt): 2 Percentage:	10%	5		Ma	dium Tr	ucks (2 Axle			
	Hour Volume:	2,000 vehicle					cks (3+ Axle	-/		
	ehicle Speed:	45 mph	,	-			010 (0171010	70). 10		
	ane Distance:	45 feet		-	Vehicle I				A E I	D-#
Site Data					ven	icleType		y Evening .5% 12.9%	Night 9.6	
					1.4	edium T		.8% 4.9%	10.3	
	rrier Height:	6.0 feet 1.0				Heavy T		.5% 2.7%		
Barrier Type (0-V	vali, 1-Berm): ist. to Barrier:	1.0 51.0 feet		L		,				
Centerline Dist.		71.0 feet		L	Noise Sc		levations (i			
Barrier Distance		20.0 feet				Auto		-		
Observer Height		5.0 feet				m Truck			E t	
	Pad Elevation:	0.0 feet			Heav	y Truck	s: 8.00	6 Grade Ad	ijustme	nt: 0.0
Ro	ad Elevation:	0.0 feet			Lane Equ	uivalen	t Distance (	'in feet)		
Ban	rier Elevation:	0.0 feet				Auto	s: 66.18	15		
	Road Grade:	0.0%			Mediui	m Truck	s: 65.94	13		
					Heav	y Truck	s: 65.83	37		
FHWA Noise Mod	lel Calculations	5								
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite		Fresnel	Barrier At	_	erm Atte
Autos:		1.06		-1.9		-1.20			800	-9.8
Medium Trucks:		-16.18		-1.9		-1.20			080	-9.0
Heavy Trucks:	82.14	-20.13		-1.9	IU .	-1.20	0.	00 -4.	900	-7.9
Inmitigated Nois										
VehicleType	Leq Peak Hou			Leq E	vening	Leq	Night	Ldn		CNEL
Autos:			65.4		63.6		57.6	66.		66
Medium Trucks:			56.8		50.5		48.9	57.		57
Heavy Trucks:			57.5		48.5		49.7	58.		58
Vehicle Noise:			66.5		63.9		58.7	67.	3	67
Mitigated Noise L		_							_	01/5/
VehicleType	Leq Peak Hou			Leq E	vening	Leq	Night	Ldn		CNEL
Autos: Medium Trucks:			55.6 47.7		53.8 41.4		47.8 39.8	56. 48.		57 48
Heavy Trucks:			47.7 49.6		41.4		39.8 41.8	48. 50.		48 50
ricavy riucks.	31	.0	<b>⊣</b> J.U		40.0		41.0	30.	4	JU

Monday, November 11, 2019

FH	IWA-RD-77-1	08 HIGHWAY	NOIS	E PRED	ICTION	MODEL	(CALV	ENO) -	10/1/2012		
Road Nam	e: Madison S	oor With Wall street vrea VIII-LDR				Job №	t Name: lumber: Analyst:	12462			
	SPECIFIC II	NPUT DATA							L INPUT	S	
Highway Data					Site Cor	ditions	(Hard =	: 10, S	oft = 15)		
Average Daily	Traffic (Adt):		S					Autos.			
	Percentage:	10%					rucks (2				
	our Volume:	2,000 vehicle	S		He	eavy Tru	cks (3+	Axles).	15		
	nicle Speed:	45 mph			Vehicle	Mix					
Near/Far Lai	ne Distance:	45 feet			Veh	icleType	е	Day	Evening	Night	Daily
Site Data							Autos:	77.59	12.9%	9.6%	97.42%
Bar	rier Height:	6.0 feet			M	ledium 7	rucks:	84.89	4.9%	10.3%	1.84%
Barrier Type (0-W	all, 1-Berm):	1.0				Heavy 7	rucks:	86.59	6 2.7%	10.8%	0.74%
Centerline Dis	t. to Barrier:	51.0 feet		l.	Noise S	ource E	levation	s (in f	eet)		
Centerline Dist.	to Observer:	71.0 feet		F		Auto		0.000	,		
Barrier Distance		20.0 feet			Mediu	m Truck	s:	2.297			
Observer Height (	,	14.0 feet			Hear	vy Truck	s:	8.006	Grade Ad	justmen	t: 0.0
	d Elevation:	0.0 feet			Lane Eq		4 Di-4	/!	f4\		
	d Elevation:	0.0 feet		l'	Larie Eq	Auto		B.780	ieei)		
	er Elevation: Road Grade:	0.0 feet 0.0%			Modiu	Auto m Truck		8.780 8.350			
,	Road Grade:	0.0%				vy Truck		7.607			
					7700	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
FHWA Noise Mode	l Calculation	18									
VehicleType	REMEL	Traffic Flow		stance		Road	Fresi		Barrier Att		rm Atten
Autos:	69.34			-2.1		-1.20		-0.51		000	0.000
Medium Trucks:	77.62			-2.1		-1.20		-0.70		000	0.000
Heavy Trucks:	82.14	-20.13		-2.0	7	-1.20		-1.30	0.0	000	0.000
Unmitigated Noise	Levels (with	nout Topo and	barri	er atten	uation)						
	Leq Peak Ho			Leq E	vening		Night		Ldn		NEL
Autos:		7.0	65.1		63.4		57.		65.9		66.5
Medium Trucks:	-	8.1	56.6		50.2		48.	•	57.1		57.4
Heavy Trucks:		8.7	57.3		48.3		49.	_	57.9		58.0
Vehicle Noise:	6	8.1	66.3		63.7		58.	5	67.0	)	67.5
Mitigated Noise Le	vels (with To	opo and barrie	r atte	nuation	)						
	Leq Peak Ho			Leq E	vening		Night		Ldn	_	NEL
Autos:		7.0	65.1		63.4		57.		65.9		66.5
Medium Trucks:		8.1	56.6		50.2		48.		57.		57.4
Heavy Trucks:		58.7 57.3		48.3		49.	_	57.9		58.0	
Vehicle Noise:	6	8.1	66.3		63.7		58.	5	67.0	)	67.5

