

Goodman Industrial Park Fontana III

NOISE IMPACT ANALYSIS CITY OF FONTANA

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12384-09 Noise Study



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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
ANSI	American National Standards Institute
Calveno	California Vehicle Noise
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
dBA	A-weighted decibels
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
I-10	Interstate 10
INCE	Institute of Noise Control Engineering
LA/ONT	Los Angeles/Ontario International Airport
L _{eq}	Equivalent continuous (average) sound level
L _{max}	Maximum level measured over the time interval
L _{min}	Minimum level measured over the time interval
mph	Miles per hour
PPV	Peak Particle Velocity
Project	Goodman Industrial Park Fontana III
REMEL	Reference Energy Mean Emission Level
RMS	Root-mean-square
UPRR	Union Pacific Railroad
VdB	Vibration Decibels

EXECUTIVE SUMMARY

Urban Crossroads, Inc. has prepared this noise study to determine the noise exposure and the necessary noise mitigation measures, if any, for the proposed Goodman Industrial Park Fontana III development ("Project"). The Project site is located north of Jurupa Avenue, between Cypress Avenue and Juniper Avenue, in the City of Fontana. The Project is proposed to consist of 1,118,460 square feet of warehousing (80%) and high-cube cold storage warehouse use (20%) across three buildings. This study has been prepared consistent with applicable City of Fontana noise standards, and significance criteria based on guidance provided by Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1) The significance criteria and analysis methodologies used in this report are also consistent with the *Scoping Agreement* prepared for the Project and approved by the City of Fontana. (2)

OFF-SITE TRAFFIC NOISE ANALYSIS

Traffic generated by the operation of the proposed Project will influence the traffic noise levels in surrounding off-site areas. To quantify the traffic noise increases on the surrounding off-site areas, the changes in traffic noise levels on 23 roadway segments surrounding the Project site were calculated based on the change in the average daily traffic (ADT) volumes. The traffic noise levels provided in this analysis are based on the traffic forecasts found in the *Goodman Industrial Park Fontana III Traffic Impact Analysis* prepared by Urban Crossroads, Inc. (3) To assess the offsite noise level impacts associated with the proposed Project, noise contour boundaries were developed for Existing, Opening Year 2022, and Horizon Year 2040 traffic conditions. The analysis shows that the unmitigated Project-related traffic noise level increases under all traffic scenarios will be *less than significant*.

OPERATIONAL NOISE ANALYSIS

Using reference noise levels to represent the potential noise sources within Goodman Industrial Park Fontana III site, this analysis estimates the Project-related operational (stationary-source) noise levels at the nearby receiver locations. The Project-related operational noise sources are expected to include roof-top air conditioning units, fire pump emergency diesel generators, parking lot vehicle movements, idling trucks, delivery truck activities, backup alarms, refrigerated containers or reefers, as well as loading and unloading of dry goods. The analysis shows that the unmitigated Project-related operational noise levels will satisfy the City of Fontana 70 dBA L_{eq} daytime and 65 dBA L_{eq} nighttime exterior noise level standards at all of the off-site noise-sensitive receiver locations. Project operational noise levels at all receiver locations, therefore, will result in *less than significant* noise impacts.

Moreover, the operational noise analysis provided in this report does not account for any additional barrier attenuation provided by any planned Project perimeter walls or noise barriers other than the Project building itself and existing noise barriers in the Project study area.



CONSTRUCTION NOISE ANALYSIS

Construction activities are expected to create temporary and intermittent high-level noise conditions at receivers surrounding the Project site. Using sample reference noise levels to represent the construction activities of the Goodman Industrial Park Fontana III site, this analysis estimates the Project-related construction noise levels at nearby sensitive receiver locations. Project construction noise levels are considered exempt if activities occur within the hours specified in the City of Fontana Municipal Code, Section 18-63(7) of 7:00 a.m. to 6:00 p.m. on weekdays and between the hours of 8:00 a.m. to 5:00 p.m. on Saturdays.

If Project construction activity occurs outside of the hours specified in the Municipal Code, noise levels shall satisfy the City of Fontana construction noise level thresholds of 70 dBA L_{eq} during the daytime hours and 65 dBA L_{eq} during the nighttime hours. At the time of this analysis, no nighttime Project construction activity was planned.

CONSTRUCTION VIBRATION ANALYSIS

At distances ranging from 30 to 847 feet from Project construction activity, construction vibration velocity levels are expected to approach 0.07 in/sec PPV. Based on the vibration standards used in this report, the unmitigated Project construction vibration levels will satisfy the 0.2 in/sec PPV threshold at all of the nearby sensitive receiver locations. Therefore, the vibration impacts due to Project construction are considered *less than significant*. Further, vibration levels at the site of the closest sensitive receiver are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating simultaneously adjacent to the Project site perimeter.

SUMMARY OF CEQA SIGNIFICANCE FINDINGS

The results of this Goodman Industrial Park Fontana III 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). (1). Table ES-1 shows the findings of significance for each potential noise and/or vibration impact under CEQA before and after any required mitigation measures described below.

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

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS



1 INTRODUCTION

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

1.1 SITE LOCATION

The proposed Goodman Industrial Park Fontana III Project is located north of Jurupa Avenue, between Cypress Avenue and Juniper Avenue, in the City of Fontana, as shown on Exhibit 1-A. The Project site is located roughly 4,500 feet south of Interstate 10 (I-10) and Union Pacific Railroad (UPRR) lines, and approximately 7.75 miles east of the Los Angeles/Ontario International Airport (LA/ONT).

Existing noise-sensitive uses in the Project study area include residential homes located north, south, east, and west of the Project site, Citrus High School northwest of the Project site, and St. Mary's Catholic Church located southwest of the Project site. Future sensitive receiver locations in the Project study area include the proposed South Fontana Sports Park adjacent to the northern Projects site boundary.

1.2 PROJECT DESCRIPTION

Exhibits 1-B and 1-C illustrate the interim and expansion site plans for the Project. As indicated on Exhibit 1-C, the buildout of the proposed Project is to consist of 1,118,460 square feet across three buildings:

- 894,768 square feet of warehousing (80% of the total square footage);
- 223,692 square feet of high-cube cold storage warehouse use (20% of the total square footage)

1.3 ANALYSIS SCENARIOS & APPROACH

A brief summary of Project-specific analysis scenarios and assumptions are provided below to describe the approach used in this report.

1.3.1 PROJECT SITE PLAN SCENARIOS

For the purpose of this report, the following scenarios are used to analyze potential operational (stationary-source) and construction impacts:

• <u>Scenario 1 – Interim Conditions</u>: This scenario refers to interim conditions (Exhibit 1-B) under which an existing residential receiver location, R11, located on Cactus Avenue will be bounded to the north, east, and south by the Project.



• <u>Scenario 2 – Expansion Conditions</u>: This scenario refers to Project buildout (expansion) conditions (Exhibit 1-C) under which the Project would expand into the area formerly represented by receiver location R11.

1.3.2 PROJECT OPERATIONAL NOISE SOURCES

At the time this noise analysis was prepared, the future tenants of the proposed Project were unknown. The on-site Project-related noise sources are expected to include: roof-top air conditioning units, fire pump emergency diesel generators, parking lot vehicle movements, idling trucks, delivery truck activities, backup alarms, refrigerated containers or reefers, as well as loading and unloading of dry goods. This noise analysis is intended to describe noise level impacts associated with the expected typical 24-hour operational activities at the Project site.

1.3.3 OFF-SITE TRAFFIC NOISE MODELING

Per the *Traffic Impact Analysis*, the Project is expected to generate a total of approximately 2,036 trip-ends per day (actual vehicles). (3) The Project trip generation includes 658 truck trip-ends per day from the proposed building within the Project site. 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: INTERIM SITE PLAN





EXHIBIT 1-C: EXPANSION SITE PLAN



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2 FUNDAMENTALS

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

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		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80		
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	M CLEANER AT 3m (10 ft) 70		SPEECH INTERFERENCE
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	CLEED
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		DISTURBANCE
QUIET SUBURBAN NIGHTTIME	LIBRARY	30		
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20	FAINT	
	BROADCAST/RECORDING STUDIO	10		NO EFFECT
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

EXHIBIT 2-A: TYPICAL NOISE LEVELS

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

2.1 RANGE OF NOISE

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



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

2.2 NOISE DESCRIPTORS

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

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 additions are made to account for the noise sensitive time periods during the evening and night hours when sound appears louder. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The City of Fontana relies on the 24-hour CNEL level to assess land use compatibility with transportation related noise sources.

2.3 SOUND PROPAGATION

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

2.3.1 GEOMETRIC SPREADING

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. (4)

2.3.2 GROUND ABSORPTION

The propagation path of noise from a highway to a receptor is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually





sufficiently accurate for distances of less than 200 ft. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receptor such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source. (6)

2.3.3 ATMOSPHERIC EFFECTS

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

2.3.4 SHIELDING

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

2.4 NOISE CONTROL

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

2.5 Noise Barrier Attenuation

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



2.6 LAND USE COMPATIBILITY WITH NOISE

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

2.7 COMMUNITY RESPONSE TO NOISE

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

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

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



EXHIBIT 2-B: NOISE LEVEL INCREASE PERCEPTION

2.8 EXPOSURE TO HIGH NOISE LEVELS

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

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

2.9 VIBRATION

Per the Federal Transit Administration (FTA) *Transit Noise Impact and Vibration Assessment* (11), vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions.



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

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

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





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

* RMS Vibration Velocity Level in VdB relative to 10⁻⁶ inches/second

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



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3 REGULATORY SETTING

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

3.1 STATE OF CALIFORNIA NOISE REQUIREMENTS

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared per guidelines adopted by the Governor's Office of Planning and Research. (12) The purpose of the Noise Element is to *limit the exposure of the community to excessive noise levels*. In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

3.2 STATE OF CALIFORNIA BUILDING STANDARDS

The 2016 State of California's Green Building Standards Code contains mandatory measures for non-residential building construction in Section 5.507 on Environmental Comfort. (13) These noise standards are applied to new construction in California for controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when non-residential structures are developed in areas where the exterior noise levels exceed 65 dBA CNEL, such as within a noise contour of an airport, freeway, railroad, and other areas where noise contours are not readily available. If the development falls within an airport or freeway 65 dBA CNEL noise contour, the combined sound transmission class (STC) rating of the wall and roof-ceiling assemblies must be at least 50. For those developments in areas where noise contours are not readily available, and the noise level exceeds 65 dBA L_{eq} for any hour of operation, a wall and roof-ceiling combined STC rating of 45, and exterior windows with a minimum STC rating of 40 are required (Section 5.507.4.1).

3.3 CITY OF FONTANA GENERAL PLAN NOISE ELEMENT

The City of Fontana General Plan was updated on November 13th, 2018. (14) To protect residents from the negative effect of "spillover" noise (Goal #10), the City of Fontana has identified the following policies in the General Plan Noise Element:



Policy

Residential land uses and areas identified as noise-sensitive shall be protected from excessive noise from non-transportation sources including industrial, commercial, and residential activities and equipment.

Actions

- A. Projects located in commercial areas shall not exceed stationary- source noise standards at the property line of proximate residential or commercial uses.
- B. Industrial uses shall not exceed commercial or residential stationary source noise standards at the most proximate land uses.
- *C.* Non-transportation noise shall be considered in land use planning decisions.
- D. Construction shall be performed as quietly as feasible when performed in proximity to residential or other noise sensitive land uses.

3.3.1 LAND USE COMPATIBILITY

While the General Plan provides background and noise fundamentals, it does not identify criteria to assess the impacts associated with off-site transportation-related noise impacts. Therefore, for this analysis, the transportation noise criteria are derived from standards contained in the California Office of Planning and Research (OPR) *General Plan Guidelines*.

The OPR land use/noise compatibility standards are used by many California cities and counties and specify the maximum noise levels allowable for new developments impacted by transportation noise sources. The OPR land use/noise compatibility criteria, found in Figure 2 of the *General Plan Guidelines, Appendix C: Noise Element Guidelines,* identify the criteria for industrial land uses such as the Project, as shown on Exhibit 3-A. When the unmitigated exterior noise levels approach 70 dBA CNEL Project land use is considered *normally acceptable*. With exterior noise levels range from 70 to 75 dBA CNEL, industrial land uses are considered *conditionally acceptable,* and with exterior noise levels greater than 75 dBA CNEL, they are considered *normally unacceptable.* For *normally unacceptable* land use, *new construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.* (15)

Land Use Category		Con	nmunity No L _{dn} or Ch				
	55	60	65	70	75	80	INTERPRETATION:
Residential - Low Density Single Family, Duplex, Mobile Homes		T		÷.	4		Normally Acceptable
Residential - Multi. Family		E.	Т				based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation
Transient Lodging - Motels, Hotels		T.	T	÷.	-	4	requirements.
Schools, Libraries, Churches, Hospitals, Nursing Homes				'n			Conditionally Acceptable New construction or development should be undertaken only after a detailed analysis of the noise reduction convirgements is mode and needed
Auditoriums, Concert Halls, Amphitheaters			P				noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning
Sports Arena, Outdoor Spectator Sports				P			will normally suffice.
Playgrounds, Neighborhood Parks							Normally Unacceptable New construction or development should generally be discouraged. If new construction or development does
Golf Courses, Riding Stables, Water Recreation, Cemeteries				Ē			proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Office Buildings, Business Commercial and Professional							Clearly Unacceptable
Industrial, Manufacturing, Utilities, Agriculture							New construction or development should generally not be undertaken.

EXHIBIT 3-A: LAND USE NOISE COMPATIBILITY CRITERIA

Source: OPR General Plan Guidelines, Appendix C: Noise Element Guidelines, Figure 2.

3.4 OPERATIONAL NOISE STANDARDS

To analyze noise impacts originating from a designated fixed location or private property such as the Goodman Industrial Park Fontana III Project, stationary-source (operational) noise such as the expected roof-top air conditioning units, fire pump emergency diesel generators, parking lot vehicle movements, idling trucks, delivery truck activities, backup alarms, refrigerated containers or reefers, as well as loading and unloading of dry goods are typically evaluated against standards established under a jurisdiction's Municipal Code. The City of Fontana noise control guidelines for determining and mitigating non-transportation or stationary noise source impacts from operations in neighboring residential areas are found in the Zoning and Development Code (Section 30-259), provided in Appendix 3.1. For industrial zoning districts, Section 30-259 indicates that *no person shall create or cause to be created any sound which exceeds the noise levels in this section as measured at the property line of any residentially zoned property.* The performance standards found in Section 30-259 limit the exterior noise level to 70 dBA L_{eq} during the daytime hours, and 65 dBA L_{eq} during the nighttime hours at sensitive receiver locations as shown on Table 3-1. (16)

TABLE 3-1: OPERATIONAL NOISE STANDARDS

Jurisdiction	Land Use	Time Period	Exterior Noise Levels (dBA L _{eq}) ²
City of	Desidential	Daytime	70
Fontana ¹	Residential	Nighttime	65

¹ Source: Section 30-259 of the City of Fontana Development Code (Appendix 3.1).

² L_{eq} represents a steady state sound level containing the same total energy as a time varying signal over a given sample period.

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

3.5 CONSTRUCTION NOISE STANDARDS

The City of Fontana has set restrictions to control noise impacts associated with the construction of the proposed Project. According to Section 18-63(b)(7), *Construction or repairing of buildings or structures,* construction activity is limited: *between the hours of 7:00 a.m. and 6:00 p.m. on weekdays and between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays except in the case of urgent necessity.* (17) Project construction noise levels are, therefore, considered exempt if activities occur within the hours specified in the City of Fontana Municipal Code, Section 18-63(7) of 7:00 a.m. to 6:00 p.m. on weekdays and between the hours of 8:00 a.m. to 5:00 p.m. on Saturdays. However, if activity occurs outside of these hours, the City of Fontana stationary-source (operational) noise level standards of 70 dBA L_{eq} during the daytime hours, and 65 dBA L_{eq} during the nighttime hours shall apply, previously discussed in Section 3.4.

3.6 CONSTRUCTION VIBRATION STANDARDS

To analyze vibration impacts originating from the operation and construction of the Goodman Industrial Park Fontana III, vibration-generating activities are typically evaluated against standards established under a City's Municipal Code. The City of Fontana Municipal Code, Section 30-183, indicates that operational vibration levels shall not *create or cause to be created any activity that causes a vibration that can be felt beyond the property line with or without the aid of an instrument*. (17) For analysis purposes, a peak-particle-velocity (PPV) vibration threshold of 0.2 in/sec PPV is used to determine perception consistent with the City of Fontana Municipal Code requirements based on guidance provided by the Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual. (11)

4 SIGNIFICANCE CRITERIA

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

- A. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- B. Generation of excessive ground-borne vibration or ground-borne noise levels?
- C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

While the City of Fontana 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

Based on the Los Angeles/Ontario International Airport Land Use Compatibility Plan (LA/ONT ALUCP) future airport noise level contours, provided in Map 2-3 of the LA/ONT ALUCP, the Project site is currently located within what Table 2-3 of the LA/ONT ALUCP indicates is considered the *normally compatible* 60 to 65 dBA CNEL noise level contour boundaries for the Project's land use. The Project site is also not located within the vicinity of a private airstrip. As such, the Project site would not be exposed to excessive noise levels from airport operations, and therefore, impacts are considered *less than significant*, and no further noise analysis is conducted in relation to Guideline C.

4.2 SIGNIFICANCE CRITERIA SUMMARY

Consistent with guidance provided by the City of Fontana, the following thresholds are used in this analysis to evaluate potential impacts. (18) Noise impacts, therefore, shall be considered significant if any of the following occur as a direct result of the proposed development. Table 4-1 shows the significance criteria summary matrix.

OFF-SITE TRAFFIC NOISE

- When off-site traffic noise levels, without or with the Project, at existing and future noise-sensitive land uses (e.g. residential, schools, churches, etc.) exceed the City of Fontana General Plan Noise and Safety Element, Goal 8, Action A 65 dBA CNEL standard, and the Project creates a community noise level increase of greater than 3 dBA CNEL.
- When off-site traffic noise levels, without or with the Project, at existing and future non-noisesensitive land uses (e.g. industrial, etc.) exceed the OPR General Plan Guidelines, Appendix C:



Noise Element Guidelines, normally acceptable 70 dBA CNEL noise level criteria and the Project creates a barely perceptible 3 dBA CNEL or greater Project-related noise level increase.

OPERATIONAL NOISE

If operational (stationary-source) noise levels exceed the exterior 70 dBA L_{eq} daytime or 65 dBA L_{eq} nighttime noise level standards at adjacent land uses in the City of Fontana (City of Fontana Municipal Code, Chapter 30 Zoning and Development Code, Section 30-259), and the Project creates a community noise level increase of greater than 3 dBA L_{eq}.

OPERATIONAL VIBRATION

• If long-term Project generated operational vibration levels *create or cause to be created any activity that causes a vibration that can be felt beyond the property line with or without the aid of an instrument* (City of Fontana Municipal Code, Section 30-183). For analysis purposes, the peak-particle-velocity (PPV) vibration threshold of 0.2 in/sec PPV is used to determine perception consistent with the City of Fontana Municipal Code requirements (Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual).

CONSTRUCTION NOISE

- Project construction noise levels are considered exempt if activities occur within the hours specified in the City of Fontana Municipal Code, Section 18-63(7) of 7:00 a.m. to 6:00 p.m. on weekdays and between the hours of 8:00 a.m. to 5:00 p.m. on Saturdays.
- If Project construction activities occur outside of the hours specified above:
 - and Project construction noise levels would exceed the exterior 70 dBA L_{eq} daytime or 65 dBA L_{eq} nighttime noise level standards at adjacent land uses in the City of Fontana (City of Fontana Municipal Code, Chapter 30 Zoning and Development Code, Section 30-259);
 - $\circ~$ and the Project creates a community noise level increase of greater than 3 dBA $L_{eq}.$

CONSTRUCTION VIBRATION

• If short-term Project construction vibration levels exceed the Caltrans human annoyance vibration threshold of 0.2 in/sec PPV at adjacent uses (Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual). The FTA threshold is used to quantify potential impacts related to perception of short-term construction-related vibration levels.

Analusia	Receiving	Condition(s)	Significa	nce Criteria	
Analysis	Land Use	Condition(s)	Daytime	Nighttime	
Off-Site	Noise- Sensitive	If off-site traffic noise is > 65 dBA CNEL	≥ 3 dBA CNEL Project increase		
Traffic Noise ¹	Non-Noise- Sensitive	If off-site traffic noise is > 70 dBA CNEL	≥ 3 dBA CNEL	Project increase	
Operational Noise ²		If operational noise is > 70 dBA L _{eq} (daytime) and/or > 65 dBA L _{eq} (nighttime):	\geq 3 dBA L _{eq} Project increase		
Operational Vibration ³		If operational vibration exceeds:	0.2 in/sec PPV		
Adjacent Uses Noise ⁴		If construction occurs outside of permitted hours, and construction noise is > 70 dBA L _{eq} (daytime) and/or > 65 dBA L _{eq} (nighttime):	≥ 3 dBA L _{eq} F	Project increase	
Construction Vibration ⁵		If construction vibration exceeds:	0.2 in/sec PPV		

TABLE 4-1: SIGNIFICANCE CRITERIA SUMMARY

¹ Based on the City of Fontana General Plan Safety and Noise Element, Office of Planning and Research guidelines.

² Based on Section 30-259 of the City of Fontana Municipal Code.

³ Based on Section 30-183 of the City of Fontana Municipal Code and the Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.

⁴ Based on Sections 18-63(7) and 30-259 of the City of Fontana Municipal Code.

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

"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, nine 24-hour noise level measurements were taken at receiver locations in the Project study area. The receiver locations were selected to describe and document the existing noise environment within the Project study area. Exhibit 5-A provides the boundaries of the Project study area and the noise level measurement locations. To fully describe the existing noise conditions, noise level measurements were collected by Urban Crossroads, Inc. on Tuesday, March 26th, and Wednesday, April 10th, 2019. Appendix 5.1 includes study area photos.

5.1 MEASUREMENT PROCEDURE AND CRITERIA

To describe the existing noise environment, the hourly noise levels were measured during typical weekday conditions over a 24-hour period. By collecting individual hourly noise level measurements, it is possible to describe the daytime and nighttime hourly noise levels and calculate the 24-hour CNEL. The long-term noise readings were recorded using Piccolo Type 2 integrating sound level meter and dataloggers. The Piccolo sound level meters were calibrated using a Larson-Davis calibrator, Model CAL 150. All noise meters were programmed in "slow" mode to record noise levels in "A" weighted form. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. (19)

5.2 NOISE MEASUREMENT LOCATIONS

The long-term noise level measurements were positioned as close to the nearest sensitive receiver locations as possible to assess the existing ambient hourly noise levels surrounding the Project site. Both Caltrans and the FTA recognize that it is not reasonable to collect noise level measurements that can fully represent any part of a private yard, patio, deck, or balcony normally used for human activity when estimating impacts for new development projects. This is demonstrated in the Caltrans general site location guidelines which indicate that, *sites must be free of noise contamination by sources other than sources of interest. Avoid sites located near sources such as barking dogs, lawnmowers, pool pumps, and air conditioners unless it is the express intent of the analyst to measure these sources. (4) Further, FTA guidance states, that it is not necessary nor recommended that existing noise exposure be determined by measuring at every noise-sensitive location in the project area. Rather, the recommended approach is to characterize the noise environment for clusters of sites based on measurements or estimates at representative locations in the community. (11)*

Based on recommendations of Caltrans and the FTA, it is not necessary to collect measurements at each individual building or residence, because each receiver measurement represents a group of buildings that share acoustical equivalence. (11) In other words, the area represented by the receiver shares similar shielding, terrain, and geometric relationship to the reference noise source. Receivers represent a location of noise sensitive areas and are used to estimate the future noise level impacts. Collecting reference ambient noise level measurements at the nearby



sensitive receiver locations allows for a comparison of the before and after Project noise levels and is necessary to assess potential noise impacts due to the Project's contribution to the ambient noise levels.

5.3 NOISE MEASUREMENT RESULTS

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

- Location L1 represents the noise levels on Juniper Avenue, northeast of the Project site, near an existing U.S. Post Office and residential home. The noise level measurements collected show an overall 24-hour exterior noise level of 69.0 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 64.9 dBA Leq with an average nighttime noise level of 61.7 dBA Leq.
- Location L2 represents the noise levels on Juniper Avenue, on the eastern border of the Project site, near existing rural residential homes. The noise level measurements collected show an overall 24-hour exterior noise level of 68.8 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 65.1 dBA L_{eq} with an average nighttime noise level of 61.4 dBA L_{eq}.
- Location L3 represents the noise levels on Juniper Avenue, near the eastern border of the Project site and existing rural residential homes. The 24-hour CNEL indicates that the overall exterior noise level is 67.2 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 64.6 dBA L_{eq} with an average nighttime noise level of 59.0 dBA L_{eq}.
- Location L4 represents the noise levels on Windcrest Drive, south of the Project site, within an existing single-family residential neighborhood. The noise level measurements collected show an overall 24-hour exterior noise level of 59.2 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 54.7 dBA L_{eq} with an average nighttime noise level of 51.8 dBA L_{eq}.
- Location L5 represents the noise levels adjacent to St. Mary's Church, near the southwest corner of Project site boundary. The unmitigated exterior noise level measurements collected show an overall 24-hour noise level of 64.8 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 58.1 dBA L_{eq} with an average nighttime noise level of 58.0 dBA L_{eq}.
- Location L6 represents the noise levels on Cypress Avenue, on the western boundary of the Project site, near existing rural-residential homes. The noise level measurements collected show an overall 24-hour exterior noise level of 68.7 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 64.7 dBA L_{eq} with an average nighttime noise level of 61.3 dBA L_{eq}.
- Location L7 represents the noise levels on Cypress Avenue, on the western border of the Project site, near an industrial construction site. The 24-hour CNEL indicates that the overall exterior noise level is 74.5 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 68.6 dBA L_{eq} with an average nighttime noise level of 67.8 dBA L_{eq}.
- Location L8 represents the noise levels on Santa Ana Avenue near existing residential homes and a vacant lot. The noise level measurements collected show an overall 24-hour exterior noise level



of 66.0 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 61.6 dBA L_{eq} with an average nighttime noise level of 58.5 dBA L_{eq} .

 Location L9 represents the noise levels within the Citrus High School parking lot, west of Cypress Avenue near existing residential homes, north of the Project Site. The unmitigated exterior noise level measurements collected show an overall 24-hour noise level of 65.3 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 63.3 dBA L_{eq} with an average nighttime noise level of 56.9 dBA L_{eq}.

Table 5-1 provides the (energy average) noise levels used to describe the daytime and nighttime ambient conditions. These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. Appendix 5.2 provides summary worksheets of the noise levels for each hour as well as the minimum, maximum, 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 the arterial roadway network. The 24-hour existing noise level measurements shown on Table 5-1 present the existing ambient noise conditions.



Location ¹	Description	Energy Average Noise Level (dBA L _{eq}) ²		CNEL
		Daytime	Nighttime	
L1	Located on Juniper Avenue, northeast of the Project site, near an existing U.S. Post Office and residential home.	64.9	61.7	69.0
L2	Located on Juniper Avenue, on the eastern border of the Project site, near existing rural residential homes.	65.1	61.4	68.8
L3	Located on Juniper Avenue, near the eastern border of the Project site and existing rural residential homes.	64.6	59.0	67.2
L4	Located on Windcrest Drive, south of the Project site, within an existing single-family residential neighborhood.	54.7	51.8	59.2
L5	Located adjacent to St. Mary's Church, near the southwest corner of Project site boundary.	58.1	58.0	64.8
L6	Located on Cypress Avenue, on the western boundary of the Project site, near existing rural-residential homes.	64.7	61.3	68.7
L7	Located on Cypress Avenue, on the western border of the Project site, near an industrial construction site.	68.6	67.8	74.5
L8	Located on Santa Ana Avenue near existing residential homes and a vacant lot.	61.6	58.5	66.0
L9	Located within the Citrus High School parking lot, west of Cypress Avenue near existing residential homes, north of the Project Site.	63.3	56.9	65.3

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

¹ See Exhibit 5-A for the noise level measurement locations.
² Energy (logarithmic) average hourly levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2.

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



5.4 SHORT-TERM AIRCRAFT FLYOVER EVENTS

To describe the exterior noise levels associated with short-term aircraft flyover events related to LA/ONT aircraft activity, Urban Crossroads, Inc. collected three short-term noise level measurements within a vacant lot inside the Proposed Project site boundaries on Tuesday, April 9th, 2019. The short-term noise level measurements were collected using a Larson Davis Type 1 LxT sound level meter with windscreen at a height of five feet. The short-term noise level measurement data is provided in Appendix 5.3.

Without aircraft flyovers, an ambient short-term noise level was measured over 52 seconds approaching 58.3 dBA L_{eq} . With aircraft flyover events, the short-term noise levels over two individual measurement periods ranged from 60.5 dBA L_{eq} (two minutes and 16 seconds) to 62.0 dBA L_{eq} (one-minute and 15 seconds). Based on the short-term noise level measurements it is estimated that short-term aircraft flyover events result in an approximate 2 to 4 dBA L_{eq} short-term noise level increase, which is considered *barely perceptible*, as previously described in Section 2.7. However, as discussed in Section 4.1, long-term aircraft noise levels will result in *less than significant* noise impacts at the Project site. Moreover, the exterior noise level increases related to short-term aircraft flyovers will vary depending on each event, concurrent ambient conditions, the aircraft type, speed, and other factors.





EXHIBIT 5-A: LONG-TERM NOISE MEASUREMENT LOCATIONS


6 METHODS AND PROCEDURES

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

6.1 FHWA TRAFFIC NOISE PREDICTION MODEL

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

6.2 OFF-SITE TRAFFIC NOISE PREDICTION MODEL INPUTS

Table 6-1 presents the roadway parameters used to assess the Project's off-site transportation noise impacts. Table 6-1 identifies the 23 study area roadway segments, the distance from the centerline to adjacent land use based on the functional roadway classifications per the City of Fontana General Plan Circulation Element, and the posted vehicle speeds. The ADT volumes used in this study are presented on Table 6-2 are based on the *Traffic Impact Analysis* for the following traffic scenarios: Existing, Opening Year 2022, and Horizon Year 2040 conditions. (3) For this analysis, soft site conditions are used to analyze the traffic noise impacts within the Project study area. Soft site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. Caltrans' research has shown that the use of soft site conditions is appropriate for the application of the FHWA traffic noise prediction model as used in this off-site traffic noise analysis. (22)



ID	Roadway	Segment	Adjacent Planned (Existing if Different) Land Use ¹	Distance from Centerline to Nearest Adjacent Land Use (Feet) ²	Vehicle Speed (mph) ³
1	Citrus Av.	s/o I-10 Ramps	Industrial (Residential)	66'	45
2	Citrus Av.	s/o Slover Av.	Industrial/Public/Commercial	46'	40
3	Citrus Av.	s/o Santa Ana Av.	Industrial (Vacant)	46'	40
4	Juniper Av.	n/o Santa Ana Av.	Residential	34'	40
5	Juniper Av.	s/o Santa Ana Av.	Industrial (Vacant/Commercial)	34'	40
6	Sierra Av.	n/o Slover Av.	Commercial (Residential)	66'	40
7	Sierra Av.	s/o Slover Av.	Industrial/Comm./Residential	66'	50
8	Sierra Av.	s/o Santa Ana Av.	Residential/Commercial	66'	50
9	Sierra Av.	s/o Jurupa Av.	Residential/Public	66'	55
10	Slover Av.	w/o Sierra Av.	Industrial (Residential)	52'	45
11	Santa Ana Av.	e/o Citrus Av.	Industrial/Residential	46'	40
12	Santa Ana Av.	e/o Juniper Av.	Residential (Commercial)	46'	40
13	Santa Ana Av.	e/o Sierra Av.	Industrial/Residential	46'	40
14	Jurupa Av.	w/o Cherry Av.	Public/Residential	60'	45
15	Jurupa Av.	e/o Cherry Av.	Industrial/Residential	60'	45
16	Jurupa Av.	e/o Beech Av.	Industrial/Residential	60'	45
17	Jurupa Av.	e/o Poplar Av.	Industrial/Residential	60'	45
18	Jurupa Av.	e/o Citrus Av.	Industrial/Residential	60'	45
19	Jurupa Av.	e/o Oleander Av.	Industrial/Residential	60'	45
20	Jurupa Av.	e/o Cypress Av.	Residential (Church)	60'	45
21	Jurupa Av.	e/o Juniper Av.	Residential	60'	45
22	Armstrong Rd.	w/o Sierra Av.	Residential/Commercial	59'	45
23	Armstrong Rd.	w/o 34th St.	Residential	59'	45

TABLE 6-1: OFF-SITE ROADWAY PARAMETERS

¹ Sources: City of Fontana and Jurupa Valley General Plan Land Use Maps.

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

³ Source: Goodman Industrial Park Fontana III Traffic Impact Analysis.

Traffic noise analysis provided in this report is based on the actual vehicle volumes obtained from the *Traffic Impact Analysis* for the Project. Per the *Traffic Impact Analysis*, the Project is expected to generate a total of approximately 2,036 trip-ends per day (actual vehicles). (3) The Project trip generation includes 658 truck trip-ends per day from the proposed building within the Project site. 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.

To quantify the off-site noise levels, the Project related truck trips were added to the heavy truck category in the FHWA noise prediction model. The addition of the Project related truck trips



increases the percentage of heavy trucks in the vehicle mix. This approach recognizes that the FHWA noise prediction model is significantly influenced by the number of heavy trucks in the vehicle mix. The daily Project truck trip-ends were assigned to the individual off-site study area roadway segments based on the Project truck trip distribution percentages documented in the *Traffic Impact Analysis*. Using the Project truck trips in combination with the Project trip distribution, Urban Crossroads, Inc. calculated the number of additional Project truck trips and vehicle mix percentages for each of the study area roadway segments. Table 6-4 shows the traffic flow by vehicle type (vehicle mix) used for all without Project traffic scenarios, and Tables 6-5 to 6-7 show the vehicle mixes used for the with Project traffic scenarios.

Average Daily Traffic							c Volumes ¹			
ID	Poodway	Sogmont	Existing	g (2019)	Opening	(ear 2022	Horizon Year 2040			
שו	коаймау	Segment	Without Project	With Project	Without Project	With Project	Without Project	With Project		
1	Citrus Av.	s/o I-10 Ramps	24,431	24,920	32,009	32,498	35,210	35,699		
2	Citrus Av.	s/o Slover Av.	12,722	13,293	19,389	19,960	21,328	21,899		
3	Citrus Av.	s/o Santa Ana Av.	10,160	10,516	14,528	14,884	15,981	16,337		
4	Juniper Av.	n/o Santa Ana Av.	2,451	2,658	2,568	2,775	2,825	3,032		
5	Juniper Av.	s/o Santa Ana Av.	2,807	3,400	2,925	3,518	3,289	3,882		
6	Sierra Av.	n/o Slover Av.	51,993	52,415	62,368	62,790	68,605	69,027		
7	Sierra Av.	s/o Slover Av.	29,623	29,949	40,332	40,658	44,365	44,691		
8	Sierra Av.	s/o Santa Ana Av.	30,692	30,877	37,429	37,614	41,172	41,357		
9	Sierra Av.	s/o Jurupa Av.	24,654	24,760	29,166	29,272	37,879	37,985		
10	Slover Av.	w/o Sierra Av.	19,017	19,058	23,939	23,980	26,333	26,374		
11	Santa Ana Av.	e/o Citrus Av.	2,979	3,255	8,143	8,419	8,957	9,233		
12	Santa Ana Av.	e/o Juniper Av.	6,907	7,293	11,082	11,468	12,191	12,577		
13	Santa Ana Av.	e/o Sierra Av.	6,283	6,529	7,608	7,854	8,368	8,614		
14	Jurupa Av.	w/o Cherry Av.	19,886	20,258	26,415	26,787	29,057	29,429		
15	Jurupa Av.	e/o Cherry Av.	16,755	17,147	23,104	23,496	25,414	25,806		
16	Jurupa Av.	e/o Beech Av.	17,357	17,756	22,807	23,206	25,087	25,486		
17	Jurupa Av.	e/o Poplar Av.	18,883	19,349	24,624	25,090	27,087	27,553		
18	Jurupa Av.	e/o Citrus Av.	16,856	17,678	20,399	21,221	22,439	23,261		
19	Jurupa Av.	e/o Oleander Av.	17,780	18,602	20,774	21,596	22,851	23,673		
20	Jurupa Av.	e/o Cypress Av.	19,790	19,928	23,022	23,160	25,325	25,463		
21	Jurupa Av.	e/o Juniper Av.	18,605	18,937	21,640	21,972	23,804	24,136		
22	Armstrong Rd.	w/o Sierra Av.	23,072	23,178	27,766	27,872	30,543	30,649		
23	Armstrong Rd.	w/o 34th St.	30,547	30,653	39,977	40,083	43,974	44,080		

TABLE 6-2: AVERAGE DAILY TRAFFIC VOLUMES

¹ Source: Goodman Industrial Park Fontana III Traffic Impact Analysis.

		Time of Day Splits		Total of Time of
venicie rype	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%

TABLE 6-3: TIME OF DAY VEHICLE SPLITS

Typical Southern California vehicle mix. Vehicle mix percentage values rounded to the nearest one-hundredth.

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

TABLE 6-4: WITHOUT PROJECT CONDITIONS VEHICLE MIX

Classification		Total		
Classification	Autos	Medium Trucks	Heavy Trucks	TOLAI
All Segments	95.52%	2.33%	2.15%	100.00%

Based on an existing PM peak hour vehicle count taken at Citrus Avenue and Jurupa Avenue (Goodman Industrial Park Fontana III Traffic Impact Analysis.). Vehicle mix percentage values rounded to the nearest one-hundredth.



			With Project ¹			
ID	Roadway	Segment	Autos	Medium Trucks	Heavy Trucks	Total ²
1	Citrus Av.	s/o I-10 Ramps	95.03%	2.40%	2.57%	100.00%
2	Citrus Av.	s/o Slover Av.	94.32%	2.52%	3.16%	100.00%
3	Citrus Av.	s/o Santa Ana Av.	93.60%	2.69%	3.71%	100.00%
4	Juniper Av.	n/o Santa Ana Av.	95.87%	2.15%	1.98%	100.00%
5	Juniper Av.	s/o Santa Ana Av.	96.30%	1.92%	1.78%	100.00%
6	Sierra Av.	n/o Slover Av.	95.33%	2.36%	2.31%	100.00%
7	Sierra Av.	s/o Slover Av.	95.17%	2.39%	2.44%	100.00%
8	Sierra Av.	s/o Santa Ana Av.	94.99%	2.43%	2.57%	100.00%
9	Sierra Av.	s/o Jurupa Av.	95.17%	2.40%	2.44%	100.00%
10	Slover Av.	w/o Sierra Av.	95.53%	2.32%	2.15%	100.00%
11	Santa Ana Av.	e/o Citrus Av.	95.90%	2.13%	1.97%	100.00%
12	Santa Ana Av.	e/o Juniper Av.	95.76%	2.21%	2.04%	100.00%
13	Santa Ana Av.	e/o Sierra Av.	94.88%	2.41%	2.71%	100.00%
14	Jurupa Av.	w/o Cherry Av.	94.85%	2.45%	2.70%	100.00%
15	Jurupa Av.	e/o Cherry Av.	94.70%	2.47%	2.83%	100.00%
16	Jurupa Av.	e/o Beech Av.	94.69%	2.47%	2.83%	100.00%
17	Jurupa Av.	e/o Poplar Av.	94.71%	2.47%	2.82%	100.00%
18	Jurupa Av.	e/o Citrus Av.	93.49%	2.69%	3.81%	100.00%
19	Jurupa Av.	e/o Oleander Av.	93.59%	2.67%	3.73%	100.00%
20	Jurupa Av.	e/o Cypress Av.	95.55%	2.31%	2.14%	100.00%
21	Jurupa Av.	e/o Juniper Av.	94.21%	2.58%	3.21%	100.00%
22	Armstrong Rd.	w/o Sierra Av.	95.14%	2.40%	2.46%	100.00%
23	Armstrong Rd.	w/o 34th St.	95.24%	2.38%	2.38%	100.00%

TABLE 6-5: EXISTING WITH PROJECT CONDITIONS VEHICLE MIX

¹ Source: Goodman Industrial Park Fontana III Traffic Impact Analysis.

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



			With Project ¹			
ID	Roadway	Segment	Autos	Medium Trucks	Heavy Trucks	Total ²
1	Citrus Av.	s/o I-10 Ramps	95.14%	2.39%	2.47%	100.00%
2	Citrus Av.	s/o Slover Av.	94.72%	2.46%	2.82%	100.00%
3	Citrus Av.	s/o Santa Ana Av.	94.16%	2.58%	3.25%	100.00%
4	Juniper Av.	n/o Santa Ana Av.	95.85%	2.16%	1.99%	100.00%
5	Juniper Av.	s/o Santa Ana Av.	96.27%	1.94%	1.79%	100.00%
6	Sierra Av.	n/o Slover Av.	95.36%	2.35%	2.29%	100.00%
7	Sierra Av.	s/o Slover Av.	95.26%	2.37%	2.36%	100.00%
8	Sierra Av.	s/o Santa Ana Av.	95.09%	2.41%	2.50%	100.00%
9	Sierra Av.	s/o Jurupa Av.	95.22%	2.39%	2.39%	100.00%
10	Slover Av.	w/o Sierra Av.	95.53%	2.33%	2.15%	100.00%
11	Santa Ana Av.	e/o Citrus Av.	95.67%	2.25%	2.08%	100.00%
12	Santa Ana Av.	e/o Juniper Av.	95.67%	2.25%	2.08%	100.00%
13	Santa Ana Av.	e/o Sierra Av.	94.99%	2.40%	2.62%	100.00%
14	Jurupa Av.	w/o Cherry Av.	95.01%	2.42%	2.57%	100.00%
15	Jurupa Av.	e/o Cherry Av.	94.92%	2.43%	2.65%	100.00%
16	Jurupa Av.	e/o Beech Av.	94.89%	2.44%	2.67%	100.00%
17	Jurupa Av.	e/o Poplar Av.	94.90%	2.43%	2.67%	100.00%
18	Jurupa Av.	e/o Citrus Av.	93.83%	2.63%	3.54%	100.00%
19	Jurupa Av.	e/o Oleander Av.	93.86%	2.63%	3.51%	100.00%
20	Jurupa Av.	e/o Cypress Av.	95.55%	2.32%	2.14%	100.00%
21	Jurupa Av.	e/o Juniper Av.	94.39%	2.55%	3.06%	100.00%
22	Armstrong Rd.	w/o Sierra Av.	95.21%	2.39%	2.40%	100.00%
23	Armstrong Rd.	w/o 34th St.	95.30%	2.37%	2.33%	100.00%

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

¹ Source: Goodman Industrial Park Fontana III Traffic Impact Analysis.

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



			With Project ¹			
ID	Roadway	Segment	Autos	Medium Trucks	Heavy Trucks	Total ²
1	Citrus Av.	s/o I-10 Ramps	95.18%	2.38%	2.44%	100.00%
2	Citrus Av.	s/o Slover Av.	94.79%	2.45%	2.76%	100.00%
3	Citrus Av.	s/o Santa Ana Av.	94.28%	2.56%	3.16%	100.00%
4	Juniper Av.	n/o Santa Ana Av.	95.83%	2.17%	2.00%	100.00%
5	Juniper Av.	s/o Santa Ana Av.	96.20%	1.97%	1.82%	100.00%
6	Sierra Av.	n/o Slover Av.	95.38%	2.35%	2.27%	100.00%
7	Sierra Av.	s/o Slover Av.	95.29%	2.37%	2.34%	100.00%
8	Sierra Av.	s/o Santa Ana Av.	95.13%	2.41%	2.47%	100.00%
9	Sierra Av.	s/o Jurupa Av.	95.29%	2.37%	2.34%	100.00%
10	Slover Av.	w/o Sierra Av.	95.53%	2.33%	2.15%	100.00%
11	Santa Ana Av.	e/o Citrus Av.	95.65%	2.26%	2.09%	100.00%
12	Santa Ana Av.	e/o Juniper Av.	95.66%	2.26%	2.08%	100.00%
13	Santa Ana Av.	e/o Sierra Av.	95.03%	2.39%	2.58%	100.00%
14	Jurupa Av.	w/o Cherry Av.	95.06%	2.41%	2.53%	100.00%
15	Jurupa Av.	e/o Cherry Av.	94.98%	2.42%	2.60%	100.00%
16	Jurupa Av.	e/o Beech Av.	94.94%	2.43%	2.63%	100.00%
17	Jurupa Av.	e/o Poplar Av.	94.95%	2.42%	2.62%	100.00%
18	Jurupa Av.	e/o Citrus Av.	93.98%	2.60%	3.42%	100.00%
19	Jurupa Av.	e/o Oleander Av.	94.01%	2.60%	3.39%	100.00%
20	Jurupa Av.	e/o Cypress Av.	95.54%	2.32%	2.14%	100.00%
21	Jurupa Av.	e/o Juniper Av.	94.49%	2.53%	2.98%	100.00%
22	Armstrong Rd.	w/o Sierra Av.	95.24%	2.38%	2.38%	100.00%
23	Armstrong Rd.	w/o 34th St.	95.32%	2.37%	2.31%	100.00%

TABLE 6-7: HORIZON YEAR WITH PROJECT CONDITIONS VEHICLE MIX

¹ Source: Goodman Industrial Park Fontana III Traffic Impact Analysis.

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

6.3 CONSTRUCTION VIBRATION ASSESSMENT METHODOLOGY

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



However, while vehicular traffic is rarely perceptible, construction has the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and equipment used. Ground vibration levels associated with several types of construction equipment are summarized on Table 6-8. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the human response (annoyance) using the following vibration assessment methods defined by the FTA. To describe the human response (annoyance) associated with vibration impacts the FTA provides the following equation: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$

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

TABLE 6-8: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, September 2018.



7 OFF-SITE TRANSPORTATION NOISE IMPACTS

To assess the off-site transportation CNEL noise level impacts associated with development of the proposed Project, noise contours were developed based on the *Traffic Impact Analysis*. (3) Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise contours were developed for the following traffic scenarios:

- <u>Existing Conditions Without / With Project</u>: This scenario refers to the existing present-day noise conditions without and with the proposed Project.
- <u>Opening Year 2022 Without / With the Project</u>: This scenario refers to Opening Year noise conditions without and with the proposed Project. This scenario includes all cumulative projects identified in the *Traffic Impact Analysis*.
- <u>Horizon Year 2040 Without / With the Project</u>: This scenario refers Year 2040 noise conditions without and with the proposed Project. This scenario includes all cumulative projects identified in the *Traffic Impact Analysis*.

7.1 TRAFFIC NOISE CONTOURS

Noise contours were used to assess the Project's incremental traffic-related noise impacts at land uses adjacent to roadways conveying Project traffic. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the Project study area. Tables 7-1 and 7-6 present a summary of the exterior traffic noise levels, without barrier attenuation, for the study area roadway segments analyzed from the without Project to the with Project conditions under Existing, Opening Year 2022, and Horizon Year 2040 traffic conditions. Appendix 7.1 includes a summary of the traffic noise level contours for each of the traffic scenarios.



			Adjacent	CNEL at Nearest	Distar from C	nce to Co enterline	ontour e (Feet)
ID	Road	Segment	Planned (Existing) Land Use ¹	Adjacent Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Citrus Av.	s/o I-10 Ramps	Industrial (Residential)	71.8	87	188	405
2	Citrus Av.	s/o Slover Av.	Industrial/Public/Commercial	69.3	RW	89	192
3	Citrus Av.	s/o Santa Ana Av.	Industrial (Vacant)	68.3	RW	77	165
4	Juniper Av.	n/o Santa Ana Av.	Residential	63.2	RW	RW	56
5	Juniper Av.	s/o Santa Ana Av.	Industrial (Vacant/Commercial)	63.8	RW	RW	61
6	Sierra Av.	n/o Slover Av.	Commercial (Residential)	74.0	121	261	563
7	Sierra Av.	s/o Slover Av.	Industrial/Comm./Residential	73.7	116	250	539
8	Sierra Av.	s/o Santa Ana Av.	Residential/Commercial	73.8	119	256	552
9	Sierra Av.	s/o Jurupa Av.	Residential/Public	73.8	119	256	552
10	Slover Av.	w/o Sierra Av.	Industrial (Residential)	71.6	67	144	310
11	Santa Ana Av.	e/o Citrus Av.	Industrial/Residential	63.0	RW	RW	73
12	Santa Ana Av.	e/o Juniper Av.	Residential (Commercial)	66.7	RW	59	128
13	Santa Ana Av.	e/o Sierra Av.	Industrial/Residential	66.2	RW	56	120
14	Jurupa Av.	w/o Cherry Av.	Public/Residential	71.5	76	164	353
15	Jurupa Av.	e/o Cherry Av.	Industrial/Residential	70.8	68	146	315
16	Jurupa Av.	e/o Beech Av.	Industrial/Residential	70.9	69	149	322
17	Jurupa Av.	e/o Poplar Av.	Industrial/Residential	71.3	73	158	341
18	Jurupa Av.	e/o Citrus Av.	Industrial/Residential	70.8	68	147	316
19	Jurupa Av.	e/o Oleander Av.	Industrial/Residential	71.1	70	152	327
20	Jurupa Av.	e/o Cypress Av.	Residential (Church)	71.5	76	163	351
21	Jurupa Av.	e/o Juniper Av.	Residential	71.2	73	157	337
22	Armstrong Rd.	w/o Sierra Av.	Residential/Commercial	71.0	69	148	318
23	Armstrong Rd.	w/o 34th St.	Residential	72.2	83	178	383

TADLE 7 1.	EVICTING WITHOUT		CONDITIONS NO	
TADLE /-1:		PROJECT	CONDITIONS NO	



			Adjacent	CNEL at Nearest	Distar from Co	nce to Co enterline	ontour e (Feet)
ID	Road	Segment	Planned (Existing) Land Use ¹	Adjacent Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Citrus Av.	s/o I-10 Ramps	Industrial (Residential)	72.2	93	200	431
2	Citrus Av.	s/o Slover Av.	Industrial/Public/Commercial	70.3	48	104	224
3	Citrus Av.	s/o Santa Ana Av.	Industrial (Vacant)	69.7	RW	94	203
4	Juniper Av.	n/o Santa Ana Av.	Residential	63.4	RW	RW	57
5	Juniper Av.	s/o Santa Ana Av.	Industrial (Vacant/Commercial)	64.2	RW	RW	65
6	Sierra Av.	n/o Slover Av.	Commercial (Residential)	74.1	125	268	578
7	Sierra Av.	s/o Slover Av.	Industrial/Comm./Residential	73.9	121	260	561
8	Sierra Av.	s/o Santa Ana Av.	Residential/Commercial	74.2	125	270	581
9	Sierra Av.	s/o Jurupa Av.	Residential/Public	74.0	123	265	570
10	Slover Av.	w/o Sierra Av.	Industrial (Residential)	71.6	67	144	310
11	Santa Ana Av.	e/o Citrus Av.	Industrial/Residential	63.2	RW	RW	75
12	Santa Ana Av.	e/o Juniper Av.	Residential (Commercial)	66.8	RW	60	130
13	Santa Ana Av.	e/o Sierra Av.	Industrial/Residential	66.9	RW	61	132
14	Jurupa Av.	w/o Cherry Av.	Public/Residential	72.0	82	177	381
15	Jurupa Av.	e/o Cherry Av.	Industrial/Residential	71.4	74	160	346
16	Jurupa Av.	e/o Beech Av.	Industrial/Residential	71.6	76	164	354
17	Jurupa Av.	e/o Poplar Av.	Industrial/Residential	71.9	81	174	374
18	Jurupa Av.	e/o Citrus Av.	Industrial/Residential	72.2	84	181	390
19	Jurupa Av.	e/o Oleander Av.	Industrial/Residential	72.4	86	186	401
20	Jurupa Av.	e/o Cypress Av.	Residential (Church)	71.5	76	163	352
21	Jurupa Av.	e/o Juniper Av.	Residential	72.1	83	179	385
22	Armstrong Rd.	w/o Sierra Av.	Residential/Commercial	71.2	71	154	331
23	Armstrong Rd.	w/o 34th St.	Residential	72.4	85	184	395

TABLE 7-2:	EXISTING WITH PROJE	CT CONDITIONS NOISE	CONTOURS



			Adjacent	CNEL at Nearest	Distance to Contour from Centerline (Feet)		
ID	Road	Segment	Planned (Existing) Land Use ¹	Adjacent Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Citrus Av.	s/o I-10 Ramps	Industrial (Residential)	73.0	104	225	485
2	Citrus Av.	s/o Slover Av.	Industrial/Public/Commercial	71.1	55	118	254
3	Citrus Av.	s/o Santa Ana Av.	Industrial (Vacant)	69.9	RW	97	210
4	Juniper Av.	n/o Santa Ana Av.	Residential	63.4	RW	RW	58
5	Juniper Av.	s/o Santa Ana Av.	Industrial (Vacant/Commercial)	64.0	RW	RW	63
6	Sierra Av.	n/o Slover Av.	Commercial (Residential)	74.8	137	295	636
7	Sierra Av.	s/o Slover Av.	Industrial/Comm./Residential	75.0	143	307	662
8	Sierra Av.	s/o Santa Ana Av.	Residential/Commercial	74.7	136	292	630
9	Sierra Av.	s/o Jurupa Av.	Residential/Public	74.6	133	286	617
10	Slover Av.	w/o Sierra Av.	Industrial (Residential)	72.6	78	168	361
11	Santa Ana Av.	e/o Citrus Av.	Industrial/Residential	67.4	RW	66	143
12	Santa Ana Av.	e/o Juniper Av.	Residential (Commercial)	68.7	RW	81	175
13	Santa Ana Av.	e/o Sierra Av.	Industrial/Residential	67.1	RW	63	136
14	Jurupa Av.	w/o Cherry Av.	Public/Residential	72.8	92	198	426
15	Jurupa Av.	e/o Cherry Av.	Industrial/Residential	72.2	84	181	390
16	Jurupa Av.	e/o Beech Av.	Industrial/Residential	72.1	83	179	386
17	Jurupa Av.	e/o Poplar Av.	Industrial/Residential	72.5	88	189	407
18	Jurupa Av.	e/o Citrus Av.	Industrial/Residential	71.6	77	166	359
19	Jurupa Av.	e/o Oleander Av.	Industrial/Residential	71.7	78	168	363
20	Jurupa Av.	e/o Cypress Av.	Residential (Church)	72.2	84	180	389
21	Jurupa Av.	e/o Juniper Av.	Residential	71.9	80	173	373
22	Armstrong Rd.	w/o Sierra Av.	Residential/Commercial	71.8	78	167	360
23	Armstrong Rd.	w/o 34th St.	Residential	73.4	99	213	459

ΤΔΒΙΕ 7-3 ·	OPENING VEAR	WITHOUT PROJECT		
TADLE 7-5.	OPENING TEAK	WITHOUT PROJECT	CONDITIONS NO	



			Adjacent	CNEL at Nearest	Distance to Contour from Centerline (Feet)		
ID	Road	Segment	Planned (Existing) Land Use ¹	Adjacent Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Citrus Av.	s/o I-10 Ramps	Industrial (Residential)	73.3	110	236	508
2	Citrus Av.	s/o Slover Av.	Industrial/Public/Commercial	71.8	61	131	282
3	Citrus Av.	s/o Santa Ana Av.	Industrial (Vacant)	70.9	53	113	244
4	Juniper Av.	n/o Santa Ana Av.	Residential	63.6	RW	RW	59
5	Juniper Av.	s/o Santa Ana Av.	Industrial (Vacant/Commercial)	64.4	RW	RW	67
6	Sierra Av.	n/o Slover Av.	Commercial (Residential)	74.9	140	302	650
7	Sierra Av.	s/o Slover Av.	Industrial/Comm./Residential	75.2	147	316	682
8	Sierra Av.	s/o Santa Ana Av.	Residential/Commercial	75.0	142	305	657
9	Sierra Av.	s/o Jurupa Av.	Residential/Public	74.7	137	294	634
10	Slover Av.	w/o Sierra Av.	Industrial (Residential)	72.6	78	168	361
11	Santa Ana Av.	e/o Citrus Av.	Industrial/Residential	67.4	RW	67	144
12	Santa Ana Av.	e/o Juniper Av.	Residential (Commercial)	68.8	RW	82	177
13	Santa Ana Av.	e/o Sierra Av.	Industrial/Residential	67.6	RW	69	148
14	Jurupa Av.	w/o Cherry Av.	Public/Residential	73.2	97	210	452
15	Jurupa Av.	e/o Cherry Av.	Industrial/Residential	72.6	90	194	418
16	Jurupa Av.	e/o Beech Av.	Industrial/Residential	72.6	90	193	416
17	Jurupa Av.	e/o Poplar Av.	Industrial/Residential	72.9	94	203	438
18	Jurupa Av.	e/o Citrus Av.	Industrial/Residential	72.8	92	199	429
19	Jurupa Av.	e/o Oleander Av.	Industrial/Residential	72.9	93	201	433
20	Jurupa Av.	e/o Cypress Av.	Residential (Church)	72.2	84	181	389
21	Jurupa Av.	e/o Juniper Av.	Residential	72.7	90	194	419
22	Armstrong Rd.	w/o Sierra Av.	Residential/Commercial	72.0	80	173	372
23	Armstrong Rd.	w/o 34th St.	Residential	73.5	101	218	470

TADLE 7 4.			CONDITIONS		
TABLE 7-4:	OPENING YEAR	WITH PROJECT	CONDITIONS	NOISE CONTO	JUKS



			Adjacent	CNEL at Nearest	Distance to Contour from Centerline (Feet)		
ID	Road	Segment	Planned (Existing) Land Use ¹	Adjacent Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Citrus Av.	s/o I-10 Ramps	Industrial (Residential)	73.4	111	240	516
2	Citrus Av.	s/o Slover Av.	Industrial/Public/Commercial	71.6	58	126	271
3	Citrus Av.	s/o Santa Ana Av.	Industrial (Vacant)	70.3	48	104	224
4	Juniper Av.	n/o Santa Ana Av.	Residential	63.8	RW	RW	61
5	Juniper Av.	s/o Santa Ana Av.	Industrial (Vacant/Commercial)	64.5	RW	RW	68
6	Sierra Av.	n/o Slover Av.	Commercial (Residential)	75.2	146	314	677
7	Sierra Av.	s/o Slover Av.	Industrial/Comm./Residential	75.4	152	327	706
8	Sierra Av.	s/o Santa Ana Av.	Residential/Commercial	75.1	145	312	671
9	Sierra Av.	s/o Jurupa Av.	Residential/Public	75.7	158	341	734
10	Slover Av.	w/o Sierra Av.	Industrial (Residential)	73.0	83	179	385
11	Santa Ana Av.	e/o Citrus Av.	Industrial/Residential	67.8	RW	71	152
12	Santa Ana Av.	e/o Juniper Av.	Residential (Commercial)	69.1	RW	87	187
13	Santa Ana Av.	e/o Sierra Av.	Industrial/Residential	67.5	RW	67	145
14	Jurupa Av.	w/o Cherry Av.	Public/Residential	73.2	98	211	454
15	Jurupa Av.	e/o Cherry Av.	Industrial/Residential	72.6	89	193	415
16	Jurupa Av.	e/o Beech Av.	Industrial/Residential	72.5	89	191	412
17	Jurupa Av.	e/o Poplar Av.	Industrial/Residential	72.9	93	201	433
18	Jurupa Av.	e/o Citrus Av.	Industrial/Residential	72.1	82	177	382
19	Jurupa Av.	e/o Oleander Av.	Industrial/Residential	72.1	83	180	387
20	Jurupa Av.	e/o Cypress Av.	Residential (Church)	72.6	89	192	414
21	Jurupa Av.	e/o Juniper Av.	Residential	72.3	86	184	397
22	Armstrong Rd.	w/o Sierra Av.	Residential/Commercial	72.2	83	178	383
23	Armstrong Rd.	w/o 34th St.	Residential	73.8	105	227	489

ΤΔΒΙΕ 7-5 ·	ΗΟΡΙΖΟΝ ΥΕΔΡ	WITHOUT PROJECT	CONDITIONS N	
TADLL 7-3.	HUNIZON ILAN	WITHOUT PROJECT	CONDITIONS	



		Sogmont	Adjacent	CNEL at Nearest	Distance to Contour from Centerline (Feet)		
ID	Road	Segment	Planned (Existing) Land Use ¹	Adjacent Land Use (dBA) ²	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Citrus Av.	s/o I-10 Ramps	Industrial (Residential)	73.7	116	250	540
2	Citrus Av.	s/o Slover Av.	Industrial/Public/Commercial	72.2	64	138	298
3	Citrus Av.	s/o Santa Ana Av.	Industrial (Vacant)	71.2	55	119	257
4	Juniper Av.	n/o Santa Ana Av.	Residential	64.0	RW	RW	63
5	Juniper Av.	s/o Santa Ana Av.	Industrial (Vacant/Commercial)	64.8	RW	RW	72
6	Sierra Av.	n/o Slover Av.	Commercial (Residential)	75.3	149	321	691
7	Sierra Av.	s/o Slover Av.	Industrial/Comm./Residential	75.6	156	336	725
8	Sierra Av.	s/o Santa Ana Av.	Residential/Commercial	75.4	150	324	698
9	Sierra Av.	s/o Jurupa Av.	Residential/Public	75.8	162	348	750
10	Slover Av.	w/o Sierra Av.	Industrial (Residential)	73.0	83	179	385
11	Santa Ana Av.	e/o Citrus Av.	Industrial/Residential	67.8	RW	71	153
12	Santa Ana Av.	e/o Juniper Av.	Residential (Commercial)	69.2	RW	88	189
13	Santa Ana Av.	e/o Sierra Av.	Industrial/Residential	68.0	RW	73	156
14	Jurupa Av.	w/o Cherry Av.	Public/Residential	73.5	103	222	479
15	Jurupa Av.	e/o Cherry Av.	Industrial/Residential	73.0	95	205	443
16	Jurupa Av.	e/o Beech Av.	Industrial/Residential	73.0	95	204	440
17	Jurupa Av.	e/o Poplar Av.	Industrial/Residential	73.3	100	215	463
18	Jurupa Av.	e/o Citrus Av.	Industrial/Residential	73.1	97	209	451
19	Jurupa Av.	e/o Oleander Av.	Industrial/Residential	73.2	98	211	455
20	Jurupa Av.	e/o Cypress Av.	Residential (Church)	72.6	89	193	415
21	Jurupa Av.	e/o Juniper Av.	Residential	73.0	95	205	442
22	Armstrong Rd.	w/o Sierra Av.	Residential/Commercial	72.4	85	183	395
23	Armstrong Rd.	w/o 34th St.	Residential	73.9	108	232	499

ΤΔΒΙΕ 7-6 ·	HORIZON YEAR	WITH PROJECT	CONDITIONS	NOISE CONT	OURS
TADLL /-0.	HUNIZON ILAN		CONDITIONS	NOISE CONT	OUNS



7.2 EXISTING CONDITION PROJECT TRAFFIC NOISE LEVEL CONTRIBUTIONS

Table 7-1 presents the Existing without Project conditions CNEL noise levels. The without Project exterior noise levels are expected to range from 63.0 to 74.0 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 63.2 to 74.2 dBA CNEL. As shown on Table 7-7 the Project will generate a noise level increase of up to 1.3 dBA CNEL on the study area roadway segments. Based on the significance criteria in Section 4, the Project-related noise level increases are considered *less than significant* under Existing conditions at the land uses adjacent to roadways conveying Project traffic.

7.3 **OPENING YEAR PROJECT TRAFFIC NOISE LEVEL CONTRIBUTIONS**

Table 7-3 presents the Opening Year 2022 without Project conditions CNEL noise levels. The without Project exterior noise levels are expected to range from 63.4 to 75.0 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-4 shows the Opening Year 2022 with Project conditions will range from 63.6 to 75.2 dBA CNEL. As shown on Table 7-8 the Project will generate a noise level increase of up to 1.1 dBA CNEL on the study area roadway segments. Based on the significance criteria in Section 4, the Project-related noise level increases are considered *less than significant* under Opening Year 2022 conditions at the land uses adjacent to roadways conveying Project traffic.

7.4 HORIZON YEAR PROJECT TRAFFIC NOISE LEVEL CONTRIBUTIONS

Table 7-5 presents the Horizon Year 2040 without Project conditions CNEL noise levels. The without Project exterior noise levels are expected to range from 63.8 to 75.7 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-6 shows the Horizon Year 2040 with Project conditions will range from 64.0 to 75.8 dBA CNEL. As shown on Table 7-9 the Project will generate a noise level increase of up to 1.0 dBA CNEL on the study area roadway segments. Based on the significance criteria in Section 4, the Project-related noise level increases are considered *less than significant* under Horizon Year 2040 conditions at the land uses adjacent to roadways conveying Project traffic.



ID	Road	Segment	CN La	EL at Adjac nd Use (dB	Noise- Sensitive Land Use?	Threshold Exceeded? ²	
			Without Project	With Project	Project Addition	Use?	
1	Citrus Av.	s/o I-10 Ramps	71.8	72.2	0.4	Yes	No
2	Citrus Av.	s/o Slover Av.	69.3	70.3	0.9	Yes	No
3	Citrus Av.	s/o Santa Ana Av.	68.3	69.7	1.3	No	No
4	Juniper Av.	n/o Santa Ana Av.	63.2	63.4	0.1	Yes	No
5	Juniper Av.	s/o Santa Ana Av.	63.8	64.2	0.4	No	No
6	Sierra Av.	n/o Slover Av.	74.0	74.1	0.1	Yes	No
7	Sierra Av.	s/o Slover Av.	73.7	73.9	0.2	Yes	No
8	Sierra Av.	s/o Santa Ana Av.	73.8	74.2	0.3	Yes	No
9	Sierra Av.	s/o Jurupa Av.	73.8	74.0	0.2	Yes	No
10	Slover Av.	w/o Sierra Av.	71.6	71.6	0.0	Yes	No
11	Santa Ana Av.	e/o Citrus Av.	63.0	63.2	0.1	Yes	No
12	Santa Ana Av.	e/o Juniper Av.	66.7	66.8	0.1	Yes	No
13	Santa Ana Av.	e/o Sierra Av.	66.2	66.9	0.6	Yes	No
14	Jurupa Av.	w/o Cherry Av.	71.5	72.0	0.5	Yes	No
15	Jurupa Av.	e/o Cherry Av.	70.8	71.4	0.6	Yes	No
16	Jurupa Av.	e/o Beech Av.	70.9	71.6	0.6	Yes	No
17	Jurupa Av.	e/o Poplar Av.	71.3	71.9	0.6	Yes	No
18	Jurupa Av.	e/o Citrus Av.	70.8	72.2	1.3	Yes	No
19	Jurupa Av.	e/o Oleander Av.	71.1	72.4	1.3	Yes	No
20	Jurupa Av.	e/o Cypress Av.	71.5	71.5	0.0	Yes	No
21	Jurupa Av.	e/o Juniper Av.	71.2	72.1	0.8	Yes	No
22	Armstrong Rd.	w/o Sierra Av.	71.0	71.2	0.2	Yes	No
23	Armstrong Rd.	w/o 34th St.	72.2	72.4	0.1	Yes	No

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

¹ The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use. Values rounded to the nearest one-tenth.

² Significance Criteria (Section 4).



ID	Road	Segment	CN La	EL at Adjac nd Use (dB/	Noise- Sensitive Land Use?	Threshold Exceeded? ²	
			Without Project	With Project	Project Addition	User	
1	Citrus Av.	s/o I-10 Ramps	73.0	73.3	0.3	Yes	No
2	Citrus Av.	s/o Slover Av.	71.1	71.8	0.6	Yes	No
3	Citrus Av.	s/o Santa Ana Av.	69.9	70.9	0.9	No	No
4	Juniper Av.	n/o Santa Ana Av.	63.4	63.6	0.1	Yes	No
5	Juniper Av.	s/o Santa Ana Av.	64.0	64.4	0.3	No	No
6	Sierra Av.	n/o Slover Av.	74.8	74.9	0.1	Yes	No
7	Sierra Av.	s/o Slover Av.	75.0	75.2	0.1	Yes	No
8	Sierra Av.	s/o Santa Ana Av.	74.7	75.0	0.2	Yes	No
9	Sierra Av.	s/o Jurupa Av.	74.6	74.7	0.1	Yes	No
10	Slover Av.	w/o Sierra Av.	72.6	72.6	0.0	Yes	No
11	Santa Ana Av.	e/o Citrus Av.	67.4	67.4	0.0	Yes	No
12	Santa Ana Av.	e/o Juniper Av.	68.7	68.8	0.0	Yes	No
13	Santa Ana Av.	e/o Sierra Av.	67.1	67.6	0.5	Yes	No
14	Jurupa Av.	w/o Cherry Av.	72.8	73.2	0.3	Yes	No
15	Jurupa Av.	e/o Cherry Av.	72.2	72.6	0.4	Yes	No
16	Jurupa Av.	e/o Beech Av.	72.1	72.6	0.4	Yes	No
17	Jurupa Av.	e/o Poplar Av.	72.5	72.9	0.4	Yes	No
18	Jurupa Av.	e/o Citrus Av.	71.6	72.8	1.1	Yes	No
19	Jurupa Av.	e/o Oleander Av.	71.7	72.9	1.1	Yes	No
20	Jurupa Av.	e/o Cypress Av.	72.2	72.2	0.0	Yes	No
21	Jurupa Av.	e/o Juniper Av.	71.9	72.7	0.7	Yes	No
22	Armstrong Rd.	w/o Sierra Av.	71.8	72.0	0.2	Yes	No
23	Armstrong Rd.	w/o 34th St.	73.4	73.5	0.1	Yes	No

TABLE 7-8: OPENING YEAR OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

¹ The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use. Values rounded to the nearest one-tenth.

² Significance Criteria (Section 4).



ID	Road	Segment	CN La	EL at Adjac nd Use (dB/	Noise- Sensitive Land Use?	Threshold Exceeded? ²	
			Without Project	With Project	Project Addition	Use?	
1	Citrus Av.	s/o I-10 Ramps	73.4	73.7	0.2	Yes	No
2	Citrus Av.	s/o Slover Av.	71.6	72.2	0.6	Yes	No
3	Citrus Av.	s/o Santa Ana Av.	70.3	71.2	0.9	No	No
4	Juniper Av.	n/o Santa Ana Av.	63.8	64.0	0.1	Yes	No
5	Juniper Av.	s/o Santa Ana Av.	64.5	64.8	0.3	No	No
6	Sierra Av.	n/o Slover Av.	75.2	75.3	0.1	Yes	No
7	Sierra Av.	s/o Slover Av.	75.4	75.6	0.1	Yes	No
8	Sierra Av.	s/o Santa Ana Av.	75.1	75.4	0.2	Yes	No
9	Sierra Av.	s/o Jurupa Av.	75.7	75.8	0.1	Yes	No
10	Slover Av.	w/o Sierra Av.	73.0	73.0	0.0	Yes	No
11	Santa Ana Av.	e/o Citrus Av.	67.8	67.8	0.0	Yes	No
12	Santa Ana Av.	e/o Juniper Av.	69.1	69.2	0.0	Yes	No
13	Santa Ana Av.	e/o Sierra Av.	67.5	68.0	0.4	Yes	No
14	Jurupa Av.	w/o Cherry Av.	73.2	73.5	0.3	Yes	No
15	Jurupa Av.	e/o Cherry Av.	72.6	73.0	0.4	Yes	No
16	Jurupa Av.	e/o Beech Av.	72.5	73.0	0.4	Yes	No
17	Jurupa Av.	e/o Poplar Av.	72.9	73.3	0.4	Yes	No
18	Jurupa Av.	e/o Citrus Av.	72.1	73.1	1.0	Yes	No
19	Jurupa Av.	e/o Oleander Av.	72.1	73.2	1.0	Yes	No
20	Jurupa Av.	e/o Cypress Av.	72.6	72.6	0.0	Yes	No
21	Jurupa Av.	e/o Juniper Av.	72.3	73.0	0.6	Yes	No
22	Armstrong Rd.	w/o Sierra Av.	72.2	72.4	0.1	Yes	No
23	Armstrong Rd.	w/o 34th St.	73.8	73.9	0.1	Yes	No

TABLE 7-9: HORIZON YEAR OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

¹ The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use. Values rounded to the nearest one-tenth.

² Significance Criteria (Section 4).



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8 **RECEIVER LOCATIONS**

To assess the potential for long-term operational and short-term construction noise impacts, the following receiver locations, as shown on Exhibit 8-A, were identified as representative locations for focused analysis. Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include: schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Moderately noise-sensitive land uses typically include: multi-family dwellings, hotels, motels, dormitories, 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, natural open space, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

Noise-sensitive receivers near the Project site include existing residential homes, Citrus High School, and St. Mary's Church. Other sensitive land uses in the Project study area that are located at greater distances than those identified in this noise study will experience lower noise levels than those presented in this report due to the additional attenuation from distance and the shielding of intervening structures.

- R1: Located approximately 70 feet north of the Project site, R1 represents an existing vacant lot and proposed South Fontana Sports Park. A 24-hour noise level measurement was taken near this location, L1, to describe the existing ambient noise environment.
- R2: Location R2 represents the existing residential home located approximately 83 feet east of the Project site on Juniper Avenue. A 24-hour noise level measurement was taken near this location, L1, to describe the existing ambient noise environment.
- R3: Location R3 represents the existing residential home east of the Project site across Juniper Avenue at roughly 84 feet. A 24-hour noise level measurement was taken near this location, L2, to describe the existing ambient noise environment.
- R4: Location R4 represents the residential home located roughly 99 feet east of the Project site on Juniper Avenue. A 24-hour noise level measurement was taken near this location, L3, to describe the existing ambient noise environment.
- R5: Location R5 represents the existing outdoor living areas (backyards) of residential homes located roughly 158 feet south of the Project site on Windcrest Drive. A 24-hour noise level measurement was taken near this location, L4, to describe the existing ambient noise environment.
- R6: Location R6 represents the existing St. Mary's Church located roughly 84 feet west of the Project site. A 24-hour noise level measurement was taken near this location, L5, to describe the existing ambient noise environment.
- R7: Location R7 represents the existing residential home and outdoor living area (backyard) located roughly 10 feet south of the Project site. A 24-hour noise level measurement was taken near this location, L5, to describe the existing ambient noise environment.

- R8: Location R8 represents the existing industrial warehouse under construction located roughly 369 feet west of the Project site. A 24-hour noise level measurement was taken near this location, L6, to describe the existing ambient noise environment.
- R9: Location R9 represents the existing Citrus High School outdoor sports field northwest of the Project site at roughly 805 feet. A 24-hour noise level measurement was taken near this location, L9, to describe the existing ambient noise environment.
- R10: Location R10 represents the existing outdoor living areas (backyards) of residential homes located roughly 751 feet north of the Project site. A 24-hour noise level measurement was taken near this location, L8, to describe the existing ambient noise environment.
- R11: Location R11 represents the existing residential home and outdoor living area (backyard) located roughly 10 feet west of the Project site under interim conditions. Future expansion of the Project site would remove this receiver location, and therefore, it is only identified under interim operational (stationary-source) and construction impact analyses. A 24-hour noise level measurement was taken near this location, L6, to describe the existing ambient noise environment.





EXHIBIT 8-A: RECEIVER LOCATIONS

*Receiver location R11 represents an existing outdoor living area (backyard) of a residential property under interim conditions pending future expansion of the Project site and is identified at 10 feet from the interim Project site boundaries.



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9 OPERATIONAL IMPACTS

This section analyzes the potential operational noise impacts due to the Project's stationary noise sources on the off-site noise-sensitive and adjacent industrial use receiver locations identified in Section 8. Exhibit 9-A identifies the receiver locations and noise source locations used to assess the Project-related operational noise levels under Scenario 1 Interim Conditions, and Exhibit 9-B presents the Scenario 2 Expansion Conditions.

9.1 **REFERENCE NOISE LEVELS**

To estimate the Project operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed Project. This section provides a detailed description of the reference noise level measurements shown on Table 9-1 used to estimate the Project operational noise impacts. It is important to note that the following projected noise levels assume the worst-case noise environment with the roof-top air conditioning units, fire pump emergency diesel generators, parking lot vehicle movements, idling trucks, delivery truck activities, backup alarms, refrigerated containers or reefers, as well as loading and unloading of dry goods all operating continuously. These noise level impacts will likely vary throughout the day.

