

Temescal Valley Business Park (PAR190052)

NOISE IMPACT ANALYSIS
COUNTY OF RIVERSIDE

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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

EPA Environmental Protection Agency
FHWA Federal Highway Administration
FTA Federal Transit Administration

Hz Hertz

I-15 Interstate 15

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

OPR Office of Planning and Research

PPV Peak particle velocity

Project Temescal Valley Business Park

REMEL Reference Energy Mean Emission Level

RMS Root-mean-square VdB Vibration Decibels



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EXECUTIVE SUMMARY

Urban Crossroads, Inc. has prepared this noise study to determine the potential noise impacts and the necessary noise mitigation measures, if any, for the proposed Temescal Valley Business Park development ("Project"). The Project site is located south of Dawson Canyon Road and east of Temescal Canyon road in unincorporated County of Riverside. The Project is proposed to consist of the development of a 183,456 square foot warehouse. This noise study includes a conservative analysis of the proposed Project uses. This study has been prepared to satisfy applicable County of Riverside standards and thresholds of significance based on guidance provided by Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1)

SUMMARY OF CEQA SIGNIFICANCE FINDINGS

The results of this Temescal Valley Business Park 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.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings		
Analysis		Unmitigated	Mitigated	
Off-Site Traffic Noise	7	Less Than Significant	-	
Operational Noise	9	Less Than Significant	-	
Construction Noise	10	Less Than Significant	-	
Construction Vibration		Less Than Significant	-	



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1 INTRODUCTION

This noise analysis has been completed to determine the noise impacts associated with the development of the proposed Temescal Valley Business Park ("Project"). This noise study briefly describes the proposed Project, provides information regarding noise fundamentals, sets out the local regulatory setting, presents the study methods and procedures for transportation related CNEL traffic noise analysis, and evaluates the future exterior noise environment. In addition, this study includes an analysis of the potential Project-related long-term stationary-source operational noise and short-term construction noise impacts.

1.1 SITE LOCATION

The proposed Temescal Valley Business Park site is located south of Dawson Canyon Road and east of Temescal Canyon road in unincorporated County of Riverside, as shown on Exhibit 1-A. Existing land uses near the site consist mostly of industrial land use and vacant land to the east and south of the Project site with some nearby residential homes located northwest and west of the Project site. Interstate 15 (I-15) is located approximately 600 feet west of the Project site.

1.2 PROJECT DESCRIPTION

As shown in Exhibit 1-B, the Project is proposed to consist of the development of a 183,456 square foot warehouse. The anticipated Project opening year is 2022. In addition, the Project will construct Temescal Canyon Road to align with the future extension of Temescal Canyon Road that is proposed to run along the northeast side of the I-15 Freeway.

The on-site Project-related noise sources are expected to include: loading dock activity, delivery van activity, entry gate & truck movements, roof-top air conditioning units, and trash enclosure activity. This noise analysis is intended to describe noise level impacts associated with the expected typical operational activities at the Project site. To present a conservative approach, this report assumes the Project will operate 24-hours daily for seven days per week.

Per the *Temescal Valley Business Park Traffic Analysis* prepared by Urban Crossroads, Inc. the Project is expected to generate a total of approximately 3,016 trip-ends per day (actual vehicles) and includes 82 truck trip-ends per day. (2) This noise study relies on the actual Project trips (as opposed to the passenger car equivalents) to accurately account for the effect of individual truck trips on the study area roadway network.



EXHIBIT 1-A: LOCATION MAP

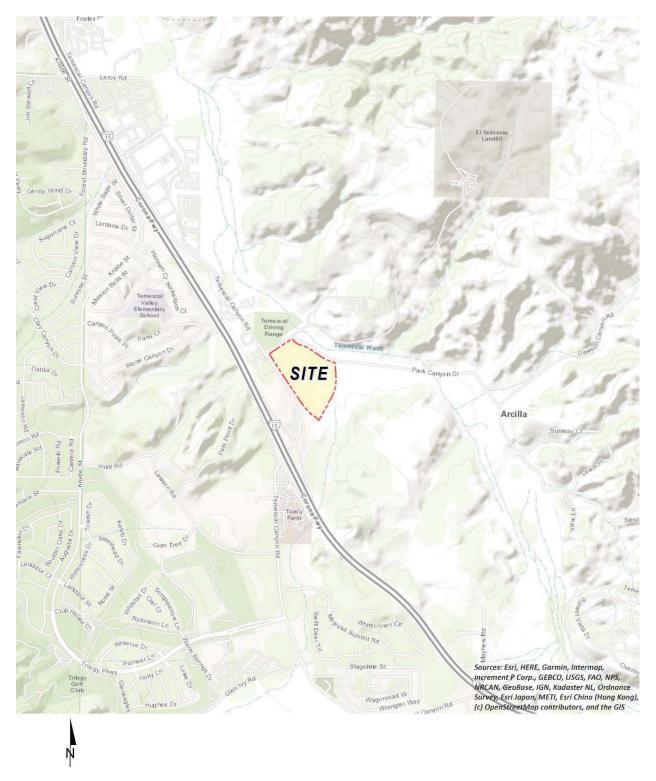
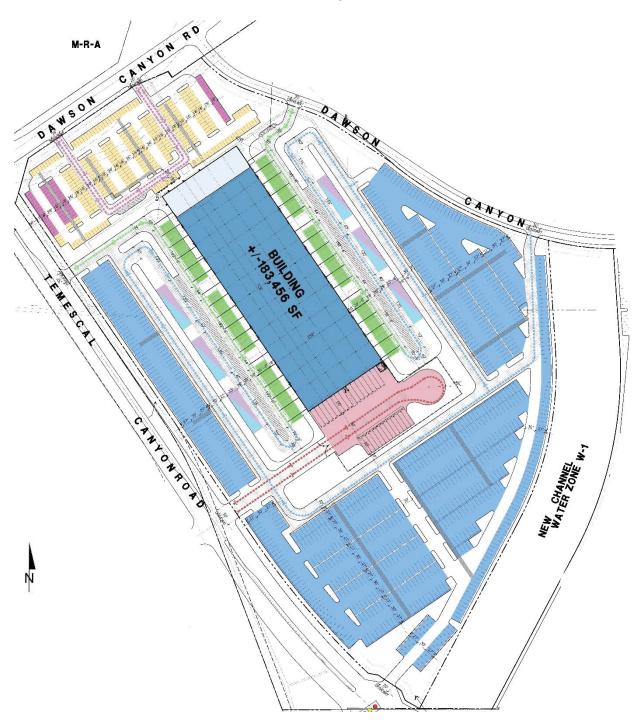




EXHIBIT 1-B: SITE PLAN



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2 FUNDAMENTALS

Noise 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). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. Exhibit 2-A presents a summary of the typical noise levels and their subjective loudness and effects that are described in more detail below.

EXHIBIT 2-A: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE	
THRESHOLD OF PAIN		140			
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	VERT HOLST		
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	2000		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	CLEED	
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		SLEEP 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	VERT PAINT		

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

2.1 RANGE OF NOISE

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. (3) 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. (4) 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 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.

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

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of 5 decibels to dBA L_{eq} sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA L_{eq} sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise sensitive time periods during the evening and night hours when sound appears louder. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The County of Riverside 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. (3)

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. (5)

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. (3)

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 Federal Highway Administration (FHWA) does not consider the planting of vegetation to be a noise abatement measure. (5)

2.3.5 REFLECTION

Field studies conducted by the FHWA have shown that the reflection from barriers and buildings does not substantially increase noise levels. (5) If all the noise striking a structure was reflected back to a given receiving point, the increase would be theoretically limited to 3 dBA. Further, not all the acoustical energy is reflected back to same point. Some of the energy would go over the structure, some is reflected to points other than the given receiving point, some is scattered by ground coverings (e.g., grass and other plants), and some is blocked by intervening structures



and/or obstacles (e.g., the noise source itself). Additionally, some of the reflected energy is lost due to the longer path that the noise must travel. FHWA measurements made to quantify reflective increases in traffic noise have not shown an increase of greater than 1-2 dBA; an increase that is not perceptible to the average human ear.

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. (5)

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. (6)

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. 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. (7) 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. (7) 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. A change of 3 dBA are considered *barely perceptible*, and changes of 5 dBA are considered *readily perceptible*. (5)

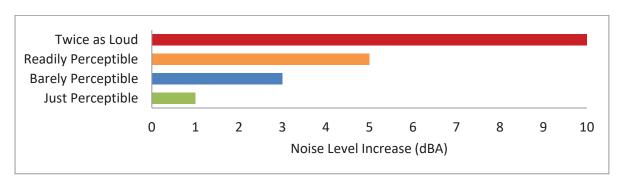


EXHIBIT 2-B: NOISE LEVEL INCREASE PERCEPTION

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. (8)

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* (9), vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. Decibel notation (VdB) is commonly used to measure RMS. Decibel notation (VdB) serves to reduce the range of numbers used to describe human response to vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment 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* **Human/Structural Response** (50 ft from source) 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 and Vibration Impact Assessment Manual.



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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 (OPR). (10) 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 GREEN BUILDING STANDARDS CODE

The State of California's Green Building Standards Code contains mandatory measures for non-residential building construction in Section 5.507 on Environmental Comfort. (11) These noise standards are applied to new construction in California for controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when non-residential structures are developed in areas where the exterior noise levels exceed 65 dBA CNEL, such as within a noise contour of an airport, freeway, railroad, and other areas where noise contours are not readily available. If the development falls within an airport or freeway 65 dBA CNEL noise contour, the combined sound transmission class (STC) rating of the wall and roof-ceiling assemblies must be at least 50. For those developments in areas where noise contours are not readily available and the noise level exceeds 65 dBA L_{eq} for any hour of operation, a wall and roof-ceiling combined STC rating of 45, and exterior windows with a minimum STC rating of 40 are required (Section 5.507.4.1).

3.3 COUNTY OF RIVERSIDE GENERAL PLAN NOISE ELEMENT

The County of Riverside has adopted a Noise Element of the General Plan to control and abate environmental noise, and to protect the citizens of County of Riverside from excessive exposure to noise. (12) The Noise Element specifies the maximum allowable exterior noise levels for new developments impacted by transportation noise sources such as arterial roads, freeways, airports and railroads. In addition, the Noise Element identifies several polices to minimize the impacts



of excessive noise levels throughout the community and establishes noise level requirements for all land uses. To protect County of Riverside residents from excessive noise, the Noise Element contains the following policies related to the Project:

- N 1.1 Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas. If the noise-producing land use cannot be relocated, then noise buffers such as setbacks, landscaping, or block walls shall be used.
- N 1.3 Consider the following uses noise-sensitive and discourage these uses in areas in excess of 65 CNEL:
 - Schools
 - Hospitals
 - Rest Homes
 - Long Term Care Facilities
 - Mental Care Facilities
 - Residential Uses
 - Libraries
 - Passive Recreation Uses
 - Places of Worship
- N 1.5 Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of Riverside County.
- N 4.1 Prohibit facility-related noise, received by any sensitive use, from exceeding the following worst-case noise levels:
 - a. 45 dBA 10-minute L_{eq} between 10:00 p.m. and 7:00 a.m.
 - b. $65 \text{ dBA } 10\text{-minute } L_{eq} \text{ between } 7:00 \text{ a.m. and } 10:00 \text{ p.m.}$
- N 13.1 Minimize the impacts of construction noise on adjacent uses within acceptable standards.
- N 13.2 Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse impacts on surrounding areas.
- N 13.3 Condition subdivision approval adjacent to developed/occupied noise-sensitive land uses (see policy N 1.3) by requiring the developer to submit a construction-related noise mitigation plan to the [County] for review and approval prior to issuance of a grading permit. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of this project, using methods such as:
 - i. Temporary noise attenuation fences.
 - ii. Preferential location and equipment; and
 - iii. Use of current noise suppression technology and equipment.
- N 16.3 Prohibit exposure of residential dwellings to perceptible ground vibration from passing trains as perceived at the ground or second floor. Perceptible motion shall be presumed to be a motion velocity of 0.01 inches/second over a range of 1 to 100 Hz.

To ensure noise-sensitive land uses are protected from high levels of noise (N 1.1), Table N-1 of the Noise Element identifies guidelines to evaluate proposed developments based on exterior and interior noise level limits for land uses and requires a noise analysis to determine needed mitigation measures if necessary. The Noise Element identifies residential use as a noise-sensitive land use (N 1.3) and discourages new development in areas with transportation related levels of 65 dBA CNEL or greater existing ambient noise levels. To prevent and mitigate noise



impacts for its residents (N 1.5), County of Riverside requires noise attenuation measures for sensitive land use exposed to transportation related noise levels higher than 65 dBA CNEL. Policy N 4.1 of the Noise Element sets a stationary-source exterior noise limit to not to be exceeded for a cumulative period of more than ten minutes in any hour of 65 dBA L_{eq} for daytime hours of 7:00 a.m. to 10:00 p.m., and 45 dBA L_{eq} during the noise-sensitive nighttime hours of 10:00 p.m. to 7:00 a.m. To prevent high levels of construction noise from impacting noise-sensitive land uses, policies N 13.1 through 13.3 identify construction noise mitigation requirements for new development located near existing noise-sensitive land uses. Policy 16.3 establishes the vibration perception threshold for rail-related vibration levels, used in this analysis as a threshold for determining potential vibration impacts due to Project construction. (12)

3.3.1 LAND USE COMPATIBILITY

The noise criteria identified in the County of Riverside Noise Element (Table N-1) are guidelines to evaluate the land use compatibility of transportation related noise. The compatibility criteria, shown on Exhibit 3-A, provides the County with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels.

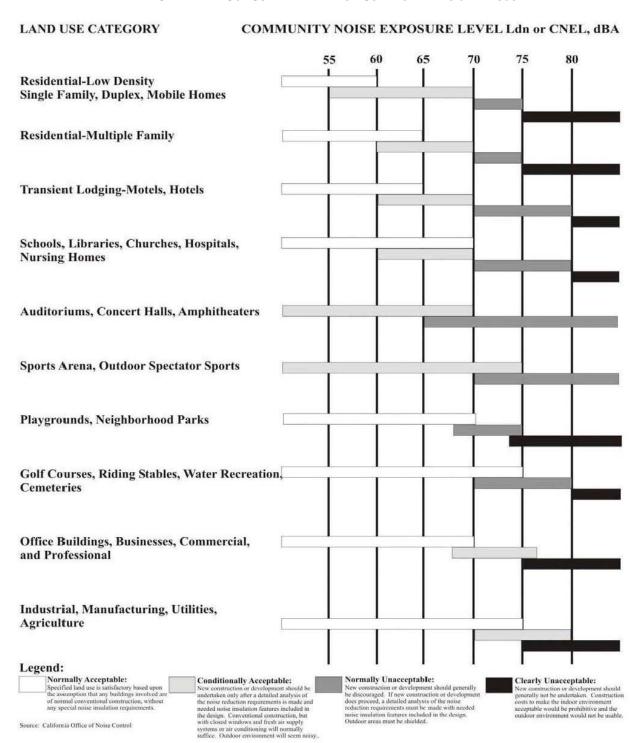
The Land Use Compatibility for Community Noise Exposure matrix describes categories of compatibility and not specific noise standards. The warehouse/industrial use of the Project is considered normally acceptable with unmitigated exterior noise levels of less than 70 dBA CNEL based on the Industrial, Manufacturing, Utilities, Agriculture land use compatibility criteria shown on Exhibit 3-A. Residential designated land uses in the Project study area 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 exterior noise levels, of up to 80 dBA CNEL for Project land uses, new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and the needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice. (12)

3.3.2 COUNTY OF RIVERSIDE STATIONARY NOISE STANDARDS

The County of Riverside has set stationary-source hourly average L_{eq} exterior noise limits to control loading dock activity, delivery van activity, entry gate & truck movements, roof-top air conditioning units, and trash enclosure activity associated with the development of the proposed Temescal Valley Business Park. The County considers noise generated using motor vehicles to be a stationary noise source when operated on private property such as at a loading dock. These facility-related noises, as projected to any portion of any surrounding property containing a habitable dwelling, hospital, school, library or nursing home, must not exceed the following worst-case noise levels.



EXHIBIT 3-A: LAND USE COMPATIBILITY FOR COMMUNITY NOISE EXPOSURE



Source: County of Riverside General Plan Noise Element, Table N-1.



Policy N 4.1 of the County of Riverside General Plan Noise Element sets a stationary-source average L_{eq} exterior noise limit not to be exceeded for a cumulative period of more than ten minutes in any hour of 65 dBA L_{eq} for daytime hours of 7:00 a.m. to 10:00 p.m., and 45 dBA L_{eq} during the noise-sensitive nighttime hours of 10:00 p.m. to 7:00 a.m. (12)

The County of Riverside Municipal Code Section 9.52.040 *General sound level standards* identify lower, more restrictive exterior noise level standards, which for the purpose of this report, are used to evaluate potential Project-related operational noise level limits instead of the higher the General Plan exterior noise level standards previously identified. The County of Riverside Municipal Code identifies exterior noise level limits of 55 dBA L_{eq} during the daytime hours of 7:00 a.m. to 10:00 p.m., and 45 dBA L_{eq} during the noise-sensitive nighttime hours of 10:00 p.m. to 7:00 a.m. for noise-sensitive uses. (13)

Based on several discussions with the County of Riverside Department of Environmental Health (DEH), Office of Industrial Hygiene (OIH), it is important to recognize that the County of Riverside Municipal Code noise level standards, incorrectly identify maximum noise level (L_{max}) standards that should instead reflect the average L_{eq} noise levels. Moreover, the County of Riverside DEH OIH's April 15th, 2015 Requirements for determining and mitigating, non-transportation noise source impacts to residential properties also identifies operational (stationary-source) noise level limits using the L_{eq} metric, consistent with the direction of the County of Riverside General Plan guidelines and standards provided in the Noise Element. Therefore, this report has been prepared consistent with direction of the County of Riverside DEH OIH guidelines and standards using the average L_{eq} noise level metric for stationary-source (operational) noise level evaluation.

3.4 CONSTRUCTION NOISE STANDARDS

To control noise impacts associated with the construction of the proposed Project, the County of Riverside has established limits to the hours of operation. Section 9.52.020 of the County's Noise Regulation ordinance indicates that noise associated with any private construction activity located within one-quarter of a mile from an inhabited dwelling is considered exempt between the hours of 6:00 a.m. and 6:00 p.m., during the months of June through September, and 7:00 a.m. and 6:00 p.m., during the months of October through May. (13) Neither the County's General Plan nor Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers for CEQA analysis purposes. Therefore, a numerical construction threshold based on Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* is used for analysis of daytime construction impacts, as discussed below.

According to the FTA, local noise ordinances are typically not very useful in evaluating construction noise. They usually relate to nuisance and hours of allowed activity, and sometimes specify limits in terms of maximum levels, but are generally not practical for assessing the impact of a construction project. Project construction noise criteria should account for the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land use. Due to the lack of standardized construction noise thresholds, the FTA provides guidelines that can be considered reasonable criteria for



construction noise assessment. The FTA considers a daytime exterior construction noise level of 80 dBA Leg as a reasonable threshold for noise sensitive residential land use. (9 p. 179)

3.5 VIBRATION STANDARDS

The County of Riverside does not have vibration standards for temporary construction, but the County's General Plan Noise Element does contain the human reaction to typical vibration levels. Vibration levels with peak particle velocity of 0.0787 inches per second are considered readily perceptible and above 0.1968 in/sec are considered annoying to people in buildings. Further, County of Riverside General Plan 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, which is used in this noise study to assess potential impacts due to Project construction vibration levels. (12)



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 County of Riverside General Plan Guidelines provide direction on noise compatibility and establish noise standards by land use type that are sufficient to assess the significance of noise impacts, they do not define the levels at which increases are considered substantial for use under Guideline A. CEQA Appendix G Guideline 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 not located within two miles of a public airport or within an airport land use plan. The closest airport is the Corona Municipal Airport located roughly 10 miles north west of the Project site. As such, the Project site would not be exposed to excessive noise levels from airport operations, and therefore, impacts are considered *less than significant*, and no further noise analysis is conducted in relation to Guideline C.

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. This approach recognizes that there is no single noise increase that renders the noise impact significant. (14)

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) (15) 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).

As previously stated, the approach used in this noise study recognizes that there is no single noise increase that renders the noise impact significant, based on a 2008 California Court of Appeal ruling on Gray v. County of Madera. (14) 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, a readily perceptible 5 dBA or greater project-related noise level increase is considered a significant impact when the without project noise levels are below 60 dBA. 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.

The FICON guidance provides an established source of criteria to assess the impacts of substantial temporary or permanent increase in ambient noise levels. Based on the FICON criteria, the amount to which a given noise level increase is considered acceptable is reduced when the without Project noise levels are already shown to exceed certain land-use specific exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or *readily perceptible*, 3 dBA or *barely perceptible*, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increases and their perceived acceptance are consistent with guidance provided by both the Federal Highway Administration (5 p. 9) and Caltrans (16 p. 2 48).

4.3 Non-Noise-Sensitive Receivers

The County of Riverside General Plan Noise Element, Table N-1, Land Use Compatibility for Community Noise Exposure was used to establish the satisfactory noise levels of significance for non-noise-sensitive land uses in the Project study area. As previously shown on Exhibit 3-A, the normally acceptable exterior noise levels for non-noise-sensitive land uses is 70 dBA CNEL. Noise



levels greater than 70 dBA CNEL are considered *conditionally acceptable* per the *Land Use Compatibility for Community Noise Exposure*. (12)

To determine if Project-related traffic noise level increases are significant at off-site non-noise-sensitive land uses, a *readily perceptible* 5 dBA and *barely perceptible* 3 dBA criteria were used. When the without Project noise levels at the non-noise-sensitive land uses are below the *normally acceptable* 70 dBA CNEL compatibility criteria, a *readily perceptible* 5 dBA or greater noise level increase is considered a significant impact. When the without Project noise levels are greater than the *normally acceptable* 70 dBA CNEL land use compatibility criteria, a *barely perceptible* 3 dBA or greater noise level increase is considered a significant impact since the noise level criteria is already exceeded. The noise level increases used to determine significant impacts for non-noise-sensitive land uses is generally consistent with the FICON noise level increase thresholds for noise-sensitive land uses but instead rely on the County of Riverside General Plan Noise Element, Table N-1, *Land Use Compatibility for Community Noise Exposure normally acceptable* 70 dBA CNEL exterior noise level criteria.

4.4 SIGNIFICANCE CRITERIA SUMMARY

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

TABLE 4-2: SIGNIFICANCE CRITERIA SUMMARY

A malusia	Receiving	Condition(a)	Significance Criteria		
Analysis	Land Use	Condition(s)	Daytime	Nighttime	
		If ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase		
0,000	Noise-Sensitive ¹	If ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase		
Off-Site Traffic		If ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase		
Traine	Non-Noise- Sensitive ^{1,2}	If ambient is < 70 dBA CNEL	≥ 5 dBA CNEL Project increase		
		If ambient is > 70 dBA CNEL	≥ 3 dBA CNEL Project increase		
	Noise- Sensitive	Exterior Noise Level Standards ³	55 dBA L _{eq} 45 dBA L _{eq}		
		If ambient is < 60 dBA Leq1	≥ 5 dBA L _{eq} Project increase		
Operational		If ambient is 60 - 65 dBA Leq1	≥ 3 dBA L _{eq} Project increase		
		If ambient is > 65 dBA Leq1	≥ 1.5 dBA L _{eq} Project increase		
		Vibration Level Threshold ⁴	0.01 in/sec RMS		
Construction	Noise Consitive	Noise Level Threshold ⁵	80 dBA L _{eq}		
Construction	Noise-Sensitive	Vibration Level Threshold ⁴	0.01 in/sec RMS		

¹ FICON, 1992.



 $^{^{\}rm 2}$ County of Riverside General Plan Noise Element, Table N-1.

³ County of Riverside General Plan Municipal Code, Section 9.52.040.

⁴ County of Riverside General Plan Noise Element, Policy N 16.3.

⁵ Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.

[&]quot;Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

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5 EXISTING NOISE LEVEL MEASUREMENTS

To assess the existing noise level environment, 24-hour noise level measurements were taken at five 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, September 23rd, 2020. 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. (17)

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. (3) 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. (9)

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. (9) 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.

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

Location ¹	Description	Energy Average Noise Level (dBA L _{eq}) ²		CNEL
		Daytime	Nighttime	
	Located northwest of the Project site on Palm			
L1	Canyon Drive near existing single-family	55.5	56.1	62.6
	residential home at 9575 Stone Canyon Road.			
	Located west of the Project site on Lawson Road			
L2	near existing single-family residential home at	56.0	54.7	61.5
	23270 Lawson Road.			
	Located southwest of the Project site on Pats			
L3	Point Drive near existing single-family residential	56.3	59.9	66.1
	home at 9455 Pats Point Drive.			
	Located southwest of the Project site on Lookout			
L4	Lane near existing single-family residential home	47.1	47.3	53.8
	at 23905 Lookout Lane.			
	Located south of the Project site on Mojeska			
L5	Summit Road near existing single-family	59.0	57.0	63.9
	residential home at 10088 Greenhorn Court.			

 $^{^{\}rm 1}\,\mbox{See}$ Exhibit 5-A for the noise level measurement locations.

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, L₁, L₂, L₅, L₈, L₂₅, L₅₀, L₉₀, L₉₅, and L₉₉ 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 surface streets. This includes the auto and heavy truck activities on study area roadway segments near the noise level measurement locations.



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

[&]quot;Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

SITE 15 SQUAW MOUNTAIN RD ICEFIELD CT LEGEND:

EXHIBIT 5-A: NOISE MEASUREMENT LOCATIONS



▲ 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. Consistent with the County of Riverside General Plan *Land Use Compatibility for Community Noise Exposure* matrix, all transportation related noise levels are presented in terms of the 24-hour CNEL's.

6.1 FHWA TRAFFIC NOISE PREDICTION MODEL

The expected roadway noise level increases from vehicular traffic were calculated by Urban Crossroads, Inc. using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model- FHWA-RD-77-108. (18) 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. (19) 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. (20)

6.2 OFF-SITE TRAFFIC NOISE PREDICTION MODEL INPUTS

Table 6-1 presents the roadway parameters used to assess the Project's off-site dBA CNEL transportation noise impacts. Table 6-1 identifies the 6 study area roadway segments, the distance from the centerline to adjacent land use based on the functional roadway classifications per the County of Riverside General Plan Circulation Element, and the posted vehicle speeds. Where posted vehicle speeds are unavailable, the 40-mph speed identified in the County of Riverside Office of Industrial Hygiene Noise Study Guidelines is used. The ADT volumes used in this study area presented on Table 6-2 are based on the *Temescal Valley Business Park Traffic Analysis*, prepared by Urban Crossroads, Inc. for the following traffic scenarios (2)

- Existing Without / With Project: This scenario refers to the existing present-day noise conditions, without and with the development of the full Project. The existing with Project scenario will not actually occur since the Project would not be fully constructed and operational until Year 2022.
- Existing plus Ambient Growth (EA) 2022 Without Temescal Canyon Road Extension Conditions
 Without / With Project: This scenario refers to the Existing + Ambient Growth conditions without
 the Temescal Canyon Road Extension (w/o ext.).
- <u>Existing plus Ambient Growth (EA) 2022 With Temescal Canyon Road Extension Conditions</u>
 <u>Without / With Project</u>: This scenario refers to the Existing + Ambient Growth conditions with the Temescal Canyon Road Extension (w/ ext.).



- Existing plus Ambient Growth plus Cumulative (EAC) 2022 Without Temescal Canyon Road
 Extension Conditions Without / With Project: This scenario refers to the Existing + Ambient
 Growth + Cumulative Projects conditions without the Temescal Canyon Road Extension (w/o ext.).
- <u>Existing plus Ambient Growth (EAC) 2022 With Temescal Canyon Road Extension Conditions</u>
 <u>Without / With Project</u>: This scenario refers to the Existing + Ambient Growth + Cumulative Projects conditions with the Temescal Canyon Road Extension (w/ ext.).
- <u>Horizon Year 2040 Conditions Without / With Project:</u> This scenario refers to the Horizon Year 2040 without and with the proposed Project.

The ADT volumes vary for each roadway segment based on the existing traffic volumes and the combination of project traffic distributions. In addition, the off-site traffic noise analysis maintains a peak hour to average daily traffic (peak-to-daily) relationship of approximately 6.31%. (2) The *General Plan Noise Element* (12) requires that future on-site traffic noise impacts be assessed using the maximum capacity design standard for highways and major roads. However, this analysis relies on a comparative analysis of the off-site traffic noise impacts, without and with project ADT traffic volumes from the Project traffic study. The use of the maximum capacity design standards is typically reserved for determining the future long-range on-site traffic noise impacts, not the comparative contributions associated with the off-site Project traffic noise level impacts.

TABLE 6-1: OFF-SITE ROADWAY PARAMETERS

ID	Roadway	Segment	Receiving Land Use ¹	Distance from Centerline to Receiving Land Use (Feet) ²	Vehicle Speed (mph) ³
1	Temescal Canyon Rd.	s/o I-15	Non-Sensitive	37'	40
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	Sensitive	59'	40
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	Sensitive	64'	45
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	Non-Sensitive	64'	40
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	Sensitive	59'	45
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	Non-Sensitive	37'	40

¹ Noise sensitive uses limited to noise sensitive residential land uses.

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



² Distance to receiving land use is based upon the right-of-way distances.

³ Source: Temescal Valley Business Park (PAR190052) Traffic Analysis.

TABLE 6-2: AVERAGE DAILY TRAFFIC VOLUMES

							Aver	age Daily T	Average Daily Traffic Volumes ¹	les1				
□	Roadway	Segment	Existing 2020	3 2020	Existing + Ambient (EA) 2022 without Extension	Ambient without sion	Existing + Ambient 2022 with Extension	Ambient with sion	Existing + Ambient + Cumulative without Extension 2022	Ambient lative ctension 2	Existing + Ambient + Cumulative with Extension 2022	Ambient ive with n 2022	Horizon Year 2040	. Year
			Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project
⊣	Temescal Canyon Rd.	s/o I-15	7,262	8,142	7,556	8,436	7,556	7,849	10,796	11,676	10,796	11,089	10,468	10,761
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	12,101	12,835	12,590	13,324	12,590	12,737	29,517	30,251	18,528	18,675	17,442	17,589
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	15,106	15,860	15,716	16,470	15,716	16,470	17,710	18,464	17,710	18,464	21,773	22,527
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	15,092	16,667	15,702	17,277	15,702	17,277	26,161	27,736	26,383	27,958	23,753	25,328
2	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	8,094	8,388	8,421	8,715	8,421	8,715	11,569	11,863	11,569	11,863	11,667	11,960
9	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	7,540	9,388	7,844	69'6	7,844	9,693	9,184	11,033	9,184	11,033	10,867	12,716
¹ Ter	¹ Temescal Valley Business Park (PAR190052) Traffic Analysis	0052) Traffic Analysis.												



Table 6-3 provides the time of day (daytime, evening, and nighttime) vehicle splits. The daily Project truck trip-ends were assigned to the individual off-site study area roadway segments based on the Project truck trip distribution percentages documented in the *Traffic Analysis*. Using the Project truck trips in combination with the Project trip distribution, Urban Crossroads, Inc. calculated the number of additional Project truck trips and vehicle mix percentages for each of the study area roadway segments. Table 6-4 shows the traffic flow by vehicle type (vehicle mix) used for all without Project traffic scenarios, and Tables 6-5 to 6-10 show the vehicle mixes used for the with Project traffic scenarios.

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

TABLE 6-3: TIME OF DAY VEHICLE SPLITS

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

¹ County of Riverside Office of Industrial Hygiene. Values rounded to the nearest one-hundredth.

TABLE 6-4: WITHOUT PROJECT VEHICLE MIX

Classification		Total % Traffic Flow		Total
Classification	Autos	Medium Trucks	Heavy Trucks	Total
All Segments	81.35%	6.69%	11.96%	100.00%

Based on an existing vehicle count taken at Temescal Canyon Road and Dawson Canyon Road (Temescal Valley Business Park (PAR190052) Traffic Analysis, Urban Crossroads, Inc.). Vehicle mix percentage values rounded to the nearest one-hundredth.

TABLE 6-5: EXISTING 2020 WITH PROJECT VEHICLE MIX

				With P	roject¹	
ID	Roadway	Segment	Autos	Medium Trucks	Heavy Trucks	Total ²
1	Temescal Canyon Rd.	s/o I-15	83.37%	5.96%	10.67%	100.00%
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	82.42%	6.30%	11.28%	100.00%
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	82.11%	6.45%	11.44%	100.00%
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	82.99%	6.13%	10.87%	100.00%
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	82.00%	6.45%	11.54%	100.00%
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	85.02%	5.37%	9.61%	100.00%

¹ Temescal Valley Business Park (PAR190052) Traffic Analysis.



[&]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.

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

TABLE 6-6: EA W/O EXT. 2022 WITH PROJECT VEHICLE MIX

				With P	roject ¹	
ID	Roadway	Segment	Autos	Medium Trucks	Heavy Trucks	Total ²
1	Temescal Canyon Rd.	s/o I-15	83.30%	5.99%	10.71%	100.00%
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	82.38%	6.32%	11.30%	100.00%
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	82.08%	6.46%	11.46%	100.00%
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	82.94%	6.15%	10.91%	100.00%
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	81.98%	6.46%	11.56%	100.00%
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	84.91%	5.41%	9.68%	100.00%

¹ Temescal Valley Business Park (PAR190052) Traffic Analysis.

TABLE 6-7: EA W/ EXT. 2022 WITH PROJECT VEHICLE MIX

				With P	roject ¹	
ID	Roadway	Segment	Autos	Medium Trucks	Heavy Trucks	Total ²
1	Temescal Canyon Rd.	s/o I-15	82.05%	6.44%	11.51%	100.00%
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	81.57%	6.61%	11.82%	100.00%
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	82.08%	6.46%	11.46%	100.00%
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	82.94%	6.15%	10.91%	100.00%
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	81.98%	6.46%	11.56%	100.00%
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	84.91%	5.41%	9.68%	100.00%

¹ Temescal Valley Business Park (PAR190052) Traffic Analysis.

TABLE 6-8: EAC W/O EXT. 2022 WITH PROJECT VEHICLE MIX

				With P	roject¹	
ID	Roadway	Segment	Autos	Medium Trucks	Heavy Trucks	Total ²
1	Temescal Canyon Rd.	s/o I-15	82.76%	6.18%	11.06%	100.00%
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	81.80%	6.52%	11.67%	100.00%
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	82.00%	6.48%	11.51%	100.00%
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	82.34%	6.35%	11.31%	100.00%
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	81.81%	6.52%	11.67%	100.00%
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	84.48%	5.57%	9.96%	100.00%

¹ Temescal Valley Business Park (PAR190052) Traffic Analysis.



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

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

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

TABLE 6-9: EAC W/ EXT. 2022 WITH PROJECT VEHICLE MIX

				With P	roject ¹	
ID	Roadway	Segment	Autos	Medium Trucks	Heavy Trucks	Total ²
1	Temescal Canyon Rd.	s/o I-15	81.85%	6.51%	11.64%	100.00%
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	81.50%	6.63%	11.87%	100.00%
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	82.00%	6.48%	11.51%	100.00%
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	82.33%	6.36%	11.31%	100.00%
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	81.81%	6.52%	11.67%	100.00%
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	84.48%	5.57%	9.96%	100.00%

¹ Temescal Valley Business Park (PAR190052) Traffic Analysis.

TABLE 6-10: HY 2040 WITH PROJECT VEHICLE MIX

				With P	roject ¹	
ID	Roadway	Segment	Autos	Medium Trucks	Heavy Trucks	Total ²
1	Temescal Canyon Rd.	s/o I-15	81.86%	6.50%	11.64%	100.00%
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	81.51%	6.63%	11.86%	100.00%
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	81.89%	6.52%	11.59%	100.00%
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	82.43%	6.32%	11.25%	100.00%
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	81.81%	6.52%	11.67%	100.00%
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	84.06%	5.71%	10.22%	100.00%

¹ Temescal Valley Business Park (PAR190052) Traffic Analysis.



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

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

7 OFF-SITE TRANSPORTATION NOISE IMPACTS

To assess the off-site transportation CNEL noise level impacts associated with the proposed Project, noise contours were developed based on the *Temescal Valley Business Park Traffic Analysis*. (2) Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway.

7.1 TRAFFIC NOISE CONTOURS

Noise contours were used to assess the Project's incremental 24-hour dBA CNEL 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 CNEL noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the Project study area.

Tables 7-1 through 7-12 present a summary of the exterior dBA CNEL traffic noise levels without barrier attenuation. Roadway segments are analyzed from the without Project to the with Project conditions in each of the following timeframes: Existing 2020, Existing plus Ambient Growth (EA) 2022 Without Temescal Canyon Road Extension, EA 2022 With Temescal Canyon Road Extension, EA plus Cumulative Projects without Temescal Canyon Road Extension (EAC w/o ext.) 2022, EA plus Cumulative Projects with Temescal Canyon Road Extension (EAC w/ext.) 2022, and Horizon Year (HY) 2040. Appendix 7.1 includes a summary of the dBA CNEL traffic noise level contours for each of the traffic scenarios.

TABLE 7-1: EXISTING 2020 WITHOUT PROJECT NOISE CONTOURS

			Receiving	CNEL at	_ 10 00.1	nce to Co enterline	
ID	Road	Segment	Land Use ¹	Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Temescal Canyon Rd.	s/o I-15	Non-Sensitive	72.3	52	113	244
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	Sensitive	72.0	80	172	371
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	Sensitive	73.5	109	235	506
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	Non-Sensitive	72.6	95	204	440
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	Sensitive	71.1	70	151	325
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	Non-Sensitive	72.4	54	116	250

¹ Noise sensitive uses limited to noise sensitive residential land uses.



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

TABLE 7-2: EXISTING 2020 WITH PROJECT NOISE CONTOURS

			Receiving	CNEL at Receiving		nce to Co enterline	
ID	Road	Segment	Land Use ¹	Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Temescal Canyon Rd.	s/o I-15	Non-Sensitive	72.4	53	114	247
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	Sensitive	72.0	80	173	373
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	Sensitive	73.5	110	237	510
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	Non-Sensitive	72.6	96	207	446
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	Sensitive	71.2	70	152	327
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	Non-Sensitive	72.6	55	119	256

 $^{^{\}rm 1}$ Noise sensitive uses limited to noise sensitive residential land uses.

TABLE 7-3: EA W/O EXT. 2022 WITHOUT PROJECT NOISE CONTOURS

			Receiving	CNEL at		nce to Co enterline	
ID	Road	Segment	Land Use ¹	Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Temescal Canyon Rd.	s/o I-15	Non-Sensitive	72.5	54	116	250
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	Sensitive	72.1	82	177	381
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	Sensitive	73.6	112	241	519
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	Non-Sensitive	72.7	97	210	452
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	Sensitive	71.3	72	155	334
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	Non-Sensitive	72.6	55	119	257

¹ Noise sensitive uses limited to noise sensitive residential land uses.



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

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

TABLE 7-4: EA W/O EXT. 2022 WITH PROJECT NOISE CONTOURS

			Receiving	CNEL at		nce to Co enterline	
ID	Road	Segment	Land Use ¹	Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Temescal Canyon Rd.	s/o I-15	Non-Sensitive	72.5	55	117	253
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	Sensitive	72.2	82	178	383
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	Sensitive	73.7	113	243	523
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	Non-Sensitive	72.8	99	212	458
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	Sensitive	71.3	72	156	335
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	Non-Sensitive	72.8	57	122	262

 $^{^{\}rm 1}$ Noise sensitive uses limited to noise sensitive residential land uses.

TABLE 7-5: EA W/ EXT. 2022 WITHOUT PROJECT NOISE CONTOURS

			Receiving	CNEL at		nce to Co enterline	
ID	Road	Segment	Land Use ¹	Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Temescal Canyon Rd.	s/o I-15	Non-Sensitive	72.5	54	116	250
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	Sensitive	72.1	82	177	381
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	Sensitive	73.6	112	241	519
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	Non-Sensitive	72.7	97	210	452
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	Sensitive	71.3	72	155	334
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	Non-Sensitive	72.6	55	119	257

¹ Noise sensitive uses limited to noise sensitive residential land uses.



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

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

TABLE 7-6: EA W/ EXT. 2022 WITH PROJECT NOISE CONTOURS

			Receiving	CNEL at		nce to Co enterline	
ID	Road	Segment	Land Use ¹	Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Temescal Canyon Rd.	s/o I-15	Non-Sensitive	72.5	54	117	251
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	Sensitive	72.2	82	177	381
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	Sensitive	73.7	113	243	523
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	Non-Sensitive	72.8	99	212	458
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	Sensitive	71.3	72	156	335
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	Non-Sensitive	72.8	57	122	262

 $^{^{\}rm 1}$ Noise sensitive uses limited to noise sensitive residential land uses.

TABLE 7-7: EAC W/O EXT. 2022 WITHOUT PROJECT NOISE CONTOURS

			Receiving	CNEL at		nce to Co enterline	
ID	Road	Segment	Land Use ¹	Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Temescal Canyon Rd.	s/o I-15	Non-Sensitive	74.0	68	147	317
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	Sensitive	75.8	145	312	672
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	Sensitive	74.2	121	261	562
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	Non-Sensitive	75.0	137	295	635
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	Sensitive	72.7	89	192	413
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	Non-Sensitive	73.3	61	132	285

¹ Noise sensitive uses limited to noise sensitive residential land uses.



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

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

TABLE 7-8: EAC W/O EXT. 2022 WITH PROJECT CONDITIONS NOISE CONTOURS

			Receiving	CNEL at		nce to Co enterline	
ID	Road	Segment	Land Use ¹	Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Temescal Canyon Rd.	s/o I-15	Non-Sensitive	74.1	69	149	320
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	Sensitive	75.9	145	313	673
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	Sensitive	74.2	122	263	566
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	Non-Sensitive	75.0	138	297	640
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	Sensitive	72.7	89	192	414
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	Non-Sensitive	73.4	63	135	291

 $^{^{\}rm 1}$ Noise sensitive uses limited to noise sensitive residential land uses.

TABLE 7-9: EAC W/ EXT. 2022 WITHOUT PROJECT CONDITIONS NOISE CONTOURS

			Receiving	CNEL at		nce to Co enterline	
ID	Road	Segment	Land Use ¹	Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Temescal Canyon Rd.	s/o I-15	Non-Sensitive	74.0	68	147	317
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	Sensitive	73.8	106	229	493
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	Sensitive	74.2	121	261	562
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	Non-Sensitive	75.0	138	297	639
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	Sensitive	72.7	89	192	413
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	Non-Sensitive	73.3	61	132	285

¹ Noise sensitive uses limited to noise sensitive residential land uses.



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

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

TABLE 7-10: EAC W/ EXT. 2022 WITH PROJECT CONDITIONS NOISE CONTOURS

			Receiving	CNEL at		nce to Co enterline	
ID	Road	Segment	Land Use ¹	Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Temescal Canyon Rd.	s/o I-15	Non-Sensitive	74.0	69	148	318
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	Sensitive	73.8	106	229	493
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	Sensitive	74.2	122	263	566
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	Non-Sensitive	75.0	139	299	644
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	Sensitive	72.7	89	192	414
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	Non-Sensitive	73.4	63	135	291

 $^{^{\}rm 1}$ Noise sensitive uses limited to noise sensitive residential land uses.

TABLE 7-11: HY 2040 WITHOUT PROJECT CONDITIONS NOISE CONTOURS

			Receiving	CNEL at		nce to Co enterline	
ID	Road	Segment	Land Use ¹	Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Temescal Canyon Rd.	s/o I-15	Non-Sensitive	73.9	67	144	311
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	Sensitive	73.6	102	220	473
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	Sensitive	75.1	139	299	645
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	Non-Sensitive	74.5	128	277	596
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	Sensitive	72.7	89	193	415
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	Non-Sensitive	74.0	69	148	319

¹ Noise sensitive uses limited to noise sensitive residential land uses.



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

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

TABLE 7-12: HY 2040 WITH PROJECT CONDITIONS NOISE CONTOURS

			Receiving	CNEL at		nce to Co enterline	
ID	Road	Segment	Land Use ¹	Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Temescal Canyon Rd.	s/o I-15	Non-Sensitive	73.9	67	145	312
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	Sensitive	73.6	102	220	473
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	Sensitive	75.1	140	301	649
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	Non-Sensitive	74.6	129	279	601
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	Sensitive	72.7	90	193	416
6	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	Non-Sensitive	74.1	70	150	324

¹ Noise sensitive uses limited to noise sensitive residential land uses.

7.2 Existing 2020 Project Traffic Noise Level Increases

An analysis of existing traffic noise levels plus traffic noise generated by the proposed Project has been included in this report to fully analyze all the existing traffic scenarios identified in the *Temescal Valley Business Park Traffic Analysis* prepared by Urban Crossroads, Inc. This condition is provided solely for informational purposes and will not occur, since the Project will not be fully developed and occupied under Existing conditions. Therefore, no mitigation measures are considered to reduce the Existing Plus Project traffic noise level increases. The future EAC and HY traffic noise conditions that include all cumulative projects are used to determine the significance of the Project off-site traffic noise level increases on the study area roadway segments. Table 7-1 shows the Existing without Project conditions CNEL noise levels. The Existing without Project exterior noise levels are expected to range from 71.1 to 73.5 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-2 shows the Existing with Project conditions will range from 71.2 to 73.5 dBA CNEL. Table 7-13 shows that the Project off-site traffic noise level impacts will range from 0.0 to 0.2 dBA CNEL.

7.3 EA w/o Ext. 2022 Project Traffic Noise Level Increases

Table 7-3 presents the Existing plus Ambient Growth (EA) without Temescal Canyon Road Extension (EA w/o ext.) without Project conditions CNEL noise levels. The EA w/o ext. without Project exterior noise levels are expected to range from 71.3 to 73.6 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-4 shows the EA without Temescal Canyon Road Extension (EA w/o ext.) with Project conditions will range from 71.3 to 73.7 dBA CNEL. Table 7-14 shows that the Project off-site traffic noise level increases will range from 0.0 to 0.1 dBA CNEL.

7.4 EA w/ Ext. 2022 Project Traffic Noise Level Increases

Table 7-5 presents the Existing plus Ambient Growth (EA) with Temescal Canyon Road Extension (EA w/ ext.) without Project conditions CNEL noise levels. The EA w/ ext. without Project exterior



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

noise levels are expected to range from 71.3 to 73.6 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-6 shows the EA with Temescal Canyon Road Extension (EA w/ ext.) with Project conditions will range from 71.3 to 73.7 dBA CNEL. Table 7-15 shows that the Project off-site traffic noise level increases will range from 0.0 to 0.1 dBA CNEL.

7.5 EAC w/o Ext. 2022 Project Traffic Noise Level Increases

Table 7-7 presents the Existing plus Ambient Growth plus Cumulative without Temescal Canyon Road Extension (EAC w/o ext.) without Project conditions CNEL noise levels. The EAC w/o ext. without Project exterior noise levels are expected to range from 72.7 to 75.8 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-8 shows that the EAC w/o ext. with Project conditions will range from 72.7 to 75.9 dBA CNEL. Table 7-16 shows that the Project off-site traffic noise level increases will range from 0.0 to 0.1 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Table 4-2, land uses adjacent to the study area roadway segments would experience *less than significant* noise level increases due to unmitigated Project-related traffic noise levels.

7.6 EAC w/ ext. 2022 Project Traffic Noise Level Increases

Table 7-9 presents the Existing plus Ambient Growth plus Cumulative with Temescal Canyon Road Extension (EAC w/ ext.) without Project conditions CNEL noise levels. The EAC w/ ext. without Project exterior noise levels are expected to range from 72.7 to 75.0 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-10 shows that the EAC w/ ext. with Project conditions will range from 72.7 to 75.0 dBA CNEL. Table 7-17 shows that the Project off-site traffic noise level increases will range from 0.0 to 0.1 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Table 4-2, land uses adjacent to the study area roadway segments would experience *less than significant* noise level increases due to unmitigated Project-related traffic noise levels.

7.7 HY 2040 PROJECT TRAFFIC NOISE LEVEL INCREASES

Table 7-11 presents the Horizon Year (HY) without Project conditions CNEL noise levels. The HY without Project exterior noise levels are expected to range from 72.7 to 75.1 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-12 shows that the HY with Project conditions will also range from 72.7 to 75.1 dBA CNEL. Table 7-18 shows that the Project off-site traffic noise level increases will range from 0.0 to 0.1 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Table 4-2, land uses adjacent to the study area roadway segments would experience *less than significant* noise level increases due to unmitigated Project-related traffic noise levels.



TABLE 7-13: EXISTING 2020 WITH PROJECT TRAFFIC NOISE LEVEL INCREASES

٥	Road	Segment	CNE	CNEL at Receiving Land Use (dBA)²	ving A)²	Noise Sensitive	Increme Level Thre	Incremental Noise Level Increase Threshold ³
			No Project	With Project	Project Addition	Land Use?	Limit	Exceeded?
1	Temescal Canyon Rd.	s/o I-15	72.3	72.4	0.1	No	3.0	No
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	72.0	72.0	0.0	Yes	1.5	No
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	73.5	73.5	0.1	Yes	1.5	No
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	72.6	72.6	0.1	No	3.0	No
2	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	71.1	71.2	0.0	Yes	1.5	No
9	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	72.4	72.6	0.2	No	3.0	No

¹ Noise sensitive uses limited to noise sensitive residential land uses.
² The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
³ Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-2)?



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TABLE 7-14: EA W/O EXT. 2022 WITH PROJECT TRAFFIC NOISE INCREASES

٥	Road	Segment	CNE	CNEL at Receiving Land Use (dBA) ²	ving A)²	Noise Sensitive	Increme Level Thre	Incremental Noise Level Increase Threshold ³
			No Project	With Project	Project Addition	Land Use?	Limit	Exceeded?
1	Temescal Canyon Rd.	s/o I-15	72.5	72.5	0.1	No	3.0	No
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	72.1	72.2	0.0	Yes	1.5	No
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	73.6	73.7	0.1	Yes	1.5	No
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	72.7	72.8	0.1	ON	3.0	No
2	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	71.3	71.3	0.0	Yes	1.5	No
9	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	72.6	72.8	0.1	ON	3.0	No



¹ Noise sensitive uses limited to noise sensitive residential land uses.
² The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
³ Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-2)?

TABLE 7-15: EA W/ EXT. 2022 WITH PROJECT TRAFFIC NOISE INCREASES

No With Project Project Addition NRd. s/o I-15 72.5 72.5 0.0 NRd. s/o Dos Lagos Rd. 73.6 73.7 0.1 NRd. s/o Dawson Canyon Rd. 72.7 72.8 0.1 Rd. s/o Temescal Canyon Rd. 71.3 71.3 0.0 Rd. e/o Temescal Canyon Rd. 72.6 72.8 0.1	D	Road	Segment	CNE	CNEL at Receiving Land Use (dBA) ²	ving (A) ²	Noise Sensitive	Increme Level Thre	Incremental Noise Level Increase Threshold ³
1 Rd. s/o I-15 72.5 72.5 0.0 1 Rd. s/o Dos Lagos Rd. 72.1 72.2 0.0 1 Rd. s/o Dos Lagos Rd. 73.6 73.7 0.1 1 Rd. s/o Dawson Canyon Rd. 72.7 72.8 0.1 Rd. s/o Temescal Canyon Rd. 71.3 71.3 0.0 Rd. e/o Temescal Canyon Rd. 72.6 72.8 0.1				No Project	With Project	Project Addition	Land Use?	Limit	Exceeded?
1 Rd. s/o Trilogy Pkwy. 72.1 72.2 0.0 1 Rd. s/o Dos Lagos Rd. 73.6 73.7 0.1 1 Rd. s/o Dawson Canyon Rd. 72.7 72.8 0.1 Rd. s/o Temescal Canyon Rd. 71.3 71.3 0.0 Rd. e/o Temescal Canyon Rd. 72.6 72.8 0.1	1	Temescal Canyon Rd.	s/o I-15	72.5	72.5	0.0	No	3.0	No
1 Rd. s/o Dos Lagos Rd. 73.6 73.7 0.1 1 Rd. s/o Dawson Canyon Rd. 72.7 72.8 0.1 Rd. s/o Temescal Canyon Rd. 71.3 71.3 0.0 Rd. e/o Temescal Canyon Rd. 72.6 72.8 0.1	2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	72.1	72.2	0.0	Yes	1.5	No
Rd. s/o Dawson Canyon Rd. 72.7 72.8 0.1 Rd. s/o Temescal Canyon Rd. 71.3 71.3 0.0 Rd. e/o Temescal Canyon Rd. 72.6 72.8 0.1	3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	9.87	73.7	0.1	Yes	1.5	No
Rd. s/o Temescal Canyon Rd. 71.3 71.3 0.0 Rd. e/o Temescal Canyon Rd. 72.6 72.8 0.1	4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	72.7	72.8	0.1	No	3.0	No
Rd. e/o Temescal Canyon Rd. 72.6 72.8 0.1	5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	71.3	71.3	0.0	Yes	1.5	No
	9	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	72.6	72.8	0.1	No	3.0	No

¹ Noise sensitive uses limited to noise sensitive residential land uses.



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² The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use. ³ Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-2)?

TABLE 7-16: EAC W/O EXT. 2022 WITH PROJECT TRAFFIC NOISE LEVEL INCREASES

QI	Road	Segment	CNE	CNEL at Receiving Land Use (dBA) ²	ving A)²	Noise Sensitive	Increme Level Thre	Incremental Noise Level Increase Threshold ³
			No Project	With Project	Project Addition	Land Use?	Limit	Exceeded?
1	Temescal Canyon Rd.	s/o I-15	74.0	74.1	0.1	No	3.0	ON
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	75.8	75.9	0.0	Yes	1.5	oN
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	74.2	74.2	0.0	Yes	1.5	oN
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	75.0	75.0	0.0	No	3.0	oN
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	72.7	72.7	0.0	Yes	1.5	ON
9	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	73.3	73.4	0.1	No	3.0	No

¹ Noise sensitive uses limited to noise sensitive residential land uses.

² The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use. ³ Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-2)?



TABLE 7-17: EAC W/ EXT. 2022 WITH PROJECT TRAFFIC NOISE LEVEL INCREASES

QI	Road	Segment	CNE	CNEL at Receiving Land Use (dBA) ²	ving A)²	Noise Sensitive	Increme Level Thre	Incremental Noise Level Increase Threshold ³
			No Project	With Project	Project Addition	Land Use?	Limit	Exceeded?
1	Temescal Canyon Rd.	s/o I-15	74.0	74.0	0.0	No	3.0	No
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	73.8	73.8	0.0	Yes	1.5	No
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	74.2	74.2	0.0	Yes	1.5	No
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	0.27	75.0	0.0	No	3.0	No
2	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	72.7	72.7	0.0	Yes	1.5	No
9	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	73.3	73.4	0.1	No	3.0	No

¹ Noise sensitive uses limited to noise sensitive residential land uses.

² The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use. ³ Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-2)?