ovember 11, 2019 Monday, November 11, 2019

# **APPENDIX 10.1:**

**CADNAA OPERATIONAL NOISE MODEL INPUTS** 



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## 13103

CadnaA Noise Prediction Model: 12642\_7.cna

Date: 22.04.20 Analyst: B. Lawson

#### **Receiver Noise Levels**

Name	M.	ID		Level Lr		Lir	nit. Val	ue		Land	Use	Height		C	oordinates	
			Day	Night	CNEL	Day	Night	CNEL	Туре	Auto	Noise Type			Х	Υ	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
RECEIVERS		R1	46.6	40.8	48.3	65.0	50.0	0.0				5.00	а	6559701.83	2172082.13	5.00
RECEIVERS		R2	46.5	44.8	51.3	65.0	50.0	0.0				5.00	а	6561160.17	2172103.84	5.00
RECEIVERS		R3	43.8	41.5	48.1	65.0	50.0	0.0				5.00	а	6561607.22	2172116.86	5.00
RECEIVERS		R4	43.0	39.9	46.7	65.0	50.0	0.0				5.00	а	6561919.72	2171422.41	5.00
RECEIVERS		R5	42.1	36.7	44.1	65.0	50.0	0.0				5.00	а	6561963.81	2170753.38	5.00
RECEIVERS		R6	52.2	30.6	49.4	65.0	50.0	0.0				5.00	а	6561014.44	2167755.55	5.00
RECEIVERS		R7	46.0	27.9	43.5	65.0	50.0	0.0				5.00	а	6560134.29	2166770.74	5.00
RECEIVERS		R8	47.0	22.2	44.1	65.0	50.0	0.0				5.00	а	6559827.00	2166505.11	5.00
RECEIVERS		R9	41.5	22.5	38.9	65.0	50.0	0.0				5.00	а	6556013.28	2170127.57	5.00
RECEIVERS		R10	39.8	30.4	39.5	65.0	50.0	0.0				5.00	а	6557185.16	2172188.76	5.00
PRJRECEIVERS		P1	58.5	31.4	55.6	65.0	50.0	0.0				5.00	а	6558248.54	2169368.52	5.00
PRJRECEIVERS		P2	55.4	33.6	52.6	65.0	50.0	0.0				5.00	а	6560358.05	2168812.35	5.00
PRJRECEIVERS		Р3	61.2	29.6	58.2	65.0	50.0	0.0				5.00	а	6558335.40	2168327.62	5.00
PRJRECEIVERS		P4	53.9	22.3	50.9	65.0	50.0	0.0				5.00	а	6559349.69	2167313.33	5.00
PRJRECEIVERS		P5	55.0	31.8	52.2	65.0	50.0	0.0				5.00	а	6560520.02	2168225.59	5.00
PRJRECEIVERS		P6	54.1	35.0	51.4	65.0	50.0	0.0				5.00	а	6559481.73	2169654.00	5.00
PRJRECEIVERS		P7	51.8	36.6	49.7	65.0	50.0	0.0				5.00	а	6560454.00	2169587.98	5.00
PRJRECEIVERS		P8	53.7	52.0	58.6	65.0	50.0	0.0				5.00	а	6560808.11	2171442.51	5.00
PRJRECEIVERS		Р9	62.4	31.5	59.4	65.0	50.0	0.0				5.00	а	6558690.22	2168964.96	5.00
PRJRECEIVERS		P10	64.5	30.4	61.6	65.0	50.0	0.0				5.00	а	6559589.56	2167959.31	5.00

### Area Source(s)

ID	R	esult. PW	/L	Re	esult. PW	L"	Lw	/Li	Op	erating T	ime	M	oving Pt. S	Src	Height
	Day	Evening	Night	Day	Evening	Night	Туре	Value	Day	Special	Night	Number			
	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			(min)	(min)	(min)	Day	Evening	Night	(ft)
WAVE	112.3	112.3	112.3	63.3	63.3	63.3	Lw"	63.3	900.00	0.00	0.00				5
POOL	103.3	103.3	103.3	57.8	57.8	57.8	Lw"	57.8	900.00	0.00	0.00				5
GAME	84.3	84.3	84.3	43.4	43.4	43.4	Lw"	43.4	900.00	0.00	0.00				5
COMMERCIAL	99.6	99.6	99.6	54.8	54.8	54.8	Lw"	54.8	900.00	0.00	540.00				5

Name		lei	ght		Coordinat	es	
	Begin		End	х	У	Z	Ground
	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
AREASOURCE	5.00	а		6558236.55	2169133.37	5.00	0.00
				6558251.42	2169142.54	5.00	0.00
				6558267.31	2169149.78	5.00	0.00
				6558283.98	2169154.98	5.00	0.00
				6558301.16	2169158.06	5.00	0.00
				6558318.60	2169158.98	5.00	0.00
				6558336.02	2169157.71	5.00	0.00
				6558353.14	2169154.28	5.00	0.00
				6558369.70	2169148.74	5.00	0.00
				6558385.44	2169141.18	5.00	0.00
				6558400.12	2169131.72	5.00	0.00
				6558435.14	2169103.86	5.00	0.00
				6558468.72	2169074.26	5.00	0.0
				6558500.75	2169043.00	5.00	0.00
				6558531.16	2169010.15	5.00	0.00
				6558559.87	2168975.82	5.00	0.00
				6558586.81	2168940.07	5.00	0.0
				6558611.51	2168895.01	5.00	0.00
				6558634.64	2168849.11	5.00	0.00
				6558656.15	2168802.43	5.00	0.0
				6558676.02	2168755.03	5.00	0.00
				6558680.23	2168738.82	5.00	0.0
				6558686.60	2168723.34	5.00	0.00
				6558695.01	2168708.86	5.00	0.00
				6558705.32	2168695.66	5.00	0.00
				6558717.33	2168683.99	5.00	0.00
				6558897.00	2168509.30	5.00	0.00
				6559075.57	2168333.49	5.00	0.00
				6559253.04	2168156.56	5.00	0.00
				6559429.40	2167978.53	5.00	0.00
				6559452.47	2167962.10	5.00	0.00
		П		6559476.93	2167947.83	5.00	0.00
		П		6559502.58	2167935.84	5.00	0.00
		П		6559529.22	2167926.22	5.00	0.00
		Ħ		6559556.61	2167919.05	5.00	0.00
		П		6559583.34	2167909.42	5.00	0.00