Noice Source	Duration	Ref.	Noise Source	Hourly	Reference Noise Level (dBA L _{eq})	
Noise Source	(hh:mm:ss)	(Feet)	Height (Feet)	(Mins)⁵	@ Ref. Dist.	@ 50 Feet
Truck Idle/Reefer Activity ¹	00:14:00	30'	8'	60	70.1	65.7
Roof-Top Air Conditioning Units ²	96:00:00	5'	25'	39	77.2	57.2
Parking Lot Vehicle Movements ³	01:00:00	10'	5'	60	52.2	38.2
Fire Pump Diesel Emergency Generator ⁴	00:15:00	50'	6'	60	64.9	64.9

TABLE 9-1: REFERENCE NOISE LEVEL MEASUREMENTS

¹ As measured by Urban Crossroads, Inc. on 1/7/2015 at the Nature's Best Distribution Facility in the City of Chino.

² As measured by Urban Crossroads, Inc. on 7/27/2015 at the Santee Walmart located at 170 Town Center Parkway.

³ As measured by Urban Crossroads, Inc. on 5/17/2017 at the Panasonic Avionics Corporation parking lot in the City of Lake Forest.

⁴ As measured by Urban Crossroads, Inc. on 7/14/2012 of an emergency generator (336 kW) in the City of San Jacinto.

⁵ Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site based on the reference noise level measurement activity.



9.1.1 TRUCK IDLING, LOADING/UNLOADING, BACKUP ALARMS, AND REFRIGERATED CONTAINERS

On Wednesday, January 7th, 2015, Urban Crossroads, Inc. collected short-term operational noise level measurements at the Nature's Best distribution facility located at 16081 Fern Avenue in the City of Chino. Operations at the Nature's Best distribution facility measurements represent the typical weekday logistics warehouse activities with both dry goods and cold storage from a single building, of approximately 397,000 square feet, with loading dock areas located on both sides of the building. To describe the loading dock activities, a reference noise level measurement was collected to represent the truck idling/reefer activity.

During the 14-minute truck idling/reefer activity reference noise level measurement, approximately 20 delivery trucks were docked, idling, or parked in the northern loading dock area. The truck idling/reefer activity reference noise level measurement was taken in the center of the loading dock activity area and represents multiple concurrent noise sources resulting in a combined noise level of 65.7 dBA L_{eq} at a uniform reference distance of 50 feet.

Specifically, the truck idling/reefer activity reference noise level measurement represents one truck located approximately 30 feet from the noise level meter with another truck passing by to park roughly 20 feet away, both with their engines idling. Throughout the reference noise level measurement, a separate docked and running reefer truck was located approximately 50 feet east of the measurement location. Additional background noise sources included truck pass-by noise, truck drivers talking to each other next to docked trucks, and air brake release noise when trucks parked.

9.1.2 ROOF-TOP AIR CONDITIONING UNITS

To assess the impacts created by the roof-top air conditioning units at the Project buildings, reference noise levels measurements were taken over a four-day total duration at the Santee Walmart on July 27th, 2015. Located at 170 Town Center Parkway in the City of Santee, the noise level measurements describe mechanical roof-top air conditioning units on the roof of an existing Walmart store, in addition to background noise levels from additional roof-top units. The reference noise level represents Lennox SCA120 series 10-ton model packaged air conditioning units. At 5 feet from the closest roof-top air conditioning units, the highest exterior noise level from all four days of the measurement period was measured at 77.2 dBA Leq. Using the uniform reference distance of 50 feet, the noise level is 57.2 dBA Leq. The operating conditions of the reference noise level measurement reflect peak summer cooling requirements with measured temperatures approaching 96 degrees Fahrenheit (°F) with average daytime temperatures of 82°F. The roof-top air condition units were observed to operate the most during the daytime hours for a total of 39 minutes per hour.



9.1.3 PARKING LOT VEHICLE MOVEMENTS (AUTOS)

To determine the noise levels associated with parking lot vehicle movements, Urban Crossroads collected reference noise level measurements over a 24-hour period on May 17^{th} , 2017 at the parking lot for the Panasonic Avionics Corporation in the City of Lake Forest. The peak hour of activity measured over the 24-hour noise level measurement period occurred between 12:00 p.m. to 1:00 p.m., or the typical lunch hour for employees working in the area. The measured reference noise level at 50 feet from parking lot vehicle movements was measured at 38.2 dBA L_{eq} . The parking lot noise levels are mainly due to cars pulling in and out of spaces during peak lunch hour activity and employees talking. Noise associated with parking lot vehicle movements is expected to operate for the entire hour (60 minutes).

9.1.4 FIRE PUMP DIESEL EMERGENCY GENERATOR

To assess the impacts created by emergency generators at the Project site, a reference noise level measurement was taken on July 14^{th} , 2012 outside of a Dollar General store located at 700 South San Jacinto Avenue. The noise level measurements describe a 336 kilowatt (kW) generator operating at a distance of 50 feet from the reference measurement location with exterior noise levels of 64.9 dBA L_{eq}. For the purpose of this noise analysis, the emergency generator was observed at a height of approximately 6 feet and is expected to operate for approximately 60 minutes during emergency conditions.







EXHIBIT 9-A: PROJECT INTERIM OPERATIONAL CONDITIONS

*Receiver location R11 represents an existing outdoor living area (backyard) of a residential property under interim conditions pending future expansion of the Project site.





EXHIBIT 9-B: PROJECT EXPANSION OPERATIONAL CONDITIONS

9.2 INTERIM CONDITION PROJECT OPERATIONAL NOISE LEVELS

Based upon the reference noise levels, it is possible to estimate the Project operational stationary-source noise levels at each receiver location. The operational noise level calculations shown on Table 9-2 account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. Hard site conditions are used in the operational noise analysis which result in noise levels that attenuate (or decrease) at a rate of 6 dBA for each doubling of distance from a point source. The basic noise attenuation equation shown below is used to calculate the distance attenuation based on a reference noise level (SPL₁):

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

Where SPL_2 is the resulting noise level after attenuation, SPL_1 is the source noise level, D_2 is the distance to the reference sound pressure level (SPL_1), and D_1 is the distance to the receiver location. Table 9-2 indicates that the unmitigated operational noise levels associated with the roof-top air conditioning units, fire pump emergency diesel generators, parking lot vehicle movements, idling trucks, delivery truck activities, backup alarms, refrigerated containers or reefers, as well as loading and unloading of dry goods are expected to range from 34.8 to 59.2 dBA L_{eq} at nearby receiver locations. The unmitigated operational noise level calculation worksheets are included in Appendix 9.1.

9.3 INTERIM CONDITION OPERATIONAL NOISE LEVEL COMPLIANCE

To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of Fontana exterior noise level standards during daytime (70 dBA L_{eq}) and nighttime (65 dBA L_{eq}) hours at nearby noise-sensitive uses. Table 9-3 shows the operational noise levels associated with Goodman Industrial Park Fontana III Project will satisfy the exterior noise level standards at all nearby noise-sensitive receiver locations. Therefore, the Project-related operational noise level impacts are considered *less than significant* at adjacent uses under Scenario 1 Interim Conditions.



	1	Combined				
Receiver Location ¹	Truck Idle/Reefer Activity	Roof-Top Air Conditioning Unit	Parking Lot Vehicle Movements	Fire Pump Emergency Generator	Operational Noise Levels (dBA L _{eq}) ³	
R1	26.1	36.3	32.6	56.3	56.4	
R2	26.6	35.9	30.2	51.5	51.7	
R3	51.2	34.5	29.8	24.5	51.3	
R4	25.5	31.1	28.9	51.3	51.4	
R5	29.2	31.2	15.8	29.1	34.8	
R6	59.1	21.0	17.1	43.0	59.2	
R7	44.9	32.7	41.1	50.2	51.8	
R8	45.0	25.7	19.9	22.2	45.1	
R9	18.4	19.9	13.7	39.9	40.0	
R10	19.2	20.2	9.0	34.9	35.2	
R11	31.4	37.0	46.2	33.3	47.0	

TABLE 9-2: UNMITIGATED INTERIM OPERATIONAL NOISE LEVELS

¹ See Exhibit 9-A for the receiver and noise source locations.

² Reference noise sources as shown on Table 9-1.

 $^{\scriptscriptstyle 3}$ Calculations for each noise source are provided in Appendix 9.1.

Receiver Location ¹	Noise Level at Receiver Locations (dBA L _{eq}) ²	Thresh Receiving (dB4	olds at Land Use Leq)	Threshold Exceeded? ³		
		Daytime	Nighttime	Daytime	Nighttime	
R1	56.4	70	65	No	No	
R2	51.7	70	65	No	No	
R3	51.3	70	65	No	No	
R4	51.4	70	65	No	No	
R5	34.8	70	70 65		No	
R6	59.2	70	65	No	No	
R7	51.8	70	65	No	No	
R8	45.1	70	65	No	No	
R9	40.0	70	65	No	No	
R10	35.2	70	65	No	No	
R11	47.0	70	65	No	No	

TABLE 9-3: UNMITIGATED INTERIM OPERATIONAL NOISE LEVEL COMPLIANCE

¹ See Exhibit 9-A for the receiver and noise source locations.

² Estimated Project operational noise levels as shown on Table 9-2.

³ Do the estimated Project operational noise levels meet the operational noise level thresholds?

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



9.4 EXPANSION CONDITION PROJECT OPERATIONAL NOISE LEVELS

Table 9-4 indicates that the unmitigated operational noise levels associated with the roof-top air conditioning units, fire pump emergency diesel generators, parking lot vehicle movements, idling trucks, delivery truck activities, backup alarms, refrigerated containers or reefers, as well as loading and unloading of dry goods are expected to range from 34.8 to 60.0 dBA L_{eq} at nearby receiver locations. The unmitigated operational noise level calculation worksheets are included in Appendix 9.1.

9.5 EXPANSION CONDITION OPERATIONAL NOISE LEVEL COMPLIANCE

To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of Fontana exterior noise level standards during daytime (70 dBA L_{eq}) and nighttime (65 dBA L_{eq}) hours at nearby noise-sensitive uses. Table 9-5 shows the operational noise levels associated with Goodman Industrial Park Fontana III Project will satisfy the exterior noise level standards at all nearby noise-sensitive receiver locations. Therefore, the Project-related operational noise level impacts are considered *less than significant* at adjacent uses under Scenario 2 Expansion Conditions.

	Noise Levels by Individual Source ²				Combined	
Receiver Location ¹	Truck Idle/Reefer Activity	Roof-Top Air Conditioning Unit	Parking Lot Vehicle Movements	Fire Pump Emergency Generator	Operational Noise Levels (dBA L _{eq}) ³	
R1	26.1	36.3	32.6	56.3	56.4	
R2	26.6	35.9	30.2	51.5	51.7	
R3	51.2	34.5	29.8	24.5	51.3	
R4	25.5	31.1	28.9	51.3	51.4	
R5	29.2	31.2	15.8	29.1	34.8	
R6	59.1	21.0	17.1	43.0	59.2	
R7	44.9	43.8	41.1	59.7	60.0	
R8	45.0	25.7	19.9	22.2	45.1	
R9	18.4	19.9	13.7	39.9	40.0	
R10	19.2	20.2	9.0	34.9	35.2	
R11	Receiver does not exist under the Project expansion scenario.					

TABLE 9-4: UNMITIGATED EXPANSION OPERATIONAL NOISE LEVELS

¹ See Exhibit 9-B for the receiver and noise source locations.

² Reference noise sources as shown on Table 9-1.

³ Calculations for each noise source are provided in Appendix 9.1.



Receiver Location ¹	Noise Level at Receiver Locations	Thresholds at Receiving Land Use (dBA L _{eq})		Threshold Exceeded? ³	
	(dBA L _{eq}) ²	Daytime	Nighttime	Daytime	Nighttime
R1	56.4	70	65	No	No
R2	51.7	70	65	No	No
R3	51.3	70	65	No	No
R4	51.4	70	65	No	No
R5	34.8	70 65		No	No
R6	59.2	70	65	No	No
R7	60.0	70	65	No	No
R8	45.1	70	65	No	No
R9	40.0	70	65	No	No
R10	35.2	70	65	No	No
R11	Receiver does not exist under the Project expansion scenario.				

TABLE 9-5: UNMITIGATED EXPANSION OPERATIONAL NOISE LEVEL COMPLIANCE

¹ See Exhibit 9-B for the receiver and noise source locations.

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

³ Do the estimated Project operational noise levels meet the operational noise level thresholds?

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

9.6 OPERATIONAL VIBRATION IMPACTS

To assess the potential vibration impacts from truck haul trips associated with operational activities the vibration threshold of 0.2 in/sec PPV is used. Truck vibration levels are dependent on vehicle characteristics, load, speed, and pavement conditions. Typical vibration levels for the Goodman Industrial Park Fontana III heavy truck activity at normal traffic speeds will approach 0.004 in/sec PPV at 25 feet based on the FTA *Transit Noise Impact and Vibration Assessment*. (11) Trucks transiting on site will be travelling at very low speeds so it is expected that delivery truck vibration impacts at nearby receiver locations will satisfy the vibration threshold, and therefore, will be *less than significant*.



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10 CONSTRUCTION IMPACTS

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

10.1 CONSTRUCTION NOISE LEVELS

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

- Demolition
- Off-Site Improvements
- Grading
- Building Construction
- Paving
- Architectural Coating

This construction noise analysis was prepared using reference noise level measurements taken by Urban Crossroads, Inc. to describe the typical construction activity noise levels for each stage of Project construction. The construction reference noise level measurements represent a list of typical construction activity noise levels. Noise levels generated by heavy construction equipment can range from approximately 68 dBA to in excess of 80 dBA when measured at 50 feet. Hard site conditions are used in the construction noise analysis which result in noise levels that attenuate (or decrease) at a rate of 6 dBA for each doubling of distance from a point source (i.e. construction equipment). For example, a noise level of 80 dBA measured at 50 feet from the noise source to the receiver would be reduced to 74 dBA at 100 feet from the source to the receiver and would be further reduced to 68 dBA at 200 feet from the source to the receiver. The construction stages used in this analysis are consistent with the data used to support the construction emissions in the *Goodman Industrial Park Fontana III Air Quality Impact Analysis* prepared by Urban Crossroads, Inc. (23)

10.2 CONSTRUCTION REFERENCE NOISE LEVELS

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



ID	Noise Source	Duration (h:mm:ss)	Reference Distance From Source (Feet)	Reference Noise Levels @ Reference Distance (dBA L _{eq})	Reference Noise Levels @ 50 Feet (dBA L _{eq}) ⁷
1	Truck Pass-Bys & Dozer Activity ¹	0:01:15	30'	63.6	59.2
2	Dozer Activity ¹	0:01:00	30'	68.6	64.2
3	Construction Vehicle Maintenance Activities ²	0:01:00	30'	71.9	67.5
4	Foundation Trenching ²	0:01:01	30'	72.6	68.2
5	Rough Grading Activities ²	0:05:00	30'	77.9	73.5
6	Framing ³	0:02:00	30'	66.7	62.3
7	Dozer Pass-By ⁴	0:00:32	30'	84.0	79.6
8	Concrete Mixer Truck Movements ⁵	0:01:00	50'	71.2	71.2
9	Concrete Paver Activities ⁵	0:01:00	30'	70.0	65.6
10	Concrete Mixer Pour & Paving Activities ⁵	0:01:00	30'	70.3	65.9
11	Concrete Mixer Backup Alarms & Air Brakes ⁵	0:00:20	50'	71.6	71.6
12	Concrete Mixer Pour Activities ⁵	1:00:00	50'	67.7	67.7
13	Forklift, Jackhammer, & Metal Truck Bed Loading ⁶	0:02:06	50'	67.9	67.9

TABLE 10-1: CONSTRUCTION REFERENCE NOISE LEVELS

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

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

³ As measured by Urban Crossroads, Inc. on 10/20/15 at a residential construction site located in Rancho Mission Viejo.

⁴ As measured by Urban Crossroads, Inc. on 10/30/15 during grading operations within an industrial construction site located in the City of Ontario.

⁵ Reference noise level measurements were collected from a nighttime concrete pour at an industrial construction site, located at 27334 San

Bernardino Avenue in the City of Redlands, between 1:00 a.m. to 2:00 a.m. on 7/1/15.

⁶ As measured by Urban Crossroads, Inc. on 9/9/16 during the demolition of an existing parking lot at 41 Corporate Park in Irvine.

⁷ Reference noise levels are calculated at 50 feet using a drop off rate of 6 dBA per doubling of distance (point source).






EXHIBIT 10-A: CONSTRUCTION ACTIVITY AND RECEIVER LOCATIONS

*Receiver location R11 represents an existing outdoor living area (backyard) of a residential property under interim conditions pending future expansion of the Project site. Primary construction activities are analyzed at 30 feet from R11.

10.3 CONSTRUCTION NOISE ANALYSIS

Tables 10-2 to 10-7 show the Project construction stages and the reference construction noise levels used for each stage. Table 10-8 provides a summary of the noise levels from each stage of construction at each of the sensitive receiver locations. Based on the reference construction noise levels, the Project-related construction noise levels when the highest reference noise level is operating at the edge of primary construction activity nearest each sensitive receiver location will range from 33.5 to 77.9 dBA L_{eq} at the sensitive receiver locations, as shown on Table 10-8.

Reference Construction Activity ¹	Reference Noise Level @ 50 Feet (dBA L _{eq})
Truck Pass-Bys & Dozer Activity	59.2
Dozer Activity	64.2
Forklift, Jackhammer, & Metal Truck Bed Activities	67.9
Highest Reference Noise Level at 50 Feet (dBA Leq):	67.9

TABLE 10-2: DEMOLITION EQUIPMENT NOISE LEVELS

Noise- Sensitive Receiver Location	Distance to Construction Activity (Feet) ²	Distance Attenuation (dBA L _{eq}) ³	Estimated Noise Barrier Attenuation (dBA L _{eq}) ⁴	Construction Noise Level (dBA L _{eq})
R1	90'	-5.1	0.0	62.8
R2	118'	-7.5	0.0	60.4
R3	120'	-7.6	0.0	60.3
R4	152'	-9.7	0.0	58.2
R5	214'	-12.6	-5.0	50.3
R6	101'	-6.1	0.0	61.8
R7	30'	4.4	0.0	72.3
R8	405'	-18.2	0.0	49.7
R9	847'	-24.6	0.0	43.3
R10	771'	-23.8	-5.0	39.1
R11	30'	4.4	0.0	72.3

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

² Distance from the nearest point of construction activity to the nearest receiver.

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



Reference Construction Activity ¹	Reference Noise Level @ 50 Feet (dBA L _{eq})
Truck Pass-Bys & Dozer Activity	59.2
Dozer Activity	64.2
Concrete Mixer Truck Movements	71.2
Concrete Paver Activities	65.6
Highest Reference Noise Level at 50 Feet (dBA L _{eq}):	71.2

TABLE 10-3	OFF-SITE IM	PROVEMENTS	FOUIPMENT	NOISE LEVELS
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Noise- Sensitive Receiver Location	Distance to Construction Activity (Feet) ²	Distance Attenuation (dBA L _{eq}) ³	Estimated Noise Barrier Attenuation (dBA L _{eq}) ⁴	Construction Noise Level (dBA L _{eq})
R1	90'	-5.1	0.0	66.1
R2	118'	-7.5	0.0	63.7
R3	120'	-7.6	0.0	63.6
R4	152'	-9.7	0.0	61.5
R5	214'	-12.6	-5.0	53.6
R6	101'	-6.1	0.0	65.1
R7	30'	4.4	0.0	75.6
R8	405'	-18.2	0.0	53.0
R9	847'	-24.6	0.0	46.6
R10	771'	-23.8	-5.0	42.4
R11	30'	4.4	0.0	75.6

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

² Distance from the nearest point of construction activity to the nearest receiver.

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



Reference Construction Activity ¹	Reference Noise Level @ 50 Feet (dBA L _{eq})
Truck Pass-Bys & Dozer Activity	59.2
Dozer Activity	64.2
Rough Grading Activities	73.5
Highest Reference Noise Level at 50 Feet (dBA L_{eq}):	73.5

TABLE 10-4: GRADING EQUIPMENT NOISE LEVELS

Noise- Sensitive Receiver Location	Distance to Construction Activity (Feet) ²	Distance Attenuation (dBA L _{eq}) ³	Estimated Noise Barrier Attenuation (dBA L _{eq}) ⁴	Construction Noise Level (dBA L _{eq})
R1	90'	-5.1	0.0	68.4
R2	118'	-7.5	0.0	66.0
R3	120'	-7.6	0.0	65.9
R4	152'	-9.7	0.0	63.8
R5	214'	-12.6	-5.0	55.8
R6	101'	-6.1	0.0	67.4
R7	30'	4.4	0.0	77.9
R8	405'	-18.2	0.0	55.3
R9	847'	-24.6	0.0	48.9
R10	771'	-23.8	-5.0	44.7
R11	30'	4.4	0.0	77.9

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

² Distance from the nearest point of construction activity to the nearest receiver.

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



Reference Construction Activity ¹	Reference Noise Level @ 50 Feet (dBA L _{eq})
Construction Vehicle Maintenance Activities	67.5
Foundation Trenching	68.2
Framing	62.3
Highest Reference Noise Level at 50 Feet (dBA L_{eq}):	68.2

TABLE 10-5: BUILDING CONSTRUCTION EQUIPMENT NOISE LEVELS

Noise- Sensitive Receiver Location	Distance to Construction Activity (Feet) ²	Distance Attenuation (dBA L _{eq}) ³	Estimated Noise Barrier Attenuation (dBA L _{eq}) ⁴	Construction Noise Level (dBA L _{eq})
R1	90'	-5.1	0.0	63.1
R2	118'	-7.5	0.0	60.7
R3	120'	-7.6	0.0	60.6
R4	152'	-9.7	0.0	58.5
R5	214'	-12.6	-5.0	50.5
R6	101'	-6.1	0.0	62.1
R7	30'	4.4	0.0	72.6
R8	405'	-18.2	0.0	50.0
R9	847'	-24.6	0.0	43.6
R10	771'	-23.8	-5.0	39.4
R11	30'	4.4	0.0	72.6

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

² Distance from the nearest point of construction activity to the nearest receiver.

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

⁴ Estimated barrier attenuation from existing barriers in the Project study area.

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

TABLE 10-6: PAVING EQUIPMENT NOISE LEVELS

Noise- Sensitive Receiver Location	Distance to Construction Activity (Feet) ²	Distance Attenuation (dBA L _{eq}) ³	Estimated Noise Barrier Attenuation (dBA L _{eq}) ⁴	Construction Noise Level (dBA L _{eq})
R1	90'	-5.1	0.0	66.5
R2	118'	-7.5	0.0	64.1
R3	120'	-7.6	0.0	64.0
R4	152'	-9.7	0.0	61.9
R5	214'	-12.6	-5.0	54.0
R6	101'	-6.1	0.0	65.5
R7	30'	4.4	0.0	76.0
R8	405'	-18.2	0.0	53.4
R9	847'	-24.6	0.0	47.0
R10	771'	-23.8	-5.0	42.8
R11	30'	4.4	0.0	76.0

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

² Distance from the nearest point of construction activity to the nearest receiver.

 $^{\rm 3}$ Point (stationary) source drop off rate of 6.0 dBA per doubling of distance.

 $^{\rm 4}$ Estimated barrier attenuation from existing barriers in the Project study area.



	Reference Construction Activity ¹	Reference Noise Level @ 50 Feet (dBA L _{eq})
Framing		62.3
	Highest Reference Noise Level at 50 Feet (dBA L_{eq}):	62.3

Noise- Sensitive Receiver Location	Distance to Construction Activity (Feet) ²	Distance Attenuation (dBA L _{eq}) ³	Estimated Noise Barrier Attenuation (dBA L _{eq}) ⁴	Construction Noise Level (dBA L _{eq})
R1	90'	-5.1	0.0	57.2
R2	118'	-7.5	0.0	54.8
R3	120'	-7.6	0.0	54.7
R4	152'	-9.7	0.0	52.6
R5	214'	-12.6	-5.0	44.6
R6	101'	-6.1	0.0	56.2
R7	30'	4.4	0.0	66.7
R8	405'	-18.2	0.0	44.1
R9	847'	-24.6	0.0	37.7
R10	771'	-23.8	-5.0	33.5
R11	30'	4.4	0.0	66.7

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

 $^{\rm 2}$ Distance from the nearest point of construction activity to the nearest receiver.

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



			Construct	ion Noise Level	s (dBA L _{eq})		
Receiver Location ¹	Demolition	Off-Site Improvements	Grading	Building Construction	Paving	Architectural Coating	Highest Levels ²
R1	62.8	66.1	68.4	63.1	66.5	57.2	68.4
R2	60.4	63.7	66.0	60.7	64.1	54.8	66.0
R3	60.3	63.6	65.9	60.6	64.0	54.7	65.9
R4	58.2	61.5	63.8	58.5	61.9	52.6	63.8
R5	50.3	53.6	55.8	50.5	54.0	44.6	55.8
R6	61.8	65.1	67.4	62.1	65.5	56.2	67.4
R7	72.3	75.6	77.9	72.6	76.0	66.7	77.9
R8	49.7	53.0	55.3	50.0	53.4	44.1	55.3
R9	43.3	46.6	48.9	43.6	47.0	37.7	48.9
R10	39.1	42.4	44.7	39.4	42.8	33.5	44.7
R11	72.3	75.6	77.9	72.6	76.0	66.7	77.9

TABLE 10-8: UNMITIGATED CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY

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

² Estimated construction noise levels during peak operating conditions.

The construction noise analysis shows that the highest construction noise levels will occur when construction activities take place at the closest point from the edge of primary construction activity to each of the nearby receiver locations. As shown on Table 10-8, the unmitigated construction noise levels are expected to range from 33.5 to 77.9 dBA L_{eq} at the nearby receiver locations. Project construction noise levels are considered exempt if activities occur within the hours specified in the City of Fontana Municipal Code, Section 18-63(7) of 7:00 a.m. to 6:00 p.m. on weekdays and between the hours of 8:00 a.m. to 5:00 p.m. on Saturdays.

If Project construction activity occurs outside of the hours specified in the Municipal Code, noise levels shall satisfy the City of Fontana construction noise level thresholds of 70 dBA L_{eq} during the daytime hours and 65 dBA L_{eq} during the nighttime hours. At the time of this analysis, no nighttime Project construction activity was planned.

OFF-SITE CUMULATIVE CONSTRUCTION ACTIVITIES

It is our understanding that construction activities related to a potential expansion of the St. Mary's Church adjacent to the Project site may overlap with Project construction activities. However, at the time of this analysis, the St. Mary's Church construction schedule, stages, and equipment types were unknown. Therefore, some combined construction noise levels may occur at nearby sensitive receiver locations if activities occur simultaneously. However as previously described, Project construction noise levels are considered exempt from the City's noise level limits if activities occur within the City of Fontana's construction hours, and as such, any off-site non-Project-related construction activity noise levels would also be considered exempt if limited to the same hours.



10.4 CONSTRUCTION VIBRATION IMPACTS

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

- Heavy Construction Equipment: Although all heavy mobile construction equipment has the potential of causing at least some perceptible vibration, the vibration is usually short-term and is not of sufficient magnitude to cause building damage.
- Trucks: Trucks hauling building materials to construction sites can be sources of vibration intrusion if the haul routes pass through residential neighborhoods on streets with bumps or potholes. Repairing the bumps and potholes generally eliminates the problem.

Ground-borne vibration levels resulting from construction activities occurring within the Project site were estimated by data published by the Federal Transit Administration (FTA). Construction activities that would have the potential to generate low levels of ground-borne vibration within the Project site include grading. Using the vibration source level of construction equipment provided on Table 6-8 and the construction vibration assessment methodology published by the FTA, it is possible to estimate the Project vibration impacts. Table 10-9 presents the expected Project related vibration levels at each of the sensitive receiver locations based on the 0.2 in/sec PPV threshold for vibration.

At distances ranging from 30 to 847 feet from Project construction activity, construction vibration velocity levels are expected to approach 0.07 in/sec PPV. Based on the vibration standards used in this report, the unmitigated Project construction vibration levels will satisfy the 0.2 in/sec PPV threshold at all of the nearby sensitive receiver locations. Therefore, the vibration impacts due to Project construction are considered *less than significant*. Further, vibration levels at the site of the closest sensitive receiver are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating simultaneously adjacent to the Project site perimeter.



	Distance		Receive	er PPV Levels (in/sec)²			
Receiver ¹	to Const. Activity (Feet)	Small Bulldozer	Jack- hammer	Loaded Trucks	Large Bulldozer	Peak Vibration	Threshold (in/sec PPV)	Threshold Exceeded? ³
R1	90'	0.000	0.005	0.011	0.013	0.013	0.2	No
R2	118'	0.000	0.003	0.007	0.009	0.009	0.2	No
R3	120'	0.000	0.003	0.007	0.008	0.008	0.2	No
R4	152'	0.000	0.002	0.005	0.006	0.006	0.2	No
R5	214'	0.000	0.001	0.003	0.004	0.004	0.2	No
R6	101'	0.000	0.004	0.009	0.011	0.011	0.2	No
R7	30'	0.002	0.027	0.058	0.068	0.068	0.2	No
R8	405'	0.000	0.001	0.001	0.001	0.001	0.2	No
R9	847'	0.000	0.000	0.000	0.000	0.000	0.2	No
R10	771'	0.000	0.000	0.000	0.001	0.001	0.2	No
R11	30'	0.002	0.027	0.058	0.068	0.068	0.2	No

TABLE 10-9: UNMITIGATED CONSTRUCTION EQUIPMENT VIBRATION LEVELS

¹Receiver locations are shown on Exhibit 10-A.

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

³ Does the peak vibration exceed the vibration thresholds?



11 REFERENCES

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- 9. Occupational Safety and Health Administration. Standard 29 CRF, Part 1910.
- 10. Center for Disease Control and Prevention. About Hearing Loss. [Online] [Cited: 04 15, 2016.] http://www.cdc.gov/healthyschools/noise/signs.htm.
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- 13. State of California. California Green Building Standards Code. 2016.
- 14. City of Fontana. General Plan Noise Element. November 2018.
- 15. Office of Planning and Research. State of California General Plan Guidelines. October 2003.
- 16. City of Fontana. Zoning and Development Code, Section 30, Article V Residential Zoning Districts, Division 6 Performance Standards.
- 17. —. Municipal Code, Chapter 18, Article II Noise.
- 18. **City of Fontana Community Development.** *Noise and Vibration Thresholds of Significance, Confirmation of Noise Impact Analysis Scope for an Industrial Warehouse Project.* May 2019.
- 19. American National Standards Institute (ANSI). Specification for Sound Level Meters ANSI S1.4-2014/IEC 61672-1:2013.
- 20. U.S. Department of Transportation, Federal Highway Administration. FHWA Highway Traffic Noise Prediction Model. December 1978. FHWA-RD-77-108.
- 21. California Department of Transportation Environmental Program, Office of Environmental Engineering. Use of California Vehicle Noise Reference Energy Mean Emission Levels (Calveno REMELs) in FHWA Highway Traffic Noise Prediction. September 1995. TAN 95-03.



- 22. **California Department of Transportation.** *Traffic Noise Attenuation as a Function of Ground and Vegetation Final Report.* June 1995. FHWA/CA/TL-95/23.
- 23. Urban Crossroads, Inc. Goodman Industrial Park Fontana III Air Quality Impact Analysis. June 2019.



12 CERTIFICATION

The contents of this noise study report represent an accurate depiction of the noise environment and impacts associated with the proposed Goodman Industrial Park Fontana III 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.

Bill Lawson, P.E., INCE Principal URBAN CROSSROADS, INC. 260 E. Baker Street, Suite 200 Costa Mesa, CA 92626 (949) 336-5979 blawson@urbanxroads.com



EDUCATION

Master of Science in Civil and Environmental Engineering California Polytechnic State University, San Luis Obispo • December, 1993

Bachelor of Science in City and Regional Planning California Polytechnic State University, San Luis Obispo • June, 1992

PROFESSIONAL REGISTRATIONS

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

PROFESSIONAL AFFILIATIONS

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

PROFESSIONAL CERTIFICATIONS

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



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APPENDIX 3.1:

CITY OF FONTANA DEVELOPMENT CODE



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- (a) *Noise levels.* No person shall create or cause to be created any sound which exceeds the noise levels in this section as measured at the property line of any residentially zoned property:
 - (1) The noise level between 7:00 a.m. and 10:00 p.m. shall not exceed 65 db(A).
 - (2) The noise level between 10:00 p.m. and 7:00 a.m. shall not exceed 70 db(A).
- (b) Noise measurements. Noise shall be measured with a sound level meter that meets the standards of the American National Standards Institute (ANSI) Section SI4-1979, Type 1 or Type 2. Noise levels shall be measured using the "A" weighted sound pressure level scale in decibels (reference pressure = 20 micronewtons per meter squared).
- (c) *Vibration.* No person shall create or cause to be created any activity which causes a vibration which can be felt beyond the property line of any residentially zoned property with or without the aid of an instrument.

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APPENDIX 5.1:

STUDY AREA PHOTOS



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L1 East 34, 3' 16.660000", 117, 26' 23.680000"



L1 North 34, 3' 16.720000", 117, 26' 23.710000"



L1 South 34, 3' 16.710000", 117, 26' 23.710000"



L1 West 34, 3' 16.720000", 117, 26' 23.710000"



L2 East 34, 3' 8.530000", 117, 26' 24.010000"



L2 North 34, 3' 8.530000", 117, 26' 24.060000"



L2 South 34, 3' 8.500000", 117, 26' 23.980000"



L2 West 34, 3' 8.480000", 117, 26' 24.060000"



L3 East 34, 2' 57.240000", 117, 26' 23.760000"



L3 North 34, 2' 57.350000", 117, 26' 23.730000"



L3 South 34, 2' 57.310000", 117, 26' 23.730000"



L3 West 34, 2' 57.330000", 117, 26' 23.710000"



L4 East 34, 2' 52.240000", 117, 26' 27.880000"



L4 North 34, 2' 52.240000", 117, 26' 27.880000"



L4 South 34, 2' 52.240000", 117, 26' 27.850000"



L4 Southwest 34, 2' 52.240000", 117, 26' 27.880000"



L4 West 34, 2' 52.240000", 117, 26' 27.910000"



L5 East 34, 2' 57.530000", 117, 26' 32.520000"



L5 North 34, 2' 57.530000", 117, 26' 32.520000"



L5 South 34, 2' 57.510000", 117, 26' 32.500000"



L5 West 34, 2' 57.510000", 117, 26' 32.520000"



L6 East 34, 3' 4.460000", 117, 26' 39.310000"



L6 North 34, 3' 4.460000", 117, 26' 39.330000"



L6 South 34, 3' 4.460000", 117, 26' 39.310000"



L6 West 34, 3' 4.460000", 117, 26' 39.360000"



L7 East 34, 3' 18.960000", 117, 26' 39.390000"



L7 North 34, 3' 18.960000", 117, 26' 39.440000"



L7 South 34, 3' 18.960000", 117, 26' 39.360000"



L7 West 34, 3' 18.910000", 117, 26' 39.440000"



L8 East 34, 3' 20.570000", 117, 26' 29.420000"



L8 North 34, 3' 20.540000", 117, 26' 29.390000"



L8 South 34, 3' 20.600000", 117, 26' 29.420000"



L8 West 34, 3' 20.600000", 117, 26' 29.390000"



L9 East 34, 3' 27.080000", 117, 26' 41.200000"



L9 North 34, 3' 27.090000", 117, 26' 41.200000"



L9 South 34, 3' 27.060000", 117, 26' 41.200000"



L9 West 34, 3' 27.110000", 117, 26' 41.200000"

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APPENDIX 5.2:

LONG-TERM NOISE LEVEL MEASUREMENT WORKSHEETS



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Date: Project:	Monday, Mé Goodman In	arch 25, 2019 Idustrial Park	Fontana III		Location:	L1 - Locatec near an exis	l on Juniper . ting U.S. Pos	Avenue, nort st Office and	residential r	nome.	Meter:				Analyst:	R. Saber
(A8b) _{P9} J γhuoH 80877 0.0002044 2000000044	S'2S	0.09	e0°3	S [.] 29	e3°0	6.43 8.43		С Т., т. т. т. т. т. т. т. т. т. т.	6.42	8:99 C :50	T.89	7.73	63	6.19	0'25 5.10 8.10	9.22
	0	1 2	- - -	4 18	- -	19 20	21	22 23 Hour Be	- 0 - 1 eginning	13 14	15 16	17	18 19	20	21 22	23
Timeframe	Hour	L eq	L _{max}	L _{min}	71%	12%	75%	%87	L25%	720%	%067	%567	%667	L eq	Adj.	Adj. L _{eq}
	0 -	57.5 60.0	83.3 86.7	42.1	70.0	64.0 68.0	56.0	54.0	51.0	49.0	46.0	45.0	44.0	57.5 60.0	10.0	67.5 70.0
	7 7	53.7	75.4	44.0	66.0	0.09 60.0	52.0	51.0	49.0	48.0	45.0	46.0	44.0	53.7	10.0	63.7
Night	£	60.3	81.4	47.6	72.0	70.0	64.0	60.0	57.0	53.0	49.0	48.0	48.0	60.3	10.0	70.3
	4 18	62.9 67.5	83.5 92.9	50.1 47.8	75.0 78.0	73.0 75.0	68.0 72.0	65.0 71.0	59.0 64.0	57.0 56.0	52.0 51.0	51.0 50.0	50.0 49.0	62.9 67.5	10.0 10.0	72.9 77.5
	5	63.0	84.5	51.1	75.0	73.0	68.0	65.0	57.0	55.0	53.0	53.0	51.0	63.0	10.0	73.0
	19	64.9 64.8	81.4 83 5	48.9 16.8	75.0 76.0	74.0 75.0	72.0	70.0 69.0	62.0 60.0	55.0	51.0 Ag O	50.0 18.0	49.0	64.9 64.8	0.0	64.9 64.8
	21 21	62.9	c.co 80.0	40.0 46.9	74.0	73.0	71.0 71.0	0.90 68.0	56.0	51.0	49.0 48.0	40.0 48.0	47.0	04.0 62.9	0.0	62.9
	22	64.1	84.1	46.0	76.0	74.0	71.0	68.0	57.0	51.0	48.0	48.0	47.0	64.1	0.0	64.1
	23	59.4	79.8	45.7	72.0	70.0	65.0	61.0	52.0	50.0	47.0	47.0	46.0	59.4	0.0	59.4
Day	0 ;	54.9 65 5	79.9 07 E	44.0 26.4	66.0 77 0	58.0 75 0	52.0	51.0	48.0 62.0	47.0 54.0	45.0	45.0	44.0 AF 0	54.9 65 5	0.0	54.9 65 5
	14	66.8	84.2 84.2	47.0	77.0	76.0	74.0	72.0	02.0 64.0	56.0	47.0 50.0	49.0	48.0	66.8	0.0	66.8
	15	68.1	87.7	46.6	78.0	0.77	74.0	73.0	66.0	58.0	49.0	49.0	48.0	68.1	0.0	68.1
	16	67.1 67.4	86.4 96.7	47.3 10 7	77.0	76.0	74.0	72.0	65.0 66.0	56.0	50.0	49.0	48.0	67.1 67.4	0.0	67.1 67 A
	18	66.3	97.2	45.8	75.0	74.0	70.0	68.0 68.0	58.0	51.0	48.0	47.0	46.0	6.3	0.0	66.3
	19	63.0	84.9	44.9	75.0	73.0	70.0	67.0	56.0	51.0	48.0	47.0	46.0	63.0	5.0	68.0
Evening	20	61.9 61.3	80.3 82 D	43.6 47 3	74.0	72.0	69.0 68.0	67.0 64.0	55.0 53.0	49.0	46.0	45.0	44.0 43.0	61.9 61 3	5.0 7.0	66.9 66.3
	22	57.0	76.6	42.5	70.0	67.0	63.0	59.0	49.0	46.0	44.0	44.0	43.0	57.0	10.0	67.0
Night	23	55.6	78.3	41.5	68.0	62.0	56.0	54.0	51.0	47.0	44.0	43.0	42.0	55.6	10.0	65.6
Timeframe	Hour	L eq	L _{max}	L _{min}	L1%	L2%	75%	%87	L25%	720%	%067	7 95%	%667		L _{eq} (dBA)	
Day	Min	54.9 68.1	79.8 97.2	36.4 48.9	66.0 78.0	58.0 77.0	52.0 74.0	51.0 73.0	48.0 66.0	47.0 58.0	45.0 51.0	45.0 50.0	44.0 49.0	24-Hour	Daytime	Nighttime
Energy	Average	65.4	Aver	age:	75.0	73.2	70.1	67.9	59.7	53.3	48.6	48.0	47.0	0 7 7	0 7 2	217
Evening	Min	61.3	80.3	42.3	74.0	72.0	68.0 70.0	64.0	53.0	48.0	44.0	44.0	43.0	0.4.0	04.7	/ • • • •
Fnerøv	IVIAX	03.U 62 1	84.9 Aver	44.7 200	U.C/ 74.3	0.67 77 3	70.U 69 ()	0.10 66.0	0.0C	0.1C	46.U	47.U 45.3	40.U 44 3	-+7	HOULCIVEL	BAJ
	Min	04.1 53.7	75.4	41.5	6.1	60.09	52.0	50.0	48.0	46.0	44.0	43.0	42.0			
Night	Max	67.5	92.9	51.1	78.0	75.0	72.0	71.0	64.0	57.0	53.0	53.0	51.0		6Y.U	
Energy.	Average	61.7	Aver	'age:	71.8	68.0	62.0	58.8	53.9	50.9	47.8	47.2	46.2			

U:\Uclobs_12100-12500_12300\12384\Fieldwork\12384_L1_Summary

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Date: Project:	Monday, M. Goodman Ir	larch 18, 2019 ndustrial Park	Fontana III		Location:	L2 - Located Project site,	on Juniper / near existin	Avenue, on t g rural reside	he eastern ential home	border of the s.	e Meter	Piccolo I			JN: Analyst:	12384 R. Saber
(A8b) _{P9} J γIruoH 80000000044 80000000000000000000000000	S'ZS	0.52	t.09	8.29	6'59	0.43		4 Keading 4 Keading		7.29	<u> </u>	T.88	6:99	6 [.]	0 [.] 25	22'e
2.00	0	1 2	- - -	4 5	- 9	7 8	- 6	10 11 Hour B	12 eginning	13 14	15 1	6 17	18 19	20	21 22	23
Timeframe	Hour	L eq	L _{max}	L _{min}	11%	L2%	L5%	%87	L25%	720%	%067	<i>767</i>	%667	L eq	Adj.	Adj. L _{eq}
	0,	57.5 52.0	83.3	42.1	70.0	64.0 77.0	59.0	54.0	51.0	49.0	46.0	45.0	44.0	57.5	10.0	67.5 62.0
	7 1	53.0 57.0	78.0 78.0	42.6 42.3	0.cə 70.0	0.7 <i>c</i> 68.0	60.0 60.0	52.0 57.0	49.0 50.0	47.0	44.0 45.0	43.0 44.0	43.0 43.0	53.0 57.0	10.0 10.0	63.U 67.0
Night	ß	60.4	86.8	46.5	72.0	69.0	64.0	60.0	54.0	52.0	49.0	48.0	47.0	60.4	10.0	70.4
	4 v	62.8 65.4	89.3 89.7	49.2 51.1	75.0 76.0	72.0 75.0	66.0 71.0	62.0 69.0	56.0 60.0	54.0 57.0	52.0 54.0	51.0 53.0	50.0 52.0	62.8 65.4	10.0 10.0	72.8 75.4
	9	65.9	83.3	50.8	77.0	75.0	73.0	71.0	62.0	57.0	54.0	53.0	52.0	65.9	10.0	75.9
	~ 0	64.4 64.6	88.5 e1 e	47.8 45 7	75.0 75.0	74.0	71.0	68.0	59.0 61.0	55.0	51.0	50.0	49.0	64.4 64.6	0.0	64.4 64.6
	00	04.0 65.3	01.0 91.3	4.5.4	76.0	74.0 74.0	71.0	0.07	0.10 59.0	53.0	0.0c 47.0	46.0	44.0	04.0 65.3	0.0	04.0 65.3
	10	65.3	85.7	42.0	76.0	75.0	72.0	70.0	62.0	53.0	46.0	45.0	43.0	65.3	0.0	65.3
	11 ;	64.3	83.0	42.1	75.0 75.0	74.0	71.0	70.0	60.0	52.0	45.0	44.0	43.0	64.3	0.0	64.3
Dау	13	64.0 65.4	80.3 86.9	41.6 42.5	0.c/ 76.0	75.0	/1.0 72.0	69.0 71.0	59.0 60.0	52.0 52.0	47.0	46.0 46.0	44.0 44.0	65.4	0.0	64.U 65.4
	14	65.8	82.4	42.5	76.0	75.0	73.0	71.0	63.0	55.0	48.0	47.0	45.0	65.8	0.0	65.8
	15	67.7	87.8	42.3	78.0	76.0	74.0	72.0	66.0	55.0	48.0	47.0	45.0	67.7	0.0	67.7
	16 17	66.1	87.6 89.5	46.U 47.8	76.0	75.0 75.0	/3.0 72.0	0.27 70.0	64.0 62.0	57.0	50.0 51.0	49.0 50.0	47.0 49.0	66.1 66.1	0.0	66.1
	18	66.3	97.2 84.0	45.8	75.0 75.0	74.0	70.0	68.0	58.0	51.0	48.0	47.0	46.0	66.3	0.0	66.3
Evening	20	0.c0 61.9	80.3	44.9 43.6	74.0	72.0	0.07	07.0 67.0	55.0	49.0	46.0	45.0	40.0	0.co 61.9	5.0	0.00 66.9
)	21	61.3	82.0	42.3	74.0	72.0	68.0	64.0	53.0	48.0	44.0	44.0	43.0	61.3	5.0	66.3
Night	22	57.0	76.6 	42.5	70.0	67.0 62.0	63.0	59.0	49.0	46.0	44.0	44.0	43.0	57.0 57.0	10.0	67.0 67.0
Timeframe	23 Hour	0.55 L	/8.3	41.5 L	68.U	62.U 12%	56.U L 5 %	54.U L8%	51.0 125%	47.0 150%	44.U 190%	43.0 L95%	42.0 199%	0.66	L (dBA)	0.60
	Min	64.0	80.3	41.5	75.0	74.0	70.0	68.0	58.0	51.0	45.0	44.0	43.0			Nichttimo
Чау	Мах	67.7	97.2	47.8	78.0	76.0	74.0	72.0	66.0	57.0	51.0	50.0	49.0	100U-47	nuyume	
Energy /	Average	65.6 24 2	Aver	age:	75.8	74.6	71.8	70.0	61.1	53.9	48.2	47.2	45.5	64.1	65.1	61.4
Evening	Min Max	61.3 63.0	80.3 84.9	42.3 44.9	75.0	73.0 73.0	68.U 70.0	64.0 67.0	53.0 56.0	48.0 51.0	44.0 48.0	44.0 47.0	43.0 46.0	24-	Hour CNEL (d	BA)
Energy /	Average	62.1	Aven	age:	74.3	72.3	69.0	66.0	54.7	49.3	46.0	45.3	44.3			
Night	Min Max	53.0 65.9	76.1 89.7	41.5 51.1	65.0 77.0	57.0 75.0	53.0 73.0	52.0 71.0	49.0 62.0	46.0 57.0	44.0 54.0	43.0 53.0	42.0 52.0		68.8	
Energy /	Average	61.4	Aven	age:	71.4	67.7	62.8	59.8	53.6	50.8	48.0	47.1	46.2			

U:\Uclobs_12100-12500_12300\12384\Fieldwork\12384_L2_Summary

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Date: Project:	Tuesday, M Goodman Ir	arch 26, 2019 Jdustrial Park) Fontana III		Location:	L3 - Locatec the Project	d on Juniper site and exis	Avenue, neal ting rural res	r the eastern idential hom	border of les.	Meter:	Piccolo I			JN: Analyst:	12384 R. Saber
(A8b) ₀₀J vhuoH 8000000000000000000000000000000000000	t.22	23:25	8.62	6'T9	Z.E3	9 [.] 29	Hourly L 4	dBA Readings	(unadjusted	S' S9	T.33	9°29	9 . 29	0.29	5'65 T'T9	9:55
1.00		1 2	C	4 - 5	- 9	7 8	- 6	10 11 Hour B i	12 1 eginning	3 14	15 16	17	18 19	20	21 22	23
Timeframe	Hour	L eq	L max	L min	L1%	L2%	L5%	L8%	125%	L50%	0 cr %067	L95%	73 0	L eq	Adj.	Adj. L _{eq}
	р с і	53.5	7.77	42.8	02.0 65.0	61.0 61.0	55.0	53.0	49.0	47.0	44.0	44.0	42.0	53.5	10.0	02.4 63.5
Night	7 6	50.4 59.8	71.0 90.6	42.3 41.7	61.0 69.0	56.0 66.0	53.0 60.0	52.0	48.0 52.0	45.0 49.0	43.0 44.0	43.0 43.0	42.0 42.0	50.4 59.8	10.0 10.0	60.4 69.8
0	0 4	58.8	81.2	45.8	70.0	68.0	63.0	60.0	55.0	52.0	49.0	48.0	46.0	58.8	10.0	68.8
	υO	61.9 63.2	87.6 82.8	49.2 50.2	73.0 74.0	71.0 72.0	65.0 70.0	62.0 67.0	58.0 60.0	55.0 57.0	52.0 53.0	51.0 52.0	50.0 51.0	61.9 63.2	10.0 10.0	71.9 73.2
	7	65.3	87.7	48.6	76.0	74.0	71.0	69.0	61.0	57.0	53.0	52.0	50.0	65.3	0.0	65.3
	∞ (62.6	83.0	45.3	73.0	72.0	0.69	67.0	58.0	54.0	49.0	48.0	46.0	62.6	0.0	62.6
	6 C	63.2 67.6	80.6 81.8	42.9	74.0	73.0	70.0	68.0 67.0	60.0 58 D	54.0 53.0	48.0 46.0	47.0 45.0	45.0 44.0	63.2 67 6	0.0	63.2 67.6
	11	64.6	84.6	40.4	75.0	74.0	71.0	69.0	61.0	54.0	48.0	47.0	44.0	64.6	0.0	64.6
Dav	12	65.2	91.3	42.9	75.0	73.0	70.0	69.0	60.0	54.0	48.0	46.0	44.0	65.2	0.0	65.2
	13	63.2 65 5	81.5 86.1	42.8 42.5	74.0	72.0 75.0	70.0	68.0 70.0	60.0	54.0	49.0	47.0	45.0 45.0	63.2 65 5	0.0	63.2 бб б
	15 14	6.20 66.1	1.00 86.8	43.5 43.6	76.0	75.0	72.0	70.0	02.0 63.0	57.0	49.0 49.0	47.0	45.0 45.0	66.1	0.0	6.00 66.1
	16	6.99	85.5	43.6	77.0	75.0	73.0	72.0	65.0	58.0	50.0	49.0	45.0	6.99	0.0	6.99
	17 18	67.6 64.6	96.3 85.9	44.7 45.3	76.0 75.0	74.0 73.0	72.0 70.0	70.0 0.69	63.0 61.0	58.0 57.0	53.0 51.0	51.0 50.0	49.0 48.0	67.6 64.6	0.0	67.6 64.6
	19	62.6	86.3	45.1	73.0	72.0	69.0	67.0	59.0	55.0	50.0	49.0	47.0	62.6	5.0	67.6
Evening	20	62.0 61.1	84.3 85.7	46.2 44.8	73.0 72.0	71.0	68.0 67.0	66.0 65.0	59.0 57.0	54.0 53.0	50.0 48.0	49.0 47.0	47.0 45.0	62.0 61.1	5.0	67.0 66.1
Nicht	22	59.5	76.3	42.5	72.0	70.0	66.0	63.0	56.0	52.0	46.0	45.0	43.0	59.5	10.0	69.5
	23	55.6	75.0	42.8	66.0	64.0	61.0	58.0	53.0	49.0	45.0	44.0	43.0	55.6	10.0	65.6
	Min	ь еа 62.6	L max 80.6	40.4	73.0	72.0	69.0	67.0	58.0	53.0	46.0	45.0	44.0			
лау	Max	67.6	96.3	48.6	77.0	75.0	73.0	72.0	65.0	58.0	53.0	52.0	50.0	24-HOUL	лаупте	Nignttime
Energy	Average	65.1	Ave	rage:	75.1	73.5	70.8	69.0	61.0	55.4	49.4	48.1	45.8	63.7	64.6	С 0 0
Evening	Min Max	61.1 62.6	84.3 86.3	44.8 46.2	72.0 73.0	70.0 72.0	67.0 69.0	65.0 67.0	57.0 59.0	53.0 55.0	48.0 50.0	47.0 49.0	45.0 47.0	24-	Hour CNEL (HBA)
Energy	Average	61.9	Ave	rage:	72.7	71.0	68.0	66.0	58.3	54.0	49.3	48.3	46.3			
Night	Min Max	50.4 63.2	71.0 90.6	41.7 50.2	61.0 74.0	56.0 72.0	53.0 70.0	52.0 67.0	48.0 60.0	45.0 57.0	43.0 53.0	43.0 52.0	42.0 51.0		67.2	
Energy.	Average	59.0	Ave	rage:	68.0	65.2	60.9	58.4	53.3	50.2	46.6	45.9	44.7			

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Date: Project:	Tuesday, M Goodman Ir	larch 26, 2019 ndustrial Park) : Fontana III		Location:	L4 - Locatec within an ex	d on Windcré xisting single	est Drive, sou t-family resid	uth of the Pro lential neighb	ject site, vorhood.	Meter:	Piccolo I			JN: Analyst:	12384 R. Saber
(A8b) p₀J { 800,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,000 700,00000000																
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Timeframe	Hour				110/	70C	150/	Hour B	eginning	1 50%	7 an%	105%	%00 <i>1</i>	-	Adi	Adi I
	0	- eq 47.1	70.8	- min 38.8	56.0	53.0	49.0	47.0	44.0	42.0	39.0	39.0	39.0	- eq 47.1	10.0	57.1
	1	47.7	69.7	39.0	58.0	50.0	46.0	45.0	43.0	42.0	40.0	40.0	39.0	47.7	10.0	57.7
Night	3 7	46.7 51.2	66.9 72.4	39.0 39.0	58.0 65.0	52.0 62.0	47.0 53.0	46.0 49.0	43.0 45.0	42.0 43.0	40.0 41.0	39.0 40.0	39.0 40.0	46.7 51.2	10.0 10.0	56.7 61.2
5	4	52.7	70.3	41.8	65.0	63.0	56.0	53.0	49.0	47.0	45.0	44.0	42.0	52.7	10.0	62.7
	ю Q	51.9 53.6	69.1 70.6	44.4 47.2	59.0 63.0	56.0 59.0	54.0 57.0	54.0 56.0	52.0 53.0	50.0 51.0	47.0 49.0	46.0 48.0	45.0 48.0	51.9 53.6	10.0 10.0	61.9 63.6
	2	56.1	71.5	45.4	66.0	64.0	61.0	59.0	55.0	53.0	49.0	48.0	46.0	56.1	0.0	56.1
	×	54.7	74.5	42.9	66.0	63.0	59.0	57.0	53.0	49.0	45.0	45.0	44.0	54.7	0.0	54.7
	б ;	55.7	75.0	41.7	66.0 2000	64.0	61.0 	59.0	54.0	50.0	44.0	43.0	42.0	55.7	0.0	55.7
	10	52.1 54.0	74.0	0.95	63.0 65 0	60.0 62 0	56.U	54.0	50.0	47.0	42.0	41.0	40.0	52.1 54.0	0.0	52.1 54.0
Ċ	12	53.8	71.6	39.1	65.0	02.0 63.0	58.0	56.0	52.0	49.0	44.0	43.0	41.0	53.8	0.0	53.8
Lay	13	53.4	79.2	39.0	64.0	60.0	56.0	55.0	49.0	46.0	42.0	42.0	40.0	53.4	0.0	53.4
	14	54.0	75.2	40.3	65.0	62.0	58.0	56.0	51.0	48.0	44.0	43.0	41.0	54.0	0.0	54.0
	c1 16	53.4 54.5	75.6	39.0 41.6	64.0 65.0	61.0 63.0	59.0 59.0	57.0	52.0 52.0	49.0 49.0	45.0 45.0	43.U 44.0	42.0 42.0	53.4 54.5	0.0	53.4 54.5
	17	58.2	85.8	42.1	67.0	65.0	61.0	59.0	53.0	50.0	46.0	45.0	44.0	58.2	0.0	58.2
	18	53.9	73.1	42.6	65.0	63.0	59.0	57.0	51.0	49.0	46.0	45.0	44.0	53.9	0.0	53.9
Fvening	19	55.8 53.1	84.4 71 2	43.1	65.0 65.0	63.0	58.0	55.0 56.0	50.0 49.0	48.0	45.0	44.0	43.0	55.8 53.1	5.0 7	60.8 58 1
0	21	54.2	74.5	39.0	65.0	64.0	62.0	59.0	48.0	46.0	42.0	42.0	40.0	54.2	5.0	59.2
Night	22	55.8	73.1	40.4	68.0	67.0	62.0	59.0	49.0	45.0	43.0	42.0	41.0	55.8	10.0	65.8
0.0	23	51.2	71.4	40.4	63.0	60.0	57.0	54.0	47.0	44.0	41.0	41.0	40.0	51.2		61.2
allinifallit	Min	۲ <i>وم</i> 52.1	- max 71.5	5 min 39.0	63.0	60.0	56.0	54.0	49.0	46.0	42.0	41.0	40.0		r eq (uuru)	
Day	Мах	58.2	85.8	45.4	67.0	65.0	61.0	59.0	55.0	53.0	49.0	48.0	46.0	24-Hour	Daytime	Nighttime
Energy	Average	54.8	Ave	rage:	65.1	62.5	58.8	56.8	52.0	48.9	44.6	43.8	42.3	С Х Х	547	ק מ
Evening	Min	53.1 55.8	71.2 84.4	39.0 43.1	65.0 65.0	63.0 64 D	58.0	55.0 59.0	48.0 50.0	46.0 48.0	42.0 45.0	42.0 44.0	40.0	0.00		
Energy ,	Average	54.5	Ave	rage:	65.0	63.3	59.7	56.7	49.0	47.0	43.3	42.7	41.0			
Night	Min Max	46.7 55.8	6.99 73,1	38.8 47.2	56.0 68.0	50.0 67.0	46.0 62.0	45.0 59.0	43.0 53.0	42.0 51.0	39.0 49.0	39.0 48.0	39.0 48.0		59.2	
Energy ,	Average	51.8	Ave	rage:	61.7	58.0	53.4	51.4	47.2	45.1	42.8	42.1	41.4			

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Date: Project:	Tuesday, M. Goodman Ir	arch 26, 2019 Idustrial Park	Fontana III		Location	L5 - Loc southw	ated adjaco est corner	ent to St. I of Project	Mary's Chu site bounc	ırch, near łary line.	the		<i>Meter:</i> Pi	ccolo I				JN: 1 Analyst: F	.2384 1. Saber
							Hour	y L _{eq} dBA	Readings (u	inadjustea	()								
85.0 80.0																			
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0.09 1 1																			
uly			0	۲. 53.69	£.0	8	9.		.	6		2	9	<mark>2.0</mark>	Þ .	8.1.6	τ.		
Hou 45.0 40.0	2:25	Z'SS 	•ZS	85)9 	·95	85 85		89	•95	2.4.3	2S	• 9 5)9 	85	5S	6 S	2.4.2	S.02
35.0	0	1	- -	4	9	-	6 0	10	11	12	13 14	15	16	17	18	19 20	21	52	23
									Hour Beg	inning									
Timeframe	Hour	L eq	L _{max}	L _{min}	11%	12%	15	%	78%	L25%	150%	57	%0	195%	%667	L eq	B	Adj.	Adj. L _{eq}
	0	52.7	76.4	43.9	64.0	59.0) 55	0.	53.0	50.0	48.0	4	5.0	45.0	44.0	52.	.7	10.0	62.7
	1	51.7	68.9	43.6	62.0	57.0	54	0.	53.0	50.0	48.0	4	5.0	45.0	44.0	51.	.7	10.0	61.7
	2	55.2	73.1	44.0	68.0	65.0	55	0.	56.0	52.0	50.0	4	7.0	46.0	45.0	55.	.2	10.0	65.2
Night	m •	57.0 52.3	71.4	48.4	68.0	66.0	[] []	0.0	59.0	56.0	53.0	שי ו -	0.0	49.0	49.0	57.	0 1	10.0	67.0
	4 ч	58.7 63.6	71.3	51.4 50.8	65.0 73.0	63.(20	0.0	61.0 69.0	59.0 62 0	57.0		4.0	53.0	52.0	58.	.7 6	10.0	68.7 73 6
	n u	03.0 603	77 4	53 1	0.67	67.0	1 64	. c	03.0 62 0	0.20 59.0	7.8.7 0.8.7	n r	0.0	0.4.0 55.0	0.66	60	p. m	10 0	0.c/ 70.3
		56.8	72.0	46.7	66.0 66.0	64.0	61	0.0	59.0	56.0	54.0		1.0	50.0	49.0	56.	∞	0.0	56.8
	~ ∞	58.6	80.5	45.8	68.0	9.99	64	o.	62.0	56.0	53.0		0.0	49.0	47.0	58.	9	0.0	58.6
	6	54.9	78.6	44.9	65.0	63.0	55	0.	57.0	53.0	51.0	4	8.0	47.0	46.0	54.	6	0.0	54.9
	10	55.7	71.6	42.9	66.0	64.0) 61	0.	60.0	54.0	51.0	4	7.0	46.0	44.0	55.	7	0.0	55.7
	11	58.2	75.2	43.4	68.0	67.(9	0.	62.0	56.0	53.0	4	8.0	47.0	45.0	58.	.2	0.0	58.2
Day	12	56.9	71.7	45.0	66.0	65.0		0, 0	61.0 52.0	56.0	53.0	4	0.0	48.0	46.0	20. 1	ما	0.0	56.9
	13	7.66 5.4.3	74.3 74.3	44.2	0.60	61.0			52.0	54.0	52.U 51.0		0.2	47.0	45.U	ς Υ.Υ.	·	0.0	7.65 5.4.3
	15	57.2	76.3	44.0	67.0	01.0 65.0		o o	62.0	56.0	52.0	4	8.0	47.0	45.0	57.	j d	0.0	57.2
	16	56.6	74.5	45.0	67.0	65.0	62	0.	60.0	55.0	53.0	4	8.0	48.0	46.0	56.	9	0.0	56.6
	17	60.2 F8 4	79.0	46.6	71.0).69 .65		0.0	64.0 61.0	58.0	54.0	ю ц	0.0	49.0 51.0	47.0	60.	2.5	0.0	60.2 F8.4
	10	4.00 61 8	0.10	50.5	71.0	69.00			0.10	61.0	57.0			0.10	51.0	-00 61	t 🗙	0.0	
Evening	20	59.9	75.2	47.2	70.0	68.0	66	<u>.</u> 0.	64.0	58.0	54.0	0.10	0.0	49.0	48.0	59.	و م	5.0	64.9
	21	59.1	76.9	44.8	70.0	.69) 65	0.	63.0	54.0	52.0	4	8.0	47.0	46.0	59.	.1	5.0	64.1
Night	22	54.2	69.0	44.3	65.0	63.() 55	0.0	57.0	52.0	50.0	4	7.0	46.0	45.0	54.	.2	10.0	64.2
ALIG INT	23	50.5	72.0	43.6	57.0	55.(53	0.	52.0	50.0	48.0	4	6.0	45.0	44.0	50.	.5	10.0	60.5
Timeframe	Hour	L eq	L max	L min	L1%	12%	37 57	%	L8%	L25%	L50%	57	0% 2 C	L95%	%667		L ea	_q (abA)	
Day	Max	54.3 60.2	/1.6 81.0	42.9 48.3	64.0 71.0	0.10		0. 0.	57.U 64.0	53.U 58.0	55.0	4 U	2.0	46.U 51.0	44.U 50.0	24-H	our Di	aytime	Nighttime
Energy A	Average	57.3	Ave	rage:	66.7	64.8	3 61	6.	60.3	55.4	52.7	4	8.8	47.9	46.3	0	-	- -	0
Evening	Min	59.1	75.2	44.8	70.0	68.() 65	0.	63.0	54.0	52.0	4	8.0	47.0	46.0	00		1.00	0.00
0	Max	61.8	83.4	50.2	71.0	.69	6)	0.	66.0	61.0	57.0	5	3.0	52.0	51.0		24-Houi	r CNEL (dB	(A)
Energy /	Average	60.4 10 1	Ave	rage:	70.3	68.7	- et	0.0	64.3	57.7	54.3	S S	0.3	49.3	48.3				
Night	Min Max	50.5 63.6	68.9 77.4	43.6 53.1	57.0 73.0).čč 72.0	20 20	0. 0.	52.0 69.0	50.0 62.0	58.0	4 0	5.0	45.0 55.0	44.0 54.0		9	4.8	
Energy A	lverage	58.0	Ave	rage:	65.7	63.(55	.6	58.0	54.4	52.2	4	9.3	48.7	47.8				

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Date: Project:	Tuesday, Mi Goodman Ir	arch 26, 2019 ndustrial Park	Fontana III		Location:	L6 - Located the Project	d on Cypress site, near ex	Avenue, on isting rural-r	the western esidential hc	boundary of mes.	Meter:	Piccolo I			JN: Analyst:	12384 R. Saber
(A8b) 75.02 72.02 72.02 72.02							Hourly L eq	dBA Reading	s (unadjusted)							
μ₀μ ζμυοΗ 2000 τ 2000 τ 2000 2000 τ 2000 τ 2000 2000 τ 2000 τ 2000 2000 τ 2000 τ 20000 τ 20000 τ 20	£'ES	9.62	S.00	8.29	0.33	9.E9	8.29	9.49	E.Ea	7:99	0.33	0.89	6 . 29	T.2 9	9.Eð	8.52
	0	1 2	ε	4 5	9	7 8	6	10 11 Hour B	12 1 eginning	3 14	15 16	17	18 19	20	21 22	23
Timeframe	Hour	L eq	L _{max}	L _{min}	L1%	12%	72%	%87	125%	720%	%067	767	%667	L _{eq}	Adj.	Adj. L _{eq}
	0 7	53.3 Fr 4	74.6 78 F	41.0	67.0	64.0	54.0	50.0	45.0	44.0	42.0	42.0	41.0	53.3	10.0	63.3 65 4
	т 2	59.6	6.8/ 82.0	40.1 42.5	72.0	70.0	65.0	0.22 60.0	40.0 49.0	44.0 46.0	41.0 44.0	41.U 43.0	41.U 43.0	59.6	10.0 10.0	69.6
Night	ε	60.5	81.5	45.6	73.0	71.0	67.0	64.0	53.0	50.0	47.0	47.0	46.0	60.5	10.0	70.5
	4 v	62.8 64.4	80.4 83.1	47.0 46.9	73.0 75.0	72.0 73.0	70.0 71.0	68.0 69.0	58.0 61.0	53.0 56.0	49.0 52.0	48.0 51.0	47.0 50.0	62.8 64.4	10.0 10.0	72.8 74.4
	9	60.0	84.0 •2 7	49.5	71.0	74.0	72.0	70.0	64.0 61 0	57.0 52.0	52.0 19 0	51.0	50.0	66.0	10.0	76.0
	~ ∞	03.0 64.1	85.9	43.4 42.3	74.0	72.0	70.0	0.69 0.9	0.1.0 62.0	53.0	46.0	40.0	44.0	03.0 64.1	0.0	0.3.0 64.1
	6	62.8	80.8	41.3	73.0	72.0	69.0	68.0	60.0	51.0	45.0	44.0	43.0	62.8	0.0	62.8
	10	63.0	79.1	41.2	73.0	72.0	0.69	68.0	62.0	53.0	46.0	45.0	43.0	63.0	0.0	63.0 64.6
ſ	11	64.6 63.3	87.7 84.1	41.9 41.2	74.0 73.0	72.0	70.0 70.0	0.80 69.0	62.0 62.0	53.0 54.0	45.0 46.0	44.0 44.0	43.0 42.0	64.6 63.3	0.0	64.6 63.3
Day	13	64.6	82.3	42.2	74.0	72.0	70.0	0.69	64.0	55.0	45.0	44.0	43.0	64.6	0.0	64.6
	14	66.2 66.0	83.2	41.3	75.0	74.0	72.0	71.0	66.0 66.0	57.0	46.0	44.0	42.0	66.2	0.0	66.2 66.0
	c1 16	00.0 66.6	91.9 88.4	41.3 43.4	75.0	73.0 73.0	71.0	70.0 70.0	0.00 66.0	0.06 60.0	40.0 48.0	47.0	43.U 45.0	00.0 66.6	0.0	00.0 66.6
	17	68.0	97.4	43.5	75.0	73.0	71.0	70.0	65.0	57.0	47.0	46.0	45.0	68.0	0.0	68.0
	19	62.9	85.1	44.5	73.0	72.0	0.07	0.60 68.0	59.0	51.0	47.0	46.0	45.0	62.9	0.0 5.0	67.9
Evening	20	62.1	82.5	43.0	72.0	71.0	0.69	67.0	60.0	50.0	45.0	44.0	43.0	62.1	5.0	67.1
	21	63.6 57.0	92.8	41.1	73.0	71.0	69.0	66.0	57.0	47.0	42.0	42.0	41.0	63.6 F7 0	5.0	68.6
Night	22 23	57.8 53.8	82.4 79.6	39.5 39.5	/U.U 67.0	67.U 63.0	64.U 53.0	49.0	0.05 44.0	43.0 43.0	42.U 41.0	42.0 41.0	41.U 39.0	57.8 53.8	10.0 10.0	67.8 63.8
Timeframe	Hour	L eq	L _{max}	L min	L1%	L2%	L5%	78%	125%	150%	%067	195%	%667		L eq (dBA)	
Day	Min	62.8 68 0	79.1 97.4	41.2 44 5	73.0 75.0	72.0	69.0 72.0	68.0 71.0	60.0 66.0	51.0 60.0	45.0 48.0	44.0 47.0	42.0 45.0	24-Hour	Daytime	Nighttime
Energy	Average	65.0	Aver	rage:	73.9	72.4	70.3	69.2	63.3	54.8	46.3	45.0	43.4	L C 3	2 7 2	C 1 3
Evening	Min	62.1 52.5	82.5	41.1 45 7	72.0	71.0	0.69	66.0 6.0	57.0 60.0	47.0 51.0	42.0 47.0	42.0 46.0	41.0 AF 0	1.00	7.40	C'TO
Energy	Average	62.9	Aver	rage:	72.7	71.3	0.60	67.0	58.7	49.3	44.7	44.0	43.0			(20
Night	Min	53.3	74.6	39.5 40 F	67.0 77.0	63.0 74.0	53.0	49.0	44.0	43.0	41.0	41.0	39.0 50.0		68.7	
Energy	Average	61.3	o4.U Aver	49.5 rage:	71.4	68.9	63.7	60.3	64.U 52.2	48.7	45.6	45.1	0.0c 44.2			

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Date: Project:	Tuesday, M Goodman Ir	larch 26, 2019 ndustrial Park) Fontana III		Location:	L7 - Located Project site,	on Cypress . near an indu	Avenue, on t. Istrial constr	ne western r uction site.	oorder of the	Meter:	Piccolo I			JN: Analyst:	12384 R. Saber
(A8b) ₀₄ I γhuoH 888,00,00,046 7.00,00,00,046 7.00,00,00,00,00,00,00,00,00,00,00,00,00,		C	m	6.89 4 Γ.0Γ ιο	o	Τ΄ΟΔ ∞ Β΄ΤΔ ►	е <mark>2.83</mark> о С.83 о	d.80 0		1.60	15 16.44 16.44	6.7 a	10 10 10 10 10 10 10 10 10 10	7.7	21 63.1 22 58.4	23 23 23
Timeframe	Hour	L _{eq}	L _{max}	L _{min}	L1%	L2%	L5%	Hour Be L8%	eginning 125%	L50%	%067	795%	%667	L eq	Adj.	Adj. L _{eq}
	0 -	53.8 59.0	73.4 79.7	39.0 41.9	68.0 70.0	65.0 68.0	55.0 64.0	50.0 64.0	46.0 53.0	44.0 48.0	41.0 44.0	40.0 43.0	40.0 47.0	53.8 59.0	10.0 10.0	63.8 69.0
Night	100	66.5 68.4	87.1 86 2	63.0 62.0	75.0	73.0	69.0 69.0	67.0 70.0	64.0 65.0	64.0	63.0	63.0 64.0	63.0 64.0	66.5 68.4	10.0	76.5
NIGINI	04	68.9	88.4	63.4	79.0	76.0	73.0	71.0	67.0	64.0	64.0	64.0	04.0 63.0	68.9	10.0	78.9
	ыo	70.7 73.3	88.1 96.2	62.2 64.5	82.0 83.0	80.0 81.0	75.0 78.0	73.0 76.0	68.0 71.0	65.0 69.0	64.0 67.0	64.0 66.0	64.0 65.0	70.7 73.3	10.0 10.0	80.7 83.3
	2	71.8	88.6	63.2	81.0	80.0	77.0	75.0	70.0	67.0	65.0	64.0	63.0	71.8	0.0	71.8
	∞ σ	70.1 68 2	91.8 85 0	62.6 60.7	80.0 75 0	74.0	72.0	71.0	68.0 68.0	66.0 66.0	64.0 64.0	63.0 64.0	63.0 63.0	70.1 68 2	0.0	70.1 68 2
	10	00.2 68.6	85.2	63.9	75.0	74.0	72.0	71.0	68.0	67.0	65.0	65.0	64.0	68.6	0.0	68.6
	11	70.9	90.8	61.9 62.5	78.0	76.0 77.0	74.0	73.0	69.0 0.69	67.0	65.0 67.0	65.0 67.0	64.0	70.9	0.0	70.9
Day	13	69.7 69.5	91.9 85.5	60.5 60.5	76.0	74.0	73.0	72.0	70.0	67.U 68.0	0.co 65.0	64.0	64.U 63.0	69.7 69.5	0.0	69.7 69.5
	14	69.1	87.1	43.0	77.0	75.0	73.0	71.0	0.69	66.0	56.0	51.0	45.0	69.1	0.0	69.1
	15 16	66.4 68 1	87.8 91.7	41.9 41 3	75.0 77.0	73.0 75.0	71.0	71.0	66.0 67 0	61.0 61.0	49.0 48.0	46.0 45.0	43.0 43.0	66.4 68 1	0.0	66.4 68 1
	17	67.9	90.5 84.1	42.6	78.0	75.0	71.0	70.0	66.0 65.0	59.0	47.0	45.0	43.0	67.9	0.0	67.9
	19	64.4 64.4	90.9	43.9	74.0	72.0	0.69	68.0	62.0	54.0	46.0	46.0	45.0	64.4 64.4	5.0	69.4
Evening	20	67.2 63 1	97.2 86.3	41.9 30 3	74.0 74.0	72.0	70.0	68.0 67.0	62.0 57 0	51.0 47.0	45.0 42.0	44.0 41.0	43.0 40.0	67.2 63 1	5.0	72.2 68 1
Ni abt	22	58.4	81.7	39.0	0.69	68.0	65.0	63.0	52.0	46.0	42.0	41.0	40.0	58.4	10.0	68.4
INIBIIL	23	57.5	87.5	38.9	67.0	64.0	56.0	51.0	45.0	43.0	41.0	40.0	39.0	57.5	10.0	67.5
IImejrame	Min	L eq 64 3	L max 84 1	L min 41 3	L1%	72 0	20 0	0 69 %87	65 0	150%	46 0	45 ()	43 0		L _{eq} (abA)	
Day	Max	71.8	91.9	63.9	81.0	80.0	77.0	75.0	70.0	68.0	65.0	65.0	64.0	24-Hour	Daytime	Nighttime
Energy	Average	69.1	Aver	age:	76.8	74.9	72.4	71.2	67.8	64.3	58.3	56.8	55.2	5 89	989	67 8
Evening	Min Max	63.1 67.2	86.3 97.2	39.3 43.9	74.0 74.0	72.0 72.0	69.0 70.0	67.0 68.0	57.0 62.0	47.0 54.0	42.0 46.0	41.0 46.0	40.0 45.0	24-1	Hour CNEL (d	8A)
Energy	Average	65.2	Aver	age:	74.0	72.0	69.3	67.7	60.3	50.7	44.3	43.7	42.7			
Night	Min Max	53.8 73.3	73.4 96.2	38.9 64.5	67.0 83.0	64.0 81.0	55.0 78.0	50.0 76.0	45.0 71.0	43.0 69.0	41.0 67.0	40.0 66.0	39.0 65.0		74.5	
Energy	Average	67.8	Aver	age:	74.8	72.4	67.4	65.0	59.0	56.3	54.4	53.9	53.3			