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TABLE 7-18: HY 2040 WITH PROJECT TRAFFIC NOISE LEVEL INCREASES

QI	Road	Segment	CNE	CNEL at Receiving Land Use (dBA) ²	ving A)²	Noise Sensitive	Increme Level Thre	Incremental Noise Level Increase Threshold³
			No Project	With Project	Project Addition	Land Use?	Limit	Exceeded?
1	Temescal Canyon Rd.	s/o I-15	73.9	73.9	0.0	ON	3.0	No
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	73.6	73.6	0.0	Yes	1.5	No
3	Temescal Canyon Rd.	s/o Dos Lagos Rd.	75.1	75.1	0.0	Yes	1.5	No
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	74.5	74.6	0.1	oN	3.0	No
2	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	72.7	72.7	0.0	SəV	1.5	No
9	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	74.0	74.1	0.1	No	3.0	No

¹ Noise sensitive uses limited to noise sensitive residential land uses.

² The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use. ³ Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-2)?



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8 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, outpatient 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.

To describe the potential off-site Project noise levels, five receiver locations in the vicinity of the Project site were identified. All distances are measured from the Project site boundary to the outdoor living areas (e.g., private backyards) or at the building façade, whichever is closer to the Project site. The selection of receiver locations is based on FHWA guidelines and is consistent with additional guidance provided by Caltrans and the FTA, as previously described in Section 5.2. 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. Distance is measured in a straight line from the project boundary to each receiver location.

- R1: Location R1 represents the existing noise sensitive residence at 9575 Stone Canyon Road, approximately 1,545 feet northwest of the Project site. R1 is placed at the private outdoor living areas (backyards) facing the Project site. A 24-hour noise measurement was taken near this location, L1, to describe the existing ambient noise environment.
- R2: Location R2 represents the existing noise sensitive residence on Lawson Road, approximately 1,317 feet west of the Project site. R2 is placed at the private outdoor living areas (backyards) facing the Project site. A 24-hour noise measurement was taken near this location, L2, to describe the existing ambient noise environment.
- R3: Location R3 represents the existing noise sensitive residence at 9490 Pats Point Drive, approximately 2,852 feet southwest of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receiver R3 is placed at the residential building façade. A 24-hour noise measurement near this location, L3, is used to describe the existing ambient noise environment.
- R4: Location R4 represents the existing noise sensitive residence at 23905 Lookout Lane, approximately 3,390 feet southwest of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receiver R4 is placed at the residential building façade. A 24-hour noise measurement near this location, L4, is used to describe the existing ambient noise environment.

R5: Location R5 represents the existing noise sensitive residence at 10088 Greenhorn Court, approximately 4,178 feet south of the Project site. R5 is placed at the private outdoor living areas (backyards) facing the Project site. A 24-hour noise measurement near this location, L5, is used to describe the existing ambient noise environment.

en en SITE 15 SQUAW MOUNTAIN RD LEGEND: Receiver Locations

EXHIBIT 8-A: RECEIVER LOCATIONS

Distance from receiver to Project site boundary (in feet)

9 OPERATIONAL NOISE IMPACTS

This section analyzes the potential stationary-source operational noise impacts at the nearest receiver locations, identified in Section 8, resulting from the operation of the proposed Temescal Valley Business Park Project. Exhibit 9-A identifies the noise source locations used to assess the hourly average L_{eq} operational noise levels consistent with the County of Riverside General Plan Noise Element Policy N 4.1.

9.1 OPERATIONAL NOISE SOURCES

This operational noise analysis is intended to describe noise level impacts associated with the expected typical of daytime and nighttime activities at the Project site. To present the potential worst-case noise conditions, this analysis assumes the Project would be operational 24 hours per day, seven days per week. Consistent with similar warehouse uses, the Project business operations would primarily be conducted within the enclosed buildings, except for traffic movements, parking activities, as well as loading and unloading of trucks and vans at designated loading bays. The on-site Project-related noise sources are expected to include: loading dock activity, delivery van activity, entry gate & truck movements, roof-top air conditioning units, and trash enclosure activity.

9.2 REFERENCE NOISE LEVELS

To estimate the Project operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed Project. This section provides a detailed description of the reference noise level measurements shown on Table 9-1 used to estimate the Project operational noise impacts. It is important to note that the following projected noise levels assume the worst-case noise environment with the loading dock activity, delivery van activity, entry gate & truck movements, roof-top air conditioning units, and trash enclosure activity all operating continuously. These sources of noise activity will likely vary throughout the day.



EXHIBIT 9-A: OPERATIONAL NOISE SOURCE LOCATIONS

TABLE 9-1: REFERENCE NOISE LEVEL MEASUREMENTS

Noise Source ¹	Noise Source	Min.,	/Hour²	Reference Noise	Sound Power
Noise Source	Height (Feet)	Day	Night	Level (dBA L _{eq}) @ 50 feet	Level (dBA)³
Loading Dock Activity	8'	60	60	62.8	103.4
Delivery Van Activity	5'	60	60	61.4	101.2
Entry Gate & Truck Movements	8'	_4	_4	58.0	89.7
Roof-Top Air Conditioning	5'	39	28	57.2	88.9
Trash Enclosure Activity	5'	5	5	57.3	89.0

¹ As measured by Urban Crossroads, Inc.

9.2.1 MEASUREMENT PROCEDURES

The reference noise level measurements presented in this section were collected using a Larson Davis LxT Type 1 precision sound level meter (serial number 01146). The LxT sound level meter was calibrated using a Larson-Davis calibrator, Model CAL 200, was programmed in "slow" mode to record noise levels in "A" weighted form and was located at approximately five feet above the ground elevation for each measurement. 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. (17)

9.2.2 LOADING DOCK ACTIVITY

The Project includes a single large loading dock area on the eastern building façade providing 19 dock doors. The reference loading dock activities are intended to describe the typical operational noise source levels associated with the Project. This includes truck idling, deliveries, backup alarms, unloading/loading, docking including a combination of tractor trailer semi-trucks, two-axle delivery trucks, and background forklift operations. At a uniform reference distance of 50 feet, Urban Crossroads collected a reference noise level of 62.8 dBA Leq.

The loading dock activity noise level measurement was taken over a fifteen-minute period and represents multiple noise sources taken from the center of activity. The reference noise level measurement includes employees unloading a docked truck container included the squeaking of the truck's shocks when weight was removed from the truck, employees playing music over a radio, as well as a forklift horn and backup alarm. In addition, during the noise level measurement a truck entered the loading dock area and proceeded to reverse and dock in a nearby loading bay, adding truck engine, idling, air brakes noise, in addition to on-going idling of an already docked truck.

 $^{^2}$ Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site. "Day" = 7:00 a.m. to 10:00 p.m.; "Night" = 10:00 p.m. to 7:00 a.m.

³ 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.

⁴ Entry Gate & Truck Movements are calculate based on the number of events by time of day (See Table 9-2).

The noise level measurements represent the typical weekday dry goods logistics warehouse operation in a single building with a loading dock area on the eastern side of the building façade. In addition, since this reference noise level describes the peak noise source activity, it is also used in the noise prediction model as area source to conservatively describe the entire loading dock area even though during normal operations, the loading dock noise source activity will occur at different locations throughout the loading dock area.

9.2.3 DELIVERY VAN ACTIVITY

To describe the delivery van activity, Urban Crossroads, collected reference noise level measurements at an existing delivery service partner. The delivery service partner maintains over 50 delivery vans and supporting operations. The reference noise level measurements suggest that at the center of activity the delivery vans generate a noise level of 61.4 dBA L_{eq} at a reference distance of 50 feet.

9.2.4 ENTRY GATE & TRUCK MOVEMENTS

An entry gate and truck movements reference noise level measurement was taken at a Fulfillment & Logistics Services distribution over a 15-minute period and represents multiple noise sources producing a reference noise level of 58.0 dBA L_{eq} at 50 feet. The noise sources included at this measurement location account for the rattling and squeaking during normal opening and closing operations, the gate closure equipment, truck engines idling outside the entry gate, truck movements through the entry gate, and background truck court activities and forklift backup alarm noise.

Consistent with the *Temescal Valley Business Park Traffic Analysis* prepared by Urban Crossroads, Inc., the Project is expected to generate a total of approximately 82 two-way truck trips per day (41 inbound and 41 outbound). Truck movements will be limited to Driveway 2, (2) Using the estimated number of truck trips in combination with time-of-day vehicle splits, the number of entry gate and truck movements were calculated. As shown on Table 9-2, this information is then used to calculate the entry gate and truck movements operational noise source activity based on the number of events by time of day.

TABLE 9-2: ENTRY GATE & TRUCK MOVEMENTS BY LOCATION

Entry Gate &	Total		Truck	Time of	Day Vehicl	e Splits⁵	Truc	k Moveme	ents ⁶
Truck Movement Location ¹	Project Truck Trips ²	Trip Dist. ³	Trips by Location ⁴	Day	Evening	Night	Day	Evening	Night
Driveway 2	82	100%	82	86.50%	2.70%	10.80%	71	2	9

¹ Driveway location as shown on the Site Plan Exhibit 9-A.

² Total Project truck trips according to Table 4-2 of the Temescal Valley Business Park Traffic Analysis.

³ Project truck trip distribution according to Exhibit 4-1 of the Temescal Valley Business Park Traffic Analysis.

⁴ Calculated trip trucks per location represents the product of the total project truck trips and the trip distribution.

⁵ Heavy truck time of day vehicle splits as shown on Table 6-3.

⁶ Calculated time of day entry gate and truck movements by location.

9.2.5 ROOF-TOP AIR CONDITIONING

To assess the noise levels created by the roof-top air conditioning units, reference noise level measurements were collected from a Lennox SCA120 series 10-ton model packaged air conditioning unit. At the uniform reference distance of 50 feet, the reference noise levels are 57.2 dBA L_{eq}. Based on the typical operating conditions observed over a four-day measurement period, the roof-top air conditioning units are estimated to operate for an average of 39 minutes per hour during the daytime hours, and 28 minutes per hour during the nighttime hours. For this noise analysis, the air conditioning units are expected to be located on the roof of the proposed building. This reference noise level describes the expected roof-top air conditioning units located 5 feet above the roof for the planned air conditioning units at the Project Site.

9.2.6 TRASH ENCLOSURE ACTIVITY

To describe the noise levels associated with a trash enclosure activity, Urban Crossroads collected a reference noise level measurement at an existing trash enclosure containing two dumpster bins. The trash enclosure noise levels describe metal gates opening and closing, metal scraping against concrete floor sounds, dumpster movement on metal wheels, and trash dropping into the metal dumpster. The reference noise levels describe trash enclosure noise activities when trash is dropped into an empty metal dumpster, as would occur at the Project site. The measured reference noise level at the uniform 50-foot reference distance is 56.8 dBA L_{eq} for the trash enclosure activity. The reference noise level describes the expected noise source activities associated with the trash enclosures for the Project's proposed building. Typical trash enclosure activities are estimated to occur for 5 minutes per hour.

9.3 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 (L_w) to describe individual noise sources. While sound pressure levels (e.g. L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish from 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 A default ground attenuation factor of 0.5 was used in the noise analysis to account for mixed ground representing a combination of hard and soft surfaces consistent with study area conditions. Appendix 9.1 includes the detailed noise model inputs.

9.4 Project Operational Noise Levels

Using the reference noise levels to represent the proposed Project operations that include loading dock activity, delivery van activity, entry gate & truck movements, roof-top air conditioning units, and trash enclosure activity, Urban Crossroads, Inc. calculated the 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 sensitive receiver locations. Table 9-3 shows the Project operational noise levels during the daytime hours of 7:00 a.m. to 10:00 p.m. he daytime hourly noise levels at the off-site receiver locations are expected to range from 27.6 to 36.4 dBA Leq.

TABLE 9-3: DAYTIME PROJECT OPERATIONAL NOISE LEVELS

Noise Source ¹	Operati	onal Noise Le	vels by Receiv	er Location (d	IBA Leq)
Noise Source	R1	R2	R3	R4	R5
Loading Dock Activity	25.3	32.3	30.3	28.4	25.8
Delivery Van Activity	31.4	33.7	27.7	25.4	22.3
Entry Gate & Truck Movements	17.6	20.8	16.0	14.0	10.9
Roof-Top Air Conditioning	21.4	22.8	16.1	13.7	9.3
Trash Enclosure Activity	0.0	0.0	3.9	2.1	0.0
Total (All Noise Sources)	32.8	36.4	32.4	30.4	27.6

¹ See Exhibit 9-A for the noise source locations. CadnaA noise model calculations are included in Appendix 9.1.

Tables 9-4 shows the Project operational noise levels during the nighttime hours of $10:00 \, \text{p.m.}$ to $7:00 \, \text{a.m.}$ The nighttime hourly noise levels at the off-site receiver locations are expected to range from $27.2 \, \text{to} \, 35.7 \, \text{dBA L}_{\text{eq.}}$ The differences between the daytime and nighttime noise levels is largely related to the duration of noise activity (Table 9-1). Appendix $9.1 \, \text{includes}$ the detailed noise model inputs.

TABLE 9-4: NIGHTTIME PROJECT OPERATIONAL NOISE LEVELS

Noise Source ¹	Operati	onal Noise Le	vels by Receiv	er Location (d	IBA Leq)
Noise Source	R1	R2	R3	R4	R5
Loading Dock Activity	25.3	32.3	30.3	28.4	25.8
Delivery Van Activity	30.4	32.7	26.7	24.4	21.3
Entry Gate & Truck Movements	8.7	11.9	7.1	5.0	1.9
Roof-Top Air Conditioning	19.0	20.4	13.7	11.3	6.9
Trash Enclosure Activity	0.0	0.0	3.0	1.1	0.0
Total (All Noise Sources)	31.8	35.7	32.0	29.9	27.2

¹ See Exhibit 9-A for the noise source locations. CadnaA noise model calculations are included in Appendix 9.1.

9.5 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 County of Riverside exterior noise level standards at nearest noise-sensitive receiver locations. Table 9-5 shows the operational noise levels associated with Temescal Valley Business Park Project will satisfy the County of Riverside 55 dBA Leq daytime and 45 dBA Leq nighttime exterior noise level standards at the nearest receiver locations. Therefore, the operational noise impacts are considered *less than significant* at the nearest noise-sensitive receiver locations.

Noise Level Standards Project Operational Noise Level Standards Receiver Noise Levels (dBA Leq)² (dBA Leq)3 Exceeded?4 Location¹ Daytime Nighttime **Daytime** Nighttime **Daytime** Nighttime R1 32.8 31.8 55 45 No No R2 45 36.4 35.7 55 No No R3 32.0 55 45 32.4 No No R4 30.4 29.9 55 45 No No R5 27.6 27.2 55 45 No No

TABLE 9-5: OPERATIONAL NOISE LEVEL COMPLIANCE

9.6 Project Operational Noise Level Increases

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise levels measurements for the nearest 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. (3) 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 increases to the existing ambient noise environment. Noise levels that would be experienced at receiver locations when Project-source noise is added to the daytime and nighttime ambient conditions are presented on Tables 9-6 and 9-7, respectively. As indicated on Tables 9-6 and 9-7, the Project will generate an unmitigated daytime and nighttime operational noise level increases ranging from 0.0 to 0.1 dBA Leq at the nearest receiver locations. Project-related operational noise level increases will satisfy the operational noise level increase significance criteria presented in Table 4-2, the increases at the sensitive receiver locations will be *less than significant*.

¹ See Exhibit 8-A for the receiver locations.

² Proposed Project operational noise levels as shown on Tables 9-3 and 9-4.

³ Exterior noise level standards for residential land use, as shown on Table 4-2.

⁴ Do the estimated Project operational noise source activities exceed the noise level standards?

[&]quot;Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

TABLE 9-6: DAYTIME PROJECT OPERATIONAL NOISE LEVEL INCREASES

Increase Criteria Exceeded? ⁷	No	No	No	No	No
Increase Criteria ⁷	2.0	3.0	3.0	1.5	3.0
Noise Sensitive Land Use?	Yes	Yes	Yes	Yes	Yes
Project Increase ⁶	0.1	0.0	0.0	0.0	0.0
Combined Project and Ambient ⁵	51.4	60.4	61.6	67.3	64.2
Reference Ambient Noise Levels ⁴	51.3	60.4	61.6	67.3	64.2
Measurement Location³	L1	L2	L3	F4	L5
Total Project Operational Noise Level ²	32.8	36.4	32.4	30.4	27.6
Receiver Location ¹	R1	R2	R3	R4	R5

¹ See Exhibit 8-A for the receiver locations.

TABLE 9-7: NIGHTTIME OPERATIONAL NOISE LEVEL INCREASES

Increase Criteria Exceeded? ⁷	oN	oN	oN	No	No
Increase Criteria ⁷	2.0	5.0	5.0	3.0	3.0
Noise Sensitive Land Use?	Yes	Yes	Yes	Yes	Yes
Project Increase ⁶	0.1	0.0	0.0	0.0	0.0
Combined Project and Ambient ⁵	51.2	57.1	58.9	63.8	62.0
Reference Ambient Noise Levels ⁴	51.1	57.1	58.9	63.8	62.0
Measurement Location ³	L1	L2	F3	L4	L5
Total Project Operational Noise Level ²	31.8	35.7	32.0	29.9	27.2
Receiver Location ¹	R1	R2	R3	R4	R5

¹ See Exhibit 8-A for the receiver locations.

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² Total Project daytime operational noise levels as shown on Table 9-3.

³ Reference noise level measurement locations as shown on Exhibit 5-A.

⁴ Observed daytime ambient noise levels as shown on Table 5-1.

⁵ Represents the combined ambient conditions plus the Project activities.

⁶ The noise level increase expected with the addition of the proposed Project activities.

⁷ Significance increase criteria as shown on Table 4-2.

² Total Project nighttime operational noise levels as shown on Table 9-4.

³ Reference noise level measurement locations as shown on Exhibit 5-A.

⁴ Observed nighttime ambient noise levels as shown on Table 5-1.

⁵ Represents the combined ambient conditions plus the Project activities.

 $^{^6}$ The noise level increase expected with the addition of the proposed Project activities. 7 Significance increase criteria as shown on Table 4-2.

10 CONSTRUCTION IMPACTS

This section analyzes potential average dBA L_{eq} impacts resulting from the short-term construction activities associated with the development of the Project. Exhibit 10-A shows the construction noise source locations in relation to the nearest sensitive receiver locations previously described in Section 8.

10.1 Construction Noise Levels

Noise generated by the Project construction equipment will include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. The number and mix of construction equipment is expected to occur in the following stages, based on the *Temescal Valley Business Park Air Quality Impact Analysis* (21) for the Project:

- 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.

10.2 Typical Construction Reference Noise Levels

To describe the Project construction noise levels, measurements were collected for similar activities at several construction sites. Table 10-1 provides a summary of the construction reference noise level measurements. Since the reference noise levels were collected at varying distances of 30 feet and 50 feet, all construction noise level measurements presented on Table 10-1 have been adjusted for consistency to describe a uniform reference distance of 50 feet.



OM M 15 SQUAW MOUNTAIN RD ICEFIELD CT ROBINSON LN WHITECROWN CIR **LEGEND:** Construction Activity — Distance from receiver to construction activity (in feet)

EXHIBIT 10-A: CONSTRUCTION NOISE SOURCE LOCATIONS



Receiver Locations

TABLE 10-1: CONSTRUCTION REFERENCE NOISE LEVELS

Construction Stage	Reference Construction Activity ¹	Reference Noise Level @ 50 Feet (dBA L _{eq})	Highest Reference Noise Level (dBA L _{eq})
	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	

¹ Reference construction noise level measurements taken by Urban Crossroads, Inc.

10.3 Typical 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 nearest 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 10-2, the construction noise levels are expected to range from 41.8 to 61.2 dBA L_{eq}, and the highest construction levels are expected to range from 51.9 to 61.2 dBA L_{eq} at the nearest receiver locations. Appendix 10.1 includes the detailed CadnaA construction noise model inputs.



TABLE 10-2: CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY

		C	onstruction Noi	se Levels (dBA	L _{eq})	
Receiver Location ¹	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels ²
R1	58.9	57.1	55.2	54.8	48.8	58.9
R2	61.2	59.4	57.5	57.1	51.1	61.2
R3	56.3	54.5	52.6	52.2	46.2	56.3
R4	54.5	52.7	50.8	50.4	44.4	54.5
R5	51.9	50.1	48.2	47.8	41.8	51.9

¹ Noise receiver locations are shown on Exhibit 10-A.

10.4 Typical Construction Noise Level Compliance

To evaluate whether the Project will generate potentially significant short-term noise levels at nearby receiver locations, a construction-related the FTA noise level threshold of 80 dBA L_{eq} is used as acceptable thresholds to assess construction noise level impacts. The construction noise analysis shows that the nearby receiver locations will satisfy the 80 dBA L_{eq} significance threshold during Project construction activities as shown on Table 10-3. Therefore, the noise impacts due to Project construction noise is considered *less than significant* at all receiver locations

TABLE 10-3: CONSTRUCTION NOISE LEVEL COMPLIANCE

Receiver Location ¹	Construction Noise Levels (dBA L _{eq})				
	Highest Construction Noise Levels ²	Threshold ³	Threshold Exceeded? ⁴		
R1	58.9	80	No		
R2	61.2	80	No		
R3	56.3	80	No		
R4	54.5	80	No		
R5	51.9	80	No		

¹ Noise receiver locations are shown on Exhibit 10-A.

10.5 Typical 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. Ground-borne vibration levels resulting from typical construction activities occurring within the Project site were estimated by data published by the Federal Transit



² 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 10.1.

² Highest construction noise level calculations based on distance from the construction noise source activity to nearby receiver locations as shown on Table 10-2.

³ Construction noise level thresholds as shown on Table 4-2.

⁴ Do the estimated Project construction noise levels exceed the construction noise level threshold?

Administration (FTA). (9) 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 10-4. 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. To describe the human response (annoyance) associated with vibration impacts the FTA provides the following equation: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$

TABLE 10-4: 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 Manual

Using the vibration source level of construction equipment provided on Table 10-4 and the construction vibration assessment methodology published by the FTA, it is possible to estimate the Project vibration impacts. Table 10-5 presents the expected Project related vibration levels at the nearby receiver locations. At distances ranging from 1,201 to 3,278 feet from Project construction activities, construction vibration velocity levels are estimated at 0.000 in/sec RMS and will remain below the County of Riverside threshold of 0.01 in/sec RMS at all receiver locations, as shown on Table 10-4. Therefore, the Project-related vibration impacts are considered *less than significant* during the construction activities at the Project site.

Moreover, the impacts at the site of the nearest sensitive receiver locations are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter.



TABLE 10-5: PROJECT CONSTRUCTION VIBRATION LEVELS

Receiver¹ Distance to Const. Activity (Feet)		Receiver Levels (in/sec) PPV ²				Velocity	Threshold		
	Small Bulldozer	Jack- hammer	Loaded Trucks	Large Bulldozer	Peak Vibration	Levels (in/sec) RMS ³	(in/sec) RMS ⁴	Threshold Exceeded? ⁵	
R1	1,417'	0.000	0.000	0.000	0.000	0.000	0.000	0.01	No
R2	1,201'	0.000	0.000	0.000	0.000	0.000	0.000	0.01	No
R3	2,613'	0.000	0.000	0.000	0.000	0.000	0.000	0.01	No
R4	2,618'	0.000	0.000	0.000	0.000	0.000	0.000	0.01	No
R5	3,278'	0.000	0.000	0.000	0.000	0.000	0.000	0.01	No

¹ Receiver locations are shown on Exhibit 10-A.



² Based on the Vibration Source Levels of Construction Equipment included on Table 6-8.

³ 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.

⁴ Source: County of Riverside General Plan Noise Element, Policy N 16.3.

⁵ Does the vibration level exceed the maximum acceptable vibration threshold?

11 REFERENCES

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- 20. **California Department of Transportation.** *Traffic Noise Attenuation as a Function of Ground and Vegetation Final Report.* June 1995. FHWA/CA/TL-95/23.
- 21. Urban Crossroads, Inc. Temescal Valley Business Park Air Quality Impact Analysis. March 2020.





12 CERTIFICATION

The contents of this noise study report represent an accurate depiction of the noise environment and impacts associated with the proposed Temescal Valley Business Park 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





APPENDIX 3.1:

COUNTY OF RIVERSIDE MUNICIPAL CODE





Sections:

9.52.010 - Intent.

At certain levels, sound becomes noise and may jeopardize the health, safety or general welfare of Riverside County residents and degrade their quality of life. Pursuant to its police power, the board of supervisors declares that noise shall be regulated in the manner described in this chapter. This chapter is intended to establish county-wide standards regulating noise. This chapter is not intended to establish thresholds of significance for the purpose of any analysis required by the California Environmental Quality Act and no such thresholds are established.

(Ord. 847 § 1, 2006)

9.52.020 - Exemptions.

Sound emanating from the following sources is exempt from the provisions of this chapter:

- A. Facilities owned or operated by or for a governmental agency;
- B. Capital improvement projects of a governmental agency;
- C. The maintenance or repair of public properties;
- D. Public safety personnel in the course of executing their official duties, including, but not limited to, sworn peace officers, emergency personnel and public utility personnel. This exemption includes, without limitation, sound emanating from all equipment used by such personnel, whether stationary or mobile;
- E. Public or private schools and school-sponsored activities;
- F. Agricultural operations on land designated "Agriculture" in the Riverside County general plan, or land zoned A-I (light agriculture), A-P (light agriculture with poultry), A-2 (heavy agriculture), A-D (agriculture-dairy) or C/V (citrus/vineyard), provided such operations are carried out in a manner consistent with accepted industry standards. This exemption includes, without limitation, sound emanating from all equipment used during such operations, whether stationary or mobile;
- G. Wind energy conversion systems (WECS), provided such systems comply with the WECS noise provisions of Riverside County Ordinance No. 348;
- H. Private construction projects located one-quarter of a mile or more from an inhabited dwelling;
- I. Private construction projects located within one-quarter of a mile from an inhabited dwelling, provided that:

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- 1. Construction does not occur between the hours of six p.m. and six a.m. during the months of June through September, and
- 2. Construction does not occur between the hours of six p.m. and seven a.m. during the months of October through May;
- J. Property maintenance, including, but not limited to, the operation of lawnmowers, leaf blowers, etc., provided such maintenance occurs between the hours of seven a.m. and eight p.m.;
- K. Motor vehicles, other than off-highway vehicles. This exemption does not include sound emanating from motor vehicle sound systems;
- L. Heating and air conditioning equipment;
- M. Safety, warning and alarm devices, including, but not limited to, house and car alarms, and other warning devices that are designed to protect the public health, safety, and welfare;
- N. The discharge of firearms consistent with all state laws.

(Ord. 847 § 2, 2006)

9.52.030 - Definitions.

As used in this chapter, the following terms shall have the following meanings:

"Audio equipment" means a television, stereo, radio, tape player, compact disc player, mp3 player, I-POD or other similar device.

"Decibel (dB)" means a unit for measuring the relative amplitude of a sound equal approximately to the smallest difference normally detectable by the human ear, the range of which includes approximately one hundred thirty (130) decibels on a scale beginning with zero decibels for the faintest detectable sound. Decibels are measured with a sound level meter using different methodologies as defined below:

- 1. "A-weighting (dBA)" means the standard A-weighted frequency response of a sound level meter, which de-emphasizes low and high frequencies of sound in a manner similar to the human ear for moderate sounds.
- 2. "Maximum sound level (L $_{
 m max}$)" means the maximum sound level measured on a sound level meter.

"Governmental agency" means the United States, the state of California, Riverside County, any city within Riverside County, any special district within Riverside County or any combination of these agencies.

"Land use permit" means a discretionary permit issued by Riverside County pursuant to Riverside County Ordinance No. 348.

"Motor vehicle" means a vehicle that is self-propelled.

"Motor vehicle sound system" means a stereo, radio, tape player, compact disc player, mp3 player, I-POD or other similar device.

"Noise" means any loud, discordant or disagreeable sound.

"Occupied property" means property upon which is located a residence, business or industrial or manufacturing use.

"Off-highway vehicle" means a motor vehicle designed to travel over any terrain.

"Public or private school" means an institution conducting academic instruction at the preschool, elementary school, junior high school, high school, or college level.

"Public property" means property owned by a governmental agency or held open to the public, including, but not limited to, parks, streets, sidewalks, and alleys.

"Sensitive receptor" means a land use that is identified as sensitive to noise in the noise element of the Riverside County general plan, including, but not limited to, residences, schools, hospitals, churches, rest homes, cemeteries or public libraries.

"Sound-amplifying equipment" means a loudspeaker, microphone, megaphone or other similar device.

"Sound level meter" means an instrument meeting the standards of the American National Standards Institute for Type 1 or Type 2 sound level meters or an instrument that provides equivalent data.

(Ord. 847 § 3, 2006)

9.52.040 - General sound level standards.

No person shall create any sound, or allow the creation of any sound, on any property that causes the exterior sound level on any other occupied property to exceed the sound level standards set forth in Table 1.

TABLE 1 Sound Level Standards (Db L $_{max}$)

ENERAL PLAN	GENERAL	GENERAL	DENSITY	MAXIMUM DECIBEL
NOITADNUC	PLAN LAND	PLAN LAND		LEVEL
OMPONENT	USE	USE		
	DESIGNATION	DESIGNATION		
		NAME 73		

				7 am—10 pm	10 pm—7 am
Community Development	EDR	Estate Density Residential	2 AC	55	45
	VLDR	Very Low Density Residential	1 AC	55	45
	LDR	Low Density Residential	1/2 AC	55	45
	MDR	Medium Density Residential	2—5	55	45
	MHDR	Medium High Density Residential	5—8	55	45
	HDR	High Density Residential	8—14	55	45
	VHDR	Very High Density Residential	14—20	55	45
	H'TDR	Highest Density Residential	20+	55	45
	CR	Retail Commercial		65	55

	СО	Office Commercial		65	55
	СТ	Tourist Commercial		65	55
	СС	Community Center		65	55
	LI	Light Industrial		75	55
	н	Heavy Industrial		75	75
	ВР	Business Park		65	45
	PF	Public Facility		65	45
	SP	Specific Plan- Residential		55	45
		Specific Plan- Commercial		65	55
		Specific Plan- Light Industrial		75	55
		Specific Plan- Heavy Industrial		75	75
Rural Community	EDR	Estate Density Residential	2 AC	55	45
		75			

	VLDR	Very Low Density Residential	1 AC	55	45
	LDR	Low Density Residential	1/2 AC	55	45
Rural	RR	Rural Residential	5 AC	45	45
	RM	Rural Mountainous	10 AC	45	45
	RD	Rural Desert	10 AC	45	45
Agriculture	AG	Agriculture	10 AC	45	45
Open Space	С	Conservation		45	45
	СН	Conservation Habitat		45	45
	REC	Recreation		45	45
	RUR	Rural	20 AC	45	45
	W	Watershed		45	45
	MR	Mineral Resources		75	45

(Ord. 847 § 4, 2006)

9.52.050 - Sound level measurement methodology.

Sound level measurements may be made anywhere within the boundaries of an occupied property. The actual location of a sound level measurement shall be at the discretion of the enforcement officials identified in <u>Section 9.52.080</u> of this chapter. Sound level measurements shall be made with a sound level meter. Immediately before a measurement is made, the sound level meter shall be calibrated utilizing an acoustical calibrator meeting the standards of the American National Standards Institute. Following a sound level measurement, the calibration of the sound level meter shall be re-verified. Sound level meters and calibration equipment shall be certified annually.

(Ord. 847 § 5, 2006)

9.52.060 - Special sound sources standards.

The general sound level standards set forth in <u>Section 9.52.040</u> of this chapter apply to sound emanating from all sources, including the following special sound sources, and the person creating, or allowing the creation of, the sound is subject to the requirements of that section. The following special sound sources are also subject to the following additional standards, the failure to comply with which constitutes separate violations of this chapter:

A. Motor Vehicles.

- 1. Off-Highway Vehicles.
 - a. No person shall operate an off-highway vehicle unless it is equipped with a USDA-qualified spark arrester and a constantly operating and properly maintained muffler. A muffler is not considered constantly operating and properly maintained if it is equipped with a cutout, bypass or similar device.
 - b. No person shall operate an off-highway vehicle unless the noise emitted by the vehicle is not more than ninety-six (96) dBA if the vehicle was manufactured on or after January 1, 1986 or is not more than one hundred one (101) dBA if the vehicle was manufactured before January 1, 1986. For purposes of this subsection, emitted noise shall be measured a distance of twenty (20) inches from the vehicle tailpipe using test procedures established by the Society of Automotive Engineers under Standard J-1287.
- 2. Sound Systems. No person shall operate a motor vehicle sound system, whether affixed to the vehicle or not, between the hours of ten p.m. and eight a.m., such that the sound system is audible to the human ear inside any inhabited dwelling. No person shall operate a motor vehicle sound system, whether affixed to the vehicle or not, at any other time such that the sound system is audible to the human ear at a distance greater than one hundred (100) feet from the vehicle.
- B. Power Tools and Equipment. No person shall operate any power tools or equipment between the hours of ten p.m. and eight a.m. such that the power tools or equipment

- are audible to the human ear inside an inhabited dwelling other than a dwelling in which the power tools or equipment may be located. No person shall operate any power tools or equipment at any other time such that the power tools or equipment are audible to the human ear at a distance greater than one hundred (100) feet from the power tools or equipment.
- C. Audio Equipment. No person shall operate any audio equipment, whether portable or not, between the hours of ten p.m. and eight a.m. such that the equipment is audible to the human ear inside an inhabited dwelling other than a dwelling in which the equipment may be located. No person shall operate any audio equipment, whether portable or not, at any other time such that the equipment is audible to the human ear at a distance greater than one hundred (100) feet from the equipment.
- D. Sound-Amplifying Equipment and Live Music. No person shall install, use or operate sound-amplifying equipment, or perform, or allow to be performed, live music unless such activities comply with the following requirements. To the extent that these requirements conflict with any conditions of approval attached to an underlying land use permit, these requirements shall control:
 - 1. Sound-amplifying equipment or live music is prohibited between the hours of ten p.m. and eight a.m.
 - 2. Sound emanating from sound-amplifying equipment or live music at any other time shall not be audible to the human ear at a distance greater than two hundred (200) feet from the equipment or music.

(Ord. 847 § 6, 2006)

9.52.070 - Exceptions.

Exceptions may be requested from the standards set forth in <u>Section 9.52.040</u> or <u>9.52.060</u> of this chapter and may be characterized as construction-related, single-event or continuous-events exceptions.

A. Application and Processing.

- Construction-Related Exceptions. An application for a construction-related exception shall be made to and considered by the director of building and safety on forms provided by the building and safety department and shall be accompanied by the appropriate filing fee. No public hearing is required.
- 2. Single-Event Exceptions. An application for a single-event exception shall be made to and considered by the planning director on forms provided by the planning department and shall be accompanied by the appropriate filing fee. No public hearing is required.
- 3. Continuous-Events Exceptions. An application for a continuous-events exception

shall be made to the planning director on forms provided by the planning department and shall be accompanied by the appropriate filing fee. Upon receipt of an application for a continuous-events exception, the planning director shall set the matter for public hearing before the planning commission, notice of which shall be given as provided in Section 18.26c of Riverside County Ordinance No. 348. Notwithstanding the above, an application for a continuous-events exception that is associated with an application for a land use permit shall be processed concurrently with the land use permit in the same manner that the land use permit is required to be processed.

- B. Requirements for Approval. The appropriate decisionmaking body or officer shall not approve an exception application unless the applicant demonstrates that the activities described in the application would not be detrimental to the health, safety or general welfare of the community. In determining whether activities are detrimental to the health, safety or general welfare of the community, the appropriate decisionmaking body or officer shall consider such factors as the proposed duration of the activities and their location in relation to sensitive receptors. If an exception application is approved, reasonable conditions may be imposed to minimize the public detriment, including, but not limited to, restrictions on sound level, sound duration and operating hours.
- C. Appeals. The director of building and safety's decision on an application for a construction-related exception is considered final. The planning director's decision on an application for a single-event exception is considered final. After making a decision on an application for a continuous-events exception, the appropriate decisionmaking body or officer shall mail notice of the decision to the applicant. Within ten (10) calendar days after the mailing of such notice, the applicant or an interested person may appeal the decision to the board of supervisors. Upon receipt of an appeal and payment of the appropriate appeal fee, the clerk of the board shall set the matter for hearing not less than five days nor more than thirty (30) days thereafter and shall give written notice of the hearing in the same manner as notice of the hearing was given by the appropriate hearing officer or body. The board of supervisors shall render its decision within thirty (30) days after the appeal hearing is closed.
- D. Effect of a Pending Continuous-Events Exception Application. For a period of one hundred eighty (180) days from the effective date of this chapter, no person creating any sound prohibited by this chapter shall be considered in violation of this chapter if the sound is related to a use that is operating pursuant to an approved land use permit, if an application for a continuous-events exception has been filed to sanction the sound and if a decision on the application is pending.

(Ord. 847 § 7, 2006)

9.52.080 - Enforcement.

The Riverside County sheriff and code enforcement shall have the primary responsibility for enforcing this chapter; provided, however, the sheriff and code enforcement may be assisted by the public health department. Violations shall be prosecuted as described in <u>Section 9.52.100</u> of this chapter, but nothing in this chapter shall prevent the sheriff, code enforcement or the department of public health from engaging in efforts to obtain voluntary compliance by means of warnings, notices, or educational programs.

(Ord. 847.1 § 1, 2007: Ord. 847 § 8, 2006)

9.52.090 - Duty to cooperate.

No person shall refuse to cooperate with, or obstruct, the enforcement officials identified in <u>Section 9.52.080</u> of this chapter when they are engaged in the process of enforcing the provisions of this chapter. This duty to cooperate may require a person to extinguish a sound source so that it can be determined whether sound emanating from the source violates the provisions of this chapter.

(Ord. 847 § 9, 2006)

9.52.100 - Violations and penalties.

Any person who violates any provision of this chapter once or twice within a one hundred eighty (180) day period shall be guilty of an infraction. Any person who violates any provision of this chapter more than twice within a one hundred eighty (180) day period shall be guilty of a misdemeanor. Each day a violation is committed or permitted to continue shall constitute a separate offense and shall be punishable as such. Penalties shall not exceed the following amounts:

- A. For the first violation within a one hundred eighty (180) day period, the minimum mandatory fine shall be five hundred dollars (\$500.00).
- B. For the second violation within a one hundred eighty (180) day period, the minimum mandatory fine shall be seven hundred fifty dollars (\$750.00).
- C. For any further violations within a one hundred eighty (180) day period, the minimum mandatory fine shall be one thousand dollars (\$1,000.00) or imprisonment in the county jail for a period not exceeding six months, or both.

(Ord. 847 § 10, 2006)

APPENDIX 5.1:

STUDY AREA PHOTOS







33, 47' 4.680000", 117, 29' 37.070000"



L1_N 33, 47' 4.050000", 117, 29' 34.260000"



L1_S 33, 47' 4.680000", 117, 29' 37.070000"



33, 47' 4.680000", 117, 29' 37.070000"



33, 46' 48.520000", 117, 29' 39.680000"



33, 46' 48.520000", 117, 29' 39.680000"



L2_S 33, 46' 48.520000", 117, 29' 39.680000"



L2_W 33, 46' 48.500000", 117, 29' 39.650000"



L3_E 33, 46' 31.230000", 117, 29' 38.520000"



L3_N 33, 46' 31.230000", 117, 29' 38.470000"



33, 46' 31.200000", 117, 29' 38.490000"



L3_W 33, 46' 31.200000", 117, 29' 38.490000"



14_E 33, 46' 21.790000", 117, 29' 32.480000"



L4_N 33, 46' 21.850000", 117, 29' 32.480000"



L4_S 33, 46' 21.780000", 117, 29' 32.450000"



L4_W 33, 46' 21.780000", 117, 29' 32.450000"



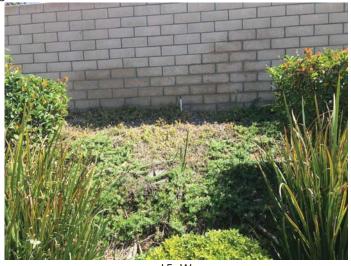
L5_E 33, 46' 3.010000", 117, 29' 1.960000"



L5_N 33, 46' 3.010000", 117, 29' 1.960000"



L5_S 33, 46' 3.060000", 117, 29' 2.100000"



L5_W 33, 46' 3.060000", 117, 29' 2.100000"

APPENDIX 5.2:

NOISE LEVEL MEASUREMENT WORKSHEETS





C URBAN GROSSROADS

	JN: 13627 yst: P. Mara		53.4	23	Adj. L en	61.7	61.5	64.6	67.2	69.3	58.8	57.7	9.95	54.1	54.2	54.0 54.8	54.7	55.2	54.9	54.9	60.3	60.0	59.4	63.4		Nighttime		26.1	BA)			
	JN: 13627 Analyst: P. Mara		£.42	21 22	Adi.	10.0	10.0	10.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	5.0	5.0	3.0	10.0	L ea (dBA)	Daytime		55.5	24-Hour CNEL (dBA)		62.6	;
			0.22	20 2	7	51.7	51.5	54.6	57.2	59.3	58.8	57.7	9.99	54.1	54.2	54.0	54.7	55.2	54.9	54.9	55.3	55.0	74.4	53.4	İ	24-Hour		55.7	24-H(Ì		
			£.22	19	%667	45.5	44.2	50.3	54.3	56.8	56.6	54.3	53.5	6.03	50.0	50.1	50.8	51.5	51.4	52.0	51.8	51.5	0.00	49.0	%667	50.0			51.8	51.1	44.2	20.00
	=		6.42	7 18		ı																	+									+
	<i>Meter:</i> Piccolo II		6.42	16 17	%567	46.2	45.1	50.9	54.7	57.2	57.0	54.7	53.9	51.4	50.5	50.8	51.3	51.9	51.8	52.3	52.3	51.9	00 2	20.2	%567	50.5	52.4	50.5	52.3	51.6	45.1	71.0
	Mete		2.22	15	%067	47.1	45.9	51.4	55.1	57.6	57.3	55.1	54.3	51.8	51.0	51.3	51.8	52.4	52.3	52.8	52.8	52.4	21.1	20.9	%067	51.0	57.8	51.1	52.8	52.1	45.9	20.0
nmary	anyon t 9575		7.42	14	720%	50.8	50.5	54.1	56.8	59.1	58.6	26.8	56.2	53.8	53.2	53.8	53.6	54.1	54.1	54.5	54.7	54.6	23.7	52.5	<i>%057</i>	53.2	54.7	53.7	54.7	54.3	50.5	0.50
24-Hour Noise Level Measurement Summary	 Located northwest of the Project site on Palm Canyon Drive near existing single-family residential home at 9575 Stone Canyon Road. Hourly Land BR Readings (unadjusted) 		0.42	12 13	IIIIIB 125%	52.7	53.0	55.6	57.9	59.8	59.2	57.9	57.2	54.8	54.5	54.4	54.8	55.2	55.2	55.4	26.0	55.7	33.1 FA 0	54.0	75%	54.4	55.8	55.1	26.0	55.6	52.7	55.0
Measure	northwest of the Project site on Paln disting single-family residential home n Road. Hourly L _{ea} dBA Readings (unadjusted)		2.42	11 12	Hour begin	55.0	55.0	57.2	59.0	60.9	60.2	60.4	58.6	2.95	56.6	56.3	56.9	57.8	57.4	56.8	57.9	57.6	7.70	56.8	%87	56.2	57.7	57.2	57.9	57.5	55.0	7.TO
se Level	vest of the single-fam J. V Leg dBA R		7.42	10							H												ł	_								+
lour Noi	Located northw rive near existing s one Canyon Road. Hourly		9.92	6	72%	55.7	55.4	57.7	59.5	61.3	9.09	61.8	59.1	56.6	58.1	5.73	58.7	59.0	58.3	57.3	58.4	58.2	57.0	1.00	72%	56.6	58.7	57.8	58.4	58.1	55.4	58.7
24-F			8.82 7.72	7 8	12%	56.4	56.0	58.2	60.1	61.9	61.2	62.6	59.9	57.3	0.09	58.9	61.3	61.5	60.0	58.2	59.0	58.7	100.4	58.7	777	57.3	60.1	58.4	59.0	58.7	56.0	0.2.0
	<i>Location:</i> L1 Dr St.		τ.09	9	77	56.6	56.2	58.5	60.3	62.2	61.4	62.8	60.4	27.7	60.7	59.8 60.8	62.1	62.7	60.9	58.5	59.3	58.9	7.00	59.0	71%	57.7	60.7	58.7	59.3	29.0	56.2	50.0
			£:65	2	L min	45.4	44.0	50.2	54.2	56.7	56.5	54.2	53.4	20.8	49.9	50.0	50.6	51.4	51.3	51.9	51.7	51.3	49.0	47.8	L min	49.9	500.3	49.8	51.7		44.0	
	2020		6.42 2.72	3 4	L max	56.9	56.4	58.7	60.5	62.4	61.7	67.9	8.09	58.1	61.7	61.6	62.9	63.9	61.8	58.9	59.5	59.1	0.60	59.7	L max	58.1	Average:	59.0	59.5	Average	56.4	Δνετασε
	<i>Date:</i> Wednesday, September 23, 2020 oject: DCW3		0.82	2	L ea		51.5	54.6	57.2	59.3	58.8	57.7	9.99	54.1	54.2	54.0	54.7	55.2	54.9	54.9	55.3	55.0	54.4	53.4	l		55.7	54.4	55.3	54.9	51.5	56.1
	lay, Septe		STS	Н	7	51		72	. 57	25	25	5.2	26	25	75 1	<u>۷</u> ۲	25	55	75	25	55	35.	70 1	7 16	7	75	y 17.	25	55	. 27	5.	3 2
	Wednesc DCW3		Z'TS	0	Hour	0	Н С	7 8	9 4	2 9	7	∞	6	10	11	12	14	15	16	18	19	20	17	23	Hour	Min	Fuerey Average	Min	Max	Energy Average	Min	Frierray Average
	Date: Wedne Project: DCW3	(A8b) pg	Hourly L _g 2 Hourly L _g 3 N W W W W W W W W W W W W W W W W W W		Timeframe			Night								Day						Evening		Night	Timeframe	Day	Fnerøv		Evening	Energy.	Night	Fnerav

	24-Hour Noise Level Measurement Summary		
e: Wednesday, September 23, 2020 at: DCW3	Location: L2 - Located west of the Project site on Lawson Road near existing single-family residential home at 23270 Lawson	Meter: Piccolo II	JN: 13627 Analyst: P. Ma
	Road.		
	Hourly L dBA Readinas (unadiusted)		

JN: 13627 Analyst: P. Mara	23 51.3	Adj. L _{eq} 57.4 59.2 64.9 62.9 66.7 68.0	57.1 49.5 58.5 63.2 52.1 50.2 50.2 51.9 51.9	56.6 56.7 56.8 62.8 61.3	Nighttime	54.7
JN: Analyst:	8. 22 52.8	Adj. 10.0 10.0 10.0 10.0 10.0	0 0 0 0 0 0 0 0 0 0 0 0	5.0 5.0 5.0 10.0	L _{eq} (dBA) Daytime	5 56.0 5 24-Hour GNEL (dBA) 61.5
	2.12 02 S1.7	47.4 49.2 52.9 56.7 58.0 57.9	57.1 5.8.5 5.4.8 5.2.1 5.0.2 5.1.9 5.1.9		24-Hour	55.5 24.H
	9.12	% C 1	0 0 2 8 5 7 9 2 7 0 8 8	2 7 7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
	5.12 %	109% 37.0 37.1 40.9 43.9 50.6 53.4	51.3 41.8 63.7 63.7 63.7 66.5 67.7 68.7 68.7 68.7 68.7 68.7 68.7 68.7	46.5 45.3 43.7 43.7 41.2	199% 41.8 63.7	49.2 43.7 46.5 45.2 45.2 37.0 53.4 44.5
iccolo II	6.12	37.7 37.7 38.1 41.7 44.9 51.4 53.3	52.1 45.6 63.9 66.9 46.9 58.9 58.9 66.6 48.2 49.0	47.3 46.4 44.8 45.0 42.3	42.3 63.9	49.7 44.8 47.3 46.1 37.7 54.0 45.4
<i>Meter:</i> Piccolo II	2.22 6.12 6.18	39.2 39.2 42.9 46.0 52.2 54.0	52.7 42.7 46.3 64.5 64.5 47.3 47.0 49.4 49.8	48.0 47.3 45.7 46.2 43.4	190% 42.7 64.5	45.7 48.0 47.0 38.7 54.6
near	2.02 41	44.5 44.5 51.0 50.8 55.6 57.0	56.3 77.5 51.7 60.2 60.2 51.1 50.5 50.8	50.7 50.6 49.9 51.0	45.7 77.5	53.6 49.9 50.7 50.4 44.5 57.1 51.3
n Road r 70 Lawsc	8.92 & £1					
on Lawsone at 2327	11 12 S2.1 Hour Beginning	48.1 48.1 49.8 53.7 57.6 57.6 58.8	58.0 48.7 56.0 78.6 55.6 50.9 61.7 49.8 52.2 52.2 52.2 52.4 52.2 52.2 52.2 52.2	52.4 52.2 52.2 53.5 52.3	48.7 78.6	55.7 52.2 52.4 52.4 62.4 48.1 58.8
west of the Project site on Lawson R e-family residential home at 23270 I Hourly L., dBA Readinas lunadiusted	Hour By 84.8	51.7 54.1 61.2 57.0 59.8 60.9	60.2 54.1 63.1 79.8 55.6 64.5 53.5 54.5 54.7	54.5 54.6 55.4 56.6 55.5	53.2 79.8	59.1 54.5 55.4 54.8 51.7 61.2
of the Pro ily reside	5.89	% & & & & L + + + + + + + + + + + + + + +	0, 10, 17, 0, 20, 0, 11, 11, 10, 14, 10, 11,	. E. 7. 6. 6. 9.	15% 54.1 80.0	5. 6. 0. 0. 6. 2. 9. 9.
ed west on a section of the section	S.82 0	53.3 53.3 55.2 62.2 60.7 61.3	60.9 56.3 66.7 60.0 60.0 60.0 65.1 65.1 65.1 65.1 65.1 65.1 65.1 65.1	55.3 55.7 56.9 57.9 56.6	15% 54.1 80.0	55.3 56.9 56.0 56.0 56.0 56.0 62.2 58.6
Location: L2 - Located west of the Project site on Lawson Road near existing single-family residential home at 23270 Lawson Road. Road.	S'67 ∞	55.3 57.2 63.9 62.1 62.1 62.1 62.1	61.9 58.2 69.0 61.9 61.9 65.9 57.2 59.0 56.8	56.6 57.5 59.2 59.7 58.2	12% 55.3 81.2	62.1 56.6 59.2 57.7 57.7 55.3 63.9
Location:	6.72 o	56.0 58.2 64.7 60.3 62.9 64.2	62.4 69.4 81.5 62.4 62.5 66.3 57.8 59.5 58.1	57.1 58.3 60.3 60.4 59.1	11% 55.7 81.5	62.7 57.1 60.3 58.6 56.0 64.7
	7.82 4	L min 36.9 36.9 40.6 43.7 50.4 52.2	51.1 41.6 63.6 63.6 44.5 44.5 58.6 46.0 47.6 48.4 48.5	46.3 45.0 43.4 43.4 40.9	<i>L</i> min 41.6 63.6	ge: 43.4 46.3 ge: 36.9 53.1
, 2020	6.S2 ω 7.92 4	64.0	62.9 89.3 81.7 62.9 63.2 66.6 58.5 59.8 56.0	57.6 58.9 61.1 61.0	L _{max} 56.0 81.7	Average: 57.6 61.1 Average: 56.5 65.1 Average:
<i>Date:</i> Wednesday, September 23, 2020 oject: DCW3	24.9	47.4 49.2 54.9 52.9 56.7 58.0	57.1 58.5 58.5 59.5 50.2 50.2 51.9 51.9	51.6 51.7 52.8 52.8	<i>L</i> εq 49.5 63.2	56.6 51.6 51.8 51.7 47.4 58.0 58.0
nesday, Se 3	t.74 ○	Hour 0 1 2 3 4 6	7	19 20 21 22 23	Hour Min Max	age Min Max age Min Min Max age
Date: Wedne Project: DCW3	888.70 70.00	_				y Aver
Dat Projec	(A8b) _{թց} l γl າυοΗ ∞∞レレΦΦυν	Timeframe Night	Day	Evening	Timeframe Day	Evening Evening Energy Night Energy