Urban Crossroads, Inc.

Name	F	lei	ght		Coordinat	es	
	Begin		End	х	У	z	Ground
	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
				6559609.25	2167897.75	5.00	0.00
				6559634.18	2167884.12	5.00	0.00
				6559657.98	2167868.61	5.00	0.00
				6559680.52	2167851.31	5.00	0.00
				6559714.17	2167825.86	5.00	0.00
				6559746.60	2167798.87	5.00	0.00
				6559777.72	2167770.39	5.00	0.00
		Т		6559807.49	2167740.49	5.00	0.00
				6559835.82	2167709.23	5.00	0.00
				6559850.27	2167695.76	5.00	0.00
				6559863.14	2167680.78	5.00	0.00
				6559874.29	2167664.48	5.00	0.00
				6559883.58	2167647.06	5.00	0.00
		Т		6559890.90	2167628.71	5.00	0.00
				6559896.15	2167609.68	5.00	0.00
				6559899.29	2167590.18	5.00	0.00
				6559900.26	2167570.45	5.00	0.00
				6559897.10	2167551.51	5.00	0.00
				6559892.16	2167532.96	5.00	0.00
				6559885.50	2167514.95	5.00	0.00
				6559877.15	2167497.66	5.00	0.00
				6559867.21	2167481.24	5.00	0.00
				6559799.89	2167417.19	5.00	0.00
				6559731.74	2167354.02	5.00	0.00
				6559710.33	2167328.19	5.00	0.00
				6559687.16	2167303.92	5.00	0.00
				6559662.35	2167281.33	5.00	0.00
				6559117.12	2167821.00	5.00	0.00
				6558573.02	2168361.80	5.00	0.00
		_		6558030.04	2168903.73	5.00	0.00
AREASOURCE	5.00	a		6560031.78	2168962.36	5.00	0.00
AKLASOOKCE	3.00	а		6560181.94	2168783.47	5.00	0.00
		_		6560029.61	2168652.28	5.00	0.00
		_		6559914.14	2168522.71	5.00	0.00
		_		6559575.47	2168140.72 2168137.40	5.00 5.00	0.00
				6559551.37			
		_		6559493.20	2167947.91	5.00	0.00
		_		6559453.95	2167969.83	5.00	0.00
				6559409.39	2168010.75	5.00	0.00
		_		6558982.88	2168435.44	5.00	0.00
		_		6559100.09	2168547.96	5.00	0.00
				6559287.09	2168386.72	5.00	0.00
				6559482.36	2168622.99	5.00	0.00
				6559599.72	2168519.46	5.00	0.00
				6559843.67	2168794.31	5.00	0.00
AREASOURCE	5.00	а		6558439.55	2169176.11	5.00	0.00
				6558437.01	2169554.16	5.00	0.00
				6558495.37	2169546.54	5.00	0.00
				6558551.19	2169559.23	5.00	0.00
					2169412.07	5.00	0.00
				6558749.09	2169351.18	5.00	0.00
				6558764.32	2169280.14	5.00	0.00
				6558794.76		5.00	0.00
				6558596.86	2169011.19	5.00	0.00
AREASOURCE	5.00	а		6560600.13	2171905.47	5.00	0.00
				6561327.49	2171892.11	5.00	0.00
				6561350.10	2171875.67	5.00	0.00
				6561362.42	2171617.81	5.00	0.00
				6561376.81	2171481.17	5.00	0.00
				6561395.30	2171370.22	5.00	0.00
				6561237.09	2171332.21	5.00	0.00
				6561169.28	2171311.66	5.00	0.00
				6561164.15	2171339.40	5.00	0.00
				6560600.13	2171698.97	5.00	0.00
l		_		•			

### Barrier(s)

Dairie	1/2	,												
Name	M.	ID	Absc	rption	Z-Ext.	Canti	ilever	F	lei	ght		Coordinat	es	
			left	right		horz.	vert.	Begin	Begin End		х	У	z	Ground
					(ft)	(ft)	(ft)	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
BARRIERS		BARRIERS00001						6.00	а		6556068.34	2169655.74	6.00	0.00
											6556072.25	2169787.25	6.00	0.00
											6556087.88	2170034.64	6.00	0.00
											6556095.69	2170198.70	6.00	0.00
											6556095.69	2170295.06	6.00	0.00
											6556056.63	2170382.30	6.00	0.00
									П		6555961.57	2170490.37	6.00	0.00