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(A8b) _{p9} J γhuoH 8887 7 89 80 80 00000000000 000000000000000000	-						bA Keduliugs	luaisuluuu							
ο) _{μα} Ι γήπυοΗ Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο Ο															
0	23'2	0.82	0.03	7.29	9.4 .09	t ⁻ T9	E'09	9.09	8.92	T.42	T.2 9	8'T9 S'T9	S.0 3	S'T9 6'T9	£.92
	1 2	m	4 5	9	7 8	9	0 11 Hour Bé	12 1 ginning	3 14	15 16	3 17	18 19	20	21 22	23
Timeframe Hour	L _{eq}	L _{max}	L min	L1%	L2%	T5%	%8 7	125%	720%	%067	767	%667	L eq	Adj.	Adj. L _{eq}
0	49.0	71.1	43.4	55.0	52.0	50.0	49.0	47.0	46.0	44.0	44.0	43.0	49.0	10.0	0.62
	52.3	72.4 75.4	43.0 44.0	65.0 66.0	61.0 61.0	52.0 53.0	49.0 51.0	46.0 49.0	45.0 47.0	45.0 45.0	45.0	43.0 44.0	52.3 53.5	10.0	62.3 63 5
Night 3	58.0	75.9	46.9	71.0	0.69	63.0	59.0	53.0	50.0	48.0	48.0	47.0	58.0	10.0	68.0
4	58.3	74.5	50.9	70.0	68.0	63.0	60.0	55.0	53.0	52.0	52.0	51.0	58.3	10.0	68.3
o u	60.0 62.4	80.0 81.8	50.1 52.0	70.0 72.0	69.0 70.0	66.0 68.0	64.0 67.0	56.0 60.0	54.0 56.0	52.0 54.0	51.0 53.0	50.0 53.0	60.0 62.4	10.0 10.0	70.0 72.4
7	64.6	85.7	51.9	75.0	73.0	70.0	69.0	63.0	58.0	54.0	53.0	52.0	64.6	0.0	64.6
Ø	60.4	77.5	47.2	71.0	0.69	67.0	65.0	58.0	53.0	50.0	50.0	48.0	60.4	0.0	60.4
σ ζ	61.4 E0.2	76.9 76 F	46.9	72.0	70.0	68.0 65.0	66.0 64.0	60.0	53.0	49.0	48.0	48.0 AF 0	61.4 E0.2	0.0	61.4 E0.2
9 11	59.2 60.3	76.6	44.8	0.07	0.70	0.2.0 66.0	04.0 65.0	0.09	53.0	40.0	47.0	45.0	5.ec 60.3	0.0	5.95 60.3
12	60.6	76.3	43.6	71.0	70.0	67.0	65.0	59.0	52.0	47.0	46.0	45.0	9.09	0.0	9.09
13	59.8	79.0	45.7	70.0	68.0	66.0	64.0	59.0	52.0	48.0	47.0	46.0	59.8	0.0	59.8
14	59.7	79.6	46.8 42.6	70.0	67.0 70.0	65.0 66.0	64.0	58.0	52.0	49.0	48.0	47.0	59.7	0.0	59.7
1 1 16	04.1 61.3	77.6	42.0 42.1	71.0 71.0	0.07	67.0	65.0	60.U 61.0	55.0	46.0 46.0	45.0 45.0	44.0 43.0	64.1 61.3	0.0	61.3 61.3
17	62.1	80.3	44.1	71.0	70.0	68.0	67.0	62.0	56.0	47.0	46.0	45.0	62.1 54 5	0.0	62.1 54 F
19 19	61.8	84.1	47.2	73.0	71.0	67.0 67.0	66.0	59.0 59.0	52.0	48.0	47.0	47.0	6.10 61.8	5.0	C'TO
Evening 20	60.5	79.8	47.4	72.0	69.0	66.0	65.0	58.0	52.0	49.0	48.0	48.0	60.5	5.0	65.5
21	61.9 61.5	81.8	46.2	73.0	71.0	69.0	67.0 CC 0	57.0	50.0	48.0	47.0	47.0	61.9 C1 F	5.0	66.9 74 F
Night 22	C.10	80.U 77.2	44.0 44.0	0.67 69.0	0'T/	63.0	00.0 60.0	51.0	49.0	46.0	45.0	44.0 45.0	C.10	10.0	C.L \
Timeframe Hour	L eq	L _{max}	L _{min}	L1%	L2%	L5%	<i>%8</i> 7	L25%	150%	%067	<i>1</i> 95%	%667		L eq (dBA)	
Day	59.2	76.3 22 -	42.1	69.0 27.0	67.0 	65.0 <u>-</u> 0.0	64.0	57.0	51.0	46.0	45.0	43.0	24-Hour	Daytime	Nighttime
Energy Average	61.6 61.6	Aver	eric age:	71.0	/3.U 69.3	66.8	65.4	0.20 59.9	53.7	48.3	47.4	46.2			
Min	60.5	79.8	46.2	72.0	69.0	66.0	65.0	57.0	50.0	48.0	47.0	47.0	00.6	9.1.9	ל.8ל
Max	61.9	84.1	47.4	73.0	71.0	69.0	67.0	59.0	52.0	49.0	48.0	48.0	24-	Hour CNET (d	(BA)
Energy Average	61.4	Aver	age:	72.7	70.3	67.3 - 2 2	66.0	58.0	51.3	48.3	47.7	47.3			
Night Max	49.0 62.4	/1.1 81.8	43.0 52.0	73.0 73.0	52.0 71.0	50.0 68.0	49.0 67.0	46.0 60.0	45.0 56.0	44.0 54.0	43.0 53.0	43.0 53.0		66.0	
Energy Average	58.5	Aver	age:	67.9	65.3	60.7	58.3	52.3	49.8	47.9	47.3	46.7			

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Date: Project:	Wednesday Goodman Ir	, April 10, 20 Idustrial Park	19 < Fontana III		Location:	L9 - Located Cypress Ave Project Site.	within the C nue near exi	itrus High Sc sting resider	chool parkir Itial homes	ng lot, west o , north of the	f Meter:	Piccolo I			JN: Analyst:	12384 R. Saber
85.0 80.0																
(A8b)								6								
۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.0000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.000 ۵.0000 ۵.0000 ۵.0000 ۵.0000 ۵.0000 ۵.0000 ۵.0000 ۵.0000 ۵.0000 ۵.00000	z.	0.	¢.2	Ţ.03	2.19	28 [.] 3	E.9	·TL	ε.	7.29	6.82	6.09	5.0 3	9.62	S.8 2	2.9
HC 40.0 35.0	77	25	is is	S			S		77							2 2 2
	0	1 2	- M	4	9	7 8	- 6	0 11	12	13 14	15 16	17	18 19	20	21 22	23
								Hour B(eginning							
Timeframe	Hour	L eq	L max	L min	L1%	L2%	L5%	%87	L25%	720%	%067	767	%667	L _{eq}	Adj.	Adj. L _{eq}
	0,	47.2	65.8 67.3	40.4	58.0	55.0	51.0	48.0	45.0	43.0	41.0	41.0	40.0	47.2	10.0	57.2
	1 0	52.0 57.5	67.2 70.3	41./ 44.8	60.0 62.0	59.U	56.0	54.0 54.0	52.0	50.0	46.U 48.0	44.0 47.0	42.0 46.0	52.0 52.5	10.0	62.0 62.5
Night	ıω	55.4	71.9	46.2	67.0	64.0	60.09	58.0	53.0	50.0	48.0	47.0	46.0	55.4	10.0	65.4
	4	57.2	72.8	46.0	68.0	66.0	63.0	61.0	55.0	52.0	49.0	48.0	47.0	57.2	10.0	67.2
	лю	60.1 61.2	76.3 81.7	49.2 47.1	69.0 71.0	67.0 69.0	65.0 65.0	64.0 64.0	60.0 60.0	55.0 56.0	51.0 50.0	51.0 49.0	50.0 48.0	60.1 61.2	10.0 10.0	70.1 71.2
	7	62.3	85.5	48.0	71.0	0.69	66.0	65.0	62.0	59.0	53.0	51.0	49.0	62.3	0.0	62.3
	∞	58.1	77.2	46.3	0.69	67.0	63.0	61.0	57.0	53.0	48.0	48.0	47.0	58.1	0.0	58.1
	б,	56.3 20 - 2	73.6 	45.9	67.0 =2.0	65.0 	61.0 21.0	59.0	55.0	51.0	48.0	47.0	46.0	56.3	0.0	56.3
	10	62.7 71 9	79.6 86.3	35.7 51 1	73.0	72.0 78.0	71.0 76.0	69.0 75.0	58.0 72 0	54.0 70.0	48.0 64.0	47.0 61.0	45.0 56.0	62.7 71 9	0.0	62.7 71 9
Č	12	41.3	70.9	35.7	49.0	43.0	40.0	38.0	35.0	35.0	35.0	35.0	35.0	41.3	0.0	41.3
Лау	13	65.7	86.9	35.7	80.0	78.0	67.0	61.0	35.0	35.0	35.0	35.0	35.0	65.7	0.0	65.7
	14	60.4 F 8 0	76.0 74 F	49.9	70.0	68.0	65.0 62.0	64.0 61.0	59.0	56.0	53.0	52.0	51.0	60.4 F8.0	0.0	60.4 F8.0
	در 16	58.9 61.2	77.6	47.5	98.U 73.0	00.0 71.0	67.0	64.0	59.0	56.0	52.0	51.0	0.1c	61.2	0.0	61.2
	17	6.09	77.0	49.2	71.0	0.69	66.0 222	64.0	59.0	57.0	52.0	51.0	50.0	6.09	0.0	60.9
	10	50 A	0.87	47.8 AF 7	70.0	0.69 68 0	64.0 64.0	63.U	59.0	0.95	0.15 70.0	0.02 A 8 0	49.0	5.0d د م	0.0	6.00 6.4 A
Evening	20	59.6	78.9	43.6	70.0	0.00	65.0	63.0	58.0	53.0	48.0	46.0	44.0	59.6	5.0	64.6
	21	58.5	73.6	41.6	69.0	67.0	64.0	62.0	57.0	52.0	44.0	43.0	42.0	58.5	5.0	63.5
Night	22	55.8	73.0	41.6 41.F	68.0	66.0	62.0	59.0	52.0	46.0	43.0	42.0	42.0	55.8	10.0	65.8 CC2
Timeframe	Hour	2.0C	L may	L min	03.0 L1%	00.0 L2%	02.0 L5%	0.6C	0.00 L25%	45.0%	0.24 190%	42.0 L95%	0.14 199%	7.00	L a (dBA)	00.2
Dav	Min	41.3	70.9	35.7	49.0	43.0	40.0	38.0	35.0	35.0	35.0	35.0	35.0	24-Hour	Davtime	Ninhttime
	Max	71.9	86.9	51.1	80.0	78.0	76.0	75.0	72.0	70.0	64.0	61.0	56.0			
LIIEIBY	Average	03.9 Fo F	AVE	age. 11 C	1.07	0/19	64.3 64.0	07.0	1.00	53.2 E 2 0	49.3	40.3	47.0	61.8	63.3	56.9
Evening	Max	59.6	78.9	45.7	0.07	0.70	04.U 65.0	02.0 63.0	58.0	54.0	44.0	43.0	42.0	24-	Hour CNEL ((BA)
Energy	Average	59.2	Ave	'age:	69.7	68.0	64.3	62.3	57.7	53.0	47.0	45.7	44.3			
Night	Min Max	47.2 61.2	65.8 81.7	40.4 49.2	58.0 71.0	55.0 69.0	51.0 65.0	48.0 64.0	45.0 60.0	43.0 56.0	41.0 51.0	41.0 51.0	40.0 50.0		65.3	
Energy	Average	56.9	Ave	age:	65.8	63.4	60.0	57.9	53.2	49.7	46.4	45.7	44.7			

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APPENDIX 5.3:

SHORT-TERM NOISE LEVEL MEASUREMENT DATA



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Summary - With Aircraft 01				
File Name on Meter	LxT Data 090			
File Name on PC	SIM 0001146 LyT Data 090.00 k	thin		
Serial Number	0001146			
Model	SoundTrack LyT®			
Firmware Version	2 301			
	R Saber			
location	Fontana			
lob Description	12384			
Note	12301			
Measurement				
Description				
Start	2019-04-09 11:22:50			
Stop	2019-04-09 11:25:06			
Duration	00:02:16.0			
Run Time	00:02:16.0			
Pause	00:00:00.0			
Pre Calibration	2010-01-08 08.55.33			
Post Calibration	2019-04-08 08.55.25 None			
Calibration Deviation	None			
Overall Settings				
RMS Weight	A Weighting			
Peak Weight	Z Weighting			
Detector	Slow			
Preamp	PRMLxT1			
Microphone Correction	Off			
Integration Method	Exponential			
OBA Range	Low			
OBA Bandwidth	1/1 and 1/3			
OBA Freq. Weighting	A Weighting			
OBA Max Spectrum	Bin Max			
Overload	145.0 dB		_	
	Α	C	Z	
Under Range Peak	101.2	98.2	103.2 dB	
Under Range Limit	37.6	35.6	43.6 dB	
Noise Floor	24.8	25.3	32.8 dB	
Results				
LASeq	60.5 dB			
LASE	81.9 dB			
EAS	17.032 μPa²h			
EAS8	3.607 mPa²h			
EAS40	18.034 mPa²h			
LZSpeak (max)	2019-04-09 11:24:13	94.9 dB		
LASmax	2019-04-09 11:24:07	70.5 dB		
LASmin	2019-04-09 11:22:50	48.0 dB		
SEA	-99.9 dB			

Summary - With Aircraft 02				
File Name on Meter	LxT Data.091			
File Name on PC	SIM 0001146 LxT Data 091 00.ldbin			
Serial Number	0001146			
Model	SoundTrack LxT®			
Firmware Version	2 301			
User	R Saber			
Location	Fontana			
Job Description	12384			
Note				
Measurement				
Description				
Start	2019-04-09 11:25:21			
Stop	2019-04-09 11:26:36			
Duration	00:01:15.2			
Run Time	00:01:15.2			
Pause	00:00:00.0			
Pro Calibration	2010-04-08 08.55.22			
Post Calibration	2019-04-08 08.35.25 None			
Calibration Deviation	None			
Overall Settings				
RMS Weight	A Weighting			
Peak Weight	Z Weighting			
Detector	Slow			
Preamp	PRMLxT1			
Microphone Correction	Off			
Integration Method	Exponential			
OBA Range	Low			
OBA Bandwidth	1/1 and 1/3			
OBA Freq. Weighting	A Weighting			
OBA Max Spectrum	Bin Max			
Overload	145.0 dB			
	Α	C	Z	
Under Range Peak	101.2	98.2	103.2 dB	
Under Range Limit	37.6	35.6	43.6 dB	
Noise Floor	24.8	25.3	32.8 dB	
Results				
LASeg	62.0 dB			
LASE	80.7 dB			
EAS	13.180 uPa²h			
EAS8	5.048 mPa ² h			
EAS40	25.238 mPa ² h			
LZSpeak (max)	2019-04-09 11:26:18	99.5 dB		
LASmax	2019-04-09 11:25:55	69.8 dB		
LASmin	2019-04-09 11:25:23	53.0 dB		
SEA	-99.9 dB			

Summary				
File Name on Meter	LxT Data 092			
File Name on PC	SIM 0001146 LvT Data 092 00 ldbin			
Serial Number	0001146			
Model	SoundTrack LyT®			
Firmware Version	2 201			
	2.301 P. Sabar			
User	R.Sabel			
Job Description	12364			
Note				
Measurement				
Description				
Start	2019-04-09 11:26:42			
Stop	2019-04-09 11:27:34			
Duration	00:00:52 5			
Run Time	00.00.52.5			
Pause	00.00.00 0			
Pre Calibration	2019-04-08 08:55:23			
Post Calibration	None			
Calibration Deviation				
Overall Settings				
RMS Weight	A Weighting			
Peak Weight	Z Weighting			
Detector	Slow			
Preamp	PRMLxT1			
Microphone Correction	Off			
Integration Method	Exponential			
OBA Range	Low			
OBA Bandwidth	1/1 and 1/3			
OBA Freq. Weighting	A Weighting			
OBA Max Spectrum	Bin Max			
Overload	145.0 dB			
	Α	С	Z	
Under Range Peak	101.2	98.2	103.2 dB	
Under Range Limit	37.6	35.6	43.6 dB	
Noise Floor	24.8	25.3	32.8 dB	
Poculto				
Results				
	58.3 UB			
	/5.5 UB			
EAS	3.980 μPa ⁻ h			
	2.184 MPa ² n			
	10.918 mPa ² h	00.4		
LZSpeak (max)	2019-04-09 11:27:13	98.4 dB		
	2019-04-09 11:27:27			
LASmin	2019-04-09 11:26:59	50.5 dB		
SEA	-99.9 dB			

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APPENDIX 7.1:

OFF-SITE TRAFFIC NOISE LEVEL CONTOURS

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	FH	WA-RD-77-10	8 HIGH	WAY NO	OISE PI	REDICTIO	N MOD	EL			
Scenar Road Nan Road Segme	rio: Existing W ne: Citrus Av. nt: s/o I-10 Ra	lithout Project				Project N Job Nur	lame: G nber: 12	oodman 2384	111		
SITE	SPECIFIC II	NPUT DATA				NC	DISE M	ODEL I	NPUTS		
Highway Data				S	lite Cor	nditions (H	lard = 1	0, Soft :	= 15)		
Average Daily	Traffic (Adt):	24,431 vehic	les				A	utos:	15		
Peak Hour	Percentage:	10%			Ме	edium Truc	ks (2 Ax	des):	15		
Peak H	lour Volume:	2,443 vehicl	es		He	avy Truck	s (3+ Ax	des):	15		
Ve	hicle Speed:	45 mph		v	ehicle	Mix					
Near/Far La	ne Distance:	88 feet		-	Veh	nicleType	D	Day E	vening	Night	Daily
Site Data						Au	tos: 7	7.5%	12.9%	9.6%	95.52%
Ba	rrier Heiaht:	0.0 feet			М	edium Tru	cks: 8	4.8%	4.9%	10.3%	2.33%
Barrier Type (0-W	Vall, 1-Berm):	0.0			1	Heavy Tru	cks: 8	6.5%	2.7%	10.8%	2.15%
Centerline Di	ist. to Barrier:	66.0 feet		N	loise S	ource Elev	vations	(in feet)		
Centerline Dist.	to Observer:	66.0 feet			0.00 0	Autos	0.00	0	,		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks:	2.29	97			
Observer Height	(Above Pad):	5.0 feet			Heav	v Trucks:	8.00)4 Gr	ade Adju	stment:	0.0
P	ad Elevation:	0.0 feet		-							
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent L	Distance	e (in fee	t)		
	Road Grade:	0.0%				Autos:	49.44	47			
	Left View:	-90.0 degre	es		Mediu	m Trucks:	49.26	58			
	Right View:	90.0 degre	ees		Heav	vy Trucks:	49.28	35			
FHWA Noise Mod	el Calculation	15									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fresne	l Ba	rrier Attei	n Ber	m Atten
Autos:	68.46	i 1.84	1	-0.03		-1.20	-4	4.71	0.00	0	0.000
Medium Trucks:	79.45	-14.28	3	-0.01		-1.20	-4	4.88	0.00	0	0.000
Heavy Trucks:	84.25	-14.63	3	-0.01		-1.20	-{	5.30	0.00	0	0.000
Unmitigated Nois	e Levels (with	nout Topo and	l barrie	r attenu	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	iy 🛛	Leq Eve	ening	Leq N	ight	Lo	In	CI	IEL
Autos:	69	9.1	67.2		65.4		59.4		68.0		68.6
Medium Trucks:	64	4.0	62.4		56.1		54.5		63.0		63.2
Heavy Trucks:	68	8.4	67.0		58.0		59.2		67.6		67.7
Vehicle Noise:	72	2.4	70.8		66.5		63.0		71.5		71.8
Centerline Distan	ce to Noise C	ontour (in fee	et)								
				70 di	BA	65 dE	BA	60 c	1BA	55	dBA
			Ldn:	82		178	3	38	33	8	25
		0	NEL:	87		188	3	40)5	8	72

	FAV	VA-RD-77-108 F		AY N	OISE PF	REDICTIO		DEL			
Scenar	io: Existing Wi	thout Project				Project N	lame:	Goodr	nan III		
Road Nam	e: Citrus Av.					Job Nu	mber:	12384			
Road Segme	nt: s/o Slover /	Av.									
SITE	SPECIFIC IN	IPUT DATA				N	DISE	NODE		S	
Highway Data				S	lite Con	ditions (I	Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	12,722 vehicles	5					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truo	:ks (2 /	(<i>xles</i>)	15		
Peak H	lour Volume:	1,272 vehicles			Hea	avy Truck	:s (3+ A	Axles):	15		
Ve	hicle Speed:	40 mph		ν	ehicle l	Nix					
Near/Far La	ne Distance:	48 feet			Vehi	cleType		Day	Evening	Night	Daily
Site Data						A	itos:	77.5%	5 12.9%	9.6%	95.52%
Bai	rrier Heiaht:	0.0 feet			Me	edium Tru	cks:	84.8%	4.9%	10.3%	2.33%
Barrier Type (0-W	all, 1-Berm):	0.0			F	leavy Tru	cks:	86.5%	2.7%	10.8%	2.15%
Centerline Di	st. to Barrier:	46.0 feet			loiso Sa	urco Elo	vation	c (in f	oot)		
Centerline Dist.	to Observer:	46.0 feet		-	10/36 30	Autor:	vauon	3 (III I	eel)		
Barrier Distance	to Observer:	0.0 feet			Modium	n Trucks	2.	207			
Observer Height (Above Pad):	5.0 feet			Heav	v Trucks	81	004	Grade Ad	iustment.	0.0
Pa	ad Elevation:	0.0 feet			mour	y maona.	0.				
Roa	ad Elevation:	0.0 feet		L	ane Equ	uivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%				Autos:	39.	560			
	Left View:	-90.0 degrees	5		Mediur	n Trucks:	39.	336			
	Right View:	90.0 degrees	6		Heav	y Trucks:	39.	358			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fresr	nel	Barrier Att	en Ber	m Atten
Autos:	66.51	-0.48		1.42		-1.20		-4.63	0.0	000	0.000
Medium Trucks:	77.72	-16.61		1.46		-1.20		-4.87	0.0	000	0.000
										100	0.000
Heavy Trucks:	82.99	-16.96		1.46		-1.20		-5.47	0.0	100	
Heavy Trucks: Unmitigated Noise	82.99 e Levels (with	-16.96 out Topo and b	arrier a	1.46 ttenu	uation)	-1.20		-5.47	0.0	100	
Heavy Trucks: Unmitigated Noise VehicleType	82.99 e Levels (with Leq Peak Hou	-16.96 out Topo and b r Leq Day	arrier a	1.46 ttenu eq Ev	uation) ening	-1.20 Leq N	light	-5.47	0.0 Ldn	.00 Сі	VEL
Heavy Trucks: Unmitigated Noise VehicleType Autos:	82.99 e Levels (with Leq Peak Hou 66	-16.96 out Topo and b r Leq Day .3 6	arrier a Le 4.4	1.46 ttenu eq Ev	uation) ening 62.6	-1.20 Leq N	light 56.5	-5.47	0.0 Ldn 65.2	CI	VEL 65.8
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	82.99 e Levels (with Leg Peak Hou 66 61	-16.96 out Topo and b Ir Leq Day .3 6 .4 5	<i>arrier a</i> <i>Le</i> 4.4 9.9	1.46 ttenu eq Ev	uation) ening 62.6 53.5	-1.20 Leq N	light 56.5 52.0	-5.47	0.0 Ldn 65.2 60.4		VEL 65.8 60.6
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	82.99 E Levels (with Leq Peak Hou 66 61 66	-16.96 out Topo and b Ir Leq Day .3 6 .4 5 .3 6	arrier a Le 4.4 9.9 4.9	1.46 ttenu eq Ev	uation) ening 62.6 53.5 55.8	-1.20 Leq N	light 56.5 52.0 57.1	-5.47	0.0 <i>Ldn</i> 65.2 60.4 65.4	CI 2 4	VEL 65.8 60.6 65.6
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	82.99 2 Levels (with Leq Peak Hou 66 61 66 69	-16.96 out Topo and b Ir Leq Day .3 6 .4 5 .3 6 .9 6	<i>arrier a</i> <i>Le</i> 4.4 9.9 4.9 8.3	1.46 ttenu eq Ev	ening 62.6 53.5 55.8 63.8	-1.20 Leg N	ight 56.5 52.0 57.1 60.5	-5.47	0.0 <i>Ldn</i> 65.2 60.4 65.2 69.0	C/ 2 4	VEL 65.8 60.6 65.6 69.3
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	82.99 <u>Leq Peak Hou</u> 66 61 66 69 ce to Noise Co	-16.96 out Topo and b rr Leq Day .3 6 .4 5 .3 6 .9 6 ontour (in feet)	arrier a Le 4.4 9.9 4.9 8.3	1.46 ettenu eq Ev	uation) ening 62.6 53.5 55.8 63.8	-1.20 Leg N	<i>light</i> 56.5 52.0 57.1 60.5	-5.47	0.0 Ldn 65.2 60.4 65.4 69.0		VEL 65.8 60.6 65.6 69.3
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	82.99 a Levels (with Leq Peak Hou 66 61 66 69 ce to Noise Co	-16.96 out Topo and b ir Leq Day .3 6 .4 5 .3 6 .9 6 ontour (in feet)	arrier a Le 4.4 9.9 4.9 8.3	1.46 ttenu aq Ev 70 d	<i>ation)</i> ening 62.6 53.5 55.8 63.8 BA	-1.20 Leg N 65 d	light 56.5 52.0 57.1 60.5 BA	5	0.0 Ldn 65.2 60.4 69.0 69.0	CI	VEL 65.8 60.6 65.6 69.3 dBA
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	82.99 a Levels (with Leq Peak Hou 66 61 66 69 ce to Noise Co	-16.96 out Topo and b r Leq Day .3 6 .4 5 .3 6 .9 6 ontour (in feet)	arrier a <u>L</u> e 4.4 9.9 4.9 8.3 dn:	1.46 ttenu aq Ev 70 di 39	uation) ening 62.6 53.5 55.8 63.8 BA	-1.20 Leq N 65 d	ight 56.5 52.0 57.1 60.5 BA	5	0.0 <u>Ldn</u> 65.2 60.4 69.0 69.0 60 dBA 182	CI CI CI CI S S S S S S S	VEL 65.8 60.6 65.6 69.3 dBA 92

Wednesday, June 05, 2019

	FHW	/A-RD-77-108 HI	GHWAY I	NOISE PI	REDICTION	MODEL			
Scenar	io: Existing Wit	hout Project			Project Nar	ne: Good	man III		
Road Nam	e: Citrus Av.				Job Numb	er: 12384	Ļ		
Road Segmer	nt: s/o Santa A	na Av.							
SITE	SPECIFIC IN	PUT DATA			NOIS	SE MODE	EL INPUTS	s	
Highway Data				Site Con	ditions (Ha	rd = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	10,160 vehicles				Autos	: 15		
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles)	: 15		
Peak H	lour Volume:	1,016 vehicles		He	avy Trucks (3+ Axles)	: 15		
Ve	hicle Speed:	40 mph	-	Vehicle	Mix				
Near/Far La	ne Distance:	48 feet	-	Veh	icleType	Dav	Evenina	Night	Daily
Site Data					Auto	s: 77.5%	6 12.9%	9.6%	95.52%
Bai	rrier Height:	0.0 feet		M	edium Truck	s: 84.8%	6 4.9%	10.3%	2.33%
Barrier Type (0-W	all. 1-Berm):	0.0		ŀ	leavy Truck	s: 86.5%	6 2.7%	10.8%	2.15%
Centerline Dis	st. to Barrier:	46.0 feet	-	Noise S	ource Fleva	tions (in i	foot)		
Centerline Dist.	to Observer:	46.0 feet	ŀ	10/30 00	Autor	0.000	001		
Barrier Distance	to Observer:	0.0 feet		Modiu	m Trucks	2 297			
Observer Height (Above Pad):	5.0 feet		Hoo	n Trucks:	8 004	Grade Ad	iustment	- 0.0
Pa	ad Elevation:	0.0 feet		near	y mucho.	0.004	0/000/10	dounion	. 0.0
Roa	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)		
1	Road Grade:	0.0%			Autos:	39.560			
	Left View:	-90.0 degrees		Mediu	m Trucks:	39.336			
	Right View:	90.0 degrees		Heav	ry Trucks:	39.358			
FHWA Noise Mode	el Calculations	5							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Atte	en Ber	m Atten
Autos:	66.51	-1.46	1.4	2	-1.20	-4.63	0.0	000	0.000
Medium Trucks:	77.72	-17.58	1.4	16	-1.20	-4.87	0.0	000	0.000
Heavy Trucks:	82.99	-17.93	1.4	16	-1.20	-5.47	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and bai	rrier atter	nuation)					
VehicleType	Leq Peak Hou	r Leq Day	Leq E	vening	Leq Nigł	nt	Ldn	C	NEL
Autos:	65.	3 63.	4	61.6		55.6	64.2	2	64.8
Medium Trucks:	60.	4 58.	9	52.5		51.0	59.4	1	59.7
Heavy Trucks:	65.	3 63.	9	54.9		56.1	64.5	5	64.6
Vehicle Noise:	69.	0 67.	3	62.9		59.5	68.0)	68.3
Centerline Distant	ce to Noise Co	ntour (in feet)							
			70	dBA	65 dBA		60 dBA	55	dBA
		Ldr	n: 3	34	73		157	3	138
		CNEL	. 3	36	77		165	3	56

	FH	WA-RD-77-108 H	IGHWA	Y NOISE P	REDICTION	IMODEL			
Scenar	io: Existing W	ithout Project			Project Na	me: Good	lman III		
Road Nan	ie: Juniper Av				Job Num	ber: 1238	4		
Road Segme	nt: n/o Santa	Ana Av.							
SITE	SPECIFIC I	IPUT DATA			NOI	SE MOD	EL INPUT	s	
Highway Data				Site Cor	nditions (Ha	ard = 10, S	Soft = 15)		
Average Daily	Traffic (Adt):	2,451 vehicles				Autos	s: 15		
Peak Hour	Percentage:	10%		Me	edium Truck	s (2 Axles): 15		
Peak H	lour Volume:	245 vehicles		He	eavy Trucks	(3+ Axles): 15		
Ve	hicle Speed:	40 mph		Vehicle	Mix				-
Near/Far La	ne Distance:	14 feet		Veh	icleType	Day	Evening	Night	Daily
Site Data					Auto	os: 77.5	% 12.9%	9.6%	95.52%
Ba	rrier Height	0.0 feet		м	edium Truck	ks: 84.8	% 4.9%	10.3%	2.33%
Barrier Type (0-V	/all, 1-Berm):	0.0			Heavy Truck	ks: 86.5	% 2.7%	10.8%	2.15%
Centerline Di	st. to Barrier:	34.0 feet		Noise S	ource Eleva	ations (in	feet)		
Centerline Dist.	to Observer:	34.0 feet			Autos:	0.000			
Barrier Distance	to Observer:	0.0 feet		Mediu	m Trucks:	2.297			
Observer Height	(Above Pad):	5.0 feet		Hea	vv Trucks:	8.004	Grade Ad	liustment	: 0.0
P	ad Elevation:	0.0 feet			,			,	
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent Di	stance (ir	1 feet)		
	Road Grade:	0.0%			Autos:	33.645			
	Left View:	-90.0 degrees		Mediu	m Trucks:	33.381			
	Right View:	90.0 degrees		Hea	vy Trucks:	33.407			
FHWA Noise Mod	el Calculation	s							
VehicleType	REMEL	Traffic Flow	Distanc	e Finite	Road I	Fresnel	Barrier At	ten Ber	m Atten
Autos:	66.51	-7.63	2	2.48	-1.20	-4.53	3 0.0	000	0.000
Medium Trucks:	77.72	-23.76	2	2.53	-1.20	-4.86	6 0.0	000	0.000
Heavy Trucks:	82.99	-24.11	2	2.52	-1.20	-5.67	7 0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and b	arrier at	tenuation)				-	
VehicleType	Leq Peak Ho	ur Leq Day	Leq	l Evening	Leq Nig	ht	Ldn	C	NEL
Autos:	60	0.2 58	1.3	56.5		50.4	59.	1	59.7
Medium Trucks:	55	5.3 53	3.8	47.4		45.9	54.	3	54.6
Heavy Trucks:	60).2 58	3.8	49.8		51.0	59.	4	59.5
Vehicle Noise:	63	3.8 62	2.2	57.7		54.4	62.	9	63.2
Centerline Distan	ce to Noise C	ontour (in feet)						-	
			7	70 dBA	65 dB/	4	60 dBA	55	dBA
		Lo	in:	11	25		53	1	14
		CNE	L:	12	26		56	1	20

Wednesday, June 05, 2019

	FH	WA-RD-77-1	08 HIGH	IWAY N	OISE P	REDICTIO	ON MOI	DEL			
Scenari Road Nam Road Segmer	io: Existing W e: Juniper Av nt: s/o Santa	lithout Project r. Ana Av.				Project I Job Nu	Vame: (mber: 1	Goodn 2384	nan III		
SITE S	SPECIFIC II	NPUT DATA	1			N	DISE N	IODE	L INPUTS	;	
Highway Data				5	Site Cor	nditions (Hard =	10, So	oft = 15)		
Average Daily	Traffic (Adt):	2,807 vehi	cles				A	Autos:	15		
Peak Hour	Percentage:	10%			Me	edium Tru	cks (2 A	xles):	15		
Peak H	our Volume:	281 vehic	les		He	avy Truci	ks (3+ A	xles):	15		
Vel	hicle Speed:	40 mph			/ehicle	Mix					
Near/Far Lar	ne Distance:	14 feet		F	Veh	nicleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	95.52%
Bar	rier Heiaht:	0.0 feet			М	edium Tru	icks:	84.8%	4.9%	10.3%	2.33%
Barrier Type (0-W	all, 1-Berm):	0.0				Heavy Tru	icks:	86.5%	2.7%	10.8%	2.15%
Centerline Dis	st. to Barrier:	34.0 feet			Voise S	ource Ele	vations	: (in fi	pet)		
Centerline Dist.	to Observer:	34.0 feet		-		Autos	0.0	00			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks	- 22	97			
Observer Height (J	Above Pad):	5.0 feet			Hear	v Trucks	8.0	104	Grade Adj	ustment	: 0.0
Pa	ad Elevation:	0.0 feet		-					,		
Roa	ad Elevation:	0.0 feet		1	ane Eq	uivalent	Distand	e (in	leet)		
F	Road Grade:	0.0%				Autos.	33.6	645			
	Left View:	-90.0 deg	rees		Mediu	m Trucks	33.3	881			
	Right View:	90.0 deg	rees		Hear	vy Trucks	33.4	107			
FHWA Noise Mode	el Calculation	15									
VehicleType	REMEL	Traffic Flow	/ Dis	stance	Finite	Road	Fresn	el	Barrier Atte	en Bei	m Atten
Autos:	66.51	-7.0	4	2.48	3	-1.20		4.53	0.0	00	0.000
Medium Trucks:	77.72	-23.1	7	2.53	3	-1.20		4.86	0.0	00	0.000
Heavy Trucks:	82.99	-23.5	2	2.52	2	-1.20		-5.67	0.0	00	0.000
Unmitigated Noise	e Levels (with	hout Topo an	d barri	er atten	uation)						
VehicleType	Leq Peak Ho	ur Leq D	ay	Leq Ev	rening	Leq N	light		Ldn	С	NEL
Autos:	60	0.7	58.8		57.1		51.0		59.6		60.3
Medium Trucks:	55	5.9	54.4		48.0		46.5		54.9		55.2
Heavy Trucks:	60	0.8	59.4		50.3		51.6		59.9		60.1
Vehicle Noise:	64	4.4	62.8		58.3		55.0		63.5		63.8
Centerline Distance	ce to Noise C	ontour (in fe	et)								
			L	70 d	IBA	65 d	BA	e	60 dBA	55	dBA
			Ldn:	12	2	27	·		58	1	25
			CNEL:	13	3	28	1		61	1	31

	FH	VA-RD-77-108	HIGHWA	Y NOIS		N MODE			
Scenar	io: Existing Wi	thout Project			Project N	lame: Goo	dman III		
Road Nan	ne: Sierra Av.				Job Nu	mber: 123	84		
Road Segme	nt: n/o Slover	Av.							
SITE	SPECIFIC IN	IPUT DATA			NC	DISE MO	DEL INPUT	s	
Highway Data				Site	Conditions (I	lard = 10,	Soft = 15)		
Average Daily	Traffic (Adt):	51,993 vehicle	es			Auto	os: 15		
Peak Hour	Percentage:	10%			Medium Truc	ks (2 Axle	s): 15		
Peak H	lour Volume:	5,199 vehicles	6		Heavy Truck	s (3+ Axle	s): 15		
Ve	hicle Speed:	40 mph		Veh	cle Mix				
Near/Far La	ne Distance:	88 feet			VehicleTvpe	Da	/ Evenina	Night	Dailv
Site Data					AL	itos: 77.	5% 12.9%	9.6%	95.52%
Ba	rrier Height:	0.0 feet			Medium Tru	cks: 84.	8% 4.9%	10.3%	2.33%
Barrier Type (0-V	Vall 1-Berm)	0.0			Heavy Tru	cks: 86.	5% 2.7%	10.8%	2.15%
Centerline Di	ist. to Barrier:	66.0 feet							
Centerline Dist.	to Observer:	66.0 feet		NOIS	e Source Ele	vations (ii	1 feet)		
Barrier Distance	to Observer:	0.0 feet			Autos:	0.000			
Observer Height	(Above Pad):	5.0 feet		M	eaium Trucks:	2.297	Crada Aa	livetreent	
° P	ad Elevation:	0.0 feet			leavy Trucks:	8.004	Grade Ad	jusiment	0.0
Ro	ad Elevation:	0.0 feet		Lane	e Equivalent l	Distance (in feet)		
	Road Grade:	0.0%			Autos:	49.447			
	Left View:	-90.0 degree	es	M	edium Trucks:	49.268			
	Right View:	90.0 degree	es		leavy Trucks:	49.285			
FHWA Noise Mod	lel Calculation	s							
VehicleType	REMEL	Traffic Flow	Distan	ce F	inite Road	Fresnel	Barrier At	ten Ber	m Atten
Autos:	66.51	5.63		-0.03	-1.20	-4.7	71 0.0	000	0.000
Medium Trucks:	77.72	-10.49		-0.01	-1.20	-4.8	8 0.0	000	0.000
				0.04				000	0.000
Heavy Trucks:	82.99	-10.84		-0.01	-1.20	-5.3	<i>i0</i> 0.0	000	
Heavy Trucks: Unmitigated Nois	82.99 e Levels (with	-10.84 out Topo and	barrier a	ttenuati	-1.20 on)	-5.3	<i>i0</i> 0.1	500	
Heavy Trucks: Unmitigated Nois VehicleType	82.99 e Levels (with Leq Peak Hou	-10.84 out Topo and Ir Leq Day	barrier a	ttenuati q Evenii	-1.20 on) ng Leq N	-5.3	Ldn	CI	VEL
Heavy Trucks: Unmitigated Nois VehicleType Autos:	82.99 e Levels (with Leq Peak Hou 70	-10.84 out Topo and Ir Leq Day .9	barrier a Le	ttenuati q Evenii	-1.20 on) ng Leq N 37.2	-5.3 ight 61.2	Ldn 69.	CI B	VEL 70.4
Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks:	82.99 e Levels (with Leq Peak Hou 70 66	-10.84 out Topo and ir Leq Day .9 .0	barrier a Le 69.0 64.5	ttenuati q Evenii	-1.20 on) og Leq N 57.2 58.1	-5.3 ight 61.2 56.6	Ldn 69.3	C/ B 1	VEL 70.4 65.3
Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks:	82.99 e Levels (with Leq Peak Hou 70 66 70	-10.84 out Topo and Ir Leq Day .9 .0 .9	barrier a Le 69.0 64.5 69.5	ttenuati q Evenii	-1.20 on) ng Leq N 57.2 58.1 50.5	-5.3 ight 61.2 56.6 61.7	Ldn 69. 65. 70.	<i>CI</i> B 1	VEL 70.4 65.3 70.2
Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	82.99 e Levels (with Leq Peak Hou 70 66 70 74	-10.84 out Topo and Ir Leq Day .9 .0 .6	barrier a Le 69.0 64.5 69.5 73.0	ttenuati q Evenii	-1.20 on) g Leq N 57.2 58.1 50.5 58.5	-5.3 ight 61.2 56.6 61.7 65.1	Ldn 69. 65. 70. 73.	C/ B 1 1 6	VEL 70.4 65.3 70.2 74.0
Heavy Trucks: Unmitigated Nois Vehicle Type Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distan	82.99 e Levels (with Leq Peak Hou 70 66 70 74 ce to Noise Co	-10.84 out Topo and ir Leq Day .9 .0 .9 .6 ontour (in feet	barrier a Le 69.0 64.5 69.5 73.0	ttenuati q Evenii	-1.20 on) ng Leq N 57.2 58.1 50.5 58.5	-5.3 ight 61.2 56.6 61.7 65.1	Ldn 69.3 65. 70. 73.1	<i>Cl</i> 8 1 1 6	NEL 70.4 65.3 70.2 74.0
Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distan	82.99 e Levels (with Leq Peak Hou 70 66 70 74 ce to Noise Co	-10.84 out Topo and ir Leq Day .9 .0 .9 .6 ontour (in feet	barrier a 69.0 64.5 69.5 73.0	ttenuati g Evenii	-1.20 on) ig Leq N 57.2 58.1 50.5 58.5 65 du	-5.3 ight 61.2 56.6 61.7 65.1 BA	Ldn 69.i 65. 70. 73.i 60 dBA	CI 8 1 1 6 55	VEL 70.4 65.3 70.2 74.0 dBA
Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distan	82.99 e Levels (with Leq Peak Hou 70 66 70 74 ce to Noise Co	-10.84 out Topo and Ir Leq Day .9 .0 .9 .6 ontour (in feet	barrier a 69.0 64.5 69.5 73.0 0 Ldn:	ttenuati oq Evenin q 70 dBA 115	-1.20 on) og Leq N 57.2 58.1 50.5 588.5 65 dl 248	-5.3 ight 61.2 56.6 61.7 65.1 BA	Ldn 69. 65. 70. 73. 60 dBA 534	<i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i> <i>Cl</i>	VEL 70.4 65.3 70.2 74.0 <i>dBA</i> 150

Wednesday, June 05, 2019

	FHV	VA-RD-77-108 H	IIGHWA	AY N	OISE PR	REDICTI	ON MC	DEL			
Scenari Road Nam Road Segmer	o: Existing Wi e: Sierra Av. at: s/o Slover /	thout Project Av.				Project Job Ni	Name: Imber:	Goodr 12384	nan III		
SITE	SPECIFIC IN	IPUT DATA				N	OISE	MODE	L INPUT	'S	
Highway Data				5	Site Con	ditions	'Hard =	= 10, Se	oft = 15)		
Average Daily Peak Hour Peak H	Traffic (Adt): Percentage: our Volume:	29,623 vehicles 10% 2,962 vehicles	5		Me He	dium Tru avy Truc	cks (2 ks (3+	Autos: Axles): Axles):	15 15 15		
Vel	hicle Speed:	50 mph									
Near/Far Lar	ne Distance:	88 feet		1	Vehicle I	Mix ioloTuno		Dav	Evoning	Night	Daily
Site Data				-	ven	сіетуре А	utos:	77.5%	12.9%	9.6%	6 95.52%
Dev Data		0.0 ()			Me	adium Tr	ucks:	84.8%	4.9%	10.39	6 2.33%
Barrier Type (0-W	all. 1-Berm):	0.0 feet			ŀ	leavy Tr	ucks:	86.5%	2.7%	10.89	6 2.15%
Centerline Dis	t. to Barrier:	66.0 feet			Noiso Se	urco El	ovatio	ne (in f	oot)		
Centerline Dist.	to Observer:	66.0 feet		ť	10/36 30		- O	000	eeij		
Barrier Distance	to Observer:	0.0 feet			Modiu	n Trucks	. 0	207			
Observer Height (J	Above Pad):	5.0 feet			Hoan	n Trucks	. <u>2</u>	004	Grade Ar	liustmer	of: 0.0
Pa	d Elevation:	0.0 feet			near	y mucha	. 0	.004	0/000/10	jaounor	. 0.0
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	nce (in	feet)		
F	Road Grade:	0.0%				Autos	: 49	.447			
	Left View:	-90.0 degrees	5		Mediur	n Trucks	: 49	.268			
	Right View:	90.0 degrees	5		Heav	y Trucks	: 49	.285			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fres	nel	Barrier At	ten Be	erm Atten
Autos:	70.20	2.22	-	-0.03	3	-1.20		-4.71	0.	000	0.00
Medium Trucks:	81.00	-13.91		-0.01		-1.20		-4.88	0.	000	0.00
Heavy Trucks:	85.38	-14.25		-0.01		-1.20		-5.30	0.	000	0.00
Unmitigated Noise	Levels (with	out Topo and b	arrier a	tten	uation)						
VehicleType	Leq Peak Hoi	ır Leq Day	Le	eq Ev	/ening	Leq I	Vight		Ldn	(ONEL
Autos:	71	.2 6	9.3		67.5		61.	5	70.	1	70.
Medium Trucks:	65	.9 6	4.4		58.0		56.	5	64.	9	65.3
Heavy Trucks:	69	.9 6	8.5		59.5		60.	7	69.	1	69.3
Vehicle Noise:	74	.3 7	2.6		68.6		64.	8	73.	3	73.
Centerline Distance	e to Noise Co	ontour (in teet)									
Centerline Distance	e to Noise Co	ontour (in feet)		70 a	iBA	65 0	<i>IBA</i>	(60 dBA	5	5 dBA
Centerline Distanc	e to Noise Co	L	dn:	70 a 11	IBA 0	65 d 23	<i>IBA</i> 6	6	60 dBA 509	5	5 dBA 1,096

	FH\	NA-RD-77-108 H	IGHWA	Y NOIS	E PREDICT	ION MO	DEL			
Scenar Road Narr Road Segme	io: Existing Wi ne: Sierra Av. nt: s/o Santa A	ithout Project Ana Av.			Project Job N	Name: lumber:	Goodr 12384	man III		
SITE	SPECIFIC IN	IPUT DATA			r	IOISE N	IODE	L INPUT	s	
Highway Data				Site	Conditions	(Hard =	10, S	oft = 15)		
Average Daily Peak Hour Peak H	Traffic (Adt): Percentage: lour Volume:	30,692 vehicles 10% 3,069 vehicles			Medium Tr Heavy Tru	ucks (2 / cks (3+ /	Autos: Axles): Axles):	15 15 15		
Ve	hicle Speed:	50 mph		Veh	cle Mix					
Near/Far La	ne Distance:	88 feet			VehicleType	;	Day	Evening	Night	t Daily
Site Data						Autos:	77.5%	6 12.9%	9.6	% 95.52%
Ba	rrior Hoiaht	0.0 feet			Medium T	rucks:	84.8%	6 4.9%	10.3	% 2.33%
Barrier Type (0-W	/all, 1-Berm):	0.0			Heavy T	rucks:	86.5%	2.7%	10.8	% 2.15%
Centerline Di	st. to Barrier:	66.0 feet		Nois	e Source E	levation	s (in f	eet)		
Centerline Dist.	to Observer:	66.0 feet			Auto	s: 0.0	000			
Barrier Distance	to Observer:	0.0 feet		М	edium Truck	s: 2.:	297			
Observer Height	Above Pad):	5.0 feet			Heavy Truck	s: 8.0	004	Grade Ad	ijustme	nt: 0.0
Pi	ad Elevation:	0.0 feet								
Roi	ad Elevation:	0.0 feet		Lane	e Equivalen	t Distan	ce (In	teet)		
	Road Grade:	0.0%			Auto	s: 49.	447			
	Left View:	-90.0 degrees		M	edium Truck	s: 49.	268			
	Right View:	90.0 degrees			Heavy Truck	s: 49.	285			
FHWA Noise Mod	el Calculation	s								
VehicleType	REMEL	Traffic Flow	Distanc	e F	inite Road	Fresr	nel	Barrier Att	en B	erm Atten
Autos:	70.20	2.38	-1	0.03	-1.20		-4.71	0.0	000	0.000
Medium Trucks:	81.00	-13.75	-1	0.01	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	85.38	-14.10	-1	0.01	-1.20		-5.30	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and ba	arrier at	tenuati	on)					
VehicleType	Leq Peak Hou	ur Leq Day	Leo	q Evenii	ng Leq	Night		Ldn		CNEL
Autos:	71	.3 69	9.5		67.7	61.6	6	70.3	3	70.9
Medium Trucks:	66	.0 64	.5	4	58.2	56.6	6	65.1	1	65.3
Heavy Trucks:	70	.1 68	3.6		59.6	60.9)	69.2	2	69.3
Vehicle Noise:	74	.4 72	2.8	1	68.7	65.0)	73.	5	73.8
Centerline Distan	ce to Noise Co	ontour (in feet)								
				70 dBA	65	dBA	(60 dBA	Ę	55 dBA
		Lo	in:	112	2	42		521		1,122
		CNE	L:	119	2	56		552		1,189

Wednesday, June 05, 2019

	FHW	/A-RD-77-108	HIGHWA	Y NOISE	PREDICTIO	N MODEL		l
Scenar Road Nam Road Segmei	io: Existing Wit e: Sierra Av. nt: s/o Jurupa /	hout Project Av.			Project N Job Nur	ame: Goo nber: 123	dman III 84	
SITE	SPECIFIC IN	PUT DATA			NC	ISE MOD	DEL INPUTS	\$
Highway Data				Site Co	onditions (H	lard = 10,	Soft = 15)	
Average Daily	Traffic (Adt):	24,654 vehicle	5			Auto	s: 15	
Peak Hour	Percentage:	10%		٨	1edium Truc	ks (2 Axle:	s <i>):</i> 15	
Peak H	our Volume:	2,465 vehicles		F	łeavy Truck	s (3+ Axle:	s): 15	
Ve	hicle Speed:	55 mph		Vehicle	• Mix			
Near/Far La	ne Distance:	88 feet		Ve	ehicleTvpe	Dav	/ Evenina	Night Daily
Site Data					Au	tos: 77.5	5% 12.9%	9.6% 95.52%
Bai	rier Heiaht:	0.0 feet			Medium Tru	cks: 84.8	3% 4.9%	10.3% 2.33%
Barrier Type (0-W	all, 1-Berm):	0.0			Heavy Tru	cks: 86.5	5% 2.7%	10.8% 2.15%
Centerline Dis	st. to Barrier:	66.0 feet		Noise	Source Elev	vations (ir	(feet)	
Centerline Dist.	to Observer:	66.0 feet			Autos:	0.000		-
Barrier Distance	to Observer:	0.0 feet		Med	ium Trucks:	2.297		
Observer Height (Above Pad):	5.0 feet		He	avy Trucks:	8.004	Grade Adj	ustment: 0.0
Pa	ad Elevation:	0.0 feet		1		Neterra ((m. f. m. et)	
Roa	ad Elevation:	0.0 feet		Lane E	quivalent L	vistance (i	n teet)	
	Road Grade:	0.0%			Autos:	49.447		
	Left View:	-90.0 degree	5	Medi	um Trucks:	49.268		
	Right view:	90.0 degree	5	ne.	avy mucks.	49.285		
FHWA Noise Mode	el Calculations	5						
VehicleType	REMEL	Traffic Flow	Distand	e Fini	te Road	Fresnel	Barrier Atte	en Berm Atten
Autos:	71.78	1.01	-	0.03	-1.20	-4.7	1 0.0	00 0.000
Medium Trucks:	82.40	-15.12	-	0.01	-1.20	-4.8	8 0.0	00 0.000
Heavy Trucks:	86.40	-15.47	-	0.01	-1.20	-5.3	0.0	00 0.000
Unmitigated Noise	e Levels (witho	out Topo and b	arrier a	tenuation)			
VehicleType	Leq Peak Hou	r Leq Day	Le	q Evening	Leq N	ight	Ldn	CNEL
Autos:	71.	6 6	9.7	67.	.9	61.8	70.5	71.1
Medium Trucks:	66.	1 6	4.6	58.	2	56.7	65.1	65.4
Heavy Trucks:	69. 74	7 6	8.3	59.	3	60.5	68.9	69.0
Contorline Distant	/ 4.	+ /	2.0	00.	.0	04.9	73.4	73.0
Centenine Distant	e to worse Co	niour (in feet)		70 dBA	65 dE	BA	60 dBA	55 dBA
		L	dn:	112	241		520	1,119
		CN	EL:	119	256	;	552	1,188

Scenario: Existing Without Project Road Name: Project Name: Goodman III Job Number: 12384 Road Segment: Wo Sierra Av. Job Number: 12384 SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS Highway Data Site Conditions (Hard = 10, Soft = 15) Average Daily Traffic (Adt): 19,017 vehicles Autos:: 15 Peak Hour Porentage: 10% Medium Trucks: (24 kels): 15 Peak Hour Volume: 1,902 vehicles Heavy Trucks: (3+ Axles): 15 Vehicle Speed: 45 mph Medium Trucks: (24 kels): 15 Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% 2. Barrier Type (0-Wail, 1-Berm): 0.0 feet Mutos: 12.9% 9.6% 95. Barrier Distance to Observer: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% 2. Observer Height (Above Pad): 0.0 feet Mutos: 4.000 Grade Adjustment: 0.0 Road Grade: 0.0% Laft View: 90.0 degrees Heavy Truc		FHV	/A-RD-77-108 H	IGHWA	Y NOISE P	REDICTIO	N MODE	L		
Base Register Av. Ster Av. SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS Highway Data Site Conditions (Hard = 10, Soft = 15) Average Daily Traffic (Adt): 19,017 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,902 vehicles Vehicle Speed: 45 mph Vehicle Speed: 45 mph Vehicle Speed: 45 mph Barrier Height: 0.0 feet Barrier Height: 0.0 feet Barrier Distance: 50 feet Centerline Dist. to Diserver: 52.0 feet Road Grade: 0.0 % Autos: 8.65% Diserver Height (Abov Pad) 5.0 feet Road Grade: 0.0 % Autos: 8.004 Grade Adjustment: 0.0 feet Road Grade: 0.0 % Autos: 8.004 Road Grade: 0.0 % Ketti View: 90.0 degrees Right View: 90.0 degrees Right View: 90.0 degrees Right View: 15.72	Scenar Road Nam	io: Existing Wit	hout Project			Project Na	ame: Go	odman III		
SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS Highway Data Site Conditions (Hard = 10, Soft = 15) Average Daily Traffic (Adi): 19,017 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 1,902 vehicles Vehicle Speed: 45 mph Near/Fer Lane Distance: 59 feet Site Data Autos: Barrier Height: 0.0 feet Barrier Type (O-Wall, 1-Berm): 0.0 Centerline Dist. to Diserver: 52.0 feet Centerline Dist. to Diserver: 52.0 feet Barrier Distance to Observer: 52.0 feet Road Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Right View: 90.0 degrees Right View: 90.0 degrees Right View: 90.0 degrees Heavy Trucks: 42.928 FHWA Noise Model Calculations Finite Road Vehicle Type REMEL Traffic Flow	Road Segme	nt: w/o Sierra A	٨v.			500 1401	1061. 120	04		
Highway Data Site Conditions (Hard = 10, Soft = 15) Average Daily Traffic (Adt): 19,017 vehicles Autos:: 15 Peak Hour Percentage: 10% Medium Trucks (24 Ake): 15 Peak Hour Volume: 1,902 vehicles Medium Trucks (24 Ake): 15 Vehicle Speed: 45 mph Heavy Trucks (3+ Akles): 15 Site Data Autos: 77.5% 12.9% 9.6% 95.5 Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% 2.1 Barrier Type (0-Wall, 1-Berrn): 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% 2.1 Centerline Dist. to Observer: 52.0 feet Autos: 0.000 Medium Trucks: 8.2.04 Grade Adjustment: 0.0 Pad Elevation: 0.0 feet Heavy Trucks: 8.004 Grade Adjustment: 0.0 Road Erevation: 0.0 feet Laft View: 90.0 degrees Heavy Trucks: 42.908 WehicleType REMEL Traffic Flow Distance Finite Road Fresnel <th>SITE</th> <th>SPECIFIC IN</th> <th>PUT DATA</th> <th></th> <th></th> <th>NO</th> <th>ISE MO</th> <th>DEL INPUT</th> <th>s</th> <th></th>	SITE	SPECIFIC IN	PUT DATA			NO	ISE MO	DEL INPUT	s	
Average Daily Traffic (Adt): 19,017 vehicles Autos: 15 Peak Hour Vercentage: 10% Medium Trucks (2 Akles): 15 Peak Hour Vehreentage: 10% Medium Trucks (2 Akles): 15 Vehicle Speed: 45 mph Medium Trucks (2 Akles): 15 Vehicle Speed: 45 mph Vehicle Mix Vehicle Mix Site Data Autos: 77.5% 12.9% 9.6% 95. Barrier Type (0-Wall, 1-Berm): 0.0 feet Medium Trucks: 84.5% 4.9% 10.3% 2. Barrier Type (0-Wall, 1-Berm): 0.0 feet Medium Trucks: 84.5% 2.7% 10.8% 2. Centerline Dist. to Observer: 52.0 feet Medium Trucks: 8.004 Grade Adjustment: 0.0 Pad Elevation: 0.0 feet Medium Trucks: 8.004 Grade Adjustment: 0.0 Road Grade: 0.0% Heavy Trucks: 42.908 Heavy Trucks: 42.908 Kight View: 90.0 degrees Medium Trucks: 42.908 Heavy Trucks: 42.900 0.00 Medium Trucks: 79.45 -15.72<	Highway Data				Site Co	nditions (H	ard = 10	, Soft = 15)		
Peak Hour Percentage: 10% Medium Trucks (2 Akles): 15 Peak Hour Volume: 1,902 vehicles Heavy Trucks (2 Akles): 15 Vehicle Speed: 45 mph Vehicle Mix Vehicle Type Day Evening Night Da Site Data Autos: 77.5% 1.29% 9.6% 95.2 Barrier Height: 0.0 feet Medium Trucks: Autos: 77.5% 1.0% 2.2 Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Diserver: 52.0 feet Medium Trucks: 86.5% 2.7% 10.8% 2.1 Barrier Distance to Observer: 0.0 feet Molum Trucks: 8.004 Grade Adjustment: 0.0 Road Grade: 0.0% Left Ivew: 90.0 degrees Heavy Trucks: 42.90 Heavy Trucks: 42.90 Heavy Trucks: 42.90 0.00 0 Hediver Trucks: 79.45 -15.37 0.89 -1.20 -4.66 0.000 0 Medium Trucks: 84.25 -15.72 0.89 -1.20 -4.	Average Daily	Traffic (Adt):	19,017 vehicles				Au	os: 15		
Peak Hour Volume: 1,902 vehicles Vehicle Speed: Heavy Trucks (3+ Axles): 15 Wehr/Far Lane Distance: 59 feet Vehicle Mix Vehicle Mix Site Data Autos: 77.5% 12.9% 9.6% 95.1 Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% 2. Barrier Type (0-Wail, 1-Berm): 0.0 Centerline Dist. to Observer: 52.0 feet Medium Trucks: 84.8% 4.9% 10.3% 2. Barrier Distance to Observer: 52.0 feet Moles Cource Elevations (in feet) Autos: 2.7% 10.8% 2. Observer Height (Abov Pad) 5.0 feet Medium Trucks: 2.97 Noise Source (in feet) Autos: 0.0 Road Grade: 0.0% Autos: 8.004 Grade Adjustment: 0.0 Left View: -90.0 degrees Heavy Trucks: 42.928 Heavy Trucks: 42.928 FHWA Noise Model Calculations Finite Road Fresnel Barrier Atten Bern Atten VehicleType REMEL Traffic Flow	Peak Hour	Percentage:	10%		M	ədium Trucl	ks (2 Axle	es): 15		
Vehicle Speed: 45 mph Near/Far Lane Distance: 59 feet Site Data Vehicle Mix Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Darrier: 52.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Darrier: 52.0 feet Barrier Tistance to Observer: 0.0 feet Barrier Weight (Above Pad): 5.0 feet Barrier Weight (Nove Pad): 5.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Right View: 90.0 degrees FHWA Noise Model Calculations Finite Road VehicleType Left View: 94.5 -15.72 0.89 -1.20 Medium Trucks: 84.25 15.72 0.89 Heavy Trucks: 64.2 Medium Trucks: 65.4 Mattos: 68.4 Mutos: 68.4 VehicleType Leg Day	Peak H	lour Volume:	1,902 vehicles		He	avy Trucks	s (3+ Axle	es): 15		
Near/Far Lane Distance: 59 feet VehicleType Day Evening Night Das Site Data Autos: 77.5% 12.9% 9.6% 95.1 Barrier Type (0-Wall, 1-Berm): 0.0 10.0 Medium Trucks: 84.8% 4.9% 10.3% 2: Barrier Type (0-Wall, 1-Berm): 0.0 10.0 Heavy Trucks: 86.5% 2.7% 10.8% 2: Centerline Dist. to Dbserver: 52.0 feet Noise Source Elevations (in feet) Autos: 0.00 Medium Trucks: 8.004 Grade Adjustment: 0.0 Deserver Height (Above Pad): 5.0 feet Autos: 0.00 Medium Trucks: 8.004 Grade Adjustment: 0.0 Road Elevation: 0.0 feet Autos: 43.113 Medium Trucks: 43.13 Left Ivew: 90.0 degrees Heavy Trucks: 42.90 Heavy Trucks: 42.90 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finet Road Freesnel Barrier Atten Berm Attance	Ve	hicle Speed:	45 mph		Vehicle	Mix				
Site Data Autos: 77.5% 12.9% 9.6% 95.1 Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% 2. Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 52.0 feet Medium Trucks: 86.5% 2.7% 10.8% 2. Centerline Dist. to Barrier: 52.0 feet Noise Source Elevations (in feet) Autos: 0.00 Observer Height (Above Pad): 5.0 feet Madum Trucks: 8.004 Grade Adjustment: 0.0 Road Grade: 0.0 feet Autos: 42.928 Heavy Trucks: 42.928 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berrier Atten VehicleType REMEL Traffic Flow Distance Finite Road Firesnel Barrier Atten Berrier Atten Medium Trucks: 42.928 FHWA Noise Model Calculations VehicleType Leg Day Leg Evening Leg Night Left Doot 0 0 <tr< td=""><td>Near/Far La</td><td>ne Distance:</td><td>59 feet</td><td></td><td>Vel</td><td>nicleTvpe</td><td>Da</td><td>v Evenina</td><td>Niaht</td><td>Dailv</td></tr<>	Near/Far La	ne Distance:	59 feet		Vel	nicleTvpe	Da	v Evenina	Niaht	Dailv
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 52.0 feet Centerline Dist. to Dbserver: 52.0 feet Barrier Distance to Observer: 0.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 degrees Right View: -90.0 degrees Right View: 90.0 degrees Heavy Trucks: 84.8% Heavy Trucks: 84.13 Medium Trucks: 42.928 FHWA Noise Model Calculations Vehicle Type Vehicle Type Irraftic Flow Distance Jumitigated Moise Levels (without Top and barrier attenuation) Heavy Trucks: Vehicle Type Leq Day Lage Vening Vehicle Type Leq Day Lage Second Vehicle Type Leq Day Lage Second Vehicle Type<	Site Data					Au	tos: 77	.5% 12.9%	9.6%	95.52%
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 52.0 feet Centerline Dist. to Desrever: 52.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Desrever: 52.0 feet Barrier Distance to Observer: 0.0 feet Barrier Distance to Observer: 0.0 feet Pad Elevation: 0.0 feet Road Grade: 0.0% Left Ivew: 90.0 degrees Right View: 90.0 degrees FHWA Noise Model Calculations VenicleType VenicleType REMEL Medium Trucks: 79.45 -15.37 0.89 -12.0 -4.66 0.000 0 Medium Trucks: 79.45 -15.37 0.89 -12.0 -4.66 0.000 0 Medium Trucks: 63.8 68.9 67.0 0.9 -1.20 -4.66 0.000 0 0 Medium Trucks: 8.425	Ba	rrier Height	0.0 feet		N	ledium Truc	ks: 84	.8% 4.9%	10.3%	2.33%
Centerline Dist. to Darrier: 52.0 feet Moise Source Elevations (in feet) Centerline Dist. to Observer: 52.0 feet Autos: 0.000 Barrier Distance to Observer: 0.0 feet Medium Trucks: 2.297 Observer Height (Above Pad): 5.0 feet Heavy Trucks: 8.004 Road Elevation: 0.0 feet Lane Equivalent Distance (in feet) Road Grade: 0.0% Autos: 43.113 Left View: -90.0 degrees Medium Trucks: 42.908 Right View: 90.0 degrees Medium Trucks: 42.908 VehicleType REMEL Traffic Flow Distance VehicleType R446 0.75 0.86 -1.20 -4.66 0.000 0 Umitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Day Leq Evening Leq Night Lefn CNL VehicleType Leq Bay 1.20 -5.41 0.000 0 Medium Trucks: 63.8 62.3 55.9 54.4 62.8 1 Medium Trucks: 63.8 62.3 55.9 54.4 62.8 1 Medium Trucks: 63.8 62.3 55.9 54.4 62.8 <t< td=""><td>Barrier Type (0-W</td><td>all. 1-Berm):</td><td>0.0</td><td></td><td></td><td>Heavy Truc</td><td>ks: 86</td><td>.5% 2.7%</td><td>10.8%</td><td>2.15%</td></t<>	Barrier Type (0-W	all. 1-Berm):	0.0			Heavy Truc	ks: 86	.5% 2.7%	10.8%	2.15%
Centerline Dist. to Observer: 52.0 feet Autos: 0.000 Barrier Distance to Observer: 0.0 feet Autos: 0.000 Observer Height (Abov Pad) 5.0 feet Heavy Trucks: 8.004 Grade Adjustment: 0.0 Pad Elevation: 0.0 feet Left View: 9.0.0 degrees Road Grade Adjustment: 0.0 Road Grade: 0.0% Autos: 42.908 Heavy Trucks: 42.928 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Attal Medium Trucks: 79.45 -15.72 0.89 -1.20 -4.66 0.000 0 Heavy Trucks: 84.25 -15.72 0.89 -1.20 -4.67 0.000 0 Hoitum Trucks: 79.45 -15.72 0.89 -1.20 -4.67 0.000 0 Heavy Trucks: 68.9 67.0 65.2 59.2 67.8 1 Medium Trucks: 63.8 62.3 55.9	Centerline Di	st. to Barrier:	52.0 feet		Naine C	-		- f= = 4)		
Barrier Distance to Observer: 0.0 feet Autos: 0.00 Observer Height (Above Pad): 5.0 feet Medium Trucks: 2.297 Pad Elevation: 0.0 feet Heavy Trucks: 8.004 Grade Adjustment: 0.0 Road Elevation: 0.0 feet Left Ivew: -0.0 degrees Autos: 43.113 Vehicle Type REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berrier Atten Cono 0 0 Medium Trucks: 42.908 0.000 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 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 </td <td>Centerline Dist.</td> <td>to Observer:</td> <td>52.0 feet</td> <td></td> <td>Noise S</td> <td>ource Elev</td> <td>ations (</td> <td>n reet)</td> <td></td> <td></td>	Centerline Dist.	to Observer:	52.0 feet		Noise S	ource Elev	ations (n reet)		
Observer Height (Above Pad): 5.0 feet Medium Trucks: 2.297 Pad Elevation: 0.0 feet Heavy Trucks: 8.004 Grade Adjustment: 0.0 Road Elevation: 0.0 feet Left View: -90.0 degrees Medium Trucks: 42.098 Road Grade: 0.0% Lane Equivalent Distance (in feet) Medium Trucks: 42.908 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Freenel Barrier Atten Berm Attacks: VehicleType REMEL Traffic Flow Distance Finite Road Freenel Barrier Atten Berm Attacks: Medium Trucks: 79.45 -15.37 0.89 -1.20 -4.66 0.000 0 Medium Trucks: 79.45 -15.72 0.89 -1.20 -5.41 0.000 0 Unmitigated Noise Levels (without Top and barrier attenuation) VehicleType Leg Day Leg Evening Leg Night Ldn CNEL Autos: 68.9 67.0 65.2 59.2 67.8 </td <td>Barrier Distance</td> <td>to Observer:</td> <td>0.0 feet</td> <td></td> <td></td> <td>Autos:</td> <td>0.000</td> <td>)</td> <td></td> <td></td>	Barrier Distance	to Observer:	0.0 feet			Autos:	0.000)		
Pad Elevation: 0.0 feet Heavy Trucks: 8.04 Grade Rajosineni. 0.0 Road Elevation: 0.0 feet Lane Equivalent Distance (in feet) Lane Equivalent Distance (in feet) Road Grade: 0.0% Lattos: 43.113 Lattos: Havios: Left View: -90.0 degrees Medium Trucks: 42.928 Heavy Trucks: 42.928 FHWA Noise Model Calculations Vehicle Type REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Watios: 68.46 0.75 0.86 -1.20 -4.66 0.000 0 Medium Trucks: 79.45 -15.72 0.89 -1.20 -4.67 0.000 0 Heavy Trucks: 84.25 -15.72 0.89 -1.20 -4.67 0.000 0 Umitigated Noise Levels (without Topo and barrier attenuation) Vehicle Type Leg Day Leg Evening Leg Night Ldn CNEL Autos: 68.3 65.3 55.9 54.4 62.8 Medium T	Observer Height (Above Pad):	5.0 feet		Medil	m Trucks:	2.291	Grado Ad	iustmont	
Road Elevation: 0.0 feet Lane Equivalent Distance (in feet) Road Grade: 0.0% Autos: 43.113 Left View: -90.0 degrees Medium Trucks: 42.908 Right View: 90.0 degrees Medium Trucks: 42.908 VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berr Atten Autos: 68.46 0.75 0.86 -1.20 -4.66 0.000 0 Medium Trucks: 79.45 -15.37 0.89 -1.20 -4.67 0.000 0 Heavy Trucks: 84.25 -15.72 0.89 -1.20 -4.67 0.000 0 Unnitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Page Leq Night Ldn CNEL Autos: 68.9 67.0 65.2 59.2 67.8 Medium Trucks: 63.8 62.3 55.9 54.4 62.8 Medium Trucks: 62.8 Medium Trucks: 62.8 71.3 Vehi	Pa	ad Elevation:	0.0 feet		Hea	vy Trucks:	8.004	Grade Au	jusunem.	0.0
Road Grade: 0.0% Autos: 43.113 Left View: -90.0 degrees Medium Trucks: 42.908 Right View: -90.0 degrees Heavy Trucks: 42.908 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Bern Attacks: Autos: 68.46 0.75 0.86 -1.20 -4.66 0.000 0 Medium Trucks: 79.45 -15.37 0.89 -1.20 -4.67 0.000 0 Heavy Trucks: 84.25 -15.72 0.89 -1.20 -5.41 0.000 0 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Day Leq Evening Leq Night Ldn CNEL Autos: 68.9 67.0 65.2 59.2 67.8 10 Medium Trucks: 63.8 62.3 55.9 54.4 62.8 10 Medium Trucks: 68.2 66.8 57.8 59.0 67.4 <td>Roa</td> <td>ad Elevation:</td> <td>0.0 feet</td> <td></td> <td>Lane Ed</td> <td>juivalent D</td> <td>istance</td> <td>(in feet)</td> <td></td> <td></td>	Roa	ad Elevation:	0.0 feet		Lane Ed	juivalent D	istance	(in feet)		
Left View: -90.0 degrees Medium Trucks: 42.908 Right View: 90.0 degrees Heavy Trucks: 42.928 FHWA Noise Model Calculations Vehicle Type REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Att Vehicle Type REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Att Medium Trucks: 79.45 -15.37 0.89 -1.20 -4.66 0.000 0 Medium Trucks: 79.45 -15.77 0.89 -1.20 -4.67 0.000 0 Unnitigated Noise Levels (without Topo and barrier attenuation) Vehicle Type Leq Day Leq Evening Leq Night Ldn CNEL Autos: 68.9 67.0 65.2 59.2 67.8 Medium Trucks: 68.2 66.8 57.8 59.0 67.4 Medium Tucks: 68.2 66.8 57.8 59.0 67.4 10.00 10.00 Medium Tucks: 68.2 66.8 <td>1</td> <td>Road Grade:</td> <td>0.0%</td> <td></td> <td></td> <td>Autos:</td> <td>43.113</td> <td>3</td> <td></td> <td></td>	1	Road Grade:	0.0%			Autos:	43.113	3		
Right View: 90.0 degrees Heavy Trucks: 42.928 FHWA Noise Model Calculations Vehicle Type REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berrn Atten Autos: 68.46 0.75 0.86 -1.20 -4.66 0.000 0 Medium Trucks: 79.45 -15.37 0.89 -1.20 -4.67 0.000 0 Unnitigated Noise Levels (without Topo and barrier attenuation) Vehicle Type Leq Day Leq Night Ldn CNEL Vehicle Type Leq Day Leq Evening Leq Night Ldn CNEL Medium Trucks: 63.8 62.3 55.9 54.4 62.8 14.40 Vehicle Type Leq Day Leq Evening Leg Night Ldn CNEL Heavy Trucks: 63.8 62.3 55.9 54.4 62.8 14.40 Vehicle Noise: 72.2 70.6 66.3 62.8 71.3 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA </td <td></td> <td>Left View:</td> <td>-90.0 degrees</td> <td></td> <td>Mediu</td> <td>ım Trucks:</td> <td>42.908</td> <td>3</td> <td></td> <td></td>		Left View:	-90.0 degrees		Mediu	ım Trucks:	42.908	3		
FHWA Noise Model Calculations Image: Constraint of the state of the s		Right View:	90.0 degrees		Hea	vy Trucks:	42.928	3		
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Bern Atten Autos: 68.46 0.75 0.86 -1.20 -4.66 0.000 0 Medium Trucks: 79.45 -15.37 0.89 -1.20 -4.67 0.000 0 Heavy Trucks: 84.25 -15.72 0.89 -1.20 -5.41 0.000 0 Unnitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leg Peak Hour Leg Day Leg Evening Leg Night Ldn CNEL Autos: 68.9 67.0 65.2 59.2 67.4 0.00 Heavy Trucks: 63.8 62.3 55.9 54.4 62.8 0 Heavy Trucks: 68.2 66.8 57.8 59.0 67.4 0 Vehicle Noise: 72.2 70.6 66.3 62.8 71.3 0	FHWA Noise Mod	el Calculations	5							
Autos: 68.46 0.75 0.86 -1.20 -4.66 0.000 0 Medium Trucks: 79.45 -15.37 0.89 -1.20 -4.87 0.000 0 Heavy Trucks: 84.25 -15.72 0.89 -1.20 -5.41 0.000 0 Unnitigated Noise Levels (without Topo and barrier attenuation) Leq Day Leq Evening Leq Night Ldn CNEL Medium Trucks: 63.8 67.0 65.2 59.2 67.8 67.4 Heavy Trucks: 63.8 62.3 55.9 54.4 62.8 62.4 Vehicle Noise: 72.2 70.6 66.3 62.8 71.3 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA	VehicleType	REMEL	Traffic Flow	Distanc	e Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Medium Trucks: 79.45 -15.37 0.89 -1.20 -4.87 0.000 0 Heavy Trucks: 84.25 -15.72 0.89 -1.20 -5.41 0.000 0 Umitigated Moise Levels (without Topo and barrier attenuation) - - - - 0.000 0 WehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 68.9 67.0 65.2 59.2 67.8 - Medium Trucks: 63.8 62.3 55.9 54.4 62.8 - Heavy Trucks: 68.2 66.8 57.8 59.0 67.4 - Vehicle Noise: 72.2 70.6 66.3 62.8 71.3 - Centerline Distance to Noise Contour (in feet) - 70 dBA 65 dBA 60 dBA 55 dBA	Autos:	68.46	0.75		0.86	-1.20	-4.	66 0.0	000	0.000
Heavy Trucks: 84.25 -15.72 0.89 -1.20 -5.41 0.000 0 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 68.9 67.0 65.2 59.2 67.8 Medium Trucks: 63.8 62.3 55.9 54.4 62.8 Medium Trucks: 68.2 66.8 57.8 59.0 67.4 Medium Trucks: 68.2 66.3 62.8 71.3 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA 50 dBA 50 dBA 55 dBA 50 dBA 55 dBA	Medium Trucks:	79.45	-15.37		0.89	-1.20	-4.	87 0.0	000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 68.9 67.0 65.2 59.2 67.8 Medium Trucks: 63.8 62.3 55.9 54.4 62.8 Heavy Trucks: 68.2 66.8 57.8 59.0 67.4 Vehicle Noise: 72.2 70.6 66.3 62.8 71.3 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA	Heavy Trucks:	84.25	-15.72		0.89	-1.20	-5.	41 0.0	000	0.000
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 68.9 67.0 65.2 59.2 67.8 67.4 62.8 67.4 62.8 67.4 62.8 67.4 62.8 66.3 57.8 59.0 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.4 67.5 67.4 67.4	Unmitigated Noise	e Levels (with	out Topo and ba	nrrier at	tenuation)					
Autos: 68.9 67.0 65.2 59.2 67.8 Medium Trucks: 63.8 62.3 55.9 54.4 62.8 Heavy Trucks: 68.2 66.8 57.8 59.0 67.4 Vehicle Noise: 72.2 70.6 66.3 62.8 71.3 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA	VehicleType	Leq Peak Hou	r Leq Day	Leo	q Evening	Leq Ni	ght	Ldn	CI	VEL
Medium Trucks: 63.8 62.3 55.9 54.4 62.8 Heavy Trucks: 68.2 66.8 57.8 59.0 67.4 Vehicle Noise: 72.2 70.6 66.3 62.8 71.3 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA	Autos:	68.	9 67	.0	65.2	:	59.2	67.8	3	68.4
Heavy Irucks: 68.2 66.8 57.8 59.0 67.4 Vehicle Noise: 72.2 70.6 66.3 62.8 71.3 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA	Medium Trucks:	63.	8 62	.3	55.9	1	54.4	62.8	3	63.0
Vehicle Noise: 72.2 70.6 66.3 62.8 71.3 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA	Heavy Trucks:	68.	2 66	.8	57.8		59.0	67.4	4	67.5
Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA	Vehicle Noise:	72.	2 70	.6	66.3	1	62.8	71.3	3	71.6
70 UDA 03 UDA 00 UBA 33 UBA	Centerline Distant	ce to Noise Co	ntour (in feet)		70 dBA	65 45	A	60 dPA	FF	dRA
I da: 62 126 202 621			10	ln:	62 62	126	~	202	1 35	21
LUII. 03 130 293 031 CNEL: 67 144 210 667				91. 71 -	67	130		293	6	67
CIVILL. 67 144 510 067			CIVE	L.	07	144		510	0	07