	JN: 13627 Analyst: P. Mara				8.99	S	23		Adj. L eq	9:59	64.6	65.6	5.73	72.3	74.6	64.1	59.2	54.9	52.0	49.8	49.1	49.4	48.7	49.9	50.5	53.0	60.6	63.8	66.1	8.99		Nighttime		59.9	(BA)			
	JN: Analyst:				1.9		1 22		Adj.	10.0	10.0	10.0	10.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	10.0	10.0	L eq (dBA)	Daytime		56.3	24-Hour CNEL (dBA)		66.1))
					8.82 4.73		20 21		L eq	55.6	54.6	55.6	5.75	62.3	64.6	64.1	59.2	54.9	52.0	49.8	49.1	49.4	48.7	49.9	50.5	53.0	55.6	58.8	56.1		7	24-Hour	H	58.0	24-Ho			
					9.2		19 2		7	5	ו מו	יט ר	Λ W		9	9	Š	Ŋ	2	4	4 4	4 4	+ 4	4	2	2	ı, ı	<u>, г</u>	5	2		24-1		23 				Т
						23	18 1		%667	52.2	48.0	50.9	59.5 59.5	60.1	62.7	62.1	57.4	52.5	49.9	47.2	45.7	46.8	46.0	46.9	47.5	50.6	53.0	54.0	52.1	52.8	%667	45.7	50.0	52.0	55.8	54.3	48.0	54.7
	II olo				S	05	17		%567	52.7	48.7	51.5	54.2 59.9	60.4	63.0	62.5	57.7	52.9	50.2	47.5	46.0	47.1	46.3	47.3	47.9	50.9	53.4	54.5	52.6	53.3	%567	46.0	50.3	20.3	53.4	54.7	48.7	55.1
	<i>Meter:</i> Piccolo II				6.	6 7	16	ı									_																					
	Me				L.	87	15		<i>%</i> 067	53.2	49.5	52.0	54.7	60.7	63.3	62.7	57.9	53.2	50.5	47.7	46.4	47.4	46.6	47.6	48.2	51.2	53.7	55.0	53.1	53.8	<i>%061</i>	46.4	50.6	50.0	53.7	55.1	49.5	55.6
ımary	int Drive Pats				6'	6 7	14		%057	55.2	53.8	55.1	57.0	62.0	64.4	63.9	58.9	54.6	51.8	49.5	48.3	49.0	48.2	49.3	49.8	52.7	55.3	58.4	55.4	56.2	%057	48.2	63.9	55.1	55.3	56.9	53.8	57.9
24-Hour Noise Level Measurement Summary	L3 - Located southwest of the Project site on Pats Point Drive near existing single-family residential home at 9455 Pats Point Drive.	usted)			þ.	6 7	13	60	%5	56.4	56.0	56.7	58.4	62.9	65.1	64.6	9.69	55.5	52.6	50.4	50.1	50.0	49.5	50.7	51.2	53.6	56.3	59.4	56.9	57.8	%5	49.5	53.7	23.7	56.3 59.4	58.0	56.0	59.2
sureme	ect site o	gs (unadji			Į.	6t ⁷	12	Hour Beginning	752%	99	56	56	22 25	62	9	99	56	55	52	20	25.	, r	9, 64	20	51	23	56	28 28	56	57	752%	49	10 D4	20	55	28	56	5.0
rel Mea	the Proje r resident	A Readin				67	_	Hour	<i>%8</i> 7	57.8	57.7	58.3	64.7	63.8	66.2	65.4	8.09	299	53.5	51.8	51.8	51.4	50.9	52.2	52.8	54.8	57.5	59.5	58.6	59.3	%87	50.9	65.4	54.5	57.5	59.3	57.7	60.6
oise Lev	:hwest of gle-family	Hourly L _{eq} dBA Readings (unadjusted)			6.f	25	9 10		72%	58.1	58.2	58.7	64.6	64.2	66.4	65.7	61.2	26.8	53.9	52.2	52.3	51.9 52.5	51.3	52.6	53.3	55.2	57.8	60.1	59.2	59.8	72%	51.3	5.7 0	24.9	57.8	59.7	58.1	61.1
Hour N	ated sout isting sing rive.				2.62		- ∞						_																	_				+		F		ŀ
24-					1.49				75%	58.7	59.0	59.5	65.7	64.6	67.0	0.99	61.7	57.2	54.3	53.0	53.0	52.8	52.2	53.5	54.2	55.6	58.2	62.4	0.09	60.4	77%	52.2	66.0	78.7	58.2	60.4	58.7	61.7
	Location:			g	9.49		9		71%	29.0	59.3	59.8	65.6	64.9	67.3	66.2	61.9	57.5	54.5	53.2	53.3	53.7	52.5	54.0	54.6	55.8	58.5	62.9	60.3	60.7	71%	52.5	55.0	79.7 78.5	58.5 62.9	8.09	59.0	62.0
					£.29		- 2		L min	52.0	47.8	50.7	53.5	0.09	62.6	62.0	57.3	52.4	49.8	47.1	45.6	46.7	45.9	46.8	47.4	50.4	52.9	53.8	52.0	52.7	L min	45.6	0.29	520	52.9 55.6		47.8	
					£.23		4		7	25.	4	<u> </u>				.9	.2	25.	<u></u>	4	4	4 4	4	4	.4	20			5.	5,	1,	4 (Avelage.	7 15	Average:		Average:
	:3, 2020				2.73	5	°		L max	59.3	59.6	60.1	65.9	65.1	67.5	66.5	62.2	57.8	54.7	53.5	53.7	53.5	52.9	54.3	55.0	26.0	58.8	63.2	9.09	61.0	L max	52.9	66.5	0 0 0	58.8	A	59.3	
	Wednesday, September 23, 2020 DCW3				9.2	S	7		F ed	55.6	54.6	55.6	57.5	62.3	64.6	64.1	59.2	54.9	52.0	49.8	49.1	49.4	48.7	49.9	50.5	53.0	55.6	58.8	56.1	56.8	L eq	48.7	55.0	55.9	55.6 58.8	57.5	54.6	59.9
	sday, Sep				9°t	75	-																													H		
	Date: Wedne: Project: DCW3		000	000	9.6		-		Hou	0	Η (7 7	ε A	1 50	9	7	∞	6	10	11	12	13	15	16	17	18	19	21	22	23	Hou	Ξ.	Average	200	Max	Energy Average	Min	Energy Average
	Date: Project:		(A8 85:0 75:0	ib) _{p9} 1	ourly I A SOSS)H			Timeframe			+4×:14	Nigni								Day						9	Evering		Night	Timeframe	Day	Fnerov	LIICIB	Evening	Energy	Night	Energy



43.8 Analyst: P. Mara 45.2 45.7 43.0 48.7 62.3 49.3 47.4 47.5 43.2 48.1 45.1 50.0 52.1 JN: 13627 45.1 23 L eq (dBA) לל ל 22 Adj. 10.0 10.0 10.0 10.0 10.0 5.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 **41.7** 21 43.7 43.7 43.0 45.0 47.0 48.9 47.5 43.8 45.2 45.7 43.0 45.0 41.7 49.3 47.4 43.2 48.1 45.1 42.1 43.7 20 19 0.24 41.3 38.3 39.6 39.8 39.9 36.5 36.5 39.2 42.1 45.0 45.0 41.9 40.9 39.7 40.6 %667 46.9 46.2 40.7 40.1 46.7 18 43.0 38.6 40.0 40.1 195% Meter: Piccolo II 40.0 41.6 36.9 39.8 42.5 45.2 46.9 46.5 40.9 40.9 47.1 45.2 45.3 39.3 42.1 40.4 41.2 17 **45.7** 45.2 16 40.7 45.5 47.4 41.8 41.9 40.4 40.4 **%067** 45.5 39.7 46.7 42.3 40.2 41.4 47.1 15 8.54 near existing single-family residential home at 23905 Lookout Location L4 - Located southwest of the Project site on Lookout Lane 24-Hour Noise Level Measurement Summary T'St 14 47.0 41.6 48.5 44.0 46.9 47.8 43.8 42.6 44.2 42.4 43.6 43.3 40.4 48.2 42.2 13 48.1 Hourly L_{eq} dBA Readings (unadjusted) 752% 49.4 49.6 48.8 48.6 45.7 46.1 45.5 45.5 44.3 63.2 752 48.1 44.2 42.4 Hour Beginning 12 43.2 11 S.TA 66.9 44.3 **18%** 50.7 49.7 46.1 49.8 48.1 48.2 50.3 48.1 45.3 10 p.7p 48.9 46.6 48.9 45.8 45.6 44.8 68.6 50.3 48.9 48.0 49.0 51.8 51.2 49.7 50.1 6 T'TS 49.3 ∞ 59.3 69.6 48.2 49.5 52.0 54.2 53.7 60.5 50.5 47.6 50.7 50.8 49.0 50.2 50.9 46.5 46.5 69.2 45.2 Lane. ST'S / 46.9 70.0 45.5 49.6 50.6 46.9 48.0 51.0 49.8 52.3 54.1 61.2 52.3 9 6.84 2 40.0 39.6 39.4 39.7 46.8 46.6 44.9 38.8 40.8 41.2 38.2 4۲.0 4 Date: Wednesday, September 23, 2020 50.0 52.0 45.8 48.8 51.4 72.2 48.8 50.9 54.8 47.5 50.2 71.1 0.24 m 43.0 7 Leq 43.7 48.4 43.0 45.0 47.0 48.9 43.8 43.7 41.7 44.4 42.1 49.3 45.0 47.5 43.2 48.1 45.1 45.2 45.7 48.4 43.7 0 12 13 14 15 15 16 17 17 19 20 20 22 22 23 Project: DCW3

Night



47.3 Nighttime

47.1

47.2 24-Hour

43.5

44.1

49.7 44.9 48.1 46.1 44.3 68.0 53.2

52.1 46.9 52.0 52.0 48.6 45.5 70.4 55.7

36.4

50.0

72.2

43.7 42.1 52.3 47.3

Max

Night

Energy Average

Energy Average Min

50.6 45.6 48.9

51.6 46.5 50.9 60.5

38.2

53.0 45.8

Max

47.6 41.7 45.0

Μin

Evening

43.0 38.3 41.3 40.0

Daytime

38.9

39.3 43.3

39.7 50.1

42.2 51.1 45.2 43.6 42.4

43.2 51.9 47.0 45.5

45.4 57.0

46.5

61.2

38.8

43.0 51.5

Σi Max

Day

Evening

Day

Night

L eg

24-Hour CNEL (dBA)

53.8

36.5 50.1 42.1

	JN: 13627 Analyst: P. Mara		
^	Meter: Piccolo II		
24-Hour Noise Level Measurement Summary	Location L5 - Located south of the Project site on Mojeska Summit Road near existing single-family residential home at 10088 Greenhorn Court	Hourly L _{eg} dBA Readings (unadjusted)	
	Date: Wednesday, September 23, 2020 Project: DCW3		(Aale 85.0 0.275 0.00 0.00 0.00 0.00 0.00

23 54.2	Adj. L eq	62.0	67.6	66.4	67.3	68.6	62.3	59.1	59.3	59.6	58.1	59.0	59.8	59.4	58.9	58.2	60.1	57.7	61.0	61.9	8.09	65.1	64.2		Nighttimo	3,,,,,,	E7 0	5.75	4)			
1.22 25	Adj.	10.0	10.0	10.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	10.0	10.0	L eq (dBA)			60 0	5.5	24-Hour CNEL (dBA)		63)
6.92 02 8.22 21	L eq	52.0	57.6	56.4	57.3	58.6	62.3	59.1	59.3	9.69	58.1	29.0	29.8	59.4	58.9	58.2	60.1	57.7	26.0	56.9	55.8	55.1		7	2A_Hour		C 03	5:5	24-Ho			
0.92	%667	46.6	54.5	50.5	51.5	53.3	54.1	48.4	45.0	47.1	49.6	20.0	50.3	50.1	50.2	51.0	51.5	50.2	46.2	48.0	48.8	47.1	46.1	%667			49.8	_	48.8	47.7	44.3	55.6
7.72 % ₩	67	4 4			20		. ry	4	4	4	4	ī	ī	Ŋ	Ŋ	isi	<u>.</u>	2	4	4	4	4	4	67	4	Ŋ	4	4	4	4	4	V 12
1.09	%567	46.9	54.6	50.9	51.8	53.6	54.4	48.7	45.5	47.5	50.0	50.3	9.05	50.5	9.09	51.4	51.9	50.5	46.5	48.2	49.2	47.4	46.4	%567	45.5	54.4	50.1	46.5	49.2	48.0	44.6	55.9
6.82 15	%067	47.2	54.7	51.2	52.0	53.8	54.8	49.0	45.9	47.8	50.3	9:09	51.0	20.8	51.0	51.7	52.2	50.8	46.9	48.5	49.5	47.8	46.6	%067	45.9	54.8	50.5	46.9	49.5	48.3	44.9	56.2
1,62 41	%0 5 7	49.1	46.6 56.0	52.7	53.4	55.1	57.9	51.7	49.5	51.3	52.2	52.7	53.1	52.7	53.8	53.6	54.8	52.9	49.7	50.1	51.4	49.5	48.2	%057	49.5	57.9	53.0	49.7	51.4	50.4	46.6	57.7
0.62 12 29.8 13 13 13 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15	752%	50.4	56.4	54.5	55.0	56.3	62.1	29.7	55.3	26.7	55.2	56.5	56.3	55.9	57.4	56.5	58.6	56.4	54.3	54.1	54.3	51.9	49.8	752%	55.2	62.1	57.0	54.1	54.3	54.2	48.8	59.6
11	%87	56.0	50.5	8.09	0.19	62.2	67.3	64.5	64.8	65.4	63.3	64.2	64.6	64.2	64.0	62.5	65.1	62.7	61.4	61.9	60.2	0.09	59.4	%87	62.5	67.3	64.4	60.2	61.9	61.2	56.0	65.3 60.2
9,62 01	\ <u>0</u>	4 0	× ^	0	2	6 9	0 00	9	2	3	2	4	3	2	6	7		2	2	3	2	2	3	٧,	2	8	9	2	3	3	4	9 9
E.92 O	72%	58.4	58.	63.0	63.5	64.9	68.89	9.99	67.5	67.3	65.5	66.4	67.3	67.2	62.9	64.7	67.1	64.5	63.2	64.3	62.	62.5	. 62.	72%	64.5	68.8	9.99	62.5	64.	63.3	58.	67.6
1.62 ∞ 2.79 2.79	77%	61.0	65.4	65.5	67.2	68.4	70.8	69.3	70.1	69.7	68.2	69.2	70.5	70.2	68.3	6.79	69.7	6.99	65.7	67.2	65.3	65.3	64.8	75%	6.99	70.8	69.2	65.3	67.2	66.1	2.09	70.5
£.13 ©	71%	61.7	66.1	66.2	68.5	69.4	71.5	70.0	70.8	9.07	0.69	70.0	71.2	7.07	0.69	8.89	70.4	67.8	66.4	0.89	0.99	62.9	65.3	71%	67.8	71.5	70.0	0.99	0.89	8.99	61.3	71.2
8.72 4	L min	46.5	54.5	50.4	51.4	53.2	54.0	48.3	44.8	47.0	49.5	49.8	50.2	50.0	50.1	50.9	51.3	50.1	46.1	47.9	48.7	47.0	46.1	L min	44.8	54.0	age:	46.1	48.7		44.3	
m 26.4	L max	62.0	o.ro 66.5	66.5	69.1	69.8	72.0	70.3	71.3	71.2	69.5	70.5	71.6	71.0	69.4	69.3	70.8	68.3	8.99	68.4	66.4	66.2	65.6	L max	68.3	72.0	Average	66.4	68.4	Average	61.6	/1.6 Average:
9.72 4	L eq	52.0	57.6	56.4	57.3	58.6	62.3	59.1	59.3	59.6	58.1	59.0	59.8	59.4	58.9	58.2	60.1	57.7	26.0	56.9	55.8	55.1	54.2	L eq	57.7	62.3	59.5	55.8	56.9	56.2	51.3	61.3 57.0
0.52	Hour	0 ,	1 2	ı m	4	ر د د	7	∞	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Hour	Min	Max	/erage	Μin	Max	Average	Min	Max
(A8b) p₃J γlnoH ≈≈۲ νοδονο44 κ σοσοσσοσσσσοσ	Timeframe			Night								Day	ŝ							Evening		Night	31.91.	Timeframe	VeC	ćaż	Energy Average	Fyening	2	Energy Av	Night	Energy Average





APPENDIX 7.1:

OFF-SITE TRAFFIC NOISE CONTOURS





	FH\	VA-RD-77-108	HIGH	1 YAW	IOISE PI	REDICT	ION MC	DEL			
	e: Temescal	ithout Project (Canyon Rd.	2020)				Name: lumber:	DCW3 13627			
	SPECIFIC IN	IPUT DATA			0				L INPUT	S	
Highway Data					Site Cor	aitions	(Hard				
Average Daily	. ,	7,262 vehicl	es					Autos:	15		
	Percentage:	6.31%				dium Tr			15		
	our Volume:	458 vehicle	:S		He	avy Truc	cks (3+	Axles):	15		
	hicle Speed:	40 mph		f	Vehicle	Mix					
Near/Far Lai	ne Distance:	12 feet		ŀ	Veh	icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%			81.35%
Par	rier Heiaht:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	6.69%
Barrier Type (0-W		0.0			-	Heavy T	rucks:	86.5%	2.7%	10.8%	11.96%
Centerline Dis	. ,	37.0 feet		-	M-: 0			// #-	41		
Centerline Dist.	to Observer:	37.0 feet		ŀ	Noise S			_ •	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height (Above Pad):	5.0 feet				m Truck		.297	0	4 4	
	ad Elevation:	0.0 feet			Heal	y Truck	s: 8	.004	Grade Ad	ustment	0.0
Ros	ad Elevation:	0.0 feet		Ī	Lane Eq	uivalen	t Distai	nce (in t	feet)		
1	Road Grade:	0.0%		Ī		Auto	s: 36	.851			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 36	.610			
	Right View:	90.0 degre			Heav	y Truck	s: 36	.634			
FHWA Noise Mode	el Calculation										
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Bei	m Atten
Autos:	66.51	-5.61		1.8	8	-1.20		-4.56	0.0	000	0.000
Medium Trucks:	77.72	-16.46		1.9	13	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	82.99	-13.94		1.9	12	-1.20		-5.61	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	er atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	61	.6	61.7		59.9		53	9	62.	5	63.1
Medium Trucks:	62	2.0	62.5		56.1		54	6	63.0)	63.3
Heavy Trucks:	69	1.8	70.4		61.3		62	.6	70.9	9	71.1
Vehicle Noise:	71	.0	71.5		64.4		63	7	72.	1	72.3
Centerline Distant	ce to Noise C	ontour (in feet)								
				70	dBA	65	dBA	6	60 dBA	55	dBA
			Ldn:		51		11)	236		509
		C	NEL:		52		11	3	244		525

	FHV	/A-RD-77-108	HIGH	A YAWI	IOISE PI	REDICT	ION MO	DDEL			
Road Nam	o: Existing Will e: Temescal Cont: s/o Trilogy I	Canyon Rd.	2020)				: Name: lumber:	DCW3	3		
	SPECIFIC IN	PUT DATA							L INPUT	S	
Highway Data					Site Cor	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	12,101 vehicle	es					Autos:	15		
Peak Hour I	Percentage:	6.31%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	our Volume:	764 vehicle	s		He	avy Tru	cks (3+	Axles):	15		
Vel	hicle Speed:	40 mph			Vehicle	Mix					
Near/Far Lar	ne Distance:	48 feet		F		icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	81.35%
Bar	rier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	6.69%
Barrier Type (0-Wa	-	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	11.96%
Centerline Dis		59.0 feet			Noise S		7		41		
Centerline Dist. t	to Observer:	59.0 feet		l l	woise 3	Auto		- '	eel)		
Barrier Distance t	to Observer:	0.0 feet			A d = elic	Auto m Truck		0.000 2.297			
Observer Height (/	Above Pad):	5.0 feet				m Truck vy Truck		3.004	Grade Ad	iuctment	. 0.0
Pa	ad Elevation:	0.0 feet			пеа	ry Truck	.s. c	5.004	Orauc Au	ustment	0.0
Roa	d Elevation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in	feet)		
F	Road Grade:	0.0%				Auto	s: 54	1.129			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 53	3.966			
	Right View:	90.0 degre	es		Hea	y Truck	s: 53	3.982			
FHWA Noise Mode	el Calculations	S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Bei	m Atten
Autos:	66.51	-3.39		-0.6	-	-1.20		-4.69	0.0	000	0.000
Medium Trucks:	77.72	-14.25		-0.6	0	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	82.99	-11.72		-0.6	0	-1.20		-5.35	0.0	000	0.000
Unmitigated Noise			barri	er atten	uation)						
	Leq Peak Hou			Leq E	vening		Night		Ldn		NEL
Autos:	61		61.4		59.6		53		62.2		62.8
Medium Trucks:	61		62.2		55.8		54		62.7		62.9
Heavy Trucks:	69	-	70.1		61.0		62		70.0	-	70.7
Vehicle Noise:	70	.7	71.2		64.1		63	.4	71.8	B	72.0
Centerline Distanc	ce to Noise Co	ntour (in feet)				·D.4				10.4
			, ,,,_	70 (dBA 70	65	dBA		60 dBA		dBA
		_	Ldn:		78		16		360		775
		Ci	NEL:		80		17	2	371		799

	FHV	VA-RD-77-108	HIGH	WAY N	UISE PI	REDICTION	MOL	JEL			
Road Nam	io: Existing Wine: Temescal (nt: s/o Dos La	Canyon Rd.	2020)			Project Na Job Num					
	SPECIFIC IN	IPUT DATA				NO	SE N	IODE	L INPUT	s	
Highway Data				5	Site Con	ditions (H	ard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	15,106 vehicl	es				,	Autos:	15		
Peak Hour	Percentage:	6.31%			Me	dium Truck	s (2 A	xles):	15		
Peak H	lour Volume:	953 vehicle	:S		He	avy Trucks	(3+ A	xles):	15		
Ve	hicle Speed:	45 mph		١	/ehicle l	Mix					
Near/Far La	ne Distance:	58 feet		F		icleType		Day	Evening	Night	Daily
Site Data						Aut	os:	77.5%	12.9%	9.6%	81.359
Bai	rrier Height:	0.0 feet			Me	edium Truc	ks:	84.8%	4.9%	10.3%	6.69%
Barrier Type (0-W	'all, 1-Berm):	0.0			F	Heavy Truc	ks:	86.5%	2.7%	10.8%	11.96%
Centerline Dis		64.0 feet		1	Voise So	ource Eleva	ations	in fe	eet)		
Centerline Dist.		64.0 feet				Autos:	0.0	000	-		
Barrier Distance		0.0 feet			Mediui	m Trucks:	2.2	297			
Observer Height (,	5.0 feet			Heavy Trucks: 8.004 Grade Adjustment: 0.0						
	ad Elevation:	0.0 feet		,	Fa	uivalent Di	o to no	o (in t	Fo.o.el)		
	ad Elevation: Road Grade:	0.0 feet		-	.ane Eq	Autos:	57.2		eet)		
		0.0%			A decedior	n Trucks:	57.2				
	Left View: Right View:	-90.0 degre 90.0 degre				n Trucks: y Trucks:	57.				
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresn	el .	Barrier Att	en Ber	m Atten
Autos:	68.46	-2.94		-0.99)	-1.20		-4.70	0.0	000	0.00
Medium Trucks:	79.45	-13.79		-0.97	7	-1.20		-4.88	0.0	000	0.00
Heavy Trucks:	84.25	-11.27		-0.97	7	-1.20		-5.31	0.0	000	0.00
Unmitigated Nois											
VehicleType	Leq Peak Hou			Leq Ev		Leq Nig			Ldn		VEL
Autos:	63		63.4		61.7		55.6		64.2	-	64.
Medium Trucks:	63		64.0		57.6		56.1		64.5	-	64.
Heavy Trucks:	70		71.4		62.4		63.6		72.0		72.
Vehicle Noise:	72		72.7		65.8		64.9		73.3	3	73.
	ce to Noise Co	ontour (in feet	t)			05.10			i0 dBA		/D.4
Centerline Distant				70 n							
Centerline Distand			Ldn:	70 a	106	65 dB	227	0	490		dBA 1.056

Monday, October 12, 2020

	EUV	WA-RD-77-108	пісни	AV N	OISE DE	PEDICT	ON MOD)EI		
		**		AT N	UISE PI					
		ithout Project (2	2020)			.,	Name: [
	me: Temescal	. ,				Job N	umber: 1	13627		
Road Segme	ent: s/o Dos La	gos Rd.								
	SPECIFIC IN	IPUT DATA							L INPUTS	
Highway Data				5	Site Con	ditions	(Hard =	10, So	ft = 15)	
Average Daily	Traffic (Adt):	15,106 vehicle	es				A	Autos:	15	
Peak Hou	r Percentage:	6.31%			Me	dium Tru	icks (2 A	xles):	15	
Peak	Hour Volume:	953 vehicles	s		He	avy Truc	ks (3+ A	xles):	15	
V	ehicle Speed:	45 mph			/ehicle					
Near/Far Li	ane Distance:	58 feet		١,		icleTvpe		D	E in	Night Daily
a:				-	ven	,, .		Day 77.5%	-	5 '
Site Data				_		edium Ti		77.5% 84.8%		9.6% 81.35% 10.3% 6.69%
	arrier Height:	0.0 feet						84.8% 86.5%		10.3% 6.69%
Barrier Type (0-V		0.0			,	Heavy Ti	ucks:	86.5%	2.7%	10.8% 11.96%
Centerline D	ist. to Barrier:	64.0 feet		^	loise S	ource E	evations	(in fe	et)	
Centerline Dist	to Observer:	64.0 feet				Auto			.,	
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck.				
Observer Height	(Above Pad):	5.0 feet				y Truck			Grade Adiu	stment: 0.0
F	Pad Elevation:	0.0 feet			1 Icas	y IIUCK	5. 0.0	70-4	Orado riaja	0.0
R	oad Elevation:	0.0 feet		L	ane Eq	uivalen	Distanc	e (in f	eet)	
	Road Grade:	0.0%				Auto	s: 57.2	271		
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 57.1	17		
	Right View:	90.0 degree	es		Heav	y Truck	s: 57.1	132		
FHWA Noise Mo	del Calculation	ıs		!_						
VehicleType	REMEL	Traffic Flow	Distai	nce	Finite	Road	Fresn	e/	Barrier Atte	n Berm Atten
Autos	: 68.46	-2.94		-0.99		-1.20		-4.70	0.00	0.000
Medium Trucks	79.45	-13.79		-0.97	,	-1.20		-4.88	0.00	0.000
Heavy Trucks	84.25	-11.27		-0.97	,	-1.20		-5.31	0.00	0.000
Unmitigated Nois	se Levels (with	out Topo and	barrier a	atteni	uation)					
VehicleType	Leq Peak Hou	ur Leq Day	L	eq Ev	ening	Leq	Night		Ldn	CNEL
Autos	: 63	3.3	63.4		61.7		55.6		64.2	64.8
Medium Trucks	: 63	3.5	64.0		57.6		56.1		64.5	64.8
Heavy Trucks	: 70	0.8	71.4		62.4		63.6		72.0	72.1
Vehicle Noise	. 72	2.2	72.7		65.8		64.9		73.3	73.5
Centerline Distar	nce to Noise Co	ontour (in feet))							
				70 d		65	dBA	6	0 dBA	55 dBA
			Ldn:		106		227		490	1,056
		CI	VEL:		109 235 506 1,08					

Monday, October 12, 2020

	FHV	WA-RD-77-108	HIGH	1 YAW	IOISE PI	REDICT	ION MC	DEL			
Road Nam	o: Existing Wi e: Temescal (nt: s/o Dawson		(2020)				Name: lumber:	DCW3 13627			
	SPECIFIC IN	IPUT DATA							L INPUT	s	
Highway Data					Site Cor	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	15,092 vehic	les					Autos:	15		
Peak Hour	Percentage:	6.31%				dium Tr			15		
Peak H	our Volume:	952 vehicle	es		He	avy Truc	cks (3+	Axles):	15		
Vei	hicle Speed:	40 mph		ŀ	Vehicle	Miv					
Near/Far Lar	ne Distance:	58 feet		ŀ		icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%			81.35%
Box	rier Heiaht:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	6.69%
Barrier Type (0-W		0.0 feet				Heavy T	rucks:	86.5%	2.7%	10.8%	11.96%
Centerline Dis		64.0 feet									
Centerline Dist		64.0 feet		-	Noise S			_ •	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	.004	Grade Ad	iustment	0.0
	d Flevation:	0.0 feet		ľ	Lane Eq	uivalen	t Distar	ice (in	feet)		
ı	Road Grade:	0.0%		ı		Auto	s: 57	.271			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 57	.117			
	Right View:	90.0 degre			Heav	y Truck	s: 57	.132			
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	-2.43		-0.9	9	-1.20		-4.70	0.0	000	0.000
Medium Trucks:	77.72	-13.29)	-0.9	7	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	82.99	-10.76		-0.9	7	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barri	er atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq Da	у	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	61	1.9	62.0		60.2		54.	2	62.8	3	63.4
Medium Trucks:	62	2.3	62.8		56.4		54.	8	63.3	3	63.5
Heavy Trucks:	70).1	70.6		61.6		62.	9	71.2	2	71.3
Vehicle Noise:	71	1.3	71.8		64.7		64.	.0	72.4	4	72.6
Centerline Distance	e to Noise Co	ontour (in fee	t)								
				70	dBA	65	dBA	6	0 dBA	55	dBA
			Ldn:		92		198	3	427		921
		C	NEL:						949		

	FHV	VA-RD-77-108	HIGH	WAY N	OISE PI	REDICTION	ON MC	DEL			
Road Nam	io: Existing Wi ne: Temescal C nt: s/o Dawsor	Canyon Rd.	2020)			Project i Job Nu		DCW3	i		
	SPECIFIC IN	PUT DATA							L INPUT	S	
Highway Data					site Cor	nditions (Hara :	_	oft = 15)		
Average Daily	. ,	15,092 vehicle	es					Autos:	15		
	Percentage:	6.31%				dium Tru		,	15		
	lour Volume:	952 vehicle	S		He	avy Truc	ks (3+	Axles):	15		
	hicle Speed:	40 mph		١	/ehicle	Mix					
Near/Far Lai	ne Distance:	58 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						Α	utos:	77.5%	12.9%	9.6%	81.359
Bai	rrier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	6.699
Barrier Type (0-W	'all, 1-Berm):	0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8%	11.969
Centerline Dis		64.0 feet		1	Voise S	ource Ele	evatio	ns (in f	eet)		
Centerline Dist.		64.0 feet				Autos		.000	,		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks		.297			
Observer Height (5.0 feet			Hear	vy Trucks	: 8	.004	Grade Ad	justmen	t: 0.0
	ad Elevation:	0.0 feet		L.							
	ad Elevation:	0.0 feet		1	.ane Eq	uivalent			reet)		
,	Road Grade:	0.0%				Autos		.271			
	Left View:	-90.0 degre				m Trucks		.117			
	Right View:	90.0 degre	es		Hea	vy Trucks	: 5/	.132			
FHWA Noise Mod											
VehicleType	REMEL	Traffic Flow	Dist	tance		Road	Fres		Barrier Att		rm Atten
Autos:	66.51	-2.43		-0.99		-1.20		-4.70		000	0.00
Medium Trucks:	77.72	-13.29		-0.97		-1.20		-4.88		000	0.00
Heavy Trucks:	82.99	-10.76		-0.97		-1.20		-5.31	0.0	000	0.00
Unmitigated Noise VehicleType	e Levels (with Leg Peak Hou			r atten Leg Ev		Leg I	Might	1	Ldn		NFL
Autos:	61		62.0	-cy -v	60.2		54.	2	62.		63.
Medium Trucks:	62		62.8		56.4		54	_	63.	-	63
Heavy Trucks:	70		70.6		61.6		62	-	71.	-	71.
Vehicle Noise:	71		71.8		64.7		64.	-	72.		72.
Centerline Distance	ce to Noise Co	ntour (in feet)								
				70 c	IBA	65 c			60 dBA	55	dBA
			Ldn:		92		198	3	427	,	921
		C	NEL:		95		204	4	440)	949

		WA-RD-77-108											
	Existing WCampbell I	ithout Project (: Ranch Rd.	2020)			.,		DCW3 13627					
Road Segmen	t: s/o Temes	cal Canyon Rd											
SITE S	PECIFIC II	NPUT DATA				N	IOISE	MODE	L INPUT	s			
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)				
Average Daily T	raffic (Adt):	8,094 vehicl	es		Autos: 15								
Peak Hour F	Percentage:	6.31%			Medium Trucks (2 Axles): 15								
Peak Ho	our Volume:	511 vehicle	s		Hea	avy Truc	cks (3+	Axles):	15				
Veh	icle Speed:	45 mph		V	ehicle N	Niv							
Near/Far Lan	e Distance:	48 feet		ř		cleType		Dav	Evening	Night	Dailv		
Site Data							Autos:	77.5%	-	9.6%	81.359		
Ran	rier Heiaht:	0.0 feet			Medium Trucks: 84.8% 4.9% 10.3% 6.6								
Barrier Type (0-Wa		0.0			H	leavy Ti	rucks:	86.5%	2.7%	10.8%	11.969		
Centerline Dist	t. to Barrier:	59.0 feet		N	loise So	urce F	levatio	ns (in fe	eet)				
Centerline Dist. to	Observer:	59.0 feet		F.	0.00 00	Auto		.000	,,,,				
Barrier Distance to	Observer:	0.0 feet			Mediun	n Truck.		297					
Observer Height (A	lbove Pad):	5.0 feet				v Truck		1.004	Grade Ad	iustment:	0.0		
Pa	d Elevation:	0.0 feet											
	d Elevation:	0.0 feet		L	ane Equ				feet)				
F	Road Grade:	0.0%				Auto		.129					
	Left View:	-90.0 degre				n Truck		1.966					
	Right View:	90.0 degre	es		Heavy Trucks: 53.982								
FHWA Noise Mode	I Calculation	ıs											
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	inel	Barrier Att	en Ber	m Atten		
Autos:	68.46	-5.65		-0.62		-1.20		-4.69	0.0	000	0.00		
Medium Trucks:	79.45			-0.60		-1.20		-4.88		000	0.00		
Heavy Trucks:	84.25	-13.98		-0.60		-1.20		-5.35	0.0	000	0.00		
Unmitigated Noise			barrier	attenu	ıation)								
	Leq Peak Ho			Leq Eve	-	Leq	Night		Ldn		VEL		
Autos:	-		61.1		59.3		53		61.9		62.		
Medium Trucks:	-		61.6		55.3		53		62.2	-	62.		
Heavy Trucks:			69.1		60.0		61		69.6		69.		
Vehicle Noise:			70.3		63.4		62	.5	70.9	9	71.		
Centerline Distanc	e to Noise C	ontour (in feet)										
			L	70 dl		65	dBA		i0 dBA		dBA		
			Ldn:		68		14	-	315		680		
	CNEL:				70 151 325				70				

Monday, October 12, 2020

	FHV	VA-RD-77-108	HIGHWA	Y NOISE P	REDICTI	ON MO	DEL					
Road Nar	rio: Existing Wi ne: Dawson Ca ent: e/o Temeso	nyon Rd.	(020)		Project Job N		DCW3					
	SPECIFIC IN	PUT DATA						L INPUT	S			
Highway Data				Site Co	nditions	(Hard	= 10, S	oft = 15)				
Average Daily	Traffic (Adt):	7,540 vehicle	s	Autos: 15								
Peak Hou	Percentage:	6.31%		Medium Trucks (2 Axles): 15								
Peak I	Hour Volume:	476 vehicles	3	He	eavy Truc	ks (3+	Axles):	15				
Ve	ehicle Speed:	40 mph		Vehicle	Miv							
Near/Far La	ane Distance:	12 feet			icleType		Dav	Evening	Night	Daily		
Site Data						Autos:	77.5%	6 12.9%	9.69	81.35%		
Ra	rrier Height:	0.0 feet		M	edium Tr	ucks:	84.89	4.9%	10.39	6.69%		
Barrier Type (0-V		0.0			Heavy Tr	ucks:	86.5%	6 2.7%	10.89	6 11.96%		
	ist. to Barrier:	37.0 feet										
Centerline Dist.	to Observer:	37.0 feet		Noise S	ource El			eet)				
Barrier Distance	to Observer:	0.0 feet			Auto: m Trucks		.000					
Observer Height	Observer Height (Above Pad): 5.0 feet						.297					
	Pad Flevation:	0.0 feet		Hea	vy Trucks	s: 8	.004	Grade Adj	ustmen	t: 0.0		
Ro	ad Elevation:	0.0 feet		Lane Ec	uivalent	Dista	nce (in	feet)				
	Road Grade:	0.0%			Autos	s: 36	.851					
	Left View:	-90.0 degree	s	Mediu	m Trucks	s: 36	.610					
	Right View:	90.0 degree	s	Hea	vy Trucks	s: 36	.634					
FHWA Noise Mod	del Calculation	s										
VehicleType	REMEL	Traffic Flow	Distant		Road	Fres		Barrier Atte		rm Atten		
Autos		-5.45		1.88	-1.20		-4.56		000	0.000		
Medium Trucks		-16.30		1.93	-1.20		-4.87		000	0.000		
Heavy Trucks	82.99	-13.77		1.92	-1.20		-5.61	0.0	000	0.000		
Inmitigated Nois			barrier at	tenuation)								
VehicleType	Leq Peak Hou			q Evening		Night		Ldn		CNEL		
Autos			61.8	60.1		54		62.6		63.3		
Medium Trucks			62.6	56.3		54		63.2	-	63.4		
Heavy Trucks			70.5	61.5		62		71.1		71.2		
Vehicle Noise	71	.1	71.7	64.5	i	63	.9	72.2	2	72.4		
Centerline Distar	ice to Noise Co	ntour (in feet)			1		1					
				70 dBA	65 (dBA		60 dBA		5 dBA		
			Ldn:					522				
		CI	IEL:	54		11	ö	250		538		

Monday, October 12, 2020

	FHV	/A-RD-77-108	HIGH	WAY N	IOISE PI	REDICT	ION MO	DEL						
	c: Existing + F e: Temescal C t: s/o I-15						Name: lumber:							
SITE S Highway Data	SPECIFIC IN	PUT DATA			Site Cor				L INPUT	S				
Average Daily 1 Peak Hour F Peak Ho	Percentage: our Volume:	8,142 vehicle 6.31% 514 vehicle			Ме	dium Tr	ucks (2	Autos: Axles):						
Veh Near/Far Lan	icle Speed:	40 mph 12 feet			Vehicle	Mix								
	e Distance.	12 1661			Veh	icleType		Day	Evening	Night	Daily			
Site Data							Autos:	77.5%		9.6%				
Barrier Type (0-Wa	rier Height: all, 1-Berm):	0.0 feet 0.0				edium T Heavy T		84.8% 86.5%		10.3% 10.8%	5.96% 10.67%			
Centerline Dis	t. to Barrier:	37.0 feet		H	Noise S	ource F	levation	ne (in f	not)					
Centerline Dist. to	o Observer:	37.0 feet		-	140/36 01	Auto		.000						
Barrier Distance to	larrier Distance to Observer: 0.0 feet						Medium Trucks: 2.297							
Observer Height (A	Above Pad): d Flevation:	5.0 feet 0.0 feet				y Truck		.004	Grade Adj	iustment	0.0			
	d Elevation:	0.0 feet		İ	Lane Eq	uivalen	t Distan	ce (in	feet)					
F	Road Grade:	0.0%				Auto		.851						
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 36	.610						
	Right View:	90.0 degree			Heavy Trucks: 36.634									
FHWA Noise Mode	l Calculation:	S												
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresi	nel	Barrier Att	en Be	rm Atten			
Autos:	66.51	-5.01		1.8	8	-1.20		-4.56	0.0	000	0.000			
Medium Trucks:	77.72	-16.46		1.9	3	-1.20		-4.87	0.0	000	0.000			
Heavy Trucks:	82.99	-13.94		1.9		-1.20		-5.61	0.0	000	0.000			
Unmitigated Noise								_						
	Leq Peak Hou			Leq E	vening	,	Night		Ldn		NEL			
Autos:	62	_	62.3		60.5		54.	-	63.	-	63.7			
Medium Trucks:	62		62.5		56.1		54.	-	63.0		63.3			
Heavy Trucks: _ Vehicle Noise:	69 71	-	70.4 71.6		61.3 64.6		62. 63.		70.9 72.1	-	71.1 72.4			
Centerline Distance	e to Noise Co	ntour (in feet)											
Contonine Distanc	0.07.036.00	mour ₍ mreet)	_	70	dBA	65	dBA	(60 dBA	55	dBA			
			Ldn:		52		111	1	239	1	515			
	CNEL:						114	1	247		531			

	FHV	/A-RD-77-108	HIGH	HWAY N	OISE PI	REDICT	ION MC	DDEL			
	o: Existing + F e: Temescal C t: s/o Trilogy F	Canyon Rd.					Name: lumber:				
SITE S	SPECIFIC IN	PUT DATA							L INPUT	S	
Highway Data					Site Cor	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily 1	raffic (Adt):	12,835 vehicle	es					Autos:	15		
Peak Hour F	Percentage:	6.31%			Me	dium Tr	ucks (2	Axles):	15		
Peak Ho	our Volume:	810 vehicle	s		He	avy Tru	cks (3+	Axles):	15		
Veh	icle Speed:	40 mph		-	Vehicle	Miv					
Near/Far Lan	e Distance:	48 feet		H		icleType)	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	-	-	82.42%
Ban	rier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	6.30%
Barrier Type (0-Wa	-	0.0			1	Heavy T	rucks:	86.5%	2.7%	10.8%	11.28%
Centerline Dis		59.0 feet		-	Noise S			(i f-	41		
Centerline Dist. to	o Observer:	59.0 feet		Η.	voise S				eet)		
Barrier Distance to	o Observer:	0.0 feet				Auto m Truck		.000			
Observer Height (A	Observer Height (Above Pad): 5.0 feet							.004	Grade Ad	uctment	0.0
Pa	d Elevation:	0.0 feet			неач	y Truck	S: 8	.004	Grade Au	usunen	0.0
Roa	d Elevation:	0.0 feet		1	Lane Eq	uivalen	t Distar	nce (in i	feet)		
F	Road Grade:	0.0%				Auto	s: 54	.129			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 53	.966			
	Right View:	90.0 degree	es		Heavy Trucks: 53.982						
FHWA Noise Mode	l Calculation:	S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	66.51	-3.08		-0.6	_	-1.20		-4.69	0.0	000	0.00
Medium Trucks:	77.72	-14.25		-0.6	0	-1.20		-4.88	0.0	000	0.00
Heavy Trucks:	82.99	-11.72		-0.6	0	-1.20		-5.35	0.0	000	0.00
Unmitigated Noise			barri	er atten	uation)						
	Leq Peak Hou			Leg E			Night		Ldn		NEL
Autos:	61		61.7		59.9		53.		62.		63.
Medium Trucks:	61		62.2		55.8		54.	-	62.7		62.
Heavy Trucks:	69	-	70.1		61.0		62.	-	70.6		70.
Vehicle Noise:	70	.7	71.2		64.2		63.	.4	71.8	3	72.0
Centerline Distanc	e to Noise Co	ntour (in feet)								
			, ,,,_	70 (65	dBA		0 dBA		dBA
	Ldn: CNFL:								779		
			80		173	0	373		804		

		VA-RD-77-108	IIIOII	TTAL IN	OIOL F						
	o: Existing + F						Name:				
	e: Temescal (,				Job ∧	lumber:	13627			
Road Segmen	t: s/o Dos La	gos Rd.									
	SPECIFIC IN	PUT DATA							L INPUT	S	
Highway Data				S	ite Cor	nditions	(Hard :	= 10, S	oft = 15)		
Average Daily 1	Traffic (Adt):	15,860 vehicl	es					Autos:	15		
Peak Hour I	Percentage:	6.31%			Me	dium Tr	ucks (2	Axles):	15		
Peak Ho	our Volume:	1,001 vehicle	S		He	avy Tru	cks (3+	Axles):	15		
Vel	nicle Speed:	45 mph		v	/ehicle	Mix					
Near/Far Lar	e Distance:	58 feet		Ė		icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	82.119
Rar	rier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	6.45%
Barrier Type (0-Wa		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	11.449
Centerline Dis	t. to Barrier:	64.0 feet			loise S	ource E	levatio	ns (in f	pet)		
Centerline Dist. t	o Observer:	64.0 feet		H.	.0.00	Auto		.000	001)		
Barrier Distance t	o Observer:	0.0 feet			Mediu	m Truck		.297			
Observer Height (A	Above Pad):	5.0 feet				/y Truck		.004	Grade Ad	iustment:	0.0
Pa	d Elevation:	0.0 feet			7700	ry much	J. U	.004	Orado riaj	40111101111	0.0
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalen	t Distar	nce (in	feet)		
F	Road Grade:	0.0%				Auto	s: 57	.271			
	Left View:	-90.0 degre	es			m Truck		.117			
	Right View:	90.0 degre	es		Hea	y Truck	s: 57	.132			
FHWA Noise Mode	l Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	68.46	-2.69		-0.99)	-1.20		-4.70	0.0	000	0.00
Medium Trucks:	79.45	-13.74		-0.97	,	-1.20		-4.88	0.0	000	0.00
Heavy Trucks:	84.25	-11.25		-0.97	,	-1.20		-5.31	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barrie	er attenu	ıation)						
VehicleType	Leq Peak Hou	r Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	63	.6	63.7		61.9		55.	.9	64.5	5	65.
Medium Trucks:	63	.5	64.0		57.7		56.	.1	64.6	3	64.
Heavy Trucks:	70	.8	71.4		62.4		63.	.6	72.0)	72.
Vehicle Noise:	72	.2	72.7		65.9		64.	.9	73.3	3	73.
Centerline Distanc	e to Noise Co	ntour (in feet)								
			L	70 d		65	dBA		60 dBA		dBA
Ldn:			106 229 494			1,064					
		_	NEL:		110		23	_	510		1.099

Monday, October 12, 2020

	FHV	VA-RD-77-108 I	HIGH	YAW 1	NOISE PF	REDICTI	ON M	DDEL			
Scena	rio: Existing + F	Project				Project	Name.	DCW	3		
Road Nar	ne: Temescal (Canyon Rd.				Job N	umber.	13627	,		
Road Segme	ent: s/o Dos La	gos Rd.									
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	15,860 vehicle	S					Autos			
Peak Hou	Percentage:	6.31%				dium Tru		/			
Peak I	Hour Volume:	1,001 vehicles			He	avy Truc	ks (3+	Axles)	15		
	ehicle Speed:	45 mph		ŀ	Vehicle I	Mix					
Near/Far La	ane Distance:	58 feet		ŀ	Veh	icleType		Day	Evening	Nigh	t Daily
Site Data							Autos:	77.59	6 12.9%	9.6	% 82.11%
Ra	rrier Heiaht:	0.0 feet			Me	edium Tr	ucks:	84.89	6 4.9%	10.3	% 6.45%
Barrier Type (0-V	Vall, 1-Berm):	0.0			F	Heavy Tr	ucks:	86.59	6 2.7%	10.8	% 11.44%
	ist. to Barrier:	64.0 feet		l	Noise So	ource El	evatio	ns (in i	eet)		
Centerline Dist.	to Observer:	64.0 feet		f		Auto:		0.000	,		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks		2.297			
Observer Height	(Above Pad):	5.0 feet				y Trucks		3.004	Grade Adj	ustme	nt: 0.0
F	Pad Elevation:	0.0 feet		L		•					
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalent	Dista	nce (in	feet)		
	Road Grade:	0.0%				Autos	s: 57	7.271			
	Left View:	-90.0 degree	s		Mediui	m Trucks	s: 57	7.117			
	Right View:	90.0 degree	s		Heav	y Trucks	s: 57	7.132			
FHWA Noise Mod	del Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fre	snel	Barrier Att	en E	Berm Atten
Autos	68.46	-2.69		-0.9	9	-1.20		-4.70	0.0	000	0.000
Medium Trucks	79.45	-13.74		-0.9	97	-1.20		-4.88	0.0	000	0.000
Heavy Trucks	84.25	-11.25		-0.9	97	-1.20		-5.31	0.0	000	0.000
Unmitigated Nois			arrie								
VehicleType	Leq Peak Hou			Leq E	vening	Leq	Night		Ldn		CNEL
Autos			3.7		61.9		55		64.5		65.1
Medium Trucks			4.0		57.7		56		64.6		64.8
Heavy Trucks			1.4		62.4		63		72.0		72.1
Vehicle Noise:	72	2 7	2.7		65.9		64	.9	73.3	3	73.5
Centerline Distan	ice to Noise Co	ontour (in feet)					10.4	_		1	55 104
			, L	70	dBA	65 (dBA		60 dBA		55 dBA
		_	.dn:		106		22	-	494		1,064
		CN	EL:		110		23	1	510		1,099

Monday, October 12, 2020

	FH\	WA-RD-77-108	HIGH	IWAY N	OISE PE	REDICTI	ON MC	DEL			
Scenari	o: Existing + I	Project				Project	Name:	DCW3			
Road Nam	e: Temescal	Canyon Rd.				Job N	umber:	13627			
Road Segmen	nt: s/o Dawso	n Canyon Rd.									
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data					Site Con	ditions	(Hard =				
Average Daily	. ,	16,667 vehicle	es					Autos:	15		
	Percentage:	6.31%				dium Tru			15		
	our Volume:	1,052 vehicle	S		He	avy Truc	ks (3+	Axles):	15		
	hicle Speed:	40 mph		1	Vehicle i	Mix					
Near/Far Lar	ne Distance:	58 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	82.99%
Rar	rier Height:	0.0 feet			M	edium Tı	ucks:	84.8%	4.9%	10.3%	6.13%
Barrier Type (0-Wa	-	0.0			F	Heavy Tr	ucks:	86.5%	2.7%	10.8%	10.87%
Centerline Dis	t. to Barrier:	64.0 feet			Noico S	ource El	ovation	e (in fe	not)		
Centerline Dist. t	to Observer:	64.0 feet		H.	V0/36 30	Auto:		.000	ei)		
Barrier Distance t	to Observer:	0.0 feet			Modiu	m Truck:		297			
Observer Height (/	Above Pad):	5.0 feet				y Trucks		.004	Grade Ad	iuetmant	. 0.0
Pa	ad Elevation:	0.0 feet				•				asimoni	0.0
Roa	d Elevation:	0.0 feet		1	Lane Eq	uivalent	Distar	ice (in t	feet)		
F	Road Grade:	0.0%				Auto	s: 57	.271			
	Left View:	-90.0 degree	es		Mediu	m Trucks	s: 57	.117			
	Right View:	90.0 degree	es		Heav	y Trucks	s: 57	.132			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres		Barrier Att	en Bei	m Atten
Autos:	66.51	-1.92		-0.99		-1.20		-4.70		000	0.000
Medium Trucks:	77.72			-0.9		-1.20		-4.88		000	0.000
Heavy Trucks:	82.99			-0.9		-1.20		-5.31	0.0	000	0.000
Unmitigated Noise			_								
	Leq Peak Hou		_	Leq Ev		Leq	Night		Ldn		NEL
Autos:			62.5		60.7		54.		63.3		63.9
Medium Trucks:			62.8		56.4		54.	-	63.4	•	63.6
Heavy Trucks:			70.7		61.6		62.	-	71.2		71.4
Vehicle Noise:			71.9		64.9		64.	0	72.4	4	72.6
Centerline Distance	e to Noise C	ontour (in feet)							,	
			L	70 c		65	dBA		60 dBA		dBA
			Ldn:		93		201		433		932
		CI	VEL:		96		207	7	446		961

	FHV	VA-RD-77-108	HIGH	WAY N	IOISE P	REDICT	ION MC	DEL			
Road Nam	io: Existing + F e: Temescal (nt: s/o Dawsor	Canyon Rd.					Name: lumber:				
SITE :	SPECIFIC IN	PUT DATA			Sito Co	nditions			L INPUT	s	
					Site Col	luitions	(IIaIu	Autos:			
Average Daily	. ,	16,667 vehicl 6.31%	es		1.6	edium Tr	uelse (2		15 15		
	Percentage:							,	15 15		
	our Volume:	1,052 vehicle	s		H	eavy Tru	CKS (3+	Axies):	15		
	hicle Speed:	40 mph			Vehicle	Mix					
Near/Far Lar	ne Distance:	58 feet			Vel	nicleType	•	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	82.99%
Bai	rrier Height:	0.0 feet			N	ledium T	rucks:	84.8%	4.9%	10.3%	6.139
Barrier Type (0-W	all, 1-Berm):	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	10.87%
Centerline Dis		64.0 feet		Ī	Noise S	ource E	levatio	ns (in f	eet)		
Centerline Dist.		64.0 feet		Ī		Auto	s: 0	.000			
Barrier Distance		0.0 feet			Mediu	m Truck	s: 2	.297			
Observer Height (,	5.0 feet			Hea	vy Truck	s: 8	.004	Grade Ad	justment	: 0.0
	ad Elevation:	0.0 feet									
	ad Elevation:	0.0 feet			Lane Ed	uivalen			feet)		
F	Road Grade:	0.0%				Auto		.271			
	Left View:	-90.0 degre	es		Mediu	m Truck		.117			
	Right View:	90.0 degre	es		Hea	vy Truck	s: 57	.132			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow		stance		Road	Fres		Barrier Att		rm Atten
Autos:	66.51	-1.92		-0.9		-1.20		-4.70		000	0.00
Medium Trucks:	77.72	-13.23		-0.9		-1.20		-4.88		000	0.00
Heavy Trucks:	82.99	-10.74		-0.9	7	-1.20		-5.31	0.0	000	0.00
Unmitigated Noise								_			
	Leq Peak Hou			Leq E	vening		Night		Ldn		NEL
Autos:	62		62.5		60.7		54		63.3	-	63.9
Medium Trucks:	62		62.8		56.4		54	-	63.4		63.6
Heavy Trucks:	70		70.7		61.6		62	-	71.2		71.4
Vehicle Noise:	71		71.9		64.9)	64	.0	72.4	4	72.0
Centerline Distance	ce to Noise Co	ntour (in feet)	70	dBA	65	dBA		60 dBA	5.6	i dBA
			Ldn:	70	и <i>Б</i> А 93	65			433		932 932
		^	NEL:		93 201 433 96 207 446			932			
		C	VEL.		96		20	,	440	,	901

	FH\	WA-RD-77-108	HIGH	WAY N	OISE PI	REDICT	ION MC	DDEL					
Scenario: Existing + Project Road Name: Campbell Ranch Rd. Road Segment: s/o Temescal Canyon Rd.					Project Name: DCW3 Job Number: 13627								
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)								
Highway Data					Site Cor	iditions	(Hard						
Average Daily Traffic (Adt): 8,388 vehicles					Autos: 15								
Peak Hour Percentage: 6.31%				Medium Trucks (2 Axles): 15									
Peak Hour Volume: 529 vehicles			S		Heavy Trucks (3+ Axles): 15								
Vehicle Speed: 45 mp				١	Vehicle Mix								
Near/Far Lar	ne Distance:	48 feet		F	Veh	ісІеТуре	,	Day	Evening	Night	Daily		
Site Data						,	Autos:	77.5%	12.9%	9.6%	82.009		
Rar	rier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	6.459		
Barrier Type (0-Wa		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	11.549		
Centerline Dis	t. to Barrier:	59.0 feet		,	Voise S	ource F	levatio	ns (in f	eet)				
Centerline Dist. to Observer: 59.0 feet				F	Noise Source Elevations (in feet) Autos: 0.000								
Barrier Distance t	0.0 feet		Medium Trucks: 2.297										
Observer Height (Above Pad): 5.0 feet				Heavy Trucks: 8.004 Grade Adjustment: 0.0									
Pa	d Elevation:	0.0 feet			rical	ry IIIUCK	s. c	.004	Orauc Au	justinoni	0.0		
Roa	0.0 feet		L	ane Eq	uivalen	t Distai	nce (in	feet)					
F	0.0%				Auto	s: 54	.129						
	-90.0 degrees			Medium Trucks: 53.966									
	Right View:	90.0 degre	es		Heav	y Truck	s: 53	.982					
FHWA Noise Mode	el Calculation	ıs											
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Bei	m Atten		
Autos:	68.46	-5.46		-0.62	2	-1.20		-4.69	0.0	000	0.00		
Medium Trucks:	79.45	-16.50		-0.60)	-1.20		-4.88	0.000		0.00		
Heavy Trucks:	84.25	-13.98		-0.60)	-1.20	1.20 -5.35		0.0	000	0.000		
Unmitigated Noise	Levels (with	out Topo and	barrie	er atten	uation)								
VehicleType	Leq Peak Hou	ur Leq Day	′	Leq Ev	rening	Leq	Night		Ldn	С	NEL		
Autos:	61	61.2 61.3			59.5		53.5		62.	1	62.		
Medium Trucks:	61.1 61.6		61.6	55.3			53.7		62.	2	62.4		
Heavy Trucks:			69.1		60.0		61.3		69.		69.		
Vehicle Noise:	69	9.8	70.3		63.5		62	.5	70.	9	71		
Centerline Distanc	e to Noise C	ontour (in feet)					,					
			L	70 a		65	dBA		60 dBA		dBA		
			Ldn:		68		14		317		683		
		C	NEL:		70		15	2	327	,	70		