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Name	M.	ID	Abso	rption	Z-Ext.	Cant	ilever	Н	lei	ght		Coordinat	es	
			left	right		horz.	vert.	Begin		End	х	у	Z	Ground
					(ft)	(ft)	(ft)	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
									П		6555886.05	2170543.76	6.00	0.00
BARRIERS		BARRIERS00002						6.00	а		6557284.27	2172169.91	6.00	0.00
									П		6557254.76	2172131.72	6.00	0.00
									П		6557208.75	2172123.04	6.00	0.00
									Н		6557131.50	2172067.48	6.00	0.00
									Н		6557060.31	2172050.99	6.00	0.00
									Н		6556932.71	2172050.99	6.00	0.00
	_								Н		6556792.95	2172051.86	6.00	0.00
									Н			2172031.80	6.00	0.00
BARRIERS		DA DDIEDCOCOCO						6.00			6556711.36		6.00	0.00
BARRIERS	_	BARRIERS00003						6.00	d		6557153.20	2172059.67		
									Н		6557222.64	2172046.65	6.00	0.00
									Н		6557325.94	2172044.91	6.00	0.00
	_								Н		6557427.50	2172050.12	6.00	0.00
BARRIERS		BARRIERS00004	_					6.00	а		6561351.48	2172027.86	6.00	0.00
			_						Ц		6561102.87	2172020.92	6.00	0.00
									Ц		6561104.95	2172050.09	6.00	0.00
									Ш		6560961.89	2172050.78	6.00	0.00
											6560757.73	2172048.00	6.00	0.00
BARRIERS		BARRIERS00005						6.00	а		6561761.78	2172032.47	6.00	0.00
											6561668.72	2172044.27	6.00	0.00
											6561565.95	2172042.88	6.00	0.00
											6561527.75	2172067.19	6.00	0.00
											6561507.61	2172141.49	6.00	0.00
											6561504.14	2172241.49	6.00	0.00
											6561506.92	2172305.38	6.00	0.00
BARRIERS		BARRIERS00006						6.00	а		6562036.78	2171815.10	6.00	0.00
									П		6562077.75	2171758.85	6.00	0.00
									П		6561990.25	2171672.05	6.00	0.00
											6561978.45	2171678.30	6.00	0.00
									П		6561885.39	2171597.74	6.00	0.00
									П		6561777.06	2171550.52	6.00	0.00
									П		6561777.75	2171540.80	6.00	0.00
									Н		6561698.58	2171485.24	6.00	0.00
									Н		6561619.42	2171384.55	6.00	0.00
									Н		6561618.03	2171366.49	6.00	0.00
	_								Н		6561622.89	2171360.43	6.00	0.00
									Н		6561606.92	2171300.34	6.00	0.00
BARRIERS		BARRIERS00007						6.00			6561650.93	2171297.74	6.00	0.00
DANNIERS		DAMNIEN300007					-	0.00	а	-	6561698.67	2171132.10	6.00	0.00
			_						Н		+			
									Н		6561730.14	2170950.90	6.00	0.00
			-						Н		6561778.97	2170829.37	6.00	0.00
									Н		6561832.14	2170754.50	6.00	0.00
									Н		6561854.92	2170726.29	6.00	0.00
									Н		6561861.43	2170734.97	6.00	0.00
			_						Ц		6561913.52	2170592.82	6.00	0.00
			_						Ц		6561937.39	2170571.12	6.00	0.00
									Ц		6561958.00	2170535.32	6.00	0.00
BARRIERS		BARRIERS00008						6.00	а		6561606.92	2171297.74	6.00	0.00
									Ц		6561606.67	2171224.32	6.00	0.00
											6561616.63	2171169.23	6.00	0.00
											6561631.23	2171167.24	6.00	0.00
											6561650.93	2171132.10	6.00	0.00
BARRIERS		BARRIERS00009						6.00	а		6560093.69	2166604.65	6.00	0.00
									П		6560092.73	2166983.08	6.00	0.00

### **Ground Absorption(s)**

				,.,	
Name	M.	ID	G	Coord	inates
				х	у
				(ft)	(ft)
GROUND		0	1.0	6558802.37	2167864.72
				6558996.92	2167822.26
				6559662.48	2167250.25
				6559909.37	2167450.59
				6560022.45	2167364.58
				6560089.35	2167366.17
				6560082.98	2166545.88
				6559426.75	2166545.88
				6558818.29	2166794.36

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# **APPENDIX 11.1:**

**CADNAA CONSTRUCTION NOISE MODEL INPUTS** 



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## 13103

CadnaA Noise Prediction Model: 12642\_ConstructionP1.cna

Date: 22.04.20 Analyst: B. Lawson

#### **Receiver Noise Levels**

Name	M.	ID		Level Lr		Lir	nit. Valı	ue		Land	l Use	Height		C	oordinates	
			Day	Night	CNEL	Day	Night	CNEL	Туре	Auto	Noise Type			Х	Υ	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
RECEIVERS		R1	65.6	65.6	72.3	85.0	0.0	0.0				5.00	а	6559701.83	2172082.13	5.00
RECEIVERS		R2	65.8	65.8	72.4	85.0	0.0	0.0				5.00	а	6561160.17	2172103.84	5.00
RECEIVERS		R3	63.0	63.0	69.7	85.0	0.0	0.0				5.00	а	6561607.22	2172116.86	5.00
RECEIVERS		R4	62.3	62.3	69.0	85.0	0.0	0.0				5.00	а	6561919.72	2171422.41	5.00
RECEIVERS		R5	61.6	61.6	68.3	85.0	0.0	0.0				5.00	а	6561963.81	2170753.38	5.00
RECEIVERS		R6	71.3	71.3	78.0	85.0	0.0	0.0				5.00	а	6561014.44	2167755.55	5.00
RECEIVERS		R7	72.5	72.5	79.1	85.0	0.0	0.0				5.00	а	6560134.29	2166770.74	5.00
RECEIVERS		R8	76.5	76.5	83.2	85.0	0.0	0.0				5.00	а	6559827.00	2166505.11	5.00
RECEIVERS		R9	58.7	58.7	65.4	85.0	0.0	0.0				5.00	а	6556013.28	2170127.57	5.00
RECEIVERS		R10	58.0	58.0	64.6	85.0	0.0	0.0				5.00	а	6557185.16	2172188.76	5.00