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL Scenario: Existing Without Project Road Name: Santa Ana Av. Project Name: Goodman III Job Number: 12384 Road Segment: e/o Citrus Av. SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15) Highway Data Autos: 15 Average Daily Traffic (Adt): 2,979 vehicles Medium Trucks (2 Axles): Peak Hour Percentage: 10% 15 Heavy Trucks (3+ Axles): Peak Hour Volume: 298 vehicles 15 Vehicle Speed: 40 mph Vehicle Mix Near/Far Lane Distance:
 Ope
 Day
 Evening
 Night
 Daily

 Autos:
 77.5%
 12.9%
 9.6%
 95.52%
 48 feet VehicleType 9.6% 95.52% Site Data Medium Trucks: 84.8% 4.9% 10.3% 2.33% Barrier Height: Barrier Type (0-Wall, 1-Berm): 0.0 feet 0.0 Heavy Trucks: 86.5% 2.7% 10.8% 2.15% Centerline Dist. to Barrier: Centerline Dist. to Observer: 46.0 feet Noise Source Elevations (in feet) 46.0 feet 0.000 Autos: Barrier Distance to Observer: Observer Height (Above Pad): 0.0 feet 5.0 feet Medium Trucks: 2.297 8.004 Heavy Trucks: Grade Adjustment: 0.0 Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet) 0.0 feet Road Elevation: Autos: 39.560 Medium Trucks: 39.336 Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Heavy Trucks: 39.358 FHWA Noise Model Calculations VehicleType REMEL
 MEL
 Traffic Flow
 Distance
 Finite Road

 66.51
 -6.78
 1.42
 -1.20
 Fresnel Barrier Atten Berm Atten -4.63 0.000 0.00 Autos Medium Trucks: 77.72 -22.91 1.46 -1.20 -4.87 0.000 Heavy Trucks: 82.99 -23.26 1.46 -1.20 -5.47 0.000

Unmitigated Nois	e Levels (withou	t Topo and barr	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	59.9	58.1	56.3	50.2	58.9	59.5
Medium Trucks:	55.1	53.6	47.2	45.6	54.1	54.3
Heavy Trucks:	60.0	58.6	49.5	50.8	59.1	59.3
Vehicle Noise:	63.6	62.0	57.5	54.2	62.7	63.0
Centerline Distan	ce to Noise Cont	our (in feet)				
			70 dBA	65 dBA	60 dBA	55 dBA
		Ldn:	15	32	69	149
		CNEL:	16	34	73	157

	FH	NA-RD-77-108	HIGHWA	AY N	IOISE PF	REDICTI	ON MC	DEL			
Scena Road Nan Road Segme	rio: Existing W ne: Santa Ana ent: e/o Juniper	ithout Project Av. Av.				Project Job Ni	Name: umber:	Goodr 12384	man III		
SITE	SPECIFIC IN	IPUT DATA				N	OISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard =	: 10, S	oft = 15)		
Average Daily Peak Hou Peak I	r Traffic (Adt): r Percentage: Hour Volume:	6,907 vehicle 10% 691 vehicle	es s		Me He	dium Tru avy Truc	ıcks (2 . :ks (3+ .	Autos: Axles): Axles):	15 15 15		
Ve	ehicle Speed:	40 mph		1	Vehicle I	Mix					
Near/Far La	ane Distance:	48 feet		F	Veh	icleType		Day	Evening	Night	Daily
Site Data						A	lutos:	77.5%	6 12.9%	9.6%	6 95.52%
Pa	verior Hoight:	0.0 foot			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	6 2.33%
Barrier Type (0-V	Vall, 1-Berm):	0.0			ŀ	łeavy Tr	ucks:	86.5%	6 2.7%	10.8%	6 2.15%
Centerline D	ist. to Barrier:	46.0 feet			Noise So	ource El	evatior	ns (in f	eet)		
Centerline Dist.	to Observer:	46.0 feet		F		Autos	s: 0	000			
Barrier Distance	to Observer:	0.0 feet			Mediur	n Trucks	. 2	297			
Observer Height	(Above Pad):	5.0 feet			Heav	y Trucks	s: 8.	004	Grade Ad	iustmer	t: 0.0
P	ad Elevation:	0.0 feet		H	l ono Ea	vivalant	Distan	aa (in	fa a 4)		
Ro	ad Elevation:	0.0 feet		-	Lane Equ	uivaleill	Distan	ce (III	leel)		
	Road Grade:	0.0%				Autos	5: 39	.560			
	Left View:	-90.0 degre	es		Mediur	n Trucks	s: 39	.336			
	Right View:	90.0 degre	es		Heav	y Trucks	s: 39	.358			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fres	nel	Barrier Att	en Be	erm Atten
Autos:	66.51	-3.13		1.42	2	-1.20		-4.63	0.0	000	0.000
Medium Trucks:	77.72	-19.26		1.46	6	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	82.99	-19.61		1.46	6	-1.20		-5.47	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier a	tten	uation)						
VehicleType	Leq Peak Ho	ır Leq Day	/ Le	eq Ev	vening	Leq I	Night		Ldn	(ONEL
Autos:	63	.6	61.7		59.9		53.	9	62.5	5	63.1
Medium Trucks:	58	.7	57.2		50.8		49.3	3	57.8	3	58.0
Heavy Trucks:	63	.6	62.2		53.2		54.	4	62.8	3	62.9
Vehicle Noise:	67	.3	65.7		61.2		57.	8	66.3	3	66.7
Centerline Distan	ce to Noise C	ontour (in feet)								
				70 c	1BA	65 0	dBA		60 dBA	5	5 dBA
			Ldn:	2	6	5	6		121		261
		Ci	NEL:	2	8	5	9		128		275

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0.000

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	FH\	VA-RD-77-108	HIGHW	AY NC	DISE P	REDICT	ION MO	DEL			
Scena Road Nar Road Segme	rio: Existing Wi me: Santa Ana ent: e/o Sierra /	ithout Project Av. Av.				Project Job N	t Name: lumber:	Good 12384	man III		
SITE	SPECIFIC IN	IPUT DATA					NOISE N	NODE	L INPUTS	5	
Highway Data				Si	ite Cor	nditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	6,283 vehicl	es					Autos	15		
Peak Hou	r Percentage:	10%			Me	edium Tr	ucks (2 A	(xles	: 15		
Peak I	Hour Volume:	628 vehicle	s		He	eavy Tru	cks (3+ A	(xles	: 15		
Ve	ehicle Speed:	40 mph		V	ehicle	Mix					
Near/Far La	ane Distance:	48 feet		-	Veh	icleTvp	e	Dav	Evenina	Niah	Dailv
Site Data							Autos:	77.5%	6 12.9%	9.6	% 95.52%
Ba	arrier Height:	0.0 feet			М	edium T	rucks:	84.8%	6 4.9%	10.3	% 2.33%
Barrier Type (0-V	Vall, 1-Berm):	0.0				Heavy T	rucks:	86.5%	6 2.7%	10.8	% 2.15%
Centerline D	ist. to Barrier:	46.0 feet		N	oise S	ource E	levation	s (in i	eet)		
Centerline Dist.	to Observer:	46.0 feet				Auto	s: 0.0	000			
Barrier Distance	e to Observer:	0.0 feet			Mediu	m Truck	s: 2.1	297			
Observer Height	(Above Pad):	5.0 feet			Hear	vy Truck	s: 8.0	004	Grade Adj	ustme	nt: 0.0
F	Pad Elevation:	0.0 feet			-	·					
Ro	ad Elevation:	0.0 feet		Lä	ane Eq	uivalen	t Distan	ce (in	teet)		
	Road Grade:	0.0%				Auto	is: 39.	560			
	Left View:	-90.0 degre	es		Mediu	m Truck	(S. 39.	336			
	Right View:	90.0 degre	es		Hea	у тиск	s: 39.	358			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresr	iel	Barrier Atte	en E	lerm Atten
Autos:	66.51	-3.54		1.42		-1.20		-4.63	0.0	00	0.000
Medium Trucks:	: 77.72	-19.67		1.46		-1.20		-4.87	0.0	00	0.000
Heavy Trucks	82.99	-20.02		1.46		-1.20		-5.47	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Hou	ir Leq Day	′ L	eq Eve	ening	Leq	Night		Ldn		CNEL
Autos:	: 63	.2	61.3		59.5		53.5		62.1		62.7
Medium Trucks:	: 58	.3	56.8		50.4		48.9)	57.4		57.6
Vehicle Noise	. 63	.2	61.8 65.2		52.8 60.8		54.0)	62.4		62.5
Centerline Distan	ce to Noise C	ontour (in feet)		00.0		07.5		00.0		50.2
Contentine Distan	100 10 110/36 01	intear (in reer	/	70 dE	BA	65	dBA		60 dBA	4	55 dBA
			Ldn:	25		;	53		114		245
		C	VEL:	26		:	56		120		259

Scenario: Road Name: Road Segment: SITE SP Hintway Data	Existing With Jurupa Av. w/o Cherry A	out Project				Project N	ame: G	Goodm	an III		
SITE SP	mo oneny A					JUD IVUI	nber: 1	2384			
Highway Data		NIT DATA				NO		005		~	
	CIFIC INP	OTDATA		3	Site Con	ditions (F	lard = 1	10 So	ft = 15	3	
Average Deily Tr	fic (Adk) 1	0.006 vehicles				0.00010	ar a = 1	utos	15		
Average Daily Tra	amic (Adt): 1	9,886 venicles	5		Mo	dium Truc	A 10 /2 A	ulos.	15		
Peak Hour Pe	r Volumou 1	10%			Ulor Llor	ovar Truck	no (2 M	vloc).	15		
reak nou	l volume. I	45 mph			nea	avy much	5 (3 1 A.	kies).	15		
Noar/Ear Lano	Distanco:	45 mpn		١	Vehicle I	Vix					
Neal/I al Laile	Distance.	oo leel			Vehi	icleType	L	Day	Evening	Night	Daily
Site Data						Au	tos: 7	7.5%	12.9%	9.6%	95.52%
Barrie	er Height:	0.0 feet			Me	edium True	cks: 8	84.8%	4.9%	10.3%	2.33%
Barrier Type (0-Wall,	1-Berm):	0.0			F	leavy Tru	cks: 8	86.5%	2.7%	10.8%	2.15%
Centerline Dist.	to Barrier:	60.0 feet			Noise Sc	urce Elev	ations	(in fo	of)		
Centerline Dist. to	Observer:	60.0 feet		Ľ.	10/30 00	Autos	0.0	00	00		
Barrier Distance to	Observer:	0.0 feet			Modiur	n Trucke:	2.2	00			
Observer Height (Ab	ove Pad):	5.0 feet			Heav	v Trucks:	8.0	57 04	Grade Ad	iustment	0.0
Pad	Elevation:	0.0 feet			neuv	y macks.	0.0	04	,		0.0
Road	Elevation:	0.0 feet		1	Lane Equ	uivalent D	listanc	e (in f	eet)		
Roa	ad Grade:	0.0%				Autos:	45.0	00			
	Left View:	-90.0 degrees	5		Mediur	n Trucks:	44.8	03			
R	ight View:	90.0 degrees	6		Heav	y Trucks:	44.8	22			
FHWA Noise Model	Calculations										
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresne	el I	Barrier Att	en Ber	m Atten
Autos:	68.46	0.95		0.58	3	-1.20	-	4.69	0.0	000	0.000
Medium Trucks:	79.45	-15.18		0.61	1	-1.20	-	4.88	0.0	000	0.000
Heavy Trucks:	84.25	-15.53		0.61	1	-1.20	-	5.34	0.0	000	0.000
Unmitigated Noise L	evels (witho	ut Topo and b	arrier	atten	uation)						
VehicleType Le	eq Peak Hour	Leq Day	L	Leq Ev	/ening	Leq Ni	ght		Ldn	CI	VEL
Autos:	68.8	6	6.9		65.1		59.1		67.7	,	68.3
Medium Trucks:	63.7	6	2.2		55.8		54.3		62.7	,	63.0
Heavy Trucks:	68.1	6	6.7		57.7		58.9		67.3	3	67.4
Vehicle Noise:	72.2	2 7	0.5		66.3		62.7		71.2	2	71.5
Centerline Distance	to Noise Cor	ntour (in feet)									
				70 c	1BA	65 dE	3A	6	0 dBA	55	dBA
		1	dn.	7:	2	155			333	7	18
		L	un.		-	100					

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	FH\	VA-RD-77-108 I	HIGI	WAY N	IOISE PE	REDICTI	ION M	ODEL			
Scenari Road Nam Road Segmer	o: Existing Wi e: Jurupa Av. nt: e/o Cherry	thout Project Av.				Project Job N	Name. umber	Goodr 12384	nan III		
SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	'S	
Highway Data				4	Site Con	ditions	(Hard	= 10, Se	oft = 15)		
Average Daily Peak Hour Peak H	Traffic (Adt): Percentage: our Volume:	16,755 vehicle 10% 1,676 vehicles	S		Me He	dium Tru avy Truc	ucks (2 cks (3+	Autos: Axles): Axles):	15 15 15		
Ve	hicle Speed:	45 mph			Vohiclo	Mix					
Near/Far La	ne Distance:	80 feet		-	Venicie i	icleType		Dav	Evenina	Niaht	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	6 95.52%
Ba	vior Hoight	0.0 feet			Me	edium Tr	rucks:	84.8%	4.9%	10.39	6 2.33%
Barrier Type (0-W	all, 1-Berm):	0.0			ŀ	leavy Ti	rucks:	86.5%	2.7%	10.8%	6 2.15%
Centerline Dis	st. to Barrier:	60.0 feet			Noise So	ource El	levatio	ns (in f	eet)		
Centerline Dist.	to Observer:	60.0 feet		F		Auto	s: (0.000	,		
Barrier Distance	to Observer:	0.0 feet			Mediu	n Truck	s: 2	297			
Observer Height (Above Pad):	5.0 feet			Heav	v Truck	s: 8	3.004	Grade Ad	ljustmer	nt: 0.0
Pa	ad Elevation:	0.0 feet								·	
Roa	ad Elevation:	0.0 feet		1	Lane Eq	uivalent	t Dista	nce (in	feet)		
I	Road Grade:	0.0%				Autos	s: 45	5.000			
	Left View: Right View:	-90.0 degree 90.0 degree	s s		Mediur Heav	n Truck: v Truck:	s: 44 s: 44	1.803 1.822			
EHWA Noise Mod	ol Colculation		_								
VehicleType	REMEI	Traffic Flow	Dis	stance	Finite	Road	Fre	snel	Barrier At	ten Be	erm Atten
Autos:	68.46	0.20		0.58	8	-1.20		-4.69	0.	000	0.00
Medium Trucks:	79.45	-15.92		0.6	1	-1.20		-4.88	0.	000	0.00
Heavy Trucks:	84.25	-16.27		0.6	1	-1.20		-5.34	0.	000	0.00
Unmitigated Noise	e Levels (with	out Topo and L	barri	er atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day		Leq E	vening	Leq	Night		Ldn	(ONEL
Autos:	68	.0 6	6.1		64.4		58	.3	67.	0	67.0
Medium Trucks:	62	.9 6	1.4		55.1		53	.5	62.	0	62.3
Heavy Trucks:	67	.4 6	6.0		56.9		58	.2	66.	5	66.
Vehicle Noise:	71	.4 6	9.8		65.5		61	.9	70.	4	70.
Centerline Distance	e to Noise Co	ontour (in feet)									
				70 0	dBA	65	dBA	(60 dBA	5	5 dBA
		L	.dn:	6	4	1:	38		297		641
		CN	EL:	6	8	14	46		315		678

	FH'	WA-RD-77-108 I	HIGHWA	YNC	DISE PF	REDICTIO	ON MO	DEL			
Scenar Road Nam Road Segme	io: Existing W ie: Jurupa Av. nt: e/o Beech	ithout Project Av.				Project I Job Nu	Vame: mber:	Goodi 12384	man III		
SITE	SPECIFIC I	NPUT DATA				N	DISE N	/IODE	L INPUT	s	
Highway Data				Si	ite Con	ditions (Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	17,357 vehicles	6					Autos.	15		
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 A	Axles)	: 15		
Peak H	lour Volume:	1,736 vehicles			He	avy Truck	ks (3+ A	Axles)	: 15		
Ve	hicle Speed:	45 mph		14	abielo I	Mix					
Near/Far La	ne Distance:	80 feet			Veh	icleTvne		Dav	Evenina	Niaht	Daily
Site Data					1011	A	utos:	77.5%	6 12.9%	9.6	% 95.52%
Ba	wier Height	0.0 (act			Me	edium Tru	icks:	84.89	6 4.9%	10.39	% 2.33%
Barrior Tupo (0.14	(all 1 Porm):	0.0 1001			F	leavv Tru	icks:	86.5%	6 2.7%	10.89	% 2.15%
Centerline Di	st to Barrier	60.0 feet		-		,					
Centerline Dist.	to Observer:	60.0 feet		N	oise Sc	ource Ele	vation	s (in f	'eet)		
Barrier Distance	to Observer:	0.0 feet				Autos.	: 0.0	000			
Observer Height	Above Pad):	5.0 feet			Mediur	n Trucks.	: 2.	297	Out de Au		
P	ad Elevation:	0.0 feet			Heav	y Trucks.	8.0	004	Grade Ad	justmei	11: 0.0
Ro	ad Elevation:	0.0 feet		Lé	ane Eq	uivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%				Autos.	45.	000			
	Left View:	-90.0 degrees	6		Mediur	n Trucks.	44.	803			
	Right View:	90.0 degrees	3		Heav	y Trucks.	44.	822			
FHWA Noise Mod	el Calculatior	IS									
VehicleType	REMEL	Traffic Flow	Distanc	e	Finite	Road	Fresr	nel	Barrier Att	en B	erm Atten
Autos:	68.46	0.36		0.58		-1.20		-4.69	0.0	000	0.000
Medium Trucks:	79.45	-15.77		0.61		-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	84.25	-16.12		0.61		-1.20		-5.34	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and b	arrier at	tenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Day	Le	q Eve	ening	Leq N	light		Ldn		CNEL
Autos:	68	3.2 6	6.3		64.5		58.5	5	67.1	1	67.7
Medium Trucks:	63	3.1 6	1.6		55.2		53.7	,	62.1	1	62.4
Heavy Trucks:	67	7.5 6	6.1		57.1		58.3	3	66.	7	66.8
Vehicle Noise:	71	1.6 6	9.9		65.7		62.1		70.6	6	70.9
Centerline Distan	ce to Noise C	ontour (in feet)									
				70 dE	BA	65 d	BA		60 dBA	5	5 dBA
		L	dn:	66		14	1		305		656
		CN	EL:	69		14	9		322		694

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	FH	WA-RD-77-10	8 HIGH	IWAY N	OISE P	REDICTIO	N MODI	EL			
Scenar Road Nan Road Segme	io: Existing W ne: Jurupa Av. nt: e/o Poplar	lithout Project Av.				Project N Job Nur	lame: Go nber: 12	oodman 2384	II		
SITE	SPECIFIC II	NPUT DATA				NC	DISE MO	DDEL IN	IPUTS		
Highway Data				5	Site Cor	nditions (H	lard = 1	0, Soft =	15)		
Average Daily	Traffic (Adt):	18,883 vehi	cles				AL	utos: 1	5		
Peak Hour	Percentage:	10%			Me	edium Truc	ks (2 Ax	<i>les):</i> 1	5		
Peak H	lour Volume:	1,888 vehic	es		He	avy Truck	s (3+ Ax	<i>les):</i> 1	5		
Ve	hicle Speed:	45 mph			Vehicle	Mix					
Near/Far La	ne Distance:	80 feet		F	Veh	nicleType	D	ay Eve	ening N	ight	Daily
Site Data						Au	tos: 7	7.5% 1	2.9%	9.6%	95.52%
Ba	rrier Heiaht:	0.0 feet			М	edium Tru	cks: 84	4.8%	4.9% 1	0.3%	2.33%
Barrier Type (0-W	Vall, 1-Berm):	0.0				Heavy Tru	cks: 86	6.5%	2.7% 1	0.8%	2.15%
Centerline Di	ist. to Barrier:	60.0 feet			Voise S	ource Flev	vations	(in feet)			
Centerline Dist.	to Observer:	60.0 feet		-	10.00 0	Autos	0.00	0			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks:	2.29	7			
Observer Height	(Above Pad):	5.0 feet			Hear	v Trucks:	8.00	4 Gra	de Adjus	tment:	0.0
P	ad Elevation:	0.0 feet		-					,		
Ro	ad Elevation:	0.0 feet		1	.ane Eq	uivalent L	Distance	(in feet)			
	Road Grade:	0.0%				Autos:	45.00	00			
	Left View:	-90.0 degr	ees		Mediu	m Trucks:	44.80)3			
	Right View:	90.0 degr	ees		Hear	vy Trucks:	44.82	22			
FHWA Noise Mod	el Calculation	15									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresnel	Barr	ier Atten	Berr	n Atten
Autos:	68.46	0.7	2	0.58	3	-1.20	-4	1.69	0.000		0.000
Medium Trucks:	79.45	i -15.4	0	0.61		-1.20	-4	1.88	0.000		0.000
Heavy Trucks:	84.25	-15.7	5	0.61		-1.20	-5	5.34	0.000		0.000
Unmitigated Nois	e Levels (with	nout Topo an	d barrie	er atten	uation)						
VehicleType	Leq Peak Ho	ur Leq D	ay	Leq Ev	/ening	Leq N	ight	Ldr	1	C٨	IEL
Autos:	68	3.6	66.7		64.9		58.8		67.5		68.1
Medium Trucks:	63	3.5	61.9		55.6		54.0		62.5		62.7
Heavy Trucks:	67	7.9	66.5		57.5		58.7		67.1		67.2
Vehicle Noise:	71	1.9	70.3		66.0		62.5		70.9		71.3
Centerline Distan	ce to Noise C	ontour (in fe	et)			I.			I		
			L	70 d	iBA	65 dE	BA	60 dł	BA	55 0	dBA
			Ldn:	69	9	150)	322		69	94
			CNEL:	73	3	158	3	341		73	34

Scenar Road Nam Road Seame	io: Existing Wi ie: Jurupa Av. nt: e/o Citrus /	thout Project				Project N Job Nur	ame: (nber: 1	Goodr 2384	nan III		
SITE	SPECIFIC IN					NO	ISE M			\$	
Highway Data	SI LOII IO III			s	Site Con	ditions (H	lard =	10, S	oft = 15	5	
Average Daily	Traffic (Adt):	16.856 vehicles					F	Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Truc	ks (2 A	xles):	15		
Peak H	lour Volume:	1.686 vehicles			Hea	avy Truck	s (3+ A	, xles):	15		
Ve	hicle Speed:	45 mph			(ahiala I	Also					
Near/Far La	ne Distance:	80 feet		v	Vohi			Dav	Evoning	Night	Daily
Site Data					veni	cierype Au	ton: '	77 F0/	12 0%	0.6%	Daily
Sile Dala				_	Me	dium Tru	lus. I	RA 8%	. 10%	10.3%	2 3 3 3 %
Bai	rrier Height:	0.0 feet			hild h	leavy Tru	sks i	36.5%	27%	10.8%	2 15%
Barrier Type (0-W	'all, 1-Berm):	0.0				ioury ma		50.0 /	2.170	10.070	2.10%
Centerline Dis	st. to Barrier:	60.0 feet		Ν	loise So	urce Elev	ations	; (in f	eet)		
Certierline Dist.	to Observer.	60.0 feet				Autos:	0.0	00			
Obsonior Hoight	(Abovo Pad):	0.0 feet			Mediun	n Trucks:	2.2	97			
Diserver meight (ad Elevation:	0.0 feet			Heav	y Trucks:	8.0	04	Grade Ad	justment.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Equ	ivalent D	istanc	e (in	feet)		
1.00	Road Grade:	0.0%				Autos:	45.0	000			
	Left View:	-90.0 degrees			Mediun	n Trucks:	44.8	03			
	Right View:	90.0 degrees			Heav	y Trucks:	44.8	22			
FHWA Noise Mod	el Calculation	s		_							
VehicleType			Distant		-			. 1			m Atton
	REMEL	Traffic Flow	Distant	e	Finite	Road	Fresn	e/	Barrier Att	en Ber	III MUCH
Autos:	REMEL 68.46	Traffic Flow 0.23	Distant	се 0.58	Finite	Road -1.20	Fresn.	el -4.69	Barrier Att 0.0	en Ber	0.000
Autos: Medium Trucks:	REMEL 68.46 79.45	Traffic Flow 0.23 -15.90	Distant	ж 0.58 0.61	Finite	Road -1.20 -1.20	Fresn.	el -4.69 -4.88	Barrier Att 0.0 0.0	en Ber)00)00	0.000
Autos: Medium Trucks: Heavy Trucks:	REMEL 68.46 79.45 84.25	7raffic Flow 0.23 -15.90 -16.25	Distant	0.58 0.61 0.61	Finite	Road -1.20 -1.20 -1.20	Fresn	el -4.69 -4.88 -5.34	<u>Barrier Att</u> 0.0 0.0 0.0	en Ber 000 000 000	0.000 0.000 0.000
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise	REMEL 68.46 79.45 84.25 PLevels (with	7raffic Flow 0.23 -15.90 -16.25 out Topo and ba	nrier a	се 0.58 0.61 0.61	Finite	Road -1.20 -1.20 -1.20	Fresn	el -4.69 -4.88 -5.34	Barrier Att 0.0 0.0 0.0	en Ber 000 000 000	0.000
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType	REMEL 68.46 79.45 84.25 9 Levels (with Leg Peak Hou	Traffic Flow 0.23 -15.90 -16.25 out Topo and base ir Leq Day	nrrier an	xe 0.58 0.61 0.61 t tenu q Eve	Finite	Road -1.20 -1.20 -1.20 Leq Ni	Fresn	el -4.69 -4.88 -5.34	Barrier Att 0.0 0.0 0.0 0.0	en Ber 000 000 000 Cl	0.000 0.000 0.000 0.000
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos:	REMEL 68.46 79.45 84.25 e Levels (with Leq Peak Hou 68	Traffic Flow 0.23 -15.90 -16.25 out Topo and base Ir Leq Day .1 66	rrier an Le	xe 0.58 0.61 0.61 t tenu q Evi	Finite uation) ening 64.4	Road -1.20 -1.20 -1.20 <i>Leq Ni</i>	Fresn ght 58.4	el -4.69 -4.88 -5.34	Barrier Att 0.0 0.0 0.0 Ldn 67.0	en Ber 000 000 000 000 Cl	0.000 0.000 0.000 0.000 VEL 67.6
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noiss VehicleType Autos: Medium Trucks:	REMEL 68.46 79.45 84.25 e Levels (with Leg Peak Hou 68 63	Traffic Flow 0.23 -15.90 -16.25 out Topo and ba ir Leq Day .1 66 .0 61	<i>Irrier a</i> Le .2 .5	20.58 0.61 0.61 t tenu g Evi	Finite uation) ening 64.4 55.1	Road -1.20 -1.20 -1.20 <i>Leq Ni</i>	Fresn ght 58.4 53.6	el -4.69 -4.88 -5.34	Barrier Att 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	en Ber 000 000 000 000 Cl	0.000 0.000 0.000 <u>VEL</u> 67.6 62.2
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noiss VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 68.46 79.45 84.25 e Levels (with Leq Peak Hou 68 63 63	Traffic Flow 0.23 -15.90 -16.25 Out Topo and ba Image: Comparison of the second	Instant Instant Le .2 .5 .0	20.58 0.61 0.61 tenu g Eve	Finite aution) ening 64.4 55.1 57.0	Road -1.20 -1.20 -1.20 <i>Leq Ni</i>	<i>ght</i> 58.4 58.2	e/ -4.69 -4.88 -5.34	Barrier Att 0.0 0.0 0.0 0.0 0.0 0.0 0.0 67.0 62.0 66.6	en Ber 000 000 000 000 Cl 0 0	0.000 0.000 0.000 <u>VEL</u> 67.6 62.2 66.7
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noiss VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	REMEL 68.46 79.45 84.25 e Levels (with Leq Peak Hou 68 63 67 71	Traffic Flow 0.23 0.23 -15.90 -16.25 -16.25 out Topo and base r Leq Day .1 66 .0 61 .4 66 .4 69	2.2 .0 .8	20.58 0.61 0.61 t tenu g Evi	Finite ation) ening 64.4 55.1 57.0 65.5	Road -1.20 -1.20 -1.20 <i>Leq Ni</i>	<i>ght</i> 58.4 53.6 58.2 62.0	el -4.69 -4.88 -5.34	Barrier Att 0.0 0.0 0.0 0.0 0.0 0.0 60.0 66.6 70.5	en Ber 000 000 000 CI 0 5 5	0.000 0.000 0.000 <u>VEL</u> 67.6 62.2 66.7 70.8
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distant	REMEL 68.46 79.45 84.25 84.25 84.25 e Levels (with 68 63 63 67 71 2e to Noise Co 68	Traffic Flow 0.23 0.23 -15.90 -16.25 0 out Topo and ba 0 rr Leq Day .1 66 .0 61 .4 66 .4 69 ontour (in feet) 0	Inrier and Le	20.58 0.61 0.61 tenu	<i>Finite</i> <i>ation)</i> <i>ening</i> 64.4 55.1 57.0 65.5	Road -1.20 -1.20 -1.20 Leq Ni	<i>ght</i> 58.4 53.6 58.2 62.0	el -4.69 -4.88 -5.34	Barrier Att 0.0 0.0 0.0 0.0 0.0 0.0 60.0 66.6 70.5	en Ber 000 000 000 Cl 0 0 5 5	0.000 0.000 0.000 VEL 67.6 62.2 66.7 70.8
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	REMEL 68.46 79.45 84.25 e Levels (with Leq Peak Hou 68 63 67 71 2e to Noise Co Co	Traffic Flow 0.23 0.23 -15.90 -16.25 -16.25 out Topo and ba -16.25	rrier at Le .2 .5 .0	20 0.58 0.61 0.61 ttenu q Evi	Finite ation) ening 64.4 55.1 57.0 65.5 BA	Road -1.20 -1.20 -1.20 -1.20 Leq Ni	<i>ght</i> 58.4 53.6 58.2 62.0	e/ -4.69 -4.88 -5.34	Barrier Att 0.0 0.0 0.0 0.0 67.0 67.0 66.0 70.5	en Ber 000 000 000 Cl 0 0 5 55	0.000 0.000 0.000 VEL 67.6 62.2 66.7 70.8
Autos: Medium Trucks: Heavy Trucks: Unmitgated Noiss Vehicle Type Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	REMEL 68.46 79.45 84.25 e Levels (with Leq Peak Hou 68 63 67 71 2e to Noise Co	Traffic Flow 0.23 -15.90 -16.25 out Topo and be m Leg Day 1 66 .0 61 .4 66 .4 69 ontour (in feet) La	rrier at Le .2 .5 .0 .8	20 0.58 0.61 0.61 ttenu 7 Eve 70 di 64	<i>Jation)</i> <i>ening</i> 64.4 55.1 57.0 65.5 <i>BA</i>	Road -1.20 -1.20 -1.20 -1.20 <i>Leq Ni</i> 65 dE 139	ght 58.4 53.6 58.2 62.0	e/ -4.69 -4.88 -5.34	Barrier Att 0.0 0.0 0.0 0.0 0.0 67.0 67.0 66.6 70.5 50 dBA 299	en Ber 000 000 000 Cl 0 5 5 6	0.000 0.000 0.000 VEL 67.6 62.2 66.7 70.8 dBA 43

Wednesday, June 05, 2019

		NA DD 77 400 I						DEL				
	FHV	VA-RD-77-108 F	HIGH	WAY N	OISE PI	REDICTION		DEL				
Scenar	io: Existing Wi	ithout Project				Project I	Name:	Goodr	nan III			
Road Nam	ne: Jurupa Av.					Job Ni	imber:	12384				
Road Segme	nt: e/o Oleand	er Av.										
SITE	SPECIFIC IN	IPUT DATA				N	OISE	MODE	L INP	JTS		
Highway Data				5	Site Con	ditions ('Hard =	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	17,780 vehicles	5					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2	Axles):	15			
Peak H	lour Volume:	1,778 vehicles			He	avy Truc	ks (3+	Axles):	15			
Ve	hicle Speed:	45 mph			/ohiclo	Mix						
Near/Far La	ne Distance:	80 feet		-	Veh	icleTvne		Dav	Eveni	na N	iaht	Daily
Site Data				-		A	utos:	77.5%	5 12.9	%	9.6%	95.52%
Pa	rrior Hoight:	0.0 foot			Me	edium Tru	ucks:	84.8%	4.9	% 1	0.3%	2.33%
Barrier Type (0-M	/all_1-Berm):	0.0 1001			ŀ	leavy Tru	ucks:	86.5%	5 2.7	% 1	0.8%	2.15%
Centerline Di	st. to Barrier:	60.0 feet		-								
Centerline Dist.	to Observer:	60.0 feet		^	voise So	burce Ele	evatio	ns (in f	eet)			
Barrier Distance	to Observer:	0.0 feet				Autos	: 0	000				
Observer Height	(Above Pad):	5.0 feet			Mediui	n Trucks	: 2	.297	0	A		
Pa	ad Elevation:	0.0 feet			Heav	y Trucks	: 8	.004	Grade	Aujus	uneni.	0.0
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	ice (in	feet)			
	Road Grade:	0.0%				Autos	: 45	.000				
	Left View:	-90.0 degrees	5		Mediur	n Trucks	: 44	.803				
	Right View:	90.0 degrees	5		Heav	y Trucks	: 44	.822				
EHWA Noiso Mod	ol Calculation	c										
VehicleType	RFMFI	Traffic Flow	Dist	tance	Finite	Road	Fres	nel	Barrier	Atten	Ber	m Atten
Autos:	68.46	0.46		0.58	3	-1.20		-4.69		0.000		0.000
Medium Trucks:	79.45	-15.66		0.61		-1.20		-4.88		0.000		0.000
Heavy Trucks:	84.25	-16.01		0.61		-1.20		-5.34		0.000		0.000
Unmitigated Nois	o I ovols (with	out Topo and h	arrio	r atton	uation)							
VehicleType	Lea Peak Hou	r Lea Dav	anne	Lea Fv	/enina	l ea l	Viaht		l dn		CI	VEL
Autos:	68	.3 6	6.4		64.6		58.	6		57.2		67.8
Medium Trucks:	63	.2 6	1.7		55.3		53.	8	(52.2		62.5
Heavy Trucks:	67	.6 6	6.2		57.2		58.	4	(6.8		66.9
Vehicle Noise:	71	.7 7	0.0		65.8		62.	2		70.7		71.1
Centerline Distan	ce to Noise Co	ontour (in feet)										
Distant				70 d	iBA	65 a	IBA		60 dBA		55	dBA
		L	dn:	67	7	14	4		309		6	67
		CN	EL:	70	C	15	2		327		7	05

	FH	WA-RD-77-108 HI	GHWAY	NOISE PI	REDICTIO	N MODE			
Scenai Road Nan Road Segme	rio: Existing W ne: Jurupa Av. ent: e/o Cypres	ithout Project s Av.			Project N Job Nur	ame: Goo nber: 123	odman III 84		
SITE	SPECIFIC IN	IPUT DATA			NC	ISE MO	DEL INPUT	'S	
Highway Data				Site Con	ditions (H	lard = 10,	Soft = 15)		
Average Daily	Traffic (Adt):	19,790 vehicles				Aut	os: 15		
Peak Hour	Percentage:	10%		Me	dium Truc	ks (2 Axle	s): 15		
Peak H	Hour Volume:	1,979 vehicles		He	avy Truck	s (3+ Axle	s): 15		
Ve	ehicle Speed:	45 mph		Vehicle	Mix				-
Near/Far La	ane Distance:	80 feet		Veh	icleType	Da	v Evenina	Niaht	Daily
Site Data					Au	tos: 77.	5% 12.9%	9.6%	6 95.52%
Ba	rrier Height	0.0 feet		М	edium Tru	cks: 84.	8% 4.9%	10.3%	6 2.33%
Barrier Type (0-V	Vall. 1-Berm):	0.0		1	Heavy Tru	cks: 86.	5% 2.7%	10.8%	5 2.15%
Centerline D	ist. to Barrier:	60.0 feet		Noice C	ouroo Elo	ationa (i	n faat)		
Centerline Dist.	to Observer:	60.0 feet		NUISe 30	Autoor		n leel)		
Barrier Distance	to Observer:	0.0 feet		Modiu	m Trucks:	2 207			
Observer Height	(Above Pad):	5.0 feet		Heal	n Trucks.	8 004	Grade Ar	diustmen	<i>t</i> . 0 0
P	ad Elevation:	0.0 feet		nour	y mucho.	0.004	0/440 / 14	ŋuounon	0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent L	Distance ('in feet)		
	Road Grade:	0.0%			Autos:	45.000			
	Left View:	-90.0 degrees		Mediu	m Trucks:	44.803			
	Right View:	90.0 degrees		Heav	ry Trucks:	44.822			
FHWA Noise Mod	lel Calculation	IS		1					
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier At	ten Be	rm Atten
Autos:	68.46	0.93	0.	58	-1.20	-4.0	69 0.	000	0.000
Medium Trucks:	79.45	-15.20	0.0	61	-1.20	-4.8	38 0.	000	0.000
Heavy Trucks:	84.25	-15.55	0.0	61	-1.20	-5.3	34 0.	000	0.000
Unmitigated Nois	e Levels (with	out Topo and ba	rrier atte	nuation)					-
VehicleType	Leq Peak Ho	ur Leq Day	Leq I	Evening	Leq N	ight	Ldn	C	NEL
Autos:	68	8.8 66	.9	65.1		59.1	67.	7	68.3
Medium Trucks:	63	8.7 62	.2	55.8		54.2	62.	7	62.9
Heavy Trucks:	68	3.1 66.	.7	57.7		58.9	67.	.3	67.4
Vehicle Noise:	72	2.1 70	.5	66.2		62.7	71.	2	71.5
Centerline Distan	ce to Noise C	ontour (in feet)							
			70) dBA	65 dE	BA	60 dBA	55	5 dBA
		Ld	n:	72	154	Ļ	332		716
		CNE	L:	76	163	5	351		757

Wednesday, June 05, 2019

	FH\	NA-RD-77-108	B HIGH	NAY NO	DISE P	REDICTIC	ON MOI	DEL			
Scenar Road Nan Road Segme	rio: Existing W ne: Jurupa Av. ent: e/o Juniper	ithout Project ⁻ Av.				Project N Job Nu	lame: (mber: 1	Goodr 2384	nan III		
SITE	SPECIFIC IN	IPUT DATA				NO	DISE N	IODE	L INPUTS	5	
Highway Data				S	ite Cor	ditions (l	Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	18,605 vehic	es				A	Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truc	cks (2 A	xles):	15		
Peak H	lour Volume:	1,861 vehicle	s		He	avy Truck	(S (3+ A	xles):	15		
Ve	ehicle Speed:	45 mph		v	ehicle	Mix					
Near/Far La	ane Distance:	80 feet		-	Veh	icleTvpe		Dav	Evenina	Niaht	Dailv
Site Data						A	itos:	77.5%	12.9%	9.6%	95.52%
Ba	rrier Height:	0.0 feet			М	edium Tru	icks:	84.8%	4.9%	10.3%	6 2.33%
Barrier Type (0-W	Vall, 1-Berm):	0.0			1	Heavy Tru	icks:	86.5%	2.7%	10.8%	i 2.15%
Centerline Di	ist. to Barrier:	60.0 feet		Δ	loise Si	ource Ele	vations	in f	oot)		-
Centerline Dist.	to Observer:	60.0 feet			0/30 0	Autos	0.0	00			
Barrier Distance	to Observer:	0.0 feet			Modiu	m Trucks	2.2	97			
Observer Height	(Above Pad):	5.0 feet			Hoa	n Trucks.	8.0	04	Grade Adii	ustmen	t: 0.0
P	ad Elevation:	0.0 feet			near	ly mucho.	0.0		,		- 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distand	e (in	feet)		
	Road Grade:	0.0%				Autos:	45.0	000			
	Left View:	-90.0 degre	es		Mediu	m Trucks:	44.8	303			
	Right View:	90.0 degre	es		Heav	/y Trucks:	44.8	322			
FHWA Noise Mod	lel Calculation	S									-
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresn	el	Barrier Atte	en Be	erm Atten
Autos:	68.46	0.66		0.58		-1.20		4.69	0.0	00	0.000
Medium Trucks:	79.45	-15.47		0.61		-1.20		4.88	0.0	00	0.000
Heavy Trucks:	84.25	-15.82		0.61		-1.20		-5.34	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	r attenu	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	y	Leq Eve	ening	Leq N	light		Ldn	0	NEL
Autos:	68	1.5	66.6		64.8		58.8		67.4		68.0
Medium Trucks:	63	1.4	61.9		55.5		54.0		62.4		62.7
Heavy Trucks:	67	.8	66.4		57.4		58.6		67.0		67.1
Vehicle Noise:	71	.9	70.2		66.0		62.4		70.9		71.2
Centerline Distan	ce to Noise C	ontour (in fee	t)								
				70 di	BA	65 d	BA	1	60 dBA	5	5 dBA
			Ldn:	69		14	3		319		687
		C	NEL:	73		15	7		337		727

	FHV	VA-RD-77-108	HIGHV	VAY NO	DISE PF	REDICTIO	N MOE	DEL			
Scenari Road Nam Road Segmer	io: Existing Wi e: Armstrong I nt: w/o Sierra A	thout Project Rd. Av.				Project N Job Nur	lame: 0 mber: 1	Goodm 2384	ian III		
SITE	SPECIFIC IN	PUT DATA				NC	DISE M	IODE		s	
Highway Data				S	ite Con	ditions (H	lard = '	10, So	oft = 15)		
Average Daily	Traffic (Adt):	23,072 vehicle	es				A	Autos:	15		
Peak Hour	Percentage:	10%			Mee	dium Truc	:ks (2 A	xles):	15		
Peak H	lour Volume:	2,307 vehicles	6		Hea	avy Truck	s (3+ A	xles):	15		
Ve	hicle Speed:	45 mph		V	ehicle I	Mix					
Near/Far La	ne Distance:	48 feet			Vehi	icleType	l	Day	Evening	Night	Daily
Site Data						Au	itos: T	77.5%	12.9%	9.6%	95.52%
Bai	rrier Height:	0.0 feet			Me	edium Tru	cks: 8	34.8%	4.9%	10.3%	2.33%
Barrier Type (0-W	all. 1-Berm):	0.0			F	leavy Tru	cks: 8	36.5%	2.7%	10.8%	2.15%
Centerline Dis	st. to Barrier:	59.0 feet		N	oiso Sa	urco Elo	vations	(in fo	(of)		
Centerline Dist.	to Observer:	59.0 feet		N	0/36 30	Autos	0.0	00	eij		
Barrier Distance	to Observer:	0.0 feet			Modiur	n Trucks:	2.2	00			
Observer Height (Above Pad):	5.0 feet			Heav	v Trucks:	8.0	04	Grade Ad	iustment:	0.0
Pa	ad Elevation:	0.0 feet			mour	<i>y maono</i> .	0.0				
Roa	ad Elevation:	0.0 feet		L	ane Equ	uivalent L	Distanc	e (in f	eet)	Night D 9.6% 95 10.3% 2 10.8% 2 ijustment: 0.0 000 (0 000 (0 000 (0 000 (0 000 (0 000 (0 000 (0 000 (0 000 (0 000 (0 000 (0 000 (0 1 2 55 6BA 685 685	
1	Road Grade:	0.0%				Autos:	54.1	29			
	Left View:	-90.0 degree	es		Mediur	n Trucks:	53.9	66			
	Right View:	90.0 degree	es		Heav	y Trucks:	53.9	182			
FHWA Noise Mode	el Calculation:	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresne	el .	Barrier Att	en Ber	m Atten
Autos:	68.46	1.59		-0.62		-1.20	-	4.69	0.0	000	0.000
Medium Trucks:	79.45	-14.53		-0.60		-1.20	-	4.88	0.0	000	0.000
Heavy Trucks:	84.25	-14.88		-0.60		-1.20	-	5.35	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Hou	r Leq Day	· 1	Leq Eve	ening	Leq N	ight		Ldn	CI	VEL
Autos:	68	.2	66.3		64.6		58.5		67.1	I	67.7
Medium Trucks:	63.	.1	61.6		55.2		53.7		62.2	2	62.4
Heavy Trucks:	67.	.6	66.1		57.1		58.4		66.7	7	66.8
Vehicle Noise:	71	.6	69.9		65.7		62.1		70.6	6	71.0
Centerline Distance	ce to Noise Co	ontour (in feet)	70.0			-				
			L	70 dl	3A	65 dE	3A	6	U dBA	55	dBA 40
			Lan:	65		140	J		301	6	48
		~	151	60		4.40	, ,		210	~	05

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL Scenario: Existing Without Project Road Name: Armstrong Rd. Road Segment: w/o 34th St. Project Name: Goodman III Job Number: 12384 SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS Highway Data Site Conditions (Hard = 10, Soft = 15) Autos: 15 Average Daily Traffic (Adt): 30,547 vehicles Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15 Peak Hour Volume: 3,055 vehicles Heavy Trucks (3+ Axles): 15 Vehicle Speed: 45 mph Vehicle Mix Near/Far Lane Distance: 48 feet pe Day Evening Night Daily Autos: 77.5% 12.9% 9.6% 95.52% VehicleType 9.6% 95.52% Site Data Medium Trucks: 84.8% 4.9% 10.3% 2.33% Barrier Height: Barrier Type (0-Wall, 1-Berm): 0.0 feet 0.0 Heavy Trucks: 86.5% 2.7% 10.8% 2.15% Centerline Dist. to Barrier: Centerline Dist. to Observer: 59.0 feet Noise Source Elevations (in feet) 59.0 feet Autos: 0.000 Barrier Distance to Observer: 0.0 feet Medium Trucks: 2.297 Observer Height (Above Pad): 5.0 feet Heavy Trucks: 8.004 Grade Adjustment: 0.0 Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet) Road Elevation: 0.0 feet Autos: Medium Trucks: Road Grade: 0.0% 54.129 53.966 Left View: -90.0 degrees Right View: 90.0 degrees Heavy Trucks: 53.982 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten -4.69 0.000 0.00 Autos 68.46 2.81 Medium Trucks: 79.45 -13.31 -0.60 -1.20 -4.88 0.000 Heavy Trucks: 84.25 -13.66 -0.60 -1.20 -5.35 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) Leq Night 59.7
 VehicleType
 Leq Peak Hour
 Leq Day
 Leq Evening

 Autos:
 69.5
 67.6
 65.8
 Ldn CNEL 68.4 Medium Trucks: 64.3 62.8 56.5 54.9 63.4

Scenario: Existing With Project Road Segment: s/o 10 Ramps Project Name: Goddman III Job Number: 12384 SiTE SPECIFIC INPUT DATA NOISE MODEL INPUTS Highway Data Site Conditions (Hard = 10, Soft = 15) Average Daily Traffic (Adt): 24,920 vehicles Autos: 15 Peak Hour Percentage: 10% Medium Trucks (3 + Axles): 15 Vehicle Speed: 45 mph Medium Trucks (3 + Axles): 15 Vehicle Speed: 45 mph Vehicle Type Day Evening Night Daily Site Data Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 0.3% 2.40 Barrier Dist. to Barrier: 66.0 feet Medium Trucks: 8.04 Gode Grade: 0.0% Medium Trucks: 8.4% 4.9% 0.3% 2.40 Barrier Dist. to Barrier: 66.0 feet Medium Trucks: 8.04 Gode Grade: 0.0% Medium Trucks: 8.4% 4.9% 0.3% 2.40 Barrier Dist. to Barrier: 66.0 feet Medium Trucks: 8.04 Grade Adjustrment: <t< th=""><th></th><th></th><th></th><th>mon</th><th></th><th></th><th>LEDIONO</th><th></th><th>DEE</th><th></th><th></th><th></th></t<>				mon			LEDIONO		DEE			
Road Name: Citrus Av. Job Number: 12384 Road Segment: s/o I-10 Ramps SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS Highway Data Site Conditions (Hard = 10, Soft = 15) Average Daily Traffic (Adt): 24,920 vehicles Autos:: 15 Peak Hour Volume: 2,492 vehicles Autos:: 15 Vehicle Speed: 45 mph Medium Trucks (2 Axles): 15 Vehicle Speed: 45 mph Medium Trucks (3 Axles): 15 Site Data Autos: 77.5% 12.9% 9.6% 9.6% Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist: to Barrier: 66.0 feet Motes: 77.5% 12.9% 9.6% 9.6% Barrier Distance to Observer: 0.0 feet Motes: 77.5% 10.3% 2.57 Observer Height (Above Pad): 5.0 feet Autos:: 0.00 Medium Trucks: 8.20 2.97 Road Elevation: 0.0 feet Road Grade: 0.0% Autos:: 0.00 4.447 Autos:: 49.44	Scenar	io: Existing W	ith Project				Project Na	ame:	Goodn	nan III		
Road Segment: s/o 1-10 Ramps SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS Highway Data Site Conditions (Hard = 10, Soft = 15) Average Daily Traffic (Adt): 24,920 vehicles Autos:: 15 Peak Hour Porcentage: 10% Medium Trucks (2 Axles):: 15 Vehicle Speed: 45 mph Near/Far Lane Distance: 88 feet Site Data Autos:: 77.5% (2.27%) 0.5% 95.03 Barrier Height: 0.0 feet Barrier Height: 0.0 feet Barrier Jobserver: 66.0 feet Centerline Dist to Daserver: 0.0 feet Barrier Height (Lobuse Pad): 5.0 feet Barrier Height (New: -90.0 degrees Right View: -90.0 degrees Road Elevation: 0.0 feet Road Elevation: 1.0 feet Road Elevation	Road Nan	e: Citrus Av.					Job Nun	nber:	12384			
SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS Highway Data Site Conditions (Hard = 10, Soft = 15) Average Daily Traffic (Adt): 24,920 vehicles Peak Hour Percentage: 10% Vehicel Speed: 45 mph Near/Far Lane Distance: 88 feet Vehicel Speed: 45 mph Near/Far Lane Distance: 88 feet Barrier Height: 0.0 feet Barrier Height: 0.0 feet Barrier Type (V44I, 1-feerm): 0.0 Centerline Dist. to Dasrver: 66.0 feet Barrier Type (V44I) 50 feet Pad Elevation: 0.0 feet Road Grade: 1.20 Autos: 68.46 VehicleType REMEL VehicleType REMEL VehicleType REMEL VehicleType REMEL VehicleType	Road Segme	nt: s/o I-10 Ra	imps									
Site Conditions (Hard = 10, Soft = 15) Average Daily Traffic (Adt): 24,920 vehicles Autos: 15 Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15 Peak Hour Volume: 2,492 vehicles Medium Trucks (2 Axles): 15 Vehicle Speed: 45 mph Medium Trucks (2 Axles): 15 Vehicle Speed: 45 mph Vehicle Mix Vehicle Mix Barrier Height: 0.0 feet Autos: 77.5% 12.9% 9.6% 95.03 Barrier Type (O-Wall, 1-Berm): 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% 2.40 Barrier Dist. to Diserver: 0.6 feet Autos: 0.000 Medium Trucks: 84.8% 4.9% 10.3% 2.40 Barrier Distance to Observer: 0.0 feet Autos: 0.000 Medium Trucks: 84.9% 10.3% 2.57 Observer Height (Above Pad): 5.0 feet Muos: 9.04 Grade Adjustment: 0.0 Road Grade: 0.0% Lane Equivalent Distance (in feet) Medium Trucks: 49.	SITE	SPECIFIC IN	IPUT DATA				NO	ISE I	MODE	L INPUT	s	
Average Daily Traffic (Ad): 24,920 vehicles Autos: 15 Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15 Peak Hour Vencentage: 10% Medium Trucks (2 Axles): 15 Near/Far Lane Distance: 88 feet Vehicle Type Day Evening Night Daily Site Data Autos: 77.5% 12.9% 95.0% 95.0% Barrier Height: 0.0 feet Autos: 77.5% 10.3% 2.40 Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist to Barrier: 66.0 feet Autos: 77.5% 10.3% 2.57 Centerline Dist to Diserver: 0.0 feet Autos: 0.00 Medium Trucks: 2.297 Observer Height (Above Pad): 5.0 feet Autos: 1.00 Medium Trucks: 49.447 Road Elevation: 0.0 feet Autos: 49.447 Medium Trucks: 49.447 Left View: 90.0 degrees Finite Road Fresnel Barrier Atten Berm Atter Autos: 68.4 1.91 </th <th>Highway Data</th> <th></th> <th></th> <th></th> <th>5</th> <th>Site Con</th> <th>ditions (H</th> <th>ard =</th> <th>: 10, So</th> <th>oft = 15)</th> <th></th> <th></th>	Highway Data				5	Site Con	ditions (H	ard =	: 10, So	oft = 15)		
Peak Hour Volume: 2,492 vehicles Medium Trucks (2 Axles): 15 Vehicle Speed: 45 mph Heavy Trucks (3 + Axles): 15 Vehicle Speed: 45 mph Vehicle Type Day Evening Night Daily Site Data Autos: 77.5% 12.9% 9.6% 95.03 Barrier Height: 0.0 feet Autos: 77.5% 12.9% 9.6% 95.03 Barrier Height: 0.0 feet Autos: 66.0 feet 7.7% 10.8% 2.67 Centerline Dist. to Deserver: 0.0 feet Autos: 0.00 Medium Trucks: 86.04 2.57 Observer: 0.0 feet Autos: 0.00 Medium Trucks: 8.004 Grade Adjustment: 0.0 Road Elevation: 0.0 feet Autos: 9.268 Heavy Trucks: 8.004 Grade Adjustment: 0.00 Road Grade: 0.00 finite Road Fresnet Barrier Atten Berm Atter Autos: 68.46 1.91 -0.03 -1.20 -4.88	Average Daily	Traffic (Adt):	24,920 vehicl	es					Autos:	15		
Peak Hour Volume: 2,492 vehicles Vehicle Speed: Heavy Trucks (3 + Axles): 15 Vehicle Speed: 45 mph Main/Far Lane Distance: 88 feet Vehicle Mix Vehicle Mix Site Data Autos: 77.5% 12.9% 9.6% 95.03 Barrier Height: 0.0 60.0 44.000 77.5% 12.9% 9.6% 95.03 Barrier Height: 0.0 1.9 Autos: 77.5% 12.9% 9.6% 95.03 Barrier Type (O-Wall, 1-Berm): 0.0 1.0 10.0% 2.40 Heavy Trucks: 84.8% 4.9% 10.3% 2.40 Barrier Distance to Observer: 0.0 feet Motise Source Elevations (in feet) Autos: 0.000 Medium Trucks: 8.004 Grade Adjustment: 0.0 Costerver Height (Above Pad): 5.0 feet Motise Source Elevations (in feet) Autos: 49.247 Road Grade: 0.0% Autos: 49.247 Medium Trucks: 49.247 VehicleType REMEL Traffic Flow Distance Finite Road Fresnel	Peak Hour	Percentage:	10%			Mee	dium Truci	(s (2	Axles):	15		
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Near/Far Lane Distance: 88 feet Vehicle Type Day Evening Night Daily Site Data Autos: 77.5% 12.9% 9.6% 95.03% 2.40 Barrier Type (0-Wall, 1-Berm): 0.0 0 Mediation Trucks: 84.8% 4.9% 10.3% 2.40 Barrier Type (0-Wall, 1-Berm): 0.0 0 Mediation Trucks: 86.5% 2.7% 10.8% 2.57 Centerline Dist to Observer: 66.0 feet Matos: 0.00 Mediation Trucks: 86.5% 2.7% 10.8% 2.57 Observer Height (Above Pad): 5.0 feet Autos: 0.00 Mediation Trucks: 8.004 Grade Adjustment: 0.0 Road Elevation: 0.0 feet Autos: 49.447 Mediation Trucks: 49.447 Kess Model Calculations Vehicle Type REMEL Traffic Flow Distance Finite Road Fresnet Barrier Atten Berm Atter Autos: 68.46 1.91 -0.01 -1.20 -4.71 0.000 0.00 <th>Ve</th> <th>hicle Speed:</th> <th>45 mph</th> <th></th> <th>1</th> <th>Vehicle I</th> <th>Nix</th> <th></th> <th></th> <th></th> <th></th> <th></th>	Ve	hicle Speed:	45 mph		1	Vehicle I	Nix					
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Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Doserver: 0.0 feet Barrier Distance to Observer: 0.0 feet Observer: Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: 90.0 degrees Right View: 90.0 degrees Heavy Trucks: 8.004 Vehicle Type REMEL Vehicle Type Leg Peak Hour Leg Peak Hour Leg Peak Inter Leg Peak Hour Leg Pearening Leq Night	Barrier Type (0-W	/all, 1-Berm):	0.0			F	leavy Truc	ks:	86.5%	2.7%	10.8%	2.57%
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Left View: -90.0 degrees Right View: Medium Trucks: 49.268 Heavy Trucks: 49.268 49.285 FHWA Noise Model Calculations Medium Trucks: 49.285 Heavy Trucks: 49.285 Vehicle Type REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berrier Atten Autos: 68.46 1.91 -0.03 -1.20 -4.71 0.000 0.00 Medium Trucks: 79.45 -14.06 -0.01 -1.20 -4.88 0.000 0.00 Unmitigated Noise Levels (without Topo and barrier attenuation) -0.03 -1.20 -5.30 0.000 0.00 Vehicle Type Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 69.1 67.2 65.5 59.4 68.0 68 Medium Trucks: 69.3 67.8 58.8 60.1 68.4 68 Vehicle Noise: 72.8 71.2 66.7 63.4 71.9 72 Centerline Distance to Noise Contour (in fee		Road Grade:	0.0%				Autos:	49.	447			
Right View: 90.0 degrees Heavy Trucks: 49.285 FHWA Noise Model Calculations Image: Calculations Image: Calculations Image: Calculations Vehicle Type REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atter Autos: 68.46 1.91 -0.03 -1.20 -4.71 0.000 0.00 Medium Trucks: 79.45 -14.06 -0.01 -1.20 -4.88 0.000 0.00 Umitigated Noise Levels (without Topo and barrier attenuation) -5.30 0.000 0.00 Vehicle Type Leq Peak Hour Leq Devening Leq Night Ldn CNEL Autos: 69.1 67.2 65.5 59.4 68.0 68 Medium Trucks: 69.3 67.8 58.8 60.1 68.4 68.2 63.2 63 Heavy Trucks: 69.3 67.8 58.8 60.1 68.4 68.0 68 Vehicle Noise: 72.8 71.2 66.7 63.4		Left View:	-90.0 degre	es		Mediur	n Trucks:	49.	268			
HWA Noise Model Calculations Vehicle Type REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 68.46 1.91 -0.03 -1.20 -4.71 0.000 0.00 Medium Trucks: 79.45 -14.06 -0.01 -1.20 -4.88 0.000 0.00 Heavy Trucks: 84.25 -13.78 -0.01 -1.20 -5.30 0.000 0.00 Uber State Leavy Trucks: 84.25 -13.78 -0.01 -1.20 -5.30 0.000 0.00 Uber State Leag Peak Hour Leag Day Leag Vening Leag Night Ldn CINEL Autos: 69.1 67.2 65.5 59.4 68.0 68 Medium Trucks: 64.2 62.7 56.3 54.8 63.2 63.3 Heavy Trucks: 69.3 67.8 58.8 60.1 68.4 68 Vehicle Noise: 72.8 71.2 66.7 63.4		Right View:	90.0 degre	es		Heav	y Trucks:	49.	285			
Vehicle Type REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atter Autos: 68.46 1.91 -0.03 -1.20 -4.71 0.000 0.00 Medium Trucks: 79.45 -1.40.6 -0.01 -1.20 -4.88 0.000 0.00 Heavy Trucks: 84.25 -13.78 -0.01 -1.20 -5.30 0.000 0.00 Ummitgated Noise Levels (without Topo and barrier attenuation) Vehicle Type Leq Peak Hour Leq Deay Leq Evening Leq Night Ldn CNEL Autos: 69.1 67.2 65.5 59.4 68.0 68 Medium Trucks: 64.2 62.7 56.3 54.8 63.2 63 Heavy Trucks: 69.3 67.8 58.8 60.1 68.4 68 Vehicle Noise: 72.8 71.2 66.7 63.4 71.9 72 Centerline Distance to Noise Contour (in feet)	FHWA Noise Mod	el Calculation	s									
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Medium Trucks: 79.45 -14.06 -0.01 -1.20 -4.88 0.000 0.00 Heavy Trucks: 84.25 -13.78 -0.01 -1.20 -5.30 0.000 0.00 Unmitigated Noise Levels (without Topo and barrier attenuation) Leq Evening Leq Night Ldn CNEL VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 69.1 67.2 65.5 59.4 68.0 68 Medium Trucks: 69.3 67.8 58.8 60.1 68.4 68 Vehicle Noise: 72.8 71.2 66.7 63.4 71.9 72 Centerline Distance to Noise Contour (in feet) Zudn: 88 190 409 880 CNEL: 93 200 431 928	Autos:	68.46	1.91		-0.03	3	-1.20		-4.71	0.0	000	0.000
Heavy Trucks: 84.25 -13.78 -0.01 -1.20 -5.30 0.000 0.00 Unmitigated Noise Levels (without Topo and barrier attenuation) Leq Day Leq Vening Leq Night Ldn CNEL VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 69.1 67.2 65.5 59.4 68.0 68 Medium Trucks: 64.2 62.7 56.3 54.8 63.2 63.3 Heavy Trucks: 69.3 67.8 58.8 60.1 68.4 68 Vehicle Noise: 72.8 71.2 66.7 63.4 71.9 72 Centerline Distance to Noise Contour (in feet)	Medium Trucks:	79.45	-14.06		-0.01	1	-1.20		-4.88	0.0	000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation) Vehicle Type Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 69.1 67.2 65.5 59.4 68.0 68 Medium Trucks: 64.2 62.7 56.3 54.8 63.2 63 Heavy Trucks: 69.3 67.8 58.8 60.1 68.4 68 Vehicle Noise: 72.8 71.2 66.7 63.4 71.9 72 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA Ldn: 88 190 409 880 CNEL: 93 200 431 928	Heavy Trucks:	84.25	-13.78		-0.01	1	-1.20		-5.30	0.0	000	0.000
Vehicle Type Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 69.1 67.2 65.5 59.4 68.0 68 Medium Trucks: 64.2 62.7 56.3 54.8 63.2 63 Heavy Trucks: 69.3 67.8 58.8 60.1 68.4 68 Vehicle Noise: 72.8 71.2 66.7 63.4 71.9 72 Centerline Distance to Noise Contour (in feet) 60 dBA 55 dBA Ldm: 88 190 409 880 CNEL: 93 200 431 928	Unmitigated Nois	e Levels (with	out Topo and	barrie	r atten	uation)						
Autos: 69.1 67.2 65.5 59.4 68.0 68 Medium Trucks: 64.2 62.7 56.3 54.8 63.2 63 Heavy Trucks: 69.3 67.8 58.8 60.1 68.4 68 Vehicle Noise: 72.8 71.2 66.7 63.4 71.9 72 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA Ldn: 88 190 409 880 CNEL: 93 200 431 928	VehicleType	Leq Peak Hou	ur Leq Day	/	Leq Ev	/ening	Leq Ni	ght		Ldn	С	NEL
Medium Trucks: 64.2 62.7 56.3 54.8 63.2 63.3 Heavy Trucks: 69.3 67.8 58.8 60.1 68.4 688 Vehicle Noise: 72.8 71.2 66.7 63.4 71.9 72 Centerline Distance to Noise Contour (in feet) Zont 70 dBA 65 dBA 60 dBA 55 dBA Ldn: 88 190 409 880 CNEL: 93 200 431 928	Autos:	69	0.1	67.2		65.5		59.4	4	68.0	С	68.6
Heavy Trucks: 69.3 67.8 58.8 60.1 68.4 68 Vehicle Noise: 72.8 71.2 66.7 63.4 71.9 72 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA Ldn: 88 190 409 880 CNEL: 93 200 431 928	Medium Trucks:	64	.2	62.7		56.3		54.8	3	63.2	2	63.5
Vehicle Noise: 72.8 71.2 66.7 63.4 71.9 72 Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA Ldn: 88 190 409 880 CNEL: 93 200 431 928	Heavy Trucks:	69	0.3	67.8		58.8		60.1	1	68.4	4	68.5
Zenterline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA Ldn: 88 190 409 880 CNEL: 93 200 431 928	Vehicle Noise:	72	2.8	71.2		66.7		63.4	4	71.9	Э	72.2
70 dBA 65 dBA 60 dBA 55 dBA Ldn: 88 190 409 880 CNEL: 93 200 431 928	Centerline Distan	ce to Noise C	ontour (in feet)								
Ldn: 88 190 409 880 CNEL: 93 200 431 928					70 c	1BA	65 dB	A	6	60 dBA	55	i dBA
CNEL: 93 200 431 928				Ldn:	88	В	190			409	8	380
			C	NEL:	93	3	200			431	ę	928

EUWA PD-77-108 UICHWAY NOISE PREDICTION MODE

Wednesday, June 05, 2019

Heavy Trucks:

Vehicle Noise:

68.8

72.8

Centerline Distance to Noise Contour (in feet)

67.4

71.2

Ldn:

CNEL:

58.3

66.9

70 dBA

78

83

59.6

63.3

65 dBA

168

178

67.9

71.8

60 dBA

363

383

Wednesday, June 05, 2019

Wednesday, June 05, 2019

120

0.000

0.000

0.000

69.0

63.6

68.1

72.2

55 dBA

	FHW	VA-RD-77-108 H	IGHWA	Y NOISE	PREDICTIC	ON MODE	L	
Scenai Road Nan Road Segme	rio: Existing Wit ne: Citrus Av. ent: s/o Slover A	th Project			Project N Job Nu	Vame: Goo mber: 123	odman III 184	
SITE	SPECIFIC IN	PUT DATA			NO	DISE MO	DEL INPUT	S
Highway Data				Site Co	onditions (l	Hard = 10,	Soft = 15)	
Average Daily	Traffic (Adt):	13,293 vehicles				Aut	os: 15	
Peak Hour	Percentage:	10%		٨	Aedium Truc	cks (2 Axle	es): 15	
Peak H	lour Volume:	1,329 vehicles		ŀ	leavy Truck	ks (3+ Axle	es): 15	
Ve	ehicle Speed:	40 mph		Vehicl	e Mix			
Near/Far La	ane Distance:	48 feet		Ve	ehicleType	Da	y Evening	Night Daily
Site Data					A	utos: 77.	5% 12.9%	9.6% 94.32%
Ba	rrier Heiaht:	0.0 feet			Medium Tru	icks: 84.	8% 4.9%	10.3% 2.52%
Barrier Type (0-V	Vall, 1-Berm):	0.0			Heavy Tru	icks: 86.	5% 2.7%	10.8% 3.16%
Centerline D	ist. to Barrier:	46.0 feet		Noise	Source Ele	vations (i	n feet)	
Centerline Dist.	to Observer:	46.0 feet			Autos	0.000		
Barrier Distance	to Observer:	0.0 feet		Med	ium Trucks:	2.297		
Observer Height	(Above Pad):	5.0 feet		He	avy Trucks:	8.004	Grade Ad	iustment: 0.0
P	ad Elevation:	0.0 feet						
Ro	ad Elevation:	0.0 feet		Lane E	quivalent	Distance (in reet)	
	Road Grade:	0.0%		14-1	Autos:	39.560		
	Left View:	-90.0 degrees		Mea	IUM Trucks:	39.336		
	Right view.	90.0 degrees		110	avy mucks.	39.330	1	
FHWA Noise Mod	lel Calculations	s						
VehicleType	REMEL	Traffic Flow	Distanc	e Fini	te Road	Fresnel	Barrier Att	en Berm Atten
Autos:	66.51	-0.34		1.42	-1.20	-4.0	63 0.0	000 0.000
Medium Trucks:	77.72	-16.07		1.46	-1.20	-4.6	87 0.0	000 0.000
Heavy Trucks:	82.99	-15.10		1.46	-1.20	-5.4	47 0.0	000 0.000
Unmitigated Nois	e Levels (with	out Topo and b	arrier at	tenuation)			r
VehicleType	Leq Peak Hou	r Leq Day	Leo	Evening	Leq N	light	Ldn	CNEL
Autos:	66.	4 64	1.5	62	.7	56.7	65.3	3 65.9
Medium Trucks:	61.	.9 60	2.4	54	.0	52.5	61.0	01.2
Vehicle Noise	70	9 60	9.7	64	3	61.5	70.0	5 67.4) 70.3
Centerline Distan	ce to Noise Co	ntour (in feet)		0.		01.0	70.0	, , , , , , , , , , , , , , , , , , , ,
Centernine Distan	00 10 110/30 00	intour (in leet)		70 dBA	65 d	BA	60 dBA	55 dBA
		Le	dn:	46	99)	213	460
		CNE	L:	48	104	4	224	482

	FHV	VA-RD-77-108	HIGHWA	AY NOISE	PREDICT		DEL			
Scenari	io: Existing Wi	th Project			Project	Name: (Goodm	an III		
Road Nam	e: Citrus Av.				Job N	umber: 1	2384			
Road Segmer	nt: s/o Santa A	na Av.								
SITE	SPECIFIC IN	PUT DATA			N	IOISE N	IODEI		s	
Highway Data				Site C	onditions	(Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	10,516 vehicle	s			A	Autos:	15		
Peak Hour	Percentage:	10%			Medium Tri	ucks (2 A	xles):	15		
Peak H	lour Volume:	1,052 vehicles	6		Heavy Tru	cks (3+ A	xles):	15		
Ve	hicle Speed:	40 mph		Vehic	le Mix					
Near/Far La	ne Distance:	48 feet		V	ehicleType		Day	Evening	Night	Daily
Site Data						Autos:	77.5%	12.9%	9.6%	93.60
Bai	rrier Height:	0.0 feet			Medium T	ucks:	84.8%	4.9%	10.3%	2.69
Barrier Type (0-W	all, 1-Berm):	0.0			Heavy T	rucks:	86.5%	2.7%	10.8%	3.719
Centerline Dis	st. to Barrier:	46.0 feet		Noine	Course E	ovetion	in fa	o.41		
Centerline Dist.	to Observer:	46.0 feet		NOISE	Source El	evalions	s (III le	el)		
Barrier Distance	to Observer:	0.0 feet		Ma	AUIO Auro Truck	s. 0.0	00			
Observer Height (Above Pad):	5.0 feet		IVIE	Juni Truck	s. 2.2	97	Grade Ad	iustment	· 0.0
Pa	ad Elevation:	0.0 feet			avy much	s. o.c	/04	onddo maj	uoumoni	0.0
Roa	ad Elevation:	0.0 feet		Lane	Equivalen	Distand	e (in f	eet)		
I	Road Grade:	0.0%			Auto	s: 39.5	560			
	Left View:	-90.0 degree	s	Me	dium Truck	s: 39.3	336			
	Right View:	90.0 degree	s	H	eavy Truck	s: 39.3	358			
FHWA Noise Mode	el Calculation	s								
VehicleType	REMEL	Traffic Flow	Distan	ice Fir	ite Road	Fresn	el I	Barrier Att	en Ber	m Atter
Autos:	66.51	-1.39		1.42	-1.20		-4.63	0.0	000	0.00
Medium Trucks:	77.72	-16.81		1.46	-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	82.99	-15.41		1.46	-1.20		-5.47	0.0	000	0.00
Unmitigated Noise	e Levels (with	out Topo and	barrier a	ttenuatio	n)					
VehicleType	Leq Peak Hou	r Leq Day	Le	eq Evening	l Leq	Night		Ldn	C	NEL
Autos:	65.	.3 6	53.4	61	1.7	55.6		64.2	2	64
	61.	.2 5	59.7	53	3.3	51.7		60.2	<u> </u>	60
Medium Trucks:	07	X 6	56.4	5	r.4	58.6		67.0)	67
Heavy Trucks:	67.							60 /	1	69
Heavy Trucks: Vehicle Noise:	67. 70.	.3 (68.8	63	3.5	60.9		69.4	r	
Vehicle Noise:	67. 70. ce to Noise Co	3 ontour (in feet)	68.8	6	3.5	60.9		09.4		-/0.4
Heavy Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	67. 70. ce to Noise Co	3 (ontour (in feet)	68.8	70 dBA	65	60.9 dBA	6	0 dBA	55	dBA
Heavy Trucks: Heavy Trucks: Vehicle Noise: Centerline Distanc	67. 70. ce to Noise Co	3 (in feet)	58.8	63 70 dBA 42	65	60.9	6	0 dBA 195	55	dBA

 FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

 Scenario:
 Existing With Project
 Project Name:
 Goodman III

 Road Name:
 Juniper Av.
 Job Number:
 12384

 Road Segment:
 r/o Santa Ana Av.
 Site SPECIFIC INPUT DATA
 NOISE MODEL INPUT MATA

 Neway Data
 Site Conditions (Hard = 10, Soft = 15)
 Site Conditions (Hard = 10, Soft = 15)