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	FHW	A-RD-77-108	HIGH	I YAWI	NOISE PI	REDICTI	ON MC	DEL				
Scenario: Existing + Project Road Name: Dawson Canyon Rd. Road Segment: e/o Temescal Canyon Rd.					Project Name: DCW3 Job Number: 13627							
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)							
Highway Data					Site Cor	nditions	(Hard :	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt): 9,388 vehicles				Autos: 15								
Peak Hour Percentage: 6.31%				Medium Trucks (2 Axles): 15								
Peak Hour Volume: 592 vehicles					Heavy Trucks (3+ Axles): 15							
Vehicle Speed: 40 mph				Vehicle Mix								
Near/Far Lar	ne Distance:	12 feet				icleType		Day	Evening	Night	Daily	
Site Data						-	Autos:	77.5%	12.9%	9.6%	85.029	
Bai	rier Height:	0.0 feet			М	edium Tı	rucks:	84.8%	4.9%	10.3%	5.37%	
Barrier Type (0-W		0.0				Heavy Ti	rucks:	86.5%	2.7%	10.8%	9.619	
Centerline Dis												
Centerline Dist. to Observer: 37.0 feet			-	Noise Source Elevations (in feet) Autos: 0.000								
Barrier Distance	to Observer:	0.0 feet			A decadio							
Observer Height (Above Pad): 5.0 feet				Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0								
Pa	nd Elevation:	0.0 feet			Heal	y iruck	s: 8	.004	Grade Adj	usimem	. 0.0	
Road Elevation: 0.0 feet				Lane Equivalent Distance (in feet)								
Road Grade: 0.0%				ĺ		Auto	s: 36	.851				
	Left View:	-90.0 degree	es		Mediu	m Trucks	s: 36	.610				
	Right View:	90.0 degree	es		Heav	y Truck	s: 36	.634				
FHWA Noise Mode	el Calculations	;										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten	
Autos:	66.51	-4.30		1.8	38	-1.20		-4.56	0.0	000	0.00	
Medium Trucks:	77.72	-16.30		1.9	93	-1.20	-1.20		0.0	000	0.00	
Heavy Trucks:	82.99	-13.77		1.9	92	-1.20	-1.20 -5.6		0.0	000	0.00	
Unmitigated Noise	e Levels (with	ut Topo and	barri	er attei	nuation)							
VehicleType	Leq Peak Hou	Leq Day	′	Leq E	vening	Leq	Night		Ldn	С	NEL	
Autos:	62.	62.9 63.0			61.2	55.2		.2	63.8		64.	
Medium Trucks:			62.6		56.3		54.7		63.2		63.	
Heavy Trucks:				61.5	62.7		.7	71.	1	71.		
Vehicle Noise:	71.	3	71.8		65.0		64.	.0	72.4	1	72.	
Centerline Distanc	ce to Noise Co	ntour (in feet)							_		
			L	70	dBA	65	dBA		60 dBA		dBA	
			Ldn:		53		11	-	248		534	
		Ci	NEL:		55		119	9	256		551	

Monday, October 12, 2020

	FHW	/A-RD-77-108	HIGH	WAY N	IOISE PI	REDICT	ON MC	DEL			
Road Na	ario: EA (2022) V me: Temescal C ent: s/o I-15						Name: lumber:				
SITE Highway Data	SPECIFIC IN	PUT DATA			Site Cor				L INPUT	S	
Average Daily Peak Hou Peak V	r Traffic (Adt): ir Percentage: Hour Volume: 'ehicle Speed: ane Distance:	7,556 vehicle 6.31% 477 vehicle 40 mph 12 feet			Me He Vehicle	dium Tri avy Truc	ucks (2 cks (3+	Autos: Axles):	15 15	Night	Dailv
Site Data							Autos:	77.5%		9.6%	81.35%
Barrier Type (0-1		0.0 feet 0.0				edium T. Heavy T.		84.8% 86.5%		10.3% 10.8%	6.69%
	Dist. to Barrier:	37.0 feet			Noise S	ource E	levation	ns (in f	eet)		
Centerline Dist		37.0 feet				Auto	s: 0	.000	-		
	Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet				Mediu	m Truck	s: 2	.297			
	Pad Elevation:	0.0 feet			Heav	y Truck	s: 8	.004	Grade Ad	justment	: 0.0
R	oad Elevation:	0.0 feet			Lane Eq	uivalen	t Distar	ice (in	feet)		
	Road Grade:	0.0%				Auto	s: 36	.851			
	Left View: Right View:	-90.0 degree				m Truck ry Truck		.610 .634			
FHWA Noise Mo	del Calculations	3		1							
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos		-5.44		1.8	8	-1.20		-4.56	0.0	000	0.000
Medium Trucks		-16.29		1.9	-	-1.20		-4.87		000	0.000
Heavy Trucks		-13.77		1.9		-1.20		-5.61	0.0	000	0.000
Unmitigated Noi							A E I-4	1	l ele		A/F/
VehicleType Autos	Leq Peak Hou		61.9	Leq E	vening 60.1	Leq	Night 54	0	Ldn 62.1		NEL 63.3
Medium Trucks		-	62.6		56.3		54. 54.	-	63.3		63.4
Heavy Trucks		_	70.5		61.5		62.		71.	_	71.2
Vehicle Noise			71.7		64.6		63.		72.		72.5
Centerline Dista	nce to Noise Co	ntour (in feet))								
				70	dBA	65	dBA	- (60 dBA	55	dBA
			Ldn:		52		113	3	243	3	523
	CNEL:						116	3	250)	539

	o: EA (2022)							DCW3			
	e: Temescal (,				Job N	umber:	13627			
Road Segmen	nt: s/o Trilogy	Pkwy.									
	SPECIFIC IN	PUT DATA							L INPUT	S	
Highway Data					Site Cor	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	12,590 vehic	les					Autos:	15		
Peak Hour	Percentage:	6.31%				dium Tru		,	15		
Peak H	our Volume:	794 vehicle	es		He	avy Truc	cks (3+	Axles):	15		
Vel	hicle Speed:	40 mph		ŀ	Vehicle	Mix					
Near/Far Lar	ne Distance:	48 feet		ŀ	Veh	icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	81.359
Bar	rier Height:	0.0 feet			М	edium Tı	rucks:	84.8%	4.9%	10.3%	6.699
Barrier Type (0-Wa	-	0.0			1	Heavy Tr	rucks:	86.5%	2.7%	10.8%	11.969
Centerline Dis		59.0 feet			M-: 0			(: 6			
Centerline Dist. t	to Observer:	59.0 feet			Noise S			_ •	eet)		
Barrier Distance t	to Observer:	0.0 feet				Auto		0.000 0.297			
Observer Height ()	Above Pad):	5.0 feet				m Trucks	-		Grade Ad	icatman	
Pa	d Elevation:	0.0 feet			Heav	y Trucks	s: 6	3.004	Grade Adj	usinen	. 0.0
Roa	d Elevation:	0.0 feet			Lane Eq	uivalent	t Dista	nce (in i	feet)		
F	Road Grade:	0.0%				Auto	s: 54	1.129			
	Left View:	-90.0 degre	ees		Mediu	m Trucks	s: 53	3.966			
	Right View:	90.0 degre	ees		Heav	y Trucks	s: 53	3.982			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Be	rm Atten
Autos:	66.51	-3.22	2	-0.6	32	-1.20		-4.69	0.0	000	0.00
Medium Trucks:	77.72	-14.07	7	-0.6	30	-1.20		-4.88	0.0	000	0.00
Heavy Trucks:	82.99	-11.55	5	-0.6	80	-1.20		-5.35	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	d barri	ier atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq Da	ay .	Leq E	vening	Leq	Night		Ldn	С	NEL
Autos:	61	.5	61.6		59.8		53	.7	62.4	4	63.
Medium Trucks:	61		62.3		56.0		54		62.9	-	63.
Heavy Trucks:	69		70.2		61.2		62	.4	70.8	-	70.
Vehicle Noise:	70	.8	71.4		64.3		63	.6	72.0)	72.
Centerline Distance	ce to Noise Co	ontour (in fee	t)				/B.4				
			!	70	dBA	65	dBA		i0 dBA		dBA
	Ldn:				80 171 369		796				
			NEL:		82		17	-	381		820

	EA (2022) V					Project N					
Road Name: Road Segment:						Job Nui	mper:	13627			
SITE SP	ECIFIC IN	PUT DATA			Site Con	MC ditions (F			L INPUT	5	
Average Daily Tra	ffin (Adt):	15.716 vehicle			one con	unions (i		Autos:	15		
Peak Hour Per	,	6.31%	5		Mod	dium Truc			15		
Peak Hour Fer	-	992 vehicles				avy Truck			15		
	e Speed:	45 mph		L	1100	avy IIuck	3 (3+7	ixics).	10		
Venici Near/Far Lane I		45 mpn 58 feet		١	/ehicle I	Иiх					
Near/Far Lane L	Jistance:	58 leet			Vehi	cleType		Day	Evening	Night	Daily
Site Data						Αι	itos:	77.5%	12.9%	9.6%	81.35
Barrie	r Height:	0.0 feet			Me	edium Tru	cks:	84.8%	4.9%	10.3%	6.69
Barrier Type (0-Wall,		0.0			F	leavy Tru	cks:	86.5%	2.7%	10.8%	11.96
Centerline Dist. to	Barrier:	64.0 feet		,	Voisa So	urce Ele	vation	e (in fa	of)		
Centerline Dist. to C	Observer:	64.0 feet		ŕ	10/36 00	Autos:		000	icij		
Barrier Distance to C	bserver:	0.0 feet			Modiur	n Trucks:		297			
Observer Height (Abo	ve Pad):	5.0 feet				y Trucks:		004	Grade Ad	ustment	0.0
Pad E	levation:	0.0 feet			1 Icav	y ITUCKS.	0.	JU4	Orauc Au	ustriiciii.	0.0
Road E	levation:	0.0 feet		L	ane Equ	uivalent L	Distan	ce (in f	eet)		
Roa	d Grade:	0.0%				Autos:	57.	271			
L	.eft View:	-90.0 degree	s		Mediur	n Trucks:	57.	117			
Ri	ght View:	90.0 degree	s		Heav	y Trucks:	57.	132			
FHWA Noise Model C	alculations	i									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresr	iel .	Barrier Att	en Ber	m Atter
Autos:	68.46	-2.77		-0.99	9	-1.20		-4.70	0.0	000	0.0
Medium Trucks:	79.45	-13.62		-0.97	7	-1.20		-4.88	0.0	000	0.00
Heavy Trucks:	84.25	-11.10		-0.97	7	-1.20		-5.31	0.0	000	0.00
Unmitigated Noise Le	evels (with	out Topo and b	arrie	r atteni	uation)						
	q Peak Hou			Leq Ev		Leq N			Ldn		VEL
Autos:	63.		3.6		61.8		55.8		64.4		65
Medium Trucks:	63.		4.1		57.8		56.2	-	64.7		64
Heavy Trucks:	71.		1.6		62.5		63.8		72.1		72
Vehicle Noise:	72.	3 7	2.8		65.9		65.0)	73.4	ļ	73
Centerline Distance t	o Noise Co	ntour (in feet)			1						
				70 a		65 dl			0 dBA		dBA
		_	.dn:		108		234		503		1,08
			EL:		112		241		519		1.11

Monday, October 12, 2020

	FHW	/A-RD-77-108	HIGH	IWAY I	NOISE P	REDICTI	ON MC	DEL		_	_
Road Nam	io: EA (2022) V e: Temescal C nt: s/o Dos Lag	anyon Rd.				Project Job N		DCW3 13627	1		
	SPECIFIC IN	PUT DATA							L INPUT	s	
Highway Data					Site Cor	iditions	(Hard				
Average Daily	Traffic (Adt):	15,716 vehicle	es					Autos:	15		
	Percentage:	6.31%				dium Tru			15		
	our Volume:	992 vehicle	S		He	avy Truc	cks (3+	Axles):	15		
	hicle Speed:	45 mph			Vehicle	Mix					
Near/Far Lar	ne Distance:	58 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						-	Autos:	77.5%	12.9%	9.6%	81.35%
Bar	rrier Height:	0.0 feet			М	edium Tı	rucks:	84.8%	4.9%	10.3%	6.69%
Barrier Type (0-W		0.0				Heavy Tr	rucks:	86.5%	2.7%	10.8%	11.96%
Centerline Dis	st. to Barrier:	64.0 feet			Noise S	ourco El	lovatio	ne (in f	not)		
Centerline Dist. t	to Observer:	64.0 feet			Noise 3	Auto:		.000	ei)		
Barrier Distance t	to Observer:	0.0 feet			Modiu	m Truck:		.000			
Observer Height (Above Pad):	5.0 feet				y Truck	J. –	.004	Grade Ad	iustment	. 0.0
Pa	ad Elevation:	0.0 feet			i ica	ry IIuck	s. 0	.004	0/400/14	4011110111	. 0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalent	t Distar	nce (in i	feet)		
F	Road Grade:	0.0%				Auto	s: 57	.271			
	Left View:	-90.0 degree	es		Mediu	m Trucks	s: 57	.117			
	Right View:	90.0 degree	es		Hea	y Truck	s: 57	.132			
FHWA Noise Mode	el Calculations	3									
VehicleType	REMEL	Traffic Flow	Dis	stance		Road	Fres		Barrier Att		m Atten
Autos:	68.46	-2.77		-0.9		-1.20		-4.70		000	0.00
Medium Trucks:	79.45	-13.62		-0.9		-1.20		-4.88		000	0.00
Heavy Trucks:	84.25	-11.10		-0.9	97	-1.20		-5.31	0.0	000	0.00
Unmitigated Noise			barri	er atte	nuation)						
	Leq Peak Hou			Leq E	vening		Night		Ldn		NEL
Autos:	63.		63.6		61.8		55.		64.4		65.
Medium Trucks:	63.	-	64.1		57.8		56.	_	64.7		64.
Heavy Trucks:	71.	-	71.6		62.5		63.	-	72.		72.
Vehicle Noise:	72.	3	72.8		65.9		65.	.0	73.4	1	73.
Centerline Distanc	ce to Noise Co	ntour (in feet)	70	dBA	er.	dBA		60 dBA		dBA
			Ldn:	70	<i>aBA</i> 108	05					1.084
			NEL:		108 234 503 112 241 519		1,084				
		Ci	VEL.		112		24		519		1,118

Monday, October 12, 2020

FH	WA-RD-77-108 HIC	GHWAY I	NOISE PI	REDICT	ION MO	DEL			
Scenario: EA (2022) Road Name: Temescal Road Segment: s/o Dawso	Canyon Rd.				Name: lumber:				
SITE SPECIFIC IN	IPUT DATA		Site Cor				L INPUT	S	
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume: Vehicle Speed: Near/Far Lane Distance:	15,702 vehicles 6.31% 991 vehicles 40 mph 58 feet		Ме	dium Tr avy Tru	ucks (2	Autos: Axles):	15 15 15 15		
	58 feet		Veh	icleType		Day	Evening	Night	Daily
Site Data Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0			edium T Heavy T		77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	
Centerline Dist. to Barrier:	64.0 feet		Noise S	ource E	levation	ns (in fe	eet)		
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	64.0 feet 0.0 feet 5.0 feet 0.0 feet		Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0						0.0
Road Elevation:	0.0 feet	ĺ	Lane Eq	uivalen	t Distan	ice (in t	feet)		
Road Grade: Left View: Right View:	0.0% -90.0 degrees 90.0 degrees			Auto m Truck y Truck	s: 57	.271 .117 .132			
FHWA Noise Model Calculation	s								
VehicleType REMEL		Distance		Road	Fres		Barrier Att		m Atten
Autos: 66.51 Medium Trucks: 77.72		-0.9 -0.9	97	-1.20 -1.20		-4.70 -4.88	0.0	000	0.000
Heavy Trucks: 82.99		-0.9	••	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise Levels (with									
VehicleType Leq Peak Ho			vening 60.4		Night	_	Ldn		NEL
	2.1 62.3		56.6		54. 55.		63.0 63.5		63.6
	2.4 62.	-	61.8		63.	-	71.4	-	71.5
	1.4 71.	-	64.8		64.	-	71.2		72.7
Centerline Distance to Noise C	ontour (in feet)								
Contenine Distance to Noise C	omour (mreet)	70	dBA	65	dBA	6	i0 dBA	55	dBA
	Ldr		95	1 00	204		439		945
	CNEL	.:	97		210)	452		974

	FHW	/A-RD-77-108	HIGH	WAY N	IOISE PF	REDICT	ION MOI	DEL			
Scenario: EA Road Name: Te Road Segment: s/o	mescal C	anyon Rd.					! Name: [lumber: ^				
SITE SPEC	IFIC IN	PUT DATA			Sito Con		NOISE N		L INPUTS	5	
					Site Con	uilions	•				
Average Daily Traffic	. ,	15,702 vehicle 6.31%	es		Мо	dium Te		Autos:	15 15		
Peak Hour Perce Peak Hour V		991 vehicle					ucks (2 A cks (3+ A	,	15		
Vehicle S		40 mph	5		110	avy IIu	CAS (J+ A	AICS).	10		
Near/Far Lane Dis	,	58 feet			Vehicle I	Mix					
iveai/i ai Laile Dis	tarice.	30 leet			Veh	icleType	9	Day	Evening	Night	Daily
Site Data								77.5%			81.35%
Barrier H	leight:	0.0 feet				edium T		84.8%		10.3%	
Barrier Type (0-Wall, 1-	Berm):	0.0			F	Heavy T	rucks:	86.5%	2.7%	10.8%	11.96%
Centerline Dist. to E	Barrier:	64.0 feet		H	Noise So	nurce F	levations	(in fe	oet)		
Centerline Dist. to Obs	server:	64.0 feet		H	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Auto		000	,,,,		
Barrier Distance to Obs	server:	0.0 feet			Mediu	m Truck		97			
Observer Height (Above	,	5.0 feet				y Truck		004	Grade Adj	ustment.	0.0
Pad Ele		0.0 feet		-							
Road Ele		0.0 feet		<u> </u>	Lane Eq		t Distanc	٠,	feet)		
	Grade:	0.0%				Auto					
	t View:	-90.0 degree				m Truck					
Righ	t View:	90.0 degree	es		Heav	y Truck	s: 57.1	132			
FHWA Noise Model Cal					1						
	MEL	Traffic Flow		stance		Road	Fresn		Barrier Atte		m Atten
Autos: Medium Trucks:	66.51 77.72	-2.26 -13.11		-0.9 -0.9	-	-1.20 -1.20		-4.70 -4.88	0.0		0.000
Heavy Trucks:	82.99	-13.11		-0.9		-1.20		-4.88 -5.31	0.0		0.000
						-1.20		-5.31	0.0	00	0.000
Unmitigated Noise Leve							*** **		Ldn		NFL.
	Peak Hour	.,.,	62.2	Leq E	vening 60.4		Night 54.3				
Autos: Medium Trucks:	62.	•	62.2		56.6		54.3 55.0		63.0 63.5		63.0
	70.		70.8		61.8		63.0		71.4		71.
					01.0		03.0		/ 1.4		/ 1.5
Heavy Trucks: Vehicle Noise:	70.		71.9		64.8		64.1		72.5	i	72.7
	71.	4			64.8		64.1		72.5	i	72.

	FHV	VA-RD-77-108	HIGH	WAY N	OISE PR	EDICT	ION MC	DEL			
Scenario: EA (Road Name: Cam Road Segment: s/o	npbell F	Ranch Rd.				.,	Name: lumber:				
SITE SPECI	FIC IN	PUT DATA			0				L INPUT	S	
Highway Data					Site Con	aitions	(Hara -				
Average Daily Traffic (,	8,421 vehicl	es			T.		Autos.			
Peak Hour Percent		6.31%	_				ucks (2 cks (3+				
Peak Hour Voli Vehicle Sp		531 vehicle 45 mph	S		пес	avy IIu	UKS (3+	Axies).	15		
Near/Far Lane Dista		48 feet		1	Vehicle N						
	IIICE.	40 leet			Vehi	cleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	
Barrier He	ight:	0.0 feet				dium T		84.89		10.3%	
Barrier Type (0-Wall, 1-Be	erm):	0.0			Н	leavy T	rucks:	86.5%	2.7%	10.8%	11.96%
Centerline Dist. to Ba	rrier:	59.0 feet		1	Noise So	urce E	levation	ıs (in f	eet)		
Centerline Dist. to Obse		59.0 feet				Auto		.000	,		
Barrier Distance to Obse	rver:	0.0 feet			Mediun	n Truck	s: 2	.297			
Observer Height (Above F		5.0 feet			Heav	y Truck	s: 8	.004	Grade Adj	iustment.	0.0
Pad Eleva		0.0 feet		١.			4 Di-4		£4\		
Road Eleva		0.0 feet		-	Lane Equ				reet)		
Road G		0.0%			Mediun	Auto		.129			
Left \ Right \	View: View:	-90.0 degre 90.0 degre				n Truck y Truck		.982			
						,					
FHWA Noise Model Calcu VehicleType REM		S Traffic Flow	Die	tance	Finite	Dood	Fres	nal	Barrier Att	on Bo	m Atten
Autos:	68.46	-5.48	DIS	-0.62		-1.20	ries	-4.69		000	0.00
Medium Trucks:	79.45	-16.33		-0.60		-1.20		-4.88		000	0.00
Heavy Trucks:	84.25	-13.81		-0.60	-	-1.20		-5.35		000	0.00
Unmitigated Noise Levels	s (with	out Topo and	barrie	er atten	uation)						
VehicleType Leq Pe	ak Hou	r Leq Day	′	Leg Ev	ening	Leq	Night		Ldn	C	NEL
Autos:	61	.2	61.3		59.5		53.	4	62.1	1	62.
Medium Trucks:	61	.3	61.8		55.4		53.	9	62.4	1	62.
Heavy Trucks:	68	.6	69.2		60.2		61.	4	69.8	3	69.
Vehicle Noise:	70	.0	70.5		63.6		62.	7	71.1	1	71.
Centerline Distance to No	oise Co	ntour (in feet)							1	
				70 c	IBA	65	dBA		60 dBA	55	dBA
				70 150 324							
		_	Ldn: NEL:		70 72		150 158	-	324 334		698 720

Monday, October 12, 2020

	FHV	VA-RD-77-108	HIGH	N YAWI	IOISE PI	REDIČTI	ION MC	DDEL			
	o: EA (2022) \					.,		DCW3			
	e: Dawson Ca					Job N	lumber:	13627			
	nt: e/o Temeso										
SITE :	SPECIFIC IN	PUT DATA			Site Cor				L INPUT	S	
Average Daily	Troffic (Adt):	7.844 vehicl			0.10 00.	- antionio	(,,,,,,	Autos:			
	Percentage:	6.31%	25		Ma	dium Tru	ucke (2		15		
	our Volume:	495 vehicle				avy Truc			15		
	hicle Speed:	40 mph	3				JN3 (0 ·	Axicoj.	10		
Near/Far Lar		12 feet			Vehicle						
	ie Distance.	12 leet			Veh	icleType	_	Day	Evening	Night	Daily
Site Data							Autos:	77.5%			81.35%
Bar	rier Height:	0.0 feet				edium Ti		84.8%		10.3%	
Barrier Type (0-Wi	all, 1-Berm):	0.0				Heavy Ti	rucks:	86.5%	2.7%	10.8%	11.96%
Centerline Dis	t. to Barrier:	37.0 feet		-	Noise S	ource F	levatio	ns (in fe	oet)		
Centerline Dist. t	to Observer:	37.0 feet		F		Auto		.000	,,,,		
Barrier Distance t	to Observer:	0.0 feet			Modiu	m Truck.		.000			
Observer Height (/	Above Pad):	5.0 feet				y Truck		.004	Grade Ad	iustment	0.0
Pa	ad Elevation:	0.0 feet			rical	ry IIuck	s. c	.004	0/400/14	, a o i i i i i i i i i i i i i i i i i i	. 0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distai	nce (in i	feet)		
F	Road Grade:	0.0%				Auto	s: 36	.851			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 36	.610			
	Right View:	90.0 degre	es		Heav	y Truck	s: 36	.634			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	66.51	-5.28		1.8	-	-1.20		-4.56	0.0	000	0.00
Medium Trucks:	77.72	-16.13		1.9	3	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	82.99	-13.60		1.9	2	-1.20		-5.61	0.0	000	0.000
Unmitigated Noise											
	Leq Peak Hou			Leq E	vening		Night		Ldn		NEL
Autos:	61		62.0		60.3		54	_	62.8	-	63.4
Medium Trucks:	62		62.8		56.4		54	-	63.4		63.
Heavy Trucks:	70		70.7		61.7		62	-	71.3	-	71.4
Vehicle Noise:	71	.3	71.8		64.7		64	.0	72.4	4	72.0
Centerline Distance	ce to Noise Co	ontour (in feet)								
			L	70	dBA	65	dBA		60 dBA		dBA
	Ldn:				54 116 249			536			
		C	NEL:		55 119 257 5				553		

Monday, October 12, 2020

	FHW	A-RD-77-108	HIGH	HWAY N	IOISE PI	REDICT	ION MC	DEL			
Road Na	nrio: EAP (2022) me: Temescal C ent: s/o I-15						Name: lumber:				
SITE Highway Data	SPECIFIC IN	PUT DATA			Site Cor				L INPUT	s	
Average Daily Peak Hou Peak	r Traffic (Adt): r Percentage: Hour Volume: ehicle Speed: ane Distance:	8,436 vehicle 6.31% 532 vehicle 40 mph 12 feet			Me He Vehicle	dium Tr avy Tru	ucks (2 cks (3+	Autos: Axles):	15 15	Night	Daily
Site Data							Autos:	77.5%		9.6%	. ,
Barrier Type (0-V	arrier Height: Wall, 1-Berm):	0.0 feet 0.0				edium T Heavy T		84.8% 86.5%		10.3% 10.8%	5.99% 10.71%
	ist. to Barrier:	37.0 feet			Noise S	ource E	levatio	ns (in f	eet)		
Centerline Dist Barrier Distance		37.0 feet 0.0 feet			Mediu	Auto m Truck		.000	,		
	Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet					y Truck		.004	Grade Adj	justmen	0.0
Re	oad Elevation:	0.0 feet			Lane Eq	uivalen	t Distar	nce (in	feet)		
	Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree				Auto m Truck vy Truck	s: 36	.851 .610 .634			
FHWA Noise Mo	del Calculations	;									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos	66.51	-4.86		1.8	8	-1.20		-4.56	0.0	000	0.000
Medium Trucks	77.72	-16.29		1.9	3	-1.20		-4.87	0.0	000	0.000
Heavy Trucks		-13.77		1.9		-1.20		-5.61	0.0	000	0.000
Unmitigated Noi								-			
VehicleType Autos	Leq Peak Hou		62.4	Leq E	vening 60.7	,	Night 54	^	Ldn 63.3		NEL 63.8
Medium Trucks		-	62.6		56.3		54. 54.	-	63.2	_	63.4
Heavy Trucks		_	70.5		61.5		62		71.	_	71.2
Vehicle Noise			71.7		64.8		63.		72.3		72.5
Centerline Distar	nce to Noise Co	ntour (in feet))								
				70 0	dBA	65	dBA	- 6	60 dBA	55	dBA
			Ldn:		53		114	4	245		529
		CI	VEL:		55		117	7	253	3	545

	: EAP (2022	\ \Mithout Ext									
) WILLIOUT LAL.				Project	Name:	DCW	3		
Road Segment	: Temescal (Job №	lumber:	13627			
	t: s/o Trilogy	Pkwy.									
	PECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data					Site Cor	nditions	(Hard		oft = 15)		
Average Daily T	. ,	13,324 vehicl	es					Autos.			
Peak Hour F	Percentage:	6.31%				dium Tr		,			
	ur Volume:	841 vehicle	S		He	avy Tru	cks (3+	Axles):	15		
	icle Speed:	40 mph		1	Vehicle	Mix					
Near/Far Lan	e Distance:	48 feet			Veh	icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	82.389
Barı	rier Heiaht:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	6.32%
Barrier Type (0-Wa		0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	11.30%
Centerline Dist	to Barrier:	59.0 feet		,	Voise S	ource E	levatio	ns (in f	eet)		
Centerline Dist. to	Observer:	59.0 feet		F		Auto		0.000	,		
Barrier Distance to	Observer:	0.0 feet			Mediu	m Truck		297			
Observer Height (A	lbove Pad):	5.0 feet				vy Truck		3.004	Grade Adj	ustment	0.0
Pad	d Elevation:	0.0 feet		L							
	d Elevation:	0.0 feet		1	Lane Eq				feet)		
R	load Grade:	0.0%				Auto		1.129			
	Left View:	-90.0 degre				m Truck		3.966			
	Right View:	90.0 degre	es		Hea	vy Truck	s: 53	3.982			
FHWA Noise Mode		-									
VehicleType	REMEL	Traffic Flow		stance		Road	Fres		Barrier Att		rm Atten
Autos:	66.51	-2.92		-0.62	_	-1.20		-4.69		000	0.00
Medium Trucks:	77.72	-14.07		-0.60	-	-1.20		-4.88		000	0.00
Heavy Trucks:	82.99	-11.55		-0.60	-	-1.20		-5.35	0.0	000	0.00
Unmitigated Noise			_							1	
	Leq Peak Hou			Leq Ev			Night		Ldn		NEL
Autos:	61		61.9		60.1		54		62.7		63.
Medium Trucks:		.8	62.3		56.0		54		62.9		63.
Heavy Trucks:	69		70.2		61.2		62		70.8		70.
Vehicle Noise:		1.9	71.4		64.4		63	.6	72.0)	72.
Centerline Distance	e to Noise Co	ontour (in feet)	70 0	ID A	C.	dBA		50 dBA		dBA
			Ldn:	700	1BA 80	65	ава 17:		371		800 800
			∟an:						3/1		800
		_	NEL:		82		17		383		825

	E + B (00 = = :							0.014/-			
	, ,	Without Ext.				Project I					
Road Name: Road Segment:						Job Nu	mber:	13627			
SITE SI Highway Data	PECIFIC IN	PUT DATA			Sita Con	ditions (L INPUT	5	
Average Daily Tr	offic (Adt):	16.470 vehicle			one con	unions (Autos:	15		
Peak Hour Pe	. ,	6.31%	5		Mod	dium Truc			15		
	-	1.039 vehicles				avy Truck			15		
	il volume. de Speed:	45 mph		L			3 (J+ A	MES).	10		
Near/Far Lane		58 feet		Ľ	Vehicle I						
	Distance.	56 leet			Vehi	cleType		Day	Evening	Night	Daily
Site Data								77.5%			82.08
Barri	er Height:	0.0 feet				edium Tru		84.8%		10.3%	6.46
Barrier Type (0-Wall	, 1-Berm):	0.0			F	leavy Tru	icks:	86.5%	2.7%	10.8%	11.469
Centerline Dist.	to Barrier:	64.0 feet		- 1	Noise So	urce Ele	vations	in fe	et)		
Centerline Dist. to	Observer:	64.0 feet		ř	10,00 00	Autos			,		
Barrier Distance to	Observer:	0.0 feet			Mediur	n Trucks		97			
Observer Height (Al	ove Pad):	5.0 feet				v Trucks.		004	Grade Adj	ustment	0.0
	Elevation:	0.0 feet		L		,					
Road	Elevation:	0.0 feet		1	Lane Equ	uivalent	Distand	e (in i	eet)		
Ro	ad Grade:	0.0%				Autos.					
	Left View:	-90.0 degree	S			n Trucks.					
F	Right View:	90.0 degree	S		Heav	y Trucks.	57.	132			
FHWA Noise Model	Calculations	;									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atter
Autos:	68.46	-2.53		-0.9	9	-1.20		-4.70	0.0	000	0.00
Medium Trucks:	79.45	-13.57		-0.9	7	-1.20		-4.88	0.0	000	0.00
Heavy Trucks:	84.25	-11.08		-0.9	7	-1.20		-5.31	0.0	000	0.00
Unmitigated Noise L	evels (with	out Topo and b	arrier	atten	uation)						
	eq Peak Hou			Leq E	vening	Leq N	-		Ldn		VEL
Autos:	63.		3.8		62.1		56.0		64.6		65
Medium Trucks:	63.		4.2		57.8		56.3		64.8		65
Heavy Trucks:	71.		1.6		62.5		63.8		72.1		72
Vehicle Noise:	72.	4 7	2.9		66.0		65.1		73.5	5	73
Centerline Distance	to Noise Co	ntour (in feet)									
				70 c		65 d		6	0 dBA		dBA
		,	dn:		109		235		507		1.09
		_	EL:		113		243		523		1.12

Monday, October 12, 2020

	FHV	VA-RD-77-108 H	IIGHWAY	NOISE PE	PEDICTI	ON MC	DEI			
Road Nan	rio: EAP (2022) ne: Temescal (ent: s/o Dos Laç) Without Ext. Canyon Rd.	IIOIIIIAI	NOIDETT	Project		DCW3			
SITE	SPECIFIC IN	PUT DATA			N	IOISE	MODE	L INPUT	8	
Highway Data				Site Con	ditions	(Hard :	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	16,470 vehicles	S				Autos:	15		
Peak Hour	Percentage:	6.31%		Me	dium Tru	ucks (2	Axles):	15		
Peak H	Hour Volume:	1,039 vehicles		He	avy Truc	cks (3+	Axles):	15		
Vé	ehicle Speed:	45 mph		Vehicle	Miv					
Near/Far La	ane Distance:	58 feet			icleType		Dav	Evening	Night	Daily
Site Data				10		Autos:	77.5%	-		82.08%
	rrier Height:	0.0 feet		М	edium Ti		84.8%		10.3%	
Barrier Type (0-V		0.0 feet			Heavy Ti	rucks:	86.5%	2.7%	10.8%	11.46%
	ist. to Barrier:	64.0 feet								
Centerline Dist		64.0 feet		Noise S				eet)		
Barrier Distance		0.0 feet			Auto		.000			
Observer Height		5.0 feet			m Truck		.297			
	Pad Flevation:	0.0 feet		Heav	y Truck	s: 8	.004	Grade Adj	ustment	: 0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalen	t Distar	nce (in	feet)		
	Road Grade:	0.0%			Auto	s: 57	.271			
	Left View:	-90.0 degrees	S	Mediu	m Truck	s: 57	.117			
	Right View:	90.0 degrees	s	Heav	y Truck	s: 57	.132			
FHWA Noise Mod	del Calculation	s		-						
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fres	nel	Barrier Atte	en Bei	m Atten
Autos.	68.46	-2.53	-0	.99	-1.20		-4.70	0.0	100	0.000
Medium Trucks:	79.45	-13.57	-0	.97	-1.20		-4.88	0.0	00	0.000
Heavy Trucks:	84.25	-11.08	-0	.97	-1.20		-5.31	0.0	00	0.000
Unmitigated Nois			arrier atte	enuation)						
VehicleType	Leq Peak Hou			Evening	Leq	Night		Ldn		NEL
Autos.			3.8	62.1		56.		64.6		65.3
Medium Trucks:			4.2	57.8		56.	-	64.8		65.0
Heavy Trucks:			1.6	62.5		63.	-	72.1		72.3
Vehicle Noise:	72	.4 7	2.9	66.0		65.	.1	73.5	5	73.7
Centerline Distan	ice to Noise Co	ntour (in feet)					1		,	
				0 dBA	65	dBA		60 dBA	55	dBA
		_	dn:	109		23		507		1,092
		CN	EL:	113		24	3	523		1,128

Monday, October 12, 2020

	FHV	VA-RD-77-108	HIGH	WAY N	IOISE PE	REDICTI	ON MO	DEL			
Road Nam	io: EAP (2022 e: Temescal (nt: s/o Dawson	Canyon Rd.					Name: umber:				
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data					Site Con	ditions	•				
Average Daily	Traffic (Adt):	17,277 vehicl	es					Autos:	15		
Peak Hour	Percentage:	6.31%				dium Tru		,	15		
Peak H	our Volume:	1,090 vehicle	s		He	avy Truc	ks (3+ A	(xles	15		
Ve	hicle Speed:	40 mph		T	Vehicle	Mix					
Near/Far Lai	ne Distance:	58 feet		-		icleType		Dav	Evenina	Niaht	Dailv
Site Data							lutos:	77.5%	. 5		82.94%
Par	rier Heiaht:	0.0 feet			М	edium Tı	ucks:	84.8%	4.9%	10.3%	6.15%
Barrier Type (0-W		0.0 feet			F	Heavy Tr	ucks:	86.5%	2.7%	10.8%	10.91%
Centerline Dis		64.0 feet									
Centerline Dist		64.0 feet		L	Noise So				eet)		
Barrier Distance		0.0 feet				Auto		000			
Observer Height (5.0 feet				m Trucks		297			
	ad Elevation:	0.0 feet			Heav	y Trucks	8.	004	Grade Adj	ustment	0.0
	ad Elevation:	0.0 feet		F	Lane Eq	uivalent	Distan	ce (in f	feet)		
	Road Grade:	0.0%		F		Auto:		271	,		
,	Left View:	-90.0 deare	00		Mediu	m Truck:		117			
	Right View:	90.0 degre				y Trucks		132			
	3		03			,					
FHWA Noise Mod				,	T =: ::			, 1			***
VehicleType	REMEL	Traffic Flow		stance		Road	Fresr		Barrier Att		m Atten
Autos:	66.51	-1.76		-0.9	-	-1.20		-4.70		000	0.000
Medium Trucks:	77.72			-0.9		-1.20		-4.88		000	0.000
Heavy Trucks:	82.99	-10.57		-0.9		-1.20		-5.31	0.0	000	0.000
Unmitigated Noise											
VehicleType	Leq Peak Hou			Leq E	vening	Leq	Night		Ldn	-	NEL
Autos:	62		62.7		60.9		54.8		63.5		64.1
Medium Trucks:		2.5	63.0		56.6		55.1		63.5		63.8
Heavy Trucks:		1.2	70.8		61.8		63.0		71.4		71.5
Vehicle Noise:	71		72.0		65.0		64.2	2	72.6	j .	72.8
Centerline Distant	ce to Noise Co	ontour (in feet)								
			L	70	dBA	65	dBA		i0 dBA	55	dBA
			Ldn:		96		206		444		956
			NEL:		99		212		458		986

	FHV	VA-RD-77-108	HIGH	N YAW	OISE PI	REDICT	ION MO	DDEL			
Scenari	o: EAP (2022)	Without Ext.				Project	t Name:	DCW3	3		
Road Nam	e: Temescal C	Canyon Rd.				Job N	lumber:	13627			
Road Segmen	nt: s/o Dawson	Canyon Rd.									
SITE :	SPECIFIC IN	PUT DATA			Site Cor				L INPUT oft = 15)	S	
					one con	uitions	(riai u				
Average Daily	. ,	17,277 vehicle	es			-ti		Autos:			
	Percentage:	6.31%				dium Tr		,			
	our Volume:	1,090 vehicle	S		не	avy Tru	CKS (3+	Axies):	15		
	hicle Speed:	40 mph		١	/ehicle	Mix					
Near/Far Lar	ne Distance:	58 feet			Veh	icleType	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	82.94%
Bar	rier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	6.15%
Barrier Type (0-Wa	-	0.0			- 1	Heavy T	rucks:	86.5%	2.7%	10.8%	10.91%
Centerline Dis	t. to Barrier:	64.0 feet		١,	Voise S		lavatio	na (in f	n n et l		
Centerline Dist. t	to Observer:	64.0 feet		,	voise 3	Auto		0.000	eet)		
Barrier Distance t	to Observer:	0.0 feet				Auto m Truck		2.297			
Observer Height (/	server Height (Above Pad): 5.0 fee					т тиск vy Truck		3.004	Grade Ad	iuetmant	- 00
Pa	Pad Elevation: 0.0 feet						(S: 6	3.004	Grade Au	usimem	. 0.0
Roa	d Elevation:	0.0 feet		I	ane Eq	uivalen	t Dista	nce (in	feet)		
F	Road Grade:	0.0%				Auto	s: 57	7.271			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 57	7.117			
	Right View:	90.0 degree	es		Heav	y Truck	(s: 57	7.132			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Di	stance		Road	Fres		Barrier Att		rm Atten
Autos:	66.51	-1.76		-0.99	-	-1.20		-4.70		000	0.00
Medium Trucks:	77.72	-13.06		-0.97		-1.20		-4.88		000	0.00
Heavy Trucks:	82.99	-10.57		-0.97		-1.20		-5.31	0.0	000	0.00
Unmitigated Noise			_				A.C	-			
	Leq Peak Hou			Leq Ev		Leq	Night		Ldn		NEL
Autos:	62		62.7		60.9		54		63.		64.
Medium Trucks:	62		63.0		56.6		55		63.	-	63.
Heavy Trucks:	70 71		70.8		61.8		63 64		71.4		71.5
Vehicle Noise:			72.0		65.0		64	.2	72.0	Ď.	72.
Centerline Distanc	e to Noise Co	ntour (in feet)	70 c	IRΔ	65	dBA	1 .	60 dBA	55	i dBA
			Ldn:	700	96	00	20		444		956
			NEL:		99		21		458		986
		0,							100		-00

		WA-RD-77-108	шоп	WAIN	OISE PI	CEDIC I	ON WIC	JUEL			
) Without Ext.						DCW3			
	e: Campbell I					Job N	lumber.	13627			
Road Segmen	nt: s/o Temes	cal Canyon Rd									
	SPECIFIC II	NPUT DATA							L INPUT	S	
Highway Data					Site Con	aitions	(Hard				
Average Daily 1		8,715 vehicl	es					Autos:	15		
Peak Hour I		6.31%				dium Tr			15		
	our Volume:	550 vehicle	S		He	avy Tru	cks (3+	Axles):	15		
	nicle Speed:	45 mph		1	Vehicle	Mix					
Near/Far Lar	ne Distance:	48 feet		ı	Veh	icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	81.989
Bar	rier Height:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	6.469
Barrier Type (0-Wa		0.0			1	Heavy T	rucks:	86.5%	2.7%	10.8%	11.569
Centerline Dis	t. to Barrier:	59.0 feet		-	Noise So	ource F	levatio	ns (in fe	eet)		
Centerline Dist. t	o Observer:	59.0 feet		F	10,00 0	Auto		.000	,,,,		
Barrier Distance t	o Observer:	0.0 feet			Mediu	m Truck		297			
Observer Height (A	Above Pad):	5.0 feet				v Truck		1.004	Grade Ad	iustment:	0.0
Pa	d Elevation:	0.0 feet				,				40111101111	0.0
Roa	d Elevation:	0.0 feet		1	Lane Eq	uivalen	t Dista	nce (in i	feet)		
F	Road Grade:	0.0%				Auto	s: 54	.129			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 53	.966			
	Right View:	90.0 degre	es		Heav	y Truck	s: 53	3.982			
FHWA Noise Mode	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	inel	Barrier Att	en Ber	m Atten
Autos:	68.46	-5.30		-0.6	2	-1.20		-4.69	0.0	000	0.00
Medium Trucks:	79.45	-16.33		-0.6	0	-1.20		-4.88	0.0	000	0.00
Heavy Trucks:	84.25	-13.81		-0.6	0	-1.20		-5.35	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barrie	er atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq E	ening/	Leq	Night		Ldn	CI	NEL
Autos:	-		61.4		59.7		53		62.2	-	62.
Medium Trucks:	6	1.3	61.8		55.4		53	.9	62.4	1	62.
Heavy Trucks:			69.2		60.2		61	.4	69.8	3	69.
Vehicle Noise:	70	0.0	70.5		63.7		62	.7	71.	1	71.
Centerline Distanc	e to Noise C	ontour (in feet)								
			L	70 c		65	dBA		i0 dBA		dBA
			Ldn:		70		15		325		700
		C	NEL:		72		15	h	335		723

Monday, October 12, 2020

	FHV	VA-RD-77-108	HIGH	-WAY	NOISE PE	REDICT	ION M	DDEL			
Scena	rio: EAP (2022)	Without Ext.				Project	Name.	DCW:	3		
Road Nan	ne: Dawson Ca	nyon Rd.				Job N	lumber.	13627			
Road Segme	ent: e/o Temeso	cal Canyon Rd.									
	SPECIFIC IN	PUT DATA			0				L INPUT	s	
Highway Data					Site Con	aitions	(Hard				
Average Daily	. ,	9,693 vehicle	es					Autos.			
	Percentage:	6.31%				dium Tr					
Peak F	lour Volume:	612 vehicles	3		He	avy Tru	cks (3+	Axles):	15		
Vé	ehicle Speed:	40 mph			Vehicle	Mix					
Near/Far La	ne Distance:	12 feet				icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	6 12.9%	9.6%	84.91%
Ba	rrier Height:	0.0 feet			M	edium T	rucks:	84.89	4.9%	10.3%	5.41%
Barrier Type (0-V		0.0			- 1	Heavy T	rucks:	86.5%	6 2.7%	10.8%	9.68%
Centerline Di	st. to Barrier:	37.0 feet			Noise S	ource E	lovatio	ne (in f	oot)		
Centerline Dist.	to Observer:	37.0 feet			140/36 00	Auto		0.000	ccij		
Barrier Distance	to Observer:	0.0 feet			Modiu	m Truck		2.297			
Observer Height	(Above Pad):	5.0 feet				v Truck		3.004	Grade Adj	iustmant	0.0
P	ad Elevation:	0.0 feet			пеач	y ITUCK	S. (0.004	Orauc Auj	astment	0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in	feet)		
	Road Grade:	0.0%				Auto	s: 36	3.851			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 36	6.610			
	Right View:	90.0 degree	es		Heav	y Truck	s: 36	6.634			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fre	snel	Barrier Att	en Bei	m Atten
Autos.	66.51	-4.17		1.8	38	-1.20		-4.56	0.0	000	0.000
Medium Trucks:	77.72	-16.13		1.9	93	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	82.99	-13.60		1.9	92	-1.20		-5.61	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er atte	nuation)						
VehicleType	Leq Peak Hou			Leq E	vening		Night		Ldn		NEL
Autos.			63.1		61.4		55		63.9	-	64.5
Medium Trucks:			62.8		56.4		54		63.4		63.6
Heavy Trucks:			70.7		61.7		62		71.3		71.4
Vehicle Noise:	71	.5	72.0		65.1		64	.2	72.6	3	72.8
Centerline Distan	ce to Noise Co	ntour (in feet)	1								
			L	70	dBA	65	dBA		60 dBA		dBA
			Ldn:		55		11		254		548
		CI	VEL:		57		12	2	262		565

Monday, October 12, 2020

	FHV	/A-RD-77-108	HIGH	WAY N	IOISE PI	REDICT	ION MC	DEL			
	o: EA (2022) \ e: Temescal 0 t: s/o I-15						Name: lumber:		3		
SITE S	SPECIFIC IN	PUT DATA			Site Cor				L INPUT	S	
Average Daily 1 Peak Hour F Peak Ho	Percentage: our Volume:	7,556 vehicle 6.31% 477 vehicle			Ме	edium Tr	ucks (2	Autos: Axles):	15 15		
ver Near/Far Lan	nicle Speed:	40 mph 12 feet			Vehicle	Mix					
	e Distance.	12 1661			Veh	icleType		Day	Evening	Night	Daily
Site Data Barrier Type (0-Wa	rier Height: all, 1-Berm):	0.0 feet 0.0				edium T Heavy T		77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	
Centerline Dis	t. to Barrier:	37.0 feet		H	Noise S	ource E	levation	ns (in f	eet)		
Centerline Dist. to Barrier Distance to Observer Height (A	o Observer:	37.0 feet 0.0 feet 5.0 feet 0.0 feet			Mediu	Auto m Truck vy Truck	s: 0 s: 2	.000 .297 .004	Grade Ad,	iustment	± 0.0
	d Elevation:	0.0 feet		l.	Lane Eq	uivalen	t Distar	nce (in	feet)		
	Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree				Auto m Truck vy Truck	s: 36	.851 .610 .634			
FHWA Noise Mode	l Calculation:	S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Bei	rm Atten
Autos:	66.51	-5.44		1.8	-	-1.20		-4.56		000	0.000
Medium Trucks: Heavy Trucks:	77.72 82.99	-16.29 -13.77		1.9 1.9	-	-1.20 -1.20		-4.87 -5.61		000	0.000
Unmitigated Noise	I evels (with	out Topo and	harri	er atten	uation)						
•	Leg Peak Hou				vening	Leg	Night		Ldn	С	NEL
Autos:	61		61.9		60.1		54.	.0	62.	7	63.3
Medium Trucks:	62	.2	62.6		56.3		54.	.7	63.2	2	63.4
Heavy Trucks:	70	.0	70.5		61.5	i	62.	7	71.	1	71.2
Vehicle Noise:	71	.1	71.7		64.6	i	63.	9	72.3	3	72.5
Centerline Distance	e to Noise Co	ntour (in feet)			1		_		_	
			[70	dBA	65	dBA		60 dBA		dBA
			Ldn:		52		113	-	243		523
		CI	VEL:		54		116	5	250		539

	FHV	VA-RD-77-108	HIGH	IWAY I	NOISE P	REDICTI	ION MO	DDEL			
Scenari	io: EA (2022) \	Nith Ext.				Project	Name:	DCW3	3		
Road Nam	e: Temescal C	Canyon Rd.				Job N	lumber:	13627			
Road Segmer	nt: s/o Trilogy I	Pkwy.									
SITE : Highway Data	SPECIFIC IN	PUT DATA			Sito Co	N nditions			L INPUT	S	
					Site Co.	iuitions	(IIIIII				
Average Daily	. ,	12,590 vehicl	es					Autos.			
	Percentage:	6.31%				edium Tru	,	,			
	our Volume:	794 vehicle	s		П	eavy Truc	CKS (3+	Axies).	15		
	hicle Speed:	40 mph			Vehicle	Mix					
Near/Far Lar	ne Distance:	48 feet			Vei	nicleType		Day	Evening	Night	Daily
Site Data						,	Autos:	77.5%	12.9%	9.6	% 81.359
Bai	rrier Height:	0.0 feet			N.	ledium Ti	rucks:	84.8%	4.9%	10.3	% 6.699
Barrier Type (0-W	-	0.0				Heavy Ti	rucks:	86.5%	6 2.7%	10.89	% 11.96 ⁹
Centerline Dis		59.0 feet			M-: C	ource El		/ 4	41		
Centerline Dist. 1	to Observer:	59.0 feet			Noise 3	Auto.			eet)		
Barrier Distance	to Observer:	0.0 feet			11-4	Auto. ım Truck:		.000			
Observer Height (Above Pad):	5.0 feet						.004	Grade Ad	livetmo	nt 0.0
Pa	ad Elevation:	0.0 feet			неа	vy Truck	S: 6	.004	Grade Ad	justinei	n. 0.0
Roa	ad Elevation:	0.0 feet			Lane Ed	quivalen	t Dista	nce (in	feet)		
F	Road Grade:	0.0%				Auto.	s: 54	.129			
	Left View:	-90.0 degre	es		Mediu	ım Truck	s: 53	.966			
	Right View:	90.0 degre	es		Hea	vy Truck	s: 53	.982			
FHWA Noise Mode		-									
VehicleType	REMEL	Traffic Flow		stance		Road	Fres		Barrier At		erm Atten
Autos:	66.51	-3.22		-0.0		-1.20		-4.69		000	0.00
Medium Trucks:	77.72	-14.07		-0.0		-1.20		-4.88		000	0.00
Heavy Trucks:	82.99	-11.55		-0.0		-1.20		-5.35	0.	000	0.00
Unmitigated Noise					,			-		1	01/5/
VehicleType	Leq Peak Hou			Leq E	vening		Night	_	Ldn		CNEL
Autos:	61		61.6		59.8		53		62.		63
Medium Trucks:	61		62.3		56.0		54		62.	-	63
Heavy Trucks: Vehicle Noise:	69 70		70.2		61.2		62		70. 72.	-	70 72
Centerline Distance						-					
Centernile Distant	e to Noise Co	nitoui (ili leei	9	70	dBA	65	dBA		60 dBA	5	5 dBA
			Ldn:		80		17	1	369)	79
		C	NEL:		82		17	7	38	I	820

Scenario	EA (2022)	With Ext				Project	Name:	DCW?			
	Temescal (umber:		'		
Road Segment						00074	umber.	10021			
		PUT DATA				N	OISE	MODE	L INPUT	s	
Highway Data				Sit	te Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily Tr	affic (Adt):	15,716 vehicle	es					Autos:	15		
Peak Hour P	ercentage:	6.31%			Med	dium Tru	icks (2	Axles):	15		
Peak Hot	ur Volume:	992 vehicles	S		Hea	avy Truc	ks (3+	Axles):	15		
Vehi	cle Speed:	45 mph		Ve	hicle I	Miv					
Near/Far Lane	Distance:	58 feet				icleType		Day	Evening	Night	Daily
Site Data						-	Autos:	77.5%	12.9%	9.6%	81.359
Barri	er Height:	0.0 feet			Me	edium Ti	ucks:	84.8%	4.9%	10.3%	6.69%
Barrier Type (0-Wal	-	0.0			F	leavy Ti	ucks:	86.5%	2.7%	10.8%	11.969
Centerline Dist.	to Barrier:	64.0 feet		No	ise So	urce El	evation	ns (in f	eet)		
Centerline Dist. to	Observer:	64.0 feet		-		Auto		.000	,		
Barrier Distance to	Observer:	0.0 feet			Mediur	n Truck:		.297			
Observer Height (Al	,	5.0 feet			Heav	v Truck	s: 8	.004	Grade Ad	ustment.	0.0
	Elevation:	0.0 feet									
	Elevation:	0.0 feet		La	ne Equ	uivalent			reet)		
Ro	oad Grade:	0.0%				Auto		.271			
	Left View:	-90.0 degree				n Truck		.117 .132			
,	Right View:	90.0 degree	es		neav	y Truck:	5. 57	.132			
FHWA Noise Model											
VehicleType	REMEL	Traffic Flow	Distar		Finite		Fres		Barrier Att		m Atten
Autos:	68.46	-2.77		-0.99		-1.20		-4.70		000	0.00
Medium Trucks:	79.45	-13.62		-0.97		-1.20		-4.88		000	0.00
Heavy Trucks:	84.25	-11.10		-0.97		-1.20		-5.31	0.0	000	0.00
Unmitigated Noise											
	eq Peak Hou			eq Eve	-	Leq	Night		Ldn		NEL
Autos:	63 63		63.6 64.1		61.8 57.8		55. 56.	-	64.4		65. 64.
Medium Trucks: Heavy Trucks:	71		64.1 71.6		62.5		63.	_	72.1		64. 72.
Vehicle Noise:	71		72.8		65.9		65.	-	73.4		73
					00.9		05.	U	13.4	*	13.
	to Noise Co	ontour (in feet,	,		-		dBA	Τ.	60 dBA		dBA
Centerline Distance				70 dB	A I	65					
Centerline Distance			Ldn:	70 dB.	A 108	65	ава 234		503		1.084