## Area Source(s)

ID	R	esult. PW	/L	Re	esult. PW	L''	Lw	/Li	Op	erating Ti	me	М	oving Pt. S	Src	Height
	Day	Evening	Night	Day	Evening	Night	Туре	Value	Day	Special	Night	Number			
	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			(min)	(min)	(min)	Day Evening Night		(ft)	
ABSORPTION00001	132.1	132.1	132.1	75.3	75.3	75.3	Lw"	75.3							8
ABSORPTION00002	120.2	120.2	120.2	75.3	75.3	75.3	Lw"	75.3							8

Name	ŀ	lei	ght		Coordinat	es	
	Begin		End	x	у	Z	Ground
	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
ABSORPTION	8.00	а		6557934.33	2168936.33	8.00	0.00
				6558256.13	2169202.16	8.00	0.00
				6558429.62	2169196.57	8.00	0.00
				6558438.01	2169563.14	8.00	0.00
				6558555.54	2169563.14	8.00	0.00
				6558745.82	2169409.23	8.00	0.0
				6558785.00	2169484.79	8.00	0.0
				6558880.14	2169568.73	8.00	0.0
				6558936.10	2169599.52	8.00	0.0
				6559056.43	2169599.52	8.00	0.0
				6559702.83	2169543.55	8.00	0.0
				6559800.77	2169487.59	8.00	0.0
				6559823.15	2169423.23	8.00	0.0
				6559828.75	2169344.87	8.00	0.0
				6559825.95	2169269.32	8.00	0.0
				6559851.13	2169202.16	8.00	0.0
				6559915.49	2169115.42	8.00	0.0
				6560150.55	2169302.90	8.00	0.0
				6560200.92	2169370.06	8.00	0.0
				6560248.49	2169336.48	8.00	0.0
				6560878.10	2169328.08	8.00	0.0
				6560880.89	2168919.54	8.00	0.0
				6560879.41	2168899.56	8.00	0.0
				6560875.68	2168879.87	8.00	0.0
				6560869.76	2168860.73	8.00	0.0
				6560861.71	2168842.39	8.00	0.0
				6560851.64	2168825.07	8.00	0.0
				6560839.68	2168809.00	8.00	0.0
				6560825.98	2168794.38	8.00	0.0
				6560810.71	2168781.40	8.00	0.0
				6560794.08	2168770.22	8.00	0.0
				6560776.30	2168761.00	8.00	0.0
				6560757.58	2168753.84	8.00	0.0
				6560738.18	2168748.84	8.00	0.0
				6560547.90	2168751.64	8.00	0.0
				6560447.16	2168734.85	8.00	0.0
				6560312.85	2168639.71	8.00	0.0
				6560421.98	2168505.40	8.00	0.0
				6560433.99	2168479.82	8.00	0.0
		П		6560443.75	2168453.31	8.00	0.0
		П		6560451.21	2168426.06	8.00	0.0
		Н		6560456.30	2168398.27	8.00	0.0
		H		6560458.99	2168370.15	8.00	0.0
		H		6560459.25	2168341.90	8.00	0.0
		H		6560457.09	2168313.73	8.00	0.0
		H		6560452.52	2168285.85	8.00	0.0
		H		6560445.57	2168258.46	8.00	0.0
		Н		6560436.30	2168231.78	8.00	0.0

Urban Crossroads, Inc.

Name	Height Fnd				Coordinat	es	
	Begin		End	х	у	Z	Ground
	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
				6560424.78	2168205.98	8.00	0.00
				6560262.48	2168029.69	8.00	0.00
				6560237.74	2168020.87	8.00	0.00
				6560213.84	2168009.97	8.00	0.00
		П		6560190.95	2167997.09	8.00	0.00
				6560169.23	2167982.32	8.00	0.00
				6560148.85	2167965.76	8.00	0.00
				6560129.94	2167947.52	8.00	0.00
				6560112.65	2167927.75	8.00	0.00
				6560097.09	2167906.59	8.00	0.00
				6560083.39	2167884.18	8.00	0.00
				6560091.78	2166546.61	8.00	0.00
				6559428.60	2166546.61	8.00	0.00
				6558812.98	2166798.46	8.00	0.00
				6558790.59	2167912.16	8.00	0.00
ABSORPTION	8.00	а		6560597.19	2171907.41	8.00	0.00
				6561333.34	2171899.09	8.00	0.00
				6561352.76	2171878.74	8.00	0.00
		П		6561357.38	2171666.04	8.00	0.00
				6561372.18	2171550.44	8.00	0.00
				6561373.10	2171506.97	8.00	0.00
				6561396.22	2171365.48	8.00	0.00
			6561170.57	2171310.91	8.00	0.00	
				6561165.02	2171342.36	8.00	0.00
				6560599.04	2171700.26	8.00	0.00

Barrier(s)