 Average Daily Traffic (Adt):
 2,658 vehicles
 Autos:
 15

 Peak Hour Vercentage:
 10%
 Heavy Trucks (2 Axles):
 15

 Vehicle Speed:
 40 mph
 Vehicle Mix

SITE	SPECIFIC IN	IPUT DATA				NO	ISE M	ODE	L INPUT:	S	
Highway Data					Site Con	ditions (H	lard = 1	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	2,658 vehicl	es				A	utos:	15		
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 A	kles):	15		
Peak H	lour Volume:	266 vehicle	s		He	avy Truck	s (3+ A	kles):	15		
Ve	hicle Speed:	40 mph		ŀ	Vehicle I	Mix					
Near/Far La	ne Distance:	14 feet		ŀ	Veh	icleTvpe	[Dav	Evenina	Niaht	Dailv
Site Data						Au	tos: 7	7.5%	12.9%	9.6%	95.87%
Ba	rrier Height:	0.0 feet			Me	edium Truc	cks: 8	4.8%	4.9%	10.3%	2.15%
Barrier Type (0-W	/all. 1-Berm):	0.0			ŀ	Heavy True	cks: 8	6.5%	2.7%	10.8%	1.98%
Centerline Di	st. to Barrier:	34.0 feet		ŀ	Noice Cr	Surea Elas	otiono	lin he	o.4)		
Centerline Dist.	to Observer:	34.0 feet		+	NOISe SC	Autoor	auons	(111 16	el)		
Barrier Distance	to Observer:	0.0 feet			Modiu	m Trucke:	2.2	00			
Observer Height ((Above Pad):	5.0 feet			Hoon	a Trucks:	2.2	04	Grada Ad	iustmont	. 0.0
Pa	ad Elevation:	0.0 feet			Tieav	y mucks.	0.0	04	Orade Adj	usunoni	0.0
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalent D	listanc	e (in f	feet)		
	Road Grade:	0.0%				Autos:	33.6	45			
	Left View:	-90.0 degre	es		Mediur	m Trucks:	33.3	81			
	Right View:	90.0 degre	es		Heav	y Trucks:	33.4	07			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresne	2	Barrier Att	en Ber	m Atten
Autos:	66.51	-7.26		2.4	18	-1.20	-	4.53	0.0	000	0.000
Medium Trucks:	77.72	-23.76		2.5	53	-1.20	-	4.86	0.0	000	0.000
Heavy Trucks:	82.99	-24.11		2.5	52	-1.20	-	5.67	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	er attei	nuation)						
VehicleType	Leq Peak Hou	ır Leq Da	/	Leq E	vening	Leq Ni	ght		Ldn	CI	NEL
Autos:	60	.5	58.6		56.9		50.8		59.4	1	60.0
Medium Trucks:	55	.3	53.8		47.4		45.9		54.3	3	54.6
Heavy Trucks:	60	.2	58.8		49.8		51.0		59.4	1	59.5
Vehicle Noise:	64	.0	62.4		58.0		54.5		63.0)	63.4
Centerline Distan	ce to Noise Ce	ontour (in fee	t)								
				70	dBA	65 dE	BA	6	0 dBA	55	dBA
			Ldn:	1	12	25			54	1	17
		С	NEL:	1	12	27			57	1	23

	FHV	VA-RD-77-108	HIGH	WAY N	OISE PI	REDICTI	ON MOI	DEL			
Scenari Road Nam Road Segmer	io: Existing Wi e: Juniper Av. nt: s/o Santa A	th Project na Av.				Project Job N	Name: (umber: ·	Goodr 12384	nan III		
SITE	SPECIFIC IN	PUT DATA				N	OISE N	IODE	L INPUTS	S	
Highway Data				5	Site Con	ditions	(Hard =	10, So	oft = 15)		
Average Daily	Traffic (Adt):	3,400 vehicl	es				/	Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	icks (2 A	(xles):	15		
Peak H	our Volume:	340 vehicle	S		He	avy Truc	:ks (3+ A	(xles):	15		
Vei	hicle Speed:	40 mph		1	/ehicle	Mix					
Near/Far Lar	ne Distance:	14 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						A	Autos:	77.5%	12.9%	9.6%	96.30%
Bar	rier Height:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	5 1.92%
Barrier Type (0-W	all, 1-Berm):	0.0			ŀ	leavy Tr	ucks:	86.5%	2.7%	10.8%	5 1.78%
Centerline Dis	st. to Barrier:	34.0 feet			Voise So	ource El	evation	s (in fe	eet)		
Centerline Dist.	to Observer:	34.0 feet		-		Autos	s: 0.0	000			
Barrier Distance	to Observer:	0.0 feet			Mediu	n Trucks	: 2.2	97			
Observer Height (.	Above Pad):	5.0 feet			Heav	v Trucks	s: 8.0	04	Grade Adj	iustmen	t: 0.0
Pa	ad Elevation:	0.0 feet		_		,					
Roa	ad Elevation:	0.0 feet		L	.ane Eq	uivalent	Distanc	ce (in	feet)		
F	Road Grade:	0.0%				Autos	s: 33.6	645			
	Left View:	-90.0 degre	es		Mediu	m Trucks	s: 33.0	381			
	Right View:	90.0 degre	es		Heav	y Trucks	33.4	407			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fresn	el	Barrier Atte	en Be	rm Atten
Autos:	66.51	-6.18		2.48	3	-1.20		-4.53	0.0	000	0.000
Medium Trucks:	77.72	-23.17		2.53	3	-1.20		-4.86	0.0	000	0.000
Heavy Trucks:	82.99	-23.52		2.52	2	-1.20		-5.67	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	r atten	uation)						
VehicleType	Leq Peak Hou	r Leq Day	/	Leq Ev	rening	Leq	Night		Ldn	C	NEL
Autos:	61	.6	59.7		57.9		51.9		60.5	5	61.1
Medium Trucks:	55	.9	54.4		48.0		46.5		54.9)	55.2
Heavy Trucks:	60	.8	59.4		50.3		51.6		59.9)	60.1
Vehicle Noise:	64	.8	63.2		59.0		55.4		63.8	3	64.2
Centerline Distance	ce to Noise Co	ontour (in feet)								
				70 a	IBA	65 (dBA	6	60 dBA	55	5 dBA
			Ldn:	13	3	2	8		61		132
		C	NEL:	14	4	3	0		65		140

Wednesday, June 05, 2019

Wednesday, June 05, 2019

	FH	WA-RD-77-108	HIGHW	AY NC	ISE P	REDICTI	ON MO	DEL				
Scenar Road Nam Road Segmei	io: Existing W ne: Sierra Av. nt: n/o Slover	ith Project Av.				Project Job N	Name: (umber:	Goodi 12384	nan III			
SITE	SPECIFIC IN	IPUT DATA				N	OISE N	/ODE		s		
Highway Data				Si	te Cor	nditions	(Hard =	10, S	oft = 15)			
Average Daily	Traffic (Adt):	52,415 vehicl	es					Autos.	15			
Peak Hour	Percentage:	10%			Me	edium Tru	icks (2 A	(xles)	15			
Peak H	lour Volume:	5,242 vehicle	s		He	eavy Truc	:ks (3+ A	(xles)	15			
Ve	hicle Speed:	40 mph		Ve	hicle	Mix						
Near/Far La	ne Distance:	88 feet			Veh	nicleType		Day	Evening	Nigl	ht D	aily
Site Data						A	lutos:	77.5%	6 12.9%	9.	6% 95	.33%
Bai	rrier Heiaht:	0.0 feet			Μ	edium Tr	ucks:	84.8%	4.9%	10.	3% 2	.36%
Barrier Type (0-W	/all, 1-Berm):	0.0				Heavy Tr	ucks:	86.5%	2.7%	10.	8% 2	.31%
Centerline Dis	st. to Barrier:	66.0 feet		N	oise S	ource El	evation	s (in f	eet)			
Centerline Dist.	to Observer:	66.0 feet				Autos	s: 0.0	000	,			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks	: 2.2	297				
Observer Height (Above Pad):	5.0 feet			Hear	vy Trucks	s: 8.0	004	Grade Ad	iustm	ent: 0.0	0
Pa	ad Elevation:	0.0 feet		1.	no Eo	wivalont	Distan	o (in	foot)			
Roa	ad Elevation:	0.0 feet		Le	ine Eq	Autor	Distant	2e (III	ieel)			
	Loft Viow:	0.0%			Modiu	m Trucks	5. 49. 2. 40.	 260				
	Right View:	90.0 degre	es es		Hear	vy Trucks	s: 49.2	285				
VehicleTure	DEME	Troffic Flow	Distor		Finito	Dood	Freeze		Dorrior AH	o.n.	Dorm /	Hon
Autos:	REIVIEL 66.51	Tranic Flow	Distar	-0.03	Finite	-1 20	Flesh	-4 71	Darrier Au		Denn A	0.000
Medium Trucks:	77 72	-10.40		-0.01		-1.20		-4.88	0.0	000		0.000
Heavy Trucks:	82.99	-10.49		-0.01		-1.20		-5.30	0.0	000		0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	ttenu	ation)							
VehicleType	Leg Peak Ho	ur Leq Da	/ Le	eq Eve	ning	Leg	Night		Ldn		CNEL	
Autos:	. 70).9	69.0	,	67.3		61.2		69.8	3		70.4
Medium Trucks:	66	5.1	64.6		58.2		56.7		65.2	2		65.4
Heavy Trucks:	71	.3	69.9		60.8		62.1		70.4	1		70.6
Vehicle Noise:	74	1.8	73.1		68.6		65.3		73.8	3		74.1
Centerline Distant	ce to Noise C	ontour (in fee	t)									
				70 dE	BA	65 0	dBA		60 dBA		55 dB/	4
			Ldn:	118		25	55		549		1,183	
		C	NEL:	125		26	68		578		1,246	

			IIGHW/								
Scenario:	Existing Wit	h Project				Project	Name:	Goodr	nan III		
Road Name:	Sierra Av.					Job Ni	imber:	12384			
Road Segment:	s/o Slover P	.v.									
SITE SPI	ECIFIC IN	PUT DATA				N	OISE N	IODE	L INPUT	s	
Highway Data				S	ite Con	ditions (Hard =	10, So	oft = 15)		
Average Daily Tra	ffic (Adt):	29,949 vehicle	S					Autos:	15		
Peak Hour Per	rcentage:	10%			Me	dium Tru	cks (2 /	(xles)	15		
Peak Hour	r Volume:	2,995 vehicles			Hea	avy Truc	ks (3+ A	(xles)	15		
Vehicl	le Speed:	50 mph		v	ehicle l	Nix					
Near/Far Lane I	Distance:	88 feet			Vehi	cleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	95.17%
Barrio	r Hoiaht	0.0 feet			Me	dium Tr	ucks:	84.8%	4.9%	10.3%	2.39%
Barrier Type (0-Wall	1-Rerm)	0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	2.44%
Centerline Dist. to	to Barrier:	66.0 feet						- // 6	4)		
Centerline Dist. to C	Observer:	66.0 feet		N	ioise so	ource El	evation	s (In te	eet)		
Barrier Distance to C	Observer:	0.0 feet				Autos	: 0.0	000			
Observer Height (Abo	ove Pad):	5.0 feet			wealur	n Trucks	: Z	297	Grada Ad	iustmont	0.0
Pad E	Elevation:	0.0 feet			neav	y mucks	. 0.	JU4	Orade Au	usunom.	0.0
Road E	Elevation:	0.0 feet		L	ane Equ	uivalent	Distan	ce (in	feet)		
Roa	ad Grade:	0.0%				Autos	: 49.	447			
L	eft View:	-90.0 degree	S		Mediur	n Trucks	: 49.	268			
Ri	ight View:	90.0 degree	S		Heav	y Trucks	: 49.	285			
FHWA Noise Model C	Calculations	;		_							
VehicleType			Dioton								
voinoio i ypo	REMEL	Traffic Flow	Distan	ce	Finite	Road	Fresr	el	Barrier Att	en Ber	m Atten
Autos:	70.20	Traffic Flow 2.25	Distan	ce 0.03	Finite	Road -1.20	Fresr	el -4.71	Barrier Att 0.0	en Ber	<i>m Atten</i> 0.000
Autos: Medium Trucks:	70.20 81.00	Traffic Flow 2.25 -13.75	Distan	ce 0.03 0.01	Finite	Road -1.20 -1.20	Fresr	el -4.71 -4.88	Barrier Att 0.0 0.0	en Ber 000 000	<i>m Atten</i> 0.000 0.000
Autos: Medium Trucks: Heavy Trucks:	70.20 81.00 85.38	7raffic Flow 2.25 -13.75 -13.66	Distan	0.03 0.01 0.01	Finite	Road -1.20 -1.20 -1.20	Fresr	el -4.71 -4.88 -5.30	Barrier Att 0.0 0.0 0.0	en Ben 000 000 000	m Atten 0.000 0.000 0.000
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise Le	REMEL 70.20 81.00 85.38 evels (withe	Traffic Flow 2.25 -13.75 -13.66 Dut Topo and I	Distan	0.03 0.01 0.01 0.01	Finite uation)	Road -1.20 -1.20 -1.20	Fresr	el -4.71 -4.88 -5.30	Barrier Att 0.0 0.0 0.0	en Ben 000 000	m Atten 0.000 0.000 0.000
Medium Trucks: Medium Trucks: Heavy Trucks: Unmitigated Noise Leavy VehicleType	REMEL 70.20 81.00 85.38 evels (without g Peak Hou	Traffic Flow 2.25 -13.75 -13.66 Dut Topo and B r Leq Day	bisian barrier a	0.03 0.01 0.01 0.01 ttenu q Evi	Finite uation) ening	Road -1.20 -1.20 -1.20 Leq I	Fresr	el -4.71 -4.88 -5.30	Barrier Att 0.0 0.0 0.0 Ldn	en Ber 000 000 000 000 Cl	m Atten 0.000 0.000 0.000
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise Le VehicleType Lee Autos:	REMEL 70.20 81.00 85.38 evels (without g Peak Hout 71.	Traffic Flow 2.25 -13.75 -13.66 Dut Topo and k Leq Day 2 6	parrier a	0.03 0.01 0.01 0.01 ttenu q Eve	Finite Iation) ening 67.6	Road -1.20 -1.20 -1.20 Leq I	Fresr light 61.5	el -4.71 -4.88 -5.30	Barrier Att 0.0 0.0 0.0 0.0 1.0 1.0 70.1	en Ber 000 000 000 000 C/	<u>m Atten</u> 0.000 0.000 0.000 <u>0.000</u> <u>VEL</u> 70.7
Medium Trucks: Medium Trucks: Heavy Trucks: Unmitigated Noise Le VehicleType Leu Autos: Medium Trucks:	REMEL 70.20 81.00 85.38 evels (without q Peak Hout 71. 66.	Traffic Flow 2.25 -13.75 -13.66 Dut Topo and L Leq Day 2 6 0 6	parrier a leg 9.3 4.5	0.03 0.01 0.01 0.01 ttenu q Evi	Finite Iation) ening 67.6 58.2	Road -1.20 -1.20 -1.20 Leq I	Frest	el -4.71 -4.88 -5.30	Barrier Att 0.0 0.0 0.0 0.0 <u>Ldn</u> 70.1 65.1	en Ben 000 000 000 000 <i>CI</i>	<u>m Atten</u> 0.000 0.000 0.000 VEL 70.7 65.3
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise Le VehicleType Lee Autos: Medium Trucks: Heavy Trucks:	REMEL 70.20 81.00 85.38 evels (witho 9 Peak Hou 71. 66. 70.	Traffic Flow 2.25 -13.75 -13.66 Dut Topo and L C r Leq Day 2 6 0 6 5 6	Distant parrier a 2.3 4.5 9.1	0.03 0.01 0.01 0.01 ttenu q Evi	Finite iation) ening 67.6 58.2 60.1	Road -1.20 -1.20 -1.20 Leq I	Fresr Vight 61.5 56.6 61.3	el -4.71 -4.88 -5.30	Barrier Att 0.0 0.0 0.0 <u>Ldn</u> 70.1 65.1 69.7	en Ben 000 000 000 000 000 000	<u>m Atten</u> 0.000 0.000 0.000 <u>VEL</u> 70.7 65.3 69.8
Autos: Medium Trucks: Heavy Trucks: Unnitigated Noise Lee Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	REMEL 70.20 81.00 85.38 evels (without q Peak Hout 71. 66. 70. 74.	Traffic Flow 2.25 -13.75 -13.66 Dut Topo and B R Leq Day 2 6 6 5 6 7	Distan parrier a 9.3 4.5 9.1 2.9	0.03 0.01 0.01 0.01 ttenu q Eve	Finite Iation) ening 67.6 58.2 60.1 68.7	Road -1.20 -1.20 -1.20 Leq I	Fresr Vight 61.5 56.6 61.3 65.1	el -4.71 -4.88 -5.30	Barrier Att 0.0 0.0 <u>Ldn</u> 70.1 65.1 73.6	en Ber 000 000 000 CI 1 7 3	<u>m Atten</u> 0.000 0.000 0.000 <u>VEL</u> 70.7 65.3 69.8 73.9
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise Le VehicleType Lee Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance to	REMEL 70.20 81.00 85.38 evels (withough q Peak Hou 71. 66. 70. 74. to Noise Ca	Traffic Flow 2.25 -13.75 -13.66 Dut Topo and It P c Carpo and It r Leq Day 2 6 0 6 5 6 6 7 ntour (in feet)	0131411 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 01311 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141 013141	0.03 0.01 0.01 0.01 ttenu q Evi	Finite ening 67.6 58.2 60.1 68.7	Road -1.20 -1.20 -1.20 Leq I	Fresr light 61.5 56.6 61.3 65.1	el -4.71 -4.88 -5.30	Barrier Att 0.0 0.0 0.0 0.0 0.0 0.0 70.1 65.1 69.7 73.6	en Bern 000 000 000 000 000 000 000	m Atten 0.000 0.000 0.000 VEL 70.7 65.3 69.8 73.9
Autos: Medium Trucks: Heavy Trucks: VehicleType Let Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance to	REMEL 70.20 81.00 85.38 evels (withough q Peak Hou 71. 66. 70. 74. to Noise Co	Traffic Flow 2.25 -13.75 -13.66 Dut Topo and L Carpo and L r Leq Day 6 0 6 6 7 Intour (in feet) 1000 (in feet) 1000 (in feet)	Distant parrier a 9.3 4.5 9.1 2.9	0.03 0.01 0.01 ttenu q Eve	Finite Iation) ening 67.6 58.2 60.1 68.7 BA	Road -1.20 -1.20 -1.20 Leq I	Fresr Vight 61.5 56.6 61.3 65.1	el -4.71 -4.88 -5.30	Barrier Att 0.0 0.0 0.0 0.0 0.0 0.0 0.0 69.7 73.6 73.6 00 dBA	en Bern 000 000 000 000 000 C/ 1 1 7 5 5 55	m Atten 0.000 0.000 0.000 VEL 70.7 65.3 69.8 73.9 dBA
Medium Trucks: Medium Trucks: Heavy Trucks: Umnitigated Noise Le VehicleType Let Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance t	REMEL	Traffic Flow	barrier a 2.9 dn:	ce 0.03 0.01 0.01 ttenu q Eve 70 di 114	Finite Finite ening 67.6 58.2 60.1 68.7 BA 4	Road -1.20 -1.20 -1.20 Leq I 	Fresr. Vight 61.5 66.6 61.3 65.1	el -4.71 -4.88 -5.30	Barrier Att 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	en Bern 000 000 000 C/ 1 7 55 1,'	<u>m Atten</u> 0.000 0.000 0.000 <u>VEL</u> 70.7 65.3 69.8 73.9 <i>dBA</i> 142

Wednesday, June 05, 2019

	FH\	VA-RD-77-108	HIGHW	AY N	IOISE PI	REDICTIO	ON MO	DEL			
Scenari Road Nam Road Segmer	o: Existing Wi e: Sierra Av. nt: s/o Santa A	ith Project Ana Av.				Project I Job Nu	Vame: Imber:	Goodr 12384	man III		
SITE	SPECIFIC IN	IPUT DATA				N	OISE	MODE	L INPUT	ſS	-
Highway Data				4	Site Con	ditions (Hard =	= 10, S	oft = 15)		
Average Daily Peak Hour	Traffic (Adt): Percentage:	30,877 vehicle 10%	S		Me	dium Tru	cks (2	Autos: Axles):	15 15		
Peak H	our Volume:	3,088 vehicles			He	avy Truc	ks (3+	Axles):	15		
Vei	hicle Speed:	50 mph			Vehicle	Mix					
Near/Far La	ne Distance:	88 feet			Veh	icleType		Dav	Evenina	Night	Daily
Site Data						A	utos:	77.5%	5 12.9%	9.6%	6 94.99%
Bar	rier Height:	0.0 feet			M	edium Tru	ucks:	84.8%	4.9%	10.39	6 2.43%
Barrier Type (0-W	all, 1-Berm):	0.0			ŀ	Heavy Tri	ucks:	86.5%	5 2.7%	10.89	6 2.57%
Centerline Dis	st. to Barrier:	66.0 feet			Noise Si	ource Ek	vatio	ns (in f	oot)		
Centerline Dist.	to Observer:	66.0 feet		H	10/30 00	Autos	. 0	000	000		
Barrier Distance	to Observer:	0.0 feet			Modiu	m Trucks	. 0	207			
Observer Height (Above Pad):	5.0 feet			Heat	n Trucks	. <u>2</u> . 8	004	Grade A	diustmer	at: 0.0
Pa	ad Elevation:	0.0 feet			mour	y maona	. 0				
Roa	ad Elevation:	0.0 feet		1	Lane Eq	uivalent	Distar	nce (in	feet)		
I	Road Grade:	0.0%				Autos	: 49	.447			
	Left View:	-90.0 degree	S		Mediu	m Trucks	: 49	.268			
	Right View:	90.0 degree	S		Heav	y Trucks	: 49	.285			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distan	nce	Finite	Road	Fres	nel	Barrier A	tten Be	ərm Atten
Autos:	70.20	2.38		-0.03	3	-1.20		-4.71	0.	.000	0.00
Medium Trucks:	81.00	-13.54		-0.0	1	-1.20		-4.88	0.	.000	0.00
Heavy Trucks:	85.38	-13.29		-0.0	1	-1.20		-5.30	0.	.000	0.00
Unmitigated Noise	e Levels (with	out Topo and	barrier a	atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	Le	eq Ei	vening	Leq I	light		Ldn	(CNEL
Autos:	71	.4 6	69.5		67.7		61.	6	70	.3	70.9
Modium Trucks:	66	.3 6	64.7		58.4		56.	8	65	.3	65.
medium mucks.	00				60.4		61	7	70	0	70.3
Heavy Trucks:	70	.9 6	69.5		60.4		01.	1	10	.0	
Heavy Trucks: Vehicle Noise:	70	.9 6	39.5 73.1		68.8		65.	3	73	.8	74.
Heavy Trucks: Vehicle Noise: Centerline Distance	70 74 ce to Noise Ce	.9 (.8 ; ontour (in feet)	89.5 73.1		68.8		65.	3	73	.8	74.:
Heavy Trucks: Vehicle Noise: Centerline Distance	70 74 ce to Noise Co	.9 6 .8 5 ontour (in feet)	i9.5 73.1	70 0	68.8 dBA	65 a	65. IBA	3	73 60 dBA	.8	74.2 5 dBA
Heavy Trucks: Vehicle Noise: Centerline Distance	70 74 ce to Noise Co	.9 (.8 7 ontour (in feet)	39.5 73.1	70 a	68.8 dBA 18	65 a 25	65. IBA 5	3	73 60 dBA 550	.8	74.2 5 dBA 1,185

	FHV	/A-RD-77-108	HIGH\	NAY N	OISE PR	EDICTI	ON MC	DEL			
Scenar Road Nam Road Segmei	io: Existing Wi le: Sierra Av. nt: s/o Jurupa	h Project Av.				Project Job Ni	Name: ımber:	Goodr 12384	nan III		
SITE	SPECIFIC IN	PUT DATA				N	OISE	MODE	L INPUT	s	
Highway Data				S	Site Con	ditions ((Hard =	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	24,760 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Tru	cks (2	Axles):	15		
Peak H	lour Volume:	2,476 vehicle	S		Hea	avy Truc	ks (3+	Axles):	15		
Ve	hicle Speed:	55 mph		N	/ehicle N	<i>lix</i>					
Near/Far La	ne Distance:	88 feet		-	Vehi	cleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	5 12.9%	9.6%	95.17%
Bai	rrier Height	0.0 feet			Me	dium Tr	ucks:	84.8%	4.9%	10.3%	2.40%
Barrier Type (0-W	all, 1-Berm):	0.0			H	leavy Tr	ucks:	86.5%	2.7%	10.8%	2.44%
Centerline Dis	st. to Barrier:	66.0 feet		٨	loise So	urce Ele	evatior	ns (in f	eet)		
Centerline Dist.	to Observer:	66.0 feet				Autos	: 0	.000			
Barrier Distance	to Observer:	0.0 feet			Mediun	n Trucks	: 2	297			
Observer Height ('Above Pad):	5.0 feet			Heav	v Trucks	: 8	.004	Grade Ad	justment	: 0.0
Pa	ad Elevation:	0.0 feet					Distan		(
Roa	ad Elevation:	0.0 feet		1	ane Equ	livalent	Distan	ice (in	reet)		
	Road Grade:	0.0%			1 4 m all 1 m	Autos	: 49	.447			
	Left View:	-90.0 degree	es		Mealun	n Trucks	. 49	208			
	Right view:	90.0 degre	es		neav	y TTUCKS	. 49	.200			
FHWA Noise Mode	el Calculation:	5									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	rm Atten
Autos:	71.78	1.01		-0.03	5	-1.20		-4.71	0.0	000	0.000
Medium Trucks:	82.40	-14.98		-0.01		-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	86.40	-14.91		-0.01		-1.20		-5.30	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	r atteni	uation)						
VehicleType	Leq Peak Hou	r Leq Day	'	Leq Ev	ening	Leq I	Vight		Ldn	C	NEL
Autos:	71.	6	69.7		67.9		61.	8	70.5	ō	71.1
Medium Trucks:	66.	2	64.7		58.4		56.	8	65.3	3	65.5
Heavy Trucks:	70.	3	68.9		59.8		61.	1	69.4	1	69.6
Vehicle Noise:	74	7	73.0		68.9		65.	2	73.7	/	74.0
Centerline Distant	ce to Noise Co	ntour (in feet)					-			
				70 d	BA	65 0	1BA		50 aBA	55	dBA 450
		0	Lan:	11	0	25			538	1,	159
		Ci	VEL:	12	3	26	i0		570	1,	228

Wednesday, June 05, 2019

	FHW	A-RD-77-108 HI	GHWAY	NOISE P	REDICTIC	N MODE	L	
Scenar Road Nan Road Segme	rio: Existing With ne: Slover Av. ent: w/o Sierra Av	n Project v.			Project N Job Nu	lame: Goo mber: 123	odman III 184	
SITE	SPECIFIC INF	PUT DATA			NC	DISE MO	DEL INPUT	S
Highway Data				Site Col	nditions (I	Hard = 10,	Soft = 15)	
Average Daily	Traffic (Adt): 1	9,058 vehicles				Aut	os: 15	
Peak Hour	Percentage:	10%		Me	edium Truc	ks (2 Axle	es): 15	
Peak H	Hour Volume: 1	,906 vehicles		He	eavy Truck	is (3+ Axle	es): 15	
Ve	ehicle Speed:	45 mph		Vehicle	Mix			
Near/Far La	ane Distance:	59 feet		Vel	nicleType	Da	y Evening	Night Daily
Site Data					AL	itos: 77.	5% 12.9%	9.6% 95.53%
Ba	rrier Heiaht:	0.0 feet		N	ledium Tru	cks: 84.	8% 4.9%	10.3% 2.32%
Barrier Type (0-V	Vall, 1-Berm):	0.0			Heavy Tru	cks: 86.	5% 2.7%	10.8% 2.15%
Centerline Di	ist. to Barrier:	52.0 feet		Noise S	ource Ele	vations (i	n feet)	
Centerline Dist.	to Observer:	52.0 feet			Autos:	0.000		
Barrier Distance	to Observer:	0.0 feet		Mediu	m Trucks:	2.297		
Observer Height	(Above Pad):	5.0 feet		Hea	vy Trucks:	8.004	Grade Adj	ustment: 0.0
P	ad Elevation:	0.0 feet		1		Di-1	(Inc. 6 4)	
Ro	ad Elevation:	0.0 feet		Lane Ec	uivalent i	Jistance (in reet)	
	Road Grade:	0.0%		Madi	Autos:	43.113		
	Dight View:	-90.0 degrees		Hoa	w Trucks.	42.900		
	rugint view.	50.0 degrees			<i>ry maono</i> .	42.020		
FHWA Noise Mod	lel Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Berm Atten
Autos:	68.46	0.76	0.	86	-1.20	-4.0	56 0.0	00 0.000
Medium Trucks:	79.45	-15.37	0.	89	-1.20	-4.8	57 U.U	00 0.000
Heavy Trucks:	84.25	-15.72	0.	89	-1.20	-0.4	47 0.0	0.000
Unmitigated Nois	e Levels (witho	ut Topo and ba	rrier atte	enuation)	1			
Vehicle I ype	Leq Peak Hour	Leq Day	Leq	Evening	Leq N	ight	Ldn	CNEL
Autos:	68.9	67.	0	65.2	<u>.</u>	59.2	67.8	68.4
Hoow Trucks	60.0	02.	0 0	57.5	,	59.4	67.4	67.5
Vehicle Noise:	72.2	2 70.	6	66.3	3	62.8	71.3	3 71.6
Centerline Distan	ce to Noise Cor	ntour (in feet)						
			70) dBA	65 d	BA	60 dBA	55 dBA
		Ldr	n:	63	136	5	293	631
		CNEL		67	144	1	310	668

NOISE NOISE NOISE NOISE NOISE NOISE Trucks (3- Trucks (:: Goodn :: 12384 : MODE = 10, Sc Autos: 2 Axles): - Axles): Day 77.5% 84.8% 86.5% ons (in fe 0.000 2.297 8.004 	L INPUT: off = 15) 15 15 15 15 15 15 12.9% 4.9% 2.7% Set) Grade Adj feet)	S Night 9.6% 10.3% 10.8%	Daily 95.90% 2.13% 1.97% 0.0
NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NOTSE NO	: 12384 : MODE = 10, Sc Autos: 2 Axles): Day 77.5% 84.8% 86.5% ons (in fe 0.000 2.297 8.004 ince (in fe 5.50	L INPUT: off = 15) 15 15 15 15 Evening 12.9% 4.9% 2.7% Grade Adj feet)	Night 9.6% 10.3% 10.8%	Daily 95.90% 2.13% 1.97%
NOISE ons (Hard n Trucks (3: Trucks (3: Trucks (3: Mutos: m Trucks: vy Trucks: vy Trucks: ce Elevatic Autos: rucks: rucks: alent Dista	MODE = 10, Sc Autos: 2 Axles): 4 Axles): Day 77.5% 84.8% 86.5% 00.000 2.297 8.004	L INPUT: fit = 15) 15 15 15 15 15 15 15 2.7% 4.9% 2.7% Seet) Grade Adj feet)	Night 9.6% 9.6% 10.3% 10.8%	Daily 95.90% 2.13% 1.97% 0.0
NOISE ons (Hard n Trucks (): Trucks (3- Trucks (3- Type Autos: im Trucks: im Trucks: vy Trucks: ce Elevatic Autos: rucks: rucks: alent Diste	MODE = 10, Sc Autos: 2 Axles): Axles): Day 77.5% 84.8% 86.5% 00.000 2.297 8.004 mcc (in fe	L INPUT: fit = 15) 15 15 15 15 15 15 15 2.7% 4.9% 2.7% Seet) Grade Adj feet)	S Night 9.6% 10.3% 10.8%	Daily 95.90% 2.13% 1.97% 0.0
ions (Hard m Trucks (): Trucks (3- Type Autos: m Trucks: vy Trucks: ce Elevatio Autos: rucks: rucks: alent Dista	= 10, Sc Autos: 2 Axles): Axles): Day 77.5% 84.8% 86.5% 00.000 2.297 8.004 mcc (in fe	off = 15) 15 15 15 15 15 200 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 12.9% 4.9% 2.7% Sett	Night 9.6% 10.3% 10.8%	Daily 95.90% 2.13% 1.97% 0.0
m Trucks (3 Trucks (3 Autos: m Trucks: vy Trucks: vy Trucks: ce Elevatio Autos: rucks: alent Dista	Autos: 2 Axles): 4 Axles): Day 777.5% 84.8% 86.5% 0000 2.297 8.004	15 15 15 12.9% 4.9% 2.7% Grade Adj feet)	Night 9.6% 10.3% 10.8%	Daily 95.90% 2.13% 1.97% 0.0
m Trucks (? Trucks (3- Type Autos: im Trucks: vy Trucks: vy Trucks: rucks: alent Dista	2 Axles): Axles): Day 77.5% 84.8% 86.5% 0.000 2.297 8.004 0.000	15 15 Evening 12.9% 4.9% 2.7% Grade Adj feet)	Night 9.6% 10.3% 10.8%	Daily 95.90% 2.13% 1.97%
Trucks (3- Type Autos: Im Trucks: vy Trucks: ce Elevatic Autos: rucks: rucks: alent Dista		15 Evening 12.9% 4.9% 2.7% Grade Adj feet)	Night 9.6% 10.3% 10.8%	Daily 95.90% 2.13% 1.97% 0.0
Type Autos: Im Trucks: vy Trucks: ce Elevatic Autos: rucks: rucks: alent Dista	Day 77.5% 84.8% 86.5% 0.000 2.297 8.004 nnce (in fe	Evening 12.9% 4.9% 2.7% eet) Grade Adj	Night 9.6% 10.3% 10.8%	Daily 95.90% 2.13% 1.97% 0.0
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alent Dista	nce (in	feet)		
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ad Fre	snel	Barrier Att	en Beri	n Atten
.20	-4.63	0.0	000	0.000
.20	-4.87	0.0	000	0.000
.20	-5.47	0.0	000	0.000
Leq Night		Ldn	CI	IEL
50	0.6	59.3	3	59.9
4	5.6	54.1		54.3
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Scenario: Existing With Project Road Name: Project Name: Goodman III Job Number: 12384 Road Segment: elo Juniper Av. Job Number: 12384 SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS Highway Data Site Conditions (Hard = 10, Soft = 15) Average Daily Traffic (Adt): 7.293 vehicles Autos: 15 Peak Hour Volume: 729 vehicles Medium Trucks (24 Axles): 15 Vehicle Speed: 40 mph Medium Trucks (24 Axles): 15 Vehicle Speed: 40 mph Autos: 77.5% 12.9% 9.6% 95.76% Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% 2.21% Barrier Type (0-Wall, 1-Berm): 0.0 feet Medium Trucks: 86.5% 2.7% 10.8% 2.04% Centerline Dist. to Observer: 46.0 feet Autos:: 0.00 Medium Trucks: 8.04 Grade Adjustment: 0.0 Road Elevation: 0.0 feet Heavy Trucks: 8.04 Grade Adjustment: 0.0 Road El		FHV	VA-RD-77-108	HIGI	HWAY N	IOISE PI	REDICTIO				
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Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 63.8 61.9 60.2 54.1 62.8 63.4 Medium Tucks: 58.7 57.2 50.8 49.3 57.8 58.0	Heavy Trucks:	82.99	-19.61		1.4	6	-1.20	-5.4	17 0.0	000	0.000
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 63.8 61.9 60.2 54.1 62.8 63.4 Medium Trucks: 58.7 57.2 50.8 49.3 57.8 58.9	Unmitigated Nois	e Levels (with	out Topo and	barri	ier atten	uation)					
Autos: 63.8 61.9 60.2 54.1 62.8 63.4 Medium Trucks: 58.7 57.2 50.8 49.3 57.8 58.0	VehicleType	Leq Peak Hou	ır Leq Day	'	Leq E	vening	Leq N	light	Ldn	C	VEL
Medium Trucks: 58.7 57.2 50.8 49.3 57.8 58.0	Autos:	63	.8	61.9		60.2		54.1	62.	В	63.4
	Medium Trucks:	58	.7	57.2		50.8		49.3	57.8	В	58.0
Heavy Trucks: 63.6 62.2 53.2 54.4 62.8 62.9	Heavy Trucks:	63	.6	62.2		53.2		54.4	62.	В	62.9
Vehicle Noise: 67.4 65.8 61.4 57.9 66.4 66.8	Vehicle Noise:	67	.4	65.8		61.4		57.9	66.4	4	66.8
Centerline Distance to Noise Contour (in feet)	Centerline Distan	ce to Noise Co	ontour (in feet)				-			
70 dBA 65 dBA 60 dBA 55 dBA					70 0	dBA	65 d	BA	60 dBA	55	dBA
Ldn: 27 57 123 265				Ldn:	2	7	57		123	2	65

	FH\	VA-RD-77-108	HIGH	WAY	NOISE PR	REDICTI	ON MC	DEL			
Scenario: E Road Name: S Road Segment: e,	xisting Wi anta Ana /o Sierra A	th Project Av. Av.				Project Job Ni	Name: umber:	Goodr 12384	nan III		
SITE SPE	CIFIC IN	IPUT DATA				N	OISE	MODE		s	
Highway Data					Site Con	ditions	(Hard =	= 10, So	oft = 15)		
Average Daily Traff	ic (Adt):	6,529 vehicle	es					Autos:	15		
Peak Hour Perc	entage:	10%			Me	dium Tru	icks (2	Axles):	15		
Peak Hour	Volume:	653 vehicles	5		He	avy Truc	ks (3+	Axles):	15		
Vehicle	Speed:	40 mph			Vehicle I	Mix					
Near/Far Lane D	istance:	48 feet			Veh	icleTvpe		Dav	Evenina	Night	Dailv
Site Data						A	utos:	77.5%	12.9%	9.6%	94.88%
Barrier	Hoiaht.	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	2.41%
Barrier Type (0-Wall, 1	-Berm):	0.0			ŀ	leavy Tr	ucks:	86.5%	2.7%	10.8%	2.71%
Centerline Dist. to	Barrier:	46.0 feet			Noise Sc	ource El	evatior	ns (in fe	eet)		
Centerline Dist. to O	Centerline Dist. to Observer: 46.0 feet					Autos	. 0	.000	,		
Barrier Distance to O	bserver:	0.0 feet			Mediur	n Trucks	: 2	297			
Observer Height (Abov	ve Pad):	5.0 feet			Heav	v Trucks	. 8	.004	Grade Ad	justment	: 0.0
Pad El	levation:	0.0 feet									
Road El	evation:	0.0 feet			Lane Eq	uivalent	Distar	ice (in	feet)		
Road	Grade:	0.0%				Autos	:: 39	.560			
Le	eft View:	-90.0 degree	es		Mediur	n Trucks	39	.336			
Rig	ht View:	90.0 degree	es		Heav	y Trucks	:: 39	.358			
FHWA Noise Model Ca	alculation	s									
VehicleType R	EMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Bei	m Atten
Autos:	66.51	-3.41		1.4	42	-1.20		-4.63	0.0	000	0.000
Medium Trucks:	77.72	-19.36		1.4	46	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	82.99	-18.84		1.4	46	-1.20		-5.47	0.0	000	0.000
Unmitigated Noise Lev	vels (with	out Topo and	barrie	er atte	nuation)						
VehicleType Leq	Peak Hou	ir Leq Day		Leq E	Evening	Leq I	Night		Ldn	C	NEL
Autos:	63	.3	61.4		59.7		53.	6	62.2	2	62.8
Medium Trucks:	58	.6	57.1		50.7		49.	2	57.7	7	57.9
Heavy Trucks:	64	.4 (63.0		53.9		55.	2	63.6	ŝ	63.7
Vehicle Noise:	67	.5	65.9		61.1		58.	1	66.6	6	66.9
Centerline Distance to	Noise Co	ontour (in feet,)					-			
			L	70	dBA	65 0	'BA	6	60 dBA	55	dBA
			Ldn:	:	27	5	8		126	2	271
		CI	VEL:	1	28	6	1		132	2	285

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	FH	WA-RD-77-108	B HIGHW	AY NO	ISE P	REDICT	ION MO	DEL			
Scena Road Nar Road Segme	rio: Existing W ne: Jurupa Av. ent: w/o Cherry	/ith Project / Av.				Project Job N	Name: (lumber:	Goodi 12384	nan III		
SITE	SPECIFIC II	NPUT DATA				N	IOISE N	/IODE	L INPUT	s	
Highway Data				Si	te Cor	nditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	20,258 vehic	les				,	Autos.	15		
Peak Hou	r Percentage:	10%			Me	edium Tri	ucks (2 A	xles).	15		
Peak I	Hour Volume:	2,026 vehicle	es		He	avy Tru	cks (3+ A	(xles)	15		
Ve	ehicle Speed:	45 mph		Ve	hicle	Mix					
Near/Far La	ane Distance:	80 feet		-	Veh	icleType	,	Day	Evening	Nigh	t Daily
Site Data							Autos:	77.5%	5 12.9%	9.6	6% 94.85%
Ba	arrier Heiaht:	0.0 feet			Μ	edium Ti	rucks:	84.8%	4.9%	10.3	3% 2.45%
Barrier Type (0-V	Vall, 1-Berm):	0.0				Heavy Ti	rucks:	86.5%	2.7%	10.8	3% 2.70%
Centerline D	ist. to Barrier:	60.0 feet		N	oise S	ource F	levation	s (in f	eet)		
Centerline Dist.	to Observer:	60.0 feet				Auto	s: 0.0	000			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s: 2.2	97			
Observer Height	(Above Pad):	5.0 feet			Hea	v Truck	s: 8.0	004	Grade Adj	iustme	ent: 0.0
F	Pad Elevation:	0.0 feet		-							
Ro	ad Elevation:	0.0 feet		Lá	ane Eq	uivalen	t Distand	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 45.0	000			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 44.8	303			
	Right View:	90.0 degre	es		Hea	vy Truck	s: 44.8	322			
FHWA Noise Mod	lel Calculation	15									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresn	el	Barrier Atte	en l	Berm Atten
Autos:	68.46	i 1.00		0.58		-1.20		-4.69	0.0	00	0.00
Medium Trucks:	79.45	-14.89		0.61		-1.20		-4.88	0.0	00	0.00
Heavy Trucks:	84.25	-14.45		0.61		-1.20		-5.34	0.0	00	0.00
Unmitigated Nois	se Levels (with	nout Topo and	l barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	y L	.eq Eve	ening	Leq	Night		Ldn		CNEL
Autos:	: 68	8.8	66.9		65.2		59.1		67.7	,	68.4
Medium Trucks:	: 64	4.0	62.5		56.1		54.6		63.0)	63.3
Heavy Trucks:	69	9.2	67.8		58.8		60.0		68.4	-	68.
Vehicle Noise.	: 72	2.7	71.0		66.5		63.2		71.7		72.
Centerline Distan	nce to Noise C	ontour (in fee	t)								
				70 dE	BA	65	dBA		60 dBA		55 dBA
			Ldn:	78		1	68		362		779
		C	NEL:	82		1	77		381		821

FHV	A-RD-77-108	HIGHWA	Y NOIS			DEL _			
io: Existing Wit	h Project			Project	Vame: (Goodm	an III		
ne: Jurupa Av. nt: e/o Cherry /	Av.			Job Ni	imber: 1	2384			
SPECIFIC IN	PUT DATA			N	DISE N	IODEI		s	
			Site	Conditions (Hard =	10, So	ft = 15)		
Traffic (Adt):	17,147 vehicle	s			A	Autos:	15		
Percentage:	10%			Medium Tru	cks (2 A	xles):	15		
lour Volume:	1,715 vehicles			Heavy Truc	ks (3+ A	xles):	15		
hicle Speed:	45 mph		Veh	icle Mix					
ne Distance:	80 feet			VehicleType		Day	Evening	Night	Daily
				A	utos:	77.5%	12.9%	9.6%	94.70%
rrier Height	0.0 feet			Medium Tr	icks:	34.8%	4.9%	10.3%	2.47%
/all. 1-Berm):	0.0			Heavy Tr	icks:	36.5%	2.7%	10.8%	2.83%
st. to Barrier:	60.0 feet								
to Observer:	60.0 feet		NOIS	se Source El	evations	(in te	et)		
to Observer:	0.0 feet			Autos	: 0.0	00			
(Above Pad):	5.0 feet		M	eaium Trucks	: 2.2	97	Crada Adi	i un tem ne te	0.0
ad Elevation:	0.0 feet			Heavy Trucks	: 8.0	04	Graue Auj	usunem.	0.0
ad Elevation:	0.0 feet		Lan	e Equivalent	Distand	e (in f	eet)		
Road Grade:	0.0%			Autos	: 45.0	000			
Left View:	-90.0 degree	s	M	edium Trucks	: 44.8	803			
Right View:	90.0 degree	s		Heavy Trucks	: 44.8	22			
el Calculations	5								
REMEL	Traffic Flow	Distan	ce F	inite Road	Fresn	el I	Barrier Atte	en Beri	m Atten
68.46	0.27		0.58	-1.20		4.69	0.0	000	0.000
79.45	-15.57		0.61	-1.20		4.88	0.0	000	0.000
84.25	-14.98		0.61	-1.20		5.34	0.0	000	0.000
e Levels (with	out Topo and I	oarrier a	ttenuat	ion)					
	1 0	Le	q Eveni	na Leal	light		Ldn	CI	IEL
Leq Peak Hou	r Leq Day				-				07.0
Leq Peak Hou 68.	r Leq Day 1 6	6.2		64.4	58.4		67.0)	67.6
Leq Peak Hou 68. 63.	r <u>Leq Day</u> 1 6 3 6	6.2 1.8		64.4 55.4	58.4 53.9		67.0 62.3) }	67.6
Leq Peak Hou 68. 63. 68.	r Leq Day 1 6 3 6 7 6	6.2 1.8 7.3		64.4 55.4 58.2	58.4 53.9 59.5		67.0 62.3 67.8) } }	67.6 62.6 68.0
Leq Peak Hou 68. 63. 68. 72.	r Leq Day 1 6 3 6 7 6 0 7	6.2 1.8 7.3 0.4	-	64.4 55.4 58.2 65.8	58.4 53.9 59.5 62.6		67.0 62.3 67.8 71.1) 3	67.6 62.6 68.0 71.4
Leq Peak Hou 68. 63. 68. 72. ce to Noise Co	r Leq Day 1 6 3 6 7 6 0 7 ontour (in feet)	6.2 1.8 7.3 '0.4	·	64.4 55.4 58.2 65.8	58.4 53.9 59.5 62.6		67.0 62.3 67.8 71.1) 3 	67.6 62.6 68.0 71.4
Leq Peak Hou 68. 63. 68. 72. ce to Noise Co	r Leq Day 1 6 3 6 7 6 0 7 mtour (in feet)	6.2 11.8 77.3 70.4	70 dBA	64.4 55.4 58.2 65.8 65.8	58.4 53.9 59.5 62.6	6	67.0 62.3 67.8 71.1 0 dBA	55	67.6 62.6 68.0 71.4 dBA
Leq Peak Hou 68. 63. 68. 72. ce to Noise Co	r Leq Day 1 6 3 6 7 6 0 7 mtour (in feet)		70 dBA 71	64.4 55.4 58.2 65.8 65.8 65.6	58.4 53.9 59.5 62.6 /BA	6	67.0 62.3 67.8 71.1 0 dBA 328	55	67.6 62.6 68.0 71.4 dBA 08
	FHV io: Existing Will io: Existing Will io: Traffic (Adt): Percentage: Iour Volume: hicle Speed: ne Distance: Trier Height: (all, 1-Berm): st. to Barrier: to Observer: to Observer: Above Pad): ad Elevation: ad Elevation: ad Elevation: Right View: el Calculation: ReAd Grade: 164,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,455 194,4	FHWA-RD-77-1081 io: Existing With Project io: Existing With Project io: Existing With Project is: Jurpa Av. SPECIFIC INPUT DATA Traffic (Adt): 17,147 vehicle Percentage: 10% four Volume: 1,715 vehicles hicle Speed: 45 mph ne Distance: 80 feet rrier Height: 0.0 feet to Observer: 0.0 feet observer: 0.0 feet ad Elevation: on feet ad Elevation: on degree Red Grade: refit: Flow: 68.46 0.27 79.45 refit: Flow: 68.46 refit: Flow: 68.46 refit: Flow: refit: Flow:	FHWA-RD-77-108 HIGHW# FHWA-RD-77-108 HIGHW# io: Existing With Project io: Existing With Project io: Status With Project BECIFIC INPUT DATA Traffic (Adt): 17,147 vehicles Percentage: 10% Data With Project Percentage: 0.0 feet Percentage: 0.0 feet Percentage: 0.0 feet Percentage: 0.0 feet Above Pad): 5.0 feet Dot feet Percentage: 0.0 feet Addition: 0.0 feet Red Grade: 0.0% Left View: -90.0 degrees Right View: -90.0 degrees REMEL REMEL REMEL REMEL REMEL	FHWA-RD-77-108 HIGHWAY NOIS ic: Existing With Project ic: Junpa Av. stratting With Project ic: Junpa Av. SPECIFIC INPUT DATA Site Traffic (Adt): 17,147 vehicles Percentage: 10% Jour Avisities hiole Speed: 45 mph Ref Height: 0.0 feet not set Alow Padi: 5.0 feet Alow Padi: 5.7	FHWA-R0-77-108 HIGHWAY NOISE PREDICITI file: Existing With Project Project I io: Existing With Project Project I io: Existing With Project Do Nu spectral colspan="2">SPECIFIC INPUT DATA SPECIFIC INPUT DATA Site Conditions (Traffic (Adt): 17,147 vehicles Percentage: 10% Hour Volume: 1,715 vehicles Percentage: 80 feet Vehicle Mix Vehicle Mix	FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MOISE Project Name: C io: Existing With Project Project Name: C io: Brain Strain St	FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL io: Existing With Project Project Name: Goodn io: Existing With Project Project Name: Goodn i: Jurupa Av. Job Number: 12384 ht: elo Cherry Av. Ste Conditions (Hard = 10, So SPECIFIC INPUT DATA NOISE MODEL Ste Conditions (Hard = 10, So Autos: Percentage: 10% Iour Volume: 1,715 vehicles Percentage: 10% Iour Volume: 1,715 vehicles Heavy Trucks (2 Axles): Heavy Trucks (2 Axles): hicle Speed: 45 mph Vehicle Mix Autos: no Distance: 80 feet Values: 77.5% Medium Trucks: 84.8% values: 0.0 to Observer: 0.0 feet Above Pad): 5.0 feet ad Elevation: 0.0 feet ad Elevation: 0.0 feet ad Elevation: 0.0 feet Adders: 8.004 Left View: 9.0.0 degrees Right View:	FHWA-RD-77-108 HIGHWAY NOISE PREDICITION MODEL Fereisting With Project Project Name: Goodman III io: Existing With Project Project Name: Goodman III io: Existing With Project Job Number: 12384 ht: elo Cherry Av. Job Number: 12384 SPECIFIC INPUT DATA NOISE MODEL INPUT Traffic (Adt): 17,147 vehicles Autos: 15 Percentage: 10% Medium Trucks (2 Axles): 15 Iour Volume: 1,715 vehicles Heavy Trucks (3 4 Axles): 15 Inc Elstance: 80 feet Vehicle Mix Io Diserver: 60.0 feet Autos: 77.5% 12.9% Io Observer: 0.0 feet Autos: 0.00 Medium Trucks: 84.8% 4.9% Heavy Trucks: 86.5% 2.7% Heavy Trucks: 65.5% 2.297 Medium Trucks: 2.297 Above Padi): 5.0 feet Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 80.04 Grade Adj Ad Elevation: 0.0 feet Autos: 45.00 Adder add Elevation: 0.0 feet Autos: 45.00 Addium Trucks: 44.803 Heavy Trucks: 44.803 Heavy Trucks: 44.803 Heavy Trucks: 44.803 Heavy Trucks: 44.803 Heavy Trucks: 44.803 Heavy	FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL io: Existing With Project Project Name: Goodman III io: Existing With Project Project Name: Goodman III io: Existing With Project Job Number: 12384 start Job Number: 12384 start Job Number: 12384 start Job Number: 12384 start NOISE MODEL INPUTS Ste Conditions (Hard = 10, Soft = 15) Traffic (Adt): 17,147 vehicles Percentage: 10% Heavy Trucks (2 Akles): 15 Heavy Trucks (34 Akles): 15 Heavy Trucks: 84.8% Percentage: 0.0 feet Mutos: 77.5% 12.9% Percentage: 0.0 feet Mutos: 77.5% 12.9% Percentage: 0.0 feet Moleum Trucks: 84.8% 4.9% Moleserver: 0.0 feet Autos: 0.00 Moleserver: 0.0 feet Autos: 0.00 Above Padi 5.0 feet Heavy Trucks: 48.00 Ad Elevation: 0.0 feet Auto

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								0.51				
	FHV	VA-RD-77-108 F	HIGH\	WAY N	OISE PI	REDICTIO	ом мо	DEL				
Scenar	io: Existing Wi	th Project				Project I	Vame:	Goodr	nan III			
Road Nam	ne: Jurupa Av.					Job Nu	mber:	12384				
Road Segme	nt: e/o Beech	Av.										
SITE	SPECIFIC IN	IPUT DATA				N	DISE	MODE	L INF	UTS		
Highway Data				5	Site Con	ditions (Hard =	= 10, S	oft = 1	5)		
Average Daily	Traffic (Adt):	17,756 vehicles	3					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2	Axles):	15			
Peak H	lour Volume:	1,776 vehicles			He	avy Truci	ks (3+	Axles):	15			
Ve	hicle Speed:	45 mph		1	/ohiclo	Mix						
Near/Far La	ne Distance:	80 feet		-	Veh	cleTvpe		Dav	Even	ina I	liaht	Dailv
Site Data				-		A	utos:	77.5%	5 12.	9%	9.6%	94.69%
Ba	rrier Height:	0.0 feet			Me	edium Tru	icks:	84.8%	ь́4.	9%	10.3%	2.47%
Barrier Type (0-W	/all. 1-Berm):	0.0			ŀ	leavy Tru	icks:	86.5%	5 2.	7%	10.8%	2.83%
Centerline Di	st. to Barrier:	60.0 feet			laina Cr	uree Ele	watio	no (in f	0.041			
Centerline Dist.	to Observer:	60.0 feet		,	voise sc	Autoo	valio	000	eel)			
Barrier Distance	to Observer:	0.0 feet			Madiu	Autos.	. 0	207				
Observer Height ((Above Pad):	5.0 feet			Hoov	n Trucks	. 2	.297	Grade	Adius	tmont	. 0.0
Pa	ad Elevation:	0.0 feet			neav	y muchs.	. 0	.004	Orada	, Aujuc	sunone	0.0
Roa	ad Elevation:	0.0 feet		L	.ane Eq	uivalent	Distar	nce (in	feet)			
	Road Grade:	0.0%				Autos.	: 45	.000				
	Left View:	-90.0 degrees	6		Mediur	n Trucks	: 44	.803				
	Right View:	90.0 degrees	5		Heav	y Trucks	: 44	.822				
FHWA Noise Mod	el Calculation	\$										
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fres	nel	Barrie	r Atten	Ber	m Atten
Autos:	68.46	0.42		0.58	3	-1.20		-4.69		0.00)	0.000
Medium Trucks:	79.45	-15.41		0.61		-1.20		-4.88		0.00	C	0.000
Heavy Trucks:	84.25	-14.82		0.61		-1.20		-5.34		0.00	D	0.000
Unmitigated Nois	e Levels (with	out Topo and b	arriei	r atten	uation)							
VehicleType	Leg Peak Hou	Ir Leq Day		Leg Ev	ening	Leg N	light		Ldn		C	NEL
Autos:	68	.3 6	6.4		64.6		58.	5		67.2		67.8
Medium Trucks:	63	.5 6	1.9		55.6		54.	0		62.5		62.7
Heavy Trucks:	68	.8 6	7.4		58.4		59.	6		68.0		68.1
Vehicle Noise:	72	.2 7	0.6		65.9		62.	8		71.2		71.6
Centerline Distan	ce to Noise Co	ontour (in feet)										
		, , , , , , , , , , , , , , , , , , , ,	1	70 d	IBA	65 d	BA		60 dBA		55	dBA
		L	dn:	72	2	15	6		336		7	25
		CN	EL:	76	6	16	4		354		7	63

	FH\	NA-RD-77-108	HIGHW.	AY N	OISE PF	REDICTI	ON MC	DDEL				
Scenar Road Nam	io: Existing Wi	ith Project				Project	Name:	Goodr	nan III			
Road Segme	nt: e/o Poplar	Av.				300 14	umber.	12304				
SITE	SPECIFIC IN	IPUT DATA				N	OISE	MODE	l inpu	TS		-
Highway Data				S	Site Con	ditions	(Hard =	= 10, S	oft = 15)			
Average Daily	Traffic (Adt):	19,349 vehicle	s					Autos:	15			
Peak Hour	Percentage:	10%			Mee	dium Tru	icks (2	Axles):	15			
Peak H	lour Volume:	1,935 vehicles			Hea	avy Truc	:ks (3+	Axles):	15			
Ve	hicle Speed:	45 mph		v	ehicle l	Mix						-
Near/Far La	ne Distance:	80 feet		-	Vehi	icleType		Day	Evening	Nic	tht	Daily
Site Data						A	utos:	77.5%	12.9%	5 9	.6%	94.71%
Ba	rrier Height	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10	.3%	2.47%
Barrier Type (0-W	all, 1-Berm):	0.0			F	leavy Tr	ucks:	86.5%	2.7%	10	.8%	2.82%
Centerline Dis	st. to Barrier:	60.0 feet		٨	loise So	ource El	evatio	ns (in f	eet)			
Centerline Dist.	to Observer:	60.0 feet				Autos	: 0	.000	1			-
Barrier Distance	to Observer:	0.0 feet			Mediur	n Trucks	: 2	.297				
Observer Height (Above Pad):	5.0 feet			Heav	y Trucks	: 8	.004	Grade A	djustr	nent:	0.0
Pa	ad Elevation:	0.0 feet					Dista		6	-		
Roa	ad Elevation:	0.0 feet		L	ane Equ	uivaient	Distar	ice (in	reet)			
	Road Grade:	0.0%				Autos	: 45	.000				
	Left View:	-90.0 degree	S		Mediur	n Trucks	. 44	.803				
	Right View:	90.0 degree	s		Heav	y Trucks	6: 44	.822				
FHWA Noise Mode	el Calculation	s										
VehicleType	REMEL	Traffic Flow	Distar	ice	Finite	Road	Fres	nel	Barrier A	tten	Bern	n Atten
Autos:	68.46	0.79		0.58		-1.20		-4.69	0	.000		0.000
Medium Trucks:	79.45	-15.05		0.61		-1.20		-4.88	0	.000		0.000
Heavy Trucks:	84.25	-14.47		0.61		-1.20		-5.34	0	.000		0.000
Unmitigated Noise	e Levels (with	out Topo and I	barrier a	attenu	uation)							
VehicleType	Leq Peak Hou	ır Leq Day	Le	eq Ev	ening	Leq I	Night		Ldn		CN	EL
Autos:	68	.6 6	6.7		65.0		58.	9	67	.5		68.1
Medium Trucks:	63	.8 6	52.3		55.9		54.	4	62	.9		63.1
Heavy Trucks:	69	.2 6	57.8		58.7		60.	0	68	.3		68.5
Vehicle Noise:	72	.6 7	0.9		66.3		63.	1	71	.6		71.9
Centerline Distant	ce to Noise Co	ontour (in feet)										
			. L	70 d	BA	65 0	1BA	(50 dBA		55 0	1BA
		1	an:	77		16	5		356		76	16 N7
		CN	IEL:	81		17	4		374		80)7

Wednesday, June 05, 2019

	FH\	VA-RD-77-108	HIGHW	AY NC	DISE P	REDICT	ION MO	DEL			
Scena Road Nar Road Segme	rio: Existing W ne: Jurupa Av. ent: e/o Citrus /	ith Project Av.				Project Job N	Name: lumber:	Goodi 12384	man III		
SITE	SPECIFIC IN	IPUT DATA				N	IOISE N	/IODE	L INPUTS	s	
Highway Data				S	ite Cor	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	17,678 vehicl	es					Autos.	15		
Peak Hou	r Percentage:	10%			Me	dium Tr	ucks (2 A	Axles).	: 15		
Peak I	Hour Volume:	1,768 vehicle	s		He	avy Tru	cks (3+ A	Axles).	: 15		
Ve	ehicle Speed:	45 mph		V	ehicle	Mix					
Near/Far La	ane Distance:	80 feet		Ē	Veh	icleTvpe	e	Dav	Evenina	Niah	t Dailv
Site Data							Autos:	77.5%	6 12.9%	9.6	% 93.49%
Ba	arrier Height:	0.0 feet			М	edium T	rucks:	84.8%	6 4.9%	10.3	% 2.69%
Barrier Type (0-V	Vall, 1-Berm):	0.0				Heavy T	rucks:	86.5%	6 2.7%	10.8	3.81%
Centerline D	ist. to Barrier:	60.0 feet		N	oise S	ource E	levation	s (in f	eet)		
Centerline Dist.	to Observer:	60.0 feet				Auto	s: 0.0	000	,		
Barrier Distance	e to Observer:	0.0 feet			Mediu	m Truck	s: 2.3	297			
Observer Height	(Above Pad):	5.0 feet			Hear	v Truck	s: 8.0	004	Grade Adj	iustme	ent: 0.0
F	Pad Elevation:	0.0 feet		-							
Ro	ad Elevation:	0.0 feet		La	ane Eq	uivalen	t Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 45.	000			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 44.	803			
	Right View:	90.0 degre	es		Hear	/y Truck	s: 44.	822			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Distar	се	Finite	Road	Fresr	iel	Barrier Atte	en E	Berm Atten
Autos:	68.46	0.34		0.58		-1.20		-4.69	0.0	00	0.000
Medium Trucks:	79.45	-15.06		0.61		-1.20		-4.88	0.0	00	0.000
Heavy Trucks:	84.25	-13.55		0.61		-1.20		-5.34	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier a	attenu	ation)	_					
VehicleType	Leq Peak Hou	ir Leq Daj	/ Le	eq Eve	ening	Leq	Night		Ldn		CNEL
Autos:	: 68	.2	66.3		64.5		58.5	;	67.1		67.7
Medium Trucks:	63	.8	62.3		55.9		54.4		62.8	5	63.1
Heavy Trucks:	70	.1	68.7		59.7		60.9)	69.3	3	69.4
venicie Noise.	. 12		71.5		00.2		03.4	•	71.9	,	12.2
Centerline Distan	ice to Noise C	uniour (in feel	9	70 dF	BA	65	dBA		60 dBA		55 dBA
			Ldn:	80		1	73		373		803
		С	NEL:	84		1	81		390		841

				NOIDE T						
Scenar	io: Existing Wit	h Project			Project N	lame: G	oodm	an III		
Road Nan	<i>e:</i> Jurupa Av.				Job Nu	nber: 1	2384			
Road Segme	nt: e/o Oleande	er Av.								
SITE	SPECIFIC IN	PUT DATA			NC	ISE M	ODE		s	
Highway Data				Site Con	ditions (F	lard = 1	0, So	ft = 15)		
Average Daily	Traffic (Adt):	18,602 vehicles				Α	utos:	15		
Peak Hour	Percentage:	10%		Me	dium Truc	ks (2 A)	des):	15		
Peak H	lour Volume:	1,860 vehicles		He	avy Truck	s (3+ A)	(les):	15		
Ve	hicle Speed:	45 mph		Vehicle	Mix					
Near/Far La	ne Distance:	80 feet		Veh	icleTvpe	L	av	Evenina	Niaht	Dailv
Site Data					AL	tos: 7	7.5%	12.9%	9.6%	93.59%
Ba	rrier Height	0.0 feet		M	edium Tru	cks: 8	4.8%	4.9%	10.3%	2.67%
Barrier Type (0-V	/all 1-Rerm) [.]	0.0 1001		1	Heavy Tru	cks: 8	6.5%	2.7%	10.8%	3.73%
Centerline Di	st. to Barrier:	60.0 feet								
Centerline Dist.	to Observer:	60.0 feet		Noise Se	ource Ele	vations	(in fe	et)		
Barrier Distance	to Observer:	0.0 feet			Autos:	0.00	00			
Observer Height	(Above Pad):	5.0 feet		Mediu	m Trucks:	2.29	97	Crada Ad	iuctmont	
P	ad Elevation:	0.0 feet		Heav	y Trucks:	8.00)4	Grade Adj	usimeni.	0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent I	Distance	e (in f	eet)		
	Road Grade:	0.0%			Autos:	45.0	00			
	Left View:	-90.0 degrees		Mediu	m Trucks:	44.8)3			
	Right View:	90.0 degrees		Heav	y Trucks:	44.8	22			
FHWA Noise Mod	el Calculations	5								
FHWA Noise Mod VehicleType	el Calculations	Traffic Flow	Distance	Finite	Road	Fresne	1	Barrier Atte	en Ber	m Atten
FHWA Noise Mod VehicleType Autos:	el Calculations REMEL 68.46	Traffic Flow 0.57	Distance 0.	Finite	Road -1.20	Fresne	l 1.69	Barrier Atte 0.0	en Ber	m Atten 0.000
FHWA Noise Mod VehicleType Autos: Medium Trucks:	el Calculations REMEL 68.46 79.45	5 Traffic Flow 0.57 -14.87	Distance 0. 0.	<i>Finite</i> 58 61	Road -1.20 -1.20	Fresne 	l 4.69 4.88	Barrier Atte 0.0 0.0	en Ber 000	m Atten 0.000 0.000
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks:	el Calculations REMEL 68.46 79.45 84.25	5 Traffic Flow 0.57 -14.87 -13.42	<i>Distance</i> 0. 0. 0.	<i>Finite</i> 58 .61 .61	Road -1.20 -1.20 -1.20	Fresne 	1 4.69 4.88 5.34	Barrier Atte 0.0 0.0 0.0	en Ben 000 000	m Atten 0.000 0.000 0.000
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois	el Calculations REMEL 68.46 79.45 84.25 e Levels (witho	Traffic Flow 0.57 -14.87 -13.42	Distance 0. 0. 0. n rrier atte	<i>Finite</i> 58 61 61 61	Road -1.20 -1.20 -1.20	Fresne 	1 4.69 4.88 5.34	Barrier Atte 0.0 0.0 0.0	en Ben 000 000 000	m Atten 0.000 0.000 0.000
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType	el Calculations REMEL 68.46 79.45 84.25 e Levels (witho Leq Peak Hou	Traffic Flow 0.57 -14.87 -13.42 Dut Topo and ba r Leg Day	Distance 0. 0. 0. 0. 0. 0. 0. 0. 0.	Finite 58 61 61 61 enuation) Evening	Road -1.20 -1.20 -1.20 Leq N	Fresne 	1 4.69 4.88 5.34	Barrier Atte 0.0 0.0 0.0 0.0	en Ben 000 000 000 CI	m Atten 0.000 0.000 0.000
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos:	el Calculations REMEL 68.46 79.45 84.25 e Levels (without Leq Peak Hout 68.	Traffic Flow 0.57 -14.87 -13.42 Dut Topo and ba r Leq Day 4 66	Distance 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	Finite 58 61 61 Evening 64.7	Road -1.20 -1.20 -1.20 Leq N	Fresne 	1 4.69 4.88 5.34	Barrier Atte 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	en Ben 000 000 000 000 000	m Atten 0.000 0.000 0.000 VEL 67.9
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks:	el Calculations <u>REMEL</u> 68.46 79.45 84.25 e Levels (withough the formation of the form	Traffic Flow 0.57 -14.87 -13.42 Dut Topo and bas 1 r Leq Day 4 66 0 62 62 62	Distance 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	<i>Finite</i> 58 61 61 <i>Evening</i> 64.7 56.1	Road -1.20 -1.20 -1.20 Leq N	Fresne 	1 4.69 4.88 5.34	Barrier Atte 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	en Ben 000 000 000 000 C/ 3	m Atten 0.000 0.000 0.000 VEL 67.9 63.3
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks:	el Calculations <u>REMEL</u> 68.46 79.45 84.25 e Levels (witho Leq Peak Hou 68. 64. 70.	Traffic Flow 0.57 -14.87 -13.42 Dut Topo and ba r Leq Day 4 66 0 62 2 68	Distance 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	<i>Finite</i> 58 61 61 <i>Evening</i> 64.7 56.1 59.8	Road -1.20 -1.20 -1.20 Leq N	Fresne 	1 4.69 4.88 5.34	Barrier Atte 0.0 0.0 0.0 0.0 0.0 0.0 67.3 63.0 69.4	en Ber 000 000 000 C/ 3 0 4	m Atten 0.000 0.000 0.000 VEL 67.9 63.3 69.5
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	el Calculations <u>REMEL</u> 68.46 79.45 84.25 e Levels (without Leg Peak Hout 68. 64. 70. 73.	Traffic Flow 0.57 -14.87 -13.42 Datt Topo and bar r Leq Day 4 66 0 62 2 68 0 71	Distance 0. 0. 0. 0. 0. 0. 1. 5. 5. 8. 4.	<i>Finite</i> 58 61 61 <i>Evening</i> 64.7 56.1 59.8 66.4	Road -1.20 -1.20 -1.20 Leq N	Fresne 	1 4.69 4.88 5.34	Barrier Atte 0.0 0.0 Ldn 67.3 63.0 69.4 72.1	en Ber 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 100	<u>m Atten</u> 0.000 0.000 0.000 VEL 67.5 63.5 69.5 72.4
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: VehicleType Autos: Medium Trucks: Vehicle Noise: Centerline Distan	el Calculations <u>REMEL</u> 68.46 79.45 84.25 e Levels (without 68. 64. 70. 73. Cce to Noise Co	S Traffic Flow 0.57 0.14.87 -13.42 Dut Topo and base 0 r Leq Day 4 66 0 62 2 68 0 71 Intour (in feet)	Distance 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	Finite 58 61 61 61 Evening 64.7 56.1 59.8 66.4	Road -1.20 -1.20 -1.20 Leq N	Fresne 	1 4.69 4.88 5.34	Barrier Atth 0.0 0.0 0.0 0.0 0.0 0.0 67.3 63.0 69.4 72.1	en Ber 000 000 000 C/ 3 0 4 1	m Atten 0.000 0.000 VEL 67.5 63.3 69.5 72.4
FHWA Noise Mod VehicleType Autos: Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distan	el Calculations <u>REMEL</u> 68.46 79.45 84.25 e Levels (with Leq Peak Hou 68. 64. 70. 73. ce to Noise Co	Traffic Flow 0.57 -14.87 -13.42 Dut Topo and ba 1 r Leg Day 4 66 62 68 0 61 2 0 71 1 1 Intour (in feet) 71 1 1	Distance 0. 0. 0. 0. 0. 0. 1. 5. 5. 5. 5. 8. 4. 70	Finite 58 61 61 enuation) Evening 64.7 59.8 66.4 0 dBA	Road -1.20 -1.20 -1.20 Leq N	Fresne 	1 4.69 4.88 5.34	Barrier Atto 0.0 0.0 0.0 67.3 63.0 69.4 72.1 0 dBA	en Ber 000 000 CI 3 0 4 55	m Atten 0.000 0.000 VEL 67.5 63.5 69.5 72.4 dBA
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: VehicleType Autos: Heavy Trucks: Vehicle Noise: Centerline Distan	el Calculations REMEL 68.46 79.45 84.25 e Levels (with Leg Peak Hou 68. 64. 70. 73. ce to Noise Co	s Traffic Flow 0.57 0.14.87 -14.87 -13.42 -13.42 Dut Topo and ba r Leq Day 4 60 62 2 68 0 71 Intour (in feet) Ld	Distance 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	Finite 5.58 661 601 Evening 64.7 56.1 59.8 66.4 0 dBA 82	Road -1.20 -1.20 Leq N 65 dl	Fresne 	1 4.69 4.88 5.34 6	Barrier Atto 0.0 0.0 0.0 67.3 63.0 69.4 72.1 0 dBA 382	en Ber 000 000 000 CI 3 0 4 1 55 8	m Atten 0.000 0.000 0.000 VEL 67.9 63.3 69.5 72.4 dBA 24

	FH	WA-RD-77-108	B HIGHV	VAY NO	DISE PI	REDICTIC	N MODE	EL			
Scenario Road Name Road Segmen	 Existing W Jurupa Av t: e/o Cypres 	ith Project s Av.				Project N Job Nui	lame: Go nber: 12	oodmar 384	n III		
SITE S	PECIFIC II	VPUT DATA				NC	DISE MO	DDEL I	NPUTS	5	
Highway Data				S	ite Con	ditions (F	lard = 10	0, Soft	= 15)		
Average Daily 1 Peak Hour F Peak Ho	raffic (Adt): Percentage: our Volume:	19,928 vehicl 10% 1,993 vehicle	es		Me He	dium Truc avy Truck	AL ks (2 Ax s (3+ Ax	ıtos: les): les):	15 15 15		
Veh	icle Speed:	45 mph		V	ehicle	Mix					-
Near/Far Lan	e Distance:	80 feet			Veh	icleType	D	ay E	vening	Night	Daily
Site Data						AL	tos: 71	7.5%	12.9%	9.6%	95.55%
Bari	rier Heiaht:	0.0 feet			M	edium Tru	cks: 84	4.8%	4.9%	10.3%	2.31%
Barrier Type (0-Wa	all, 1-Berm):	0.0			ŀ	Heavy Tru	cks: 86	6.5%	2.7%	10.8%	2.14%
Centerline Dis	t. to Barrier:	60.0 feet		N	oise So	ource Ele	vations ((in feet)		
Centerline Dist. to	o Observer:	60.0 feet				Autos:	0.00	0			
Barrier Distance to	o Observer:	0.0 feet			Mediu	m Trucks:	2.29	7			
Observer Height (A	Above Pad):	5.0 feet			Heav	y Trucks:	8.00	4 Gr	rade Adj	ustment	: 0.0
Pa	d Elevation:	0.0 feet			ono Ea	uivelent l	Diotonoo	lin foo	4)		
Roa	d Elevation:	0.0 feet		L	ane Eq		JSLANCE	(III lee	<i>u</i>)		
H H	load Grade:	0.0%				Autos:	45.00	0			
	Left View:	-90.0 degre	es		Mediui	m Trucks:	44.80	13			
	Right view:	90.0 degre	es		neav	y mucks.	44.02	2			
FHWA Noise Mode	l Calculatior	15									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresnel	Ba	rrier Atte	en Ber	m Atten
Autos:	68.46	0.96		0.58		-1.20	-4	.69	0.0	00	0.000
Medium Trucks:	79.45	-15.20		0.61		-1.20	-4	1.88	0.0	00	0.000
Heavy Trucks:	84.25	-15.55		0.61		-1.20	-5	.34	0.0	00	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	y I	Leq Eve	ening	Leq N	ight	Lo	dn	C	NEL
Autos:	68	3.8	66.9		65.1		59.1		67.7		68.3
Medium Trucks:	63	3.7	62.2		55.8		54.2		62.7		62.9
Heavy Trucks:	68	3.1	66.7		57.7		58.9		67.3		67.4
Vehicle Noise:	72	2.1	70.5		66.3		62.7		71.2		71.5
Centerline Distance	e to Noise C	ontour (in fee	t)								-
				70 dł	BA	65 dl	BA	60 0	dBA	55	dBA
			Ldn:	72		155	5	33	33	7	'18
		С	NEL:	76		163	3	35	52	7	59

	FH	WA-RD-77-108	B HIGHW	VAYN	OISE PF	REDICTIO		DEL			
Scena Road Nan Road Segme	rio: Existing W ne: Jurupa Av ent: e/o Junipe	/ith Project r Av.				Project I Job Nu	Vame: Imber:	Goodr 12384	man III		
SITE	SPECIFIC II	NPUT DATA				N	DISE N	/IODE	L INPUT	s	
Highway Data				S	Site Con	ditions (Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	18,937 vehic	es				,	Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 A	(xles)	15		
Peak I	Hour Volume:	1,894 vehicle	s		He	avy Truci	ks (3+ A	(xles)	15		
Ve	ehicle Speed:	45 mph		v	ehicle l	Mix					
Near/Far La	ane Distance:	80 feet		F	Veh	icleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	6 12.9%	9.6%	6 94.21%
Ba	rrier Heiaht:	0.0 feet			Me	edium Tru	icks:	84.8%	6 4.9%	10.3%	⁶ 2.58%
Barrier Type (0-V	Vall, 1-Berm):	0.0			ŀ	leavy Tru	icks:	86.5%	2.7%	10.8%	3.21%
Centerline D	ist. to Barrier:	60.0 feet		٨	loise Sc	ource Ele	vation	s (in f	eet)		
Centerline Dist.	to Observer:	60.0 feet				Autos	: 0.0	000	1		
Barrier Distance	to Observer:	0.0 feet			Mediur	n Trucks	: 2.2	297			
Observer Height	(Above Pad):	5.0 feet			Heav	v Trucks	: 8.0	004	Grade Ad	justmen	t: 0.0
P	ad Elevation:	0.0 feet									
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%				Autos	: 45.0	000			
	Left View:	-90.0 degre	es		Mediur	n Trucks	: 44.	803			
	Right View:	90.0 degre	es		Heav	y Trucks	: 44.	822			
FHWA Noise Mod	lel Calculation	15									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresn	el	Barrier Att	en Be	rm Atten
Autos:	68.46	0.68		0.58		-1.20		-4.69	0.0	000	0.000
Medium Trucks:	79.45	-14.95		0.61		-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	84.25	-14.00		0.61		-1.20		-5.34	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier	attenu	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	y L	Leq Ev	ening	Leq N	light		Ldn	C	NEL
Autos:	68	8.5	66.6		64.9		58.8		67.4	1	68.0
Medium Trucks:	63	3.9	62.4		56.0		54.5		63.0)	63.2
Heavy Trucks:	69	9.7	68.2		59.2		60.5		68.8	3	68.9
Vehicle Noise:	72	2.7	71.1		66.3		63.3	5	71.8	3	72.1
Centerline Distan	ce to Noise C	ontour (in fee	t)								
				70 d	BA	65 a	BA	1	60 dBA	55	5 dBA
		-	Ldn:	79)	17	0		367		790
		С	NEL:	83	5	17	9		385		830