Monday, October 12, 2020

	FHV	VA-RD-77-108	HIGHW	AY N	OISE PF	REDICTI	ON MC	DEL			
Road Nar	rio: EA (2022) ne: Temescal ent: s/o Dos La	Canyon Rd.				Project Job N	Name: umber:				
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard =	10, S	oft = 15)		
	Traffic (Adt): Percentage: Hour Volume:	15,716 vehicle 6.31% 992 vehicles				dium Tru avy Truc		,	15		
Ve	ehicle Speed:	45 mph			/ehicle l	Mix					
Near/Far La	ne Distance:	58 feet		F		icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	6 12.9%	9.6%	81.35%
Rs	rrier Height:	0.0 feet			Me	edium Ti	rucks:	84.89	4.9%	10.3%	6.69%
Barrier Type (0-V	-	0.0			F	leavy Ti	rucks:	86.5%	6 2.7%	10.8%	11.96%
	ist. to Barrier:	64.0 feet		L.							
Centerline Dist.		64.0 feet		^	loise So	ource E			eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		000			
Observer Height	(Above Pad):	5.0 feet				n Truck		297			
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	004	Grade Adj	ustmen	. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 57	.271			
	Left View:	-90.0 degree	s		Mediui	n Truck	s: 57	117			
	Right View:	90.0 degree			Heav	y Truck	s: 57	132			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	nel	Barrier Atte	en Be	rm Atten
Autos	68.46	-2.77		-0.99)	-1.20		-4.70	0.0	000	0.000
Medium Trucks	79.45	-13.62		-0.97		-1.20		-4.88	0.0	000	0.000
Heavy Trucks	84.25	-11.10		-0.97		-1.20		-5.31	0.0	000	0.000
Inmitigated Nois	e Levels (with	out Topo and	barrier	atteni	uation)						
VehicleType	Leq Peak Hou			.eq Ev		Leq	Night		Ldn		NEL
Autos			63.6		61.8		55.	-	64.4		65.0
Medium Trucks			64.1		57.8		56.	_	64.7		64.9
Heavy Trucks			71.6		62.5		63.	-	72.1		72.3
Vehicle Noise:	72	2.3	72.8		65.9		65.	0	73.4	ļ	73.6
Centerline Distar	ce to Noise C	ontour (in feet)									
			L	70 d		65	dBA		60 dBA		5 dBA
		-	Ldn:		108		234		503		1,084
		CN	IEL:		112		241		519		1,119

Monday, October 12, 2020

FH	WA-RD-77-108 I	HIGHW	VAY NO	DISE PI	REDICT	ION MC	DEL			
Scenario: EA (2022) Road Name: Temescal Road Segment: s/o Dawso	Canyon Rd.					! Name: lumber:				
SITE SPECIFIC II Highway Data	NPUT DATA		9	ito Cor				L INPUT oft = 15)	S	
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	15,702 vehicle 6.31% 991 vehicles			Ме	dium Tr	ucks (2 cks (3+	Autos: Axles):	15 15		
Vehicle Speed:	40 mph		V	ehicle	Mix					
Near/Far Lane Distance:	58 feet			Veh	icleType	9	Day	Evening	Night	Daily
Site Data						Autos:	77.5%	12.9%	9.6%	81.35%
Barrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	6.69%
Barrier Type (0-Wall, 1-Berm):	0.0			,	Heavy T	rucks:	86.5%	2.7%	10.8%	11.96%
Centerline Dist. to Barrier:	64.0 feet		N	oise S	ource E	levation	ıs (in f	eet)		
Centerline Dist. to Observer:	64.0 feet				Auto	s: 0	.000			
Barrier Distance to Observer:	0.0 feet			Mediu	m Truck	s: 2	.297			
Observer Height (Above Pad): Pad Elevation:	eerver Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet					s: 8	.004	Grade Ad	justment	0.0
Road Elevation:	0.0 feet		Li	ane Eq	uivalen	t Distar	ice (in	feet)		
Road Grade:	0.0%				Auto	s: 57	.271			
Left View:	-90.0 degree	:S		Mediu	m Truck	s: 57	.117			
Right View:	90.0 degree	:S		Heav	y Truck	s: 57	.132			
FHWA Noise Model Calculation										
VehicleType REMEL	Traffic Flow	Dista		Finite	Road	Fres		Barrier Att		rm Atten
Autos: 66.51			-0.99		-1.20		-4.70		000	0.000
Medium Trucks: 77.72			-0.97		-1.20		-4.88		000	0.000
Heavy Trucks: 82.99			-0.97		-1.20		-5.31	0.0	000	0.000
Unmitigated Noise Levels (with						A.C. 1.1	1			
VehicleType Leq Peak Ho		32.2	Leq Eve	ening 60.4		Night 54		Ldn 63.0		NEL 63.6
		52.2 52.9					-		-	63.6
				56.6		55.	-	63.	-	
		70.8 71.9		61.8		63. 64.		71.4		71.5 72.7
Centerline Distance to Noise C				U+.0		04.		12.5		12.1
Centernine Distance to Noise C	ontour (in reet)		70 dE	BA	65	dBA		60 dBA	55	dBA
	ı	Ldn:		95		204	1	439)	945
	CN	IEL:		97		210)	452	2	974

	FHV	VA-RD-77-10	8 HIG	HWAY I	NOISE PI	REDICT	ION MOI	DEL			
Road Nam	ne: Temescal (nt: s/o Dawson	Canyon Rd.					t Name: I lumber:				
SITE Highway Data	SPECIFIC IN	IPUT DATA	١		Sito Cor		NOISE N		L INPUT	S	
	T	45 700bi	-1		Site Con	iuitions	•	Autos:	15		
Average Daily	Percentage:	15,702 vehi	cies		Ma	dium T	ucks (2 A		15		
	lour Volume:	991 vehic	laa.				cks (3+ A	,	15		
	hicle Speed:	40 mph	les				CAS (S+ A	ixies).	10		
	ne Distance:	58 feet			Vehicle	Mix					
IVEAI/I AI LA	rie Distance.	36 leet			Veh	icleTyp	е	Day	Evening	Night	Daily
Site Data								77.5%			81.35%
Ва	rrier Height:	0.0 feet				edium 7		84.8%		10.3%	6.69%
Barrier Type (0-W	/all, 1-Berm):	0.0			-	Heavy 1	rucks:	86.5%	2.7%	10.8%	11.96%
Centerline Di	st. to Barrier:	64.0 feet			Noise S	nurce F	levations	s (in fe	oet)		
Centerline Dist.	to Observer:	64.0 feet			710,00	Auto		000	,,,,		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck		297			
Observer Height ('Above Pad):	5.0 feet				ry Truck		004	Grade Adj	ustment:	0.0
P	ad Elevation:	0.0 feet				•					
	ad Elevation:	0.0 feet			Lane Eq		t Distanc		feet)		
	Road Grade:	0.0%				Auto					
	Left View:	-90.0 degr				m Truck					
	Right View:	90.0 degr	ees		Heav	y Truck	s: 57.	132			
FHWA Noise Mod											
VehicleType	REMEL	Traffic Flow		stance		Road	Fresn		Barrier Att		m Atten
Autos:		-2.2	-	-0.9		-1.20		-4.70		000	0.000
Medium Trucks:				-0.9		-1.20		-4.88		000	0.000
Heavy Trucks:		-10.5		-0.9		-1.20		-5.31	0.0	000	0.000
Unmitigated Nois											
VehicleType	Leq Peak Hou		_	Leq E	vening		Night		Ldn	-	VEL
Autos:	62		62.2		60.4		54.3		63.0		63.6
Medium Trucks:		2.4	62.9		56.6		55.0		63.5		63.7
Heavy Trucks: Vehicle Noise:	70	.4	70.8		61.8 64.8		63.0		71.4 72.5		71.5
Centerline Distan	ce to Noise Co	ontour (in fe	et)								
		(.,	70	dBA	65	dBA	6	0 dBA	55	dBA

	FHW	/A-RD-77-108	HIGH	I YAW	NOISE PF	REDICTIO	м мо	DEL			
Scenario: EA (20						Project N	lame:	DCW3			
Road Name: Camp						Job Nu	mber:	13627			
Road Segment: s/o Te	mesc	al Canyon Rd									
SITE SPECIFI	C IN	PUT DATA							L INPUT	S	
Highway Data					Site Con	ditions (Hard =	: 10, Sc	oft = 15)		
Average Daily Traffic (Ad	tt):	8,421 vehicl	es					Autos:	15		
Peak Hour Percentag	ge:	6.31%				dium Truc		,	15		
Peak Hour Volun	ne:	531 vehicle	S		He	avy Truck	(S (3+)	Axles):	15		
Vehicle Spee		45 mph		-	Vehicle I	Mix					
Near/Far Lane Distant	ce:	48 feet		İ	Veh	icleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	81.359
Barrier Heig	ht:	0.0 feet			Me	edium Tru	icks:	84.8%	4.9%	10.3%	6.69%
Barrier Type (0-Wall, 1-Berr	n):	0.0			F	Heavy Tru	icks:	86.5%	2.7%	10.8%	11.969
Centerline Dist. to Barri		59.0 feet			Noise So	ource Ele	vation	s (in fe	eet)		
Centerline Dist. to Observ		59.0 feet		Ī		Autos:	: 0.	000			
Barrier Distance to Observ		0.0 feet			Mediui	n Trucks:	2.	297			
Observer Height (Above Pa	- /	5.0 feet			Heav	y Trucks:	8.	004	Grade Adj	iustment.	0.0
Pad Elevati		0.0 feet					D:-4	//	F 41		
Road Elevation		0.0 feet			Lane Eq	uivalent l			eet)		
Road Gra		0.0%				Autos:		129			
Left Vie Right Vie		-90.0 degre				n Trucks: vy Trucks:		.966 .982			
•		90.0 degre	es		ricav	y ITUCKS.		.502			
FHWA Noise Model Calcula				,							***
VehicleType REME Autos: 6		Traffic Flow	Di	stance	Finite		Fresi		Barrier Att		m Atten
	8.46 9.45	-5.48 -16.33		-0.6	_	-1.20 -1.20		-4.69 -4.88		000	0.00
	9.45 4.25	-10.33		-0.6	-	-1.20		-5.35		000	0.00
Unmitigated Noise Levels					-	-1.20		-0.30	0.0	J00	0.00
VehicleType Leg Peak					vening	Leg N	liaht	T	Ldn		NEL
Autos:	61.	.,.,	61.3	209 2	59.5	204 /	53.	4	62.		62
Medium Trucks:	61.	3	61.8		55.4		53.	9	62.4	1	62.
Heavy Trucks:	68.		69.2		60.2		61.	4	69.8	3	69.
Vehicle Noise:	70.	0	70.5		63.6		62.	7	71.	1	71.
Centerline Distance to Nois	se Co	ntour (in feet)								
				70	dBA	65 d	BA	6	0 dBA	55	dBA
			Ldn:		70		150)	324		698

Monday, October 12, 2020

	FHW	/A-RD-77-108	HIGH	WAY N	IOISE PI	REDICTI	ON MC	DDEL			
	o: EA (2022) V					.,		DCW3			
	e: Dawson Ca					Job N	umber:	13627			
Road Segmen											
SITE S Highway Data	SPECIFIC IN	PUT DATA			Site Con				L INPUT	S	
					Site Con	uitions	(паги	_			
Average Daily 1		7,844 vehicl	es					Autos:	15		
Peak Hour F		6.31%				dium Tru			15		
	our Volume:	495 vehicle	:S		He	avy Truc	cks (3+	Axles):	15		
	nicle Speed:	40 mph		ŀ	Vehicle	Mix					
Near/Far Lan	e Distance:	12 feet		ŀ	Veh	icleType		Day	Evening	Night	Daily
Site Data						-	Autos:	77.5%	12.9%	9.6%	81.35%
Bar	rier Height:	0.0 feet			M	edium Tı	rucks:	84.8%	4.9%	10.3%	6.69%
Barrier Type (0-Wa		0.0			1	Heavy Tr	rucks:	86.5%	2.7%	10.8%	11.96%
Centerline Dis		37.0 feet		- 1	M-: 0	F1		(i £-	41		
Centerline Dist. to	o Observer:	37.0 feet			Noise S				eet)		
Barrier Distance to	o Observer:	0.0 feet				Auto: m Truck:		2.000			
Observer Height (A	Above Pad):	5.0 feet							Crada Ad	iuatmant	
Pa	d Elevation:	0.0 feet			Heav	y Truck	s: 8	1.004	Grade Adj	ustinent	0.0
Roa	d Elevation:	0.0 feet			Lane Eq	uivalent	t Distai	nce (in i	feet)		
F	Road Grade:	0.0%				Auto	s: 36	.851			
	Left View:	-90.0 degre	es		Mediu	m Trucks	s: 36	6.610			
	Right View:	90.0 degre	es		Heav	y Truck	s: 36	6.634			
FHWA Noise Mode	el Calculations	5									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	inel	Barrier Att	en Bei	m Atten
Autos:	66.51	-5.28		1.8	8	-1.20		-4.56	0.0	000	0.000
Medium Trucks:	77.72	-16.13		1.9	3	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	82.99	-13.60		1.9	2	-1.20		-5.61	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barri	er atter	nuation)						
	Leq Peak Hou			Leq E	vening	,	Night		Ldn		NEL
Autos:	61.	-	62.0		60.3		54	-	62.8	-	63.4
Medium Trucks:	62.	-	62.8		56.4		54		63.4		63.0
Heavy Trucks:	70.		70.7		61.7		62	.9	71.3	3	71.4
Vehicle Noise:	71.	.3	71.8		64.7		64	.0	72.4	1	72.0
Centerline Distanc	e to Noise Co	ntour (in feet)								
			L	70	dBA	65	dBA		i0 dBA		dBA
			Ldn:		54		11	6	249		536
			NEL:		55		11	-	257		553

Monday, October 12, 2020

	FHW	A-RD-77-108	HIGH	WAY N	OISE P	REDICT	ION MC	DEL			
	: EAP (2022) : Temescal C : s/o I-15						Name: lumber:				
SITE S	PECIFIC IN	PUT DATA			Sito Co	nditions			L INPUT	S	
Average Daily Tr Peak Hour Pe Peak Hou		7,849 vehicle 6.31% 495 vehicles 40 mph			Ме	edium Tr eavy Tru	ucks (2	Autos: Axles):	15 15		
Near/Far Lane	Distance:	12 feet		۱		iviix nicleType		Dav	Evening	Niaht	Dailv
Site Data					¥ C/		Autos:	77.5%	-		82.05%
Barrier Type (0-Wal	ier Height:	0.0 feet 0.0				ledium T Heavy T		84.8% 86.5%		10.3% 10.8%	6.44%
Centerline Dist.	to Barrier:	37.0 feet		^	loise S	ource E	levation	ns (in f	eet)		
Barrier Distance to	Centerline Dist. to Observer: 37.0 feet Barrier Distance to Observer: 0.0 feet bbserver Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet				Mediu	Auto m Truck vv Truck	s: 0 s: 2	.000 .297 .004	Grade Ad	iustment	+ nn
Pad	Elevation:	0.0 feet								Justinein	. 0.0
Ro	Rad Elevation: 0.0 teet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Mediu	Auto MTruck Yy Truck	s: 36 s: 36	.851 .610 .634	feet)		
FHWA Noise Model	Calculations	;									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	66.51	-5.24		1.88	3	-1.20		-4.56	0.0	000	0.000
Medium Trucks: Heavy Trucks:	77.72 82.99	-16.29 -13.77		1.93 1.92		-1.20 -1.20		-4.87 -5.61		000	0.000
Unmitigated Noise	Levels (witho	out Topo and	barri	er atteni	uation)						
VehicleType L	eq Peak Hour	Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	С	NEL
Autos:	62.	0 (62.1		60.3	3	54.	2	62.9	9	63.5
Medium Trucks:	62.	2	62.6		56.3	3	54.	7	63.2	2	63.4
Heavy Trucks:	70.		70.5		61.5		62.		71.		71.2
Vehicle Noise:	71.	2	71.7		64.6	5	63.	9	72.	3	72.5
Centerline Distance	to Noise Co	ntour (in feet))			1		1			
			L	70 d		65	dBA		60 dBA		dBA
			Ldn:		52		113	-	244		525
		CI	VEL:		54		117	7	251		541

	FHW	A-RD-77-108	HIGH	1 YAWI	NOISE P	REDICTI	ON MC	DDEL			
Road Nam	io: EAP (2022) e: Temescal C nt: s/o Trilogy P	anyon Rd.						DCW3 13627			
	SPECIFIC IN	PUT DATA							L INPUT	S	
Highway Data					Site Cor	nditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	12,737 vehicle	es					Autos:	15		
Peak Hour	Percentage:	6.31%			Me	dium Tru	ıcks (2	Axles):	15		
Peak H	our Volume:	804 vehicle	s		He	avy Truc	ks (3+	Axles):	15		
Vei	hicle Speed:	40 mph		ŀ	Vehicle	Mix					
Near/Far Lar	ne Distance:	48 feet		H		icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	81.579
Bai	rrier Height:	0.0 feet			М	edium Tı	ucks:	84.8%	4.9%	10.3%	6.61%
Barrier Type (0-W	-	0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8%	11.829
Centerline Dis	t. to Barrier:	59.0 feet		ŀ	Noise S	ourco El	ovatio	ne (in f	not)		
Centerline Dist.	to Observer:	59.0 feet		ŀ	NOISE 3	Auto:		.000	ei)		
Barrier Distance	to Observer:	0.0 feet			Modiu	m Trucks		297			
Observer Height (A	Above Pad):	5.0 feet				vy Trucks	-	.004	Grade Ad	iustmani	- 0.0
Pa	ad Elevation:	0.0 feet			1100	y much	s. 0	.004	0/440/14	dolinoni	. 0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalent	Distar	nce (in i	feet)		
F	Road Grade:	0.0%				Auto	s: 54	.129			
	Left View:	-90.0 degre	es		Mediu	m Trucks	s: 53	.966			
	Right View:	90.0 degre	es		Hea	y Trucks	s: 53	.982			
FHWA Noise Mode	el Calculations										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	66.51	-3.16		-0.6	32	-1.20		-4.69	0.0	000	0.00
Medium Trucks:	77.72	-14.07		-0.6	0	-1.20		-4.88	0.0	000	0.00
Heavy Trucks:	82.99	-11.55		-0.6	0	-1.20		-5.35	0.0	000	0.00
Unmitigated Noise			barrie	er atter	nuation)						
VehicleType	Leq Peak Hour			Leq E	vening		Night		Ldn		NEL
Autos:	61.		61.6		59.9		53.		62.4		63.
Medium Trucks:	61.8	-	62.3		56.0		54.		62.9	-	63.
Heavy Trucks:	69.0		70.2		61.2		62.		70.8	-	70.
Vehicle Noise:	70.9	9	71.4		64.3	i	63.	.6	72.0)	72.
Centerline Distance	ce to Noise Co	ntour (in feet)								
			L	70	dBA	65	dBA		0 dBA		dBA
			Ldn:		80		173	_	370		797
		C	NEL:		82		17	/	381		821

	FH	WA-RD-77-108	півну	VAT NU	JOE PR	CEDIC II	ON WIC	BEE			
	p: EAP (2022	,				Project					
	e: Temescal					Job N	umber:	13627			
Road Segmen	t: s/o Dos La	igos Rd.									
	SPECIFIC II	NPUT DATA							L INPUT	S	
Highway Data				Si	ite Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily 1	raffic (Adt):	16,470 vehicl	es					Autos:	15		
Peak Hour F	Percentage:	6.31%				dium Tru					
Peak Ho	our Volume:	1,039 vehicle	:S		He	avy Truc	ks (3+	Axles):	15		
Veh	icle Speed:	45 mph		V	ehicle l	Mix					
Near/Far Lan	e Distance:	58 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	82.089
Ron	rier Height:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	6.469
Barrier Type (0-Wa		0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	11.469
Centerline Dis	t. to Barrier:	64.0 feet		A/	oioo Ca	ource El	ovetion	an /in f	204)		
Centerline Dist. to	o Observer:	64.0 feet		/4	oise sc	Auto:		.000	eu)		
Barrier Distance t	o Observer:	0.0 feet			Madiu	mulo: m Trucks		.297			
Observer Height (A	Above Pad):	5.0 feet				v Trucks		.004	Grade Ad	iustmant	0.0
Pa	d Elevation:	0.0 feet			ricav	y IIIUCKS	s. o	.004	Orade Adj	ustriiciit.	0.0
Roa	d Elevation:	0.0 feet		La	ane Eq	uivalent	Distar	ice (in	feet)		
F	Road Grade:	0.0%				Autos	s: 57	.271			
	Left View:	-90.0 degre	es			n Trucks		.117			
	Right View:	90.0 degre	es		Heav	y Trucks	s: 57	.132			
FHWA Noise Mode	l Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	68.46	-2.53		-0.99		-1.20		-4.70	0.0	000	0.00
Medium Trucks:	79.45	-13.57		-0.97		-1.20		-4.88	0.0	000	0.00
Heavy Trucks:	84.25	-11.08		-0.97		-1.20		-5.31	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Daj	/ 1	Leq Eve	ning	Leq	Night		Ldn	CI	VEL
Autos:	63	3.7	63.8		62.1		56.	0	64.6	3	65.
Medium Trucks:	63	3.7	64.2		57.8		56.	3	64.8	3	65.
Heavy Trucks:		1.0	71.6		62.5		63.	-	72.		72.
Vehicle Noise:	72	2.4	72.9		66.0		65.	1	73.5	5	73.
Centerline Distanc	e to Noise C	ontour (in feet)								
				70 dE		65 (dBA		60 dBA		dBA
			Ldn:		109		235	5	507		1,092
			NEL:		113		243		523		

Monday, October 12, 2020

	FHV	VA-RD-77-108	HIGH	WAY I	NOISE PI	REDICTION	ON MO	DEL			
Scenario	o: EAP (2022) With Ext.				Project	Name:	DCW3			
Road Name	e: Temescal	Canyon Rd.				Job Nu	umber:	13627			
Road Segmen	t: s/o Dos La	gos Rd.									
SITE S	SPECIFIC IN	IPUT DATA			Site Cor				L INPUT	s	
					Site Cor	iuitions (
Average Daily 1	. ,	16,470 vehic	les					Autos:			
Peak Hour I		6.31%				dium Tru			15		
	our Volume:	1,039 vehicle	es		He	avy Truc	ks (3+ A	(xies	15		
	nicle Speed:	45 mph			Vehicle	Mix					
Near/Far Lar	e Distance:	58 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						Α	lutos:	77.5%	12.9%	9.6%	82.089
Bar	rier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	6.469
Barrier Type (0-Wa		0.0			1	Heavy Tr	ucks:	86.5%	2.7%	10.8%	11.469
Centerline Dis		64.0 feet			M-: 0	F1		- /:- 5	41		
Centerline Dist. t	o Observer:	64.0 feet			Noise S	Autos			eet)		
Barrier Distance t	o Observer:	0.0 feet			A decedio	Autos m Trucks		000 297			
Observer Height (A	Above Pad):	5.0 feet						291 004	Grade Ad	iustman	- 00
Pa	d Elevation:	0.0 feet			Heal	y Trucks	i: 8.	004	Grade Adj	ustinen	. 0.0
Roa	d Elevation:	0.0 feet			Lane Eq	uivalent	Distan	ce (in	feet)		
F	Road Grade:	0.0%				Autos	57.	271			
	Left View:	-90.0 degre	ees		Mediu	m Trucks	: 57.	117			
	Right View:	90.0 degre	ees		Heav	y Trucks	: 57.	132			
FHWA Noise Mode			_								
VehicleType	REMEL	Traffic Flow		stance		Road	Fresr		Barrier Att		rm Atten
Autos:	68.46	-2.53		-0.9		-1.20		-4.70		000	0.00
Medium Trucks:	79.45	-13.57		-0.9		-1.20		-4.88		000	0.00
Heavy Trucks:	84.25			-0.9	•	-1.20		-5.31	0.0	000	0.00
Unmitigated Noise							N. Control	_	Ldn		NEL
VehicleType Autos:	Leq Peak Hou	ır Leq Da	63.8	Ley E	vening 62.1	Leq I	vigrit 56.0		64.0		.w⊆L 65.
Medium Trucks:		3.7	64.2		57.8		56.3		64.		65
Heavy Trucks:		.0	71.6		62.5		63.8	-	72.	-	72
Vehicle Noise:		2.4	72.9		66.0		65.1		73.		73.
Centerline Distanc	e to Noise Co	ontour (in fee	t)								
				70	dBA	65 c	BA.	6	60 dBA	55	dBA
			Ldn:		109		235		507	•	1,092

Monday, October 12, 2020 Monday, October 12, 2020

	FHV	VA-RD-77-108	HIGH	HWAY N	OISE PI	REDICT	ION MC	DDEL			
Road Nam	io: EAP (2022) e: Temescal (nt: s/o Dawsor	Canyon Rd.					Name: lumber:				
	SPECIFIC IN	PUT DATA							L INPUT	s	
Highway Data					Site Cor	aitions	(Hara	-	oft = 15)		
Average Daily	. ,	17,277 vehicle	es					Autos:			
	Percentage:	6.31%				dium Tr		,			
	our Volume:	1,090 vehicle	S		He	avy Tru	cks (3+	Axles):	15		
	hicle Speed:	40 mph		1	Vehicle .	Mix					
Near/Far Lar	ne Distance:	58 feet			Veh	icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	82.94%
Bai	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	6.15%
Barrier Type (0-W	all, 1-Berm):	0.0			1	Heavy T	rucks:	86.5%	2.7%	10.8%	10.91%
Centerline Dis		64.0 feet		1	Voise S	ource E	levatio	ns (in f	eet)		
Centerline Dist.		64.0 feet				Auto	s: 0	.000	,		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s: 2	.297			
Observer Height (5.0 feet			Heav	y Truck	s: 8	.004	Grade Ad	justment	0.0
	ad Elevation:	0.0 feet		L.							
	ad Elevation:	0.0 feet		Ľ	Lane Eq				reet)		
ŀ	Road Grade:	0.0%				Auto		.271			
	Left View:	-90.0 degree				m Truck		.117			
	Right View:	90.0 degree	es		Heav	y Truck	S: 5/	132			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Di	stance		Road	Fres		Barrier Att		m Atten
Autos:	66.51	-1.76		-0.99		-1.20		-4.70		000	0.000
Medium Trucks:	77.72	-13.06		-0.9		-1.20		-4.88		000	0.000
Heavy Trucks:	82.99	-10.57		-0.9		-1.20		-5.31	0.0	000	0.000
Unmitigated Noise VehicleType	Leg Peak Hou			er atten Leg Ev		Loa	Night		Ldn		NEL
Autos:	62 62		62.7	LUY LI	60.9	Ley	Tvigrit 54	8	63.5		64.1
Medium Trucks:	62		63.0		56.6		55	-	63.5	-	63.8
Heavy Trucks:	70		70.8		61.8		63		71.4	-	71.5
Vehicle Noise:	71		72.0		65.0		64	-	72.0		72.8
Centerline Distance	ce to Noise Co	ntour (in feet)								
		-		70 c	IBA	65	dBA	- (60 dBA	55	dBA
			Ldn:		96		20	-	444	ļ	956
		CI	VEL:		99		21	2	458	3	986

Autos: 77.5% 12.9% 9.6% 82		FH\	WA-RD-77-108	HIGH	WAY N	OISE P	REDICT	ON MC	DDEL			
Site Specific (Adt): 17,277 vehicles Autos: 15 A	Scenari	o: EAP (2022) With Ext.				Project	Name:	DCW3	3		
SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS							Job N	lumber:	13627			
Average Daily Traffic (Adt): 17,277 vehicles Peak Hour Percentage: 6,31% Average Daily Traffic (Adt): 17,277 vehicles Peak Hour Volume: 1,090 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 58 feet Vehicle Mix Vehicle Type Day Evening Night Nigh	Road Segmen	nt: s/o Dawso	n Canyon Rd.									
Average Daily Traffic (Adt): 17,277 vehicles		SPECIFIC IN	IPUT DATA			Sito Co					S	
Peak Hour Percentage: 6.31% Medium Trucks (2 Axiles): 15						one co	luitions	(mara				
Peak Hour Volume:		. ,	,=	es		1.4	odium Tr	ualea (2				
Vehicle Speed: 40 mph Vehicle Mix Vehicle Type Day Evening Night L Site Data Autos: 77.5% 12.9% 96.9% 82.9% 9.6% 82.9% 1.2.9% 96.9% 82.9% 1.0.3% 64.9% 64.9% 10.3% 64.9% 10.3% 64.9% 10.3% 64.9% 10.3% 64.9% 10.3% 64.0 feet Medium Trucks: 84.6% 4.9% 4.9% 10.3% 64.0 feet Heavy Trucks: 86.5% 2.7% 10.8% 10.3% 64.0 feet Heavy Trucks: 86.5% 2.7% 10.8% 10.3% 64.0 feet Noise Source Elevations (in feet) Heavy Trucks: 8.004 Grade Adjustment 0.0 feet Noise Source Elevations (in feet) Heavy Trucks: 8.004 Grade Adjustment 0.0 feet Heavy Trucks: 57.117 Heavy Trucks: 57.132 Heavy Trucks: 57.132 Noise Source Elevations (in feet) Heavy Trucks: 57.117 Heavy Trucks: 57.132 Noise Source Elevations (in feet) Noise Source Elevations (in feet) Heavy Trucks: 57.117 Heavy Trucks: 57.132 Heavy Trucks: 57.132 Noise Source Elevations (in feet) Noise Source Elevations (in feet) Heavy Trucks: 57.117 Heavy Trucks: 57.132 Heavy Trucks: 57.132 Noise Source Elevations (in feet) Noise Source Elevations (in				_					,			
Near/Far Lane Distance: 58 feet Vehicle MIX Vehicle Type Day Evening Night E Vehicle Type Day Evening Night Day Day Evening Night Day			,	S		п	avy IIu	iks (st	Axies).	15		
Site Data Autos: 77.72 1.9.06 Autos: 77.86 Autos: 70.86 Autos: 86.87 Autos: 86.87 Autos: 70.87 Autos: 70.88				1	Vehicle	Mix						
Barrier Height: 0.0 feet Heavy Trucks: 84.8% 4.9% 10.3% 6 10	Near/Far Lar	ne Distance:	58 feet			Vel	nicleType	•	Day	Evening	Night	Daily
Barrier Type (0-Wall, 1-Berm): 0.0 feet Heavy Trucks: 86.5% 2.7% 10.8% 10.8	Site Data						,	Autos:	77.5%	12.9%	9.6%	82.949
Noise Source Elevations (in feet)	Bar	rier Height:	0.0 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.	Barrier Type (0-Wa	all, 1-Berm):	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	10.919
Centerline Dist. to Observer: 64,0 feet Barrier Distance to Observer: 0,0 feet Cobserver Height (Above Pad): 5,0 feet Pad Glevation: 0,0 feet Road Grade: 0,0 % Left View: 90,0 degrees Right View: 90,0 degrees Right View: 90,0 degrees Medium Trucks: 57,271 Medium Trucks: 57,171 Medium Trucks: 57,172 Medium Trucks: 57,	Centerline Dis	t. to Barrier:	64.0 feet		- h	Noico S	ourco E	lovatio	ne (in f	not)		
Barrier Distance to Observer: 0.0 feet Pad Elevation: 0.0 feet Pad Elevation: 0.0 feet Road Five: 0	Centerline Dist. t	to Observer:	64.0 feet		H.	10/36 0			_ •			
Diserver Height (Above Pad): 5.0 feet	Barrier Distance t	to Observer:	0.0 feet			Modi						
Pad Elevation: 0.0 feet Canada Observer Height (/	Above Pad):	5.0 feet					· -		Grade Ad	iustment	0.0	
Road Grade: 0.0% Left View: 90.0 degrees Medium Trucks: 57.271 Medium Trucks: 57.117 Heavy Trucks: 57.117 Heavy Trucks: 57.117 Heavy Trucks: 57.117 Heavy Trucks: 57.117 Heavy Trucks: 57.132 Heavy Trucks: 66.51 -1.76 -0.99 -1.20 -4.70 0.000 Hedium Trucks: 77.72 -13.06 -0.97 -1.20 -4.88 0.000 Heavy Trucks: 82.99 -10.57 -0.97 -1.20 -5.31 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType	Pa	ad Elevation:	0.0 feet								dottriorit	0.0
Left View: 90.0 degrees	Roa	d Elevation:	0.0 feet		1	Lane Ed	uivalen	t Distai	nce (in	feet)		
FIRMA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Autos: 66.51 -1.76 -0.99 -1.20 -4.70 0.000	F	Road Grade:	0.0%				Auto	s: 57	.271			
Private Priv		Left View:	-90.0 degre	es		Mediu	m Truck	s: 57	.117			
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Autos: 66.51 -1.76 -0.99 -1.20 -4.70 0.000		Right View:	90.0 degre	es		Hea	vy Truck	s: 57	1.132			
Autos: 66.51 -1.76 -0.99 -1.20 -4.70 0.000 Medium Trucks: 77.72 -13.06 -0.97 -1.20 -4.88 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) -1.20 -5.31 0.000 UenkileType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 62.6 62.7 60.9 54.8 63.5 63.5 Heavy Trucks: 62.5 63.0 56.6 55.1 63.5 63.5 Heavy Trucks: 70.2 70.8 61.8 63.0 71.4 Vehicle Noise: 71.5 72.0 65.0 64.2 72.6 Centerline Distance to Noise Contour (in feet) 65 dBA 60 dBA 55 dBA	FHWA Noise Mode		-									
Medium Trucks: 77.72 -13.06 -0.97 -1.20 -4.88 0.000								Fres				m Atten
Heavy Trucks: 82.99 -10.57 -0.97 -1.20 -5.31 0.000						-						0.00
Unmitigated Noise Levels (without Topo and barrier attenuation) Vehicle Type Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL												0.00
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 62.6 62.7 60.9 54.8 63.5 Medium Trucks: 62.5 63.0 56.6 55.1 63.5 Heavy Trucks: 70.2 70.8 61.8 63.0 71.4 Vehicle Noise: 71.5 72.0 65.0 64.2 72.6 Centerline Distance to Noise Contour (In feet)						-	-1.20		-5.31	0.0	000	0.00
Autos: 62.6 62.7 60.9 54.8 63.5 Medium Trucks: 62.5 63.0 56.6 55.1 63.5 Heavy Trucks: 70.2 70.8 61.8 63.0 71.4 Vehicle Noise: 71.5 72.0 65.0 64.2 72.6 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dB.								A E l- 4	1	l da		N.E.
Medium Trucks: 62.5 63.0 56.6 55.1 63.5 Heavy Trucks: 70.2 70.8 61.8 63.0 71.4 Vehicle Noise: 71.5 72.0 65.0 64.2 72.6 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dB.					Leq E			_	0			NEL 64
Heavy Trucks: 70.2 70.8 61.8 63.0 71.4 Vehicle Noise: 71.5 72.0 65.0 64.2 72.6 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dB.									-		-	63
Vehicle Noise: 71.5 72.0 65.0 64.2 72.6 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dB.											-	71
70 dBA 65 dBA 60 dBA 55 dBA									-			72.
	Centerline Distanc	e to Noise C	ontour (in feet)								
Ldn: 96 206 444					70 c	dBA	65	dBA	- (60 dBA	55	dBA
				Ldn:		96	•	20	6	444		956
CNEL: 99 212 458			C	NEL:		99		21	2	458		986

		WA-RD-77-108	THOIT	TAT NO	IOE FI						
	c: EAP (2022					Project					
	e: Campbell I					Job N	umber:	13627			
Road Segmen	t: s/o Temes	cal Canyon Rd									
	SPECIFIC II	NPUT DATA							L INPUT	S	
Highway Data				Si	te Con	ditions	(Hard				
Average Daily T	raffic (Adt):	8,715 vehicl	es					Autos:			
Peak Hour F	Percentage:	6.31%				dium Tru					
	our Volume:	550 vehicle	S		He	avy Truc	ks (3+	Axles):	15		
	icle Speed:	45 mph		Ve	hicle l	Mix					
Near/Far Lan	e Distance:	48 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						-	Autos:	77.5%	12.9%	9.6%	81.989
Bari	rier Height:	0.0 feet			Me	edium Tı	ucks:	84.8%	4.9%	10.3%	6.469
Barrier Type (0-Wa		0.0			F	Heavy Tr	rucks:	86.5%	2.7%	10.8%	11.569
Centerline Dist		59.0 feet		No	oise So	ource El	evatio	ns (in fe	eet)		
Centerline Dist. to		59.0 feet				Auto		.000	,		
Barrier Distance to		0.0 feet			Mediui	m Trucks		.297			
Observer Height (A	,	5.0 feet			Heav	v Truck	s: 8	.004	Grade Ad	iustment.	0.0
	d Elevation:	0.0 feet		_							
	d Elevation:	0.0 feet		La	ne Eq	uivalent			feet)		
F	Road Grade:	0.0%				Auto		.129			
	Left View:	-90.0 degre				m Trucks		1.966			
	Right View:	90.0 degre	es		Heav	y Truck:	s: 53	3.982			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Dista		Finite		Fres		Barrier Att	_	m Atten
Autos:	68.46			-0.62		-1.20		-4.69		000	0.00
Medium Trucks:	79.45			-0.60		-1.20		-4.88		000	0.00
Heavy Trucks:	84.25			-0.60		-1.20		-5.35	0.0	000	0.00
Unmitigated Noise											
	Leq Peak Ho			Leq Eve	_	Leq	Night		Ldn		NEL
Autos:	-		61.4		59.7		53		62.		62.
Medium Trucks:	-		61.8		55.4		53		62.4		62.
Heavy Trucks:			69.2		60.2		61		69.8	_	69.
Vehicle Noise:			70.5		63.7		62	./	71.	1	71.
Centerline Distanc	e to Noise C	ontour (in feet)	70 dB	:A	65	dBA		SO dBA	55	dBA
			Ldn:	70 02	70	- 00	15	1	325		700

Monday, October 12, 2020

	FHW	A-RD-77-108	HIGH	1 YAWI	NOISE PI	REDICTI	ON MC	DEL			
Road Nam	o: EAP (2022) e: Dawson Car nt: e/o Temesc	nyon Rd.				Project Job N	Name: umber:				
	SPECIFIC IN	PUT DATA							L INPUT	s	
Highway Data					Site Cor	iditions	(Hard :				
Average Daily	. ,	9,693 vehicl	es					Autos:	15		
	Percentage:	6.31%				dium Tru			15		
Peak H	our Volume:	612 vehicle	s		He	avy Truc	ks (3+	Axles):	15		
Ve	hicle Speed:	40 mph		F	Vehicle	Mix					
Near/Far Lar	ne Distance:	12 feet		-	Veh	icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	84.919
Bai	rier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	5.41%
Barrier Type (0-W	-	0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8%	9.689
Centerline Dis		37.0 feet			Noise S			(: #-	41		
Centerline Dist.	to Observer:	37.0 feet		F	Noise 3	Auto:			et)		
Barrier Distance	to Observer:	0.0 feet			A decadio			.000			
Observer Height (Above Pad):	5.0 feet				m Trucks	-	.004	Grade Ad	iuctmon	- 00
Pá	ad Elevation:	0.0 feet			Heal	y Trucks	S: 8	.004	Grade Auj	ustricii	. 0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalent	Distar	nce (in i	feet)		
1	Road Grade:	0.0%				Autos	s: 36	.851			
	Left View:	-90.0 degre	es		Mediu	m Trucks	s: 36	.610			
	Right View:	90.0 degre	es		Heav	y Trucks	s: 36	.634			
FHWA Noise Mode	el Calculations	;									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	66.51	-4.17		1.8	38	-1.20		-4.56	0.0	000	0.00
Medium Trucks:	77.72	-16.13		1.9	93	-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	82.99	-13.60		1.9	92	-1.20		-5.61	0.0	000	0.00
Unmitigated Noise	e Levels (with	ut Topo and	barri	er atter	nuation)						
VehicleType	Leq Peak Hour	Leq Day	/	Leq E	vening	Leq	Night		Ldn	С	NEL
Autos:	63.	0	63.1		61.4		55.	.3	63.9	9	64.
Medium Trucks:	62.	-	62.8		56.4		54.	-	63.4		63.
Heavy Trucks:	70.		70.7		61.7		62.	-	71.3	-	71.
Vehicle Noise:	71.	5	72.0		65.1		64.	.2	72.6	6	72.
Centerline Distant	ce to Noise Co	ntour (in feet	t)								
			1 -1-	70	dBA	65 (dBA		0 dBA		dBA
			Ldn:		55		110	-	254		548
		C	NEL:		57		12:	2	262		565

Monday, October 12, 2020

	FHW	/A-RD-77-108	HIGH	HWAY N	OISE PI	REDICT	ION MC	DEL			
	io: EAC (2022) ne: Temescal C nt: s/o I-15						Name: lumber:				
SITE Highway Data	SPECIFIC IN	PUT DATA			Sita Car				L INPUT oft = 15)	S	
Average Daily Peak Hour Peak H Ve	Percentage: lour Volume: hicle Speed:	10,796 vehicle 6.31% 681 vehicle 40 mph			Ме	dium Tr avy Tru	ucks (2	Autos: Axles):	15 15		
Near/Far La	ne Distance:	12 feet			Veh	icleType	,	Day	Evening	Night	Daily
Site Data Bai Barrier Type (0-W	rrier Height: /all, 1-Berm):	0.0 feet 0.0				edium T Heavy T		77.5% 84.8% 86.5%	4.9%	10.3%	81.35% 6.69% 11.96%
Centerline Dis		37.0 feet		1	Voise S	ource E	levatio	ns (in f	eet)		
Barrier Distance Observer Height (Centerline Dist. to Observer: 37.0 feet Barrier Distance to Observer: 0.0 feet Dbserver Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet					Auto m Truck ry Truck	s: 2	.000 .297 .004	Grade Ad	iustmen	t: 0.0
				1	Autos: 36.851 Medium Trucks: 36.610 Heavy Trucks: 36.634						
FHWA Noise Mod	el Calculations	S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos: Medium Trucks: Heavy Trucks:	77.72	-3.89 -14.74 -12.22		1.88 1.93 1.92	3	-1.20 -1.20 -1.20		-4.56 -4.87 -5.61	0.0	000 000 000	0.000 0.000 0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Hou	r Leq Day	′	Leq Ev	ening	Leq	Night		Ldn	C	NEL
Autos:	63.	-	63.4		61.6		55.	-	64.2	_	64.8
Medium Trucks:	63.		64.2		57.8		56.	-	64.7		65.0
Heavy Trucks: Vehicle Noise:	71. 72.		72.1 73.2		63.0 66.1		64. 65.		72.6 73.8	-	72.8 74.0
Centerline Distant	ce to Noise Co	ntour (in feet)								
		. ,,		70 c	iBA	65	dBA	(60 dBA	55	dBA
			Ldn:		66		14:	-	308		664
		CI	VEL:		68		14	7	317		684

	FH\	WA-RD-77-108	HIGH	WAY NO	DISE PI	REDICT	ION MC	DDEL			
) Without Ext.					Name:				
	e: Temescal					Job №	lumber:	13627			
Road Segmen	nt: s/o Trilogy	Pkwy.									
	SPECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	ite Cor	nditions	(Hard	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	29,517 vehicle	es					Autos.	15		
Peak Hour	Percentage:	6.31%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	our Volume:	1,863 vehicle	s		He	avy Tru	cks (3+	Axles):	15		
Vel	nicle Speed:	40 mph		ν	'ehicle	Mix					
Near/Far Lar	ne Distance:	48 feet		Ë		icleType	9	Dav	Evening	Night	Dailv
Site Data							Autos:	77.5%			81.359
Rar	rier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	6.69%
Barrier Type (0-Wa	-	0.0				Heavy T	rucks:	86.5%	6 2.7%	10.8%	11.96%
Centerline Dis		59.0 feet			·- · 0		Y41-	/! 4	41		
Centerline Dist. t	o Observer:	59.0 feet		N	ioise S	ource E		_ •	eet)		
Barrier Distance t	o Observer:	0.0 feet				Auto m Truck		2.000			
Observer Height (/	Above Pad):	5.0 feet					-	3.004	Grade Adj	uctment	- 0.0
Pa	d Elevation:	0.0 feet			пеа	vy Truck	.s. c	0.004	Orauc Auj	astmont	. 0.0
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalen	t Distai	nce (in	feet)		
F	Road Grade:	0.0%				Auto	s: 54	1.129			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 53	3.966			
	Right View:	90.0 degree	es		Hea	vy Truck	s: 53	3.982			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fres	snel	Barrier Att	en Bei	rm Atten
Autos:	66.51	0.48		-0.62		-1.20		-4.69	0.0	000	0.00
Medium Trucks:	77.72			-0.60		-1.20		-4.88		000	0.00
Heavy Trucks:	82.99	-7.85		-0.60		-1.20		-5.35	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barrie	r attenu	ıation)						
	Leq Peak Hou		_	Leq Eve	ening	Leq	Night		Ldn		NEL
Autos:			65.3		63.5		57		66.1		66.
Medium Trucks:			66.0		59.7		58		66.6	-	66.
Heavy Trucks:			73.9		64.9		66		74.5		74.
Vehicle Noise:	74	1.5	75.1		68.0		67	.3	75.7	7	75.
Centerline Distanc	e to Noise C	ontour (in feet)								
			L	70 di		65	dBA		60 dBA		dBA
			Ldn:		140		30		652		1,405
		CI	NEL:		145		31	2	672		1,447

Road Name: Road Segment: SITE SI Highway Data Average Daily Tr Peak Hour Pe Peak Hou	PECIFIC IN	anyon Rd. os Rd.					Name: D umber: 1				
Road Segment: SITE SI Highway Data Average Daily Tr Peak Hour Pe Peak Hou	s/o Dos Lag	os Rd.									
Highway Data Average Daily Tr Peak Hour Pe Peak Hou		PUT DATA									
Average Daily Tr Peak Hour Pe Peak Hou									L INPUT	S	
Peak Hour Pe Peak Hou					Site Con	ditions	(Hard = 1	0, Sc	ft = 15)		
Peak Hou	raffic (Adt):	17,710 vehicle	s				A	utos:	15		
	ercentage:	6.31%			Med	dium Tru	icks (2 Ax	les):	15		
	ur Volume:	1,118 vehicles			Hea	avy Truc	ks (3+ Ax	les):	15		
Vehic	cle Speed:	45 mph		-	Vehicle N	Nix					
Near/Far Lane	Distance:	58 feet		ŀ		cleType	E	ay	Evening	Night	Daily
Site Data						A	lutos: 7	7.5%	12.9%	9.6%	81.35
Barri	ier Heiaht:	0.0 feet			Me	edium Tr	ucks: 8	4.8%	4.9%	10.3%	6.69
Barrier Type (0-Wal		0.0			H	leavy Tr	ucks: 8	6.5%	2.7%	10.8%	11.96
Centerline Dist.		64.0 feet			Noise So	urce Fl	ovations	(in fa	of)		
Centerline Dist. to	Observer:	64.0 feet		H	110/36 00	Autos		•	.01)		
Barrier Distance to	Observer:	0.0 feet			Mediun	n Trucks		-			
Observer Height (Al		5.0 feet				y Trucks			Grade Adj	ustment	0.0
	l Elevation:	0.0 feet		L							
	Elevation:	0.0 feet		Į.	Lane Equ			•	eet)		
Ro	oad Grade:	0.0%				Autos					
	Left View:	-90.0 degree				n Trucks					
r	Right View:	90.0 degree	S		neav.	y Trucks	i. 37.1	02			
FHWA Noise Model	Calculations	i									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresne	1	Barrier Att	en Bei	m Atter
Autos:	68.46	-2.25		-0.9	19	-1.20		1.70	0.0	000	0.00
Medium Trucks:	79.45	-13.10		-0.9	7	-1.20		1.88	0.0	000	0.00
Heavy Trucks:	84.25	-10.58		-0.9	7	-1.20	-4	5.31	0.0	000	0.00
Unmitigated Noise I	Levels (witho	out Topo and I	arrie	er atten	uation)						
, ,	eq Peak Hour	- 1 - 7		Leq E	vening	Leq I	-		Ldn		NEL
Autos:	64.		64.1		62.4		56.3		64.9		65
Medium Trucks:	64.		34.7		58.3		56.8		65.2	-	65
Heavy Trucks:	71.		2.1		63.0		64.3		72.7		72
Vehicle Noise:	72.		3.4		66.4		65.6		74.0)	74
Centerline Distance	to Noise Co.	ntour (in feet)								1	
				70	dBA	65 (dBA OFF	6	0 dBA		dBA
		-	.dn:		117 121		253 261		545 562		1,17 1.21

Monday, October 12, 2020

	FHW	A-RD-77-108	HIGH	IWAY I	NOISE PE	REDICTI	ON MO	DEL			
Road Nam	o: EAC (2022) e: Temescal C	anyon Rd.				Project Job Ni	Name: umber:				
	nt: s/o Dos Lag										
	SPECIFIC IN	PUT DATA			011 0				L INPUTS	8	
Highway Data					Site Con	aitions					
Average Daily		17,710 vehicle	es					Autos:	15		
	Percentage:	6.31%				dium Tru			15		
		1,118 vehicle:	S		He	avy Truc	ks (3+ A	(xles	15		
	nicle Speed:	45 mph			Vehicle	Mix					
Near/Far Lar	ne Distance:	58 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	81.35%
Bar	rier Height:	0.0 feet			M	edium Tr	ucks:	84.8%	4.9%	10.3%	6.69%
Barrier Type (0-Wa		0.0			1	Heavy Tr	ucks:	86.5%	2.7%	10.8%	11.96%
Centerline Dis		64.0 feet			M-: 0			- // #			
Centerline Dist. t	o Observer:	64.0 feet			Noise S				eet)		
Barrier Distance t	o Observer:	0.0 feet				Autos		000			
Observer Height ()	Above Pad):	5.0 feet				m Trucks		297	Crada Adi	untmant	0.0
Pa	d Elevation:	0.0 feet			Heav	y Trucks	: 8.	004	Grade Adj	usimem	0.0
Roa	d Elevation:	0.0 feet			Lane Eq	uivalent	Distan	ce (in	feet)		
F	Road Grade:	0.0%				Autos	s: 57.	271			
	Left View:	-90.0 degree	es		Mediu	m Trucks	: 57.	117			
	Right View:	90.0 degree	es		Heav	y Trucks	57.	132			
FHWA Noise Mode	el Calculations	1									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresr	iel .	Barrier Atte	en Ber	m Atten
Autos:	68.46	-2.25		-0.9	99	-1.20		-4.70	0.0	00	0.00
Medium Trucks:	79.45	-13.10		-0.9	97	-1.20		-4.88	0.0	00	0.000
Heavy Trucks:	84.25	-10.58		-0.9	97	-1.20		-5.31	0.0	00	0.000
Unmitigated Noise	Levels (with	ut Topo and	barrie	er atte	nuation)						
VehicleType	Leq Peak Hour	Leq Day	,	Leq E	vening	Leq I	Night		Ldn	C	VEL
Autos:	64.	0	64.1		62.4		56.3	3	64.9)	65.
Medium Trucks:	64.	2	64.7		58.3		56.8	3	65.2	2	65.
Heavy Trucks:	71.	5	72.1		63.0		64.3	3	72.7	•	72.
Vehicle Noise:	72.	9	73.4		66.4		65.6	3	74.0)	74.2
Centerline Distance	e to Noise Co	ntour (in feet,)								
	-		T	70	dBA	65 0			0 dBA	55	dBA
			Ldn:		117		253		545		1,174
			VEL:		121		261		562		1.211

Monday, October 12, 2020 Monday, October 12, 2020

	FHW	A-RD-77-108	HIGH	HWAY N	OISE PI	REDICT	ION MC	DEL			
Road Na	nrio: EAC (2022) me: Temescal C ent: s/o Dawson	anyon Rd.					Name: lumber:				
SITE Highway Data	SPECIFIC IN	PUT DATA			04- 0				L INPUT oft = 15)	S	
Average Daily Peak Hou	r Percentage:	26,161 vehicle 6.31% 1,651 vehicle:			Ме	dium Tri	ucks (2	Autos: Axles):	15 15		
	ehicle Speed:	40 mph			Vehicle	Mix					
Near/Far L	ane Distance:	58 feet			Veh	icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	81.35%
В	arrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	6.69%
Barrier Type (0-V	-	0.0			1	Heavy T	rucks:	86.5%	2.7%	10.8%	11.96%
Centerline D	ist. to Barrier:	64.0 feet		- 1	Noise S	ource E	levation	ns (in f	eet)		
Centerline Dist	to Observer:	64.0 feet				Auto		.000	,		
Barrier Distance	e to Observer:	0.0 feet			Mediu	m Truck		.297			
Observer Height		5.0 feet				vy Truck		.004	Grade Ad	iustment	0.0
	Pad Elevation:	0.0 feet									
Re	oad Elevation:	0.0 feet		-	Lane Eq				reet)		
	Road Grade:	0.0%				Auto		.271			
	Left View: Right View:	-90.0 degree				m Truck vy Truck		.117 .132			
FHWA Noise Mo	del Calculations	;									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos	66.51	-0.05		-0.9	9	-1.20		-4.70	0.0	000	0.000
Medium Trucks	77.72	-10.90		-0.9	7	-1.20		-4.88	0.0	000	0.000
Heavy Trucks	82.99	-8.37		-0.9	7	-1.20		-5.31	0.0	000	0.000
Unmitigated Nois	se Levels (witho	out Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Hour			Leq E			Night		Ldn		NEL
Autos		-	64.4		62.6		56.	-	65.2	_	65.8
Medium Trucks		-	65.1		58.8		57.	_	65.7		65.9
Heavy Trucks			73.0		64.0		65.		73.0		73.7
Vehicle Noise		-	74.2		67.1		66.	.4	74.8	3	75.0
Centerline Distar	nce to Noise Co	ntour (in feet))	70	-(D.4		-/0.4		CO -ID 4		-10.4
			,	70 (65	dBA		60 dBA		dBA
			Ldn: VEL:						1,328		
		CI	VEL:		137		298	0	635	'	1,369