Name	M.	ID	Absorption		Z-Ext.	Cant	ilever	H	leig	ht		Coordinate	es	
			left	right		horz.	vert.	Begin		End	х	У	z	Ground
					(ft)	(ft)	(ft)	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
BARRIERS		BARRIERS00001						6.00	а		6556068.34	2169655.74	6.00	0.00
											6556072.25	2169787.25	6.00	0.00
											6556087.88	2170034.64	6.00	0.00
											6556095.69	2170198.70	6.00	0.00
											6556095.69	2170295.06	6.00	0.00
											6556056.63	2170382.30	6.00	0.00
											6555961.57	2170490.37	6.00	0.00
											6555886.05	2170543.76	6.00	0.00
BARRIERS		BARRIERS00002						6.00	а		6557284.27	2172169.91	6.00	0.00
											6557254.76	2172131.72	6.00	0.00
											6557208.75	2172123.04	6.00	0.00
											6557131.50	2172067.48	6.00	0.00
											6557060.31	2172050.99	6.00	0.00
											6556932.71	2172050.99	6.00	0.00
											6556792.95	2172051.86	6.00	0.00
											6556711.36	2172079.64	6.00	0.00
BARRIERS		BARRIERS00003						6.00	а		6557153.20	2172059.67	6.00	0.00
											6557222.64	2172046.65	6.00	0.00
											6557325.94	2172044.91	6.00	0.00
											6557427.50	2172050.12	6.00	0.00
BARRIERS		BARRIERS00004						6.00	а		6561351.48	2172027.86	6.00	0.00
											6561102.87	2172020.92	6.00	0.00
											6561104.95	2172050.09	6.00	0.00
											6560961.89	2172050.78	6.00	0.00
											6560757.73	2172048.00	6.00	0.00
BARRIERS		BARRIERS00005						6.00	а		6561761.78	2172032.47	6.00	0.00
											6561668.72	2172044.27	6.00	0.00
											6561565.95	2172042.88	6.00	0.00
											6561527.75	2172067.19	6.00	0.00
											6561507.61	2172141.49	6.00	0.00
											6561504.14	2172241.49	6.00	0.00
											6561506.92	2172305.38	6.00	0.00
BARRIERS		BARRIERS00006						6.00	а		6562036.78	2171815.10	6.00	0.00
											6562077.75	2171758.85	6.00	0.00
											6561990.25	2171672.05	6.00	0.00
											6561978.45	2171678.30	6.00	0.00
											6561885.39	2171597.74	6.00	0.00
											6561777.06	2171550.52	6.00	0.00
											6561777.75	2171540.80	6.00	0.00
											6561698.58	2171485.24	6.00	0.00
											6561619.42	2171384.55	6.00	0.00
											6561618.03	2171366.49	6.00	0.00
											6561622.89	2171360.94	6.00	0.00
									П		6561606.92	2171297.74	6.00	0.00
BARRIERS		BARRIERS00007						6.00	а		6561650.93	2171132.10	6.00	0.00
									П		6561698.67	2171027.94	6.00	0.00

Name	M.	ID	Abso	rption	Z-Ext.	Canti	lever	H	lei	ght	Coordinates				
			left	right		horz.	vert.	Begin		End	х	у	Z	Ground	
					(ft)	(ft)	(ft)	(ft)	Г	(ft)	(ft)	(ft)	(ft)	(ft)	
											6561730.14	2170950.90	6.00	0.00	
											6561778.97	2170829.37	6.00	0.00	
									Г		6561832.14	2170754.50	6.00	0.00	
											6561854.92	2170726.29	6.00	0.00	
									Г		6561861.43	2170734.97	6.00	0.00	
											6561913.52	2170592.82	6.00	0.00	
											6561937.39	2170571.12	6.00	0.00	
									Г		6561958.00	2170535.32	6.00	0.00	
BARRIERS		BARRIERS00008						6.00	а		6561606.92	2171297.74	6.00	0.00	
											6561606.67	2171224.32	6.00	0.00	
									Г		6561616.63	2171169.23	6.00	0.00	
											6561631.23	2171167.24	6.00	0.00	
											6561650.93	2171132.10	6.00	0.00	
BARRIERS		BARRIERS00009						6.00	а		6560093.69	2166604.65	6.00	0.00	
											6560092.73	2166983.08	6.00	0.00	

## 13103

CadnaA Noise Prediction Model: 12642\_ConstructionP23.cna

Date: 22.04.20 Analyst: B. Lawson

### **Receiver Noise Levels**

Name	M.	ID		Level Lr		Limit. Value			Land Use			Height		Coordinates			
			Day	Night	CNEL	Day	Night	CNEL	Туре	Auto	Noise Type			Х	Υ	Z	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)	
RECEIVERS		R1	74.8	74.8	81.5	85.0	0.0	0.0				5.00	а	6559701.83	2172082.13	5.00	
RECEIVERS		R2	69.9	69.9	76.6	85.0	0.0	0.0				5.00	а	6561160.17	2172103.84	5.00	
RECEIVERS		R3	67.9	67.9	74.6	85.0	0.0	0.0				5.00	а	6561607.22	2172116.86	5.00	
RECEIVERS		R4	68.8	68.8	75.5	85.0	0.0	0.0				5.00	а	6561919.72	2171422.41	5.00	
RECEIVERS		R5	70.6	70.6	77.2	85.0	0.0	0.0				5.00	а	6561963.81	2170753.38	5.00	
RECEIVERS		R6	75.8	75.8	82.5	85.0	0.0	0.0				5.00	а	6561014.44	2167755.55	5.00	
RECEIVERS		R7	68.6	68.6	75.3	85.0	0.0	0.0				5.00	а	6560134.29	2166770.74	5.00	
RECEIVERS		R8	67.5	67.5	74.2	85.0	0.0	0.0				5.00	а	6559827.00	2166505.11	5.00	
RECEIVERS		R9	63.7	63.7	70.3	85.0	0.0	0.0				5.00	а	6556013.28	2170127.57	5.00	
RECEIVERS		R10	64.0	64.0	70.7	85.0	0.0	0.0				5.00	а	6557185.16	2172188.76	5.00	
PRJRECEIVERS		P1	82.8	82.8	89.5	85.0	0.0	0.0				5.00	а	6558248.54	2169368.52	5.00	
PRJRECEIVERS		P2	76.8	76.8	83.4	85.0	0.0	0.0				5.00	а	6560358.05	2168812.35	5.00	
PRJRECEIVERS		Р3	82.3	82.3	89.0	85.0	0.0	0.0				5.00	а	6558335.40	2168327.62	5.00	
PRJRECEIVERS		P4	70.6	70.6	77.3	85.0	0.0	0.0				5.00	а	6559349.69	2167313.33	5.00	
PRJRECEIVERS		P5	82.5	82.5	89.1	85.0	0.0	0.0				5.00	а	6560520.02	2168225.59	5.00	
PRJRECEIVERS		P6	82.9	82.9	89.5	85.0	0.0	0.0				5.00	а	6559481.73	2169654.00	5.00	
PRJRECEIVERS		P7	83.2	83.2	89.9	85.0	0.0	0.0				5.00	а	6560454.00	2169587.98	5.00	
PRJRECEIVERS		P8	83.1	83.1	89.8	85.0	0.0	0.0				5.00	a	6560808.11	2171442.51	5.00	
PRJRECEIVERS		Р9	75.3	75.3	82.0	85.0	0.0	0.0				5.00	а	6558690.22	2168964.96	5.00	
PRJRECEIVERS		P10	72.6	72.6	79.3	85.0	0.0	0.0				5.00	а	6559589.56	2167959.31	5.00	