Wednesday, June 05, 2019

	FHW	A-RD-77-108 H	GHWAY	' NOISE P	REDICTIC	N MODE	L	
Scenar Road Nan Road Segme	rio: Existing Wit ne: Armstrong F ent: w/o Sierra A	h Project Rd. v.			Project N Job Nui	lame: Goo mber: 123	odman III 84	
SITE	SPECIFIC IN	PUT DATA			NC	DISE MO	DEL INPUTS	5
Highway Data				Site Co	nditions (H	Hard = 10,	Soft = 15)	
Average Daily	Traffic (Adt):	23,178 vehicles				Aut	os: 15	
Peak Hour	Percentage:	10%		Me	edium Truc	ks (2 Axle	s): 15	
Peak H	lour Volume:	2,318 vehicles		He	eavy Truck	s (3+ Axle	s): 15	
Ve	ehicle Speed:	45 mph		Vehicle	Mix			
Near/Far La	ane Distance:	48 feet		Vel	hicleType	Da	v Evening	Night Daily
Site Data					AL	itos: 77.	5% 12.9%	9.6% 95.14%
Ba	rrier Heiaht:	0.0 feet		N	1edium Tru	cks: 84.	8% 4.9%	10.3% 2.40%
Barrier Type (0-V	Vall, 1-Berm):	0.0			Heavy Tru	cks: 86.	5% 2.7%	10.8% 2.46%
Centerline Di	ist. to Barrier:	59.0 feet		Noise S	ource Ele	vations (i	n feet)	
Centerline Dist.	to Observer:	59.0 feet			Autos:	0.000		
Barrier Distance	to Observer:	0.0 feet		Mediu	im Trucks:	2.297		
Observer Height	(Above Pad):	5.0 feet		Hea	vy Trucks:	8.004	Grade Adj	ustment: 0.0
P	ad Elevation:	0.0 feet		1		Di-4	(In 6 4)	
Ro	ad Elevation:	0.0 feet		Lane Ec	quivalent L	Jistance (in reet)	
	Road Grade:	0.0%		Madi	Autos:	54.129		
	Left View:	-90.0 degrees		Hoa	M Trucks.	53.900		
	Night view.	90.0 degrees		nea	vy mucho.	33.902		
FHWA Noise Mod	lel Calculations							
VehicleType	REMEL	Traffic Flow	Distance	e Finite	e Road	Fresnel	Barrier Atte	en Berm Atten
Autos:	68.46	1.60	-0	.62	-1.20	-4.0	59 0.0	00 0.000
Medium Trucks:	79.45	-14.38	-0	.60	-1.20	-4.8	38 0.0	00 0.000
Heavy Trucks:	84.25	-14.29	-0	.60	-1.20	-5.3	35 0.0	00 0.000
Unmitigated Nois	e Levels (witho	ut Topo and ba	rrier att	enuation)				
VehicleType	Leq Peak Hour	Leq Day	Leq	Evening	Leq N	light	Ldn	CNEL
Autos:	68.	2 66	.3	64.6	5	58.5	67.1	67.7
Medium Trucks:	63.	3 61	.8	55.4	+	53.9	62.3	62.5
Vehicle Noise	71	2 <u>60</u> 9 70	2	65.8	3	62.4	70.9	71.2
Centerline Distan	ce to Noise Co	ntour (in feet)	-	00.0	·	02.1	10.0	
Genternite Distan	00 10 110/30 00	niour (ni leel)	7	0 dBA	65 dl	BA	60 dBA	55 dBA
		Ld	n:	68	146	6	314	676
		CNE	L:	71	154	1	331	713

	FHV	VA-RD-77-108	HIGHWA	AY NOIS	SE PREDICTIO	N MOD	EL			
Scenar Road Nam Road Segmei	io: Existing Wi ne: Armstrong I nt: w/o 34th St	th Project Rd.			Project N Job Nu	lame: G mber: 12	oodm 2384	an III		
SITE	SPECIFIC IN	PUT DATA			NC	DISE M	ODEL	INPUT	s	
Highway Data				Site	Conditions (I	lard = 1	0, So	ft = 15)		
Average Daily	Traffic (Adt):	30,653 vehicle	S			A	utos:	15		
Peak Hour	Percentage:	10%			Medium Truc	ks (2 Ax	les):	15		
Peak H	lour Volume:	3,065 vehicles			Heavy Truck	s (3+ Ax	les):	15		
Ve	hicle Speed:	45 mph		Veh	icle Mix					
Near/Far La	ne Distance:	48 feet			VehicleType	D	ay	Evening	Night	Daily
Site Data					AL	itos: 7	7.5%	12.9%	9.6%	95.24%
Ba	rrier Height:	0.0 feet			Medium Tru	cks: 8	4.8%	4.9%	10.3%	2.38%
Barrier Type (0-W	(all, 1-Berm):	0.0			Heavy Tru	cks: 8	6.5%	2.7%	10.8%	2.38%
Centerline Di	st. to Barrier:	59.0 feet		Nei	so Sourco Ela	vations	(in fo	ot		
Centerline Dist.	to Observer:	59.0 feet		NOIS	Se Source Ele	vauons		el)		
Barrier Distance	to Observer:	0.0 feet			Autos. Indium Trunkou	0.00	10			
Observer Height (Above Pad):	5.0 feet		N/	Hoovy Trucks:	2.28	и и і	Grade Ad	iustment [.]	0.0
Pa	ad Elevation:	0.0 feet			neavy mucks.	8.00	14	orade Adj	usunent.	0.0
Roa	ad Elevation:	0.0 feet		Lan	e Equivalent l	Distance	e (in fe	eet)		
1	Road Grade:	0.0%			Autos:	54.12	29			
	Left View:	-90.0 degree	S	M	ledium Trucks:	53.96	66			
	Right View:	90.0 degree	S		Heavy Trucks:	53.98	32			
FHWA Noise Mod	el Calculation:	5								
VehicleType	REMEL	Traffic Flow	Distan	ce F	inite Road	Fresne	I E	Barrier Att	en Beri	m Atten
Autos:	68.46	2.82		-0.62	1.20		1 69	0.0	00	0.000
					-1.20	-4		0.0	000	
Medium Trucks:	79.45	-13.20		-0.60	-1.20	-4	1.88	0.0	000	0.000
Medium Trucks: Heavy Trucks:	79.45 84.25	-13.20 -13.21		-0.60 -0.60	-1.20 -1.20	-4 -4 -5	4.88 5.35	0.0	000	0.000
Medium Trucks: Heavy Trucks: Unmitigated Noise	79.45 84.25 e Levels (with	-13.20 -13.21 out Topo and L	arrier a	-0.60 -0.60 <i>ttenuat</i>	-1.20 -1.20 -1.20	-4 -4	1.88 5.35	0.0	00	0.000
Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType	79.45 84.25 e Levels (with Leq Peak Hou	-13.20 -13.21 Dut Topo and L r Leq Day	arrier a	-0.60 -0.60 ttenuat q Eveni	-1.20 -1.20 -1.20 ion) ing Leq N	-4 -4 -5	1.88 5.35	0.0 0.0 0.0	000 000 000 <i>Cl</i>	0.000 0.000
Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos:	79.45 84.25 e Levels (with Leq Peak Hou 69.	-13.20 -13.21 Dut Topo and E r Leq Day 5 6	parrier a	-0.60 -0.60 ttenuat eq Eveni	-1.20 -1.20 -1.20 ion) ing Leq N 65.8	-4 -4 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5	1.88 5.35	0.0 0.0 0.0 <u>Ldn</u> 68.4	000 000 C/	0.000 0.000 <u>VEL</u> 69.0
Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	79.45 84.25 e Levels (with Leq Peak Hou 69. 64.	-13.20 -13.21 Dut Topo and k r Leq Day 5 6 4 6	<i>parrier a</i> <i>Le</i> 7.6 2.9	-0.60 -0.60 <u>ttenuat</u> -g Eveni	-1.20 -1.20 -1.20 ion) mg Leq N 65.8 56.6	-4 -4 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5	4.88 5.35	0.0 0.0 0.0 <u>Ldn</u> 68.4 63.5	000 000 000 <i>Cl</i>	0.000 0.000 <u>VEL</u> 69.0 63.7
Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	79.45 84.25 e Levels (with Leg Peak Hou 69. 64. 69.	-13.20 -13.21 Dut Topo and R r Leq Day 5 6 4 6 2 6	<i>parrier a</i> <i>Le</i> 7.6 2.9 7.8	0.60 -0.60 ttenuat q Eveni	-1.20 -1.20 -1.20 ion) mg Leq N 65.8 56.6 58.8	-4 -4 -5 -4 -4 -5 -4 -4 -4 -4 -5 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4	1.88 5.35	0.0 0.0 0.0 0.0 0.0 68.4 68.4 68.4	000 000 000 1 1 5	0.000 0.000 <u>VEL</u> 69.0 63.7 68.5
Medium Trucks: Heavy Trucks: Unmitigated Noiss VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	79.45 84.25 e Levels (with Leq Peak Hou 69. 64. 69. 73.	-13.20 -13.21 Dut Topo and B r Leq Day 5 6 4 6 2 6 0 7	<i>parrier a</i> <i>Le</i> 7.6 2.9 7.8 1.4	-0.60 -0.60 <u>ttenuat</u> q Eveni	-1.20 -1.20 -1.20 ion) mg Leq N 65.8 56.6 58.8 67.0	-4 -4 -5 -5 -5 -6 -5 -6 -5 -5 -5 -6 -6 -6 -6 -6 -6 -6 -6 -5 -5 -6 -6 -6 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5	1.88 5.35	0.0 0.0 0.0 68.4 63.5 68.4 72.0		0.000 0.000 <u>VEL</u> 69.0 63.7 68.5 72.4
Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distant	79.45 84.25 e Levels (with Leq Peak Hou 69 64 69 73 73 ce to Noise Co	-13.20 -13.21 but Topo and I r Leq Day 5 6 4 6 2 6 0 7 butour (in feet)	parrier a Le 7.6 2.9 7.8 1.4	0.60 0.60 ttenuat q Eveni	-1.20 -1.20 -1.20 ion) mg Leq N 65.8 56.6 58.8 67.0	-4 -4 -5 59.7 55.0 60.0 63.6	1.88	0.0 0.0 0.0 68.4 63.5 68.4 72.0		0.000 0.000 VEL 69.0 63.7 68.5 72.4
Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distant	79.45 84.25 e Levels (with Leq Peak Hou 69 64 69 73 ce to Noise Co	-13.20 -13.21 Dut Topo and I r Leq Day 5 6 4 6 2 6 0 7 Dutour (in feet)	parrier a Le 7.6 2.9 7.8 1.4	0.60 0.60 ttenuat q Eveni 70 dBA	-1.20 -1.20 -1.20 ion) mg Leq N 65.8 56.6 58.8 67.0	-4 -4 -5 59.7 55.0 60.0 63.6 3A	6	0.0 0.0 0.0 68.4 63.5 68.4 72.0 0 dBA	000 000 000 1 5 5 5 5 5 5 5 5 5 5	0.000 0.000 VEL 69.0 63.7 68.5 72.4 dBA
Medium Trucks: Heavy Trucks: Unmitigated Noiss VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distant	79.45 84.25 e Levels (with Leq Peak Hou 69 64 69 73 73 ce to Noise Co	-13.20 -13.21 but Topo and L <u>r</u> Leq Day 5 6 4 6 2 6 0 7 ontour (in feet) L	<i>parrier a</i> Le 7.6 2.9 7.8 1.4 <i>dn:</i>	0.60 0.60 <u>ttenuat</u> <u>q Eveni</u> 70 <u>dBA</u> 81	-1.20 -1.20 -1.20 ion) mg Leq N 65.8 56.6 58.8 67.0 	-4 -4 -5 59.7 55.0 60.0 63.6 BA	60	0.0 0.0 0.0 0.0 68.4 68.4 72.0 0 dBA 375	000 000 000 100 100 100 100 100 100 100	0.000 0.000 <u>VEL</u> 69.0 63.7 68.5 72.4 <u>dBA</u> 07

Wednesday, June 05, 2019

	EU	MA-PD-77-109	LICHW/					DEI			
	FIN	MA-KD-11-100				EDICTIO		DEL			
Scenar	o: OY Withou	t Project				Project N	ame:	Goodr	nan III		
Road Nam	e: Citrus AV.					JOD INUR	nber:	12384			
Road Seymen	11. S/01-10 Ra	imps		1							
SITE	SPECIFIC IN	IPUT DATA				NO	ISE N	NODE	L INPUT	S	
Highway Data				5	Site Con	ditions (H	lard =	10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	32,009 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 A	Axles):	15		
Peak H	our Volume:	3,201 vehicles			He	avy Truck	s (3+ A	Axles):	15		
Ve	hicle Speed:	45 mph		1	Vehicle I	Mix					
Near/Far La	ne Distance:	88 feet		F	Vehi	cleType		Day	Evening	Night	Daily
Site Data						Au	tos:	77.5%	12.9%	9.69	% 95.52%
Bai	rier Height:	0.0 feet			Me	edium True	cks:	84.8%	4.9%	10.39	% 2.33%
Barrier Type (0-W	all. 1-Berm):	0.0			F	leavy Tru	cks:	86.5%	2.7%	10.89	% 2.15%
Centerline Dis	st. to Barrier:	66.0 feet			Noine Ce	uree Eler	(otion	o (in fe	o.4)		
Centerline Dist.	to Observer:	66.0 feet		-	voise sc	Autoor	auon	S (III 16	el)		
Barrier Distance	to Observer:	0.0 feet			Modius	Autos:	0.0	207			
Observer Height (Above Pad):	5.0 feet			Heave	II TTUCKS.	2	297	Grado Ar	liustmor	at: 0.0
Pa	ad Elevation:	0.0 feet			neav	y muchs.	0.0	004	Orade Ad	gusuner	1. 0.0
Roa	ad Elevation:	0.0 feet		L	Lane Equ	uivalent D	Distan	ce (in f	feet)		
1	Road Grade:	0.0%				Autos:	49.	447			
	Left View:	-90.0 degree	s		Mediur	n Trucks:	49.	268			
	Right View:	90.0 degree	S		Heav	y Trucks:	49.	285			
FHWA Noise Mod	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fresr	nel	Barrier At	ten Be	erm Atten
Autos:	68.46	3.02		0.03	3	-1.20		-4.71	0.	000	0.000
Medium Trucks:	79.45	-13.11		0.01	1	-1.20		-4.88	0.	000	0.000
Heavy Trucks:	84.25	-13.46		0.01	1	-1.20		-5.30	0.	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	tten	uation)						
VehicleType	Leq Peak Hou	ur Leq Day	Le	q Ev	/ening	Leq Ni	ght		Ldn	(CNEL
Autoor	70).2 E	6.8		66.6		60.5	5	69.	1	69.8
Autos.	70				F7 0		CC 7	7	64	2	64.4
Medium Trucks:	65	i.1 6	63.6		57.3		55.7		01.	2	
Medium Trucks: Heavy Trucks:	65 69	i.1 6 1.6 6	3.6 8.2		57.3 59.1		55.7 60.4	1	68.	7	68.9
Medium Trucks: Medium Trucks: Heavy Trucks: Vehicle Noise:	65 69 73	i.1 6 1.6 6	3.6 8.2 72.0		57.3 59.1 67.7		60.4 64.1	1	68. 72.	7 6	68.9 73.0
Mulos. Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	65 69 73 ce to Noise C	6.1 6 9.6 6 9.6 7 ontour (in feet)	33.6 38.2 72.0		57.3 59.1 67.7		60.4 64.1	1	68. 72.	7 6	68.9 73.0
Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	70 65 69 73 73 73	6.1 6 6.6 6 6.6 7 6.6 7	3.6 38.2 72.0	70 a	57.3 59.1 67.7	65 dE	60.4 64.1 8A	6	68. 72.	2 7 6 5	68.9 73.0
Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distanc	70 65 69 73 73 73	6.1 6 9.6 6 9.6 7 ontour (in feet)	33.6 38.2 72.0	70 a 99	57.3 59.1 67.7 /BA	65 dE 213	60.4 64.1 8A	6	68. 72. 0 dBA 458	2 7 6 5	68.9 73.0 5 dBA 987

	FH	WA-RD-77-108	HIGHW	VAYN	DISE PR	EDICT	ON MC	DEL			
Scenar	io: OY Withou	t Project				Project	Name:	Goodr	nan III		
Road Nam	e: Citrus Av.					Job N	umber:	12384			
Road Segme	nt: s/o Slover	Av.									
SITE	SPECIFIC IN	IPUT DATA				N	OISE	MODE	L INPUT	s	
Highway Data				S	ite Con	ditions	(Hard =	: 10, S	oft = 15)		
Average Daily	Traffic (Adt):	19,389 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	icks (2	Axles).	15		
Peak H	lour Volume:	1,939 vehicle	S		Hea	avy Truc	:ks (3+	Axles).	15		
Ve	hicle Speed:	40 mph		V	ehicle l	Nix					
Near/Far La	ne Distance:	48 feet		F	Vehi	cleType		Day	Evening	Night	Daily
Site Data						A	lutos:	77.5%	12.9%	9.6%	95.52%
Bai	rrier Heiaht:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	2.33%
Barrier Type (0-W	all, 1-Berm):	0.0			H	leavy Tr	ucks:	86.5%	2.7%	10.8%	2.15%
Centerline Dis	st. to Barrier:	46.0 feet			loise So	ource El	evatior	ıs (in f	eet)		
Centerline Dist.	to Observer:	46.0 feet				Autos	s: 0	000	,		
Barrier Distance	to Observer:	0.0 feet			Mediur	n Truck	. 2	297			
Observer Height (Above Pad):	5.0 feet			Hoav	v Trucks		004	Grade Ad	iustmen	.00
Pa	ad Elevation:	0.0 feet			neav	y mucho	s. 0	004	0/000/10	Juoumoni	. 0.0
Roa	ad Elevation:	0.0 feet		L	ane Equ	uivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%				Autos	s: 39	.560			
	Left View:	-90.0 degree	es		Mediur	n Trucks	s: 39	.336			
	Right View:	90.0 degree	es		Heav	y Trucks	s: 39	.358			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Be	m Atten
Autos:	66.51	1.35		1.42		-1.20		-4.63	0.0	000	0.000
Medium Trucks:	77.72	-14.78		1.46		-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	82.99	-15.13		1.46		-1.20		-5.47	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	' L	Leq Ev	ening	Leq	Night		Ldn	С	NEL
Autos:	68	3.1	66.2		64.4		58.	4	67.0	C	67.6
Medium Trucks:	63	3.2	61.7		55.3		53.	В	62.2	2	62.5
Heavy Trucks:	68	3.1	66.7		57.7		58.	9	67.3	3	67.4
Vehicle Noise:	71	.8	70.1		65.7		62.	3	70.8	3	71.1
Centerline Distant	ce to Noise C	ontour (in feet)								
				70 d	BA	65 (dBA		60 dBA	55	dBA
			Ldn:	52	_	11	12		241	ţ	520
		Ci	VEL:	55		11	18		254	ţ	548

	FH\	NA-RD-77-108	HIGHW	VAY NC	DISE P	REDICT	ION MO	DEL			
Scenai Road Nan Road Segme	rio: OY Withou ne: Citrus Av. ent: s/o Santa A	t Project Ana Av.				Project Job N	t Name: lumber:	Goodi 12384	man III		
SITE	SPECIFIC IN	IPUT DATA				P	NOISE	/IODE	L INPUTS	s	
Highway Data				Si	ite Cor	nditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	14,528 vehicl	es					Autos.	15		
Peak Hour	r Percentage:	10%			Me	edium Tr	ucks (2 A	Axles).	: 15		
Peak H	Hour Volume:	1,453 vehicle	s		He	eavy Tru	cks (3+ A	Axles).	: 15		
Ve	ehicle Speed:	40 mph		V	ehicle	Mix					
Near/Far La	ane Distance:	48 feet		Ē	Veh	nicleTvpe	e	Dav	Evenina	Niał	t Dailv
Site Data							Autos:	77.5%	6 12.9%	9.6	5% 95.52%
Ba	nrrier Height:	0.0 feet			М	edium T	rucks:	84.8%	6 4.9%	10.3	3% 2.33%
Barrier Type (0-V	Vall, 1-Berm):	0.0				Heavy T	rucks:	86.5%	6 2.7%	10.8	3% 2.15%
Centerline D	ist. to Barrier:	46.0 feet		N	oise S	ource E	levation	s (in f	eet)		
Centerline Dist.	to Observer:	46.0 feet				Auto	s: 0.0	000			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s: 2.1	297			
Observer Height	(Above Pad):	5.0 feet			Hear	vy Truck	s: 8.0	004	Grade Adj	iustme	ent: 0.0
P	ad Elevation:	0.0 feet			-	·					
Ro	ad Elevation:	0.0 feet		Lä	ane Eq	uivalen	t Distan	ce (in	teet)		
	Road Grade:	0.0%				Auto	is: 39.	560			
	Left View:	-90.0 degre	es		Mediu	m Truck	(S. 39.	336			
	Right View:	90.0 degre	es		Hea	у тиск	s: 39.	358			
FHWA Noise Mod	lel Calculation	S									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresr	iel 🛛	Barrier Atte	en l	Berm Atten
Autos:	66.51	0.10		1.42		-1.20		-4.63	0.0	00	0.000
Medium Trucks:	77.72	-16.03		1.46		-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	82.99	-16.38		1.46		-1.20		-5.47	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Hou	ur Leq Day	/ L	Leq Eve	ening	Leq	Night		Ldn		CNEL
Autos:	66	6.8	64.9		63.2		57.1		65.7		66.3
Medium Trucks:	61	.9	60.4		54.1		52.5		61.0)	61.2
Heavy Trucks:	- 6b - 70	1.9	65.4 68.9		56.4 64.4		57.7 61.1		69.5)	66.1
Contorlino Distan	no to Noiso C	ontour (in foo	4		04.4		01.1		00.0	·	00.0
Sentenine Distan	to to morae C	under (millee	/	70 dE	BA	65	dBA		60 dBA		55 dBA
			Ldn:	43			92		199		429
		C	NEL:	45		ę	97		210		452

		1A-110-11-100									
Scenar	io: OY Withou	t Project				Project N	lame: 0	Goodr	nan III		
Road Nam	e: Juniper Av.					Job Nu	mber: 1	2384			
Road Segme	nt: n/o Santa A	Ana Av.									
SITE	SPECIFIC IN	IPUT DATA				N	DISE N	IODE	L INPUT	s	
Highway Data				S	Site Con	ditions (l	Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	2,568 vehicle	es				A	Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Truo	:ks (2 A	xles):	15		
Peak H	lour Volume:	257 vehicles	6		Hea	avy Truck	is (3+ A	xles):	15		
Ve	hicle Speed:	40 mph		V	/ehicle N	<i>lix</i>					
Near/Far La	ne Distance:	14 feet			Vehi	cleType	1	Day	Evening	Night	Daily
Site Data						A	itos:	77.5%	12.9%	9.6%	95.52%
Bai	rrier Heiaht:	0.0 feet			Me	dium Tru	cks: 8	34.8%	4.9%	10.3%	2.33%
Barrier Type (0-W	/all, 1-Berm):	0.0			h	leavy Tru	cks: 8	36.5%	2.7%	10.8%	2.15%
Centerline Di	st. to Barrier:	34.0 feet			Voico Co	urco Ela	vations	(in f	not)		
Centerline Dist.	to Observer:	34.0 feet		~	voise 30	Autoo	vauons	00	eel)		
Barrier Distance	to Observer:	0.0 feet			Madium	Autos.	0.0	00			
Observer Height (Above Pad):	5.0 feet			Hear	Trucks.	2.2	.97	Grade Ad	iustmont	0.0
Pa	ad Elevation:	0.0 feet			neav	y mucks.	0.0	04	Orade Adj	usunoni	0.0
Roa	ad Elevation:	0.0 feet		L	ane Equ	ivalent l	Distanc	e (in	feet)		
	Road Grade:	0.0%				Autos:	33.6	645			
	Left View:	-90.0 degree	es		Mediun	n Trucks:	33.3	81			
	Right View:	90.0 degree	es		Heav	y Trucks:	33.4	07			
FHWA Noise Mod	el Calculation	s		_							
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten
VehicleType Autos:	REMEL 66.51	Traffic Flow -7.43	Distan	2.48	Finite	Road -1.20	Fresn	el -4.53	Barrier Atte 0.0	en Ber	m Atten 0.000
VehicleType Autos: Medium Trucks:	REMEL 66.51 77.72	Traffic Flow -7.43 -23.56	Distan	2.48 2.53	Finite	Road -1.20 -1.20	Fresn	el -4.53 -4.86	Barrier Atte 0.0 0.0	en Ber 000 000	m Atten 0.000 0.000
VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 66.51 77.72 82.99	Traffic Flow -7.43 -23.56 -23.91	Distan	2.48 2.53 2.52	Finite	Road -1.20 -1.20 -1.20	Fresn	el -4.53 -4.86 -5.67	Barrier Atte 0.0 0.0 0.0	en Ber 000 000 000	m Atten 0.000 0.000 0.000
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise	REMEL 66.51 77.72 82.99 e Levels (with	Traffic Flow -7.43 -23.56 -23.91 out Topo and	Distan barrier a	2.48 2.53 2.52	Finite	Road -1.20 -1.20 -1.20	Fresn	el -4.53 -4.86 -5.67	Barrier Atte 0.0 0.0 0.0	en Ber 000 000 000	m Atten 0.000 0.000 0.000
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hou	Traffic Flow -7.43 -23.56 -23.91 out Topo and Ir Leq Day	Distan	2.48 2.53 2.52 attent eq Ev	Finite	Road -1.20 -1.20 -1.20 Leq N	Fresn	el -4.53 -4.86 -5.67	Barrier Atte 0.0 0.0 0.0 Ldn	en Ber 000 000 000 000 Cl	m Atten 0.000 0.000 0.000
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos:	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hou 60	Traffic Flow -7.43 -23.56 -23.91 out Topo and Ir Leq Day .4	Distan	2.48 2.53 2.52 tteni eq Ev	Finite B B B C C C C C C C C C C C C C C C C	Road -1.20 -1.20 -1.20 <i>Leq N</i>	Fresn ight 50.6	el -4.53 -4.86 -5.67	Barrier Atte 0.0 0.0 0.0 0.0 0.0 59.3	en Ber 000 000 000 000 Cl	<u>m Atten</u> 0.000 0.000 0.000 <u>VEL</u> 59.9
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	REMEL 66.51 77.72 82.99 e Levels (with Leg Peak Hou 60 55	Traffic Flow -7.43 -23.56 -23.91 out Topo and r Leq Day .4	Distan	2.48 2.53 2.52 attent eq Ev	Finite	Road -1.20 -1.20 -1.20 Leq N	Fresn ight 50.6 46.1	el -4.53 -4.86 -5.67	Barrier Atte 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	en Ber 000 000 000 Cl 3	<u>m Atten</u> 0.000 0.000 0.000 <u>VEL</u> 59.9 54.8
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noist VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 66.51 77.72 82.99 e Levels (with Leg Peak Hou 60 55 60	Traffic Flow -7.43 -23.56 -23.91 out Topo and r Leq Day .4	Distan	2.48 2.53 2.52 attent eq Ev	Finite 1 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Road -1.20 -1.20 -1.20 Leg N	Fresh light 50.6 46.1 51.2	el -4.53 -4.86 -5.67	Barrier Atte 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 59.3 54.5 59.6	en Ber 000 000 000 000 Cl 3 5 5	<u>m Atten</u> 0.000 0.000 0.000 <u>VEL</u> 59.9 54.8 59.7
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noist VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hou 60 55 60 64 64	Traffic Flow -7.43 -23.56 -23.91 out Topo and rr Leq Day .4 .5 .4 .0	Distan	2.48 2.53 2.52 attenu eq Ev	Finite 3 3 2 uation) rening 56.7 47.6 50.0 58.0	Road -1.20 -1.20 -1.20 Leq N	Fresh ight 50.6 46.1 51.2 54.6	el -4.53 -4.86 -5.67	Barrier Atte 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	en Ber 000 000 000 Cl 3 5 5 5 1	m Atten 0.000 0.000 0.000 VEL 59.5 54.8 59.7 63.4
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmittigated Noiss VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distant	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hou 60 55 60 64 64	Traffic Flow -7.43 -23.56 -23.91 out Topo and Ir Leq Day .4 .5 .4 .0 Dontour (in feet)	Distan	2.48 2.53 2.52 attent eq Ev	Finite 3 2 uation) rening 56.7 47.6 50.0 58.0	Road -1.20 -1.20 -1.20 Leq N	Fresh light 50.6 46.1 51.2 54.6	el -4.53 -4.86 -5.67	Barrier Atte 0.0 0.0 0.0 0.0 0.0 59.3 54.5 59.6 63.1	en Ber 000 000 000 000 Cl 3 5 5	m Atten 0.000 0.000 0.000 VEL 59.9 54.8 59.7 63.4
VehicleType Autos: Medium Trucks: Heavy Trucks: VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hot 60 60 55 60 64 cce to Noise Co 60	Traffic Flow -7.43 -23.56 -23.91 out Topo and r Leq Day .4 .0 ontour (in feet)	Distan	2.48 2.53 2.52 attenu eq Ev	Finite 3 2 uation) rening 56.7 47.6 50.0 58.0 IBA	Road -1.20 -1.20 -1.20 Leq N	Fresh ight 50.6 46.1 51.2 54.6 BA	el -4.53 -4.86 -5.67	Barrier Attu 0.0 0.0 0.0 0.0 59.3 54.5 59.6 63.1	en Ber 000 000 000 Cl 3 5 5 5 5 5 5 5 5 5 5 5 5 5	m Atten 0.000 0.000 0.000 VEL 59.5 54.8 59.7 63.4 dBA
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hou 60 55 60 64 ce to Noise Co	Traffic Flow -7.43 -23.56 -23.91 out Topo and ir Leq Day .4 .5 .4 .0 Dontour (in feet)	Distan	2.48 2.53 2.52 <u>attent</u> eq Ev 70 d	Finite 3 2 uation) rening 56.7 47.6 50.0 58.0 ////////////////////////////////////	Road -1.20 -1.20 -1.20 Leq N 65 d 25	Fresh ight 50.6 46.1 51.2 54.6 BA	el -4.53 -4.86 -5.67	Barrier Attu 0.0 0.0 0.0 0.0 59.3 59.3 59.6 63.1 59.6 63.1 50 dBA 55	en Ber 000 000 000 000 CI 3 5 5 5 1 55 1	m Atten 0.000 0.000 0.000 VEL 59.5 54.8 59.7 63.4 dBA 17

Wednesday, June 05, 2019

	FHV	VA-RD-77-108	HIGH	WAY N	NOISE PI	REDICTIO	ON M	DDEL				
Scenario: Road Name: Road Segment:	OY Without Juniper Av. s/o Santa A	Project na Av.				Project I Job Nu	Vame: mber:	Goodr 12384	nan III			
SITE SP	ECIFIC IN	PUT DATA				N	DISE	MODE	L INPU	ГS		
Highway Data					Site Con	ditions (Hard	= 10, Se	oft = 15)			
Average Daily Tra Peak Hour Pe Peak Hou	affic (Adt): rcentage: r Volume:	2,925 vehicle 10% 293 vehicles	s		Me He	dium Tru avy Truck	cks (2 ks (3+	Autos: Axles): Axles):	15 15 15			
Vehic	le Speed:	40 mph			Vehicle	Mix						
Near/Far Lane	Vehicle Speed: 40 mph Near/Far Lane Distance: 14 feet Data Barrier Height: 0.0 feet rrier Type (0-Wall, 1-Berrn): 0.0 Centerline Dist. to Barrier: 34.0 feet 2enterline Dist. to Observer: 34.0 feet				Veh	icleType	T	Day	Evening	Nig	ht	Daily
Peak Hour Volume: 293 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 14 feet Ite Data Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 34.0 feet Barrier Distance to Observer: 34.0 feet Barrier Distance to Observer: 0.0 feet Barrier Distance to Observer: 0.0 feet Barrier Distance: 0.0 feet Barrier Distance: 0.0 feet Pad Elevation: 0.0 feet						A	utos:	77.5%	12.9%	9.	.6%	95.52%
Barrie	er Heiaht:	0.0 feet			M	edium Tru	icks:	84.8%	4.9%	10	.3%	2.33%
Barrier Type (0-Wall,	1-Berm):	0.0			ŀ	leavy Tru	icks:	86.5%	2.7%	10	.8%	2.15%
Centerline Dist.	to Barrier:	34.0 feet		-	Noise So	ource Ele	vatio	ns (in f	eet)			
Centerline Dist. to	Observer:	34.0 feet		F		Autos		.000				
Barrier Distance to	Observer:	0.0 feet			Mediu	n Trucks	. 2	297				
Observer Height (Ab	ove Pad):	5.0 feet			Heav	v Trucks:	- 8	.004	Grade A	djustrr	nent:	0.0
Pad	Elevation:	0.0 feet		-								
Road	Elevation:	0.0 feet		-	Lane Eq	uivalent	Dista	nce (in	feet)			
Roa	ad Grade:	0.0%				Autos:	33	3.645				
R	Left View: ight View:	-90.0 degree 90.0 degree	s s		Mediui Heav	m Trucks. y Trucks:	: 33 : 33	8.381 8.407				
FHWA Noise Model (Calculation	5										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier A	tten	Beri	m Atten
Autos:	66.51	-6.86		2.4	8	-1.20		-4.53	0	.000		0.00
Medium Trucks:	77.72	-22.99		2.5	3	-1.20		-4.86	0	.000		0.00
Heavy Trucks:	82.99	-23.34		2.5	2	-1.20		-5.67	0	.000		0.00
Unmitigated Noise L	evels (with	out Topo and I	barrie	er atter	nuation)							
VehicleType Le	eq Peak Hou	r Leq Day		Leq E	vening	Leq N	light		Ldn		CI	VEL
Autos:	60.	.9 5	9.0		57.3		51	.2	59	.8		60.4
Medium Trucks:	56.	.1 5	4.5		48.2		46	.6	55	.1		55.
Heavy Trucks:	61.	.0 5	9.6		50.5		51	.8	60	.1		60.
Vehicle Noise:	64	.6 6	63.0		58.5		55	.2	63	.6		64.
Centerline Distance	to Noise Co	ontour (in feet)										
				70	dBA	65 d	BA	(60 dBA		55	dBA
		1	.dn:	1	3	28	5		59		1:	28
		CN	IFI :	1	1	20			63		10	35

	FH	WA-RD-77-10	8 HIGF	HWAY N	IOISE PI	REDICTIO	N MODI	EL			
Scenar Road Nam Road Segme	io: OY Withou e: Sierra Av. nt: n/o Slover	ut Project Av.				Project N Job Nur	ame: G nber: 12	oodman II 2384	I		
SITE	SPECIFIC II	NPUT DATA				NO	ISE MO	DDEL IN	PUTS		
Highway Data					Site Con	ditions (H	lard = 1	0, Soft = 1	15)		
Average Daily	Traffic (Adt):	62,368 vehic	les				AL	utos: 15	5		
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 Ax	les): 15	5		
Peak H	lour Volume:	6,237 vehicle	es		He	avy Truck	s (3+ Ax	les): 15	5		
Ve	hicle Speed:	40 mph			Vehicle	Mix					
Near/Far La	ne Distance:	88 feet		F	Veh	icleTvpe	D	av Eve	nina N	iaht	Dailv
Site Data						Au	tos: 7	7.5% 12	.9%	9.6%	95.52%
Bai	rrier Height	0.0 feet			Me	edium True	cks: 84	4.8% 4	.9% 1	0.3%	2.33%
Barrier Type (0-W	/all, 1-Berm):	0.0			ŀ	leavy Tru	cks: 80	6.5% 2	.7% 1	0.8%	2.15%
Centerline Dis	st. to Barrier:	66.0 feet		-	Noise Sr	ource Elev	ations	(in feet)			
Centerline Dist.	to Observer:	66.0 feet		-		Autos:	0.00	0			-
Barrier Distance	to Observer:	0.0 feet			Mediu	n Trucks:	2 29	7			
Observer Height (Above Pad):	5.0 feet			Heav	v Trucks:	8.00	 14 Grad	le Adius	ment:	0.0
Pa	ad Elevation:	0.0 feet		_		,					
Roa	ad Elevation:	0.0 feet		1	Lane Eq	uivalent D	Distance	e (in feet)			
	Road Grade:	0.0%				Autos:	49.44	17			
	Left View:	-90.0 degre	es		Mediu	m Trucks:	49.26	68			
	Right View:	90.0 degre	es		Heav	y Trucks:	49.28	35			
FHWA Noise Mod	el Calculation	15									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresne	l Barri	er Atten	Berr	n Atten
Autos:	66.51	6.42	2	-0.0	3	-1.20	-4	1.71	0.000		0.000
Medium Trucks:	77.72	-9.70)	-0.0	1	-1.20	-4	1.88	0.000		0.000
Heavy Trucks:	82.99	-10.05	5	-0.0	1	-1.20	-5	5.30	0.000		0.000
Unmitigated Noise	e Levels (with	hout Topo and	l barri	er atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq E	vening	Leq Ni	ght	Ldn		C٨	IEL
Autos:	7'	1.7	69.8		68.0		62.0		70.6		71.2
Medium Trucks:	66	6.8	65.3		58.9		57.4		65.9		66.1
Heavy Trucks:	7'	1.7	70.3		61.3		62.5		70.9		71.0
Vehicle Noise:	75	5.4	73.7		69.3		65.9		74.4		74.8
Centerline Distant	ce to Noise C	ontour (in fee	t)								
				70 0	dBA	65 dE	BA	60 dB	A	55 (dBA
			Ldn:	13	30	280		603		1,2	98
		C	NEL:	13	37	295		636		1,3	70

	FH	WA-RD-77-1	08 HIGI	HWAY N	IOISE P	REDICTIC	N MODE	EL			
Scenan Road Nam Road Segmei	io: OY Withou ne: Sierra Av. nt: s/o Slover	ıt Project Av.				Project N Job Nui	lame: Go nber: 12	odman III 384			
SITE	SPECIFIC IN	VPUT DATA	4			NC	DISE MO	DEL INP	UTS		
Highway Data				3	Site Cor	nditions (H	lard = 10	0, Soft = 1	5)		
Average Daily	Traffic (Adt):	40,332 vehi	cles				AL	tos: 15			
Peak Hour	Percentage:	10%			Me	edium Truc	ks (2 Ax	les): 15			
Peak H	lour Volume:	4,033 vehic	les		He	avy Truck	s (3+ Ax	les): 15			
Ve	hicle Speed:	50 mph		5	Vehicle	Mix					
Near/Far La	ne Distance:	88 feet		F	Veh	nicleType	D	av Even	ina Ni	aht	Dailv
Site Data						AL	tos: 77	7.5% 12.	9% 9	9.6%	95.52%
Bai	rrier Heiaht:	0.0 feet			М	edium Tru	cks: 84	4.8% 4.	9% 10	0.3%	2.33%
Barrier Type (0-W	/all, 1-Berm):	0.0				Heavy Tru	cks: 86	6.5% 2.	7% 10	0.8%	2.15%
Centerline Dis	st. to Barrier:	66.0 feet			Noise S	ource Ele	vations	(in feet)			
Centerline Dist.	to Observer:	66.0 feet		Ľ.	10.00 0	Autos:	0.00	0			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks:	2 29	7			
Observer Height (Above Pad):	5.0 feet			Hear	w Trucks:	8.00	, ⊿ Grade	e Adiusti	ment:	0.0
Pa	ad Elevation:	0.0 feet		L	1100	<i>y maono.</i>	0.00				
Roa	ad Elevation:	0.0 feet		1	Lane Eq	uivalent L	Distance	(in feet)			
	Road Grade:	0.0%				Autos:	49.44	7			
	Left View:	-90.0 deg	rees		Mediu	m Trucks:	49.26	8			
	Right View:	90.0 deg	rees		Hear	vy Trucks:	49.28	5			
FHWA Noise Mode	el Calculation	15									
VehicleType	REMEL	Traffic Flow	/ Di	stance	Finite	Road	Fresnel	Barrie	r Atten	Bern	n Atten
Autos:	70.20	3.5	6	-0.03	3	-1.20	-4	.71	0.000		0.000
Medium Trucks:	81.00	-12.5	57	-0.01	1	-1.20	-4	.88	0.000		0.000
Heavy Trucks:	85.38	-12.9)1	-0.01	1	-1.20	-5	.30	0.000		0.000
Unmitigated Noise	e Levels (with	nout Topo an	ıd barri	ier atten	uation)						
VehicleType	Leq Peak Ho	ur Leq D	ay	Leq E	/ening	Leq N	ight	Ldn		CN	EL
Autos:	72	2.5	70.6		68.9		62.8		71.4		72.0
Medium Trucks:	67	7.2	65.7		59.4		57.8		66.3		66.5
Heavy Trucks:	71	1.3	69.8		60.8		62.0		70.4		70.5
Vehicle Noise:	75	5.6	74.0		69.9		66.1		74.6		75.0
Centerline Distant	ce to Noise C	ontour (in fe	et)		-						
			L	70 c	1BA	65 di	BA	60 dBA		55 c	IBA
			Ldn:	13	35	290)	625		1,3	46
			CNEL:	14	13	307	,	662		1,4	27

	FHW	A-RD-77-108	HIGHW	AY NOI	SE PF	REDICTIC		DEL _			
Scenari	p: OY Without	Project				Project N	ame: 0	Goodn	nan III		
Road Nam	e: Sierra Av.					Job Nu	nber: 1	2384			
Road Segmen	it: s/o Santa Ai	na Av.									
SITES	SPECIFIC IN	PUT DATA				NC	ISE N	ODE		S	
Highway Data				Site	e Con	ditions (F	lard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	37,429 vehicle	s				A	utos:	15		
Peak Hour	Percentage:	10%			Mee	dium Truc	ks (2 A	xles):	15		
Peak H	our Volume:	3,743 vehicles			Hea	avy Truck	s (3+ A	xles):	15		
Vel	nicle Speed:	50 mph		Vel	nicle I	Mix					
Near/Far Lar	ne Distance:	88 feet			Vehi	icleTvpe		Dav	Evenina	Niaht	Dailv
Site Data						AL	tos:	7.5%	12.9%	9.6%	95.52%
Bar	rier Height	0.0 feet			Me	edium Tru	cks: 8	34.8%	4.9%	10.3%	2.33%
Barrier Type (0-W	all 1-Berm):	0.0			F	leavy Tru	cks: 8	36.5%	2.7%	10.8%	2.15%
Centerline Dis	t. to Barrier:	66.0 feet									
Centerline Dist. t	o Observer:	66.0 feet		NO	se So	ource Ele	vations	(In fe	eet)		
Barrier Distance t	o Observer:	0.0 feet				Autos:	0.0	00			
Observer Height ()	Above Pad):	5.0 feet		Λ	neaiur	n Trucks:	2.2	97	Grado Ad	iustmont	
Pa	d Elevation:	0.0 feet			Heav	y Trucks:	8.0	04	Graue Auj	usunem.	0.0
Roa	d Elevation:	0.0 feet		Lar	ne Equ	uivalent I	Distanc	e (in i	feet)		
F	Road Grade:	0.0%				Autos:	49.4	47			
	Left View:	-90.0 degree	s	٨	<i>Nediur</i>	n Trucks:	49.2	68			
	Right View:	90.0 degree	s		Heav	y Trucks:	49.2	85			
FHWA Noise Mode	el Calculations										
VehicleType	REMEL	Traffic Flow	Distar	ce	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten
Autos:	70.20	3.24		-0.03		-1.20		4.71	0.0	000	0.000
Medium Trucks:	81.00	-12.89		-0.01		-1.20		4.88	0.0	000	0.000
Heavy Trucks:	85.38	-13.24		-0.01		-1.20		5.30	0.0	000	0.000
Unmitigated Noise	Levels (witho	out Topo and I	oarrier a	ttenua	tion)						
VehicleType	Leq Peak Hou	r Leq Day	Le	eq Even	ing	Leq N	ight		Ldn	CI	VEL
Autos:	72.	2 7	0.3		68.5		62.5		71.1		71.7
Medium Trucks:	66.	96	5.4		59.0		57.5		66.0)	66.2
Heavy Trucks:	70.	96	9.5		60.5		61.7		70.1		70.2
Vehicle Noise:	75.	3 7	3.6		69.6		65.8		74.3	3	74.7
	a ta Najaa Ca	ntour (in feet)									
Centerline Distanc	e lo noise co		1	70 -10	· /	05 -11	24	6	OdPA	55	dDA
Centerline Distanc	e lo noise co			70 aBA	4	65 di	D/A	U	U UDA	55	UDA
Centerline Distanc	e to Noise Co	L	.dn:	128	•	276	;	U	595	1,2	281

Wednesday, June 05, 2019

Wednesday, June 05, 2019

	FHV	VA-RD-77-108	HIGHW	AY N	NOISE PI	REDICTI	ON MO	DEL			
Scenario: C Road Name: S Road Segment: s	Y Without ierra Av. /o Jurupa	Project Av.				Project Job N	Name: umber:	Goodn 12384	nan III		
SITE SPE	CIFIC IN	PUT DATA				N	OISE	MODE	l input	'S	
Highway Data					Site Con	ditions	(Hard =	= 10, So	oft = 15)		
Average Daily Traff	ic (Adt):	29,166 vehicle	s					Autos:	15		
Peak Hour Perc	entage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak Hour	/olume:	2,917 vehicles			He	avy Truc	:ks (3+	Axles):	15		
Vehicle	Speed:	55 mph		-	Vohiclo	Mix					
Near/Far Lane D	istance:	88 feet		-	Venicie	icleType		Dav	Evenina	Niaht	Daily
Site Data					1011		utos.	77.5%	12.9%	9.6%	6 95 52%
Damian	I la la la la	0.0 ()			M	, edium Ti	ucks:	84.8%	4.9%	10.3%	6 2.33%
Barrier	Height:	0.0 feet			ŀ	Heavy Tr	ucks:	86.5%	2.7%	10.8%	6 2.15%
Centerline Dist to	Barriar	66.0 feet									
Centerline Dist. to O	banner: hserver:	66.0 feet		_	Noise So	ource El	evatio	ns (in fe	eet)		
Barrier Distance to O	hserver:	0.0 feet				Autos	s: 0	.000			
Observer Height (Aboy	/e Pad):	5.0 feet			Mediu	m Truck	s: 2	.297			
Pad El	evation:	0.0 feet			Heav	y Trucks	8: 8	.004	Grade Ad	ljustmen	t: 0.0
Road El	evation:	0.0 feet			Lane Eq	uivalent	Distar	nce (in i	feet)		
Road	Grade:	0.0%				Autos	s: 49	.447			
Le	eft View:	-90.0 degree	s		Mediu	m Truck	s: 49	.268			
Rigi	ht View:	90.0 degree	s		Heav	y Truck	s: 49	.285			
FHWA Noise Model Ca	lculation	S									
VehicleType R	EMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	nel	Barrier At	ten Be	erm Atten
Autos:	71.78	1.74		-0.0	3	-1.20		-4.71	0.	000	0.00
Medium Trucks:	82.40	-14.39		-0.0	1	-1.20		-4.88	0.	000	0.000
Heavy Trucks:	86.40	-14.74		-0.0	1	-1.20		-5.30	0.	000	0.00
Unmitigated Noise Lev	els (with	out Topo and	barrier	atter	nuation)						
VehicleType Leq	Peak Hou	r Leq Day	L	.eq E	vening	Leq	Night		Ldn	C	ONEL
Autos:	72.	.3 7	0.4		68.6		62.	6	71.	2	71.8
Medium Trucks:	66.	.8 6	35.3		58.9		57.	4	65.	9	66.
Heavy Trucks:	70.	5 6	69.0		60.0		61.	2	69.	6	69.
Vehicle Noise:	75.	.2	73.5		69.6		65.	7	74.	2	74.
Contorlino Distanco to	Noise Co	ntour (in feet)									
Centernine Distance to	110100 00	, ,									
Centernine Distance to	10.00 00	,		70	dBA	65	dBA	6	60 dBA	55	5 dBA
Centenine Distance to	10.00 00		dn:	70 12	dBA 25	65 2	dBA 70	e	50 dBA 581	55	5 dBA ,252

Scenario: OY Without Project Road Name: Slover Av. Project Name: Goodman III Job Number: 12384 Road Segment: wlo Sierra Av. Job Number: 12384 SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS Highway Data Site Conditions (Hard = 10, Soft = 15) Average Daily Traffic (Adt): 23,939 vehicles Peak Hour Volume: 2,334 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 59 feet Autos: 15 Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Vehicle Mix Vehicle Source Elevations (in feet) Centerline Dist. to Barrier: 52.0 feet Barrier Distance to Observer: 0.0 feet Road Elevation: 0.0 feet Noise Source Elevations (in feet) Noise Source Elevations (in feet) Road Elevation: 0.0 feet Noise Garde Adjustment: 0.0
SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS Highway Data Site Conditions (Hard = 10, Soft = 15) Average Daily Traffic (Adt): 23,939 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,394 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 59 feet Site Data Autos: Barrier Height: 0.0 feet Barrier Height: 0.0 feet Centerline Dist. to Barrier: 52.0 feet Observer: 5.0 feet Pad Elevation: 0.0 feet Rarie Pleight: 0.0 feet Pad Elevation: 0.0 feet Rade Elevation: 0.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet
Site Conditions (Hard = 10, Soft = 15) Average Daily Traffic (Adt): 23,939 vehicles Autos: 15 Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15 Peak Hour Volume: 2,394 vehicles Medium Trucks (2 Axles): 15 Vehicle Speed: 45 mph Vehicle Mix Vehicle Mix Site Data Autos: 77.5% 12.9% 9.6% Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% 2.33 Barrier Type (0-Wall, 1-Berm): 0.0 feet Meavy Trucks: 86.5% 2.7% 10.8% 2.15 Centerline Dist. to Barrier: 5.0 feet Noise Source Elevations (in feet) Autos: 0.00 Barrier Distance to Observer: 0.0 feet Medium Trucks: 8.004 Grade Adjustment: 0.0 Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet) 0.0 Lane Equivalent Distance (in feet)
Average Daily Traffic (Ad): 23.939 vehicles Autos: 15 Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15 Peak Hour Volume: 2,394 vehicles Medium Trucks (2 Axles): 15 Vehicle Speed: 45 mph Vehicle Type Day Evening Night Daily Site Data Autos: 77.5% 12.9% 9.6% 95.52 Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% 2.33 Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 52.0 feet Molse Source Elevations (in feet) Centerline Dist. to Observer: 0.0 feet Autos: 0.0 Medium Trucks: 2.297 Observer Height (Above Pad): 5.0 feet Medium Trucks: 8.004 Grade Adjustment: 0.0 Road Elevation: 0.0 feet Lane Equivalent Distance (in feet) Lane Equivalent Distance (in feet)
Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15 Peak Hour Volume: 2,394 vehicles Heavy Trucks (3 Axles): 15 Vehicle Speed: 45 mph Vehicle Type Day Evening Night Daily Site Data Autos: 77.5% 12.9% 9.6% 95.52 Barrier Type (0-Wall, 1-Berm): 0.0 16 Medium Trucks: 84.9% 4.9% 10.3% 2.35 Centerline Dist. to Barrier: 52.0 feet Moles Source Elevations (in feet) 10.8% 2.15 Centerline Dist. to Observer: 0.0 feet Autos: 0.00 Medium Trucks: 2.297 Observer Height (Above Pad): 5.0 feet Autos: 0.00 Medium Trucks: 8.004 Grade Adjustment: 0.0 Road Elevation: 0.0 feet Lane Equivalent Distance (in feet) 10.9 10.9 10.9
Peak Hour Volume: 2,394 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 59 feet Site Data Autos: 77.5% 12.9% Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Doserver: 5.0 feet Barrier Distance to Observer: 0.0 feet Barrier Distance to Observer: 0.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet
Vehicle Speed: 45 mph Near/Far Lane Distance: 59 feet Site Data Autos: Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist to Barrier: 52.0 feet Barrier Distance to Observer: 0.0 feet Barrier Distance to Observer: 0.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet
Near/Far Lane Distance: 59 feet VehicleType Day Evening Night Daily Site Data Autos: 77.5% 12.9% 9.6% 95.52 Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% 2.33 Barrier Type (0-Wall, 1-Berm): 0.0 10.8% 2.15 Medium Trucks: 86.5% 2.7% 10.8% 2.15 Centerline Dist. to Observer: 52.0 feet Autos: 0.00 Barrier Distance to Observer: 0.0 feet Autos: 0.00 Medium Trucks: 2.297 Medium Trucks: 8.004 Grade Adjustment: 0.0 Deavy Trucks: 8.004 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Lane Equivalent Distance (in feet)
Site Data Autos: 77.5% 12.9% 9.6% 95.52 Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% 2.33 Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5% 2.7% 10.8% 2.33 Centerline Dist. to Diserver: 52.0 feet Noise Source Elevations (in feet) Autos: 0.00 Barrier Distance to Observer: 0.0 feet Autos: 0.000 Medium Trucks: 2.297 Observer Height (Above Pad): 5.0 feet Heavy Trucks: 8.004 Grade Adjustment: 0.0 Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet) Lane Equivalent Distance (in feet)
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist, to Barrier: 52.0 feet Barrier Distance to Observer: 0.0 feet Deserver: 5.0 feet Parrier Distance to Observer: 0.0 feet Observer: 0.0 feet Parrier Distance to Observer: 0.0 feet Parrier Distance to Observer: 0.0 feet Road Elevation: 0.0 feet Road Elevation: 0.0 feet
Barrier Type (0-Wall, 1-Jearm): 0.0 Heavy Trucks: 86.5% 2.7% 10.8% 2.15 Centerline Dist. to Barrier: 52.0 feet Noise Source Elevations (in feet) Centerline Dist. to Observer: 0.0 feet Autos: 0.00 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 Road Elevation: 0.0 feet Lane Equivalent Distance (in feet) 1.0
Centerline Dist. to Barrier: 52.0 feet Noise Source Elevations (in feet) Centerline Dist. to Observer: 52.0 feet Autos: 0.000 Barrier Distance to Observer: 0.0 feet Medium Trucks: 2.297 Observer Height (Above Pad): 5.0 feet Heavy Trucks: 8.004 Grade Adjustment: 0.0 Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet)
Centerline Dist. to Observer: 52.0 feet Autos:: 0.000 Barrier Distance to Observer: 0.0 feet Medium Trucks: 2.297 Observer Height (Above Pad): 5.0 feet Heavy Trucks: 8.004 Grade Adjustment: 0.0 Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet) Lane Equivalent Distance (in feet)
Barrier Distance to Observer: 0.0 feet Network Observer Height (Above Pad): 5.0 feet Medium Trucks: 2.297 Pad Elevation: 0.0 feet Heavy Trucks: 8.004 Grade Adjustment: 0.0 Road Elevation: 0.0 feet Lane Equivalent Distance (in feet)
Observer Height (Above Pad): 5.0 feet Heavy Trucks: 2.237 Pad Elevation: 0.0 feet Heavy Trucks: 8.004 Grade Adjustment: 0.0 Road Elevation: 0.0 feet Lane Equivalent Distance (in feet)
Pad Elevation: 0.0 feet Court Plane Description Road Elevation: 0.0 feet Lane Equivalent Distance (in feet)
Road Elevation: 0.0 feet Lane Equivalent Distance (in feet)
Road Grade: 0.0% Autos: 43.113
Left View: -90.0 degrees Medium Trucks: 42.908
Right View: 90.0 degrees Heavy Trucks: 42.928
FHWA Noise Model Calculations
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atter
Autos: 68.46 1.75 0.86 -1.20 -4.66 0.000 0.0
Medium Trucks: 79.45 -14.37 0.89 -1.20 -4.87 0.000 0.0
Heavy Trucks: 84.25 -14.72 0.89 -1.20 -5.41 0.000 0.0
Unmitigated Noise Levels (without Topo and barrier attenuation)
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL
Autos: 69.9 68.0 66.2 60.2 68.8 65
Medium Trucks: 64.8 63.3 56.9 55.4 63.8 64
Heavy Trucks: 69.2 67.8 58.8 60.0 68.4 68
Vehicle Noise: 73.2 71.6 67.3 63.8 72.3 72
Centerline Distance to Noise Contour (in feet)
70 dBA 65 dBA 60 dBA 55 dBA
Ldn: 74 158 341 736
CNEL: 78 168 361 778

	FH\	VA-RD-77-108	HIGHW	AY NO	DISE P	REDICT	ION MO	DEL			
Scena Road Nar Road Segme	Scenario: OY Without Project Road Name: Santa Ana Av. Road Segment: elo Citrus Av. SITE SPECIFIC INPUT DATA phway Data						t Name: lumber:	Good 12384	man III		
SITE	SPECIFIC IN	IPUT DATA				P	NOISE N	/IODE	L INPUT	s	
Highway Data				S	ite Cor	nditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	8,143 vehicl	es					Autos	15		
Peak Hou	r Percentage:	10%			Me	edium Tr	ucks (2 A	(xles	: 15		
Peak I	Hour Volume:	814 vehicle	s		He	eavy Tru	cks (3+ A	(xles	: 15		
Ve	ehicle Speed:	40 mph		V	ehicle	Mix					
Near/Far La	ane Distance:	48 feet			Veh	nicleTvpe	e	Dav	Evenina	Niał	t Dailv
Site Data							Autos:	77.5%	6 12.9%	9.6	5% 95.52%
Ba	nrrier Height:	0.0 feet			М	edium T	rucks:	84.8%	6 4.9%	10.3	3% 2.33%
Barrier Type (0-V	Vall, 1-Berm):	0.0				Heavy T	rucks:	86.5%	6 2.7%	10.8	3% 2.15%
Centerline D	ist. to Barrier:	46.0 feet		N	oise S	ource E	levation	s (in i	eet)		
Centerline Dist.	to Observer:	46.0 feet				Auto	s: 0.0	000	,		
Barrier Distance	Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet					m Truck	s: 2.1	297			
Observer Height	Observer Height (Above Pad): 5.0 feet					vy Truck	s: 8.0	004	Grade Adj	iustme	ent: 0.0
F	Pad Elevation: 0.0 feet				-	·					
Ro	ad Elevation:	0.0 feet		Li	ane Eq	uivalen	t Distan	ce (in	teet)		
	Road Grade:	0.0%				Auto	is: 39.	560			
	Left View:	-90.0 degre	es		Mediu	m Truck	(S. 39.	336			
	Right View:	90.0 degre	es		Hea	у тиск	s: 39.	358			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresr	iel	Barrier Atte	en l	Berm Atten
Autos:	66.51	-2.42		1.42		-1.20		-4.63	0.0	00	0.000
Medium Trucks:	77.72	-18.54		1.46		-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	82.99	-18.89		1.46		-1.20		-5.47	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier	attenu	ation)			1			
Venicle I ype	Leq Peak Hou	Ir Leq Day		eq Eve	ening	Leq	Night		Ldn		CNEL
Autos.	64	.3	62.4		60.7		54.6		63.2		63.8
Heavy Trucks	59	4	57.9 62.0		51.0		50.0	,	00.0		50.7
Vehicle Noise.	68	.4	66.4		61.9		58.5	;	67.0)	67.4
Centerline Distan	ce to Noise C	ontour (in feet)								-
L				70 dE	BA	65	dBA		60 dBA		55 dBA
			Ldn:	29		6	63		135		291
		C	VEL:	31		6	66		143		307

	FHV	VA-RD-77-108	HIGHW	AY N	OISE PF	REDICTIO		DEL _			
Scenar	io: OY Without	Project				Project I	Vame: 0	Goodm	an III		
Road Nam	e: Santa Ana	Av.				Job Nu	mber: 1	2384			
Road Segme	nt: e/o Juniper	Av.									
SITE	SPECIFIC IN	PUT DATA				N	DISE N	ODE	INPUTS	S	
Highway Data				s	Site Con	ditions (Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	11,082 vehicle	es				A	utos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 A	xles):	15		
Peak H	lour Volume:	1,108 vehicles	6		He	avy Truci	ks (3+ A	xles):	15		
Ve	hicle Speed:	40 mph		V	ehicle l	Mix					
Near/Far La	ne Distance:	48 feet			Veh	icleType	1	Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	95.52%
Ba	rrier Height	0.0 feet			Me	edium Tru	icks: 8	34.8%	4.9%	10.3%	2.33%
Barrier Type (0-W	(all 1-Rerm):	0.0			ŀ	leavy Tru	icks: 8	36.5%	2.7%	10.8%	2.15%
Centerline Di	st. to Barrier:	46.0 feet		_							
Centerline Dist.	to Observer:	46.0 feet		^	loise Sc	burce Ele	vations	(In fe	et)		
Barrier Distance	to Observer:	0.0 feet				Autos	0.0	00			
Observer Height	Above Pad):	5.0 feet			Mediur	m Trucks	2.2	97	Grada Adi	ustmont	
P	ad Elevation:	0.0 feet			Heav	y Trucks	8.0	04	Graue Auj	usunem.	0.0
Roi	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distanc	e (in f	eet)		
	Road Grade:	0.0%				Autos	39.5	60			
	Left View:	-90.0 degree	es		Mediur	m Trucks	39.3	36			
	Right View:	90.0 degree	es		Heav	y Trucks	39.3	58			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distan	ice	Finite	Road	Fresn	el i	Barrier Atte	en Ber	m Atten
Autos:	66.51	-1.08		1.42		-1.20		4.63	0.0	00	0.000
Medium Trucks:	77.72	-17.21		1.46		-1.20		4.87	0.0	00	0.000
Heavy Trucks:	82.99	-17.56		1.46		-1.20		5.47	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier a	attenu	uation)						
VehicleType	Leq Peak Hou	r Leq Day	Le	eq Ev	ening	Leq N	light		Ldn	CI	VEL
Autos:	65	.7	63.8		62.0		55.9		64.6		65.2
Medium Trucks:	00	.8	59.3		52.9		51.4		59.8		60.0
modium muono.	60				EE 2		56 F		64.8		65.0
Heavy Trucks:	60 65	.7	64.3		55.Z		30.3				
Heavy Trucks: Vehicle Noise:	65 69	.7 .3	64.3 67.7		63.2		59.9		68.4		68.7
Heavy Trucks: Vehicle Noise: Centerline Distan	65 69 ce to Noise Co	.7 .3 ontour (in feet	64.3 67.7		63.2		59.9		68.4		68.7
Heavy Trucks: Vehicle Noise: Centerline Distan	60 65 69 ce to Noise Co	.7 .3 ontour (in feet	64.3 67.7)	70 d	63.2 BA	65 a	59.9 BA	6	68.4 0 dBA	55	68.7 dBA
Heavy Trucks: Vehicle Noise: Centerline Distan	60 65 69 ce to Noise Co	.7 .3 ontour (in feet	64.3 67.7) Ldn:	70 d. 36	63.2 BA	65 d 77	59.9 BA	6	68.4 <i>0 dBA</i> 166	55	68.7 dBA 58

Wednesday, June 05, 2019

	FHW	/A-RD-77-108 H	IGHWA	Y N	OISE PF	REDICTI	ON MO	DDEL			
Scenario Road Name Road Segmen	CY Without Santa Ana A c e/o Sierra A	Project Av. v.				Project Job N	Name: umber:	Goodn 12384	nan III		
SITE S	PECIFIC IN	PUT DATA				N	OISE	MODE	l input	s	
Highway Data				S	Site Con	ditions	(Hard =	= 10, So	oft = 15)		
Average Daily T Peak Hour F Peak Ho	raffic (Adt): Percentage: ur Volume:	7,608 vehicles 10% 761 vehicles			Me He	dium Tru avy Truc	icks (2 ks (3+	Autos: Axles): Axles):	15 15 15		
Near/Far I an	o Distanco:	40 mpn 48 feet		V	/ehicle l	Mix					
iveai/i ai Laii	e Distance.	40 1661			Veh	icleType		Day	Evening	Night	Daily
Site Data Barr Barrier Type (0-Wa	ier Height: II, 1-Berm):	0.0 feet 0.0			Me F	م dium Tr leavy Tr	utos: ucks: ucks:	77.5% 84.8% 86.5%	12.9% 4.9% 2.7%	9.6% 10.3% 10.8%	95.52% 2.33% 2.15%
Centerline Dist	to Barrier:	46.0 feet			loise Sc	ource Fl	evatio	ns (in fi	eet)		
Centerline Dist. to Barrier Distance to Observer Height (A Par	o Observer: o Observer: bove Pad): d Elevation:	46.0 feet 0.0 feet 5.0 feet			Mediur Heav	Autos n Trucks y Trucks	n: 0 n: 2 n: 8	.000 .297 .004	Grade Ad	ljustmen	t: 0.0
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	nce (in	feet)		
R	oad Grade: Left View: Right View:	0.0% -90.0 degrees 90.0 degrees			Mediui Heav	Autos n Trucks y Trucks	n: 39 n: 39 n: 39	.560 .336 .358			
FHWA Noise Mode	Calculations	;									
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fres	nel	Barrier At	ten Be	rm Atten
Autos: Medium Trucks: Heavy Trucks:	66.51 77.72 82.99	-2.71 -18.84 -19.19		1.42 1.46 1.46		-1.20 -1.20 -1.20		-4.63 -4.87 -5.47	0. 0. 0.	000 000 000	0.00 0.00 0.00
Unmitigated Noise	Levels (with	out Topo and ba	nrier a	tteni	uation)						
VehicleType I	ea Peak Hou	r Lea Dav	Le	a Ev	enina	Lea	Viaht		Ldn	0	NEL
Autos:	64.	0 62	.1		60.4		54.	3	62.	9	63.
Medium Trucks:	59.	1 57	.6		51.3		49.	7	58.	2	58.
Heavy Trucks:	64.	1 62	.6		53.6		54.	9	63.	2	63.3
Vehicle Noise:	67.	7 66	.1		61.6		58.	.3	66.	7	67.
	to Noise Co	ntour (in feet)									
Centerline Distance											
Centerline Distance	. 10 110/30 00			70 d	BA	65 (1BA	6	60 dBA	55	5 dBA
Centerline Distance	. 10 110/30 00	Lo	In:	70 d 28	BA 3	65 d	1BA 0	e	60 dBA 129	55	5 dBA 279

	FH\	NA-RD-77-108	HIGHW	AY NO	OISE PF	REDICT		ODEL			
Scenar Road Nam Road Segmei	io: OY Withou e: Jurupa Av. nt: w/o Cherry	t Project Av.				Project Job N	t Name. lumber.	Goodr 12384	nan III		
SITE	SPECIFIC IN	IPUT DATA				r	OISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	26,415 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Mee	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,642 vehicle	S		Hea	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	45 mph		v	ehicle I	Mix					
Near/Far La	ne Distance:	80 feet		-	Vehi	icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	5 12.9%	9.6%	95.52%
Ba	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	2.33%
Barrier Type (0-W	all. 1-Berm):	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	2.15%
Centerline Dis	st. to Barrier:	60.0 feet			laiaa Ca	uree E	lovotio	no (in f	0.04)		
Centerline Dist.	to Observer:	60.0 feet		N	ioise su	Auto	levalio		eel)		
Barrier Distance	to Observer:	0.0 feet			Modium	Auto n Truck	ю. с	207			
Observer Height (Above Pad):	5.0 feet			Hoav	v Truck	ю. 2 ю. Я	004	Grade Ac	liustmen	t· 0.0
Pa	ad Elevation:	0.0 feet			neav	y mach	J. C	.004	0/000/10	juounon	0.0
Roa	ad Elevation:	0.0 feet		L	ane Equ	uivalen	t Dista	nce (in	feet)		
	Road Grade:	0.0%				Auto	s: 45	5.000			
	Left View:	-90.0 degree	es		Mediur	n Truck	:s: 44	.803			
	Right View:	90.0 degree	es		Heav	y Truck	's: 44	.822			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fres	nel	Barrier At	ten Be	rm Atten
Autos:	68.46	2.18		0.58		-1.20		-4.69	0.	000	0.000
Medium Trucks:	79.45	-13.95		0.61		-1.20		-4.88	0.	000	0.000
Heavy Trucks:	84.25	-14.29		0.61		-1.20		-5.34	0.	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	attenu	lation)						
VehicleType	Leq Peak Hou	ur Leq Day	' Li	eq Ev	ening	Leq	Night		Ldn	0	NEL
Autos:	70	.0	68.1		66.4		60	.3	68.	9	69.5
Medium Trucks:	64	.9	63.4		57.0		55	.5	64.	0	64.2
Heavy Trucks:	69	.4	67.9		58.9		60	.2	68.	5	68.6
Vehicle Noise:	73	.4	71.7		67.5		63	.9	72.	4	72.8
Centerline Distant	ce to Noise C	ontour (in feet)	=0.			10.4	_			
			ட	70 di	ВA	65	aBA		5U dBA	55	αBA
		~	Ldn:	87		1	87		403		808
	CNEL:						98		426	1	918

	FH	WA-RD-77-108	B HIGH	NAY NC	DISE P	REDICT	ION MO	DEL			
Scena Road Nar Road Segme	rio: OY Withou ne: Jurupa Av. ent: e/o Cherry	ut Project Av.				Project Job N	Name: lumber:	Goodr 12384	man III		
SITE	SPECIFIC II	NPUT DATA				N	IOISE N	/IODE	L INPUTS	5	
Highway Data				Si	ite Cor	nditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	23,104 vehic	les					Autos:	15		
Peak Hou	r Percentage:	10%			Me	edium Tri	ucks (2 A	(xles	15		
Peak	Hour Volume:	2,310 vehicle	es		He	eavy True	cks (3+ A	Axles):	15		
V	ehicle Speed:	45 mph		Ve	ehicle	Mix					
Near/Far La	ane Distance:	80 feet		-	Veh	icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	5 12.9%	9.6	% 95.52%
Ba	arrier Heiaht:	0.0 feet			Μ	edium Ti	rucks:	84.8%	4.9%	10.3	% 2.33%
Barrier Type (0-V	Vall, 1-Berm):	0.0				Heavy Ti	rucks:	86.5%	2.7%	10.8	% 2.15%
Centerline D	ist. to Barrier:	60.0 feet		N	oise S	ource E	levation	s (in f	eet)		
Centerline Dist	to Observer:	60.0 feet		-		Auto	s: 0.0	000			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s: 2.2	297			
Observer Height	(Above Pad):	5.0 feet			Hear	v Truck	s: 8.0	004	Grade Adj	ustme	nt: 0.0
F	Pad Elevation:	0.0 feet		-							
Ro	ad Elevation:	0.0 feet		Lá	ane Eq	uivalen	t Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 45.	000			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 44.	803			
	Right View:	90.0 degre	es		Hea	vy Truck	s: 44.	822			
FHWA Noise Mod	lel Calculation	15									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Frest	iel 🛛	Barrier Atte	en B	erm Atten
Autos	68.46	1.60		0.58		-1.20		-4.69	0.0	00	0.000
Medium Trucks	79.45	-14.53		0.61		-1.20		-4.88	0.0	00	0.000
Heavy Trucks	: 84.25	-14.88		0.61		-1.20		-5.34	0.0	00	0.000
Unmitigated Nois	e Levels (with	nout Topo and	l barriei	r attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	у	Leq Eve	ening	Leq	Night		Ldn		CNEL
Autos	: 69	9.4	67.5		65.8		59.7		68.3		69.0
Medium Trucks	: 64	4.3	62.8		56.5		54.9)	63.4		63.6
Heavy Trucks	68	8.8	67.4		58.3		59.6	;	67.9		68.1
venicie ivoise.	. 14	2.8	71.2		66.9		63.3	,	71.8		12.2
Centerline Distar	ice to Noise C	ontour (in fee	t)	70 de	24	65	dBA		60 dPA	F	E dBA
			I dn	70 02	2/1	1	71	I '	360	5	70/
		0	NEL.	79 84		1:	, i 81		300		830
		C C	TALL.	04		10			030		000

	FHW	/A-RD-77-108 F	IIGHWA	AY NC	DISE PF	REDICTIO	N MOE	DEL			
Scenar	io: OY Without	Project				Project N	ame: C	Goodn	an III		
Road Nan	<i>ie:</i> Jurupa Av.					Job Nur	nber: 1	2384			
Road Segme	nt: e/o Beech A	ν.									
SITE	SPECIFIC IN	PUT DATA				NO	ISE N	IODE		S	
Highway Data				Si	te Con	ditions (H	lard =	10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	22,807 vehicles					A	Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 A	xles):	15		
Peak H	lour Volume:	2,281 vehicles			Hea	avy Truck	s (3+ A	xles):	15		
Ve	hicle Speed:	45 mph		V	ehicle I	Nix					
Near/Far La	ne Distance:	80 feet			Vehi	cleType	1	Day	Evening	Night	Daily
Site Data						Au	tos:	77.5%	12.9%	9.6%	95.52%
Ba	rrier Heiaht:	0.0 feet			Me	edium True	cks: 8	34.8%	4.9%	10.3%	2.33%
Barrier Type (0-V	/all. 1-Berm):	0.0			ŀ	leavy Tru	cks: 8	36.5%	2.7%	10.8%	2.15%
Centerline Di	st. to Barrier:	60.0 feet		AL	oloo Co	uree Elev	otions	lin fe	041		
Centerline Dist.	to Observer:	60.0 feet		/14	oise su	Autoor	auons		el)		
Barrier Distance	to Observer:	0.0 feet			Madium	Autos.	0.0	00			
Observer Height	(Above Pad):	5.0 feet			Hoav	v Trucks:	8.0	04	Grade Ad	ustment:	0.0
P	ad Elevation:	0.0 feet			nouv	y macks.	0.0		,		0.0
Ro	ad Elevation:	0.0 feet		Lá	ane Equ	uivalent E	listanc	e (in i	eet)		
	Road Grade:	0.0%				Autos:	45.0	000			
	Left View:	-90.0 degrees			Mediur	n Trucks:	44.8	803			
	Right View:	90.0 degrees			Heav	y Trucks:	44.8	22			
FHWA Noise Mod	el Calculations	:									
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fresn	el	Barrier Att	en Beri	m Atten
Autos:	68.46	1.54		0.58		-1.20		4.69	0.0	000	0.000
Medium Trucks:	79.45	-14.58		0.61		-1.20		4.88	0.0	000	0.000
Heavy Trucks:	84.25	-14.93		0.61		-1.20		5.34	0.0	000	0.000
Unmitigated Nois	e Levels (witho	out Topo and b	arrier a	ttenu	ation)						
VehicleType	Leq Peak Hou	r Leq Day	Le	q Eve	ening	Leq Ni	ght		Ldn	CI	VEL
Autos:	69	4 67	7.5		65.7		59.7		68.3	3	68.9
Medium Trucks:	64.	3 62	2.8		56.4		54.9		63.3	3	63.6
Heavy Trucks:	68.	7 6	7.3		58.3		59.5		67.9)	68.0
Vehicle Noise:	72.	7 7	1.1		66.9		63.3		71.8	3	72.1
Centerline Distan	ce to Noise Co	ntour (in feet)			1						
				70 dE	3A	65 dE	BA	6	0 dBA	55	dBA
		Le	dn:	79		170			365	7	87
		CN	:L:	83		179			386	8	32