	FHV	/A-RD-77-108	HIGH	WAY I	NOISE P	REDICTI	ON MO	DDEL			
Scenari	io: EAC (2022)	Without Ext.				Project	Name:	DCW3	3		
Road Nam	e: Temescal C	Canyon Rd.				Job N	lumber:	13627			
Road Segmer	nt: s/o Dawson	Canyon Rd.									
SITE :	SPECIFIC IN	PUT DATA			Site Co	N nditions			L INPUT	'S	
					Site Coi	luluons	(IIIaIU	Autos:			
Average Daily	. ,	26,161 vehicl	es			- di T					
	Percentage:	6.31%				edium Tru	,	,			
	our Volume:	1,651 vehicle	es .		П	eavy Truc	CKS (3+	Axies):	15		
	hicle Speed:	40 mph		ĺ	Vehicle	Mix					
Near/Far Lar	ne Distance:	58 feet		ĺ	Vel	nicleType		Day	Evening	Night	Daily
Site Data						,	Autos:	77.5%	12.9%	9.6	% 81.359
Bai	rrier Height:	0.0 feet			N	ledium Ti	rucks:	84.8%	4.9%	10.3	% 6.699
Barrier Type (0-W	-	0.0				Heavy Ti	rucks:	86.5%	2.7%	10.89	% 11.969
Centerline Dis	t. to Barrier:	64.0 feet			Maiaa C	ource El	lovetio	na (in f	n n el l		
Centerline Dist. 1	to Observer:	64.0 feet			Noise 3	Auto.			eet)		
Barrier Distance	to Observer:	0.0 feet			11-4	m Truck:		0.000 2.297			
Observer Height (Above Pad):	5.0 feet						3.004	Grade Ad	livetmo	nt 0.0
Pa	ad Elevation:	0.0 feet			неа	vy Truck	S: 6	3.004	Grade Au	ijustiriei	n. 0.0
Roa	ad Elevation:	0.0 feet			Lane Ed	uivalen	t Dista	nce (in	feet)		
F	Road Grade:	0.0%				Auto.	s: 57	7.271			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 57	7.117			
	Right View:	90.0 degre	es		Hea	vy Truck	s: 57	7.132			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow		stance		Road	Fres		Barrier At		erm Atten
Autos:	66.51	-0.05		-0.9		-1.20		-4.70		000	0.00
Medium Trucks:	77.72	-10.90		-0.9		-1.20		-4.88		000	0.00
Heavy Trucks:	82.99	-8.37		-0.9		-1.20		-5.31	0.	000	0.00
Unmitigated Noise								-		-	01/5/
VehicleType Autos:	Leq Peak Hou 64		64.4	Leq E	vening 62.6		Night		Ldn		CNEL
Medium Trucks:	64		65.1		58.8		56 57		65. 65.		65. 65.
Heavy Trucks: Vehicle Noise:	72 73		73.0		64.0		65 66	-	73. 74.	-	73. 75.
Centerline Distance					-7.		- 50			-	
Contenine Distant	e to Noise Co	anour (in feet	,	70	dBA	65	dBA		60 dBA		5 dBA
			Ldn:		133	1	28	6	617	7	1,328
		C	NEL:		137		29	5	635	5	1,369

	FHV	VA-RD-77-108	HIGH	IWAY N	OISE P	REDICT	ION MO	DDEL			
	io: EAC (2022						Name:				
	ne: Campbell F nt: s/o Temeso					Job N	lumber:	13627			
	SPECIFIC IN		•				10105	MODE	L INPUT	_	
Highway Data	SPECIFIC IN	IPUI DAIA		5	ite Co				oft = 15)	3	
Average Daily	Traffic (Adt):	11.569 vehicl	es					Autos:	15		
Peak Hour	Percentage:	6.31%			Ме	edium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	730 vehicle	s		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	45 mph		,	/ehicle	Miv					
Near/Far Lai	ne Distance:	48 feet		-		nicleType	9	Dav	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	81.359
Rai	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3%	6.699
Barrier Type (0-W	-	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	11.969
Centerline Dis	st. to Barrier:	59.0 feet		٨	loise S	ource E	levatio	ns (in f	eet)		
Centerline Dist.	to Observer:	59.0 feet		-	.0.00 0	Auto		.000	000		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck		.297			
Observer Height (Above Pad):	5.0 feet				vy Truck		1.004	Grade Ad	iustment	. 0.0
Pa	ad Elevation:	0.0 feet			iica	vy IIuch	.s. c	1.004	Orauc Au	ustriciit	0.0
Ros	ad Elevation:	0.0 feet		L	ane Eq	juivalen	t Dista	nce (in	feet)		
	Road Grade:	0.0%				Auto	s: 54	.129			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 53	.966			
	Right View:	90.0 degre	es		Hea	vy Truck	s: 53	1.982			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	inel	Barrier Att	en Be	m Atten
Autos:	68.46	-4.10		-0.62	2	-1.20		-4.69	0.0	000	0.00
Medium Trucks:	79.45	-14.95		-0.60)	-1.20		-4.88	0.0	000	0.00
Heavy Trucks:	84.25	-12.43		-0.60)	-1.20		-5.35	0.0	000	0.00
Unmitigated Noise	e Levels (with	out Topo and	barri	er atteni	ıation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	С	NEL
Autos:	62		62.6		60.9		54		63.4		64.
Medium Trucks:	62		63.2		56.8		55		63.		64.
Heavy Trucks:	70		70.6		61.6	6	62	.8	71.		71.
Vehicle Noise:	71	.4	71.9		65.0)	64	.1	72.	5	72.
Centerline Distan	ce to Noise Co	ontour (in feet)	70			10.4				10.4
			, , , L	70 d		65	dBA		60 dBA		dBA
			Ldn:		86		18	-	400		862
		C	NEL:		89		19	_	413		890

Monday, October 12, 2020

	FHW	A-RD-77-108	HIGH	WAY I	NOISE PI	REDICTI	ON MC	DEL			
Road Nam	o: EAC (2022) e: Dawson Car nt: e/o Temesc	nyon Rd.				Project Job N	Name: umber:		1		
	SPECIFIC IN	PUT DATA							L INPUT	s	
Highway Data					Site Cor	iditions	(Hard	_			
Average Daily	. ,	9,184 vehicle	es					Autos:	15		
	Percentage:	6.31%				dium Tru			15		
Peak H	our Volume:	580 vehicle	S		He	avy Truc	cks (3+	Axles):	15		
Vel	hicle Speed:	40 mph			Vehicle	Mix					
Near/Far Lar	ne Distance:	12 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	81.35%
Bar	rier Height:	0.0 feet			М	edium Tı	rucks:	84.8%	4.9%	10.3%	6.69%
Barrier Type (0-Wi		0.0				Heavy Tr	rucks:	86.5%	2.7%	10.8%	11.96%
Centerline Dis		37.0 feet									
Centerline Dist. t	to Observer:	37.0 feet			Noise S				eet)		
Barrier Distance t	to Observer:	0.0 feet				Auto		.000			
Observer Height (Above Pad):	5.0 feet				m Truck	J. –	.297	0	4 4	
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.004	Grade Adj	ustment	0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalent	t Distar	nce (in i	feet)		
F	Road Grade:	0.0%				Auto	s: 36	.851			
	Left View:	-90.0 degree	es		Mediu	m Trucks	s: 36	.610			
	Right View:	90.0 degree	es		Heav	y Truck:	s: 36	.634			
FHWA Noise Mode	el Calculations										
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Bei	m Atten
Autos:	66.51	-4.59		1.8	88	-1.20		-4.56	0.0	000	0.000
Medium Trucks:	77.72	-15.44		1.9	93	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	82.99	-12.92		1.9	92	-1.20		-5.61	0.0	000	0.000
Unmitigated Noise	Levels (witho	ut Topo and	barri	er atte	nuation)						
	Leq Peak Hour			Leq E	vening		Night		Ldn		NEL
Autos:	62.	6	62.7		60.9		54.	.9	63.5	5	64.
Medium Trucks:	63.	0	63.5		57.1		55.	.6	64.0)	64.3
Heavy Trucks:	70.		71.4		62.3		63.	-	71.9		72.
Vehicle Noise:	72.	0	72.5		65.4		64.	.7	73.	1	73.
Centerline Distance	ce to Noise Co	ntour (in feet)								
			l	70	dBA	65	dBA		60 dBA		dBA
			Ldn: NFL:		60		12	-	277		596
			61 132 285				614				

Monday, October 12, 2020

	FHW	A-RD-77-108	HIGH	WAY N	DISE PI	REDICT	ION MO	DEL			
	: Temescal C	?) Without Ext. anyon Rd.					Name: lumber:				
	PECIFIC IN	PUT DATA							L INPUT	S	
Highway Data				S	ite Cor	nditions	(Hard =	10, S	oft = 15)		
Average Daily T	raffic (Adt):	11,676 vehicle	:S					Autos:	15		
Peak Hour P	ercentage:	6.31%					ucks (2 /	/			
Peak Ho	ur Volume:	737 vehicles	6		He	avy Tru	cks (3+ /	(xles	15		
	icle Speed:	40 mph		V	ehicle	Mix					
Near/Far Land	e Distance:	12 feet			Veh	icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.69	6 82.76%
Barr	ier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.39	6.18%
Barrier Type (0-Wa	II, 1-Berm):	0.0				Heavy T	rucks:	86.5%	2.7%	10.89	6 11.06%
Centerline Dist		37.0 feet		٨	loise S	ource E	levation	s (in f	eet)		
Centerline Dist. to		37.0 feet				Auto	s: 0.	000	-		
Barrier Distance to		0.0 feet			Mediu	m Truck	s: 2.	297			
Observer Height (A		5.0 feet			Hear	vy Truck	s: 8.	004	Grade Ad	justmer	t: 0.0
	d Elevation:	0.0 feet		,	one Fe	ivalan	t Distan	aa (in	foot)		
	d Elevation:	0.0 feet		L	ane Eq				reet)		
R	oad Grade:	0.0%			Maratica	Auto m Truck		851 610			
	Left View: Right View:	-90.0 degree				m Truck vy Truck		634			
FHWA Noise Model	l Calculations	-									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresi	nel	Barrier Att	en Be	erm Atten
Autos:	66.51	-3.47		1.88		-1.20		-4.56		000	0.000
Medium Trucks:	77.72	-14.74		1.93	;	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	82.99	-12.22		1.92	!	-1.20		-5.61	0.0	000	0.000
Unmitigated Noise	Levels (witho	ut Topo and	barrie	er attenu	ıation)						
VehicleType L	eq Peak Hour	Leq Day		Leq Ev	ening	Leq	Night		Ldn	(CNEL
Autos:	63.	7	3.8		62.1	•	56.0)	64.	6	65.2
Medium Trucks:	63.	7	64.2		57.8		56.3	3	64.	7	65.0
Heavy Trucks:	71.	5	72.1		63.0	ı	64.3	3	72.	6	72.8
Vehicle Noise:	72.	7	73.3		66.3		65.	5	73.	9	74.1
Centerline Distance	e to Noise Co	ntour (in feet)		70			10.4	1	00 104		
			L	70 d		65	dBA		60 dBA		5 dBA
			Ldn: IFL:		67 69		144 149		310		668
		Cr	IEL.		69		149		320	,	689

	FHV	VA-RD-77-108	HIGH	WAY NO	DISE PI	REDICTION	ом мо	DEL				
	e: Temescal (Project Job No	Name: umber:					
	SPECIFIC IN	PUT DATA							L INPUT	S		
Highway Data				S	ite Cor	nditions		_				
Average Daily 1	raffic (Adt):	30,251 vehicle	es					Autos:				
Peak Hour I		6.31%				edium Tru		,				
	our Volume:	1,909 vehicle	S		He	avy Truc	ks (3+ .	Axles):	15			
	icle Speed:	40 mph		V	ehicle	Mix						_
Near/Far Lan	e Distance:	48 feet			Veh	icleType		Day	Evening	Night	Di	aily
Site Data						A	utos:	77.5%	12.9%	9.6	% 81.	.809
Rar	rier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3	% 6.	.529
Barrier Type (0-Wa	all, 1-Berm):	0.0			1	Heavy Tr	ucks:	86.5%	2.7%	10.8	% 11.	.679
Centerline Dis		59.0 feet		N	loise S	ource Ele	evation	s (in f	eet)			_
Centerline Dist. t		59.0 feet				Autos		000	,			_
Barrier Distance t	o Observer:	0.0 feet			Mediu	m Trucks		297				
Observer Height (A	,	5.0 feet			Heav	vy Trucks	. 8.	004	Grade Ad	justme	nt: 0.0)
	d Elevation:	0.0 feet										
	d Elevation:	0.0 feet		L	ane Eq	uivalent			feet)			
F	Road Grade:	0.0%				Autos		129				
	Left View:	-90.0 degre				m Trucks		966				
	Right View:	90.0 degre	es		Heav	vy Trucks	: 53	982				
FHWA Noise Mode												
VehicleType	REMEL	Traffic Flow	Dist	ance		Road	Fresi		Barrier Att		erm A	
Autos:	66.51	0.61		-0.62		-1.20		-4.69		000		0.00
Medium Trucks:	77.72	-10.37		-0.60		-1.20		-4.88		000		0.00
Heavy Trucks:	82.99	-7.85		-0.60		-1.20		-5.35	0.0	000	(0.00
Unmitigated Noise								_		_		
	Leq Peak Hou			Leq Eve		Leq I	_		Ldn		CNEL	
Autos:	65		65.4		63.6		57.	-	66.	_		66.
Medium Trucks:	65		66.0		59.7		58.		66.	-		66.
Heavy Trucks:	73		73.9		64.9		66.		74.	-		74.
Vehicle Noise:	74		75.1		68.0		67.	3	75.	7		75.
Contarling Distance	e to Noise Co	ntour (in feet)	70 dl	D.4		iBA		60 dBA		55 dBA	1
Centernine Distanc												
Centernite Distance			Ldn:	70 at	<i>ВА</i> 141	65 (303 303		653			.408

F	HWA-RD-77-10	B HIGHWA	Y NOISE PI	REDICTI	ON MOD	EL		
Scenario: EAPC (2 Road Name: Temeso Road Segment: s/o Dos	al Canyon Rd.	t.			Name: D umber: 13			
SITE SPECIFIC	INPUT DATA			N	OISE M	ODEL INF	UTS	
Highway Data			Site Cor	ditions	(Hard = 1	0, Soft = 1	5)	
Average Daily Traffic (Adt) Peak Hour Percentage Peak Hour Volume	6.31%				Ai icks (2 Ax ks (3+ Ax	,		
Vehicle Speed	45 mph		Vehicle	Miv				
Near/Far Lane Distance	58 feet			icleType		ay Even	ina Mi	ght Daily
Site Data			V C//					9.6% 82.00%
			М	edium Tr				0.3% 6.48%
Barrier Height				Heavy Tr				0.8% 11.51%
Barrier Type (0-Wall, 1-Berm) Centerline Dist. to Barrier								0.070 11.0170
Centerline Dist. to Barrier			Noise S	ource El	evations	(in feet)		
Barrier Distance to Observer				Autos	s: 0.00	00		
			Mediu	m Trucks	3: 2.29	97		
Observer Height (Above Pad) Pad Elevation			Heav	y Trucks	8.00)4 Grade	Adjust	ment: 0.0
Road Elevation	0.0 1001		I ano Fo	uivalont	Distance	(in foot)		
Road Elevation	0.0 1001		Lane Lq	Autos		. ,		
Left View	. 0.070		Modiu	m Trucks				
Right View				y Trucks				
FHWA Noise Model Calculati	ons							
VehicleType REMEL	Traffic Flow	Distan	ce Finite	Road	Fresne	l Barrie	r Atten	Berm Atten
Autos: 68.	46 -2.04	1 .	-0.99	-1.20	-4	1.70	0.000	0.000
Medium Trucks: 79.	45 -13.06	3 .	-0.97	-1.20	-4	1.88	0.000	0.000
Heavy Trucks: 84.	25 -10.56	3 .	-0.97	-1.20	-4	5.31	0.000	0.000
Unmitigated Noise Levels (w	ithout Topo and	l barrier a	ttenuation)					
VehicleType Leq Peak I	Hour Leq Da	y Le	q Evening	Leq I	Night	Ldn		CNEL
Autos:	64.2	64.3	62.6		56.5		65.1	65.7
Medium Trucks:	64.2	64.7	58.4		56.8		65.3	65.5
Heavy Trucks:	71.5	72.1	63.1		64.3		72.7	72.8
Vehicle Noise:	72.9	73.4	66.5		65.6		74.0	74.2
Centerline Distance to Noise	Contour (in fee	t)						
			70 dBA	65 (dBA	60 dBA	١	55 dBA
		Ldn:	118		255		549	1,182
	(CNEL:	122		263		566	1,220

Monday, October 12, 2020

	FHW	/A-RD-77-108	HIGH	WAY N	IOISE PF	REDICTION	ON MO	DDEL			
	e: Temescal C					Project Job No		DCW3			
SITE S	PECIFIC IN	PUT DATA							L INPUT	s	
Highway Data					Site Con	ditions	(Hard	= 10, S	oft = 15)		
Average Daily T	raffic (Adt):	18,464 vehicle	s					Autos.	15		
Peak Hour F	Percentage:	6.31%			Me	dium Tru	icks (2	Axles):	15		
Peak Ho	our Volume:	1,165 vehicles	;		He	avy Truc	ks (3+	Axles):	15		
Veh	icle Speed:	45 mph		ŀ	Vehicle I	Mix					
Near/Far Lan	e Distance:	58 feet		ŀ		icleType		Day	Evening	Night	Daily
Site Data							utos:	77.5%	-		82.00%
Ran	rier Height:	0.0 feet			Me	edium Tr	ucks:	84.89	4.9%	10.3%	6.48%
Barrier Type (0-Wa		0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	11.51%
Centerline Dist		64.0 feet									
Centerline Dist. to	Observer:	64.0 feet			Noise So				eet)		
Barrier Distance to	Observer:	0.0 feet				Autos n Trucks		0.000 0.297			
Observer Height (A	lbove Pad):	5.0 feet						3.004	Grade Ad	iuctmont	- 0.0
Pa	d Elevation:	0.0 feet			Heav	y Trucks	: 6	3.004	Grade Auj	usimem	. 0.0
Roa	d Elevation:	0.0 feet		L	Lane Eq	uivalent	Dista	nce (in	feet)		
F	Road Grade:	0.0%				Autos	s: 57	7.271			
	Left View:	-90.0 degree	s		Mediui	n Trucks	: 57	7.117			
	Right View:	90.0 degree	s		Heav	y Trucks	: 57	7.132			
FHWA Noise Mode	I Calculations	3									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	snel	Barrier Att	en Be	rm Atten
Autos:	68.46	-2.04		-0.9	-	-1.20		-4.70		000	0.000
Medium Trucks:	79.45	-13.06		-0.9		-1.20		-4.88		000	0.000
Heavy Trucks:	84.25	-10.56		-0.9		-1.20		-5.31	0.0	000	0.000
Inmitigated Noise			barrie								
	Leq Peak Hou			Leq E	vening	Leq i	-		Ldn		NEL
Autos:	64.		34.3		62.6		56		65.		65.7 65.5
Medium Trucks:	64.		34.7 72.1		58.4 63.1		56 64		65.3 72.3	-	
Heavy Trucks: Vehicle Noise:	71. 72.		73.4		66.5		65		74.0		72.8
					00.0					-	
Centerline Distanc	e to Noise Co	ntour (in feet)		70	dBA	65 (iBA		60 dBA	55	dBA
		L L	_dn:		118		25	5	549		1.182

Monday, October 12, 2020 Monday, October 12, 2020

FH	WA-RD-77-108	HIGH	WAY N	OISE PF	REDICT	ои мо	DEL			
Scenario: EAPC (20: Road Name: Temescal Road Segment: s/o Dawso	Canyon Rd.	•				Name: I umber:				
SITE SPECIFIC II	NPUT DATA			24- 0		IOISE N (Hard =		L INPUT	S	
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	27,736 vehicle 6.31% 1,750 vehicle			Ме	dium Tri	•	Autos: (xles):	15 15 15 15		
Vehicle Speed:	40 mph		١	/ehicle	Mix					
Near/Far Lane Distance:	58 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						Autos:	77.5%	12.9%	9.6%	82.34%
Barrier Height:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	6.35%
Barrier Type (0-Wall, 1-Berm):	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	11.31%
Centerline Dist. to Barrier:	64.0 feet		1	Voise So	ource E	evations	s (in fe	et)		
Centerline Dist. to Observer:	64.0 feet				Auto	s: 0.0	000			
Barrier Distance to Observer:	0.0 feet			Mediu	m Truck	s: 2.2	297			
Observer Height (Above Pad): Pad Elevation:	5.0 feet 0.0 feet			Heav	y Truck	s: 8.0	004	Grade Adj	ustment	0.0
Road Elevation:	0.0 feet		L	ane Eq	uivalen	Distanc	e (in t	eet)		
Road Grade:	0.0%				Auto		_			
Left View:	-90.0 degree	es		Mediu	m Truck	s: 57.	117			
Right View:	90.0 degree			Heav	y Truck	s: 57.	132			
FHWA Noise Model Calculation	15									
VehicleType REMEL	Traffic Flow	Dist	tance	Finite	Road	Fresn	el	Barrier Att	en Bei	m Atten
Autos: 66.51	0.26		-0.99	9	-1.20		-4.70	0.0	000	0.000
Medium Trucks: 77.72	-10.87		-0.97	7	-1.20		-4.88	0.0	000	0.000
Heavy Trucks: 82.99	-8.36		-0.97	7	-1.20		-5.31	0.0	000	0.000
Unmitigated Noise Levels (with		barrie								
VehicleType Leq Peak Ho			Leq Ev		Leq	Night		Ldn		NEL
		64.7		62.9		56.9		65.5	-	66.1
		65.2		58.8		57.3		65.7		66.0
,		73.0		64.0		65.3		73.6		73.7
		74.2		67.2		66.4		74.8	3	75.0
Vehicle Noise: 7: Centerline Distance to Noise C)	70.0	ID A	65	AD A	-	o de a	55	dDA
	ontour (in feet) Ldn:	70 a	IBA 134	65	dBA 288	6	0 dBA 621		dBA 1.338

Autos: 77.5% 12.9% 9.6% 82.34			WA-RD-77-108		III N	OIOL F						
Site Segment: slo Dawson Carryon Rd. Site Segment: slo Dawson Carryon Rd.										3		
SITE SPECIFIC INPUT DATA SITE SPECIFIC INPUT DATA Site Conditions (Hard = 10, Soft = 15)							Job N	lumber:	13627			
Average Daily Traffic (Adi): 27,736 vehicles Peak Hour Percentage: 6.31% Average Daily Traffic (Adi): 1,750 vehicles Peak Hour Volume: 1,750 vehicles Vehicle Speed: 40 mph Vehicle Mix	Road Segmer	nt: s/o Dawso	n Canyon Rd.									
Average Daily Traffic (Adt): 27,736 vehicles Peak Hour Percentage: 6.31% Medium Trucks (2 Axles): 15 Vehicle Speed: 40 mph Vehicle Speed: 40 mph Site Data Autos: 77.5% 12.9% 9.6% 82.34 Medium Trucks (34 Axles): 15 Vehicle Speed: 40 mph Vehicle Type Day Evening Night Dail Autos: 77.5% 12.9% 9.6% 82.34 Medium Trucks: 86.5% 2.7% 10.3% 62.34 Medium Trucks: 86.5% 2.7% 10.3% 62.34 Medium Trucks: 86.5% 2.7% 10.3% 62.34 Medium Trucks: 86.5% 2.7% 10.3% 11.3* Medium Trucks: 86.5% 2.7% 10.8% 11.3* Medium Trucks: 80.04 Grade Adjustment: 0.0 Get Autos: 60.00 Medium Trucks: 80.04 Grade Adjustment: 0.0 Get Autos: 57.271 Medium Trucks: 57.117 Medium Trucks: 57.117 Heavy Trucks: 57.132 Medium Trucks: 57.132 Medium Trucks: 57.132 Medium Trucks: 57.132 Medium Trucks: 57.132 Medium Trucks: 68.5% 0.99 1.20 -4.70 0.000 0.00 Medium Trucks: 77.72 -10.87 -0.97 -1.20 -4.88 0.000 0.00 Medium Trucks: 82.99 -8.36 -0.97 -1.20 -4.88 0.000 0.00 Medium Trucks: 82.99 -8.36 -0.97 -1.20 -4.88 0.000 0.00 Medium Trucks: 64.6 64.7 65.2 58.8 57.3 65.7 65.5 66 Medium Trucks: 64.7 65.2 58.8 57.3 65.7 65		SPECIFIC II	NPUT DATA								S	
Peak Hour Percentage: 6.31% Medium Trucks (2 Axles): 15	Highway Data				5	Site Cor	nditions	(Hard	= 10, Sc	oft = 15)		
Peak Hour Volume: 1,750 vehicles	Average Daily	Traffic (Adt):	27,736 vehicl	es					Autos:	15		
Vehicle Speed:	Peak Hour	Percentage:	6.31%			Me	dium Tr	ucks (2	Axles):	15		
Near/Far Lane Distance: 58 feet VehicleType Day Evening Night Dail	Peak H	our Volume:	1,750 vehicle	s		He	avy Tru	cks (3+	Axles):	15		
Near/Far Lane Distance: 58 feet VehicleType Day Evening Night Dail	Vei	hicle Speed:	40 mph		1	/ahicla	Miv					
Autos: 77.5% 12.9% 9.6% 82.34	Near/Far Lar	ne Distance:	58 feet		F.				Dav	Evenina	Night	Daily
Barrier Trype (0-Wall, 1-Berm): 0.0 Centerline Dist. to Observer: 64.0 feet	Site Data											
	Rai	rrier Height	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	6.35
Centerline Dist. to Observer: 64.0 feet Autos: 0.000							Heavy T	rucks:	86.5%	2.7%	10.8%	11.31
Autos: 0.000 Autos: 0.000 Barrier Distance to Observer: 0.0 feet Autos: 0.000 Medium Trucks: 2.297 Autos: 57.271 Medium Trucks: 57.117 Heavy Trucks: 6.51 0.26 0.99 -1.20 -4.70 0.000 0.	Centerline Dis	t. to Barrier:	64.0 feet			laisa S	ource F	lovatio	ne (in f	not)		
Barrier Distance to Observer: 0.0 feet Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0 feet Road Elevation: 0.0 feet Road Elevation: 0.0 feet Lane Equivalent Distance (in feet)	Centerline Dist.	to Observer:	64.0 feet		-	10/36 0			_ •			
Diserver Height (Above Pad):	Barrier Distance	to Observer:	0.0 feet			Modiu						
Pad Elevation:	Observer Height (Above Pad):	5.0 feet					· -		Grade Ad	iustment	- 0.0
Road Grade: 0.0%	Pa	ad Elevation:	0.0 feet			i ica	ry IIuck	s. c	.004	Ordao riaj	Juotimom	. 0.0
Left View:	Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distaı	nce (in	feet)		
Right View: 90.0 degrees Heavy Trucks: 57.132	F	Road Grade:	0.0%				Auto					
FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atte		Left View:	-90.0 degre	es		Mediu	m Truck	s: 57	.117			
VehicleType		Right View:	90.0 degre	es		Hea	vy Truck	s: 57	.132			
Autos: 66.51 0.26 -0.99 -1.20 -4.70 0.000 0.00 Medium Trucks: 77.72 -10.87 -0.97 -1.20 -4.88 0.000 0.00 0	FHWA Noise Mode	el Calculation	ıs									
Medium Trucks: 77.72	VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	inel	Barrier Att	en Bei	rm Atten
Heavy Trucks: 82.99 -8.36 -0.97 -1.20 -5.31 0.000 0.000					-0.99	9						0.00
Unmitigated Noise Levels (without Topo and barrier attenuation)												0.00
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 64.6 64.7 62.9 56.9 65.5 6 Medium Trucks: 64.7 65.2 58.8 57.3 65.7 6 Heavy Trucks: 72.5 73.0 64.0 65.3 73.6 7 Vehicle Noise: 73.7 74.2 67.2 66.4 74.8 7 Centerline Distance to Noise Contour (In feet) 70 dBA 65 dBA 60 dBA 55 dBA Ldn: 134 288 621 1,3	Heavy Trucks:	82.99	-8.36		-0.97	,	-1.20		-5.31	0.0	000	0.00
Autos: 64.6 64.7 62.9 56.9 65.5 6 Medium Trucks: 64.7 65.2 58.8 57.3 65.7 6 Heavy Trucks: 72.5 73.0 64.0 65.3 73.6 7 Vehicle Noise: 73.7 74.2 67.2 66.4 74.8 7 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA Ldn: 134 288 621 1,3											_	
Medium Trucks: 64.7 65.2 58.8 57.3 65.7 6 Heavy Trucks: 72.5 73.0 64.0 65.3 73.6 7 Vehicle Noise: 73.7 74.2 67.2 66.4 74.8 7 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA Ldn: 134 288 621 1,3					Leq Ev			_				
Heavy Trucks: 72.5 73.0 64.0 65.3 73.6 7. Vehicle Noise: 73.7 74.2 67.2 66.4 74.8 7 Centerline Distance to Noise Contour (In feet) Ldn: 134 288 621 1,3		-										66
Vehicle Noise: 73.7 74.2 67.2 66.4 74.8 7 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA Ldn: 134 288 621 1,3		-										66
Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA Ldn: 134 288 621 1,3									-		-	73
70 dBA 65 dBA 60 dBA 55 dBA Ldn: 134 288 621 1,3						67.2	!	66	.4	74.8	8	75
Ldn: 134 288 621 1,3	Centerline Distanc	ce to Noise C	ontour (in feet)	70 -	ID A	65	dDA		20 AB A		dD A
				l dn:	70 0		65					
CIVEL: 138 291 640 1,3			_						-			,
			C	IVEL:		138		29	1	640	,	1,37

Scenar	rio: EAPC (202	2) Without Ext.				Project	Name: D	CW3			
Road Nan	ne: Campbell F	Ranch Rd.				Job No	umber: 1	3627			
Road Segme	nt: s/o Temes	cal Canyon Rd.									
	SPECIFIC IN	IPUT DATA							L INPUT	8	
lighway Data					Site Con	ditions	(Hard = 1	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	11,863 vehicle	es				Α	utos:	15		
Peak Hour	Percentage:	6.31%			Med	dium Tru	icks (2 A)	(les):	15		
Peak F	Hour Volume:	749 vehicles	3		Hea	avy Truc	ks (3+ A)	(les):	15		
Ve	ehicle Speed:	45 mph		- 1	Vehicle N	Nix					
Near/Far La	ne Distance:	48 feet		F		cleType	1	Dav	Evening	Night	Daily
Site Data							lutos: 7	7.5%	12.9%	9.6%	81.819
Ba	rrier Heiaht:	0.0 feet			Me	edium Tr	ucks: 8	34.8%	4.9%	10.3%	6.52
Barrier Type (0-W		0.0			H	leavy Tr	ucks: 8	86.5%	2.7%	10.8%	11.67
Centerline Di	st. to Barrier:	59.0 feet		- 1	Noise So	urco El	ovatione	(in fe	not)		
Centerline Dist.	to Observer:	59.0 feet		ť	140/36 30	Autos		,	elj		
Barrier Distance	to Observer:	0.0 feet			Modium	n Trucks					
Observer Height	(Above Pad):	5.0 feet				y Trucks			Grade Adj	ustment	0.0
P	ad Elevation:	0.0 feet								actimom.	0.0
Ro	ad Elevation:	0.0 feet		Ľ	Lane Equ	uivalent	Distanc	e (in i	feet)		
	Road Grade:	0.0%				Autos					
	Left View:	-90.0 degree				n Trucks					
	Right View:	90.0 degree	es		Heav	y Trucks	53.9	82			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresne	e/	Barrier Atte	en Ber	m Atter
Autos:	00.10	-3.97		-0.6	2	-1.20	-	4.69	0.0	00	0.00
Medium Trucks:		-14.95		-0.6	0	-1.20	-	4.88	0.0	00	0.00
Heavy Trucks:	84.25	-12.43		-0.6	0	-1.20	-	5.35	0.0	00	0.00
Inmitigated Nois	e Levels (with	out Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hou			.eq E	vening	Leq i			Ldn		NEL
Autos:			62.8		61.0		55.0		63.6		64
			63.2		56.8		55.3		63.7		64
Medium Trucks:			70.6		61.6		62.8		71.2		71
Heavy Trucks:		.4	71.9		65.0		64.1		72.5	5	72
Heavy Trucks: Vehicle Noise:											
Heavy Trucks: Vehicle Noise:		ontour (in feet)	1	7.0	-/D.4		/D4	-	O -/D 4		-ID 4
Heavy Trucks: Vehicle Noise:		, ,		70 c		65 (BA 400	6	60 dBA	55	dBA
Heavy Trucks:		•	Ldn:	70 0	dBA 86 89	65 (186 192	έ	60 dBA 401 414	55	dBA 86 89

Monday, October 12, 2020

	FH	WA-RD-77-108	HIGH	-WAY	NOISE PE	REDICTI	ON MO	DDEL			
Road Na	nrio: EAPC (202 me: Dawson C ent: e/o Temes	anyon Rd.				Project Job N		DCW3			
	SPECIFIC II	NPUT DATA							L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, S	oft = 15)		
Average Daily	/ Traffic (Adt):	11,033 vehicl	es					Autos:	15		
Peak Hou	r Percentage:	6.31%				dium Tru					
Peak	Hour Volume:	696 vehicle	s		He	avy Truc	ks (3+	Axles):	15		
V	ehicle Speed:	40 mph			Vehicle	Mix					
Near/Far L	ane Distance:	12 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	-		84.48%
	arrier Height:	0.0 feet			M	edium Tı	ucks:	84.8%	4.9%	10.3%	5.57%
Barrier Type (0-1		0.0 1661			1	Heavy Tr	ucks:	86.5%	6 2.7%	10.8%	9.96%
	ist to Barrier:	37.0 feet									
Centerline Dist	to Observer:	37.0 feet			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		
1	Pad Elevation:	0.0 feet			Heav	y Truck	s: 6	3.004	Grade Ad	ustment	0.0
R	oad Elevation:	0.0 feet			Lane Eq	uivalent	Dista	nce (in	feet)		
	Road Grade:	0.0%				Auto	s: 36	3.851			
	Left View:	-90.0 degre	es		Mediu	m Trucks	s: 36	6.610			
	Right View:	90.0 degre	es		Heav	y Truck:	s: 36	6.634			
FHWA Noise Mo	del Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Di:	stance		Road	Fres		Barrier Att		m Atten
Autos				1.8	38	-1.20		-4.56		000	0.000
Medium Trucks				1.9		-1.20		-4.87		000	0.000
Heavy Trucks				1.9		-1.20		-5.61	0.0	000	0.000
Unmitigated Noi			_				A.C	-		-	
VehicleType Autos	Leq Peak Ho			Leq E	vening	,	Night		Ldn		NEL
			63.7		61.9		55		64.		65.1 64.3
Medium Trucks		3.0	71.4		57.1 62.3		55 63		64.0 71.5		
Heavy Trucks Vehicle Noise		2.1	72.6		65.8		64		71.5	-	72.1 73.4
Centerline Dista	nce to Noise C	ontour (in feet)								
				70	dBA	65	dBA		60 dBA	55	dBA
			Ldn:		61		13	1	282		607
	CNEL:				63		13	5	291		626

Monday, October 12, 2020

Fi	IWA-RD-77-10	8 HIGI	HWAY N	IOISE PI	REDICT	ON MO	DEL				
Scenario: EAC (202 Road Name: Temesca Road Segment: s/o I-15						Name: lumber:					
SITE SPECIFIC	INPUT DATA			011 0				L INPUT	S		
Highway Data			- 1	Site Cor	aitions	•					
Average Daily Traffic (Adt):	10,796 vehic	cles					Autos:	15			
Peak Hour Percentage:	6.31%				dium Tr			15			
Peak Hour Volume:	681 vehicl	es		He	avy Truc	cks (3+)	Axles):	15			
Vehicle Speed:	40 mph			Vehicle	Mix						
Near/Far Lane Distance:	12 feet			Veh	icleType	,	Day	Evening	Night	Daily	
Site Data						Autos:	77.5%	12.9%	9.6%	81.35%	
Barrier Height:	0.0 feet			Medium Trucks: 84.8% 4.9% 10.3% 6.						6.69%	
Barrier Type (0-Wall, 1-Berm):	0.0			1	Heavy T	rucks:	86.5%	2.7%	10.8%	11.96%	
Centerline Dist. to Barrier:	37.0 feet			Noise S	ource E	levation	s (in fe	eet)			
Centerline Dist. to Observer:	37.0 feet				Auto	s: 0.	000				
Barrier Distance to Observer:	0.0 feet			Medium Trucks: 2.297							
Observer Height (Above Pad):	5.0 feet			Heavy Trucks: 8.004 Grade Adjustment: 0.0							
Pad Elevation:	0.0 feet		L								
Road Elevation:	0.0 feet		<u> </u>	Lane Eq				'eet)			
Road Grade:	0.070				Auto		851				
Left View:	-90.0 degr	ees			m Truck		610				
Right View:	90.0 degr	ees		Heav	y Truck	s: 36.	634				
FHWA Noise Model Calculation	ns										
VehicleType REMEL	Traffic Flow	Di	stance	Finite	Road	Fresi	nel	Barrier Att	en Ber	m Atten	
Autos: 66.5	1 -3.8	9	1.8	-	-1.20		-4.56	0.0	000	0.000	
Medium Trucks: 77.7	2 -14.7	4	1.9	3	-1.20		-4.87	0.0	000	0.000	
Heavy Trucks: 82.9			1.9		-1.20		-5.61	0.0	000	0.000	
Unmitigated Noise Levels (with							_		T		
VehicleType Leq Peak H			Leq E			Night		Ldn		NEL	
	33.3	63.4		61.6		55.	-	64.2	_	64.8	
	33.7	64.2		57.8		56.	-	64.7		65.0	
	71.5	72.1		63.0		64.3	_	72.0		72.8	
1011010110100	72.7	73.2		66.1		65.4	4	73.8	3	74.0	
Centerline Distance to Noise	Contour (in fee	et)	70 /	dBA	65	dBA	-	i0 dBA	55	dBA	
		Ldn:	700	66	00	143		308		664	
	CNEL:					68 147 317 68					

	FHV	VA-RD-77-108	HIGH	I YAWI	NOISE P	REDICT	ION MC	DDEL				
Scenari	io: EAC (2022) With Ext.				Project	Name:	DCW3	3			
Road Nam	e: Temescal (Canyon Rd.				Job N	lumber:	13627				
Road Segme	nt: s/o Trilogy	Pkwy.										
SITE Highway Data	SPECIFIC IN	PUT DATA			Site Coi				L INPUT	S		
• •					Site Coi	luitions	(naru	_				
Average Daily	. ,	18,528 vehicl	es					Autos:				
	Percentage:	6.31%				edium Tri		,				
	lour Volume:	1,169 vehicle	s		He	eavy Truc	cks (3+	Axles):	15			
	hicle Speed:	40 mph			Vehicle	Mix						
Near/Far Lai	ne Distance:	48 feet			Veh	icleType		Day	Evening	Nigh	t E	Daily
Site Data						,	Autos:	77.5%	12.9%	9.6	% 81	1.35%
Bai	rrier Height:	0.0 feet			M	ledium T	rucks:	84.8%	4.9%	10.3	% 6	6.699
Barrier Type (0-W	-	0.0				Heavy T	rucks:	86.5%	6 2.7%	10.8	% 11	1.969
Centerline Dis	st. to Barrier:	59.0 feet		ł	Noise S	ourco E	lovatio	ne (in f	inot)			
Centerline Dist.	to Observer:	59.0 feet		ł	Noise 3	Auto		.000	eeij			
Barrier Distance	to Observer:	0.0 feet			Modis	m Truck		.297				
Observer Height (Above Pad):	5.0 feet				vy Truck		.004	Grade Ad	iuetma	nt 0	n
Pa	ad Elevation:	0.0 feet			пеа	vy muck	s. c	.004	Orace Au	Justino	11L. U.	.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distai	nce (in	feet)			
I	Road Grade:	0.0%				Auto	s: 54	.129				
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 53	.966				
	Right View:	90.0 degre	es		Hea	vy Truck	s: 53	.982				
FHWA Noise Mod												
VehicleType	REMEL	Traffic Flow		stance		Road	Fres		Barrier Att		Berm A	
Autos:	66.51	-1.54		-0.6		-1.20		-4.69		000		0.00
Medium Trucks:	77.72	-12.40		-0.6		-1.20		-4.88		000		0.00
Heavy Trucks:	82.99	-9.87		-0.6	60	-1.20		-5.35	0.0	000		0.00
Unmitigated Noise												
VehicleType	Leq Peak Hou			Leq E	vening		Night		Ldn		CNEL	
Autos:	63		63.2		61.5		55		64.	-		64.
Medium Trucks:	63		64.0		57.6		56		64.	-		64.
Heavy Trucks:	71		71.9		62.9		64		72.	-		72.
Vehicle Noise:	72		73.0		65.9)	65	.2	73.	6		73.
Centerline Distant	ce to Noise Co	ontour (in fee	t)	70	dBA	65	dBA		60 dBA	_	55 dB	4
			Ldn:	70	103	05	ава 22:		ви ава 478			A 1.030
		_	NEL:		103		22	_	478			1,030
		C	IVEL:		106		22	5	493	,		1,00

	- FH	WA-RD-77-108	HIGHV	VAY NC	ЛОЕ РК	KEDICII	ON MC	IDEL			
	o: EAC (2022 e: Temescal t: s/o Dos La	Canyon Rd.				Project Job Ni		DCW3 13627			
SITE S	SPECIFIC II	NPUT DATA				N	OISE	MODE	L INPUT	s	
Highway Data				Si	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily T	raffic (Adt):	17,710 vehicl	es					Autos:	15		
Peak Hour F	Percentage:	6.31%			Me	dium Tru	cks (2	Axles):	15		
Peak Ho	our Volume:	1,118 vehicle	:S		He	avy Truc	ks (3+	Axles):	15		
Veh	icle Speed:	45 mph		V	ehicle l	Miv					
Near/Far Lan	e Distance:	58 feet				icleType		Dav	Evening	Night	Dailv
Site Data							utos:	77.5%		9.6%	81.359
Ran	rier Heiaht:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	6.699
Barrier Type (0-Wa		0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	11.969
Centerline Dist	t. to Barrier:	64.0 feet		N	oise Sc	ource El	evatio	ns (in fe	eet)		
Centerline Dist. to	o Observer:	64.0 feet				Autos		.000	,		
Barrier Distance to	o Observer:	0.0 feet			Mediur	n Trucks		297			
Observer Height (A	,	5.0 feet				y Trucks	-	.004	Grade Adj	iustment.	0.0
	d Elevation:	0.0 feet			F		Di-4	//	F4)		
	d Elevation:	0.0 feet		Li	ane Eq	uivalent			reet)		
h	Road Grade:	0.0%			A de ellere	Autos n Trucks		.271			
	Left View:	-90.0 degre				n Trucks vy Trucks		.117			
	Right View:	90.0 degre	es		ricav	y ITUCKS	i. 31	. 102			
FHWA Noise Mode		-									
VehicleType	REMEL	Traffic Flow	Dista		Finite		Fres		Barrier Att		m Atten
Autos:	68.46			-0.99		-1.20		-4.70		000	0.00
Medium Trucks:	79.45			-0.97		-1.20		-4.88		000	0.00
Heavy Trucks:	84.25			-0.97		-1.20		-5.31	0.0	000	0.00
VehicleType	Levels (with Leg Peak Ho			attenu Leg Eve		Legi	Minht	1	Ldn		NEL
Autos:		1.0	64.1	Ley Eve	62.4	Leq	vigrit 56.	2	64.9		65.
Medium Trucks:	-	1.2	64.7		58.3		56		65.3		65
Heavy Trucks:	-	1.5	72.1		63.0		64	-	72.7	-	72.
Vehicle Noise:		2.9	73.4		66.4		65.	-	74.0		74.
Centerline Distanc	e to Noise C	ontour (in fee)								
				70 dE	ВА	65 (BA.	6	60 dBA	55	dBA
			Ldn:		117		25	3	545		1.174
			Luii.		117		20		0.0		.,

Monday, October 12, 2020

	FHV	VA-RD-77-108	HIGH	I YAWI	NOISE PE	REDICT	ION M	ODEL			
Scenar	io: EAC (2022)) With Ext.				Project	Name.	DCW	3		
Road Nam	e: Temescal (Canyon Rd.				Job N	lumber.	13627	,		
Road Segmen	nt: s/o Dos Laç	gos Rd.									
	SPECIFIC IN	PUT DATA			0				L INPUT	s	
Highway Data					Site Con	aitions	(Hard				
Average Daily		17,710 vehicle	es					Autos			
	Percentage:	6.31%				dium Tr					
	lour Volume:	1,118 vehicles	3		He	avy Tru	cks (3+	Axles).	: 15		
	hicle Speed:	45 mph		-	Vehicle	Mix					
Near/Far La	ne Distance:	58 feet		F	Veh	icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.59	6 12.9%	9.6%	81.35%
Rai	rrier Height:	0.0 feet			М	edium T	rucks:	84.89	6 4.9%	10.3%	6.69%
Barrier Type (0-W		0.0			I	Heavy T	rucks:	86.5%	6 2.7%	10.8%	11.96%
Centerline Dis		64.0 feet		ľ	Noise S	ource E	levatio	ns (in t	eet)		
Centerline Dist.		64.0 feet		ľ		Auto		0.000	,		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck		2.297			
Observer Height (5.0 feet			Heav	v Truck	s: 8	3.004	Grade Adj	ustment	t: 0.0
	ad Elevation:	0.0 feet		ļ		,					
	ad Elevation:	0.0 feet			Lane Eq				feet)		
	Road Grade:	0.0%				Auto		7.271			
	Left View:	-90.0 degree				m Truck		7.117			
	Right View:	90.0 degree	es		Heav	y Truck	s: 57	7.132			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance		Road	Fre		Barrier Att		rm Atten
Autos:	68.46	-2.25		-0.9		-1.20		-4.70		000	0.000
Medium Trucks:	79.45	-13.10		-0.9		-1.20		-4.88		000	0.000
Heavy Trucks:	84.25	-10.58		-0.9		-1.20		-5.31	0.0	000	0.000
Unmitigated Nois							A 17 In 4		1 -1-		A / E /
VehicleType Autos:	Leq Peak Hou		64.1	Leq E	vening 62.4	Leq	Night 56		Ldn 64.9		NEL
										-	65.5
Medium Trucks:	64 71	'	64.7 72.1		58.3 63.0		56 64		65.2 72.7	-	65.5
Heavy Trucks: Vehicle Noise:	71		73.4		66.4		65		72.7		72.8 74.2
					66.4		65	1.6	74.0)	74.2
Centerline Distan	ce to Noise Co	ontour (in feet)	1	70	dBA	65	dBA		60 dBA	55	i dBA
			Ldn:	- 70	117		25		545		1.174
		-	VEL:		121		26		562		1,211
		0,							302		.,

Monday, October 12, 2020

	FHV	VA-RD-77-108	HIGH	WAY N	DISE PI	REDICT	ION MO	DEL			
	EAC (2022 E: Temescal (E: s/o Dawsor	Canyon Rd.					Name: lumber:				
	PECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	ite Cor	ditions	(Hard =	10, Sc	ft = 15)		
Average Daily T	. ,	26,383 vehicle	es					Autos:	15		
Peak Hour P	-	6.31%					ucks (2 A	/	15		
	ur Volume:	1,665 vehicles	3		He	avy Truc	cks (3+ A	(xles	15		
	icle Speed:	40 mph		ν	ehicle	Mix					
Near/Far Lane	e Distance:	58 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.69	6 81.35%
Barr	ier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.39	6.69%
Barrier Type (0-Wa	-	0.0			- 1	Heavy T	rucks:	86.5%	2.7%	10.89	6 11.96%
Centerline Dist	to Barrier:	64.0 feet		۸	loise S	ource E	levation	s (in fe	et)		
Centerline Dist. to	Observer:	64.0 feet				Auto		000			
Barrier Distance to	Observer:	0.0 feet			Mediu	m Truck		297			
Observer Height (A		5.0 feet			Heavy Trucks: 8.004 Grade Adjustment: 0.0						
	d Elevation:	0.0 feet		_		-					
	d Elevation:	0.0 feet		L	ane Eq		t Distan		eet)		
R	oad Grade:	0.0%				Auto					
	Left View:	-90.0 degree				m Truck					
	Right View:	90.0 degree	es		неач	y Truck	S: 57.	132			
FHWA Noise Model				•							
VehicleType	REMEL	Traffic Flow	Dis	tance		Road	Fresr		Barrier Att	_	erm Atten
Autos:	66.51	-0.01		-0.99		-1.20		-4.70	0.0		0.000
Medium Trucks:	77.72	-10.86		-0.97		-1.20		-4.88	0.0		0.000
Heavy Trucks:	82.99	-8.33		-0.97		-1.20		-5.31	0.0	000	0.000
Unmitigated Noise											
	Leq Peak Hou			Leq Ev			Night		Ldn		CNEL
Autos:	64		64.4		62.6		56.6		65.2		65.8
Medium Trucks:	64		65.2		58.8		57.3		65.7		66.0
Heavy Trucks:	72		73.1		64.0		65.3		73.6		73.8
Vehicle Noise:	73	**	74.2		67.1		66.4	1	74.8	3	75.0
Centerline Distance	e to Noise Co	ontour (in feet)		70 d	D A	65	dBA		0 dBA	-	5 dBA
			Ldn:	7 U a	134	00	ава 288		0 dBA 620) 5	1.336
			IEL:		138		200		639		1,336
		O1			100		201		000		.,011

	FHV	VA-RD-77-108	HIGH	IWAY I	NOISE P	REDICTI	ON MC	DEL			
	io: EAC (2022					Project			3		
	e: Temescal (Job N	umber:	13627			
Road Segmer	nt: s/o Dawsor	n Canyon Rd.									
	SPECIFIC IN	PUT DATA							L INPUT	S	
Highway Data					Site Cor	nditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	26,383 vehicl	es					Autos:			
Peak Hour	Percentage:	6.31%				edium Tru		,			
Peak H	our Volume:	1,665 vehicle	s		He	eavy Truc	cks (3+	Axles):	15		
Vei	hicle Speed:	40 mph			Vehicle	Mix					
Near/Far Lar	ne Distance:	58 feet			Veh	icleType		Day	Evening	Nigh	t Daily
Site Data						,	Autos:	77.5%	12.9%	9.6	% 81.35
Bai	rrier Height:	0.0 feet			M	ledium Ti	rucks:	84.8%	4.9%	10.3	% 6.69
Barrier Type (0-W	-	0.0				Heavy Ti	rucks:	86.5%	2.7%	10.8	% 11.96
Centerline Dis	st. to Barrier:	64.0 feet			Noice S	ource El	ovatio	ne (in f	not)		
Centerline Dist.	to Observer:	64.0 feet			Noise 3	Auto.		.000	eei)		
Barrier Distance	to Observer:	0.0 feet			Modiu	m Truck:		.000			
Observer Height (Above Pad):	5.0 feet				vy Truck		004	Grade Ad	iustme	nt: 0.0
Pa	ad Elevation:	0.0 feet				•				,	
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen			feet)		
F	Road Grade:	0.0%				Auto		.271			
	Left View:	-90.0 degre				m Truck		.117			
	Right View:	90.0 degre	es		Hea	vy Truck	s: 57	.132			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow		stance		Road	Fres		Barrier Att		Berm Attei
Autos:	66.51	-0.01		-0.9		-1.20		-4.70		000	0.0
Medium Trucks:	77.72	-10.86		-0.9		-1.20		-4.88		000	0.0
Heavy Trucks:	82.99	-8.33		-0.9	97	-1.20		-5.31	0.0	000	0.0
Unmitigated Noise			barri	er atte	nuation)						
VehicleType	Leq Peak Hou			Leq E	vening		Night		Ldn		CNEL
Autos:	64		64.4		62.6		56.	-	65.	_	65
Medium Trucks:	64		65.2		58.8		57.	-	65.		66
Heavy Trucks:	72		73.1		64.0		65.	-	73.	-	73
Vehicle Noise:	73	.7	74.2		67.1		66.	4	74.	8	75
Centerline Distance	ce to Noise Co	ontour (in fee	t)								
			1 -1	70	dBA	65	dBA		60 dBA		55 dBA
			Ldn:		134		28	-	620		1,33
		C	NEL:		138		29	r	639	,	1,37

	io: EAC (2022)) With Ext.			Project I	Vame: [CW3			
	e: Campbell F					mber: 1				
	nt: s/o Temeso									
SITE	SPECIFIC IN	PUT DATA			N	OISE M	ODE	L INPUT	S	
Highway Data				Site Con	ditions (Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	11,569 vehicles				A	lutos:	15		
Peak Hour	Percentage:	6.31%		Me	dium Tru	cks (2 A	xles):	15		
Peak H	lour Volume:	730 vehicles		He	avy Truci	ks (3+ A	xles):	15		
Ve	hicle Speed:	45 mph		Vehicle i	Mix					
Near/Far La	ne Distance:	48 feet			icleType		Dav	Evening	Night	Daily
Site Data						utos:	77.5%	-	9.6%	,
Ra	rrier Height:	0.0 feet		Me	edium Tru	icks:	34.8%	4.9%	10.3%	6.69%
Barrier Type (0-W		0.0		F	Heavy Tru	icks:	36.5%	2.7%	10.8%	11.96%
Centerline Dis	. ,	59.0 feet		M-1 0	F1-		/! E	41		
Centerline Dist.	to Observer:	59.0 feet		Noise So	Autos		•	eet)		
Barrier Distance	to Observer:	0.0 feet		A decellor	Autos n Trucks					
Observer Height (Above Pad):	5.0 feet			т тиска v Trucks			Grade Adj	uctment	
P	ad Elevation:	0.0 feet		пеач	y Trucks	. 0.0	04	Grade Auj	ustinent	0.0
Roa	ad Elevation:	0.0 feet		Lane Eq	uivalent	Distanc	e (in	feet)		
	Road Grade:	0.0%			Autos	: 54.1	29			
	Left View:	-90.0 degrees			n Trucks					
	Right View:	90.0 degrees		Heav	y Trucks	53.9	182			
FHWA Noise Mod	el Calculation	s								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresne	e/	Barrier Atte	en Ber	m Atten
Autos:	68.46	-4.10	-0	.62	-1.20		4.69	0.0	00	0.00
	79.45	-14.95	-0	.60	-1.20	-	4.88	0.0	00	0.00
Medium Trucks:	15.40						5.35	0.0	00	0.00
Heavy Trucks:	70.10	-12.43	-0	.60	-1.20		-0.30	0.0		
Heavy Trucks: Unmitigated Nois	84.25 e Levels (with	out Topo and ba	arrier atte	enuation)			-0.30			
Heavy Trucks: Unmitigated Nois VehicleType	84.25 e Levels (with	out Topo and ba	arrier atte	enuation) Evening	-1.20 Leg N	light	-5.35	Ldn		NEL
Heavy Trucks: Unmitigated Nois VehicleType Autos:	84.25 e Levels (with Leq Peak Hou	out Topo and bar Leq Day .5 62	Leq	enuation) Evening 60.9		light 54.8		Ldn 63.4		64.
Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks:	84.25 e Levels (with Leq Peak Hou 62	out Topo and bar Leq Day .5 62 .7 63	Leq 2.6 3.2	enuation) Evening 60.9 56.8		light 54.8 55.3		Ldn 63.4 63.7		64. 64.
Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks:	84.25 e Levels (with Leq Peak Hou 62 62 70	out Topo and bar Leq Day .5 62 .7 63	Leq 2.6 3.2	Evening 60.9 56.8 61.6		54.8 55.3 62.8		Edn 63.4 63.7 71.2		64. 64. 71.
Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	84.25 e Levels (with Leq Peak Hou 62 62 70 71	out Topo and bar Leq Day .5 62 .7 63 .0 70 .4 71	Leq 2.6 3.2	enuation) Evening 60.9 56.8		light 54.8 55.3		Ldn 63.4 63.7		64. 64. 71.
Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	84.25 e Levels (with Leq Peak Hou 62 62 70 71	out Topo and bar Leq Day .5 62 .7 63 .0 70 .4 71	Leq 2.6 3.2 0.6	Evening 60.9 56.8 61.6 65.0	Leq N	54.8 55.3 62.8 64.1		Edn 63.4 63.7 71.2 72.5	!	64. 64. 71. 72.
Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks:	84.25 e Levels (with Leq Peak Hou 62 62 70 71	out Topo and bi r Leq Day .5 62 .7 63 .0 70 .4 71 ontour (in feet)	Leq 2.6 3.2 0.6	Evening 60.9 56.8 61.6		54.8 55.3 62.8 64.1		Edn 63.4 63.7 71.2	!	NEL 64. 64. 71. 72. dBA