## Area Source(s)

ID	R	esult. PW	L	Result. PWL"			Lw / Li		Op	erating T	me	М	Height		
	Day	Evening	Night	Day	Evening	Night	Туре	Value	Day	Special	Night	Number			
	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			(min)	(min)	(min)	Day	Evening	Night	(ft)
P2P3CONSTRUCTION00002	0.0	0.0	0.0	0.0	0.0	0.0	Lw"								0
P2P3CONSTRUCTION00002	135.7 135.7 135.7			75.3	75.3	75.3	Lw"	75.3							8

Name	-	Hei	ght		Coordinat	es	
	Begin		End	х	у	Z	Ground
	(ft)	П	(ft)	(ft)	(ft)	(ft)	(ft)
P2P3CONSTRUCTION	0.00	а		6561352.29	2171907.14	0.00	0.00
				6561351.77	2171917.28	0.00	0.00
		П		6561352.08	2171917.24	0.00	0.00
P2P3CONSTRUCTION	8.00	a		6561351.52	2171922.05	8.00	0.00
				6561351.77	2171917.28	8.00	0.00
				6561393.19	2171387.33	8.00	0.00
				6561448.74	2171172.05	8.00	0.00
				6561525.13	2170963.71	8.00	0.00
				6561650.13	2170692.88	8.00	0.00
				6561733.46	2170533.16	8.00	0.00
				6561851.52	2170331.77	8.00	0.00
				6561914.02	2170206.77	8.00	0.00
				6562011.24	2169949.83	8.00	0.00
				6562087.63	2169685.94	8.00	0.00
				6562122.35	2169428.99	8.00	0.00
				6562129.30	2169102.60	8.00	0.00
				6562108.46	2168838.71	8.00	0.00
				6562073.74	2168678.99	8.00	0.00
				6561983.46	2168387.33	8.00	0.00
				6561858.46	2168095.66	8.00	0.00
				6561712.63	2167845.66	8.00	0.00
				6561594.57	2167623.44	8.00	0.00
				6561518.19	2167435.94	8.00	0.00
				6561441.80	2167158.16	8.00	0.00
				6561434.85	2167887.33	8.00	0.00
				6560093.22	2167888.99	8.00	0.00
				6560083.39	2167884.18	8.00	0.00
				6560097.09	2167906.59	8.00	0.00
				6560112.65	2167927.75	8.00	0.00
				6560129.94	2167947.52	8.00	0.00
				6560148.85	2167965.76	8.00	0.00
				6560169.23	2167982.32	8.00	0.00
				6560190.95	2167997.09	8.00	0.00
				6560213.84	2168009.97	8.00	0.00
				6560237.74	2168020.87	8.00	0.00
				6560262.48	2168029.69	8.00	0.00
				6560424.78	2168205.98	8.00	0.00
				6560436.30	2168231.78	8.00	0.00

Urban Crossroads, Inc.

Name	He	ight	Coordinates							
	Begin	End	х	у	z	Ground				
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)				
			6560445.57	2168258.46	8.00	0.00				
			6560452.52	2168285.85	8.00	0.00				
			6560457.09	2168313.73	8.00	0.00				
			6560459.25	2168341.90	8.00	0.00				
			6560458.99	2168370.15	8.00	0.00				
			6560456.30	2168398.27	8.00	0.00				
			6560451.21	2168426.06	8.00	0.00				
			6560443.75	2168453.31	8.00	0.00				
			6560433.99	2168479.82	8.00	0.00				
			6560421.98	2168505.40	8.00	0.00				
			6560312.85	2168639.71	8.00	0.00				
			6560447.16	2168734.85	8.00	0.00				
			6560547.90	2168751.64	8.00	0.00				
			6560738.18	2168748.84	8.00	0.00				
			6560757.58	2168753.84	8.00	0.00				
			6560776.30	2168761.00	8.00	0.00				
			6560794.08	2168770.22	8.00	0.00				
			6560810.71	2168781.40	8.00	0.00				
			6560825.98	2168794.38	8.00	0.00				
			6560839.68	2168809.00	8.00	0.00				
			6560851.64	2168825.07	8.00	0.00				
			6560861.71	2168842.39	8.00	0.00				
			6560869.76	2168860.73	8.00	0.00				
			6560875.68	2168879.87	8.00	0.00				
			6560879.41	2168899.56	8.00	0.00				
			6560880.89	2168919.54	8.00	0.00				
			6560878.10	2169328.08	8.00	0.00				
			6560248.49	2169336.48	8.00	0.00				
			6560200.92	2169370.06	8.00	0.00				
			6560150.55	2169302.90	8.00	0.00				
			6559915.49	2169115.42	8.00	0.00				
			6559851.13	2169202.16	8.00	0.00				
			6559825.95	2169269.32	8.00	0.00				
			6559828.75	2169344.87	8.00	0.00				
			6559823.15	2169423.23	8.00	0.00				
			6559800.77	2169487.59	8.00	0.00				
			6559702.83	2169543.55	8.00	0.00				
			6559056.43	2169599.52	8.00	0.00				
			6558936.10	2169599.52	8.00	0.00				
			6558880.14	2169568.73	8.00	0.00				
			6558785.00	2169484.79	8.00	0.00				
			6558745.82	2169409.23	8.00	0.00				
			6558555.54	2169563.14	8.00	0.00				
			6558438.01	2169563.14	8.00	0.00				
		+ +	6558429.62	2169196.57	8.00	0.00				
			6558256.13	2169202.16	8.00	0.00				
			6557934.33	2168936.33	8.00	0.00				
			6558790.59	2167912.16	8.00	0.00				
		<del>                                     </del>	6558789.02	2167901.22	8.00	0.00				
			6557490.41	2167915.10	8.00	0.00				
			6557455.69	2170838.71	8.00	0.00				
		+ +	6559601.52	2170838.71	8.00	0.00				
		+ +	6559594.57	2171928.99	8.00	0.00				
			13333337	,,	5.50	0.00				