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL Scenario: OY Without Project Road Name: Jurupa Av. Road Segment: e/o Poplar Av. Project Name: Goodman III Job Number: 12384 SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS Highway Data Site Conditions (Hard = 10, Soft = 15) Autos: 15 Average Daily Traffic (Adt): 24,624 vehicles Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15 Peak Hour Volume: 2,462 vehicles Heavy Trucks (3+ Axles): 15 45 mph Vehicle Speed: Vehicle Mix Near/Far Lane Distance: 80 feet pe Day Evening Night Daily Autos: 77.5% 12.9% 9.6% 95.52% VehicleType 9.6% 95.52% Site Data Medium Trucks: 84.8% 4.9% 10.3% 2.33% Barrier Height: Barrier Type (0-Wall, 1-Berm): 0.0 feet 0.0 Heavy Trucks: 86.5% 2.7% 10.8% 2.15% Centerline Dist. to Barrier: Centerline Dist. to Observer: 60.0 feet Noise Source Elevations (in feet) 60.0 feet Autos: 0.000 Barrier Distance to Observer: 0.0 feet Medium Trucks: 2.297 Observer Height (Above Pad): 5.0 feet Heavy Trucks: 8.004 Grade Adjustment: 0.0 Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet) 0.0 feet Road Elevation: Autos: Medium Trucks: 45.000 44.803 Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Heavy Trucks: 44.822 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road 6 1.88 0.58 -1.20 Fresnel Barrier Atten Berm Atten -4.69 0.000 0.00 Autos 68.46 Medium Trucks: 79.45 -14.25 0.61 -1.20 -4.88 0.000 Heavy Trucks: 84.25 -14.60 0.61 -1.20 -5.34 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) Leq Night 60.0 Leq Day Leq Evening 67.8 66.1 VehicleType Leq Peak Hour Ldn CNEL 68.6 Autos 69.7 Medium Trucks: 64.6 63.1 56.7 55.2 63.7 67.6 Heavy Trucks: 69.1 58.6 59.9 68.2 Vehicle Noise: 73.1 71.4 67.2 63.6 72.1 Centerline Distance to Noise Contour (in feet) 60 dBA 70 dBA 65 dBA 55 dBA

Ldn:

CNEL:

83

88

178

189

385

407

	FR	MA-KD-77-100 F	IGHWA					DEL			
Scenar	io: OY Withou	t Project				Project I	Name:	Goodr	nan III		
Road Nan	ne: Jurupa Av.					Job NL	ımber:	12384			
Road Segme	nt: e/o Citrus /	Av.									
SITE	SPECIFIC IN	IPUT DATA				N	OISE	NODE	L INPUT	s	
Highway Data				S	ite Con	ditions ('Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	20,399 vehicles						Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 /	Axles):	15		
Peak F	lour Volume:	2,040 vehicles			He	avy Truc	ks (3+ /	Axles):	15		
Ve	hicle Speed:	45 mph		V	ohicle I	Mix					
Near/Far La	ne Distance:	80 feet		ŀ	Veh	icleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	5 12.9%	9.6%	95.52%
Ba	rrier Height	0.0 feet			Me	edium Tri	ucks:	84.8%	4.9%	10.3%	2.33%
Barrier Type (0-W	Vall, 1-Berm):	0.0			ŀ	leavy Tri	ucks:	86.5%	2.7%	10.8%	2.15%
Centerline Di	ist. to Barrier:	60.0 feet		N	loise Sc	ource Ele	vation	s (in f	eet)		
Centerline Dist.	to Observer:	60.0 feet		-		Autos	· 0	000	,		
Barrier Distance	to Observer:	0.0 feet			Mediur	n Trucks	. 2	297			
Observer Height	(Above Pad):	5.0 feet			Heav	v Trucks	: 8	004	Grade Ad	liustmen	t: 0.0
P	Pad Elevation: 0.0 feet					,				,	
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%				Autos	: 45.	000			
	Left View:	-90.0 degrees			Mediur	m Trucks	: 44.	803			
	Right View:	90.0 degrees			Heav	ry Trucks	: 44.	822			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fresr	nel	Barrier Att	en Be	rm Atten
Autos:	68.46	1.06		0.58		-1.20		-4.69	0.0	000	0.000
Medium Trucks:	79.45	-15.07		0.61		-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	84.25	-15.42		0.61		-1.20		-5.34	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and b	arrier a	ttenu	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	Le	q Ev	ening	Leq I	Vight		Ldn	C	NEL
Autos:	68	.9 67	.0		65.2		59.2	2	67.8	3	68.4
Medium Trucks:	63	.8 62	2.3		55.9		54.4	1	62.8	3	63.1
Heavy Trucks:	68	.2 66	5.8		57.8		59.0)	67.4	4	67.5
Vehicle Noise:	72	.3 70).6		66.4		62.8	3	71.3	3	71.6
Centerline Distan	ce to Noise C	ontour (in feet)									
				70 di	BA	65 c	IBA		60 dBA	55	5 dBA
		Lo	in:	73		15	7		339	1	731
		CNE	EL:	77		16	6		359		773

Wednesday, June 05, 2019

Wednesday, June 05, 2019

Wednesday, June 05, 2019

0.000

0.000

0.000

69.2

63.9

68.3

72.5

828

	FH\	NA-RD-77-108	BHIGHV	VAY NO	DISE P	REDICT	ION MO	DEL			
Scenai Road Nan Road Segme	rio: OY Withou ne: Jurupa Av. ent: e/o Oleand	t Project er Av.				Project Job N	Name: (lumber:	Goodi 12384	man III		
SITE	SPECIFIC IN	IPUT DATA				N	IOISE N	/IODE	L INPUTS	5	
Highway Data				S	ite Cor	nditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	20,774 vehicl	es					Autos.	15		
Peak Hour	r Percentage:	10%			Me	edium Tri	ucks (2 A	Axles).	: 15		
Peak H	Hour Volume:	2,077 vehicle	s		He	eavy True	cks (3+ A	Axles).	: 15		
Ve	ehicle Speed:	45 mph		V	ehicle	Mix					
Near/Far La	ane Distance:	80 feet			Veh	icleType	,	Day	Evening	Nigh	Daily
Site Data							Autos:	77.5%	6 12.9%	9.6	% 95.52%
Ba	nrrier Heiaht:	0.0 feet			М	edium Ti	rucks:	84.8%	6 4.9%	10.3	% 2.33%
Barrier Type (0-V	Vall, 1-Berm):	0.0			I	Heavy Ti	rucks:	86.5%	6 2.7%	10.8	% 2.15%
Centerline D	ist. to Barrier:	60.0 feet		N	oise S	ource E	levation	s (in f	eet)		
Centerline Dist.	to Observer:	60.0 feet				Auto	s: 0.0	000			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s: 2.2	297			
Observer Height	(Above Pad):	5.0 feet			Heav	vy Truck	s: 8.0	004	Grade Adj	ustme	nt: 0.0
P	ad Elevation:	0.0 feet					Distant	//	6		
Ro	ad Elevation:	0.0 feet		Li	ane Eq	uivalen	t Distand	ce (In	teet)		
	Road Grade:	0.0%				Auto	s: 45.0	000			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 44.8	803			
	Right View:	90.0 degre	es		Heat	у тиск	S: 44.8	822			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresn	iel	Barrier Atte	en E	erm Atten
Autos:	68.46	1.14		0.58		-1.20		-4.69	0.0	00	0.000
Medium Trucks:	79.45	-14.99		0.61		-1.20		-4.88	0.0	00	0.000
Heavy Trucks:	84.25	-15.34		0.61		-1.20		-5.34	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Hou	ur Leq Da	y I	Leq Eve	ening	Leq	Night		Ldn		CNEL
Autos:	69	0.0	67.1		65.3		59.3	5	67.9		68.5
Medium Trucks:	63	.9	62.4		56.0		54.5	5	62.9		63.2
Heavy Trucks:	68	.3	66.9		57.9		59.1		67.5		67.6
Verlicie Noise.	12		10.1		00.4		02.3	,	71.4		11.1
Centeriihe Distan	ice to NOISE C	uniour (In tee	9	70 dE	BA	65	dBA		60 dBA		55 dBA
			Ldn:	74		1	59		343		740
	Ldn: CNEL:					1	68		363		782

	FHV	/A-RD-77-108	HIGHW.	AY NO	ISE PF	REDICTIO		DEL			
Scenar	io: OY Without	Project				Project I	lame: (Goodn	nan III		
Road Nam	ie: Jurupa Av.					Job Nu	mber: 1	2384			
Road Segme	nt: e/o Cypress	Av.									
SITE	SPECIFIC IN	PUT DATA				N	DISE N	IODE	L INPUT	s	
Highway Data				Sit	e Con	ditions (Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	23,022 vehicle	s				1	Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 A	xles):	15		
Peak H	lour Volume:	2,302 vehicles	\$		He	avy Truck	(3+ A	xles):	15		
Ve	hicle Speed:	45 mph		Ve	hicle l	Mix					
Near/Far La	ne Distance:	80 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						A	itos:	77.5%	12.9%	9.6%	95.52%
Bai	rrier Height	0.0 feet			Me	edium Tru	icks:	84.8%	4.9%	10.3%	2.33%
Barrier Type (0-W	(all. 1-Berm):	0.0			F	leavy Tru	icks:	86.5%	2.7%	10.8%	2.15%
Centerline Di	st. to Barrier:	60.0 feet							4		
Centerline Dist.	to Observer:	60.0 feet		NO	ise so	ource Ele	vations		et)		
Barrier Distance	to Observer:	0.0 feet			de ellere	Autos.	0.0	000			
Observer Height (Above Pad):	5.0 feet			Viediur	n Trucks.	2.2	97	Grada Ad	iustmont	0.0
Pa	ad Elevation:	0.0 feet			neav	y mucks.	0.0	/04	Orade Adj	usunon.	0.0
Roa	ad Elevation:	0.0 feet		La	ne Eq	uivalent	Distand	e (in i	feet)		
	Road Grade:	0.0%				Autos.	45.0	000			
	Left View:	-90.0 degree	s	1	Mediur	n Trucks.	44.8	303			
	Right View:	90.0 degree	s		Heav	y Trucks.	44.8	322			
FHWA Noise Mod	el Calculations	5									
VehicleType	REMEL	Traffic Flow	Distar	ice	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten
Autos:	68.46	1.58		0.58		-1.20		4.69	0.0	000	0.000
Medium Trucks:	79.45	-14.54		0.61		-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	84.25	-14.89		0.61		-1.20		-5.34	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	ttenua	tion)						
VehicleType	Leq Peak Hou	r Leq Day	Le	eq Ever	ning	Leq N	light		Ldn	CI	VEL
Autos:	69.	4	67.5		65.8		59.7		68.3	3	68.9
Medium Trucks:	64.	3	52.8		56.4		54.9		63.4	1	63.6
Heavy Trucks:	68.	8	67.3		58.3		59.6		67.9)	68.0
		o .	71.1		66.9		63.3		71.8	3	72.2
Vehicle Noise:	72.	0									
Vehicle Noise: Centerline Distand	72. ce to Noise Co	o ntour (in feet,			- 1						
Vehicle Noise: Centerline Distant	72. ce to Noise Co	ontour (in feet,		70 dB	4	65 d	BA	6	0 dBA	55	dBA
Vehicle Noise: Centerline Distant	72. ce to Noise Co	ntour (in feet,	Ldn:	70 dB, 79	4	65 d 17	BA 1	6	0 dBA 368	55	<i>dBA</i> 92

	FH\	NA-RD-77	'-108 HIG	HWAY I	NOISE PI	REDICTIC	ON MC	DEL				
Scenar	io: OY Withou	t Project				Project N	lame:	Goodn	nan III			
Road Nam	ie: Jurupa Av.					Job Nu	mber:	12384				
Road Segme	nt: e/o Juniper	Av.										
SITE	SPECIFIC IN	IPUT DA	ТА			NC	DISE	MODE	l inpu	JTS		
Highway Data					Site Con	ditions (I	Hard =	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	21,640 v	ehicles					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Truc	cks (2	Axles):	15			
Peak H	lour Volume:	2,164 ve	hicles		He	avy Truck	ks (3+	Axles):	15			
Ve	hicle Speed:	45 m	bh	-	Vohiclo	Mix						
Near/Far La	ne Distance:	80 fe	et	-	Venicle	icleTvpe		Dav	Evenin	a N	aht	Dailv
Site Data						A	utos:	77.5%	12.9	%	9.6%	95.52%
Ba	rrier Height:	0.0 fr	et		M	edium Tru	icks:	84.8%	4.9	% 1	0.3%	2.33%
Barrier Type (0-W	/all, 1-Berm):	0.0			ŀ	Heavy Tru	icks:	86.5%	2.7	% 1	0.8%	2.15%
Centerline Di	st. to Barrier:	60.0 fe	eet	-	Noise So	ource Ele	vatior	ns (in fe	eet)			
Centerline Dist.	to Observer:	60.0 fe	eet	ŀ		Autos	0	.000				
Barrier Distance	to Observer:	0.0 fe	eet		Mediu	m Trucks:	2	297				
Observer Height	(Above Pad):	5.0 fe	eet		Heav	v Trucks:	8	.004	Grade	Adjust	ment:	0.0
P	ad Elevation:	0.0 fe	eet	-						,		
Ro	ad Elevation:	0.0 fe	eet	-	Lane Eq	uivalent	Distan	ice (in i	teet)			
	Road Grade:	0.0%				Autos:	45	.000				
	Left View:	-90.0 d	egrees		Mediu	m Trucks:	: 44	.803				
	Right View:	90.0 d	egrees		Heav	y Trucks:	44	.822				
FHWA Noise Mod	el Calculation	s										-
VehicleType	REMEL	Traffic F	low D	listance	Finite	Road	Fres	nel	Barrier .	Atten	Ber	m Atten
Autos:	68.46		1.32	0.5	58	-1.20		-4.69		0.000		0.00
Medium Trucks:	79.45	-1	4.81	0.6	51	-1.20		-4.88		0.000		0.00
Heavy Trucks:	84.25	-1	5.16	0.6	51	-1.20		-5.34		0.000		0.00
Unmitigated Nois	e Levels (with	out Topo	and bar	rier attei	nuation)							
VehicleType	Leq Peak Hou	ur Leo	y Day	Leq E	vening	Leq N	light		Ldn		CI	VEL
Autos:	69	1.2	67.3		65.5		59.	4	6	8.1		68.
Medium Trucks:	64	.0	62.5		56.2		54.	6	6	3.1		63.3
Heavy Trucks:	68	1.5	67.1		58.0		59.	3	6	7.6		67.8
Vehicle Noise:	72	2.5	70.9		66.6		63.	1	7	1.5		71.9
Centerline Distan	ce to Noise C	ontour (in	feet)									
				70	dBA	65 d	BA	6	60 dBA		55	dBA
			Ldn:	: 7	76	164	4		353		7	80
			CNEL:	: 8	30	17:	3		373		8	04

	FH	WA-RD-	77-108	HIGH	WAY N	OISE PI	REDICT	ION MO	DEL									
Scena Road Nan Road Segme	Scenario: OY Without Project Road Name: Armstrong Rd. Road Segment: wio Sierra Av. SITE SPECIFIC INPUT DATA ghway Data						Project Job N	Name: umber:	Goodn 12384	nan III								
SITE	SPECIFIC II	NPUT D	АТА				N	IOISE N	IODE	L INPUT	s							
Highway Data					5	Site Con	ditions	(Hard =	10, So	oft = 15)								
Average Daily Peak Hou Peak F	Traffic (Adt): Percentage: Iour Volume:	27,766 10% 2,777	vehicle vehicles	s		Me He	dium Tri avy Tru	ucks (2 / cks (3+ /	Autos: Axles): Axles):	15 15 15								
Ve	hicle Speed:	45	mph		1	/ehicle	Mix											
Near/Far La	ne Distance:	48	feet			Veh	icleTvpe		Dav	Evenina	Nic	aht	Dailv					
Site Data								Autos:	77.5%	12.9%	- 9	.6%	95.52%					
Ba Barrier Type (0-V	rrier Height: Vall, 1-Berm):	0.0 0.0	feet			Me F	edium T. Heavy Ti	ucks: ucks:	84.8% 86.5%	4.9% 2.7%	10 10	.3% .8%	2.33% 2.15%					
Centerline D	ist. to Barrier:	59.0	feet			loiso Se	urco E	ovation	e (in fi	not)								
Centerline Dist. Barrier Distance Observer Height F	to Observer: to Observer: (Above Pad): ad Elevation:	59.0 0.0 5.0 0.0	feet feet feet feet		,	Mediui Heav	Auto m Truck ry Truck	s: 0.0 s: 2.1 s: 8.0	000 297 004	Grade Ad	ljustr	nent:	0.0					
Ro	ad Elevation:	0.0	feet		L	ane Eq	uivalen	Distan	ce (in	feet)								
	Road Grade: Left View: Right View:	0.0 -90.0 90.0	% degree degree	s s		Mediui Heav	Auto n Truck y Truck	s: 54. s: 53. s: 53.	129 966 982									
FHWA Noise Mod	lel Calculation	าร										-						
VehicleType	REMEL	Traffic	Flow	Dist	tance	Finite	Road	Fresr	nel	Barrier At	ten	Berr	n Atten					
Autos: Medium Trucks:	68.46 79.45	i i	2.40 -13.73		-0.62 -0.60	2	-1.20 -1.20		-4.69 -4.88	0. 0.	000 000		0.000					
Heavy Trucks:	84.25	5	-14.08		-0.60)	-1.20		-5.35	0.	000		0.000					
Unmitigated Nois	e Levels (with	nout Tor	o and	barrie	r atten	uation)												
VehicleType	Leg Peak Ho	ur L	eq Day		Leg Ev	ening	Leq	Night		Ldn	Т	CN	IEL					
Autos:	6	9.0		57.1	,	65.4		59.3	3	67.	9		68.5					
Medium Trucks:	6	3.9	6	62.4		56.1		54.5	5	63.	0		63.2					
Heavy Trucks:	6	8.4	6	67.0		57.9 59.2 67.5					67.6							
Vehicle Noise:	7:	2.4	7	0.7		66.5		62.9)	71.	4		71.8					
Centerline Distan	ce to Noise C	ontour ((in feet)															
L					70 a	IBA	65	dBA	6	60 dBA	Т	55 (dBA					
			l	dn:	73	3	1	58		340		73	33					
	Lan: CNEL:					3	1	67		360		stment: 0.0 I Berm Atte 0 0.0 0 0.0 0 0.0 0 0.0 CNEL 66 67 67 55 dBA 733						

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	FH\	NA-RD-77-108	HIGHW	AY NO	ISE P	REDICT	ION MO	DEL				
Scenai Road Nan Road Segme	Scenario: OY Without Project Road Name: Armstrong Rd. Road Segment: wio 34th St. SITE SPECIFIC INPUT DATA					Project Job N	Name: lumber:	Good 12384	man III			
SITE	SPECIFIC IN	IPUT DATA				N	IOISE N	/IODE	L INPUT	s		
Highway Data				Si	te Cor	nditions	(Hard =	10, S	oft = 15)			
Average Daily	Traffic (Adt):	39,977 vehicl	es					Autos	15			
Peak Hour	r Percentage:	10%			Me	edium Tr	ucks (2 A	(xles	: 15			
Peak H	Hour Volume:	3,998 vehicle	s		He	avy Tru	cks (3+ A	(xles	: 15			
Ve	ehicle Speed:	45 mph		Ve	hicle	Mix						_
Near/Far La	ane Distance:	48 feet			Veh	icleTvpe		Dav	Evenina	Niał	t Dail	v
Site Data							Autos:	77.5%	6 12.9%	9.6	6% 95.52	2%
Ba	nrrier Height:	0.0 feet			М	edium T	rucks:	84.8%	6 4.9%	10.3	3% 2.33	3%
Barrier Type (0-V	Vall, 1-Berm):	0.0				Heavy T	rucks:	86.5%	6 2.7%	10.8	3% 2.15	5%
Centerline D	ist. to Barrier:	59.0 feet		No	oise S	ource E	levation	s (in i	eet)			_
Centerline Dist.	to Observer:	59.0 feet				Auto	s: 0.0	200				
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s: 2.3	297				
Observer Height	(Above Pad):	5.0 feet			Hea	v Truck	s: 8.0	004	Grade Ad	iustme	ent: 0.0	
P	Pad Elevation:	0.0 feet										
Ro	ad Elevation:	0.0 feet		La	ine Eq	uivalen	t Distan	ce (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.	982				
FHWA Noise Mod	lel Calculation	s										_
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresr	iel	Barrier Atte	en l	Berm Atte	n
Autos:	68.46	3.98		-0.62		-1.20		-4.69	0.0	00	0.0	100
Medium Trucks:	79.45	-12.15		-0.60		-1.20		-4.88	0.0	00	0.0	100
Heavy Trucks:	84.25	-12.50		-0.60		-1.20		-5.35	0.0	00	0.0	100
Unmitigated Nois	e Levels (with	out Topo and	barrier a	attenua	ation)							
VehicleType	Leq Peak Hou	ur Leq Da	/ Le	eq Eve	ning	Leq	Night		Ldn		CNEL	
Autos:	70	0.6	68.7		67.0		60.9)	69.5		70	J.1
Medium Trucks:	65	.5	64.0		57.6		56.1		64.5	5	64	4.8
Heavy Trucks:	70	1.0	68.5		59.5		60.7		69.1)	69	э.2 24
Contorlino D'-t	74		12.0		00.1		04.0	,	73.0	,	15	J.4
Centernine Distan	ice to moise Ci	unour (in tee	9	70 dB	A	65	dBA		60 dBA		55 dBA	
			Ldn:	93		2	01		434		935	
	CNEL:		99		2	13		459		988		

	FHW	/A-RD-77-108	HIGHWA	Y NOIS	SE PREDICTIO	ON MOD	EL			
Scenari	Scenario: OY With Project				Project Name: Goodman III					
Road Nam	e: Citrus Av.				Job Nu	mber: 1	2384			
Road Segmer	nt: s/o I-10 Rar	nps								
SITE	SPECIFIC IN	PUT DATA			NO	DISE M	ODEL	. INPUTS	5	
Highway Data				Site	Conditions (I	Hard = 1	10, So	ft = 15)		
Average Daily	Traffic (Adt):	32,498 vehicle	s			A	utos:	15		
Peak Hour	Percentage:	10%			Medium Truc	cks (2 A	xles):	15		
Peak H	our Volume:	3,250 vehicles			Heavy Truck	is (3+ A	xles):	15		
Vei	hicle Speed:	45 mph		Veh	icle Mix					
Near/Far Lai	ne Distance:	88 feet			VehicleTvpe	[Dav	Evenina	Niaht	Dailv
Site Data					AL	itos: 7	7.5%	12.9%	9.6%	95.14%
Bar	rier Height	0.0 feet			Medium Tru	cks: 8	84.8%	4.9%	10.3%	2.39%
Barrier Type (0-W	all. 1-Berm):	0.0			Heavy Tru	cks: 8	86.5%	2.7%	10.8%	2.47%
Centerline Dis	t. to Barrier:	66.0 feet		A1 - 1			11-1-6-	- 41		
Centerline Dist.	to Observer:	66.0 feet		NOI	se Source Ele	vations	(In re	et)		
Barrier Distance	to Observer:	0.0 feet			Autos:	0.0	00			
Observer Height (Above Pad):	5.0 feet		IV.	eaium Trucks: Lleover Trucks	2.2	97	Grada Adi	ustmont	0.0
Pa	d Elevation:	0.0 feet			neavy mucks.	8.0	04	orade Auj	usunoni.	0.0
Roa	d Elevation:	0.0 feet		Lan	e Equivalent l	Distanc	e (in fe	eet)		
F	Road Grade:	0.0%			Autos:	49.4	47			
	Left View:	-90.0 degree	s	N	ledium Trucks:	49.2	68			
	Right View:	90.0 degree	s		Heavy Trucks:	49.2	85			
FHWA Noise Mode	el Calculations	5								
VehicleType	REMEL	Traffic Flow	Distan	ce P	inite Road	Fresne	el E	Barrier Atte	en Beri	m Atten
Autos:	68.46	3.06	-	0.03	-1.20	-	4.71	0.0	00	0.000
Medium Trucks:	79.45	-12.94	-	0.01	-1.20	-	4.88	0.0	00	0.000
Heavy Trucks:	84.25	-12.79	-	0.01	-1.20	-	5.30	0.0	00	0.000
Unmitigated Noise		tone and	barrier a	ttenuat	ion)					
	e Levels (witho	out ropo and i							<u> </u>	IFI
VehicleType	Levels (without Leq Peak Hour	r Leq Day	Le	q Eveni	ng Leq N	light		Ldn	U	
VehicleType Autos:	Levels (without Leq Peak Hou 70.	r Leq Day 3 6	Le 68.4	q Eveni	ng Leq N 66.6	ight 60.6		Ldn 69.2		69.8
VehicleType Autos: Medium Trucks:	E Levels (without Leq Peak Hou 70. 65.	r Leq Day 3 6 3 6	Le 68.4 63.8	q Eveni	ng Leq N 66.6 57.4	ight 60.6 55.9		Ldn 69.2 64.3	C	69.8 64.6
VehicleType Autos: Medium Trucks: Heavy Trucks:	E Levels (without Leg Peak Hout 70. 65. 70.	r Leq Day 3 6 3 6 2 6	Le 68.4 63.8 68.8	q Eveni	ng Leq N 66.6 57.4 59.8	light 60.6 55.9 61.0		Ldn 69.2 64.3 69.4		69.8 64.6 69.5
VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	Leg Peak Hou Leg Peak Hou 70. 65. 70. 73.	r Leq Day 3 6 3 6 2 6 9 7	Le 68.4 63.8 68.8 72.3	q Eveni	ng Leq N 66.6 57.4 59.8 67.9	light 60.6 55.9 61.0 64.5		Ldn 69.2 64.3 69.4 73.0		69.8 64.6 69.5 73.3
VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	2 Levels (without Leq Peak Hout 70. 65. 70. 73. 73. ree to Noise Co	Image: constraint of the second sec	Le 58.4 53.8 58.8 72.3	q Eveni	ng Leq N 66.6 57.4 59.8 67.9	ight 60.6 55.9 61.0 64.5		Ldn 69.2 64.3 69.4 73.0		69.8 64.6 69.5 73.3
VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distanc	A Levels (without Leq Peak Hout 70. 65. 70. 73. 73. reto Noise Co	Image: constraint of the second sec	Le 58.4 53.8 58.8 72.3	q Eveni 70 dBA	ng Leq N 66.6 57.4 59.8 67.9 65 dl	ight 60.6 55.9 61.0 64.5 BA	60	Ldn 69.2 64.3 69.4 73.0 0 dBA	55	69.8 64.6 69.5 73.3 dBA
VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distanc	Levels (without Leg Peak Hout 70. 65. 70. 73. re to Noise Co	Leq Day 3 6 2 6 9 7 ntour (in feet) 1	Le 68.4 63.8 68.8 72.3 .dn:	q Eveni 70 dBA 104	ng Leq N 66.6 57.4 59.8 67.9 65 dl 222	light 60.6 55.9 61.0 64.5 BA 4	60	Ldn 69.2 64.3 69.4 73.0 0 dBA 482	55	69.8 64.6 69.5 73.3 dBA

	FH\	VA-RD-77-108	HIGH	WAY N	IOISE PI	REDICTI	ON MO	DDEL					
Scenar Road Nan Road Segme	io: OY With Pr ne: Citrus Av. nt: s/o Slover i	oject Av.				Project Job Ni	Name: umber:	Goodn 12384	nan III				
SITE	SPECIFIC IN	IPUT DATA				N	OISE	MODE	l input	S			
Highway Data					Site Cor	ditions	(Hard :	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	19,960 vehicle	es					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15				
Peak H	lour Volume:	1,996 vehicle	s		Heavy Trucks (3+ Axles): 15								
Ve	hicle Speed:	40 mph		-	Vehicle	Mix							
Near/Far La	ne Distance:	48 feet			Veh	icleType		Day	Evening	Night	Daily		
Site Data						A	lutos:	77.5%	12.9%	9.6%	94.72%		
Ba	rrior Hoight:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	2.46%		
Barrier Type (0-V	/all, 1-Berm):	0.0			1	Heavy Tr	ucks:	86.5%	2.7%	10.8%	2.82%		
Centerline Di	Centerline Dist. to Barrier: Centerline Dist. to Observer:				Noise S	ource El	evatio	ns (in fe	eet)				
Centerline Dist.	to Observer:	46.0 feet			Autos: 0.000								
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks	s: 2	.297					
Observer Height (Above Pad		5.0 feet			Heav	v Trucks	s: 8	.004	Grade Ad	ljustmen	t: 0.0		
P	ad Elevation:	0.0 feet		L			Dista		6	-			
Ro	ad Elevation:	0.0 feet		-	Lane Eq	uivaient	Distar	ice (in i	reet)				
	Road Grade:	0.0%			1 4 m - 10 - 1	Autos	39	.560					
	Left View:	-90.0 degree	es		iviediu.	m Trucks	3: 39	.336					
	Right View:	90.0 degrei	es		Heat	/y Trucks	39	.358					
FHWA Noise Mod	el Calculation	s											
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier At	ten Be	rm Atten		
Autos:	66.51	1.44		1.4	2	-1.20		-4.63	0.	000	0.000		
Medium Trucks:	11.12	-14.42		1.4	6	-1.20		-4.87	0.	000	0.000		
Heavy Trucks:	82.99	-13.82		1.4	b .	-1.20		-5.47	0.	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrie	er atten	uation)			-					
VehicleType	Leq Peak Hou	ir Leq Day	·	Leq E	vening	Leq I	Night		Ldn	C	NEL		
Autos:	68	.2	66.3		64.5		58.	5	67.	1	67.7		
Medium Trucks:	63	.6	62.0		55.7		54.	1	62.	6	62.8		
Vehicle Noise	72	.4	68.0 70.9		59.0 66.0		63	2	71	5 5	68.7 71.8		
Centerline Distan	ce to Noise Ci	ntour (in feet	1		00.0			-	71.	-			
Center inte Distan	10 110/30 01	nitoui (ill'ieel	/ 	70 0	dBA	65 (dBA	f	0 dBA	55	dBA		
			Ldn:	58 125 269 579				579					
	CI	VFI :	6	1	13	31		282		508			

	FH	WA-RD-77-108	BHIGH	WATN	UISE PI	REDICTI		DEL			
Scenar	Scenario: OY With Project					Project	Name:	Goodr	nan III		
Road Nan	ne: Citrus Av.					Job Ni	umber:	12384			
Road Segme	ent: s/o Santa /	Ana Av.									
SITE	SPECIFIC IN	IPUT DATA				N	OISE	MODE	L INPUT	s	
Highway Data				S	Site Con	nditions ((Hard =	: 10, S	oft = 15)		
Average Daily	Traffic (Adt):	14,884 vehicl	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	icks (2 J	Axles).	15		
Peak H	lour Volume:	1,488 vehicle	s		He	avy Truc	:ks (3+)	Axles).	15		
Ve	ehicle Speed:	40 mph		L.	/ohiclo	Mix					
Near/Far La	ane Distance:	48 feet		-	Veh	icleTvpe		Dav	Evenina	Niaht	Dailv
Site Data						A	utos:	77.5%	12.9%	9.6%	6 94.16%
Pa	rrior Hoight:	0.0 foot			M	edium Tr	ucks:	84.8%	4.9%	10.3%	6 2.58%
Barrier Type (0-V	Vall 1-Rerm)	0.0 1001			1	Heavy Tr	ucks:	86.5%	2.7%	10.8%	6 3.25%
Centerline D	ist. to Barrier:	46.0 feet		-		-					
Centerline Dist.	to Observer:	46.0 feet		~	voise So	burce El	evation	is (in t	eet)		
Barrier Distance	to Observer:	0.0 feet			14-16-1	Autos	:: 0.	000			
Observer Height	Barrier Distance to Observer: 0.0 teet Observer Height (Above Pad): 5.0 feet				Medium Trucks: 2.297						4 0 0
P	ad Elevation:	0.0 feet			Heavy Trucks. 8.004 Grade Adjustment. 0.0						1. 0.0
Ro	ad Elevation:	0.0 feet		L	.ane Eq	uivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%				Autos	: 39.	560			
	Left View:	-90.0 degre	es		Mediu	m Trucks	: 39.	336			
	Right View:	90.0 degre	es		Heav	/y Trucks	a: 39.	358			
FHWA Noise Mod	lel Calculation	IS									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresi	nel	Barrier Att	en Be	erm Atten
Autos:	66.51	0.14		1.42	2	-1.20		-4.63	0.0	000	0.000
Medium Trucks:	77.72	-15.48		1.46	6	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	82.99	-14.47		1.46	6	-1.20		-5.47	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	r atteni	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	y	Leq Ev	rening	Leq I	Night		Ldn	C	NEL
Autos:	66	6.9	65.0		63.2		57.2	2	65.8	3	66.4
Medium Trucks:	62	2.5	61.0		54.6		53.1	1	61.	5	61.8
Heavy Trucks:	68	3.8	67.4		58.3		59.0	6	67.9)	68.0
Vehicle Noise:	71	.5	69.9		64.9		62.	1	70.6	ò	70.9
Centerline Distan	ce to Noise C	ontour (in fee	t)								
			L	70 d	IBA	65 0	'BA		60 dBA	55	5 dBA
			Ldn:	50 108 233 5			502				
	CNEL				3	53 113 244 526					526

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	FH	WA-RD-77-10	B HIGH	WAY NC	DISE P	REDICTIC	ON MOD	EL			
Scenari Road Name Road Segmen	Scenario: OY With Project Road Name: Juniper Av. Road Segment: n/o Santa Ana Av. SITE SPECIFIC INPUT DATA					Project N Job Nu	lame: G mber: 1	ioodm 2384	an III		
SITE S	SPECIFIC II	NPUT DATA				N	DISE M	ODEI	INPUTS	5	
Highway Data				Si	ite Cor	nditions (I	Hard = 1	10, So	ft = 15)		
Average Daily	Traffic (Adt):	2,775 vehic	les				A	utos:	15		
Peak Hour	Percentage:	10%			Me	edium Truc	cks (2 A	kles):	15		
Peak He	our Volume:	277 vehicle	es		He	avy Truck	(3+ A)	kles):	15		
Vel	nicle Speed:	40 mph		Ve	ehicle	Mix					
Near/Far Lar	ne Distance:	14 feet			Veh	icleType	Ĺ	Day	Evening	Night	Daily
Site Data						A	itos: 7	7.5%	12.9%	9.6%	6 95.85%
Bar	rier Heiaht:	0.0 feet			Μ	edium Tru	icks: 8	4.8%	4.9%	10.3%	6 2.16%
Barrier Type (0-Wa	all, 1-Berm):	0.0				Heavy Tru	icks: 8	6.5%	2.7%	10.8%	6 1.99%
Centerline Dis	t. to Barrier:	34.0 feet		N	oise S	ource Ele	vations	(in fe	et)		
Centerline Dist. t	o Observer:	34.0 feet				Autos	0.0	00			
Barrier Distance t	o Observer:	0.0 feet			Mediu	m Trucks:	2.2	97			
Observer Height (/	Above Pad):	5.0 feet			Hea	v Trucks:	8.0	04	Grade Adji	ustmen	ot: 0.0
Pa	d Elevation:	0.0 feet		-							
Roa	d Elevation:	0.0 feet		Lá	ane Eq	uivalent	Distanc	e (in f	eet)		
F	Road Grade:	0.0%				Autos:	33.6	45			
	Left View:	-90.0 degre	es		Mediu	m Trucks:	33.3	81			
	Right View:	90.0 degre	es		Hea	vy Trucks:	33.4	07			
FHWA Noise Mode	l Calculation	15									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresne	2 I	Barrier Atte	en Be	erm Atten
Autos:	66.51	-7.08	3	2.48		-1.20	-	4.53	0.0	00	0.000
Medium Trucks:	77.72	-23.56	6	2.53		-1.20	-	4.86	0.0	00	0.000
Heavy Trucks:	82.99	-23.91		2.52		-1.20	-	5.67	0.0	00	0.000
Unmitigated Noise	Levels (with	nout Topo and	l barrie	r attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	у	Leq Eve	ening	Leq N	light		Ldn	0	ONEL
Autos:	60	0.7	58.8		57.0		51.0		59.6		60.2
Medium Trucks:	55	5.5	54.0		47.6		46.1		54.5		54.8
Heavy Trucks:	60	0.4	59.0		50.0		51.2		59.6		59.7
Vehicle Noise:	64	4.2	62.6		58.2		54.7		63.2		63.6
Centerline Distance	e to Noise C	ontour (in fee	t)			r					
				70 dE	BA	65 d	BA	6	0 dBA	5	5 dBA
			Ldn:	12	26 56 120			120			
		C	NEL:	13		27			59		127

	rnv	VA-RD-77-108	i li Griwi	AY NO	DISE PR	EDICTIO	N MODE	L					
Scenar	Scenario: OY With Project					Project Name: Goodman III							
Road Nan	e: Juniper Av.					Job Nun	nber: 123	384					
Road Segme	nt: s/o Santa A	na Av.											
SITE	SPECIFIC IN	IPUT DATA				NO	ISE MO	DEL INPUT	'S				
Highway Data				S	ite Con	ditions (H	ard = 10	, Soft = 15)					
Average Daily	Traffic (Adt):	3,518 vehicl	es				Aut	os: 15					
Peak Hour	Percentage:	10%			Med	lium Trucl	ks (2 Axle	es): 15					
Peak F	lour Volume:	352 vehicle	s		Hea	avy Trucks	: (3+ Axle	es): 15					
Ve	hicle Speed:	40 mph		v	ehicle N	lix							
Near/Far La	ne Distance:	14 feet		Ē	Vehi	cleType	Da	y Evening	Night	Daily			
Site Data						Au	os: 77	.5% 12.9%	9.6%	96.27%			
Ba	rrier Heiaht:	0.0 feet			Me	dium Truc	ks: 84	.8% 4.9%	10.3%	1.94%			
Barrier Type (0-W	/all. 1-Berm):	0.0			н	leavy Truc	ks: 86	.5% 2.7%	10.8%	1.79%			
Centerline Di	st. to Barrier:	34.0 feet			laiaa Ca	uree Elev	ationa (i	in fact)					
Centerline Dist.	to Observer:	34.0 feet		N	ioise so	urce Elev		n leel)					
Barrier Distance	to Observer:	0.0 feet				Autos:	0.000						
Observer Height	(Above Pad):	5.0 feet			Mealun	Trucks:	2.297	Grada A	diustmon				
P	ad Elevation:	0.0 feet			neav	/ HUCKS.	0.004	Orade A	ijusinen	. 0.0			
Ro	ad Elevation:	0.0 feet		L	ane Equ	ivalent D	istance	(in feet)					
	Road Grade:	0.0%				Autos:	33.645	5					
	Left View:	-90.0 degre	es		Mediun	n Trucks:	33.381						
	Right View:	90.0 degre	es		Heavy	/ Trucks:	33.407	,					
FHWA Noise Mod	el Calculation	s											
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite I	Road	Fresnel	Barrier At	ten Be	m Atten			
Autos:	66.51	-6.03		2.48		-1.20	-4.	53 0.	000	0.000			
		00.00		2 5 2				~ ~	000	0.000			
Medium Trucks:	77.72	-22.99		2.55		-1.20	-4.	86 0.	000				
Medium Trucks: Heavy Trucks:	77.72 82.99	-22.99 -23.34		2.53		-1.20 -1.20	-4. -5.	67 0.	000	0.000			
Medium Trucks: Heavy Trucks: Unmitigated Nois	77.72 82.99 e Levels (with	-22.99 -23.34 out Topo and	barrier a	2.53 2.52 attenu	uation)	-1.20 -1.20	-4. -5.	67 0.	000	0.000			
Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType	77.72 82.99 e Levels (with Leq Peak Hou	-22.99 -23.34 out Topo and Ir Leq Day	barrier a	2.53 2.52 attenu eq Evi	iation) ening	-1.20 -1.20 Leq Ni	-4. -5. ght	86 0. 67 0. <u>Ldn</u>	000 000 C	0.000			
Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos:	77.72 82.99 <u>e Levels (with</u> Leq Peak Hou 61	-22.99 -23.34 out Topo and Ir Leq Day .8	<i>barrier a</i> / Le 59.9	2.53 2.52 attenu eq Evi	<i>iation)</i> ening 58.1	-1.20 -1.20 <i>Leq Ni</i>	-4. -5. ght 52.0	86 0. 67 0. <u>Ldn</u> 60.	000 000 C	0.000 NEL 61.3			
Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks:	77.72 82.99 e Levels (with Leq Peak Hou 61 56	-22.99 -23.34 out Topo and ir Leq Day .8 .1	<i>barrier a</i> / <i>Le</i> 59.9 54.5	2.53 2.52 attenu eq Evi	ening 58.1 48.2	-1.20 -1.20 Leq Nig	-4. -5. <u>ght</u> 52.0 46.6	86 0. 67 0. <u>Ldn</u> 60. 55.	000 000 7 1	0.000 NEL 61.3 55.3			
Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks:	77.72 82.99 <u>e Levels (with</u> Leq Peak Hou 61 56 61	-22.99 -23.34 out Topo and ir Leq Day .8 .1 .0	barrier a / Le 59.9 54.5 59.6	2.53 2.52 attenu eq Evi	<i>ation)</i> ening 58.1 48.2 50.5	-1.20 -1.20 Leq Ni	-4. -5. ght 52.0 46.6 51.8	86 0. 67 0. <u>Ldn</u> 60. 55. 60.	000 000 7 1 1	0.000 NEL 61.3 55.3 60.3			
Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	77.72 82.99 <u>e Levels (with</u> Leq Peak Hou 61 56 61 65	-22.99 -23.34 out Topo and rr Leq Day .8 .1 .0 .0	barrier a / Le 59.9 54.5 59.6 63.3	2.53 2.52 attenu eq Evi	<i>iation)</i> ening 58.1 48.2 50.5 59.2	-1.20 -1.20 Leq Ni	-4. -5. ght 52.0 46.6 51.8 55.5	67 0. 67 0. <u>Ldn</u> 60. 55. 60. 64.	000 000 7 1 1 0	0.000 NEL 61.3 55.3 60.3 64.4			
Medium Trucks: Heavy Trucks: Unnitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distan	77.72 82.99 e Levels (with Leq Peak Hou 61 56 61 65 ce to Noise Co	-22.99 -23.34 out Topo and ir Leq Day .8 .1 .0 .0 .0 .0	barrier a 59.9 54.5 59.6 63.3 ()	2.53 2.52 attenu eq Evi	uation) ening 58.1 48.2 50.5 59.2	-1.20 -1.20 Leq Ni	-4. -5. 201 46.6 51.8 55.5	86 0. 67 0. <u>Ldn</u> 60. 55. 60. 64.	000 000 7 1 1 0	0.000 NEL 61.3 55.3 60.3 64.4			
Medium Trucks: Heavy Trucks: Unnitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distan	77.72 82.99 e Levels (with Leq Peak Hou 61 56 61 65 ce to Noise Co	-22.99 -23.34 out Topo and rr Leq Da) .8 .1 .0 .0 .0 .0	barrier a / Le 59.9 54.5 59.6 63.3 2)	2.53 2.52 attenu eq Evi	<i>ation)</i> ening 58.1 48.2 50.5 59.2 BA	-1.20 -1.20 Leq Nig 65 dE	-4. -5. ght 52.0 46.6 51.8 55.5	26 0. 67 0. <u>Ldn</u> 60. 55. 60. 64. 60 dBA	000 000 7 1 1 0 55	0.000 NEL 61.3 55.3 60.3 64.4 dBA			
Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distan	77.72 82.99 e Levels (with Leq Peak Hou 61 56 61 65 cce to Noise Co	-22.99 -23.34 out Topo and ir Leq Day .8 .1 .0 .0 .0 .0	barrier a / Le 59.9 54.5 59.6 63.3 () Ldn:	2.53 2.52 attenu eq Eve 70 di 14	iation) ening 58.1 48.2 50.5 59.2 BA	-1.20 -1.20 Leq Ni 65 dE	-4. -5. ght 52.0 46.6 51.8 55.5	26 0. 67 0. <i>Ldn</i> 60. 55. 60. 64. 60. 64. 60. 63. 63. 63. 63. 63. 64. 63. 63. 63. 64. 64. 65. 65. 65. 65. 65. 65. 65. 65	000 000 7 1 1 1 0 555	0.000 NEL 61.3 55.3 60.3 64.4 dBA 136			

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	FHW	/A-RD-77-108 HIG	HWAY	NOISE PI	REDICTIO	N MODE	iL.			
Scenai Road Nan Road Segme	rio: OY With Pro ne: Sierra Av. ent: n/o Slover A	oject .v.			Project Na Job Nun	ame: Go nber: 12	odman II 384	I		
SITE	SPECIFIC IN	PUT DATA			NO	ISE MO	DEL INI	PUTS		
Highway Data				Site Cor	ditions (H	ard = 10), Soft = 1	15)		
Average Daily	Traffic (Adt):	62,790 vehicles				Au	tos: 15	5		
Peak Hour	Percentage:	10%		Me	dium Truck	ks (2 Axl	es): 15	5		
Peak I	Hour Volume:	6,279 vehicles		He	avy Trucks	6 (3+ Axl	es): 15	5		
Ve	ehicle Speed:	40 mph	ŀ	Vahiala	Mbr					
Near/Far La	ane Distance:	88 feet	ł	Venicle	icleTyne	Di	av Ever	nina N	liaht	Daily
Site Data				10.1	Aut	os: 77	5% 12	.9%	9.6%	95.36%
Re	wrier Height	0.0 (aat		М	edium Truc	ks: 84	.8% 4	.9% 1	0.3%	2.35%
Da Parriar Tuna (0.1/	Voll 1 Borm):	0.0 1001			leavv Truc	ks: 86	.5% 2	.7% 1	0.8%	2.29%
Centerline D	ist to Barrier	66.0 feet	-		,					
Centerline Dist.	to Observer:	66.0 feet	-	Noise S	ource Elev	ations (in feet)			
Barrier Distance	to Observer:	0.0 feet			Autos:	0.00				
Observer Height	Distance to Observer: 0.0 te Diserver Height (Above Pad): 5.0 fe			Medium Trucks: 2.297						
P	Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet			Heav	y Trucks:	8.00	4 Grad	ie Adjus	ment:	0.0
Ro	ad Elevation:	0.0 feet	Ī	Lane Eq	uivalent D	istance	(in feet)			
	Road Grade:	0.0%			Autos:	49.44	7			
	Left View:	-90.0 degrees		Mediu	m Trucks:	49.26	в			
	Right View:	90.0 degrees		Heav	y Trucks:	49.28	5			
FHWA Noise Mod	lel Calculations	;								
VehicleType	REMEL	Traffic Flow D	Distance	Finite	Road	Fresnel	Barrie	er Atten	Berr	m Atten
Autos:	66.51	6.45	-0.0)3	-1.20	-4	.71	0.000		0.00
Medium Trucks:	77.72	-9.63	-0.0)1	-1.20	-4	.88	0.000		0.00
Heavy Trucks:	82.99	-9.76	-0.0)1	-1.20	-5	.30	0.000		0.00
Unmitigated Nois	e Levels (witho	out Topo and bar	rier attei	nuation)						
VehicleType	Leg Peak Hou	r Leq Day	Leq E	vening	Leq Ni	ght	Ldn		CI	IEL
Autos:	71.	7 69.8	3	68.1		62.0		70.6		71.
Medium Trucks:	66.	9 65.4	l I	59.0		57.5		65.9		66.3
Heavy Trucks:	72.	0 70.6	i	61.6 62.8 71.2				71.3		
Vehicle Noise:	75.	5 73.9)	69.4		66.1		74.6		74.9
Centerline Distan	ce to Noise Co	ntour (in feet)								
			70	dBA	65 dB	A	60 dB/	A	55	dBA
		Ldn.	: 1	133 286 617 1,329				329		
	CNEL:			140 302 650 1,401						

	FHV	VA-RD-77-108 HIG	HWAY		REDICTIO	N MODEL			
Scenari Road Nam Road Segmen	Scenario: OY With Project Road Name: Sierra Av. Road Segment: s/o Slover Av. SITE SPECIFIC INPUT DATA					ame: Good nber: 1238	Iman III 4		
SITE S	SPECIFIC IN	IPUT DATA			NO	ISE MOD	EL INPUT	S	
Highway Data				Site Con	ditions (H	lard = 10, S	Soft = 15)		
Average Daily	Traffic (Adt):	40,658 vehicles				Autos	s: 15		
Peak Hour	Percentage:	10%		Mee	dium Truc	ks (2 Axles): 15		
Peak H	our Volume:	4,066 vehicles		Hea	avy Truck	s (3+ Axles): 15		
Vel	hicle Speed:	50 mph	-	Vehicle I	Nix				-
Near/Far Lar	ne Distance:	88 feet	-	Vehicle	cleTvne	Dav	Evenina	Niaht	Daily
Site Data					Au	tos: 77.5	% 12.9%	9.6%	95.26%
Bar	rior Hoight	0.0 feet		Me	edium True	cks: 84.8	% 4.9%	10.3%	2.37%
Barrier Type (0-W	all. 1-Berm):	0.0		F	leavy Tru	cks: 86.5	% 2.7%	10.8%	2.36%
Centerline Dis	t. to Barrier:	66.0 feet		Noice Co	uree Elev	ationo (in	fa a 4)	-	
Centerline Dist. t	to Observer:	66.0 feet		Noise So	ource Elev	vations (in	reet)		
Barrier Distance	to Observer:	0.0 feet		Modium	Autos:	0.000			
Observer Height ()	Above Pad):	5.0 feet		Hoov	V Trucks:	2.297	Grada Ad	iustmont	
Pa	d Elevation:	0.0 feet		Tieav	y mucks.	0.004	Orade Adj	usunon.	0.0
Roa	d Elevation:	0.0 feet		Lane Equ	uivalent D	Distance (in	n feet)		
F	Road Grade:	0.0%			Autos:	49.447			
	Left View:	-90.0 degrees		Mediur	n Trucks:	49.268			
	Right View:	90.0 degrees		Heav	y Trucks:	49.285			
FHWA Noise Mode	el Calculation	s							
VehicleType	REMEL	Traffic Flow D	istance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	70.20	3.59	-0.0	13	-1.20	-4.71	0.0	000	0.000
Medium Trucks:	81.00	-12.45	-0.0)1	-1.20	-4.88	3 0.0	000	0.000
Heavy Trucks:	85.38	-12.47	-0.0	11	-1.20	-5.30	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and barr	rier atter	nuation)					
VehicleType	Leq Peak Hou	r Leq Day	Leq E	vening	Leq Ni	ight	Ldn	CI	VEL
Autos:	72	.6 70.7		68.9		62.8	71.5	ŝ	72.1
Medium Trucks:	67	.3 65.8		59.5		57.9	66.4	4	66.6
Heavy Trucks:	71	.7 70.3		61.2		62.5	70.8	3	71.0
Vehicle Noise:	75	.8 74.2		70.0		66.4	74.8	3	75.2
Centerline Distance	e to Noise Co	ontour (in feet)							
			70	dBA	65 dE	BA	60 dBA	55	dBA
		Ldn:	: 1:	139 299 644 1,38			388		
		CNEL:	1	47	316		682	1,4	469

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	FH\	NA-RD-77-108	BHIGHW	AY NO	ISE P	REDICTI	ON MO	DEL				
Scenario Road Name Road Segmen	Scenario: OY With Project Road Name: Sierra Av. Road Segment: s/o Santa Ana Av. SITE SPECIFIC INPUT DATA					Project Job Nu	Name: (Imber:	Goodr 12384	nan III			
SITE S	PECIFIC IN	IPUT DATA				N	OISE N	IODE		s		
Highway Data				Si	te Cor	nditions ('Hard =	10, S	oft = 15)			
Average Daily T	raffic (Adt):	37,614 vehicl	es					Autos:	15			
Peak Hour F	Percentage:	10%			Me	edium Tru	cks (2 A	xles):	15			
Peak Ho	our Volume:	3,761 vehicle	s		He	avy Truc	ks (3+ A	xles):	15			
Veh	icle Speed:	50 mph		Ve	hicle	Mix						
Near/Far Lan	e Distance:	88 feet		-	Veh	nicleTvpe		Dav	Evenina	Niah	t Dai	ilv
Site Data						A	utos:	77.5%	12.9%	9.6	% 95.0	9%
Barr	rier Heiaht:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3	% 2.4	1%
Barrier Type (0-Wa	all, 1-Berm):	0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8	% 2.5	0%
Centerline Dist	t. to Barrier:	66.0 feet		N	nise S	ource Ele	vation	s (in f	eet)			
Centerline Dist. to	o Observer:	66.0 feet				Autos	. 0(000				
Barrier Distance to	o Observer:	0.0 feet			Mediu	m Trucks	2.3	297				
Observer Height (A	Above Pad):	5.0 feet			Hea	v Trucks	: 8.0	004	Grade Ad	iustme	nt: 0.0	
Pa	d Elevation:	0.0 feet										
Road	d Elevation:	0.0 feet		Lá	ine Eq	uivalent	Distand	ce (in	feet)			
R	load Grade:	0.0%				Autos	: 49.4	147				
	Left View:	-90.0 degre	es		Mealu	m Trucks	49.2	268				
	Right view:	90.0 degre	es		пеа	vy mucks	. 49.	285				
FHWA Noise Mode	I Calculation	s										-
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresn	el	Barrier Att	en E	Berm Att	en
Autos:	70.20	3.24		-0.03		-1.20		-4.71	0.0	00	0.	000
Medium Trucks:	81.00	-12.71		-0.01		-1.20		-4.88	0.0	00	0.	000
Heavy Trucks:	85.38	-12.57		-0.01		-1.20		-5.30	0.0	00	0.	000
Unmitigated Noise	Levels (with	out Topo and	barrier	attenua	ation)							
VehicleType	Leq Peak Ho	ur Leq Da	y L	.eq Eve	ning	Leq I	Vight		Ldn		CNEL	
Autos:	72	2.2	70.3		68.5		62.5		71.1		7	'1.7
Medium Trucks:	67	.1	65.6		59.2		57.7		66.1		e	6.4
Heavy Trucks:	71	.6	70.2		61.1		62.4		70.8	3	7	'0.9
Vehicle Noise:	75	0.6	73.9		69.7		66.1		74.6	6	1	'5.0
Centerline Distance	e to Noise C	ontour (in fee	t)									
			∟	70 dE	8A	65 0	iBA	1	50 dBA	1	55 dBA	
			Lan:	134		28	9		622		1,339	
		C	NEL:	142		30	15		657		1,416	

	FHV	VA-RD-77-108 H	IGHWA	Y NOISE	PREDICTIO	N MODEI			
Scenar	Scenario: OY With Project					ame: Goo	dman III		
Road Nam	e: Sierra Av.				Job Nur	nber: 123	84		
Road Segme	nt: s/o Jurupa	Av.							
SITE	SPECIFIC IN	PUT DATA			NO	ISE MO	DEL INPUT	s	
Highway Data				Site C	onditions (H	lard = 10,	Soft = 15)		
Average Daily	Traffic (Adt):	29,272 vehicles				Auto	os: 15		
Peak Hour	Percentage:	10%			Medium Truc	ks (2 Axle	s): 15		
Peak H	lour Volume:	2,927 vehicles			Heavy Truck	s (3+ Axle	s): 15		
Ve	hicle Speed:	55 mph		Vehic	le Mix				
Near/Far La	ne Distance:	88 feet		Volino	ehicleType	Da	/ Evening	Night	Daily
Site Data					Au	tos: 77.	5% 12.9%	9.6%	95.22%
Ba	rrier Height	0.0 feet			Medium True	cks: 84.	8% 4.9%	10.3%	2.39%
Barrier Type (0-W	all. 1-Berm):	0.0			Heavy True	cks: 86.	5% 2.7%	10.8%	2.39%
Centerline Dis	st. to Barrier:	66.0 feet		Noios	Source Eler	untiono (i	n faat)		
Centerline Dist.	to Observer:	66.0 feet		NOISE	Source Elev		Tieel)		
Barrier Distance	to Observer:	0.0 feet			Autos:	0.000			
Observer Height (Above Pad):	5.0 feet		Me	alum Trucks:	2.297	Grade Ad	iustmont	
Pa	ad Elevation:	0.0 feet			eavy mucks.	0.004	Grade Adj	usunoni	0.0
Roa	ad Elevation:	0.0 feet		Lane	Equivalent D	istance (in feet)		
1	Road Grade:	0.0%			Autos:	49.447			
	Left View:	-90.0 degrees		Me	dium Trucks:	49.268			
	Right View:	90.0 degrees		H	eavy Trucks:	49.285			
FHWA Noise Mod	el Calculation	s							
VehicleType	REMEL	Traffic Flow	Distance	e Fir	ite Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.74	-0	0.03	-1.20	-4.7	71 0.0	000	0.000
Medium Trucks:	82.40	-14.27	-0	0.01	-1.20	-4.8	38 0.0	000	0.000
Heavy Trucks:	86.40	-14.26	-0	0.01	-1.20	-5.3	30 0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and ba	nrrier att	enuatio	n)				
VehicleType	Leq Peak Hou	r Leq Day	Leg	Evening	Leq Ni	ght	Ldn	CI	VEL
Autos:	72	.3 70	.4	68	3.6	62.6	71.2	2	71.8
Medium Trucks:	66	.9 65	.4	59	9.1	57.5	66.0)	66.2
	=0	.9 69	.5	60).5	61.7	70.1		70.2
Heavy Trucks:	70					65.9	74 4	1	74.7
Heavy Trucks: Vehicle Noise:	70	.3 73	.7	69	9.0	00.5			
Heavy Trucks: Vehicle Noise: Centerline Distant	70 75 ce to Noise Co	3 73 ontour (in feet)	.7	69		00.0		1.	
Heavy Trucks: Vehicle Noise: Centerline Distance	70 75 ce to Noise Co	3 73 ontour (in feet)	.7	0 dBA	65 dE	BA	60 dBA	55	dBA
Heavy Trucks: Vehicle Noise: Centerline Distand	70 75 ce to Noise Co	3 73 ontour (in feet)	.7 7 In:	0 dBA 129	65 dE	BA	60 dBA 598	55 1,	dBA 289

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	FHW	/A-RD-77-108	HIGH	WAY I	NOISE P	REDICT	ION M	ODEL				
Scenario: C Road Name: S Road Segment: w	DY With Pro Slover Av. w/o Sierra A	oject vv.				Project Job N	Name lumber	: Good : 12384	man III			
SITE SPE	CIFIC IN	PUT DATA				N	IOISE	MODE	EL INPU	ITS		
Highway Data					Site Cor	ditions	(Hard	= 10, S	oft = 15)			
Average Daily Trafi	fic (Adt):	23,980 vehicle	s					Autos	15			
Peak Hour Perc	centage:	10%			Me	dium Tr	ucks (2	Axles)	: 15			
Peak Hour	Volume:	2,398 vehicles	5		He	avy Tru	cks (3+	Axles)	: 15			
Vehicle	Speed:	45 mph		ŀ	Vehicle	Mix						
Near/Far Lane D	istance:	59 feet		ł	Venicle	icleType	2	Dav	Evenin	a N	iaht	Dailv
Site Data							Autos:	77.5%	6 12.99	%	9.6%	95.53%
Parrior	Hoight:	0.0 foot			М	edium T	rucks:	84.8%	6 4.99	% 1	0.3%	2.33%
Barrier Type (0-Wall	1-Berm)	0.0				Heavy T	rucks:	86.5%	6 2.79	% 1	0.8%	2.15%
Centerline Dist. to	Barrier:	52.0 feet		-								
Centerline Dist. to Observer:		52.0 feet		-	Autos: 0.000							
Barrier Distance to O	bserver:	0.0 feet				Auto	s: (0.000				
Observer Height (Abo	ve Pad):	5.0 feet			Mediu	m Truck	S: 2	2.297	Crada	Adius	imont.	
Pad E	0.0 feet			Hear	у тиск	S: 6	3.004	Grade	ujus	uneni.	0.0	
Road E	levation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in	feet)			
Road	d Grade:	0.0%		ſ		Auto	s: 43	3.113				
Le	eft View:	-90.0 degree	s		Mediu	m Truck	s: 42	2.908				
Rig	ht View:	90.0 degree	s		Hear	/y Truck	s: 42	2.928				
FHWA Noise Model Ca	alculations	5		I								
VehicleType R	REMEL	Traffic Flow	Dis	tance	Finite	Road	Free	snel	Barrier	Atten	Ber	m Atten
Autos:	68.46	1.76		0.8	36	-1.20		-4.66		0.000		0.00
Medium Trucks:	79.45	-14.37		0.8	39	-1.20		-4.87		0.000		0.00
Heavy Trucks:	84.25	-14.72		0.8	39	-1.20		-5.41		0.000		0.00
Unmitigated Noise Le	vels (with	out Topo and	barrie	er atter	nuation)							
VehicleType Leq	Peak Hou	r Leq Day		Leq E	vening	Leq	Night		Ldn		CI	VEL
Autos:	69.	9 (6.83		66.2		60	.2	6	8.8		69.4
Medium Trucks:	64.	8 (53.3	56.9 55.4 63.8			64.0					
Heavy Trucks:	69.	2 (67.8		58.8		60	.0	6	8.4		68.
Vehicle Noise:	73.	2	71.6		67.3		63	.8	7	2.3		72.
Centerline Distance to	Noise Co	ntour (in feet,										
				70	dBA	65	dBA		60 dBA		55	dBA
			dn:	7	74	1	59		342		7	36
		CI	IEL:	7	78 168 361 778					78		

	FH	WA-RD-77-108 H	IIGHW/	Y NO	DISE PF	REDICT	ION MO	DEL				
Scenar Road Nan Road Segme	Scenario: OY With Project Road Name: Santa Ana Av. Road Segment: e/o Citrus Av.					Project Job N	Name: lumber:	Goodi 12384	man III			
SITE	SPECIFIC IN	IPUT DATA				ľ	IOISE I	NODE	L INPU	rs		
Highway Data				S	ite Con	ditions	(Hard =	10, S	oft = 15)			
Average Daily	Traffic (Adt):	8,419 vehicles	5					Autos.	: 15			
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2)	Axles)	: 15			
Peak H	our Volume:	842 vehicles			Hea	avy Tru	cks (3+)	Axles)	: 15			
Ve	hicle Speed:	40 mph		14	ahiala I	Alw						
Near/Far La	ne Distance:	48 feet		v	Vehi	nix cleTvne		Dav	Evenina	Nic	aht	Daily
Site Data				-	1011	0.013pc	Autos:	77.5%	6 12.9%	g	.6%	95.67%
Ba	rrior Hoight:	0.0 foot			Me	edium T	rucks:	84.89	6 4.9%	10	.3%	2.25%
Barrier Type (0-W	/all 1-Berm)	0.0 1001			F	leavy T	rucks:	86.5%	6 2.7%	10	.8%	2.08%
Centerline Di	st. to Barrier:	46.0 feet		-								
Centerline Dist.	to Observer:	46.0 feet		N	oise So	ource E	evation	s (in 1	eet)			
Barrier Distance	to Observer:	0.0 feet				Auto	s: 0.	000				
Observer Height	Observer Height (Above Pad): 5.0 feet				Heavy Trucks: 8,004 Grade Adjustment: 0,0							0.0
P	ad Elevation:	0.0 feet			neav	y muck	s. o.	004	Graue A	ijusii	ient.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Equ	uivalen	t Distan	ce (in	feet)	_		
	Road Grade:	0.0%				Auto	s: 39.	560				
	Left View:	-90.0 degrees	5		Mediur	n Truck	s: 39.	336				
	Right View:	90.0 degrees	5		Heav	y Truck	s: 39.	358				
FHWA Noise Mod	el Calculation	s									-	
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite	Road	Fresi	nel	Barrier A	tten	Bern	n Atten
Autos:	66.51	-2.27		1.42		-1.20		-4.63	0	.000		0.000
Medium Trucks:	77.72	-18.54		1.46		-1.20		-4.87	0	.000		0.000
Heavy Trucks:	82.99	-18.89		1.46		-1.20		-5.47	0	.000		0.000
Unmitigated Nois	e Levels (with	out Topo and b	arrier a	ttenu	ation)						-	
VehicleType	Leq Peak Ho	ur Leq Day	Le	q Eve	ening	Leq	Night		Ldn		CN	IEL
Autos:	64	.5 6	2.6		60.8		54.	7	63	.4		64.0
Medium Trucks:	59	.4 5	7.9		51.6		50.0)	58	.5		58.7
Heavy Trucks:	64	.4 6	2.9		53.9		55.1		63	.5		63.6
Vehicle Noise:	68	3.1 6	6.4		62.0		58.0	6	67	.1		67.4
Centerline Distan	ce to Noise C	ontour (in feet)										
				70 dl	BA	65	dBA		60 dBA		55 0	'BA
		L	dn:	29 63 137 294			94					
	CNEL:					6	57		144		31	1

Wednesday, June 05, 2019

	FH\	NA-RD-77-108	HIGHWA	AY NO	DISE P	REDICTI	ON MO	DEL			
Scenar Road Nan Road Segme	io: OY With Pr ne: Santa Ana nt: e/o Juniper	roject Av. ⁻ Av.				Project Job N	Name: (umber:	Goodi 12384	nan III		
SITE	SPECIFIC IN	IPUT DATA				N	OISE N	/IODE	L INPUTS	5	
Highway Data				Si	ite Cor	nditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	11,468 vehicl	es				,	Autos.	15		
Peak Hour	Percentage:	10%			Me	edium Tru	ıcks (2 A	(xles)	15		
Peak H	lour Volume:	1,147 vehicle	s		He	eavy Truc	cks (3+ A	(xles)	15		
Ve	hicle Speed:	40 mph		Ve	ehicle	Mix					
Near/Far La	ne Distance:	48 feet		-	Veh	nicleTvpe		Dav	Evenina	Niah	Dailv
Site Data						A	Autos:	77.5%	5 12.9%	9.6	% 95.67%
Ba	rrier Heiaht:	0.0 feet			М	ledium Tr	ucks:	84.8%	4.9%	10.3	% 2.25%
Barrier Type (0-W	/all, 1-Berm):	0.0				Heavy Ti	ucks:	86.5%	2.7%	10.8	% 2.08%
Centerline Di	st. to Barrier:	46.0 feet		N	oise S	ource El	evation	s (in f	eet)		
Centerline Dist.	to Observer:	46.0 feet				Autos	s: 0.0	000	,		
Barrier Distance	er Distance to Observer: 0.0 feet				Mediu	m Truck	s: 2.2	297			
Observer Height	(Above Pad):	ve Pad): 5.0 feet			Hear	vv Truck	s: 8.0	004	Grade Adj	ustme	nt: 0.0
P	ad Elevation:	n: 0.0 feet									
Ro	Road Elevation: 0.0 feet				ane Eq	uivalent	Distant	ce (In	feet)		
	Road Grade:	0.0%				Autos	s: 39.	560			
	Left View:	-90.0 degre	es		Meaiu	m Truck	s: 39.0	336			
	Right View:	90.0 degre	es		Hea	vy Truck	s: 39.:	358			
FHWA Noise Mod	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fresn	el	Barrier Atte	en B	erm Atten
Autos:	66.51	-0.92		1.42		-1.20		-4.63	0.0	00	0.000
Medium Trucks:	77.72	-17.21		1.46		-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	82.99	-17.56		1.46		-1.20		-5.47	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier a	ttenu	ation)						
VehicleType	Leq Peak Hou	ur Leq Day	/ Le	eq Eve	ening	Leq	Night		Ldn		CNEL
Autos:	65	.8	63.9		62.1		56.1		64.7		65.3
Medium Trucks:	60	0.8	59.3		52.9		51.4		59.8		60.0
Vehicle Noise	65	0.7	64.3 67.8		55.2 63.4		59.5		64.8		65.0
Centerline Distan	ce to Noise Ce	ontour (in feet)				20.0		20.1		20.0
				70 dBA 65 dBA 60 dBA		60 dBA	1	55 dBA			
	Ldn:			36 78		168		362			
	CNEL:			38		8	2		177		382

	FH	VA-RD-77-108	HIGHW.		DISE PI	REDICTIO	N MOL	EL _			
Scenar	io: OY With Pi	oject				Project N	ame: G	oodm	nan III		
Road Nam	ne: Santa Ana	Av.				Job Nur	nber: 1	2384			
Road Segme	nt: e/o Sierra /	Av.									
SITE	SPECIFIC IN	IPUT DATA				NC	ISE M	ODE		s	
Highway Data				S	ite Con	ditions (H	lard = 1	0, So	oft = 15)		
Average Daily	Traffic (Adt):	7,854 vehicle	S				A	utos:	15		
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 A)	des):	15		
Peak H	lour Volume:	785 vehicles			He	avy Truck	s (3+ A)	des):	15		
Ve	hicle Speed:	40 mph		ν	ehicle l	Mix					
Near/Far La	ne Distance:	48 feet			Vehi	icleType	E)ay	Evening	Night	Daily
Site Data					Autos: 77.5% 12.9% 9.6%						
Ba	rrier Heiaht:	0.0 feet			Me	edium Tru	cks: 8	4.8%	4.9%	10.3%	2.40%
Barrier Type (0-W	/all, 1-Berm):	0.0			ŀ	leavy Tru	cks: 8	6.5%	2.7%	10.8%	2.62%
Centerline Di	st. to Barrier:	46.0 feet			laise Sr	urce Elev	vations	(in fe	oot)		
Centerline Dist.	to Observer:	46.0 feet		-	0130 00	Autos	0.0	0			
Barrier Distance	to Observer:	0.0 feet			Mediur	n Trucks:	2.2	90 97			
Observer Height (bserver Height (Above Pad): 5.0 feet					v Trucks:	8.0	57 74	Grade Ad	iustment	: 0.0
Pi	Pad Elevation: 0.0 feet						0.0				
Ro	Road Elevation: 0.0 feet						Distance	e (in f	feet)		
	Road Grade:	0.0%				Autos:	39.5	60			
	Left View:	-90.0 degree	S		Mediur	n Trucks:	39.3	36			
	Right View:	90.0 degree	S		Heav	y Trucks:	39.3	58			
FHWA Noise Mod	el Calculation	s		-							
VehicleType	REMEL	Traffic Flow	Distar	ice	Finite	Road	Fresne	d .	Barrier Att	en Bei	rm Atten
Autos:	66.51	-2.60		1.42		-1.20	-	4.63	0.0	000	0.000
Medium Trucks:	77.72	-18.58		1.46		-1.20	-	4.87	0.0	000	0.000
Heavy Trucks:	82.99	-18.20		1.46		-1.20	-	5.47	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and L	arrier a	attenu	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	Le	eq Ev	ening	Leq N	ight		Ldn	С	NEL
Autos:	64	.1 6	2.2		60.5		54.4		63.0)	63.6
Medium Trucks:	59	.4 5	7.9		51.5		50.0		58.4	1	58.7
Heavy Trucks:	65	.1 6	3.6		54.6		55.8		64.2	2	64.3
Vehicle Noise:	68	.2 6	6.6		61.9		58.8		67.3	3	67.6
								_			
Centerline Distan	ce to Noise C	ontour (in feet)	1								
Centerline Distan	ce to Noise C	ontour (in feet)		70 di	BA	65 dE	BA	6	0 dBA	55	dBA
Centerline Distan	ce to Noise C	ontour (in feet)	.dn:	70 di 30	BA	65 dE 65	BA	6	0 dBA	55	dBA 303

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	FHV	VA-RD-77-108	HIGHW	AY N	OISE PE	REDICTIC	N MO	DEL				
Scenari Road Nam Road Segmer	o: OY With Pr e: Jurupa Av. nt: w/o Cherry	roject Av.				Project N Job Nu	lame: mber:	Goodr 12384	nan III			
SITE	SPECIFIC IN	IPUT DATA				NC	DISE	MODE	L INPUT	ſS		
Highway Data					Site Con	ditions (I	Hard :	= 10, Se	oft = 15)			
Average Daily Peak Hour Peak H	Traffic (Adt): Percentage: our Volume:	26,787 vehicle 10% 2,679 vehicles	s		Me He	dium Truc avy Truck	:ks (2 :s (3+	Autos: Axles): Axles):	15 15 15			
Ve	hicle Speed:	45 mph			/ohiclo	Mix						
Near/Far La	ne Distance:	80 feet		H	Veh	cleTvpe		Dav	Evenina	Nial	ht	Dailv
Site Data						AL	itos:	77.5%	12.9%	9.	6% 9	95.01%
Bar	rier Height:	0.0 feet			Me	edium Tru	cks:	84.8%	4.9%	10.	3%	2.42%
Barrier Type (0-W	all, 1-Berm):	0.0			ŀ	leavy Tru	cks:	86.5%	2.7%	10.	8%	2.57%
Centerline Dis	st. to Barrier:	60.0 feet		,	Voise Sr	urce Ele	vatio	ns (in f	eet)			
Centerline Dist.	to Observer:	60.0 feet		Ľ.	10.00 00	Autos:	0	000	000			
Barrier Distance	to Observer:	0.0 feet			Modiu	n Trucks:	2	207				
Observer Height (Observer Height (Above Pad): 5.0 feet				Hoay	v Trucks:	2	004	Grade A	diustm	ent (0 0
Pad Elevation: 0.0 feet					near	y muono.	0	.004	0/000/1	ajaoan	0111. 0	
Roa	Road Elevation: 0.0 feet					uivalent l	Distar	nce (in	feet)			
I	Road Grade:	0.0%				Autos:	45	.000				
	Left View:	-90.0 degree	S		Mediur	n Trucks:	44	.803				
	Right View:	90.0 degree	S		Heav	y Trucks:	44	.822				
FHWA Noise Mode	el Calculation	s										-
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	nel	Barrier A	tten	Berm	Atten
Autos:	68.46	2.22		0.58	3	-1.20		-4.69	0.	.000		0.00
Medium Trucks:	79.45	-13.73		0.61	I	-1.20		-4.88	0.	.000		0.00
Heavy Trucks:	84.25	-13.46		0.61	I	-1.20		-5.34	0.	.000		0.00
Unmitigated Noise	e Levels (with	out Topo and I	barrier	atten	uation)							
VehicleType	Leq Peak Hou	Ir Leq Day	L	.eq Ev	/ening	Leq N	ight		Ldn		CNE	EL
Autos:	70	.1 6	8.2		66.4		60.	3	69	.0		69.0
Medium Trucks:	65	.1 θ	3.6		57.3		55.	7	64	.2		64.4
Heavy Trucks:	70	.2 6	8.8		59.7		61.	0	69	.3		69.
Vehicle Noise:	73	.8 7	2.1		67.7		64.	3	72	.8		73.
Centerline Distance	e to Noise Co	ontour (in feet)										
				70 a	IBA	65 di	BA	(60 dBA		55 dl	BA
		l	dn:	92	2	199	9		429		924	4
		CN	IEL:	97	7	210)		452		974	1

	FH	WA-RD-77-108	HIGH\	WAY N	OISE PF	REDICTIC	ON MO	DEL						
Scenar Road Narr Road Segme	io: OY With P ne: Jurupa Av. nt: e/o Cherry	roject Av.			Project Name: Goodman III Job Number: 12384									
SITE	SPECIFIC II	NPUT DATA				NC	DISE N	/IODE	L INPUT	S				
Highway Data				3	Site Con	ditions (F	Hard =	10, S	oft = 15)					
Average Daily	Traffic (Adt):	23,496 vehicle	s					Autos:	: 15					
Peak Hour	Percentage:	10%			Me	dium Truc	:ks (2 A	(xles)	: 15					
Peak H	lour Volume:	2,350 vehicles	;		He	avy Truck	is (3+ A	(xles)	: 15					
Ve	hicle Speed:	45 mph			Vohiclo I	Mix								
Near/Far La	ne Distance:	80 feet		Ľ	Venicie i Veh	icleTvne		Dav	Evenina	Nia	ht	Daily		
Site Data					Autos: 77.5% 12.9% 9.6% 94.92									
Pa	rrior Hoight:	0.0 foot			Me	edium Tru	cks:	84.8%	6 4.9%	10.	3%	2.43%		
Barrier Type (0-W	/all_1-Berm)	0.0 1001			F	leavy Tru	cks:	86.5%	6 2.7%	10.	8%	2.65%		
Centerline Di	st. to Barrier:	60.0 feet		L.										
Centerline Dist.	to Observer:	60.0 feet		'	voise Sc	burce Ele	vation	s (in f	eet)					
Barrier Distance	to Observer:	0.0 feet			Autos. 0.000 Madium Truakau 2.207									
Observer Height	Observer Height (Above Pad): 5.0 feet				Mediur	m Trucks:	2.2	297	Out de Au					
P	Pad Elevation: 0.0 feet						8.0	JU4	Grade Ad	ijustri	ient:	0.0		
Ro	Road Elevation: 0.0 feet						Distan	ce (in	feet)					
	Road Grade:	0.0%				Autos:	45.	000						
	Left View:	-90.0 degree	s		Mediur	m Trucks:	44.	803						
	Right View:	90.0 degree	S		Heavy Trucks: 44.822									
FHWA Noise Mod	el Calculatior	ıs												
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresn	el	Barrier At	ten	Berm	Atten		
Autos:	68.46	1.65		0.58	3	-1.20		-4.69	0.	000		0.000		
Medium Trucks:	79.45	-14.27		0.61	I	-1.20		-4.88	0.	000		0.000		
Heavy Trucks:	84.25	-13.90		0.61	1	-1.20		-5.34	0.	000		0.000		
Unmitigated Nois	e Levels (with	nout Topo and	barrie	r atten	uation)									
VehicleType	Leq Peak Ho	ur Leq Day		Leq Ev	/ening	Leq N	light		Ldn		CNI	EL		
Autos:	69	9.5 6	67.6		65.8		59.8		68.	4		69.0		
Medium Trucks:	64	4.6 6	63.1		56.7		55.2		63.	6		63.9		
Heavy Trucks:	Heavy Trucks: 69.8 68.3				59.3		60.6	i	68.	9		69.0		
Vehicle Noise:	73	3.3 7	71.6		67.1		63.8		72.	3		72.6		
Centerline Distan	ce to Noise C	ontour (in feet)												
	7				70 dBA 65 dBA		1	60 dBA		55 d	BA			
		1	dn:	85	5	184 397 8			85	4				
	CNEL:					90 194 418 900								