Monday, October 12, 2020

	FHV	VA-RD-77-108	HIGH	-WAY	NOISE PF	REDICTI	ON MO	DDEL					
Road Nar	rio: EAC (2022 me: Dawson Ca ent: e/o Temes	anyon Rd.				Project Job N		DCW3					
	SPECIFIC IN	IPUT DATA							L INPUT	S			
Highway Data					Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	9,184 vehicle	es					Autos:	15				
Peak Hou	Percentage:	6.31%			Me	dium Tru	icks (2	Axles):	15				
Peak I	Hour Volume:	580 vehicles	3		He	avy Truc	ks (3+	Axles):	15				
Ve	ehicle Speed:	40 mph			Vehicle I	Miv							
Near/Far La	ane Distance:	12 feet				icleType		Day	Evening	Night	Daily		
Site Data							lutos:	77.5%	-		81.35%		
	rrier Heiaht:	0.0 feet			Me	edium Tı		84.8%		10.3%			
Barrier Type (0-V		0.0 reet 0.0			F	Heavy Tr	ucks:	86.5%	2.7%	10.8%	11.96%		
	ist to Barrier:	37.0 feet											
Centerline Dist		37.0 feet			Noise So	ource El	evatio	ns (in f	eet)				
Barrier Distance		0.0 feet				Auto		0.000					
Observer Height		5.0 feet			Mediui	m Trucks	s: 2	2.297					
	Pad Flevation:	0.0 feet			Heav	y Truck	s: 8	3.004	Grade Ad	iustment	: 0.0		
	ad Elevation:	0.0 feet			Lane Eq	uivalent	Dista	nce (in	feet)				
710	Road Grade:	0.0%				Auto		3.851	,				
	Left View:	-90.0 degree	20		Mediui	m Trucks	36	3.610					
	Right View:	90.0 degree			Heav	y Truck	s: 36	6.634					
FHWA Noise Mod	del Calculation	s											
VehicleType	REMEL	Traffic Flow	Dis	stance		Road	Fres		Barrier Att		rm Atten		
Autos		-4.59		1.8	88	-1.20		-4.56		000	0.000		
Medium Trucks				1.9		-1.20		-4.87		000	0.000		
Heavy Trucks	82.99	-12.92		1.9	92	-1.20		-5.61	0.0	000	0.000		
Unmitigated Nois	, ,		_										
VehicleType	Leq Peak Hou			Leq E	vening	,	Night		Ldn		NEL		
Autos	-		62.7		60.9		54		63.		64.1		
Medium Trucks			63.5		57.1		55		64.0		64.3		
Heavy Trucks.			71.4		62.3 65.4		63 64		71.9 73.	-	72.1 73.3		
Centerline Distan										-	70.0		
Centernine Distar	re to Noise Co	mour (iii reet)		70	dBA	65	dBA		60 dBA	55	dBA		
			Ldn:		60		12	8	277	. '	596		
		CI	VEL:		61		13	2	285		614		

Monday, October 12, 2020

	FHW	A-RD-77-108	HIGH	WAY N	IOISE PI	REDICT	ION MC	DEL				
	nio: EAPC (2022 ne: Temescal C nt: s/o I-15						Name: lumber:					
	SPECIFIC IN	PUT DATA							L INPUT	S		
Highway Data					Site Cor	iditions	(Hard =					
Average Daily	, ,	11,089 vehicle	es					Autos:				
	Percentage:	6.31%				dium Tr						
	lour Volume:	700 vehicle	S		He	avy Tru	cks (3+	Axles):	15			
	hicle Speed:	40 mph			Vehicle	Mix						
Near/Far La	ne Distance:	12 feet			Veh	icleType	•	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%	12.9%	9.6%	81.85%	
Ro	rrier Height:	0.0 feet			Medium Trucks: 84.8% 4.9% 10.3% 6.							
Barrier Type (0-W	/all, 1-Berm):	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	11.64%	
Centerline Di		37.0 feet			Noise S	ource E	levatior	ns (in f	eet)			
Centerline Dist.		37.0 feet				Auto	s: 0	.000				
Barrier Distance		0.0 feet			Medium Trucks: 2.297							
Observer Height (5.0 feet			Heavy Trucks: 8.004 Grade Adjustment: 0.0							
	ad Elevation:	0.0 feet		-	F.		4 D :- 4	//	f4)			
	ad Elevation:	0.0 feet		-	Lane Eq				reet)			
	Road Grade:	0.0%				Auto		.851				
	Left View:	-90.0 degree				m Truck		.610				
	Right View:	90.0 degree	es		Hea	y Truck	s: 36	.634				
FHWA Noise Mod												
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Bei	m Atten	
Autos:	00.01	-3.75		1.8	-	-1.20		-4.56		000	0.000	
Medium Trucks:		-14.74		1.9	-	-1.20		-4.87		000	0.000	
Heavy Trucks:		-12.22		1.9		-1.20		-5.61	0.0	000	0.000	
Unmitigated Nois								_				
VehicleType	Leq Peak Hour			Leq E	vening	,	Night		Ldn		NEL	
Autos:			63.6		61.8		55.		64.4		65.0	
Medium Trucks:			64.2		57.8		56.	-	64.7		65.0	
Heavy Trucks: Vehicle Noise:			72.1 73.2		63.0		64. 65.	-	72.6 73.8	-	72.8 74.0	
Centerline Distan	ce to Noise Co	ntour (in feet)									
Contonnie Distan	00 10 110136 001	nour (mreet)		70	dBA	65	dBA	(60 dBA	55	dBA	
			Ldn:		67		143	3	309	ı .	665	
			69		148	В	318		686			

	FHV	VA-RD-77-10	HIGH	WAY I	NOISE PI	REDICTION	ом ис	DEL			
Scenario	: EAPC (202	2) With Ext.				Project	Name:	DCW3	3		
Road Name	e: Temescal (Canyon Rd.				Job Nu	ımber:	13627			
Road Segmen	t: s/o Trilogy	Pkwy.									
SITE S Highway Data	SPECIFIC IN	IPUT DATA			Sito Cor	N nditions (L INPUT	s	
					Site Cor	iuitions (
Average Daily T	. ,	18,675 vehic	les					Autos:			
Peak Hour F	-	6.31%				dium Tru		,			
	our Volume:	1,178 vehicle	es		He	avy Truc	ks (3+)	Axles):	15		
	icle Speed:	40 mph		ı	Vehicle	Mix					
Near/Far Lan	e Distance:	48 feet		ı	Veh	icleType		Day	Evening	Night	Daily
Site Data						Α	utos:	77.5%	12.9%	9.6%	81.509
Barı	rier Height:	0.0 feet			М	edium Tri	ucks:	84.8%	4.9%	10.3%	6.639
Barrier Type (0-Wa	-	0.0			- 1	Heavy Tr	ucks:	86.5%	2.7%	10.8%	11.879
Centerline Dist	t. to Barrier:	59.0 feet			Maina C	ource Ele	n rotio n	a (in f	n a f l		
Centerline Dist. to	Observer:	59.0 feet			Noise 3	Autos		000	eel)		
Barrier Distance to	o Observer:	0.0 feet				Autos m Trucks		297			
Observer Height (A	Above Pad):	5.0 feet				n Trucks vy Trucks		004	Grade Ad	iuetman	t 0.0
Pa	d Elevation:	0.0 feet			пеан	ry Trucks	. 0.	004	Orauc Au	astmen	i. 0.0
Roa	d Elevation:	0.0 feet			Lane Eq	uivalent	Distan	ce (in	feet)		
R	Road Grade:	0.0%				Autos	: 54.	129			
	Left View:	-90.0 degre	ees		Mediu	m Trucks	: 53.	966			
	Right View:	90.0 degre	ees		Heav	y Trucks	: 53.	982			
FHWA Noise Mode	l Calculation	-		'							
VehicleType	REMEL	Traffic Flow		stance		Road	Fresi		Barrier Att		rm Atten
Autos:	66.51	-1.50	-	-0.6		-1.20		-4.69		000	0.00
Medium Trucks:	77.72		-	-0.6		-1.20		-4.88		000	0.00
Heavy Trucks:	82.99	-9.87	7	-0.6	30	-1.20		-5.35	0.0	000	0.00
Unmitigated Noise					,						
	Leq Peak Hou		,	Leq E	vening	Leq I	_		Ldn		NEL
Autos:	63		63.3		61.5		55.		64.		64
Medium Trucks:	63		64.0		57.6		56.		64.	-	64
Heavy Trucks:	71		71.9		62.9		64.		72.	-	72
Vehicle Noise:	72		73.0		66.0		65.:	2	73.	o .	73
Centerline Distanc	e to Noise Co	ontour (in fee	t)	70	dBA	65 0	IRA	1	60 dBA	51	5 dBA
			Ldn:		103	000	222		478		1.030

		WA-RD-77-108									
	EAPC (202					Project					
	: Temescal					Job N	umber:	13627			
Road Segment	: s/o Dos La	gos Ra.									
	PECIFIC IN	IPUT DATA							L INPUT	S	
Highway Data				S	ite Cor	nditions	(Hard :	= 10, S	oft = 15)		
Average Daily T	raffic (Adt):	18,464 vehicl	es					Autos:	15		
Peak Hour F	Percentage:	6.31%				dium Tru					
	ur Volume:	1,165 vehicle	es		He	avy Truc	ks (3+	Axles):	15		
	icle Speed:	45 mph		ν	/ehicle	Mix					
Near/Far Lan	e Distance:	58 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	82.009
Rari	ier Height:	0.0 feet			М	edium Tı	ucks:	84.8%	4.9%	10.3%	6.489
Barrier Type (0-Wa	-	0.0				Heavy Ti	ucks:	86.5%	2.7%	10.8%	11.519
Centerline Dist	to Barrier:	64.0 feet		^	loise S	ource El	evatio	ns (in f	eet)		
Centerline Dist. to	Observer:	64.0 feet		F.	.0.00	Auto		.000	,,,,		
Barrier Distance to	Observer:	0.0 feet			Mediu	m Truck:		297			
Observer Height (A	,	5.0 feet			Heav	v Truck	s: 8	.004	Grade Ad	ustment.	0.0
	d Elevation:	0.0 feet		_							
	d Elevation:	0.0 feet		L	.ane Eq	uivalent			reet)		
R	load Grade:	0.0%				Auto		.271			
	Left View:	-90.0 degre				m Trucks		'.117 '.132			
	Right View:	90.0 degre	es		неач	y Truck:	5. 57	.132			
FHWA Noise Mode	l Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	inel	Barrier Att	en Ber	m Atten
Autos:	68.46			-0.99		-1.20		-4.70		000	0.00
Medium Trucks:	79.45			-0.97		-1.20		-4.88		000	0.00
Heavy Trucks:	84.25			-0.97		-1.20		-5.31	0.0	000	0.00
Unmitigated Noise											
	Leq Peak Hou			Leq Ev			Night		Ldn		NEL
Autos:	-	1.2	64.3		62.6		56.		65.	•	65.
Medium Trucks:	-	1.2	64.7		58.4		56.		65.3	-	65.
Heavy Trucks:		1.5	72.1		63.1		64.		72.7		72.
Vehicle Noise:		2.9	73.4		66.5		65.	.υ	74.0	J	74.
Centerline Distance	e to Noise C	ontour (in fee	t)	70 d	DΛ	65	dBA	1 .	SO dBA	FE	dBA
			Ldn:	70 0	118	00	25	5	549		1.182

Monday, October 12, 2020

	FHV	/A-RD-77-108 H	HIGHWAY	NOISE PI	REDICTION	ON MO	ODEL			
Road Nar	rio: EAPC (202 ne: Temescal (ent: s/o Dos Laç	Canyon Rd.			Project I Job Nu		DCW3			
SITE	SPECIFIC IN	PUT DATA						L INPUT	s	
Highway Data				Site Cor	nditions (Hard	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	18,464 vehicles	S				Autos:	15		
Peak Hou	r Percentage:	6.31%		Me	dium Tru	cks (2	Axles):	15		
Peak I	Hour Volume:	1,165 vehicles		He	avy Truci	ks (3+	Axles):	15		
V	ehicle Speed:	45 mph		Vehicle	Mix					
Near/Far La	ane Distance:	58 feet			icleType		Day	Evening	Night	Daily
Site Data						utos:	77.5%	-		82.00%
	arrier Height:	0.0 feet		М	edium Tri	ıcks:	84.8%	4.9%	10.3%	
Barrier Type (0-V		0.0 feet			Heavy Tru	icks:	86.5%	2.7%	10.8%	11.51%
	ist to Barrier:	64.0 feet								
Centerline Dist		64.0 feet		Noise S	ource Ele			eet)		
Barrier Distance		0.0 feet			Autos		0.000			
Observer Height		5.0 feet			m Trucks		2.297			
	Pad Flevation:	0.0 feet		Heav	y Trucks	: 8	3.004	Grade Adj	ustment	. 0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent	Dista	nce (in	feet)		
	Road Grade:	0.0%			Autos	: 57	7.271	-		
	Left View:	-90.0 degrees	S	Mediu	m Trucks	: 57	7.117			
	Right View:	90.0 degrees	S	Heav	y Trucks	: 57	7.132			
FHWA Noise Mod	del Calculation	s								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fre	snel	Barrier Att	en Be	rm Atten
Autos	: 68.46	-2.04	-0	.99	-1.20		-4.70	0.0	000	0.000
Medium Trucks	79.45	-13.06	-0	.97	-1.20		-4.88	0.0	000	0.000
Heavy Trucks		-10.56		.97	-1.20		-5.31	0.0	000	0.000
Unmitigated Nois										
VehicleType	Leq Peak Hou			Evening	Leq I	-		Ldn		NEL
Autos			4.3	62.6		56		65.	•	65.7
Medium Trucks			4.7	58.4		56		65.3	-	65.5
Heavy Trucks			2.1	63.1		64		72.7		72.8
Vehicle Noise			3.4	66.5		65	.b	74.0	J	74.2
Centerline Distar	ice to Noise Co	ntour (in feet)	7	0 dBA	65.0	IRΔ		60 dBA	55	dBA
		,	dn:	118	550	25		549		1.182
		CN		122		26	-	566		1,102
		CIV		122		20		300		1,220

Monday, October 12, 2020

	FHW	A-RD-77-108	HIGH	IWAY N	OISE PI	REDICT	ION MC	DEL			
Road Na	nrio: EAPC (2022 me: Temescal C ent: s/o Dawson	anyon Rd.					Name: lumber:				
SITE Highway Data	SPECIFIC IN	PUT DATA			04- 0				L INPUT oft = 15)	s	
Average Daily Peak Hou Peak	r Percentage: Hour Volume:	27,958 vehicle 6.31% 1,764 vehicles			Ме	dium Tri avy Truc	ucks (2	Autos: Axles):	15 15		
	ehicle Speed: ane Distance:	40 mph 58 feet		1	Vehicle						
	ane Distance.	J0 1661			Veh	icleType		Day	Evening	Night	Daily
Site Data Barrier Type (0-1)	arrier Height: Wall, 1-Berm):	0.0 feet 0.0				edium T Heavy T		77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	
Centerline D	ist. to Barrier:	64.0 feet		-	Noise S	ource F	levation	ns (in f	oet)		
Centerline Dist Barrier Distance	e to Observer:	64.0 feet 0.0 feet		,		Auto m Truck	s: 0	.000 .297	eet)		
	Pad Elevation:	5.0 feet 0.0 feet			Heav	y Truck		.004	Grade Adj	iustment	0.0
R	pad Elevation: Road Grade: Left View: Right View:	0.0 feet 0.0% -90.0 degree 90.0 degree			Mediu	Auto m Truck ry Truck	s: 57 s: 57	.271 .117 .132	ieeij		
FHWA Noise Mo	del Calculations	;									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Bei	rm Atten
Autos		0.29		-0.9	9	-1.20		-4.70	0.0	000	0.000
Medium Trucks Heavy Trucks		-10.83 -8.33		-0.9 -0.9		-1.20 -1.20		-4.88 -5.31		000	0.000
Unmitigated Noi	so I avals (with	out Tono and	harri	or atton	uation)						
VehicleType	Leg Peak Hour			Leg E		Lea	Night		Ldn	С	NEL
Autos			64.7		63.0		56.	.9	65.	5	66.1
Medium Trucks	64.	7	65.2		58.8		57.	3	65.8	В	66.0
Heavy Trucks	: 72.	5	73.1		64.0		65.	.3	73.0	3	73.8
Vehicle Noise	: 73.	7	74.2		67.2		66.	4	74.8	3	75.0
Centerline Distai	nce to Noise Co	ntour (in feet)						_		_	
			L	70 c		65	dBA		60 dBA		dBA
			Ldn:		135		290 299	-	624		1,345
		CI	VEL:		139		299	9	644		1,387

		FHW	A-RD-77-108	HIGH	NAY NO	DISE PI	REDICTION	ON MC	DEL			
SITE SPECIFIC INPUT DATA	Scenario	: EAPC (2022	2) With Ext.				Project I	Name:	DCW3			
SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS							Job Nu	ımber:	13627			
Average Daily Traffic (Adi):	Road Segment	t: s/o Dawson	Canyon Rd.									
Average Daily Traffic (Adf): 27,958 vehicles Peak Hour Percentage: 6,31% Medium Trucks (2 Axles): 15 Vehicle Speed: 40 mph Site Data Peak Hour Percentage: 6,31% Medium Trucks (2 Axles): 15 Vehicle Speed: 40 mph Site Data Peak Hour Politance: 58 feet Vehicle Mix Vehicle Type Day Evening Night N		PECIFIC IN	PUT DATA								s	
Peak Hour Percentage: 6.31% Medium Trucks (2 Axles): 15	jhway Data				S	ite Cor	ditions ((Hard :	_	oft = 15)		
Peak Hour Volume:	Average Daily T	raffic (Adt):	27,958 vehicle	es						15		
Vehicle Speed:	Peak Hour P	Percentage:	6.31%						,			
Near/Far Lane Distance: S8 feet Vehicle MIX Vehicle Type Day Evening Night Vehicle Type Leq Peak How Leq Day Leq Pening Leq Night Ldn Challed Type Called Type Leq Peak How Leq Day Leq Day Leq Night Ldn Called Type Called Type Called Type Leq Peak How Leq Day Leq Day Leq Night Ldn Called Type Called Type Called Type Leq Peak How Leq Day Leq D	Peak Ho	ur Volume:	1,764 vehicle	s		He	avy Truc	ks (3+	Axles):	15		
Site Data Autos: 77.75% 12.9% 9.6% 9.6%	Veh	icle Speed:	40 mph		ν	ehicle	Mix					
Barrier Height: 0.0 feet	Near/Far Land	e Distance:	58 feet		F	Veh	icleType		Day	Evening	Night	Daily
Barrier Trype (0-Wall, 1-Berm): 0.0 Get	e Data						A	utos:	77.5%	12.9%	9.6%	82.33
Barrier Type (0-Wall, 1-Berm):	Barr	ier Heiaht	0.0 feet			М	edium Tri	ucks:	84.8%	4.9%	10.3%	6.36
Centerline Dist. to Observer: 64.0 feet Autos: 0.000		-					Heavy Tr	ucks:	86.5%	2.7%	10.8%	11.31
Centerline Dist. to Observer: 64.0 feet Barrier Distance to Observer: 0.0 feet Medium Trucks: 2.297	Centerline Dist	to Barrier:	64.0 feet		Α.	Inien S	ource Ele	ovatio	ne (in fa	not)		
Barrier Distance to Observer: 0.0 feet Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: Content of Pad Elevation: 0.0 feet Content of Pad Elevation: Content	Centerline Dist. to	Observer:	64.0 feet			10/36 0						
Distance Helay Trucks: 8.004 Grade Adjustment:	Barrier Distance to	Observer:	0.0 feet			Modiu						
Pad Elevation:	bserver Height (A	bove Pad):	5.0 feet							Grade Ad	iustment	0.0
Road Grade: 0.0%	Pad	d Elevation:	0.0 feet								,	
Left View:	Road	d Elevation:	0.0 feet		L	ane Eq				feet)		
Right View: 90.0 degrees Heavy Trucks: 57.132	R	oad Grade:	0.0%									
FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berner Autos: 66.51 0.29 -0.99 -1.20 -4.70 0.000		Left View:	-90.0 degree	es					.117			
VehicleType		Right View:	90.0 degree	es		Hea	y Trucks	: 57	.132			
Medium Trucks: Fraction Fra	WA Noise Mode	l Calculations	;									
Medium Trucks: 77.72 -10.83 -0.97 -1.20 -4.88 0.000	• • • • • • • • • • • • • • • • • • • •			Dist				Fres				rm Atter
Heavy Trucks: 82.99 -8.33 -0.97 -1.20 -5.31 0.000												0.00
Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CN												0.00
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CA Autos: 64.6 64.7 63.0 56.9 65.5 Medium Trucks: 64.7 65.2 58.8 57.3 65.8 Heavy Trucks: 72.5 73.1 64.0 66.3 73.6 Vehicle Noise: 73.7 74.2 67.2 66.4 74.8 Centerline Distance to Noise Contour (in feet) Ldn: 135 290 624	Heavy Trucks:	82.99	-8.33		-0.97		-1.20		-5.31	0.0	000	0.00
Autos: 64.6 64.7 63.0 56.9 65.5 Medium Trucks: 64.7 65.2 58.8 57.3 65.8 Heavy Trucks: 72.5 73.1 64.0 65.3 73.6 Vehicle Noise: 73.7 74.2 67.2 66.4 74.8 Centerline Distance to Noise Contour (in Feet) 70 dBA 65 dBA 60 dBA 55 Ldr: 135 290 624												
Medium Trucks: 64.7 65.2 58.8 57.3 65.8 Heavy Trucks: 72.5 73.1 64.0 65.3 73.6 Vehicle Noise: 73.7 74.2 67.2 66.4 74.8 Centerline Distance to Noise Contour (in feet) Ldn: 135 290 624	• • • • • • • • • • • • • • • • • • • •				Leq Eve		,	-				NEL
Heavy Trucks: 72.5 73.1 64.0 65.3 73.6			-						-		-	66
Vehicle Noise: 73.7 74.2 67.2 66.4 74.8 Centerline Distance to Noise Contour (in feet) To dBA 65 dBA 60 dBA 55 Ldn: 135 290 624									-		-	66
Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 Ldn: 135 290 624			-						-		-	73
70 dBA 65 dBA 60 dBA 55 d Ldn: 135 290 624						67.2		66.	4	74.	8	75
Ldn: 135 290 624	nterline Distance	e to Noise Co	ntour (in feet)	70 -	D.4	05.	/D 4		20 -10 4		-/D4
				l dn:	/U al		05.0					
CNEL: 139 299 644									-			1,34
CIVEL: 139 299 644			CI	VEL:		139		29	,	644	•	1,38

Coenari	: EAPC (202	2) Mith Evt				Project	Nama	DCW	2		
	e: Campbell F						ivame: 'umber:				
		cal Canyon Rd.				JUD 11	uiiibei.	13021			
SITE S	SPECIFIC IN	IPUT DATA				ı	IOISE	MODE	L INPUT	s	
Highway Data				s	ite Con	ditions	(Hard :	= 10, S	oft = 15)		
Average Daily 1	raffic (Adt):	11,863 vehicle	es					Autos:	15		
Peak Hour I	Percentage:	6.31%			Me	dium Tr	ucks (2	Axles):	15		
Peak Ho	our Volume:	749 vehicle	s		He	avy Tru	cks (3+	Axles):	15		
Veh	icle Speed:	45 mph		v	ehicle l	Miv					
Near/Far Lan	e Distance:	48 feet				icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	81.819
Ran	rier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	6.529
Barrier Type (0-Wa	all, 1-Berm):	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	11.679
Centerline Dis		59.0 feet		N	loise So	ource E	levatio	ns (in f	eet)		
Centerline Dist. to		59.0 feet				Auto	s: 0	.000			
Barrier Distance t		0.0 feet			Mediui	n Truck	s: 2	.297			
Observer Height (A	,	5.0 feet			Heav	y Truck	s: 8	.004	Grade Adj	iustment	0.0
	d Elevation:	0.0 feet		,	one Fe	uivalen	Dieter	ann (in	foot)		
	d Elevation: Road Grade:	0.0 feet		L	ane Eq	Auto		.129	reet)		
r	Left View:	0.0%			Madiu	Auto n Truck		.129			
	Right View:	-90.0 degree				т тиск y Truck		.982			
	•	90.0 degree	28		77000	y muck	3. 00	.502			
FHWA Noise Mode								. 1			
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite		Fres		Barrier Att		m Atter
Autos: Medium Trucks:	68.46	-3.97		-0.62		-1.20		-4.69		000	0.00
	79.45			-0.60		-1.20		-4.88		000	0.00
Heavy Trucks:	84.25			-0.60		-1.20		-5.35	0.0	000	0.00
Jnmitigated Noise VehicleType	Leg Peak Hou			Leg Eve		Lea	Night	1	Ldn	С	NFL
Autos:	62		62.8	. ,	61.0		55.	.0	63.6	6	64.
Medium Trucks:	62	2.7	63.2		56.8		55.	.3	63.7	7	64.
Heavy Trucks:	70	0.0	70.6		61.6		62.	.8	71.2	2	71.
Vehicle Noise:	71	.4	71.9		65.0		64.	.1	72.	5	72.
Centerline Distanc	e to Noise C	ontour (in feet)					1			
			L	70 dl		65	dBA		60 dBA		dBA
			Ldn:		86		18	2	401		869
			NEL:		89		19:	-	414		89:

Monday, October 12, 2020

	FHV	VA-RD-77-108	HIGH	1 YAW	NOISE PE	REDICTI	ON MC	DEL			
Scenario: E Road Name: D Road Segment: e	awson Ca	nyon Rd.				Project Job N		DCW3 13627			
	CIFIC IN	PUT DATA							L INPUT	S	
Highway Data					Site Con	nditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Traff	ic (Adt):	11,033 vehicl	es					Autos:	15		
Peak Hour Perd	entage:	6.31%			Me	dium Tru	icks (2	Axles):	15		
Peak Hour	Volume:	696 vehicle	:S		He	avy Truc	ks (3+	Axles):	15		
Vehicle	Speed:	40 mph		ŀ	Vehicle	Mix					
Near/Far Lane D	istance:	12 feet		-		icleType		Dav	Evening	Night	Daily
Site Data							Autos:	77.5%	-	9.6%	
Rarrier	Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	5.57%
Barrier Type (0-Wall, 1	-	0.0			- 1	Heavy Tr	ucks:	86.5%	2.7%	10.8%	9.96%
Centerline Dist. to		37.0 feet		ŀ							
Centerline Dist. to Ol	bserver:	37.0 feet		ŀ	Noise S				eet)		
Barrier Distance to O	bserver:	0.0 feet				Autos		.000			
Observer Height (Abov	/e Pad):	5.0 feet				m Trucks		.297	0	4	
Pad El	levation:	0.0 feet			Heav	y Trucks	s: 8	.004	Grade Adj	usimem	. 0.0
Road El	levation:	0.0 feet			Lane Eq	uivalent	Distar	nce (in	feet)		
Road	d Grade:	0.0%				Autos	s: 36	.851			
Le	eft View:	-90.0 degre	es		Mediu	m Trucks	36	.610			
Rig	ht View:	90.0 degre	es		Heav	y Trucks	36	.634			
FHWA Noise Model Ca	alculation	s									
VehicleType R	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	66.51	-3.63		1.8	-	-1.20		-4.56	0.0	000	0.000
Medium Trucks:	77.72	-15.44		1.9	13	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	82.99	-12.92		1.9	12	-1.20		-5.61	0.0	000	0.000
Unmitigated Noise Le	vels (with	out Topo and	barri	er atter	nuation)						
	Peak Hou			Leq E	vening		Night		Ldn		NEL
Autos:	63		63.7		61.9		55.	-	64.5	-	65.1
Medium Trucks:	63		63.5		57.1		55.	-	64.0	-	64.3
Heavy Trucks:	70		71.4		62.3		63.	-	71.9		72.1
Vehicle Noise:	72	.1	72.6		65.8		64.	.8	73.2	2	73.4
Centerline Distance to	Noise Co	ontour (in feet	()								
			L	70	dBA	65 (dΒA		i0 dBA		dBA
			Ldn:		61				282		607
			NEL:		63		13	•	282		626

Monday, October 12, 2020

APPENDIX 9.1:

CADNAA OPERATIONAL NOISE MODEL INPUTS



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13627 - Temescal Valley Business Park (PAR190052) CadnaA Noise Prediction Model: 13627_01.cna

Date: 21.10.20 Analyst: S. Shami

Calculation Configuration

rrier
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Receiver Noise Levels

Name	M.	ID	Level Lr			Lir	nit. Valı	ue		Land	l Use	Height		Co	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	32.8	31.9	38.3	55.0	45.0	0.0				5.00	а	6183839.40	2231226.88	5.00
RECEIVERS		R2	36.4	35.7	42.2	55.0	45.0	0.0				5.00	а	6184217.00	2230062.30	5.00
RECEIVERS		R3	32.4	32.0	38.6	55.0	45.0	0.0				5.00	а	6183500.51	2228344.42	5.00
RECEIVERS		R4	30.4	30.0	36.6	55.0	45.0	0.0				5.00	а	6183906.17	2226981.10	5.00
RECEIVERS		R5	27.6	27.2	33.8	55.0	45.0	0.0				5.00	а	6186729.65	2225120.63	5.00

Point Source(s)

Name	M.	ID	R	esult. PW	'L		Lw / L	i	Op	erating Ti	ime	K0	Height		Co	oordinates	
			Day	Evening	Night	Туре	Value	norm.	Day	Special	Night				Х	Υ	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(dB)	(ft)		(ft)	(ft)	(ft)
POINTSOURCE		AC01	88.9	88.9	88.9	Lw	88.9		585.00	0.00	252.00	0.0	5.00	g	6185942.37	2230807.62	50.00
POINTSOURCE		AC02	88.9	88.9	88.9	Lw	88.9		585.00	0.00	252.00	0.0	5.00	g	6185773.93	2230704.68	50.00
POINTSOURCE		TRASH01	89.0	89.0	89.0	Lw	89.0		75.00	0.00	45.00	0.0	5.00	а	6186338.84	2230211.59	5.00

Line Source(s)

		-1-,																	
Name	M.	ID	Result. PWL			R	esult. PW	'L'		Lw / Li		Op	erating Ti	ime		Moving	Pt. Src		Height
			Day	Evening	Night	Day	Evening	Night	Туре	Value	norm.	Day	Special	Night		Number		Speed	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)
LINESOURCE		DWY01	88.1	72.6	79.1	68.2	52.7	59.2	PWL-Pt	89.7					71.0	2.0	9.0	6.2	8

Name	ŀ	lei	ght			Coordinat	es	
	Begin		End		х	У	Z	Ground
	(ft) (ft)		(ft)	(ft)	(ft)	(ft)		
LINESOURCE	8.00 a				6185922.64	2229853.50	8.00	0.00
					6186196.80	2230019.75	8.00	0.00

Area Source(s)

Name	M.	ID	R	esult. PW	'L	Re	esult. PW	L"		Lw / L	i	Оре	erating Ti	me	Height
			Day	Evening	Night	Day	Evening	Night	Туре	Value	norm.	Day	Special	Night	(ft)
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	
AREASOURCE		DOCK01	103.4	103.4	103.4	66.5	66.5	66.5	Lw	103.4					8
AREASOURCE		DELIVERY01	101.2	101.2	101.2	65.5	65.5	65.5	Lw	101.2		900.00	0.00	540.00	5
AREASOURCE		DELIVERY02	101.2	101.2	101.2	65.5	65.5	65.5	Lw	101.2		900.00	0.00	540.00	5

Name	Не	ight		Coordinat	es	
	Begin	End	х	у	Z	Ground
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
AREASOURCE	8.00 a		6186134.79	2230112.57	8.00	0.0
			6186344.07	2230242.82	8.00	0.0
			6186377.60	2230190.55	8.00	0.0
			6186380.49	2230187.46	8.00	0.0
			6186385.43	2230185.19	8.00	0.0
			6186391.00	2230184.16	8.00	0.0
			6186394.50	2230184.16	8.00	0.0
			6186400.27	2230184.98	8.00	0.0
			6186441.69		8.00	0.0
			6186447.05	2230213.22	8.00	0.0
			6186451.58	2230214.66	8.00	0.0
			6186456.53	2230216.10	8.00	0.0
			6186461.89	2230216.31	8.00	0.0
				2230216.31	8.00	0.0
				2230215.48	8.00	0.0
			6186478.37		8.00	0.0
			6186482.29		8.00	0.0
			6186486.41		8.00	0.0
				2230207.45	8.00	0.0
			6186497.33		8.00	0.0
			6186500.84		8.00	0.0
			6186505.16		8.00	0.0
			6186508.05		8.00	0.0
				2230187.04	8.00	0.0
			_	2230187.04	8.00	0.0
				2230175.50	8.00	0.0
			6186515.26		8.00	0.0
				2230161.90	8.00	0.0
			6186513.82		8.00	0.0
				2230148.09 2230142.32	8.00	0.0
				2230142.32		0.0
			6186500.84		8.00 8.00	0.0
			6186494.65	2230130.78 2230125.84	8.00	0.0
					8.00	0.0
			6186488.68			
			6186483.94		8.00	0.0
			6186478.17		8.00	0.0
			6186472.60		8.00	0.0
			6186467.25		8.00	0.0
			6186460.86		8.00	0.0
			6186454.26		8.00	0.0
			6186448.90		8.00	0.0
				2230123.16	8.00	0.0
			6186441.49		8.00	0.0
		-	6186438.39		8.00	0.0
		-	6186435.71		8.00	0.0
			6186431.80		8.00	0.0
			6186428.71		8.00	0.0
		-	6186424.38		8.00	0.0
		-	6186421.29		8.00	0.0
			6186417.79		8.00	0.0
			6186414.28		8.00	0.0
			6186410.78	2230119.45	8.00	0.0
			6186408.31	2230115.95	8.00	0.0
			6186407.28	2230113.27	8.00	0.0
			6186406.45	2230109.15	8.00	0.0
			6186406.45	2230105.85	8.00	0.0
			6186407.07	2230101.93	8.00	0.0
			6186429.53	2230067.72	8.00	0.0
			6186300.32	2229986.32	8.00	0.0
			6186282.80	2230011.88	8.00	0.0

Urban Crossroads, Inc.

Name	ŀ	lei	ght			Coordinat	es	
	Begin		End		х	у	Z	Ground
	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
					6186276.62	2230015.58	8.00	0.00
					6186274.15	2230016.61	8.00	0.00
					6186271.06	2230017.03	8.00	0.00
					6186268.58	2230017.03	8.00	0.00
					6186265.29	2230016.41	8.00	0.00
					6186263.02	2230016.41	8.00	0.00
					6186218.30	2229987.56	8.00	0.00
AREASOURCE	5.00	а			6185944.72	2230850.04	5.00	0.00
					6185991.55	2230879.27	5.00	0.00
					6186390.89	2230270.03	5.00	0.00
					6186344.07	2230242.82	5.00	0.00
AREASOURCE	5.00	а			6185736.37	2230718.69	5.00	0.00
					6186134.79	2230112.57	5.00	0.00
					6186089.38	2230081.49	5.00	0.00
					6185689.87	2230691.06	5.00	0.00

Building(s)

	O١	- /									
Name	M.	ID	RB	Residents	Absorption	Height	:		Coordinat	es	
						Begin		х	у	Z	Ground
						(ft)		(ft)	(ft)	(ft)	(ft)
BUILDING		BUILDING00001	х	0		45.00	а	6185736.37	2230718.69	45.00	0.00
								6185944.72	2230850.04	45.00	0.00
								6186344.07	2230242.82	45.00	0.00
								6186134.79	2230112.57	45.00	0.00

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APPENDIX 10.1:

CADNAA CONSTRUCTION NOISE MODEL INPUTS



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13627 - Temescal Valley Business Park (PAR190052) CadnaA Noise Prediction Model: 13627-09_Construction.cna

Date: 27.04.21 Analyst: S. Shami

Calculation Configuration

Configurat	ion
Parameter	Value
General	
Country	(user defined)
Max. Error (dB)	0.00
Max. Search Radius (#(Unit,LEN))	2000.01
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (#(Unit,LEN))	999.99
Min. Length of Section (#(Unit,LEN))	1.01
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Reference Time Day (min)	960.00
Reference Time Night (min)	480.00
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	5.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	2
Search Radius Src	100.00
Search Radius Rcvr	100.00
Max. Distance Source - Rcvr	1000.00 1000.00
Min. Distance Rvcr - Reflector	1.00 1.00
Min. Distance Source - Reflector	0.10
Industrial (ISO 9613)	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Incl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (#(Unit,TEMP))	10
rel. Humidity (%)	70
Ground Absorption G	0.50
Wind Speed for Dir. (#(Unit,SPEED))	3.0
Roads (RLS-90)	
Strictly acc. to RLS-90	
Railways (FTA/FRA)	
Aircraft (???)	

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	58.9	58.9	65.6	55.0	45.0	0.0				5.00	а	6183839.40	2231226.88	5.00
RECEIVERS		R2	61.2	61.2	67.8	55.0	45.0	0.0				5.00	а	6184217.00	2230062.30	5.00
RECEIVERS		R3	56.3	56.3	62.9	55.0	45.0	0.0				5.00	а	6183500.51	2228344.42	5.00
RECEIVERS		R4	54.5	54.5	61.2	55.0	45.0	0.0				5.00	а	6183906.17	2226981.10	5.00
RECEIVERS		R5	51.9	51.9	58.5	55.0	45.0	0.0				5.00	а	6186729.65	2225120.63	5.00

Area Source(s)

Name	M.	ID	R	Result. PWL			Result. PWL"			Lw / Li			Operating Time		
			Day	Evening	Night	Day	Evening	Night	Туре	Value	norm.	Day	Special	Night	(ft)
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	
CONSTRUCTION		0	117.4	117.4	117.4	75.3	75.3	75.3	Lw"	75.3					8
CONSTRUCTION		0	114.6	114.6	114.6	75.3	75.3	75.3	Lw"	75.3					8
CONSTRUCTION		0	120.3	120.3	120.3	75.3	75.3	75.3	Lw"	75.3					8
CONSTRUCTION		0	104.9	104.9	104.9	75.3	75.3	75.3	Lw"	75.3					8
CONSTRUCTION		0	127.9	127.9	127.9	75.3	75.3	75.3	Lw"	75.3					8
CONSTRUCTION		0	112.7	112.7	112.7	75.3	75.3	75.3	Lw"	75.3					8

Name	ŀ	lei	ght		Coordinates					
	Begin		End		х	У	Z	Ground		
	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)		
CONSTRUCTION	8.00	а			6185889.69	2231146.91	8.00	0.00		

Name	He	eight		Coordinat	es		
	Begin	End	х	У	z	Ground	
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
			6185857.00	2231124.64	8.00	0.00	
			6185856.95	2231124.69	8.00	0.00	
			6185856.68	2231124.51	8.00	0.00	
			6185856.73	2231124.45	8.00	0.00	
			6185767.31	2231063.52	8.00	0.00	
			6185756.49	2231079.41	8.00	0.00	
			6185755.35	2231078.92	8.00	0.00	
	_		6185755.05	2231079.37	8.00	0.00	
			6185661.15	2231039.58	8.00	0.00	
	+	-	6185639.18	2231024.61	8.00	0.00	
			6185589.89	2230991.02	8.00	0.00	
			6185363.66	2230836.86	8.00	0.00	
			6185333.38	2230726.67	8.00	0.00	
			6185328.88	2230710.31	8.00	0.00	
			6185567.93	2230359.51	8.00	0.00	
			6185738.90	2230108.46	8.00	0.00	
			6185852.64	2229889.47	8.00	0.00	
			6185937.75	2229663.50	8.00	0.00	
			6185912.53	2229703.14	8.00	0.00	
			6185894.23	2229731.64	8.00	0.00	
	+ +		6185885.72	2229744.41	8.00	0.00	
	+ +		6185883.83	2229744.41	8.00	0.00	
	+	+					
	+	+ +	6185881.69	2229749.26	8.00	0.00	
	+		6185879.31	2229751.34	8.00	0.00	
	\perp		6185876.73	2229753.16	8.00	0.00	
			6185873.97	2229754.70	8.00	0.00	
			6185871.06	2229755.94	8.00	0.00	
			6185868.04	2229756.87	8.00	0.00	
			6185864.94	2229757.47	8.00	0.00	
			6185861.79	2229757.75	8.00	0.00	
			6185858.63	2229757.69	8.00	0.00	
			6185855.50	2229757.30	8.00	0.00	
	_		6185852.42	2229756.58	8.00	0.00	
	+		+				
			6185849.43	2229755.55	8.00	0.00	
			6185846.57	2229754.20	8.00	0.00	
			6185843.87	2229752.56	8.00	0.00	
			6185839.68	2229749.71	8.00	0.00	
			6185832.97	2229744.56	8.00	0.00	
			6185826.87	2229738.68	8.00	0.00	
			6185821.48	2229732.16	8.00	0.00	
			6185816.86	2229725.07	8.00	0.00	
			6185813.07	2229717.51	8.00	0.00	
			6185810.15	2229709.56	8.00	0.00	
			6185808.15	2229701.34	8.00	0.00	
			6185807.08	2229692.94	8.00	0.0	
			6185806.97	2229684.48	8.00	0.00	
	_		6185807.81	2229676.06	8.00	0.0	
			+				
			6185809.60	2229667.79	8.00		
				2229387.96	8.00		
	\perp		_	2229374.67	8.00	0.00	
	\perp	\perp		2229654.50	8.00	0.0	
			6185758.42	2229668.29	8.00	0.00	
			6185757.02	2229682.32	8.00	0.00	
		$oxed{\Box}$	6185757.20	2229696.43	8.00	0.0	
			6185758.98	2229710.42	8.00	0.0	
			6185762.32	2229724.12	8.00		
				2229737.36	8.00	0.00	
				2229749.97	8.00		
	+ +	 	+	2229761.79	8.00		
	+ +	+ +	1	2229772.66	8.00		
	+ + +	+ +	6185800.34		8.00	0.00	
	+ +	+ +		2229782.45			
	+ + +	+ +		2229791.03	8.00		
	+	-		2229794.11	8.00	0.00	
	\perp			2229796.01	8.00		
			6185820.84	2229798.17	8.00	0.00	
			6185822.89	2229800.55	8.00	0.00	
			6185824.68	2229803.13	8.00	0.00	
			6185826.19	2229805.88	8.00	0.00	
				2229808.77	8.00		
	+ +			2229811.78	8.00		
	+ +	1					
	+	+ +		2229814.87	8.00		
	+	-	6185829.15	2229818.00	8.00	0.00	
	\perp			2229821.14	8.00		
			6185828.69	2229824.25	8.00	0.00	
			6185827.97	2229827.31	8.00	0.00	
			6185826.93	2229830.27	8.00	0.00	

Name		lei	ght	1	Coordinat		
	Begin	_	End	X (5)	У	Z	Ground
	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
					2229835.80	8.00	0.00
					2230727.19	8.00	0.00
				6185215.32	2230729.29	8.00	0.00
		L		6185213.62	2230731.27	8.00	0.00
				6185211.77	2230733.13	8.00	0.00
				6185209.79	2230734.83	8.00	0.00
		H				8.00	0.00
		\vdash		6185205.47	2230737.78	8.00	0.00
				6185202.35 6185199.09	2230739.38 2230740.66	8.00	0.00
		H		6185199.09		8.00	0.00
		\vdash		6185193.72	2230741.61 2230742.22		0.00
		\vdash			2230742.22	8.00	0.00
		\vdash		6185185.27	2230742.47	8.00	0.00
					2230769.85	8.00	0.00
		\vdash		6185166.21	2230773.35	8.00	0.00
				6185167.50		8.00	0.00
				6185168.38	2230780.79	8.00	0.00
		\vdash		6185168.84	2230784.64	8.00	0.00
				6185168.87	2230788.52	8.00	0.00
		Т		6185168.47	2230792.38	8.00	0.00
				6185237.92	2230855.91	8.00	0.00
		Г		6185241.39	2230854.26	8.00	0.00
		Г			2230853.00	8.00	0.00
				6185248.75	2230852.14	8.00	0.00
		Г			2230851.70	8.00	0.00
		Г		6185256.40	2230851.68	8.00	0.00
				6185260.22		8.00	0.00
				6185263.97	2230852.90	8.00	0.00
				6185267.61	2230854.12	8.00	0.00
				6185271.09	2230855.73	8.00	0.00
				6185274.38	2230857.71	8.00	0.00
				6185362.66	2230905.74	8.00	0.00
				6185844.33	2231233.78	8.00	0.00
				6185872.31	2231194.44	8.00	0.00
				6185871.00	2231191.97	8.00	0.00
				6185869.98	2231189.38	8.00	0.00
				6185869.25	2231186.68	8.00	0.00
				6185868.82	2231183.92	8.00	0.00
				6185868.71	2231181.13	8.00	0.00
				6185868.91		8.00	0.00
				6185869.41	2231175.61	8.00	0.00
		L		6185870.22	2231172.93	8.00	0.00
		L		6185871.32	2231170.37	8.00	0.00
					2231167.94	8.00	0.00
CONICTRILICTION	0.00	_		6185874.35	2231165.69	8.00	0.00
CONSTRUCTION	8.00	a		6186831.66	2230727.95	8.00	0.00
						8.00	
		H		+	2230736.99	8.00	0.00
		H	 		2230739.31	8.00	
		H			2230742.08	8.00	0.00
		\vdash		6186839.29	2230746.97 2230751.86	8.00	0.00
		H	 	6186838.87		8.00	0.00
		H	 	6186838.88	2230756.84	8.00	0.00
			 	6186838.67	2230761.86	8.00	0.00
			 		2230700.83	8.00	0.00
				1	2230771.73	8.00	0.00
					2230770.01	8.00	0.00
		H		6186830.43		8.00	0.00
		Т		+	2230791.26	8.00	0.00
					2230796.22	8.00	0.00
		Г			2230801.39	8.00	0.00
				6186833.82		8.00	0.00
		Γ			2230807.13	8.00	0.00
		Г		6186833.72	2230811.62	8.00	0.00
				6186833.27	2230816.60	8.00	0.00
		Г		6186833.19		8.00	0.00
		Г		6186833.53		8.00	0.00
				+	2230831.66	8.00	0.00
		Г			2230836.68	8.00	0.00
		Г			2230841.76	8.00	0.00
		Г			2230859.78	8.00	0.00
		\vdash			2230854.67	8.00	0.00
				6186857.12	2230843.97	8.00	0.00
				6186857.12	2230843.97 2230836.41	8.00 8.00	0.00

Name		ght .	-	Coordinat		
	Begin	End	X (61)	У	Z	Ground
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
			6186876.42	2230831.83	8.00	0.00
			6186879.00	2230825.04 2230817.09	8.00	0.00
			6186905.38		8.00	0.00
			6186911.39	2230806.13	8.00	0.00
			6186914.49	2230794.83	8.00	0.00
				2230788.47	8.00	0.00
			6186911.46	2230788.47	8.00	0.00
			6186914.17	2230778.33	8.00	0.00
			6186914.17	2230777.30	8.00	0.00
				2230780.28	8.00	0.00
			6186931.72	2230784.82	8.00	0.00
				2230787.79	8.00	
			6186955.26	2230787.29	8.00	0.00
				2230778.08	8.00	0.00
			6186973.74	2230751.83	8.00	0.00
			6186983.28		8.00	0.00
			6186984.42	2230735.10	8.00	0.00
			6186994.88	2230720.43	8.00	0.00
			6187004.82			
	 		6187004.82	2230714.05 2230709.99	8.00	0.00
	+ +			2230709.99	8.00	0.00
	 		6187016.30			
	+ +		6187016.90	2230709.72 2230709.71	8.00	0.00
				2230709.71	8.00	0.00
	+ +			2230709.70	8.00	0.00
	+ +		6187018.97	2230709.68	8.00	0.00
	+ +		_	2230709.64	8.00	0.00
			6187021.72	2230709.54	8.00	0.00
			6187022.42	2230709.34	8.00	0.00
			6187023.06	2230709.43	8.00	0.00
			6187023.11	2230709.43	8.00	0.00
				2230709.45	8.00	0.0
			+			
				2230709.29	8.00	0.00
			6187025.18 6187025.87	2230709.21 2230709.12	8.00	0.00
					8.00	0.00
				2230709.03	8.00	0.00
			6187027.24	2230708.92 2230708.82	8.00	0.00
			6187027.92	2230708.82	8.00	0.00
			6187029.17	2230708.70	8.00	0.0
			6187029.28	2230708.56	8.00	0.00
			6187029.96	2230708.39	8.00	0.00
			6187030.64	2230708.39	8.00	0.00
			6187031.31		8.00	0.0
				2230703.11	8.00	0.0
			6187032.65	2230707.34	8.00	0.0
			+	2230707.77	8.00	0.0
				2230707.33		
	+ +			2230707.41	8.00	0.0
	+ +			2230707.22		0.0
	+ +			2230707.07	8.00	0.0
	+ +		6187035.31	2230707.02	8.00	0.0
	+ +		6187036.62		8.00	0.0
	+ +		6187036.62	2230706.80	8.00	0.0
	+ +		6187037.27	2230706.39	8.00	0.0
				2230705.10	8.00	0.0
	+ +			2230705.70	8.00	0.0
			6187039.85		8.00	0.0
					8.00	0.0
	+ +			2230705.21	8.00	0.0
	+ +		6187041.33		8.00	0.0
				2230704.68	8.00	0.0
	 			2230704.08	8.00	0.0
	 			2230704.45	8.00	0.0
	 		6187043.62	2230704.10	8.00	0.0
	+ +		6187044.41		8.00	0.0
			6187045.41	2230703.32	8.00	0.0
	+ +		6187045.41	2230703.05	8.00	0.0
	+ +			2230702.73	8.00	0.0
	+ +					
	+			2230702.46	8.00	0.0
	+		_	2230702.16	8.00	0.0
	+			2230701.86	8.00	0.0
	1 1	ı I	P18/048.48	2230701.56	8.00	0.0
			C107040 0=	2220704 25	0.00	~ ~
			6187049.07	2230701.25 2230700.93	8.00 8.00	0.0

Name	Hei			Coordinat		Graves
	Begin (ft)	End (ft)	(f+)	у /f+\	Z (f+)	Ground
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
			6187050.82	2230700.28	8.00	0.0
			6187051.39	2230699.95	8.00	0.0
			6187051.88	2230699.66	8.00	0.0
			6187051.96	2230699.61	8.00	0.0
			6187052.53	2230699.27	8.00	0.0
			6187053.09	2230698.93	8.00	0.0
			6187053.84	2230698.45	8.00	0.0
			6187054.23	2230698.20	8.00	0.0
			6187054.74	2230697.86	8.00	0.0
			6187055.29	2230697.49	8.00	0.0
			6187055.82	2230697.12	8.00	0.0
			6187056.35	2230696.74	8.00	0.0
			6187056.88	2230696.36	8.00	0.0
			6187057.03	2230696.26	8.00	0.0
			6187057.40	2230695.98	8.00	0.0
			6187057.92	2230695.59	8.00	0.0
			6187058.61	2230695.06	8.00	0.0
			6187051.78	2230684.50	8.00	0.0
			6187053.15	2230673.51	8.00	0.0
			6187050.65	2230673.43	8.00	0.0
			6187044.99	2230673.24	8.00	0.0
			6187041.33	2230673.12	8.00	0.0
			6187034.32	2230668.67	8.00	0.0
	 		6187033.35	2230668.95	8.00	0.0
	+ +		6187030.19	2230669.02	8.00	0.0
	+ +		6187030.19		8.00	
	+ +			2230676.85		0.0
	+		6187027.90	2230676.53	8.00	0.0
			6187024.64	2230675.84	8.00	0.0
			6187021.23	2230675.86	8.00	0.0
			6187017.87	2230676.28	8.00	0.0
			6187014.82	2230676.75	8.00	0.0
			6187011.70	2230677.14	8.00	0.0
			6187008.55	2230677.22	8.00	0.0
			6187005.34	2230677.26	8.00	0.0
			6187006.42	2230668.16	8.00	0.0
			6187003.25	2230666.52	8.00	0.0
			6187000.11	2230664.72	8.00	0.0
			6186997.06	2230662.58	8.00	0.0
	_		6186993.91	2230659.91	8.00	0.0
			6186991.03	2230656.83	8.00	0.0
			6186988.72	2230653.64	8.00	0.0
			6186987.25	2230650.34	8.00	0.0
			6186986.24	2230647.26	8.00	0.0
			6186985.53	2230644.15	8.00	0.0
			6186985.16	2230641.04	8.00	0.0
			6186985.07	2230637.98	8.00	0.0
			6186985.24	2230634.97	8.00	0.0
			6186985.29	2230634.54	8.00	0.0
				2230628.70	8.00	0.0
			6186988.49	2230624.67	8.00	0.0
	+ +			2230624.07	8.00	0.0
	+ +		6187040.07	2230621.79		0.0
	+				8.00	
	+ +		6187248.61	2230620.08	8.00	0.0
	+		6187263.12	2230619.66	8.00	0.0
	+		6187277.62	2230619.03	8.00	0.0
	\perp		6187292.10	2230618.19	8.00	0.0
			6187306.58	2230617.14	8.00	0.0
			6187321.03	2230615.89	8.00	0.0
			6187467.95	2230602.08	8.00	0.0
			6187486.97	2230600.11	8.00	0.0
			6187505.96	2230597.78	8.00	0.0
			6187524.90	2230595.09	8.00	0.0
			6187543.78	2230592.05	8.00	0.0
			6187562.60		8.00	0.0
	+ +		6187581.36	2230584.89	8.00	0.0
	+ +		6187729.69	2230553.72	8.00	0.0
	+ +					
			6187748.00	2230550.05	8.00	0.0
	+		6187766.37	2230546.73	8.00	0.0
			6187784.81	2230543.76	8.00	0.0
			6187803.30	2230541.13	8.00	0.0
			6187821.84	2230538.86	8.00	0.0
			6187840.41	2230536.94	8.00	0.0
				2230486.30	8.00	0.0
	+ +		6188376.85	2230462.41	8.00	0.0
	+		6188361.78		8.00	0.0
				££JU4U3.03	0.00	U.U
			6188276.66	2230471.83	8.00	0.0