Barrier(s)

	. ,-	,												
Name	M.	ID	Abso	rption	Z-Ext.	Canti	ilever	H	lei	ght		Coordinat	es	
			left	right		horz.	vert.	Begin		End	х	у	Z	Ground
					(ft)	(ft)	(ft)	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
BARRIERS		BARRIERS00001						6.00	а		6556068.34	2169655.74	6.00	0.00
											6556072.25	2169787.25	6.00	0.00
											6556087.88	2170034.64	6.00	0.00
											6556095.69	2170198.70	6.00	0.00
											6556095.69	2170295.06	6.00	0.00
											6556056.63	2170382.30	6.00	0.00
											6555961.57	2170490.37	6.00	0.00
											6555886.05	2170543.76	6.00	0.00
BARRIERS		BARRIERS00002						6.00	а		6557284.27	2172169.91	6.00	0.00
											6557254.76	2172131.72	6.00	0.00
											6557208.75	2172123.04	6.00	0.00
											6557131.50	2172067.48	6.00	0.00
											6557060.31	2172050.99	6.00	0.00
											6556932.71	2172050.99	6.00	0.00
											6556792.95	2172051.86	6.00	0.00
											6556711.36	2172079.64	6.00	0.00
BARRIERS		BARRIERS00003						6.00	а		6557153.20	2172059.67	6.00	0.00
											6557222.64	2172046.65	6.00	0.00

Name	M.	ID	Abso	rption	Z-Ext.	Canti	lever	H	leig	ght		Coordinate	es	
			left	right		horz.	vert.	Begin		End	х	у	Z	Ground
					(ft)	(ft)	(ft)	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
											6557325.94	2172044.91	6.00	0.00
											6557427.50	2172050.12	6.00	0.00
BARRIERS		BARRIERS00004						6.00	а		6561351.48	2172027.86	6.00	0.00
											6561102.87	2172020.92	6.00	0.00
											6561104.95	2172050.09	6.00	0.00
											6560961.89	2172050.78	6.00	0.00
											6560757.73	2172048.00	6.00	0.00
BARRIERS		BARRIERS00005						6.00	а		6561761.78	2172032.47	6.00	0.00
											6561668.72	2172044.27	6.00	0.00
											6561565.95	2172042.88	6.00	0.00
											6561527.75	2172067.19	6.00	0.00
											6561507.61	2172141.49	6.00	0.00
											6561504.14	2172241.49	6.00	0.00
											6561506.92	2172305.38	6.00	0.00
BARRIERS		BARRIERS00006						6.00	а		6562036.78	2171815.10	6.00	0.00
											6562077.75	2171758.85	6.00	0.00
											6561990.25	2171672.05	6.00	0.00
											6561978.45	2171678.30	6.00	0.00
											6561885.39	2171597.74	6.00	0.00
											6561777.06	2171550.52	6.00	0.00
											6561777.75	2171540.80	6.00	0.00
											6561698.58	2171485.24	6.00	0.00
											6561619.42	2171384.55	6.00	0.00
											6561618.03	2171366.49	6.00	0.00
											6561622.89	2171360.94	6.00	0.00
											6561606.92	2171297.74	6.00	0.00
BARRIERS		BARRIERS00007						6.00	а		6561650.93	2171132.10	6.00	0.00
											6561698.67	2171027.94	6.00	0.00
											6561730.14	2170950.90	6.00	0.00
											6561778.97	2170829.37	6.00	0.00
											6561832.14	2170754.50	6.00	0.00
											6561854.92	2170726.29	6.00	0.00
											6561861.43	2170734.97	6.00	0.00
											6561913.52	2170592.82	6.00	0.00
											6561937.39	2170571.12	6.00	0.00
											6561958.00	2170535.32	6.00	0.00
BARRIERS		BARRIERS00008						6.00	а		6561606.92	2171297.74	6.00	0.00
											6561606.67	2171224.32	6.00	0.00
											6561616.63	2171169.23	6.00	0.00
									Ц		6561631.23	2171167.24	6.00	0.00
									Ц		6561650.93	2171132.10	6.00	0.00
BARRIERS		BARRIERS00009						6.00	a			2166604.65	6.00	0.00
											6560092.73	2166983.08	6.00	0.00