Name	ı	lei	ght		Coordinat	es	
	Begin	_	End	х	У	Z	Ground
	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
		L		6187819.14	2230515.00	8.00	0.00
				6187800.15	2230517.33	8.00	0.00
				6187781.21	2230520.02	8.00	0.00
		\vdash		6187762.33 6187743.51	2230523.07 2230526.47	8.00 8.00	0.00
		H		6187724.75	2230526.47	8.00	0.00
				6187576.43	2230561.40	8.00	0.00
		Н		6187558.11	2230565.07	8.00	0.00
				6187539.74	2230568.39	8.00	0.00
				6187521.30	2230571.36	8.00	0.00
				6187502.81	2230573.99	8.00	0.00
				6187484.28	2230576.26	8.00	0.00
				6187465.70	2230578.19	8.00	0.00
				6187318.79	2230591.99	8.00	0.00
		L		6187304.67	2230593.22	8.00	0.00
				6187290.54	2230594.24	8.00	0.00
				6187276.40	2230595.06	8.00	0.00
		H		6187262.25	2230595.68	8.00 8.00	0.00
		-		6187248.09 6187233.92	2230596.09 2230596.30	8.00	0.00
				6187078.64	2230597.49	8.00	0.00
				6187013.17	2230597.49	8.00	0.00
				6187001.64	2230599.27	8.00	0.00
		Т		6187005.54	2230533.27	8.00	0.00
				6187004.46	2230537.69	8.00	0.00
				6187000.66	2230585.88	8.00	0.00
				6186980.68	2230586.07	8.00	0.00
				6186956.73	2230587.13	8.00	0.00
				6186932.83	2230589.00	8.00	0.00
				6186909.00	2230591.69	8.00	0.00
				6186885.29	2230595.20	8.00	0.00
				6186861.71	2230599.52	8.00	0.00
				6186820.04	2230609.56	8.00	0.00
				6186778.40	2230619.59	8.00	0.00
				6186696.89	2230646.00	8.00	0.00
				6186617.63	2230678.57	8.00	0.00
				6186541.11	2230717.13 2230761.44	8.00 8.00	0.00
				6186398.04	2230811.25	8.00	0.00
				6186317.76	2230882.87	8.00	0.00
		Г		6186256.74	2230937.29	8.00	0.00
		Г		6186256.67	2230948.64	8.00	0.00
				6186502.00	2230786.11	8.00	0.00
				6186583.67	2230737.49	8.00	0.00
				6186669.63	2230696.94	8.00	0.00
				6186759.09	2230664.84	8.00	0.00
				6186832.87	2230646.14	8.00	0.00
				6186833.12			0.00
					2230651.65	8.00	0.00
		H			2230652.14	8.00	0.00
		\vdash			2230655.96	8.00	
		\vdash			2230660.90	8.00	0.00
		H			2230665.84 2230670.77	8.00	0.00
		\vdash		_	2230670.77	8.00 8.00	0.00
					2230673.70	8.00	0.00
		Г			2230684.42	8.00	0.00
		Г			2230685.57	8.00	0.00
					2230690.50	8.00	0.00
					2230695.44	8.00	0.00
				6186818.39	2230700.36	8.00	0.00
		Ĺ		6186816.70	2230705.26	8.00	0.00
				6186815.43	2230710.18	8.00	0.00
					2230713.28	8.00	0.00
		L			2230715.12	8.00	0.00
		H			2230720.25	8.00	0.00
CONCERNICE	0.00	-			2230726.09	8.00	0.00
CONSTRUCTION	8.00	a			2229296.05	8.00	0.00
		H			2229296.12 2229296.21	8.00	0.00
					2229296.21	8.00 8.00	0.00
					2229296.46	8.00	0.00
					2229296.86		0.00
		Н		6186458.49		8.00	0.00
					2229297.00	8.00	0.00
		Г			2229297.00	8.00	0.00
				6186662.46		8.00	0.00
		_					

Name		eight		Coordinat	es	
	Begin	End	x	У	Z	Ground
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
			6186662.54	2229297.68	8.00	0.00
			6186663.35	2229297.67	8.00	0.00
			6186658.96	2229289.39	8.00	0.00
			6186656.61	2229284.97	8.00	0.00
			6186654.27	2229280.56	8.00	0.00
			6186651.93	2229276.14	8.00	0.00
			6186649.59	2229271.72	8.00	0.00
			6186647.24	2229267.31	8.00	0.00
			6186644.90	2229262.89	8.00	0.00
			1			
	+	-	6186642.56	2229258.47	8.00	0.00
			6186640.21	2229254.05	8.00	0.00
			6186637.87	2229249.64	8.00	0.00
			6186635.53	2229245.22	8.00	0.00
			6186633.19	2229240.80	8.00	0.00
			6186630.84	2229236.39	8.00	0.00
			6186628.50	2229231.97	8.00	0.00
			6186626.16	2229227.55	8.00	0.00
			6186623.82	2229223.13	8.00	0.00
			6186621.47	2229218.72	8.00	0.00
			6186619.13	2229214.30	8.00	0.00
	+ +		6186616.79	2229209.88	8.00	0.00
	+ +		6186614.44			0.00
	+	+		2229205.47	8.00	
	+	+ +	6186612.10	2229201.05	8.00	0.00
	+		6186609.76	2229196.63	8.00	0.00
	1		6186607.42	2229192.21	8.00	0.00
			6186605.07	2229187.80	8.00	0.00
			6186602.73	2229183.38	8.00	0.00
			6186600.39	2229178.96	8.00	0.00
			6186598.04	2229174.55	8.00	0.00
			6186595.70	2229170.13	8.00	0.00
			6186593.36	2229165.71	8.00	0.00
			6186591.02	2229161.29	8.00	0.0
			6186588.67	2229156.88	8.00	0.0
	+		+			
			6186586.33	2229152.46	8.00	0.0
			6186583.99	2229148.04	8.00	0.00
			6186581.65	2229143.63	8.00	0.00
			6186579.30	2229139.21	8.00	0.00
			6186576.96	2229134.79	8.00	0.00
			6186574.62	2229130.37	8.00	0.00
			6186572.27	2229125.96	8.00	0.00
			6186569.93	2229121.54	8.00	0.0
			6186567.59	2229117.12	8.00	0.0
			6186565.25	2229112.70	8.00	0.00
			6186562.90	2229108.29	8.00	0.0
	_		6186560.56	2229103.87	8.00	0.0
			6186558.22	2229099.45	8.00	0.0
	+		6186555.87	2229095.04	8.00	0.0
	_					
	_		6186553.53	2229090.62		
	+			2229086.20	8.00	
			6186548.85	2229081.78	8.00	0.0
				2229077.37	8.00	0.0
			6186544.16	2229072.95	8.00	0.0
			6186541.82	2229068.53	8.00	0.0
			6186539.48	2229064.12	8.00	0.0
			6186537.13	2229059.70	8.00	0.0
			6186534.79	2229055.28	8.00	
				2229050.86	8.00	0.0
	+ +	1		2229046.45	8.00	
	+ +	+ +		2229042.03	8.00	
	+ +	+ +		2229042.03	8.00	
	+ +	+ +			8.00	
	+ +			2229033.20		0.00
	+ +	+		2229028.78	8.00	
	\perp			2229024.36	8.00	0.0
	\perp			2229019.94	8.00	0.0
			6186513.70	2229015.53	8.00	0.00
			6186511.36	2229011.11	8.00	0.00
			6186509.02	2229006.69	8.00	0.0
				2229002.28	8.00	0.0
				2228997.86	8.00	
	+ +			2228993.44	8.00	
	+ +	+ +				
	+	+ +		2228989.02	8.00	
	1	+		2228984.61	8.00	0.0
	\perp			2228980.19	8.00	
			6186492.52	2228975.58	8.00	0.00
				2220057.25	0.00	0.00
			6186488.10	2228967.25	8.00	0.0
	+			2228967.25	8.00	0.0

Name		eight		Coordinat	es	
	Begin	End	х	У	Z	Ground
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
			6186475.19	2228942.30	8.00	0.00
			6186471.17	2228934.14	8.00	0.00
			6186467.38	2228926.24	8.00	0.00
			6186467.17	2228925.80	8.00	0.00
			6186463.26	2228917.44	8.00	0.00
			6186461.53	2228913.65	8.00	0.00
			6186457.77	2228905.29	8.00	0.00
			6186454.13	2228896.96	8.00	0.00
			6186450.58	2228888.59	8.00	0.00
			6186447.11	2228880.19	8.00	0.00
			6186443.70	2228871.71	8.00	0.00
			6186442.08			
			6186438.80	2228867.58	8.00	0.00
		+ +	+	2228859.03	8.00	0.00
			6186435.63	2228850.51	8.00	0.00
			6186432.54	2228841.96	8.00	0.00
			6186429.54	2228833.38	8.00	0.00
			6186426.63	2228824.76	8.00	0.00
			6186423.80	2228816.12	8.00	0.00
			6186421.07	2228807.45	8.00	0.00
			6186418.42	2228798.76	8.00	0.00
			6186415.85	2228790.04	8.00	0.00
			6186413.38	2228781.29	8.00	0.00
			6186409.84	2228768.13	8.00	0.00
			6186407.58	2228759.30	8.00	0.00
			6186406.49	2228754.89	8.00	0.00
			6186405.42	2228750.47	8.00	0.00
			6186404.37	2228746.05	8.00	0.00
			6186403.34	2228741.62	8.00	0.00
			6186402.34	2228737.19	8.00	0.00
		+ +	6186401.36	2228732.75	8.00	0.00
			6186400.40	2228728.31	8.00	0.00
		+ +			8.00	
			6186398.55	2228723.80	8.00	0.00
			+			0.00
			6186397.66	2228714.95	8.00	0.00
		+	6186396.79	2228710.48	8.00	0.00
			6186395.94	2228706.02	8.00	0.00
			6186395.12	2228701.55	8.00	0.00
			6186394.32	2228697.07	8.00	0.00
			6186393.54	2228692.59	8.00	0.00
			6186392.78	2228688.11	8.00	0.00
			6186392.05	2228683.63	8.00	0.00
			6186391.34	2228679.14	8.00	0.00
			6186390.65	2228674.64	8.00	0.00
			6186389.99	2228670.15	8.00	0.00
			6186389.35	2228665.65	8.00	0.00
			6186388.73	2228661.14	8.00	0.00
			6186388.13	2228656.64	8.00	0.0
			6186387.56	2228652.13	8.00	0.00
				2228647.61	8.00	
				2228643.10	8.00	0.0
		+ +		2228638.58	8.00	
		+ +		2228634.06	8.00	
		+ +				
	+ +	+ +		2228629.54	8.00	
		+ +		2228625.01	8.00	
	1	+ +		2228620.49	8.00	
	1	+		2228615.96	8.00	
		+		2228611.43	8.00	
		+ +		2228606.90	8.00	
		\perp		2228602.36	8.00	
			6186382.45	2228597.83	8.00	0.00
			6186382.17	2228593.29	8.00	0.00
			6186381.92	2228588.75	8.00	0.00
			6186381.69	2228584.21	8.00	0.00
			6186381.48	2228579.67	8.00	0.00
			6186381.29	2228575.13	8.00	0.00
				2228570.58	8.00	
				2228566.04	8.00	
		+ +		2228561.50	8.00	
		+ +		2228556.95	8.00	
	1		0100300.78			
	-		C10C2C2 7:			
			6186380.71		8.00	
			6186380.66	2228547.86	8.00	0.0
				2228547.86		0.0
			6186380.66 6186380.64	2228547.86	8.00	0.00
			6186380.66 6186380.64	2228547.86 2228543.32 2228538.77	8.00 8.00	0.00
			6186380.66 6186380.64 6186380.64	2228547.86 2228543.32 2228538.77 2228534.22	8.00 8.00 8.00	0.00 0.00 0.00
			6186380.66 6186380.64 6186380.64 6186380.66 6186380.70	2228547.86 2228543.32 2228538.77 2228534.22	8.00 8.00 8.00 8.00	0.00 0.00 0.00

	ight	<u> </u>	Coordinat		Cr
Begin	End	(fe)	y (f+)	Z (64)	Ground
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
		6186380.97	2228515.95	8.00	0.00
		6186381.11 6186381.27	2228511.52 2228506.96	8.00	0.00
		6186381.45	2228502.42	8.00	0.00
		6186381.65	2228497.88	8.00	0.00
		6186381.88	2228493.34	8.00	0.00
		6186382.13	2228488.80	8.00	0.00
		6186382.41	2228484.26	8.00	0.00
		6186382.70	2228479.72	8.00	0.00
		6186383.02	2228475.19	8.00	0.00
		6186383.37	2228470.66	8.00	0.00
		6186383.73	2228466.13	8.00	0.00
		6186384.12	2228461.60	8.00	0.00
		6186384.53	2228457.07	8.00	0.00
		6186384.96	2228452.54	8.00	0.00
		6186385.42	2228448.02	8.00	0.00
		6186385.90	2228443.50	8.00	0.00
		6186386.40	2228438.98	8.00	0.00
		6186386.93	2228434.47	8.00	0.00
		6186387.48	2228429.96	8.00	0.00
		6186388.05	2228425.45	8.00	0.00
+ +		6186388.64	2228420.94	8.00	0.00
+ +		6186389.26	2228420.94	8.00	0.00
+ +		6186389.90	2228411.93	8.00	0.00
+ +		6186390.56	2228407.44	8.00	0.00
+ +		6186391.24	2228402.93	8.00	0.00
		6186391.88	2228398.89	8.00	0.00
		6186392.75	2228393.46	8.00	0.00
		6186393.79	2228386.89	8.00	0.00
		6186216.05	2228358.64	8.00	0.00
		6186215.01	2228365.21	8.00	0.00
		6186214.11	2228370.84	8.00	0.00
		6186213.38	2228375.50	8.00	0.00
		6186212.56	2228373.30	8.00	0.00
		6186211.76	2228386.27	8.00	0.00
		6186211.00	2228391.67	8.00	0.00
		6186210.26	2228397.08	8.00	0.00
		6186209.55	2228402.48	8.00	0.00
		6186208.86	2228407.90	8.00	0.00
		6186208.20	2228413.31	8.00	0.00
		6186207.57	2228413.31	8.00	0.00
		6186206.97	2228424.15	8.00	0.00
		6186206.48	2228428.77	8.00	0.00
		6186145.64	2228882.34	8.00	0.00
		6186144.49	2228921.31	8.00	0.00
		6186141.50	2228960.18	8.00	0.00
		6186136.68	2228998.86	8.00	0.00
		6185962.31	2228793.69	8.00	0.00
		1	2228784.59	8.00	0.00
		6185949.64	2228774.77	8.00	0.0
+ +			2228774.77	8.00	0.0
		6185941.57	2228753.47	8.00	0.0
+ +		6185939.41	2228742.27	8.00	0.00
+ +		6185938.53	2228742.27	8.00	0.00
+ +		6185938.96		8.00	0.00
		6185940.68	2228713.30	8.00	0.00
		6185943.68	2228697.21	8.00	0.0
+ +		6185947.91	2228686.62	8.00	0.0
+ +		6185963.19	2228653.90	8.00	0.0
		6185945.07	2228645.43	8.00	0.0
		6185919.79	2228699.55	8.00	0.0
			2228701.44	8.00	0.0
		6185917.58	2228703.21	8.00	0.0
		6185916.19		8.00	0.0
		6185914.64	2228706.32	8.00	0.0
		6185912.94	2228707.61	8.00	0.0
		6185911.10	2228708.72	8.00	0.0
		6185909.16		8.00	0.0
		6185907.14	2228703.03	8.00	0.0
+ +		6185905.05	2228710.33	8.00	0.0
+ +		6185903.03		8.00	
	1 1	0103302.92			0.0
+ +		6185000 70			
		6185900.78	2228711.07	8.00	
		6185898.65	2228710.86	8.00	0.0
		6185898.65 6185896.55	2228710.86 2228710.42	8.00 8.00	0.0
		6185898.65	2228710.86	8.00	0.0

Name	Heig		ght		Coordinat	es	C= 1	
	Begin		End	х	У	z	Ground	
	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)	
				6185888.98	2228706.55	8.00	0.00	
				6185887.40	2228705.10	8.00	0.00	
				6185885.99	2228703.49	8.00	0.00	
				6185833.12	2228752.72	8.00	0.00	
				6185836.97	2228758.18	8.00	0.00	
				6185840.18	2228764.03	8.00	0.00	
				6185842.72	2228770.21	8.00	0.00	
		_		6185844.56	2228776.63	8.00	0.00	
				6185845.68	2228770.03	8.00	0.00	
		_			2228789.88			
		_		6185846.06		8.00	0.00	
				6185845.69	2228796.55	8.00	0.00	
				6185844.59	2228803.14	8.00	0.00	
		_		6185842.76	2228809.56	8.00	0.00	
				6185840.23	2228815.74	8.00	0.00	
				6185837.03	2228821.60	8.00	0.00	
				6185833.19	2228827.07	8.00	0.00	
				6185795.86	2228874.46	8.00	0.00	
				6185825.68	2228897.94	8.00	0.00	
				6185829.22	2228893.91	8.00	0.00	
				6185833.17	2228890.29	8.00	0.00	
				6185837.49	2228887.10	8.00	0.00	
				6185842.13	2228884.40	8.00	0.00	
				6185847.02	2228882.21	8.00	0.00	
				6185852.13	2228880.56	8.00	0.00	
				6185857.38	2228879.46	8.00	0.00	
				6185862.72	2228878.93	8.00	0.00	
				6185868.08	2228878.98	8.00	0.00	
			 	6185873.41	2228879.60	8.00	0.00	
				6185878.64	2228880.79	8.00	0.00	
		_		6185883.72	2228882.54	8.00	0.00	
		_		6185888.58	2228884.81			
				-		8.00	0.00	
		_		6185893.16	2228887.60	8.00	0.00	
				6185897.42	2228890.86	8.00	0.00	
				6186035.81	2229009.01	8.00	0.00	
		_		6186113.13	2229106.78	8.00	0.00	
				6186105.27	2229132.34	8.00	0.00	
CONSTRUCTION	8.00	а		6187050.65	2230673.43	8.00	0.00	
				6187053.15	2230673.51	8.00	0.00	
				6187051.78	2230684.50	8.00	0.00	
				6187058.61	2230695.06	8.00	0.00	
				6187057.92	2230695.59	8.00	0.00	
				6187057.40	2230695.98	8.00	0.00	
				6187057.03	2230696.26	8.00	0.00	
				6187056.88	2230696.36	8.00	0.00	
				6187056.35	2230696.74	8.00	0.00	
				6187055.82	2230697.12	8.00	0.00	
				6187055.29	2230697.49	8.00	0.00	
				6187054.74	2230697.86	8.00	0.00	
		_			2230698.20	8.00	0.00	
		-	 		2230698.20	8.00	0.00	
			\vdash		2230698.93	8.00	0.00	
		_	-		2230699.27	8.00	0.00	
					2230699.61	8.00	0.00	
		_			2230699.66	8.00	0.00	
		_		+	2230699.95	8.00	0.00	
			. 1	6187050.82	2230700.28	8.00	0.00	
			-					
					2230700.61	8.00		
				6187049.65	2230700.61 2230700.93	8.00 8.00	0.00	
				6187049.65	2230700.61			
				6187049.65 6187049.07	2230700.61 2230700.93	8.00	0.00	
				6187049.65 6187049.07 6187048.48	2230700.61 2230700.93 2230701.25	8.00 8.00	0.00 0.00 0.00	
				6187049.65 6187049.07 6187048.48 6187047.88	2230700.61 2230700.93 2230701.25 2230701.56	8.00 8.00 8.00	0.00 0.00 0.00 0.00	
				6187049.65 6187049.07 6187048.48 6187047.88 6187047.28	2230700.61 2230700.93 2230701.25 2230701.56 2230701.86	8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00	
				6187049.65 6187049.07 6187048.48 6187047.88 6187047.28 6187046.68	2230700.61 2230700.93 2230701.25 2230701.56 2230701.86 2230702.16	8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00	
				6187049.65 6187049.07 6187048.48 6187047.88 6187047.28 6187046.68 6187046.52	2230700.61 2230700.93 2230701.25 2230701.56 2230701.86 2230702.16 2230702.46	8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00 0.00	
				6187049.65 6187049.07 6187048.48 6187047.88 6187047.28 6187046.68 6187046.52 6187046.06	2230700.61 2230700.93 2230701.25 2230701.56 2230701.86 2230702.16 2230702.46 2230702.53 2230702.75	8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00	
				6187049.65 6187049.07 6187048.48 6187047.88 6187047.28 6187046.68 6187046.52 6187046.06 6187045.41	2230700.61 2230700.93 2230701.25 2230701.56 2230701.86 2230702.16 2230702.46 2230702.53 2230702.75 2230703.05	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	
				6187049.65 6187049.07 6187048.48 6187047.28 6187047.28 6187046.68 6187046.52 6187046.06 6187045.41 6187044.41	2230700.61 2230700.93 2230701.25 2230701.56 2230701.86 2230702.16 2230702.46 2230702.53 2230702.75 2230703.05 2230703.52	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	
				6187049.65 6187049.07 6187048.48 6187047.28 6187047.28 6187046.68 6187046.52 6187045.41 6187044.41 6187043.62	2230700.61 2230700.93 2230701.25 2230701.56 2230702.86 2230702.46 2230702.53 2230702.75 2230703.05 2230703.88	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	
				6187049.65 6187049.07 6187048.48 6187047.28 6187046.65 6187046.52 6187046.54 6187045.41 6187044.41 6187043.62 6187043.62	2230700.61 2230700.93 2230701.25 2230701.56 2230701.16 2230702.16 2230702.53 2230702.75 2230703.05 2230703.52 2230703.88 2230704.16	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	
				6187049.65 6187049.07 6187048.48 6187047.28 6187046.68 6187046.66 6187045.41 6187044.41 6187043.62 6187043.00 6187042.38	2230700.61 2230700.93 2230701.25 2230701.56 2230702.16 2230702.46 2230702.53 2230702.75 2230703.05 2230703.52 2230703.88 2230704.43	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	
				6187049.65 6187049.07 6187048.48 6187047.28 6187047.28 6187046.68 6187046.52 6187045.41 6187043.41 6187043.00 6187043.30 6187042.38 6187041.78	2230700.61 2230700.93 2230701.25 2230701.86 2230702.16 2230702.46 2230702.53 2230702.75 2230703.05 2230703.05 2230703.88 2230704.16 2230704.43	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	
				6187049.65 6187049.07 6187048.48 6187047.28 6187047.28 6187046.68 6187046.52 6187045.41 6187043.41 6187043.00 6187043.30 6187042.38 6187041.78	2230700.61 2230700.93 2230701.25 2230701.56 2230702.16 2230702.46 2230702.53 2230702.75 2230703.05 2230703.52 2230703.88 2230704.43	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	
				6187049.65 6187049.07 6187048.48 6187047.28 6187047.28 6187046.68 6187046.52 6187045.41 6187044.41 6187043.00 6187042.38 6187041.78 6187041.78	2230700.61 2230700.93 2230701.25 2230701.86 2230702.16 2230702.46 2230702.53 2230702.75 2230703.05 2230703.05 2230703.88 2230704.16 2230704.43	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	
				6187049.65 6187049.07 6187048.48 6187047.28 6187047.28 6187046.68 6187046.52 6187045.41 6187044.41 6187043.00 6187042.38 6187041.78 6187041.78	2230700.61 2230700.93 2230701.25 2230701.56 2230702.16 2230702.46 2230702.75 2230703.05 2230703.05 2230703.82 2230704.16 2230704.43 2230704.48	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	
				6187049.65 6187049.07 6187048.48 6187047.88 6187046.68 6187046.52 6187046.06 6187044.41 6187043.62 6187042.38 6187041.78 6187041.33 6187041.33	2230700.61 2230700.93 2230701.25 2230701.86 2230702.16 2230702.46 2230702.75 2230703.05 2230703.52 2230704.16 2230704.43 2230704.48 2230704.87 2230704.88	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00	
				6187049.65 6187049.07 6187048.48 6187047.28 6187046.65 6187046.65 6187046.41 6187043.62 6187043.62 6187043.62 6187043.30 6187043.30 6187043.30 6187043.30 6187043.30 6187043.30 6187043.30	2230700.61 2230700.93 2230701.25 2230701.86 2230702.16 2230702.46 2230702.75 2230703.05 2230703.52 2230704.16 2230704.43 2230704.48 2230704.87 2230704.88	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	

Name		ght		Coordinat		C = a · · · · ·
	Begin (ft)	End (ft)	(ft)	y (ft)	z (ft)	Ground (ft)
	(π)	(π)	1			
	+ +		6187037.92 6187037.27	2230706.16 2230706.39	8.00	0.00
			6187036.62	2230706.59	8.00	0.00
			6187035.96	2230706.80	8.00	0.00
			6187035.31	2230700.81	8.00	0.00
			6187035.15	2230707.02	8.00	0.00
			+			
			6187034.65	2230707.22	8.00	0.00
			6187033.98	2230707.41	8.00	0.00
			6187033.32	2230707.59	8.00	0.00
			6187032.65	2230707.77	8.00	0.00
			6187031.98	2230707.94	8.00	0.00
			6187031.31	2230708.11	8.00	0.00
			6187030.64	2230708.26	8.00	0.00
			6187029.96	2230708.39	8.00	0.00
			6187029.28	2230708.56	8.00	0.00
			6187029.17	2230708.60	8.00	0.00
			6187028.61	2230708.70	8.00	0.00
			6187027.92	2230708.82	8.00	0.00
			6187027.24	2230708.92	8.00	0.00
			6187026.55	2230709.03	8.00	0.00
			6187025.87	2230709.12	8.00	0.00
			6187025.18	2230709.21	8.00	0.00
			6187024.49	2230709.29	8.00	0.00
			6187023.80	2230709.36	8.00	0.00
			6187023.11	2230709.43	8.00	0.00
			6187023.06	2230709.43	8.00	0.00
			6187022.42	2230709.49	8.00	0.00
			6187021.72	2230709.54	8.00	0.00
			6187021.00	2230709.59	8.00	0.00
			6187020.01	2230709.64	8.00	0.00
			6187018.97	2230709.68	8.00	0.00
			6187018.28	2230709.70	8.00	0.00
			6187017.59	2230709.71	8.00	0.00
			6187016.90	2230709.72	8.00	0.00
			6187016.30	2230709.66	8.00	0.00
			6187016.35	2230709.99	8.00	0.00
			6187004.82	2230714.05	8.00	0.00
			6186994.88	2230718.41	8.00	0.00
			6186984.42	2230726.43	8.00	0.00
			6186983.28	2230733.16	8.00	0.00
			6186973.74	2230751.83	8.00	0.00
			6186966.02	2230765.40	8.00	0.00
			6186955.26	2230778.08	8.00	0.00
			6186942.08	2230787.29	8.00	0.00
			6186931.72	2230787.79	8.00	0.00
			6186923.88	2230784.82	8.00	0.00
			6186919.30	2230780.28	8.00	0.00
			6186914.17	2230777.30	8.00	0.00
				2230777.50	8.00	0.00
			6186915.09	2230778.33	8.00	
	+ +					0.00
	+ +			2230794.83	8.00	0.00
	+		6186911.39	2230799.31 2230806.13	8.00	0.00
	+ +		6186905.38			0.00
	+		6186887.95	2230817.09	8.00	0.00
	+ +		6186879.00		8.00	0.0
	+ +		6186876.42	2230831.83	8.00	0.0
	+ +		6186871.69	2230835.01	8.00	0.0
			+	2230836.41	8.00	0.0
	+ +		6186857.12	2230843.97	8.00	0.0
	+			2230854.67	8.00	0.0
			6186841.58	2230859.78	8.00	0.0
	+ +			2230841.76	8.00	0.0
	+		6186833.70	2230836.68	8.00	0.0
			6186833.62		8.00	0.0
	+		6186833.53	2230826.64	8.00	0.0
	\perp		6186833.19	2230821.61	8.00	0.0
			6186833.27	2230816.60	8.00	0.0
	\perp		6186833.72	2230811.62	8.00	0.0
			6186834.09	2230807.13	8.00	0.0
			6186833.82	2230806.62	8.00	0.0
			6186830.48	2230801.39	8.00	0.0
			6186828.09	2230796.22	8.00	0.0
			6186828.89	2230791.26	8.00	0.0
			6186830.43	2230786.35	8.00	0.0
			6186832.58		8.00	0.00
				2230776.61	8.00	0.00
			6186834.65	2230770.011	0.00	

Name		eight		Coordinat	es		
	Begin	End	х	У	z	Ground	
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
			6186838.67	2230766.85	8.00	0.00	
			6186838.88	2230761.86	8.00	0.00	
			6186838.87	2230756.84	8.00	0.00	
			6186839.29	2230751.86	8.00	0.00	
			6186841.11	2230746.97	8.00	0.00	
			6186842.86	2230742.08	8.00	0.00	
			6186842.26	2230739.31	8.00	0.00	
			6186841.77	2230736.99	8.00	0.00	
			6186838.01	2230731.73	8.00	0.00	
			6186831.66	2230727.95	8.00	0.00	
			6186828.23	2230729.61	8.00	0.00	
			6186825.60	2230731.09	8.00	0.00	
			6186821.47	2230734.09	8.00	0.00	
			6186819.02	2230735.60	8.00	0.00	
			6186815.77	2230737.08	8.00	0.00	
			6186811.89	2230737.79	8.00	0.00	
			6186805.71	2230737.34	8.00	0.00	
			6186806.07	2230737.57	8.00	0.00	
			6186807.23	2230738.19	8.00	0.00	
	+ +	+ +	6186807.59	2230738.36	8.00	0.00	
	+	+ +	6186819.15 6186820.63	2230743.78	8.00	0.00	
				2230744.66	8.00		
	+ +	+ +	6186820.54	2230744.90 2230745.43	8.00	0.00	
	+	+ +	6186820.36		8.00 8.00	0.00	
	+ +	+ +	6186819.98 6186819.68	2230746.68	8.00	0.00	
	+ +	+ +		2230747.96 2230749.25		0.00	
	+ +	+ +	6186819.47 6186819.37	2230749.25	8.00 8.00	0.00	
			6186818.94	2230755.16	8.00	0.00	
			6186818.92	2230755.54	8.00	0.00	
			6186818.87	2230755.34	8.00	0.00	
			6186818.87	2230756.88	8.00		
			6186818.88	2230730.88	8.00	0.00	
			6186818.84	2230761.43	8.00	0.00	
			6186818.17	2230762.48	8.00	0.00	
			6186818.16	2230764.11	8.00	0.00	
			6186816.19	2230768.90	8.00	0.00	
			6186814.23	2230768.90	8.00		
			6186812.14	2230778.25	8.00	0.00	
			6186811.95	2230778.70	8.00	0.00	
			6186811.49	2230778.70	8.00	0.00	
			6186811.35	2230773.32	8.00	0.00	
			6186809.81	2230785.27	8.00	0.00	
			6186809.57	2230785.27	8.00	0.00	
			6186809.27	2230787.36	8.00	0.00	
			6186809.14	2230788.09	8.00	0.00	
			6186808.35	2230793.05	8.00	0.00	
				2230793.60			
				2230794.91	8.00	0.00	
				2230796.22	8.00	0.00	
		+ +		2230797.52	8.00		
		+ +		2230797.32	8.00	0.00	
		+ +		2230800.12	8.00		
				2230801.39	8.00	0.00	
				2230802.64	8.00	0.00	
				2230803.87	8.00		
		+ +		2230804.60	8.00	0.00	
		+ +		2230809.77	8.00	0.00	
				2230810.23	8.00	0.00	
				2230811.39	8.00	0.00	
			_	2230812.10	8.00	0.00	
			6186813.35		8.00	0.00	
			6186813.31		8.00	0.00	
				2230816.31	8.00		
				2230821.32	8.00	0.00	
				2230821.61	8.00	0.00	
				2230822.92	8.00	0.00	
		+ +		2230822.96	8.00	0.00	
				2230827.50	8.00	0.00	
				2230831.99	8.00	0.00	
				2230836.97	8.00		
		+ +	6186813.74		8.00	0.00	
		+ +		2230837.38	8.00	0.00	
		+ +	6186814.08		8.00	0.00	
	+ +	+ +	6186815.10		8.00	0.00	
	+ +	+ +		2230845.67	8.00	0.00	
	+ +	+ +	6186815.77		8.00	0.00	
			0100013.//	2230048.18	0.00	U.00	

		Coordinates			
Begin	End	x	У	Z	Ground
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
		6186816.02	2230848.88	8.00	0.00
		6186822.89	2230866.90	8.00	0.00
		6186823.10	2230867.43	8.00	0.00
		6186823.64	2230868.62	8.00	0.00
		6186824.26	2230869.78	8.00	0.00
		6186824.95	2230870.89	8.00	0.00
		6186825.71	2230871.95	8.00	0.00
					0.00
					0.00
					0.00
					0.00
					0.00
		+			0.00
		+			0.00
		+			0.00
					0.00
		6186836.40	2230879.10	8.00	0.00
		6186837.68	2230879.39	8.00	0.00
		6186838.97	2230879.61	8.00	0.00
		6186840.27	2230879.73	8.00	0.00
		6186841.58	2230879.78	8.00	0.00
		6186842.89	2230879.73	8.00	0.00
		6186844.19	2230879.61	8.00	0.00
		6186845.48	2230879.39	8.00	0.00
		6186846.76	2230879.10	8.00	0.00
		6186848.01	2230878.72	8.00	0.00
		6186849.23	2230878.25	8.00	0.00
		6186850.42	2230877.71		0.00
		6186851 58	2230877 10		0.00
					0.00
		+			0.00
+					0.00
		+			0.00
		1			0.00
					0.0
					0.00
		+			0.00
		+			0.00
		6186875.84		8.00	0.00
		6186876.87	2230854.33	8.00	0.00
		6186878.12	2230853.95	8.00	0.00
		6186879.35	2230853.49	8.00	0.00
		6186880.54	2230852.95	8.00	0.00
		6186881.69	2230852.33	8.00	0.00
		6186882.80	2230851.64	8.00	0.0
		6186882.85	2230851.61	8.00	0.0
		6186887.58	2230848.43	8.00	0.0
		6186888.59	2230847.70	8.00	0.0
					0.0
+ +	+ +				0.0
+ +	+ +				0.00
+ +	+ +				0.00
1	+ +				
+ +	+ +				0.0
1	+ +				0.0
1	+				
+	+				0.0
	\perp				0.00
\perp	\perp				
		6186916.49	2230822.76	8.00	0.00
		6186917.55	2230821.99	8.00	0.00
		6186918.56	2230821.16	8.00	0.0
		6186919.52	2230820.27	8.00	0.0
				8.00	0.0
					0.0
					0.0
	+ +				0.0
+ +	+ +				0.0
+ +	+ +	+			
+ +	+ +				0.0
+	++				
				8.00	0.0
			2230807.77	8.00	0.0
		6186943.04	2230807.27	8.00	0.00
		6186943.39	2230807.25	8.00	0.00
		6186944.69	2230807.12	8.00	0.00
				8.00	0.0
1		1 2 2 3 3 7 3 . 3 3		5.00	0.0
	Begin		Begin	Begin End X Y	Begin End X Y Z

Name		eight		Coordinat	es	Grannel	
	Begin	End	x	У	Z	Ground	
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
			6186947.26	2230806.61	8.00	0.00	
			6186948.51	2230806.23	8.00	0.00	
			6186949.74	2230805.77	8.00	0.00	
			6186950.93	2230805.23	8.00	0.00	
			6186952.08	2230804.61	8.00	0.00	
			6186953.20	2230803.92	8.00	0.00	
			6186953.54	2230803.68	8.00	0.00	
			6186966.72	2230794.47	8.00	0.00	
			6186967.44	2230793.95	8.00	0.00	
			6186968.45	2230793.33	8.00	0.00	
			6186969.41	2230793.12	8.00	0.00	
			6186970.30	2230791.27	8.00	0.00	
			6186970.52	2230791.02	8.00	0.00	
			6186981.27	2230778.33	8.00	0.00	
			6186981.89	2230777.57	8.00	0.00	
			6186982.65	2230776.51	8.00	0.00	
			6186983.34	2230775.40	8.00	0.00	
			6186983.40	2230775.29	8.00	0.00	
			6186991.12	2230761.71	8.00	0.00	
			6186991.55	2230760.93	8.00	0.00	
			6187001.09	2230742.26	8.00	0.00	
			6187001.22	2230742.00	8.00	0.00	
			6187001.76	2230740.81	8.00	0.00	
			6187002.22	2230739.59	8.00	0.0	
			6187002.60	2230738.34	8.00	0.00	
			6187002.78	2230737.55	8.00	0.00	
		1	6187005.13	2230735.75	8.00	0.0	
			6187012.17	2230732.67	8.00	0.0	
			6187020.80	2230729.63	8.00	0.00	
			6187021.08	2230729.61	8.00	0.0	
			6187022.07	2230729.56	8.00	0.00	
			6187022.30	2230729.55	8.00		
			6187023.02	2230729.50	8.00	0.0	
						0.0	
			6187023.23	2230729.48	8.00	0.0	
		+	6187023.92	2230729.43	8.00	0.0	
			6187024.12	2230729.42	8.00	0.00	
			6187024.75	2230729.36	8.00	0.00	
			6187024.77	2230729.36	8.00	0.00	
			6187024.83	2230729.36	8.00	0.00	
			6187025.00	2230729.34	8.00	0.00	
			6187025.69	2230729.28	8.00	0.00	
			6187025.88	2230729.26	8.00	0.00	
			6187026.57	2230729.18	8.00	0.00	
			6187026.85	2230729.15	8.00	0.00	
			6187027.53	2230729.07	8.00	0.0	
			6187027.75	2230729.05	8.00	0.0	
			6187028.44	2230728.96	8.00	0.0	
			6187028.48	2230728.95	8.00	0.0	
				2230728.93	8.00		
				2230728.83	8.00	0.0	
		+ +		2230728.81	8.00		
	+ +	+ +		2230728.81	8.00		
	+ +	+ +		2230728.71			
		+ +			8.00		
	+ +	+ +		2230728.57	8.00		
	+ -	+ +		2230728.54	8.00	0.0	
	+ +	+		2230728.42	8.00		
	+	+	_	2230728.37	8.00	0.0	
	1	+		2230728.27	8.00		
	1	\perp		2230728.21	8.00		
		\perp		2230727.93	8.00		
			6187034.31	2230727.92	8.00	0.0	
			6187034.54	2230727.88	8.00	0.00	
			6187035.21	2230727.74	8.00	0.0	
			6187035.88	2230727.58	8.00	0.0	
			6187036.08	2230727.53	8.00	0.0	
			_	2230727.37	8.00		
				2230727.32	8.00		
		+ +		2230727.14	8.00	0.0	
	1	+ +		2230727.14	8.00		
		1					
					8.00	0.0	
			6187038.48			-	
			6187038.67	2230726.86	8.00		
			6187038.67				
			6187038.67 6187039.34	2230726.86	8.00	0.0	
			6187038.67 6187039.34	2230726.86 2230726.68 2230726.62	8.00 8.00	0.0	
			6187038.67 6187039.34 6187039.53 6187040.19	2230726.86 2230726.68 2230726.62	8.00 8.00 8.00	0.00	
			6187038.67 6187039.34 6187039.53 6187040.19 6187040.38	2230726.86 2230726.68 2230726.62 2230726.43	8.00 8.00 8.00 8.00	0.0	

	ght	V	Coordinat		Grann
Begin (ft)	End (ft)	(ft)	У (ft)	Z (ft)	Ground (ft)
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
		6187041.06	2230726.17	8.00	0.0
		6187041.24	2230726.12	8.00	0.0
		6187041.89	2230725.92	8.00	0.0
		6187042.08	2230725.86	8.00	0.0
		6187042.74	2230725.64	8.00	0.0
		6187042.93	2230725.58	8.00	0.0
		6187043.58	2230725.37	8.00	0.0
		6187043.70	2230725.33	8.00	0.0
		6187043.77	2230725.30	8.00	0.0
		6187044.42	2230725.08	8.00	0.0
		6187044.61	2230725.01	8.00	0.0
		6187045.26	2230724.78	8.00	0.0
		6187045.44	2230724.72	8.00	0.0
		6187046.09	2230724.72	8.00	0.0
		6187046.27	2230724.41	8.00	0.0
		6187046.91	2230724.17	8.00	0.0
		6187047.10	2230724.10	8.00	0.0
		6187047.74	2230723.85	8.00	0.0
		6187047.93	2230723.77	8.00	0.0
		6187048.40	2230723.58	8.00	0.0
		6187048.43	2230723.57	8.00	0.0
		6187048.80	2230723.42	8.00	0.0
 		6187048.99	2230723.35	8.00	0.0
		6187049.45	2230723.33	8.00	0.0
+ +		6187049.45		8.00	
			2230723.09		0.0
		6187050.19	2230722.84	8.00	0.0
		6187050.36	2230722.77	8.00	0.0
		6187050.98	2230722.50	8.00	0.0
		6187051.17	2230722.42	8.00	0.0
		6187051.78	2230722.14	8.00	0.0
		6187051.99	2230722.05	8.00	0.0
		6187052.78	2230721.68	8.00	0.0
		6187052.82	2230721.66	8.00	0.0
		6187053.82	2230721.20	8.00	0.0
		6187054.47	2230721.20	8.00	0.0
_		6187054.66	2230720.30	8.00	0.0
		6187055.12	2230720.59	8.00	0.0
		6187055.15	2230720.58	8.00	0.0
		6187055.30	2230720.50	8.00	0.0
		6187055.46	2230720.43	8.00	0.0
		6187056.07	2230720.13	8.00	0.0
		6187056.13	2230720.10	8.00	0.0
		6187056.24	2230720.04	8.00	0.0
		6187056.84	2230719.74	8.00	0.0
		6187057.02	2230719.65	8.00	0.0
		6187057.61	2230719.35	8.00	0.0
		6187057.79	2230719.26	8.00	0.0
		6187058.38			
			2230718.95	8.00	
+		6187058.55	2230718.85	8.00	0.0
		6187059.14	2230718.54	8.00	0.0
			2230718.44	8.00	
		6187059.90	2230718.12	8.00	0.0
		6187060.07	2230718.03	8.00	0.0
		6187060.65	2230717.70	8.00	0.0
		6187060.82	2230717.60	8.00	0.0
		6187061.39	2230717.27	8.00	0.0
		6187061.56	2230717.17	8.00	0.0
		6187062.05	2230716.88	8.00	0.0
		6187062.07		8.00	0.0
 		6187062.14	2230716.83	8.00	0.0
+ +		6187062.30	2230716.74	8.00	0.0
+ +			2230716.74		
+ +				8.00	0.0
+		6187063.03	2230716.29	8.00	0.0
			2230715.95	8.00	
\perp		6187063.78	2230715.83	8.00	0.0
		6187064.53	2230715.36	8.00	0.0
		6187064.70	2230715.24	8.00	0.0
 \perp	oxdot	6187065.09	2230714.99	8.00	0.0
		6187065.22	2230714.91	8.00	0.0
		6187065.74	2230714.56	8.00	0.0
+ +		6187065.86	2230714.49	8.00	0.0
+ +		6187065.91	2230714.45		
+ +				8.00	0.0
		6187066.46		8.00	0.0
		6187066.70	2230713.92	8.00	0.0
		6187067.24	2230713.55	8.00	0.0

Name	Heig		Height		ght		Coordinat	es	
	Begin	_	End	х	У	z	Ground		
	(ft)	Ĺ	(ft)	(ft)	(ft)	(ft)	(ft)		
		L		6187068.07	2230712.95	8.00	0.00		
		L		6187068.60	2230712.57	8.00	0.00		
				6187068.72	2230712.48	8.00	0.00		
		L		6187068.87	2230712.38	8.00	0.00		
		L		6187068.91	2230712.34	8.00	0.00		
				6187069.29	2230712.06	8.00	0.00		
		\vdash		6187069.42	2230711.96	8.00	0.00		
				6187069.94	2230711.57	8.00	0.00		
				6187070.06	2230711.48	8.00	0.00		
		L		6187070.75	2230710.95	8.00	0.00		
				6187070.79	2230710.93	8.00	0.00		
				6187071.80 6187072.75	2230710.10 2230709.20	8.00 8.00	0.00		
		-		6187073.65	2230709.20	8.00	0.00		
				6187074.48	2230708.23	8.00	0.00		
		H		6187075.24	2230707.24	8.00	0.00		
		_		6187075.93	2230705.06	8.00	0.00		
				6187076.55	2230703.00	8.00	0.00		
		H		6187077.09	2230703.31	8.00	0.00		
				6187077.55	2230701.49	8.00	0.00		
				6187077.93	2230700.24	8.00	0.00		
		Т		6187078.23	2230698.96	8.00	0.00		
				6187078.44	2230697.67	8.00	0.00		
		Т		6187078.57	2230696.37	8.00	0.00		
		Т		6187078.61	2230695.06	8.00	0.00		
				6187078.57	2230693.75	8.00	0.00		
		Г		6187078.44	2230692.45	8.00	0.00		
				6187078.23	2230691.16	8.00	0.00		
				6187077.93	2230689.89	8.00	0.00		
				6187077.55	2230688.63	8.00	0.00		
				6187077.09	2230687.41	8.00	0.00		
				6187076.55	2230686.22	8.00	0.00		
				6187075.93	2230685.06	8.00	0.00		
				6187075.40	2230684.20	8.00	0.00		
				6187072.52	2230679.75	8.00	0.00		
				6187072.99	2230675.98	8.00	0.00		
				6187073.10	2230674.82	8.00	0.00		
				6187073.15	2230673.51	8.00	0.00		
				6187073.10	2230672.20	8.00	0.00		
				6187072.97	2230670.90	8.00	0.00		
				6187072.76	2230669.61	8.00	0.00		
				6187072.46	2230668.33	8.00	0.00		
				6187072.08	2230667.08	8.00	0.00		
				6187071.62	2230665.86	8.00	0.00		
				6187071.08	2230664.66	8.00	0.00		
		L		6187070.48	2230663.53	8.00	0.00		
				6187065.79	2230665.21	8.00	0.00		
		H		6187059.10	2230668.20		0.00		
		\vdash			2230671.20 2230672.71	8.00 8.00			
CONSTRUCTION	8.00	2					0.00		
CONSTRUCTION	8.00	a			2230990.12 2230980.04	8.00 8.00	0.00		
		\vdash			2230980.04	8.00	0.00		
		H			2230978.26	8.00	0.00		
		H		+	2230948.64	8.00	0.00		
					2230882.87	8.00	0.00		
		H			2230882.87	8.00	0.00		
					2230761.44	8.00			
		H			2230717.13	8.00	0.00		
					2230678.57	8.00	0.00		
		Т			2230646.00	8.00	0.00		
					2230619.59	8.00	0.00		
		Г			2230609.56	8.00	0.00		
		Г			2230599.52	8.00	0.00		
					2230595.20	8.00	0.00		
					2230591.69	8.00	0.00		
		$\overline{}$			2230589.00	8.00	0.00		
				6186956.73	2230587.13	8.00	0.00		
					2230587.13 2230586.07	8.00 8.00			
				6186980.68			0.00		
				6186980.68 6187000.66	2230586.07 2230585.88	8.00 8.00	0.00		
				6186980.68 6187000.66 6187004.46	2230586.07 2230585.88 2230537.69	8.00	0.00		
				6186980.68 6187000.66 6187004.46 6187010.76	2230586.07 2230585.88 2230537.69 2230458.01	8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00		
				6186980.68 6187000.66 6187004.46 6187010.76 6187017.34	2230586.07 2230585.88 2230537.69 2230458.01 2230359.30	8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00		
				6186980.68 6187000.66 6187004.46 6187010.76 6187017.34 6187020.91	2230586.07 2230585.88 2230537.69 2230458.01 2230359.30 2230259.67	8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00		
				6186980.68 6187000.66 6187004.46 6187010.76 6187017.34 6187020.91 6187021.64	2230586.07 2230585.88 2230537.69 2230458.01 2230359.30 2230259.67	8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00		

	Begin (ft)		End (ft)	x (ft) 6186998.94 6186988.38 6186971.27 6186912.05 6186834.00 6186777.20 6186777.20 6186717.09 6186703.49 6186663.44 6186662.54 6186662.54	y (ft) 2230022.07 2229984.21 2229918.41 2229832.86 2229771.00 2229622.28 2229513.97 2229472.10 2229472.10 2229472.10 2229374.96 2229374.96	z (ft) 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.0	Ground (ft) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.
	(ft)		(ft)	6186998.94 6186988.38 6186971.27 6186941.00 6186912.05 6186833.09 6186777.20 6186754.91 6186703.49 6186660.14 6186663.44 6186662.54	2230022.07 2229984.21 2229918.41 2229832.86 2229771.00 2229731.10 2229622.28 2229513.97 2229472.10 2229400.55 2229374.96 2229342.33	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
				6186988.38 6186971.27 6186941.00 6186912.05 6186834.09 6186777.20 6186754.91 6186703.49 6186663.44 6186663.44 6186662.54	2229984.21 2229918.41 2229832.86 2229771.00 2229713.10 2229622.28 2229513.97 2229472.10 2229400.55 2229374.96 2229342.33	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
				6186971.27 6186941.00 6186912.05 6186833.09 6186834.40 6186777.20 6186754.91 6186703.49 6186663.44 6186663.44	2229918.41 2229832.86 2229771.00 2229713.10 2229622.28 2229513.97 2229472.10 2229400.55 2229374.96 2229342.33	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
				6186941.00 6186912.05 6186833.09 6186834.40 6186777.20 6186754.91 6186703.49 6186686.14 6186663.44 6186662.54	2229832.86 2229771.00 2229713.10 2229622.28 2229513.97 2229472.10 2229400.55 2229374.96 2229342.33	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00
				6186912.05 6186883.09 6186834.40 6186777.20 6186754.91 6186703.49 6186686.14 6186663.44 6186662.54	2229771.00 2229713.10 2229622.28 2229513.97 2229472.10 2229400.55 2229374.96 2229342.33	8.00 8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00 0.00
				6186883.09 6186834.40 6186777.20 6186754.91 6186717.09 6186703.49 6186686.14 6186663.44 6186662.54	2229713.10 2229622.28 2229513.97 2229472.10 2229400.55 2229374.96 2229342.33	8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00 0.00
				6186834.40 6186777.20 6186754.91 6186717.09 6186703.49 6186686.14 6186663.44 6186662.54	2229622.28 2229513.97 2229472.10 2229400.55 2229374.96 2229342.33	8.00 8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00
				6186777.20 6186754.91 6186717.09 6186703.49 6186686.14 6186663.44 6186662.54	2229513.97 2229472.10 2229400.55 2229374.96 2229342.33	8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00
				6186754.91 6186717.09 6186703.49 6186686.14 6186663.44 6186662.54	2229472.10 2229400.55 2229374.96 2229342.33	8.00 8.00 8.00 8.00	0.00 0.00 0.00
				6186717.09 6186703.49 6186686.14 6186663.44 6186662.54	2229400.55 2229374.96 2229342.33	8.00 8.00 8.00	0.00
				6186703.49 6186686.14 6186663.44 6186662.54	2229374.96 2229342.33	8.00 8.00	0.00
				6186686.14 6186663.44 6186662.54	2229342.33	8.00	
				6186663.44 6186662.54			0.00
				6186662.54	2229299.46	8.00	0.00
				+	2229297.68	8.00	0.00
				0100002.40	2229297.50	8.00	0.00
				6186459.52	2229297.00	8.00	0.00
				6186459.24	2229297.00	8.00	0.00
				6186458.49	2229297.00	8.00	0.00
		_		6186401.64	2229296.86	8.00	0.00
				6186267.86	2229296.52	8.00	0.00
		-		6186242.43	2229296.46	8.00	0.00
		-		6186141.75	2229296.46	8.00	0.00
				6186107.03	2229296.21	8.00	0.00
+		-		6186076.14	2229296.12	8.00	0.00
		-		6185937.75	2229663.50	8.00	0.00
-		H		6185852.64	2229889.47	8.00	0.00
-		\vdash		6185738.90	2230108.46	8.00	0.00
		-		6185567.93	2230108.46	8.00	0.00
				6185328.88	2230333.31	8.00	0.00
		_		6185333.38	2230716.51	8.00	0.00
		_		6185363.66	2230836.86	8.00	0.00
				6185589.89	2230991.02	8.00	0.00
		_		6185639.18	2231024.61	8.00	0.00
				6185661.15	2231024.01	8.00	0.00
				6185755.05	2231039.38	8.00	0.00
		_		6185755.35	2231079.37	8.00	0.00
				6185766.31	2231078.92	8.00	0.00
		_		6185767.31	2231062.84	8.00	0.00
		_		6185856.73	2231124.45	8.00	0.00
				6185857.00	2231124.64	8.00	0.00
				6185889.69	2231124.04	8.00	0.00
		_		6185945.42	2231140.31	8.00	0.00
				6185964.95	2231198.20	8.00	0.00
		_		6185978.44	2231193.88	8.00	0.00
				6185991.56	2231178.26	8.00	0.00
				6186000.93	2231162.64	8.00	0.00
		Т		6186014.68	2231144.52	8.00	0.00
					2231134.52		
					2231131.05	8.00	
		Н			2231122.35	8.00	0.00
				_	2231122.65	8.00	
		Т			2231117.03	8.00	
					2231106.41	8.00	0.00
		Г			2231094.54	8.00	0.00
		Г			2231085.16	8.00	0.00
					2231081.78	8.00	
					2231068.48	8.00	0.00
		Г			2231031.43	8.00	
		Г			2231015.09	8.00	0.00
CONSTRUCTION	8.00	а			2230990.12	8.00	
				6186215.57	2231015.09	8.00	0.00
				6186196.50	2231031.43	8.00	
		Г			2231068.48	8.00	0.00
					2231081.78	8.00	0.00
					2231085.16	8.00	0.00
					2231094.54	8.00	0.00
					2231106.41	8.00	0.00
		П			2231117.03	8.00	0.00
		Г			2231122.65	8.00	
					2231122.35	8.00	0.00
		Г			2231131.05	8.00	
		Т			2231134.52	8.00	0.00
					2231144.52	8.00	
				6186000.93		8.00	0.00
		Н			2231102.04	8.00	0.00
		-			2231178.20	8.00	0.00
		H	 	6185964.95		8.00	0.00

Name	Height				Coordinates				
	Begin		End		х	у	z	Ground	
	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)	
					6186224.84	2231375.29	8.00	0.00	
		Г		Г	6186253.97	2231346.80	8.00	0.00	
		Г		Г	6186256.36	2230994.04	8.00	0.00	

Urban Crossroads, Inc.