	FH\	NA-RD-77-108	HIGHW	AY NC	DISE P	REDICT	ION MO	DEL			
Scena Road Nar Road Segme	rio: OY With P ne: Jurupa Av. ent: e/o Beech	roject Av.				Project Job N	t Name: lumber:	Good 12384	man III		
SITE	SPECIFIC IN	IPUT DATA				P	NOISE N	/IODE	L INPUTS	5	
Highway Data				Si	ite Cor	nditions	(Hard =	10, S	oft = 15)		
Average Daily	/ Traffic (Adt):	23,206 vehicl	es					Autos	15		
Peak Hou	r Percentage:	10%			Me	edium Tr	ucks (2 A	Axles)	: 15		
Peak I	Hour Volume:	2,321 vehicle	s		He	eavy Tru	cks (3+ A	Axles)	: 15		
Ve	ehicle Speed:	45 mph		Ve	ehicle	Mix					
Near/Far La	ane Distance:	80 feet		-	Veh	icleType	е	Day	Evening	Nigh	t Daily
Site Data							Autos:	77.5%	6 12.9%	9.6	3% 94.89%
Ba	arrier Height:	0.0 feet			М	edium T	rucks:	84.8%	6 4.9%	10.3	3% 2.44%
Barrier Type (0-V	Vall, 1-Berm):	0.0				Heavy T	rucks:	86.5%	6 2.7%	10.8	3% 2.67%
Centerline D	ist. to Barrier:	60.0 feet		N	oise S	ource E	levation	s (in i	eet)		
Centerline Dist.	to Observer:	60.0 feet				Auto	s: 0.0	000	,		
Barrier Distance	Barrier Distance to Observer: 0.0 feet Dbserver Height (Above Pad): 5.0 feet				Mediu	m Truck	s: 2.1	297			
Observer Height	Observer Height (Above Pad): 5.0 feet				Hear	vy Truck	s: 8.0	004	Grade Adj	ustme	ent: 0.0
F F	Pad Elevation: 0.0 feet					wixalan	4 Dioton		faa4)		
Ro	bad Elevation:	0.0 feet		Le	ane Eq	Auto	DISIAI		leel)		
	Road Grade:	0.0%			Madiu	AUIO m Truck	S. 45.	000			
	Lent View:	-90.0 degre	es		Hoa	N Truck	S. 44.	803 022			
	rugin view.	30.0 degre	55		mou	<i>iy maon</i>		022			
FHWA Noise Mod	lel Calculation	S									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresr	iel	Barrier Atte	en E	Berm Atten
Autos:	: 68.46	1.59		0.58		-1.20		-4.69	0.0	00	0.000
Medium Trucks:	: 79.45	-14.31		0.61		-1.20		-4.88	0.0	00	0.000
Heavy Trucks:	84.25	-13.91		0.61		-1.20		-5.34	0.0	00	0.000
Unmitigated Nois	se Levels (with	out Topo and	barrier a	attenu	ation)			1			
Venicle I ype	Leq Peak Hou	ur Leq Day	/ Le	eq Eve	ening	Leq	Night		Ldn		CNEL
Autos. Modium Trucks	. 05	.4	62.0		00.0 56.7		59.7		62.6		62.9
Hoow Trucks		.0	69.2		50.7		60 F		69.0		60.0
Vehicle Noise.	. 03	3.2	71.6		67.1		63.8	3	72.3		72.6
Centerline Distan	ce to Noise C	ontour (in feet)								
L				70 dBA 65 dBA			60 dBA		55 dBA		
			Ldn:	85 183		395		850			
	CNEL:			90	90 193 416 896					896	

	FHW	A-RD-77-108	HIGHW	AY NO	DISE PF	REDICTIC	ON MOI	DEL				
Scenari Road Nam Road Segmen	o: OY With Pro e: Jurupa Av. nt: e/o Poplar A		Project Name: Goodman III Job Number: 12384									
SITE	SPECIFIC IN	PUT DATA				NC	DISE N	IODE		s		
Highway Data				S	ite Con	ditions (I	Hard =	10, Sc	oft = 15)	-		
Average Daily Peak Hour Peak H	Traffic (Adt): 2 Percentage: pur Volume: 2	25,090 vehicle 10% 2,509 vehicles	5		Me He	dium Truc avy Truck	A cks (2 A cs (3+ A	Autos: xles): xles):	15 15 15			
Near/Far I ar	nele opeca. ne Distance:	80 feet		V	ehicle l	Mix		_				
riodini di Edi	io Biotanoo.	00 1001			Vehi	icleType		Day	Evening	Night	Daily	
Site Data Bar Barrier Type (0-W)	rier Height:	0.0 feet			Me F	AL edium Tru leavy Tru	itos: icks: icks:	77.5% 84.8% 86.5%	12.9% 4.9% 2.7%	9.6% 10.3% 10.8%	2.43% 2.67%	
Centerline Dis	t. to Barrier:	60.0 feet		N	oise Sc	ource Ele	vations	s (in fe	et)			
Barrier Distance a Observer Height (, Pa	o Observer: o Observer: Above Pad): od Elevation:	0.0 feet 5.0 feet 0.0 feet			Mediur Heav	Autos: n Trucks: y Trucks:	0.0 2.2 8.0	000 197 104	Grade Adj	justment.	0.0	
Roa	Road Elevation: 0.0 feet						Distand	e (in i	feet)			
F	Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree	6 6		Medium Trucks: 44.803 Heavy Trucks: 44.822							
FHWA Noise Mode	l Calculations											
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten	
Autos: Medium Trucks: Heavy Trucks:	68.46 79.45 84.25	1.93 -13.98 -13.58		0.58 0.61 0.61		-1.20 -1.20 -1.20		-4.69 -4.88 -5.34	0.0 0.0 0.0	000 000 000	0.00 0.00 0.00	
United and Maria	1 ((+	Tana and		- 44	- 41 1	-		_				
VehicleType	Levels (willio	Lea Dav	J		alion	Lean	light		l dn	0	VEI	
Autos:	69.1	B 6	7.9		66.1	LUYN	60.1		68.7		69.	
Medium Trucks:	64.9	9 6	3.4		57.0		55.5		63.9	9	64.	
Heavy Trucks:	70.	1 6	8.7		59.6		60.9		69.2	2	69.	
Vehicle Noise:	73.0	6 7	1.9		67.4		64.1		72.6	6	72.	
Centerline Distanc	e to Noise Co	ntour (in feet)	-	70 4	5A	65 4	DA.	6	OdPA	FF	dBA	
				70 at	24	00 0		C		35	UDA 05	
			dest	00		402						

	FHW	A-RD-77-108 HI	GHWAY	NOIŜE PI	REDICTIC	ON MODE	EL			
Scenai Road Nan Road Segme	rio: OY With Pro ne: Jurupa Av. ent: e/o Citrus A	oject v.			Project N Job Nui	lame: Go mber: 12	odma 384	n III		
SITE	SPECIFIC IN	PUT DATA			NC	DISE MC	DEL	INPUTS	;	
Highway Data				Site Con	ditions (H	Hard = 10), Soft	= 15)		
Average Daily	Traffic (Adt):	21,221 vehicles				Au	tos:	15		
Peak Hour	Percentage:	10%		Me	dium Truc	:ks (2 Axl	es):	15		
Peak H	Hour Volume:	2,122 vehicles		He	avy Truck	is (3+ Axl	es):	15		
Ve	chicle Speed:	45 mph		Vehicle	Mix					
Near/Far La	ane Distance:	80 feet		Veh	icleType	Dá	ay E	vening	Night	Daily
Site Data					AL	itos: 77	.5%	12.9%	9.6%	93.83%
Ba	rrier Height:	0.0 feet		M	edium Tru	cks: 84	.8%	4.9%	10.3%	2.63%
Barrier Type (0-V	Vall, 1-Berm):	0.0		ŀ	Heavy Tru	cks: 86	6.5%	2.7%	10.8%	3.54%
Centerline D	ist. to Barrier:	60.0 feet		Noise So	ource Ele	vations (in fee	t)		
Centerline Dist.	to Observer:	60.0 feet			Autos:	0.00	0	<i>'</i>		
Barrier Distance	to Observer:	0.0 feet		Mediu	m Trucks:	2.29	7			
Observer Height	(Above Pad):	5.0 feet		Heav	v Trucks:	8.004	4 G	rade Adji	ustment	0.0
P	ad Elevation:	0.0 feet		1 F		Di- 1	() -	- 41		
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent L	Jistance	(in ree	et)		
	Road Grade:	0.0%		Martin	Autos:	45.00	0			
	Left View:	-90.0 degrees		Mediu	m Trucks:	44.80	3			
	Right view:	90.0 degrees		neav	y mucks.	44.02	2			
FHWA Noise Mod	lel Calculations	;								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Ba	arrier Atte	en Ber	m Atten
Autos:	68.46	1.15	0.5	58	-1.20	-4.	.69	0.0	00	0.000
Medium Trucks:	79.45	-14.37	0.6	61	-1.20	-4	.88	0.0	00	0.000
Heavy Trucks:	84.25	-13.08	0.6	61	-1.20	-5.	.34	0.0	00	0.000
Unmitigated Nois	e Levels (witho	ut Topo and ba	rrier atte	nuation)						
VehicleType	Leq Peak Hou	· Leq Day	Leq E	vening	Leq N	ïght	L	dn	CI	VEL
Autos:	69.	0 67.	1	65.3		59.3		67.9		68.5
Medium Trucks:	64.	5 63.	0	56.6		55.1		63.5		63.8
Heavy Trucks:	70.	6 69.	2	60.1		61.4		69.7		69.9
Vehicle Noise:	73.	5 71.	9	66.9		64.0		72.5		72.8
Centerline Distan	ce to Noise Co	ntour (in feet)								
			70	dBA	65 dl	BA	60	dBA	55	dBA
		Ldr	n: 1	58	190)	4	09	8	82
		CNEL	1. 1	92	199	1	4	29	9	25

	FHW/	A-RD-77-108 H	IIGHWA	AY NO	DISE PI	REDICT	ION MO	DEL						
Scena Road Nar Road Segme	rio: OY With Proj ne: Jurupa Av. ent: e/o Oleander		Project Name: Goodman III Job Number: 12384											
SITE	SPECIFIC INP	UT DATA				N	IOISE N	/IODE	L INPUTS	5				
Highway Data				S	ite Con	ditions	(Hard =	10, So	oft = 15)					
Average Daily Peak Hou Peak I	Traffic (Adt): 2 Percentage: Jour Volume: 2	1,596 vehicles 10% 2.160 vehicles	5		Me He	dium Tri avv Tru	ucks (2 A cks (3+ A	Autos: \xles): \xles);	15 15 15					
Vear/Far La	ehicle Speed: ane Distance:	45 mph 80 feet		v	ehicle I Veh	Vix icleTvpe		Dav	Evening	Niaht	Dailv			
Site Data							Autos:	77.5%	12.9%	9.6%	93.86%			
Ba Barrier Type (0-V	vrrier Height: Vall, 1-Berm):	0.0 feet 0.0			Me F	edium T. Heavy Ti	rucks: rucks:	84.8% 86.5%	4.9% 2.7%	10.3% 10.8%	2.63% 3.51%			
Centerline D Centerline Dist. Barrier Distance Observer Height F	Centerline Dist. to Barrier. 60.0 feet Centerline Dist. to Observer: 60.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet					Noise Source Elevations (in feet) Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0								
Ro	Road Elevation: 0.0 feet						t Distand	ce (in	feet)		-			
	Road Grade: Left View: Right View:	0.0% -90.0 degrees 90.0 degrees	5		Autos: 45.000 Medium Trucks: 44.803 Heavy Trucks: 44.822									
FHWA Noise Mod	lel Calculations													
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fresh	el	Barrier Atte	en Be	rm Atten			
Autos. Medium Trucks. Heavy Trucks.	68.46 79.45 84.25	1.23 -14.30 -13.04		0.58 0.61 0.61		-1.20 -1.20 -1.20		-4.69 -4.88 -5.34	0.0 0.0 0.0	00	0.000			
Unmitigated Nois	e I evels (withou	ut Topo and h	arrior a	ttoni	(ation)									
VehicleType	Lea Peak Hour	Lea Dav	Le	a Ev	enina	Lea	Niaht		Ldn	С	NEL			
Autos.	69.1	6	7.2	,	65.4		59.4		68.0		68.6			
Medium Trucks.	64.6	6	3.1		56.7		55.1		63.6		63.8			
Heavy Trucks	Heavy Trucks: 70.6 69.2				60.2 61.4 69.8				69.9					
Vehicle Noise.	73.5	7	1.9		67.0		64.1		72.6	;	72.9			
Centerline Distan	ce to Noise Con	tour (in feet)												
		. ,		70 d	BA	65	dBA	6	60 dBA	55	dBA			
		L	dn:	89		1	92		413	8	390			
	CNEL:					93 201 433 933								

Wednesday, June 05, 2019

Wednesday, June 05, 2019

Wednesday, June 05, 2019

	FH	WA-RD-77-108	B HIGHV	VAY NC	ISE P	REDICT	ION MO	DEL			
Scena Road Nar Road Segme	Scenario: OY With Project Road Name: Jurupa Av. Road Segment: e/o Cypress Av.					Project Job N	Name: (lumber:	Goodr 12384	nan III		
SITE	SPECIFIC II	NPUT DATA				N	IOISE N	IODE	L INPUTS	5	
Highway Data				Si	te Cor	nditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	23,160 vehic	les					Autos:	15		
Peak Hou	r Percentage:	10%			Me	edium Tr	ucks (2 A	xles):	15		
Peak	Hour Volume:	2,316 vehicle	es		He	avy Tru	cks (3+ A	(xles)	15		
V	ehicle Speed:	45 mph		Ve	hicle	Mix					
Near/Far La	ane Distance:	80 feet		Ē	Veh	nicleTvpe	,	Dav	Evenina	Niaht	Dailv
Site Data							Autos:	77.5%	5 12.9%	9.6	% 95.55%
Ba	arrier Height	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3	% 2.32%
Barrier Type (0-V	Vall, 1-Berm):	0.0				Heavy T	rucks:	86.5%	2.7%	10.8	% 2.14%
Centerline D	ist. to Barrier:	60.0 feet		N	oise S	ource E	levation	s (in f	eet)		
Centerline Dist	to Observer:	60.0 feet		-		Auto	s [.] 0 (000			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s: 2.2	97			
Observer Height	oserver Height (Above Pad): 5.0 feet				Hea	v Truck	s: 8.0	004	Grade Adj	ustme	nt: 0.0
F	Pad Elevation:	Elevation: 0.0 feet									
Ro	Road Elevation: 0.0 feet					uivalen	t Distand	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 45.0	000			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 44.8	303			
	Right View:	90.0 degre	es		Hear	vy Truck	s: 44.8	322			
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresn	el	Barrier Atte	en B	erm Atten
Autos	68.46	i 1.61		0.58		-1.20		-4.69	0.0	00	0.000
Medium Trucks	79.45	-14.54		0.61		-1.20		-4.88	0.0	00	0.000
Heavy Trucks	84.25	-14.89		0.61		-1.20		-5.34	0.0	00	0.000
Unmitigated Nois	se Levels (with	hout Topo and	l barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	y I	Leq Eve	ening	Leq	Night		Ldn		CNEL
Autos	69	9.5	67.6		65.8		59.7		68.4		69.0
Medium Trucks	: 64	4.3	62.8		56.4		54.9		63.4		63.6
Heavy Trucks	68	8.8	67.3		58.3		59.6		67.9		68.0
Vehicle Noise	: 72	2.8	71.2		66.9		63.3		71.8		72.2
Centerline Distar	ice to Noise C	ontour (in fee	t)	70 -15		05	-10.4	r .	00 -10 4		
	7			70 GE	70 dBA 65 dBA		L '	269	5	704	
		~	NEL:	79 171 368			1 34 920				
	CNEL:				84 181 389 839						039

	FHW	A-RD-77-108	HIGHW	AY NO	DISE PR	EDICTIC		DEL _				
Scenari Road Nam Road Segmer	o: OY With Pro e: Jurupa Av. nt: e/o Juniper	oject Av.				Project N Job Nu	lame: 0 mber: 1	Goodm 2384	ian III			
SITE	SPECIFIC IN	PUT DATA				NO	DISE M	ODE		S		
Highway Data				S	ite Con	ditions (l	Hard =	10, So	ft = 15)			
Average Daily Peak Hour Peak H Vel	Traffic (Adt): Percentage: our Volume: hicle Speed:	21,972 vehicle 10% 2,197 vehicles 45 mph	s	V	Med Hea ehicle M	dium Truc avy Truck Aix	A cks (2 A cs (3+ A	utos: xles): xles):	15 15 15			
Near/Far Lai	ne Distance:	80 feet		Ē	Vehi	cleTvpe	1	Dav	Evenina	Niaht	Dailv	
Site Data						AL	itos: T	7.5%	12.9%	9.6%	94.39%	
Bar Barrier Type (0-W	rier Height: all, 1-Berm):	0.0 feet 0.0			Me H	dium Tru leavy Tru	cks: 8 cks: 8	34.8% 36.5%	4.9% 2.7%	10.3% 10.8%	2.55% 3.06%	
Centerline Dis	t. to Barrier:	60.0 feet		N	مادم 20	urco Elo	vations	(in fe	of)			
Centerline Dist. Barrier Distance Observer Height (. Pa Roa	to Observer: to Observer: Above Pad): ad Elevation: ad Elevation:	60.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet	0.0 feet 5.0 feet 0.0 feet 0.0 feet			Autos: n Trucks: y Trucks: iivalent l	0.0 2.2 8.0 Distanc	00 97 04 e (in f	Grade Adj	ustment:	0.0	
F	Road Grade:	0.0%				Autos:	45.0	00				
	Left View: Right View:	-90.0 degree 90.0 degree	s s		Medium Trucks: 44.803 Heavy Trucks: 44.822							
FHWA Noise Mode	el Calculations	i i										
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite I	Road	Fresne	el .	Barrier Att	en Ber	m Atten	
Autos:	68.46	1.33		0.58		-1.20	-	4.69	0.0	000	0.00	
Medium Trucks: Heavy Trucks:	79.45 84.25	-14.36 -13.56		0.61 0.61		-1.20 -1.20	-	4.88 5.34	0.0 0.0	000 000	0.000	
Unmitigated Noise	Levels (witho	out Topo and	barrier a	attenu	ation)							
VehicleType	Leq Peak Hou	Leq Day	L	eq Eve	ening	Leq N	light		Ldn	CI	VEL	
Autos:	69.	26	57.3		65.5		59.5		68.1		68.	
Medium Trucks:	64.	5 θ	63.0		56.6		55.1		63.5	5	63.	
Heavy Trucks:	Heavy Trucks: 70.1 68.7				59.6		60.9		69.3	3	69.	
Vehicle Noise:	73.	3 7	1.7		66.9		63.9		72.3	3	72.	
Centerline Distanc	e to Noise Co	ntour (in feet)	-	70. "		05.			0 -10 4		-10.4	
				70 dE	5A	65 di	BA	6	U aBA	55	aBA E0	
			din i	0/1		4.00						

Wednesday, June 05, 2019

	=10	NA DD 77 400						DEL	_			_
	FH	VA-RD-77-108	HIGH	WATN	UISE PI	EDICTI		DEL				
Scenar	io: OY With Pr	oject				Project	Name:	Goodn	nan III			
Road Nam	e: Armstrong	Rd.				Job Ni	umber:	12384				
Road Segme	nt: w/o Sierra	AV.										
SITE	SPECIFIC IN	IPUT DATA				N	OISE	MODE	l inpu	TS		
Highway Data				1	Site Con	ditions	(Hard =	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	27,872 vehicle	s					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tru	icks (2	Axles):	15			
Peak H	lour Volume:	2,787 vehicles	6		He	avy Truc	ks (3+	Axles):	15			
Ve	hicle Speed:	45 mph			Vehicle	Mix						
Near/Far La	ne Distance:	48 feet		E E	Veh	icleType	1	Dav	Evenin	a Ni	aht	Dailv
Site Data				-		A	utos:	77.5%	12.9	% 5	9.6%	95.21%
Ba	rrior Hoimht	0.0 feet			M	edium Tr	ucks:	84.8%	4.9	% 10	0.3%	2.39%
Barrier Tyne (0-M	/all_1_Borm)	0.0 1001			ŀ	leavy Tr	ucks:	86.5%	2.7	% 10	0.8%	2.40%
Centerline Di	st to Barrier	59.0 feet		-		,		<i></i>				
Centerline Dist.	to Observer:	59.0 feet		1	Voise So	burce El	evatio	ns (in fe	eet)			
Barrier Distance	to Observer:	0.0 feet				Autos	:: 0	.000				
Observer Height ((Above Pad):	5.0 feet			Mediu	n Trucks	: 2	.297	~ .			
P	ad Elevation:	0.0 feet			Heav	y Trucks	8	.004	Grade	Adjusti	nent:	0.0
Roa	ad Elevation:	0.0 feet		1	Lane Eq	uivalent	Distar	nce (in i	feet)			
	Road Grade:	0.0%				Autos	: 54	.129				
	Left View:	-90.0 degree	s		Mediu	n Trucks	: 53	.966				
	Right View:	90.0 degree	es		Heav	y Trucks	: 53	.982				
FHWA Noise Mod	el Calculation	s										
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fres	nel	Barrier .	Atten	Berr	m Atten
Autos:	68.46	2.40		-0.62	2	-1.20		-4.69		0.000.0	-	0.000
Medium Trucks:	79.45	-13.60		-0.60)	-1.20		-4.88		000.0		0.000
Heavy Trucks:	84.25	-13.58		-0.60)	-1.20		-5.35		0.000		0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	r atten	uation)					-		
VehicleType	Leq Peak Hou	ır Leq Day		Leg Ev	/ening	Leq I	Vight		Ldn		CI	JEL
Autos:	69	.0 0	67.1		65.4		59.	3	6	7.9		68.5
Medium Trucks:	64	.0 0	62.5		56.2		54.	6	6	3.1		63.3
Heavy Trucks:	68	.9 (67.5		58.4		59.	7	6	8.0		68.1
Vehicle Noise:	72	.6	71.0		66.6		63.	2	7	1.6		72.0
Centerline Distant	ce to Noise Co	ontour (in feet,)									
			L	70 c	iBA	65 0	1BA	6	60 dBA		55	dBA
			Ldn:	70	6	16	64		353		7	59
		Cl	IEL:	8	C	17	'3		372		8	02
Centerline Distan	ce to Noise Co	ontour (in feet, CN) Ldn: IEL:	70 c 7(8)	IBA 6 0	65 d 16 17	<i>IBA</i> 64 73	6	0 dBA 353 372		55 7: 8	<i>dBA</i> 59 02

	FHV	WA-RD-77-108	HIGH	WAY N	OISE PR	EDICTI	ON MC	DEL			
Scenar	io: OY With Pr	roject				Project I	Name:	Goodr	nan III		
Road Nan	e: Armstrong	Rd.				Job NL	umber:	12384			
Road Segme	nt: w/o 34th St	L.									
SITE	SPECIFIC IN	IPUT DATA				N	OISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions ((Hard =	: 10, S	oft = 15)		
Average Daily	Traffic (Adt):	40,083 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Tru	cks (2	Axles).	15		
Peak H	lour Volume:	4,008 vehicle	S		Hea	avy Truc	ks (3+	Axles).	15		
Ve	hicle Speed:	45 mph		N	/ehicle N	<i>lix</i>					
Near/Far La	ne Distance:	48 feet		F	Vehi	cleType		Day	Evening	Night	Daily
Site Data					Autos: 77.5% 12.9% 9.6%						
Ba	rrier Height	0.0 feet			Me	dium Tri	ucks:	84.8%	4.9%	10.3	% 2.37%
Barrier Type (0-W	/all, 1-Berm):	0.0			H	leavy Tri	ucks:	86.5%	2.7%	10.8	% 2.33%
Centerline Di	st. to Barrier:	59.0 feet			loise So	urce Ele	evatior	ıs (in f	eet)		
Centerline Dist.	to Observer:	59.0 feet		-		Autos	: 0	000			-
Barrier Distance	to Observer:	0.0 feet			Mediun	n Trucks	: 2	297			
Observer Height	bserver Height (Above Pad): 5.0 feet						: 8	004	Grade Ac	ljustme	nt: 0.0
P	Pad Elevation: 0.0 feet									,	
Ro	ad Elevation:	0.0 feet		L	ane Equ	livalent	Distar	ce (in	feet)		
	Road Grade:	0.0%				Autos	: 54	.129			
	Left View:	-90.0 degre	es		Mediun	n Trucks	: 53	.966			
	Right View:	90.0 degre	es		Heav	y Trucks	53	.982			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fres	nel	Barrier At	ten B	erm Atten
Autos:	68.46	3.98		-0.62		-1.20		-4.69	0.	000	0.000
Medium Trucks:	79.45	-12.06		-0.60)	-1.20		-4.88	0.	000	0.000
Heavy Trucks:	84.25	-12.14		-0.60)	-1.20		-5.35	0.	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	r atteni	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	·	Leq Ev	rening	Leq I	Vight		Ldn		CNEL
Autos:	70	.6	68.7		67.0		60.	9	69.	5	70.1
Medium Trucks:	65	.6	64.1		57.7		56.	2	64.	6	64.9
Heavy Trucks:	Heavy Trucks: 70.3 68.9				59.9		61.	1	69.	5	69.6
Vehicle Noise:	74	.1	72.5		68.1		64.	7	73.	2	73.5
Centerline Distan	ce to Noise Co	ontour (in feet)							-	
			L	70 d	BA	65 c	1BA		60 dBA	5	5 dBA
	Ldn:				96 206 445 9			958			
	CNEL:						8		470		1,012

	FH	WA-RD-77-10	B HIGHW	VAY NO	ISE P	REDICTIO	ON MOI	DEL				
Scenario: HY Without Project Road Name: Citrus Av. Road Segment: s/o I-10 Ramps					Project Name: Goodman III Job Number: 12384							
SITE S	PECIFIC IN	NPUT DATA				N	DISE N	IODE	L INPUTS	s		
Highway Data				Si	te Cor	nditions (Hard =	10, Se	oft = 15)			
Average Daily T	raffic (Adt):	35,210 vehic	les				/	Autos:	15			
Peak Hour F	Percentage:	10%			Me	edium Tru	cks (2 A	xles):	15			
Peak Ho	our Volume:	3,521 vehicle	es		He	avy Truci	ks (3+ A	xles):	15			
Veh	icle Speed:	45 mph		Ve	hiclo	Mix						
Near/Far Lan	e Distance:	88 feet			Veh	nicleType		Dav	Evenina	Niahi	Dailv	
Site Data						A	utos:	77.5%	12.9%	9.6	% 95.52%	
Barr	rier Heiaht:	0.0 feet			М	edium Tru	icks:	84.8%	4.9%	10.3	% 2.33%	
Barrier Type (0-Wa	all, 1-Berm):	0.0				Heavy Tru	icks:	86.5%	2.7%	10.8	% 2.15%	
Centerline Dist	t. to Barrier:	66.0 feet		No	niso S	ource Ele	vation	: (in f	aat)			
Centerline Dist. to	o Observer:	66.0 feet			130 0	Autos	. 0.0	000				
Barrier Distance to	o Observer:	0.0 feet			Mediu	m Trucks	. 22	97				
Observer Height (A	Above Pad):	5.0 feet			Hear	N Trucks	. 80	04	Grade Adi	iustme	nt: 0.0	
Pad	d Elevation:	0.0 feet				.,						
Road Elevation: 0.0 feet				La	ne Eq	uivalent	Distand	e (in	feet)			
R	load Grade:	0.0%				Autos	: 49.4	147				
	Left View:	-90.0 degrees			Inearum Trucks: 49.268							
	Right View:	90.0 degre	es		Hea	vy Trucks	49.2	285				
FHWA Noise Model	I Calculation	15										
VehicleType	REMEL	Traffic Flow	Dista	ince	Finite	Road	Fresn	el	Barrier Atte	en B	erm Atten	
Autos:	68.46	3.43		-0.03		-1.20		-4.71	0.0	00	0.00	
Medium Trucks:	79.45	-12.70		-0.01		-1.20		-4.88	0.0	00	0.00	
Heavy Trucks:	84.25	-13.05		-0.01		-1.20		-5.30	0.0	00	0.00	
Unmitigated Noise	Levels (with	nout Topo and	l barrier	attenua	ation)							
VehicleType	Leq Peak Ho	ur Leq Da	y L	leq Eve	ning	Leq N	light		Ldn		CNEL	
Autos:	70	0.7	68.8		67.0		60.9		69.6	6	70.3	
Medium Trucks:	65	5.5	64.0		57.7		56.1		64.6	6	64.8	
Heavy Trucks: 70.0 68.6			59.5 60.8				69.1		69.3			
Vehicle Noise:	74	4.0	72.4		68.1		64.5		73.0)	73.4	
Centerline Distance	e to Noise C	ontour (in fee	t)									
				70 dB	8A	65 d	BA	6	60 dBA	1	55 dBA	
		_	Ldn:	105		22	7		488		1,052	
		C	NEL:	111		24	U		516		1,112	

	FH	NA-RD-77-108	HIGHW		DISE PF	EDICTIC								
Scenario: HY Without Project					Project Name: Goodman III									
Road Name: Citrus Av.					Job Number: 12384									
Road Segmer	nt: s/o Slover /	Av.												
SITE	SPECIFIC IN	IPUT DATA				N	DISE N	IODE		s				
Highway Data				S	ite Con	ditions (Hard =	10, Sc	oft = 15)					
Average Daily	Traffic (Adt):	21,328 vehicle	s				/	Autos:	15					
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 A	(xles):	15					
Peak H	our Volume:	2,133 vehicles			Heavy Trucks (3+ Axles): 15									
Ve	hicle Speed:	40 mph		v	ehicle I	Nix								
Near/Far La	ne Distance:	48 feet			Vehi	cleType		Day	Evening	Night	Daily			
Site Data						A	itos:	77.5%	12.9%	9.6%	95.52%			
Barrier Height: 0.0 feet				Me	edium Tru	icks:	84.8%	4.9%	10.3%	2.33%				
Barrier Type (0-Wall, 1-Berm): 0.0					F	leavy Tru	icks:	86.5%	2.7%	10.8%	2.15%			
Centerline Dis	t. to Barrier:	46.0 feet			laisa Sa	urco Ela	vation	in f	not)					
Centerline Dist.	to Observer:	46.0 feet		N	0136 30	Autoo	vauon	000	el)					
Barrier Distance	to Observer:	0.0 feet			Modium	Autos. n Trucko	- 21	000						
Observer Height (Above Pad): 5.0 feet				Hoov	n Trucks.	2.2	297	Grade Ad	iustment	. 0.0				
Pa	d Elevation:	0.0 feet			neav	y mucho.	0.0	704			0.0			
Roa	d Elevation:	0.0 feet		L	ane Equ	uivalent	Distand	ce (in i	feet)					
I	Road Grade:	0.0%				Autos.	39.5	560						
	Left View:	-90.0 degree	s		Mediur	n Trucks.	39.3	336						
	Right View:	90.0 degree	s		Heav	y Trucks.	39.3	358						
FHWA Noise Mode	el Calculation	s												
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten			
Autos:	66.51	1.76		1.42		-1.20		-4.63	0.0	000	0.000			
Medium Trucks:	77.72	-14.36		1.46		-1.20		-4.87	0.0	000	0.000			
Heavy Trucks:	82.99	-14.71	-14.71		.46 -1.20			-5.47 0.0		0.000 0.000				
Unmitigated Noise	e Levels (with	out Topo and I	oarrier a	attenu	ation)									
VehicleType	Leq Peak Hou	ır Leq Day	L	eq Ev	ening	Leq N	light		Ldn	CI	VEL			
Autos:	68	.5 6	6.6		64.8		58.8		67.4	1	68.0			
Medium Trucks:	ks: 63.6 62.1		2.1		55.7	54.2		62.7		7	62.9			
Heavy Trucks: 68		.5 67.1			58.1	59		9.3 67		7	67.8			
Vehicle Noise:	72	.2 7	0.5		66.1		62.7		71.2	2	71.6			
Centerline Distant	e to Noise Co	ontour (in feet)		_										
				70 d	BA	65 d	BA	6	i0 dBA	55	dBA			
		L	.dn:	55		11	9		257	5	54			
											-			

Wednesday, June 05, 2019

	FHV	VA-RD-77-108	HIGH	WAY N	NOISE P	REDICT		DDEL				
Scenario: HY Without Project Road Name: Citrus Av.					Project Name: Goodman III Job Number: 12384							
Road Segme	ent: s/o Santa A	ina Av.										
SITE SPECIFIC INPUT DATA					04-0	N	IOISE	MODE		TS		
Average Daily Peak Hour Peak F	Traffic (Adt): Percentage: Hour Volume:	15,981 vehicles 10% 1,598 vehicles			Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15							
Ve	ehicle Speed:	40 mph		F	Vehicle	Mix						
Near/Far La	ane Distance:	48 feet	feet		Veh	icleType	;	Day	Evenin	g Ni	ight	Daily
Site Data							Autos:	77.5%	12.9	6	9.6%	95.52%
Ba	rrier Heiaht:	0.0 feet			М	edium T	rucks:	84.8%	4.99	% 1	0.3%	2.33%
Barrier Type (0-V	Vall, 1-Berm):	0.0			1	Heavy T	rucks:	86.5%	2.79	% 1	0.8%	2.15%
Centerline Di	ist. to Barrier:	46.0 feet		F	Noise Source Elevations (in feet)							
Centerline Dist.	to Observer:	46.0 feet		F		Auto	s: (.000	000			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s: 2	.297				
Observer Height	Observer Height (Above Pad): 5.0 feet				Heavy Trucks: 8.004 Grade Adjustment: 0.0							
P	ad Elevation:	0.0 feet		-			Dista		6 43			
Ro	ad Elevation:	0.0 feet		-	Lane Eq	uivalen	t Dista	nce (in	feet)			
	Road Grade:	0.0%				Auto	s: 39	1.560				
	Left View: Right View:	-90.0 degree 90.0 degree	s s		Heav	m Truck /y Truck	s: 39 s: 39	1.336 1.358				
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier J	Atten	Ber	m Atten
Autos:	66.51	0.51		1.4	2	-1.20		-4.63		0.000		0.00
Medium Trucks:	77.72	-15.62		1.4	6	-1.20		-4.87		0.000		0.00
Heavy Trucks:	82.99	-15.97		1.4	6	-1.20		-5.47		0.000		0.00
Unmitigated Nois	e Levels (with	out Topo and I	barrie	er atter	nuation)					-		
VehicleType	Leq Peak Hou	r Leq Day		Leq E	vening	Leq	Night		Ldn		CI	VEL
Autos:	67	.2 6	5.3		63.6		57	.5	6	6.1		66.
Medium Trucks:	62	.4 6	0.9		54.5		52	.9	6	1.4		61.
Heavy Trucks:	67	.3 6	i5.9		56.8		58	.1	6	6.4		66.
Vehicle Noise:	70	.9 6	9.3		64.8		61	.5	7	0.0		70.
Centerline Distan	ce to Noise Co	ontour (in feet)										
				70	dBA	65	dBA	(60 dBA		55	dBA
		1	.dn:	4	6	9	98		212		4	57
		CN	IEL:	4	8	1	04		224		4	82

	FH\	WA-RD-77-108 HIC	GHWAY	NOISE PI	REDICTIO	N MODEL						
Scenar Road Nan Road Segme		Project Name: Goodman III Job Number: 12384										
SITE	SPECIFIC IN	IPUT DATA			NC	DISE MOD	EL INPUT	s				
Highway Data				Site Con	ditions (H	lard = 10,	Soft = 15)					
Average Daily	Traffic (Adt):	2,825 vehicles		Autos: 15								
Peak Hour	Percentage:	10%		Medium Trucks (2 Axles): 15								
Peak H	lour Volume:	283 vehicles		He	avy Truck	s (3+ Axles): 15					
Ve	hicle Speed:	40 mph		Vohiclo	Mix							
Near/Far La	ne Distance:	14 feet		Veh	icleTvne	Dav	Evening	Night	Daily			
Site Data				VCI	Au	itos: 77.5	% 12.9%	9.6%	95.52%			
Pa	Brining Heinheiten 0.0 (aut			Me	edium Tru	cks: 84.8	% 4.9%	10.3%	2.33%			
Barrier Type (0-V	Barrier Type (0-Wall 1-Berm): 0.0			ŀ	leavy Tru	cks: 86.5	% 2.7%	10.8%	2.15%			
Centerline Di	st. to Barrier:	34.0 feet		Noise Deves Eleveting (in feet)								
Centerline Dist. to Observer: 34.0 feet												
Barrier Distance to Observer: 0.0 feet				Autos. 0.000								
Observer Height (Above Pad): 5.0 feet				Honey Trucks: 2.001 Grade Adjustment: 0.0								
Pad Elevation: 0.0 feet												
Road Elevation: 0.0 feet				Lane Eq	uivalent L	Distance (i	n feet)					
	Road Grade:	0.0%		Autos: 33.645								
	Left View:	-90.0 degrees		Mediu	m Trucks:	33.381						
	Right View:	90.0 degrees		Heav	y Trucks:	33.407						
FHWA Noise Mod	el Calculation	IS										
VehicleType	REMEL	Traffic Flow [Distance	Finite	Road	Fresnel	Barrier Att	ten Ber	m Atten			
Autos:	66.51	-7.01	2.4	18	-1.20	-4.5	3 0.0	000	0.000			
Medium Trucks:	77.72	-23.14	2.5	53	-1.20	-4.8	6 0.0	000	0.000			
Heavy Trucks:	82.99	-23.49	2.5	52	-1.20	-5.6	7 0.0	000	0.000			
Unmitigated Nois	e Levels (with	out Topo and bar	rier atte	nuation)								
VehicleType	Leg Peak Ho	ur Leq Day	Leq E	vening	Leq N	ight	Ldn	CI	NEL			
Autos:	60	0.8 58.9	9	57.1		51.1	59.1	7	60.3			
Medium Trucks:	s: 55.9 54.4		4	48.0		46.5	54.9	Э	55.2			
Heavy Trucks: 60.8 59.4		4	50.4		51.6		3	60.1				
Vehicle Noise:	64	1.5 62.8	8	58.4		55.0	63.	5	63.8			
Centerline Distan	ce to Noise C	ontour (in feet)										
			70	dBA	65 dE	BA	60 dBA		dBA			
		Ldn	n: ·	13	27		58	1	125			
CNEL:				13 28 61					32			

Wednesday, June 05, 2019
	FH	WA-RD-77-10	08 HIGH	IWAY N	IOISE P	REDICTI	ON MOE	DEL				
Scenar Road Nan Road Segme	io: HY Withou ne: Juniper Av nt: s/o Santa	ut Project r. Ana Av.				Project Job Nu	Name: 0 Imber: 1	Goodn 2384	nan III			
SITE	SPECIFIC I	NPUT DATA				N	OISE M	ODE	L INPUTS	;		
Highway Data				5	Site Cor	nditions (Hard =	10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	3,289 vehi	cles				A	utos:	15			
Peak Hour	Percentage:	10%			Me	edium Tru	cks (2 A	xles):	15			
Peak H	our Volume:	329 vehic	les		He	avy Truc	ks (3+ A	xles):	15			
Ve	hicle Speed:	40 mph		1	Vehicle	Mix						
Near/Far La	ne Distance:	14 feet			Veh	icleTvpe	1	Dav	Evenina	Niaht	Dailv	
Site Data						A	utos: ī	7.5%	12.9%	9.6%	95.52%	
Ba	rrier Heiaht:	0.0 feet			М	edium Tr	ucks: 8	34.8%	4.9%	10.3%	2.33%	
Barrier Type (0-V	Vall, 1-Berm):	0.0				Heavy Tr	ucks: 8	36.5%	2.7%	10.8%	2.15%	
Centerline Di	ist. to Barrier:	34.0 feet		,	Noise S	ource Ele	evations	(in fe	pet)			
Centerline Dist.	to Observer:	34.0 feet		Ľ.	10.00 0	Autos	. 0.0	00	.00			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks	. 0.0	97				
Observer Height	(Above Pad):	5.0 feet			Hear	v Trucks	8.0	04	Grade Adju	Istmen	: 0.0	
P	ad Elevation:	0.0 feet		H								
Ro	ad Elevation:	0.0 feet		1	Lane Equivalent Distance (in feet)							
	Road Grade:	0.0%				Autos	: 33.6	45				
	Left View:	-90.0 degi	ees		Mediu	m Trucks	: 33.3	81				
	Right View:	90.0 degi	ees		Hear	vy Trucks	: 33.4	07				
FHWA Noise Mod	el Calculation	15										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresne	e/	Barrier Atte	n Be	rm Atten	
Autos:	66.51	-6.3	5	2.48	3	-1.20	-	4.53	0.0	00	0.000	
Medium Trucks:	77.72	-22.4	8	2.53	3	-1.20	-	4.86	0.0	00	0.000	
Heavy Trucks:	82.99	-22.8	3	2.52	2	-1.20	-	5.67	0.0	00	0.000	
Unmitigated Nois	e Levels (with	nout Topo an	d barrie	er atten	uation)							
VehicleType	Leq Peak Ho	ur Leq D	ay	Leq Ev	/ening	Leq I	Vight		Ldn	С	NEL	
Autos:	61	1.4	59.5		57.8		51.7		60.3		60.9	
Medium Trucks:	56	6.6	55.1		48.7		47.1		55.6		55.8	
Heavy Trucks:	6'	1.5	60.1		51.0		52.3		60.6		60.8	
Vehicle Noise:	65	5.1	63.5		59.0		55.7		64.2		64.5	
Centerline Distan	ce to Noise C	ontour (in fe	et)	70 -	JDA	65 -	ID A		O dBA	~	dD A	
			L day	70 0	IBA A	650	IBA	6	U aBA	55	abA 120	
				14 30 64 15 21 69				139				
			UNEL:	13	5	3			00		40	

Scenari Road Nam Road Segmei	io: HY Without ne: Sierra Av. nt: n/o Slover /		Project Name: Goodman III Job Number: 12384									
SITE						NO	ISE M			2		
Highway Data	SFECIFIC IN	FOI DAIA		s	ite Con	ditions (H	lard =	10. Sc	ft = 15	3		
Average Daily	Traffic (Adt):	68 605 vehicle	20				A	utos:	15			
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 A	xles):	15			
Peak H	lour Volume:	6.861 vehicles	5		Hea	avy Trucks	s (3+ A	xles):	15			
Ve	hicle Speed:	40 mph										
Near/Far La	ne Distance:	88 feet		v	Vohi			Dav	Evoning	Night	Daily	
Sito Data					Veni	Διι	toe: T	Jay 77 5%	12.0%	9.6%	95 52%	
Sile Dala					Me	dium Tru	sks f	34.8%	4.9%	10.3%	2 33%	
Barrier Turne (0.14	rrier neight:	U.U feet			F	leavy Truc	cks: 8	36.5%	2.7%	10.8%	2.15%	
Contorlino Di	all, 1-Berm):	0.0				,						
Centerline Dist	to Observer:	66.0 foot		N	loise So	urce Elev	ations	(in fe	eet)			
Barrier Distance	to Observer:	0.0 feet				Autos:	0.0	00				
Observer Height (Above Pad):	5.0 feet			Mediur	n Trucks:	2.2	97				
Pa	ad Elevation:	0.0 feet			Heav	y Trucks:	8.0	04	Grade Adj	ustment:	0.0	
Roa	ad Elevation:	0.0 feet		L	ane Equ	ivalent D	listanc	e (in :	feet)			
	Road Grade:	0.0%				Autos:	49.4	47				
	Left View:	-90.0 degree	es		Mediur	n Trucks:	49.2	68				
	Right View:	90.0 degree	es		Heav	y Trucks:	49.2	85				
FHWA Noise Mod	el Calculation	s										
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresne	e/	Barrier Att	en Beri	n Atten	
VehicleType Autos:	REMEL 66.51	Traffic Flow 6.84	Distar	-0.03	Finite	Road -1.20	Fresne	el 4.71	Barrier Atte 0.0	en Beri	n Atten 0.000	
VehicleType Autos: Medium Trucks:	REMEL 66.51 77.72	Traffic Flow 6.84 -9.29	Distar	-0.03 -0.01	Finite	Road -1.20 -1.20	Fresne	el 4.71 4.88	Barrier Atte 0.0 0.0	en Ben 100 100	n Atten 0.000 0.000	
VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 66.51 77.72 82.99	Traffic Flow 6.84 -9.29 -9.64	Distar	-0.03 -0.01 -0.01	Finite	Road -1.20 -1.20 -1.20	Fresne	el 4.71 4.88 5.30	Barrier Atte 0.0 0.0 0.0	en Ben 100 100 100	n Atten 0.000 0.000 0.000	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise	REMEL 66.51 77.72 82.99 e Levels (with	Traffic Flow 6.84 -9.29 -9.64 out Topo and	Distar barrier a	-0.03 -0.01 -0.01	Finite uation)	Road -1.20 -1.20 -1.20	Fresne -	el 4.71 4.88 5.30	Barrier Atte 0.0 0.0 0.0	en Ben 100 100 100	m Atten 0.000 0.000 0.000	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hou	Traffic Flow 6.84 -9.29 -9.64 out Topo and r Leq Day	Distar barrier a	-0.03 -0.01 -0.01 -0.01 attenu eq Eve	Finite Iation) ening	Road -1.20 -1.20 -1.20 Leq Ni	Fresne - - ght	el 4.71 4.88 5.30	Barrier Atte 0.0 0.0 0.0 0.0	en Bern 100 100 100 100 100	m Atten 0.000 0.000 0.000	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos:	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hou 72	Traffic Flow 6.84 -9.29 -9.64 out Topo and r Leq Day .1	Distar barrier a Le 70.2	nce -0.03 -0.01 -0.01 attenu eq Eve	Finite Iation) ening 68.5	Road -1.20 -1.20 -1.20 Leq Ni	Fresne ght 62.4	el 4.71 4.88 5.30	Barrier Atti 0.0 0.0 0.0 0.0 0.0 71.0	en Ben 000 000 000 Ch	<u>n Atten</u> 0.000 0.000 0.000 <i>IEL</i> 71.6	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noiss VehicleType Autos: Medium Trucks:	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hou 72 67	Traffic Flow 6.84 -9.29 -9.64 out Topo and r Leq Day .1 .2	Distar barrier a Le 70.2 65.7	nce -0.03 -0.01 -0.01 attenu eq Eve	Finite Iation) ening 68.5 59.3	Road -1.20 -1.20 -1.20 Leq Ni	Fresne - - - - - - - - - - - - - - - - - - -	el 4.71 4.88 5.30	Barrier Atte 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	en Ben 000 000 000 000 Ch	n Atten 0.000 0.000 0.000 <i>IEL</i> 71.6 66.5	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unnitigated Noxis VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hou 72 67 72	Traffic Flow 6.84 -9.29 -9.64 out Topo and r Leq Day .1 .2 .1	Distar barrier a 0.2 65.7 70.7	nce -0.03 -0.01 -0.01 attenu eq Eve	Finite ation) ening 68.5 59.3 61.7	Road -1.20 -1.20 -1.20 Leq Ni	<i>ght</i> 62.4 57.8 62.9	el 4.71 4.88 5.30	Barrier Atte 0.0 0.0 0.0 0.0 0.0 0.0 71.0 66.3 71.3	en Ben 000 000 000 Ch	n Atten 0.000 0.000 0.000 <u>IEL</u> 71.6 66.5 71.4	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hou 72 67 72 75	Traffic Flow 6.84 -9.29 -9.64 Out Topo and r Leq Day .1 .8	Distar barrier a 70.2 65.7 70.7 74.2	nce -0.03 -0.01 -0.01 attenu eq Eve	Finite (ation) ening 68.5 59.3 61.7 69.7	Road -1.20 -1.20 -1.20 <i>Leq Ni</i>	<i>ght</i> 62.4 57.8 62.9 66.3	el 4.71 4.88 5.30	Barrier Atte 0.0 0.0 0.0 <u>Ldn</u> 71.0 66.3 71.3 74.8	en Ben 000 000 000 Ch 3 3	n Atten 0.000 0.000 0.000 71.6 66.5 71.4 75.2	
VehicleType Autos: Medium Trucks: Heavy Trucks: VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distant	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hou 72 67 72 75 ce to Noise Co	Traffic Flow 6.84 -9.29 -9.64 out Topo and rr Leq Day 1 .2 .1 .8 ontour (in feet	Distar barrier a 70.2 65.7 70.7 74.2	nce -0.03 -0.01 -0.01 attenu eq Eve	Finite (ation) ening 68.5 59.3 61.7 69.7	Road -1.20 -1.20 -1.20 -1.20 Leq Ni	<i>ght</i> 62.4 57.8 62.9 66.3	el 4.71 4.88 5.30	Barrier Atte 0.0 0.0 0.0 0.0 0.0 0.0 71.0 66.3 71.3 74.8	en Ben 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 100	n Atten 0.000 0.000 0.000 <i>IEL</i> 71.6 66.5 71.4 75.2	
VehicleType Autos: Medium Trucks: Heavy Trucks: VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hou 72 67 67 72 75 75 Ce to Noise Co 67	Traffic Flow 6.84 -9.29 -9.64 out Topo and rr Leq Day .1 .2 .1 .8 ontour (in feet	Distar	70 dl	Finite ening 68.5 59.3 61.7 69.7 BA	Road -1.20 -1.20 -1.20 Leq Ni	<i>ght</i> 62.4 57.8 62.9 66.3	€ 4.71 4.88 5.30	Barrier Att 0.0 0.0 0.0 0.0 0.0 0.0 66.3 71.5 74.8 74.8	en Ben 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 100	n Atten 0.000 0.000 <i>IEL</i> 71.6 66.5 71.4 75.2	
VehicleType Autos: Medium Trucks: Heavy Trucks: Unnitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	REMEL 66.51 77.72 82.99 e Levels (with Leq Peak Hou 72 67 72 67 72 75 75 5ce to Noise Co 67	Traffic Flow 6.84 -9.29 -9.64 out Topo and r Leq Day 1 .2 .1 .8 ontour (in feet	Distar	nce -0.03 -0.01 -0.01 attenu eq Eve 70 dl 138	Finite ation) ening 68.5 59.3 61.7 69.7 BA 3	Road -1.20 -1.20 -1.20 Leq Ni 65 dE	<i>ght</i> 62.4 57.8 62.9 66.3	₽/ 4.71 4.88 5.30	Barrier Attu 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 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	en Ben 000 000 000 000 000 000 000 0	n Atten 0.000 0.000 1EL 71.6 66.5 71.4 75.2 dBA 884	

Wednesday, June 05, 2019

Wednesday, June 05, 2019

	FHV	VA-RD-77- <u>108</u>	HIGHV	VAY N	IOISE <u>P</u> F	REDICT	ION MO	DEL	_	_	_		
Scenari Road Nam Road Segmer	o: HY Without e: Sierra Av. nt: s/o Slover /	t Project Av.			Project Name: Goodman III Job Number: 12384								
SITES	SPECIFIC IN	IPUT DATA				I	IOISE N	IODE	L INPUTS	s			
Highway Data				4	Site Con	ditions	(Hard =	10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	44,365 vehicle	s					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2 A	(xles):	15				
Peak H	our Volume:	4,437 vehicles	5		He	avy Tru	cks (3+ A	(xles)	15				
Vel	hicle Speed:	50 mph			Vehicle	Mix							
Near/Far Lar	ne Distance:	88 feet		H	Veh	icleType		Dav	Evenina	Night	Daily		
Site Data						0.01300	Autos	77.5%	12.9%	9.69	% 95.52%		
Dev Data		0.0 ()			Me	edium T	rucks:	84.8%	4.9%	10.39	% 2.33%		
Barrier Turne (0.14)	rier Height:	0.0 feet			ŀ	leavy T	rucks:	86.5%	2.7%	10.89	% 2.15%		
Contorlino Dis	all, 1-Dell11).	0.0 66.0 foot											
Centerline Dist	to Observer:	66.0 feet		1	Noise So	ource E	levation	s (in fe	eet)				
Barrier Distance	to Observer:	0.0 feet				Auto	s: 0.0	000					
Ohsenver Height (Barrier Distance to Observer: 0.0 feet Diserver Height (Above Pad): 5.0 feet				Medium Trucks: 2.297								
Po	Dbserver Height (Above Pad): 5.0 teet					y Truck	s: 8.0	004	Grade Adj	ustmei	nt: 0.0		
Ros	d Elevation:	0.0 feet		1	Lane Equivalent Distance (in feet)								
F	Road Grade:	0.0%				Auto	s: 49.	147	,				
	Left View:	-90.0 degree	s		Mediur	n Truck	s: 49.	268					
	Right View:	90.0 degree	s		Heav	y Truck	s: 49.	285					
FHWA Noise Mode	el Calculation	s											
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresr	el	Barrier Atte	en B	erm Atten		
Autos:	70.20	3.98		-0.03	3	-1.20		-4.71	0.0	00	0.000		
Medium Trucks:	81.00	-12.15		-0.01	1	-1.20		-4.88	0.0	00	0.000		
Heavy Trucks:	85.38	-12.50		-0.01	1	-1.20		-5.30	0.0	00	0.00		
Unmitigated Noise	e Levels (with	out Topo and	barrier	atten	uation)								
VehicleType	Leq Peak Hou	ır Leq Day	1	Leq E	/ening	Leq	Night		Ldn	(CNEL		
Autos:	72	.9	71.1		69.3		63.2		71.9)	72.5		
Medium Trucks:	67	.6 6	6.1		59.8		58.2		66.7	,	66.9		
Heavy Trucks:	71	.7 7	70.2		61.2		62.5		70.8	3	70.9		
Vehicle Noise:	76	.0	74.4		70.3		66.6		75.1		75.4		
Centerline Distance	e to Noise Co	ontour (in feet)											
				70 c	1BA	65	dBA	e	60 dBA	5	5 dBA		
		1	Ldn:	14	13	3	09		666		1,435		
		Ch	IEL:	152 327 706 1,520					1,520				

	FH\	WA-RD-77-108	HIGHW#	AY N	OISE PR	EDICT	ION MO	DEL				
Scenar Road Narr Road Segme	io: HY Withou ne: Sierra Av. nt: s/o Santa /	t Project Ana Av.				Project Job N	t Name: lumber:	Goodi 12384	man III			
SITE	SPECIFIC IN	IPUT DATA				N	NOISE I	NODE	L INPUT	s		
Highway Data				S	Site Cond	litions	(Hard =	10, S	oft = 15)			
Average Daily	Traffic (Adt):	41,172 vehicle	s					Autos.	: 15			
Peak Hour	Percentage:	10%			Med	lium Tr	ucks (2)	Axles)	: 15			
Peak H	lour Volume:	4,117 vehicles			Hea	vy Tru	cks (3+ /	Axles)	: 15			
Ve	hicle Speed:	50 mph		1	(ahiala l	114						
Near/Far La	ne Distance:	88 feet			Vohi			Dav	Evoning	Night	Daily	
Site Data				_	venio	leiype	Autos	77.5%	6 12 9%	9.69	6 95 52%	
one Data					Me	, dium T	nucks:	84.8%	6 4 9%	10.39	6 2.33%	
Ba.	rrier Height:	0.0 feet			н	eavv T	rucks:	86.5%	6 2.7%	10.89	6 2.00%	
Barrier Type (U-W	all, 1-Berm):	0.0				oury r	ruono.	00.07	2.170	10.07	0 2.1070	
Centerline Dia	st. to Barrier:	66.0 feet		٨	loise So	urce E	levation	s (in f	leet)			
Centenine Dist.	to Observer.	00.0 feet				Auto	s: 0.	000				
Observer Height	(Abous Dod)	5.0 feet			Medium	n Truck	s: 2.	297				
Observer Height (ADOVE Pau).	5.0 feet			Heavy Trucks: 8.004 Grade Adjustment: 0.0							
Po	ad Elevation.	0.0 feet		L	ane Equ	ivalen	t Distan	ce (in	feet)			
7.0	Bood Grado:	0.0 1661		F		Auto	e· /0	447	,			
	Left View:	-90.0 degree	e		Medium	Truck	3. 40. 's' 49	268				
	Right View:	90.0 degree	s		Heavy	/ Truck	s: 49.	285				
FHWA Noise Mod	el Calculation	s										
VehicleType	REMEL	Traffic Flow	Distan	се	Finite I	Road	Fresr	nel	Barrier Att	en Be	erm Atten	
Autos:	70.20	3.65		0.03		-1.20		-4.71	0.0	000	0.000	
Medium Trucks:	81.00	-12.48		0.01		-1.20		-4.88	0.0	000	0.000	
Heavy Trucks:	85.38	-12.82		0.01		-1.20		-5.30	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barrier a	ttenı	uation)							
VehicleType	Leq Peak Ho	ur Leq Day	Le	q Ev	ening	Leq	Night		Ldn	0	ONEL	
Autos:	72	.6	0.7		69.0		62.9	9	71.	5	72.1	
Medium Trucks:	67	'.3 f	5.8		59.4		57.9	9	66.4	4	66.6	
Heavy Trucks:	71	.3 (9.9		60.9		62.1		70.	5	70.6	
Vehicle Noise:	75	5.7	'4.1		70.0		66.2	2	74.	7	75.1	
Centerline Distan	ce to Noise C	ontour (in feet)										
				70 d	BA	65	dBA		60 dBA	5	5 dBA	
			.dn:	136 294 634 1,3			,365					
		CN	IEL:	14	5	3	12		671	1	1,446	

	FH\	NA-RD-77-108	HIGHW	AY NC	DISE P	REDICTI	ON MO	DEL				
Scenari Road Nam Road Segmer	io: HY Withou e: Sierra Av. nt: s/o Jurupa	t Project Av.				Project Job N	Name: (umber:	Goodi 12384	man III			
SITE	SPECIFIC IN	IPUT DATA				N	OISE N	/IODE	L INPUT	s		
Highway Data				Si	ite Cor	nditions	(Hard =	10, S	oft = 15)			
Average Daily	Traffic (Adt):	37,879 vehicl	es					Autos.	15			
Peak Hour	Percentage:	10%			Me	edium Tru	icks (2 A	xles).	15			
Peak H	our Volume:	3,788 vehicle	s		He	avy Truc	:ks (3+ A	(xles)	15			
Vei	hicle Speed:	55 mph		V	ehicle	Mix						
Near/Far La	ne Distance:	88 feet			Veł	nicleTvpe		Dav	Evenina	Nia	ht	Dailv
Site Data						F	lutos:	77.5%	5 12.9%	9.	.6%	95.52%
Bai	rier Height:	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10	.3%	2.33%
Barrier Type (0-W	all, 1-Berm):	0.0				Heavy Tr	ucks:	86.5%	2.7%	10	.8%	2.15%
Centerline Dis	st. to Barrier:	66.0 feet		N	oise S	ource El	evation	s (in f	eet)			
Centerline Dist.	to Observer:	66.0 feet				Autos	s: 0.0	000	,			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks	: 2.2	297				
Observer Height (Above Pad):	5.0 feet			Hear	vy Trucks	s: 8.0	004	Grade Ad	justr	nent:	0.0
Pa	ad Elevation:	0.0 feet					Distant	//	641			
Roa	ad Elevation:	0.0 feet		La	ane Eq	uivalent	Distanc	ce (In	teet)			
	Road Grade:	0.0%			11-11-	Autos	5: 49.4	447				
	Left View:	-90.0 degre	es		Hoo	ni Trucks	s. 49.	208				
	Right view.	90.0 degre	es		nea	ly mucks	5. 49.	200				
FHWA Noise Mode	el Calculation	s										
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresn	el	Barrier Att	en	Bern	n Atten
Autos:	71.78	2.88		-0.03		-1.20		-4.71	0.0	000		0.000
Medium Trucks:	82.40	-13.25		-0.01		-1.20		-4.88	0.0	000		0.000
Heavy Trucks:	86.40	-13.60		-0.01		-1.20		-5.30	0.0	000		0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	attenu	ation)					-		
Venicle I ype	Leq Peak Hou	ur Leq Day	/ Le	eq Eve	ening	Leq	Night		Ldn		CN	EL 70.0
Autos. Modium Trucks:	13	1.4	71.5 66.4		60.1		59.F		67.0	כ ר		67.2
Heavy Trucks:	71	.5	70.2		61.1		62.4		70.5	7		70.9
Vehicle Noise:	76	5.3	74.6		70.7		66.8		75.3	3		75.7
Centerline Distance	ce to Noise Co	ontour (in fee	t)									
-		1		70 dE	BA	65 (dBA		60 dBA		55 a	IBA
			Ldn:	149		32	21		692		1,4	90
		С	NEL:	158		34	11		734		1,5	82

							_		
Scenar	io: HY Without	Project			Project Na	ame: Goo	dman III		
Road Nam	e: Slover Av.				Job Nun	nber: 123	84		
Road Segme	nt: w/o Sierra A	Av.							
SITE	SPECIFIC IN	PUT DATA			NO	ISE MO	DEL INPUT	s	
Highway Data				Site Cor	ditions (H	ard = 10,	Soft = 15)		
Average Daily	Traffic (Adt):	26,333 vehicles				Auto	os: 15		
Peak Hour	Percentage:	10%		Me	dium Truci	ks (2 Axle	s): 15		
Peak H	lour Volume:	2,633 vehicles		He	avy Trucks	s (3+ Axle	s): 15		
Ve	hicle Speed:	45 mph		Vehicle	Mix				
Near/Far La	ne Distance:	59 feet		Veh	icleTvpe	Dav	/ Evenina	Niaht	Dailv
Site Data					Au	tos: 77.	5% 12.9%	9.6%	95.52%
Ba	rrier Height:	0.0 feet		M	edium Truc	ks: 84.8	8% 4.9%	10.3%	2.33%
Barrier Tyne (0-W	/all 1-Rerm)	0.0		1	Heavy Truc	ks: 86.	5% 2.7%	10.8%	2.15%
Centerline Di	st. to Barrier:	52.0 feet							
Centerline Dist.	to Observer:	52.0 feet		Noise Se	ource Elev	ations (ii	1 feet)		
Barrier Distance	to Observer:	0.0 feet			Autos:	0.000			
Observer Height	(Above Pad):	5.0 feet		Mediu	m Trucks:	2.297	Crada Ar	livetreent	
Pi	ad Elevation:	0.0 feet		Heav	y Trucks:	8.004	Grade Ad	ijusimeni.	0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in feet)		
	Road Grade:	0.0%			Autos:	43.113			
	Left View:	-90.0 degrees		Mediu	m Trucks:	42.908			
	Right View	90.0 degrees		Heav	y Trucks:	42.928			
	ragin view.								
FHWA Noise Mod	el Calculations	s							
FHWA Noise Mod VehicleType	el Calculations	s Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier At	ten Ber	m Atten
FHWA Noise Mod VehicleType Autos:	el Calculations REMEL 68.46	s Traffic Flow 2.17	Distance 0	Finite	Road -1.20	Fresnel -4.6	Barrier At	ten Ber	m Atten 0.000
FHWA Noise Mod VehicleType Autos: Medium Trucks:	el Calculations REMEL 68.46 79.45	s Traffic Flow 2.17 -13.96	Distance 0 0	<i>Finite</i> .86 .89	Road -1.20 -1.20	Fresnel -4.6 -4.8	Barrier At 66 0. 87 0.	ten Ben 000 000	m Atten 0.000 0.000
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks:	el Calculations REMEL 68.46 79.45 84.25	s Traffic Flow 2.17 -13.96 -14.31	Distance 0 0 0	<i>Finite</i> .86 .89 .89	Road -1.20 -1.20 -1.20	Fresnel -4.6 -4.8 -5.4	Barrier At 66 0. 87 0. 81 0.	ten Ben 000 000 000	m Atten 0.000 0.000 0.000
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois	el Calculations REMEL 68.46 79.45 84.25 e Levels (witho	s Traffic Flow 2.17 -13.96 -14.31 pout Topo and ba	Distance 0 0 0 arrier att	<i>Finite</i> .86 .89 .89 .89	Road -1.20 -1.20 -1.20	Fresnel -4.6 -4.8 -5.4	Barrier At 66 0. 87 0. 81 0.	ten Ben 000 000 000	m Atten 0.000 0.000 0.000
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Nois VehicleType	el Calculations REMEL 68.46 79.45 84.25 e Levels (witho Leq Peak Hou	s Traffic Flow 2.17 -13.96 -14.31 but Topo and ba r Leq Day	Distance 0 0 0 0 arrier att	Finite 86 89 89 enuation) Evening	Road -1.20 -1.20 -1.20 -1.20	Fresnel -4.6 -4.8 -5.4 ght	Barrier At 66 0. 87 0. 11 0. Ldn	ten Ben 000 000 000 <i>CI</i>	m Atten 0.000 0.000 0.000
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos:	el Calculations REMEL 68.46 79.45 84.25 e Levels (without Leq Peak Hout 70.	s Traffic Flow 2.17 -13.96 -14.31 but Topo and ba r Leq Day 3 68	Distance 0 0 0 0 arrier att Leq	 Finite .86 .89 .89 enuation) Evening 66.6 	Road -1.20 -1.20 -1.20 -1.20	Fresnel -4.6 -4.8 -5.4 ght 60.6	Barrier At 66 0. 87 0. 11 0. <u>Ldn</u> 69.	ten Ben 000 000 000 000 <i>Cl</i> 2	m Atten 0.000 0.000 0.000 VEL 69.8
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	el Calculations <u>REMEL</u> 68.46 79.45 84.25 e Levels (with Leq Peak Hou 70. 65.	s Traffic Flow 2.17 -13.96 -14.31 but Topo and ba r Leq Day 3 68 2 63	Distance 0 0 0 arrier att Leq 3.4 5.7	 Finite .86 .89 .89 enuation) Evening 66.6 57.3 	Road -1.20 -1.20 -1.20 Leq Ni	Fresnel -4.6 -5.4 ght 60.6 55.8	Barrier At 6 0. 7 0. 11 0. <u>Ldn</u> 69. 64.	ten Ben 000 000 000 C/ 2 2	m Atten 0.000 0.000 0.000 VEL 69.8 64.5
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	el Calculations <u>REMEL</u> 68.46 79.45 84.25 e Levels (withou Leq Peak Hou 70. 65. 69.	s Traffic Flow 2.17 -13.96 -14.31 out Topo and ba r Leg Day 3 68 2 63 6 68	Distance 0 0 0 arrier att Leq .4 .7 .2	Finite .86 .89 .89 enuation) Evening 66.6 57.3 59.2	Road -1.20 -1.20 -1.20 Leq Ni	Fresnel -4.6 -4.8 -5.4 ght 60.6 55.8 60.4	Barrier At 6 0. 7 0. 11 0. <u>Ldn</u> 69. 64. 68.	ten Ben 000 000 000 22 2 8	m Atten 0.000 0.000 0.000 VEL 69.8 64.5 68.5
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise	el Calculations <u>REMEL</u> 68.46 79.45 84.25 e Levels (without Leg Peak Hout 700. 65. 69. 73.	s Traffic Flow 2.17 -13.96 -14.31 out Topo and ba r Leg Day 3 6 68 6 68 7 72	Distance 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Evening 66.6 57.3 59.2 67.8	Road -1.20 -1.20 -1.20 -1.20	Fresnel -4.6 -4.8 -5.4 60.6 55.8 60.4 64.2	Barrier At 66 0. 77 0. 11 0. <i>Ldn</i> 69. 64. 68. 72.	ten Berr 000 000 000 2 2 2 8 7	m Atten 0.000 0.000 0.000 VEL 69.8 64.5 68.5 73.0
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Vehicle Noise: Centerline Distan	el Calculations <u>REMEL</u> 68.46 79.45 84.25 e Levels (witho Leq Peak Hou 70. 65. 69. 73. ce to Noise Co	s Traffic Flow 2.17 -13.96 -14.31 Dut Topo and ba r Leg Day 3 68 2 63 6 688 7 72 2 000 2 000 6 88 7 72 2 000 1 0	Distance 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Finite 88 89 enuation) Evening 66.6 57.3 59.2 67.8	Road -1.20 -1.20 -1.20 -1.20	Fresnel -4.6 -5.4 ght 60.6 55.8 60.4 64.2	Barrier At 66 0. 77 0. 11 0. <i>Ldn</i> 69. 64. 68. 72.	ten Berr 000 000 000 22 2 8 7	m Atten 0.000 0.000 0.000 VEL 69.8 64.5 68.5 73.0
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distant	el Calculations: REMEL 68.46 79.45 84.25 e Levels (with Leq Peak Hou 70. 65. 69. 73. ce to Noise Co	s Traffic Flow 2.17 -13.96 -14.31 Dut Topo and ba r Leq Day 3 68 2 63 6 68 8 6 688 7 72 Intour (in feet)	Distance 0 0 arrier att Leq 4.4 7 2.2 7	Finite 8 88 89 enuation) Evening 66.6 57.3 59.2 67.8 0 dBA	Road -1.20 -1.20 -1.20 Leq Nit	Fresnel -4.6 -5.4 ght 60.6 55.8 60.4 64.2	Barrier At 66 0. 77 0. 11 0. <u>Ldn</u> 69. 64. 68. 72. 60 dBA	ten Ber 000 000 000 2 2 8 7 7 55	m Atten 0.000 0.000 0.000 VEL 69.8 64.5 73.0 dBA
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks: Umitigated Nois VehicleType Autos: Heavy Trucks: Vehicle Noise: Centerline Distant	el Calculations: REMEL 68.46 79.45 84.25 e Levels (with Leq Peak Hou 70. 65. 69. 73. ce to Noise Co	s Traffic Flow 2.17 -13.96 -14.31 Dut Topo and ba r 2.63 6.68 7.772 Dut for feet La	Distance 0 0 arrier att Leq 4.4 7 2.2 2.0 7 In:	P Finite 88 89 enuation) Evening 66.6 57.3 59.2 67.8 0 dBA 78	Road -1.20 -1.20 -1.20 Leq Nig 65 dB	Fresnel -4.6 -4.8 -5.4 60.6 55.8 60.4 64.2	Barrier At 6 0. 87 0. 11 0. 11 0. 14 0. 69. 64. 68. 72. 60 dBA 364	ten Berr 000 000 000 22 2 8 7 7 55 7	m Atten 0.000 0.000 VEL 69.8 64.5 68.9 73.0 dBA 84

Wednesday, June 05, 2019

			_								_		
	FHV	VA-RD-77-108 I	HIGH	IWAY N	IOISE PI	REDICT		DDEL					
Scenar	io: HY Without	Project				Project	Name:	Goodr	nan III				
Road Nam	ne: Santa Ana	Av.				Job N	lumber:	12384					
Road Segme	nt: e/o Citrus A	.v.											
SITE	SPECIFIC IN	PUT DATA				Ν	IOISE	MODE	L INP	JTS			
Highway Data				1	Site Con	ditions	(Hard :	= 10, Se	oft = 15)			
Average Daily	Traffic (Adt):	8,957 vehicle	s					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tri	ucks (2	Axles):	15				
Peak H	lour Volume:	896 vehicles			He	avy Tru	cks (3+	Axles):	15				
Ve	hicle Speed:	40 mph		-	Vehicle	Mix							
Near/Far La	ne Distance:	48 feet		H	Veh	icleTvpe	,	Dav	Evenir	na N	liaht	Dailv	
Site Data				-			Autos:	77.5%	12.9	1%	9.6%	95.52%	
Ba	rrier Height	0.0 feet			M	edium Ti	rucks:	84.8%	4.9	% 1	0.3%	2.33%	
Barrier Type (0-W	/all. 1-Berm):	0.0			ŀ	Heavy T	rucks:	86.5%	2.7	% 1	0.8%	2.15%	
Centerline Di	st. to Barrier:	46.0 feet		H	Naina C	-	lovatio	no (in f	0.041				
Centerline Dist.	to Observer:	46.0 feet		-	10/36 30			000	eeij				
Barrier Distance	to Observer:	0.0 feet			Modiu	m Truck	5. U	207					
Observer Height ((Above Pad):	5.0 feet			Hoo	n Truck	o. 2	.291	Grada	Adius	tmont	0.0	
Pa	ad Elevation:	0.0 feet			Tieav	y much	3. 0	.004	Orade	Aujus	unioni.	0.0	
Roa	ad Elevation:	0.0 feet		1	Lane Equivalent Distance (in feet)								
	Road Grade:	0.0%				Auto	s: 39	.560					
	Left View:	-90.0 degree	s		Mediu	m Truck	s: 39	.336					
	Right View:	90.0 degree	s		Heav	y Truck	s: 39	.358					
FHWA Noise Mod	el Calculation:	5											
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier	Atten	Ber	m Atten	
Autos:	66.51	-2.00		1.42	2	-1.20		-4.63		0.000		0.000	
Medium Trucks:	77.72	-18.13		1.46	6	-1.20		-4.87		0.000		0.000	
Heavy Trucks:	82.99	-18.48		1.46	6	-1.20		-5.47		0.000		0.000	
Unmitigated Nois	e Levels (with	out Topo and b	arrie	er atten	uation)								
VehicleType	Leq Peak Hou	r Leq Day		Leg Ev	/ening	Leq	Night		Ldn		CI	VEL	
Autos:	64.	.7 6	2.8		61.1		55.	0	6	63.6		64.2	
Medium Trucks:	59.	.8 5	8.3		52.0		50.	4	ŧ	58.9		59.1	
Heavy Trucks:	64.	.8 6	3.3		54.3		55.	6	6	63.9		64.0	
Vehicle Noise:	68.	.4 6	6.8		62.3		59.	0	6	67.4		67.8	
Centerline Distan	ce to Noise Co	ntour (in feet)											
		,		70 c	/BA	65	dBA	6	60 dBA		55	dBA	
		L	.dn:	3	1	6	67		144		3	11	
		CN	EL:	3	3	7	1		152		3	28	

	FH	WA-RD-77-108	HIGHV	VAYN	OISE PF	REDICTI		DEL			
Scenar	io: HY Withou	t Project				Project	Name:	Goodr	nan III		
Road Nan	ie: Santa Ana	Av.				Job N	umber:	12384			
Road Segme	nt: e/o Junipei	r Av.									
SITE	SPECIFIC IN	IPUT DATA				N	OISE	MODE	L INPUT	'S	
Highway Data				S	Site Con	ditions	(Hard :	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	12,191 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	ıcks (2	Axles).	15		
Peak H	lour Volume:	1,219 vehicles	6		Hea	avy Truc	:ks (3+	Axles).	15		
Ve	hicle Speed:	40 mph		v	ehicle l	Mix					
Near/Far La	ne Distance:	48 feet		Ē	Vehi	icleType		Day	Evening	Nigh	t Daily
Site Data						A	lutos:	77.5%	5 12.9%	9.6	6% 95.52%
Ba	rrier Heiaht:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3	3% 2.33%
Barrier Type (0-W	/all, 1-Berm):	0.0			H	leavy Tr	ucks:	86.5%	2.7%	10.8	3% 2.15%
Centerline Di	st. to Barrier:	46.0 feet		N	loise So	ource El	evatio	ns (in f	eet)		
Centerline Dist.	to Observer:	46.0 feet		-		Autos	· 0	000			
Barrier Distance	to Observer:	0.0 feet			Mediur	n Trucks	s: 2	.297			
Observer Height	(Above Pad):	5.0 feet			Heav	v Trucks	. 8	.004	Grade Ad	liustm	ent: 0.0
P	ad Elevation:	0.0 feet				,					
Ro	ad Elevation:	0.0 feet		L	ane Equ	uivalent	Distar	nce (in	feet)		
	Road Grade:	0.0%				Autos	s: 39	.560			
	Left View:	-90.0 degree	s		Mediur	n Trucks	s: 39	.336			
	Right View:	90.0 degree	s		Heav	y Trucks	s: 39	.358			
FHWA Noise Mod	el Calculation	IS									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier At	ten l	Berm Atten
Autos:	66.51	-0.66		1.42		-1.20		-4.63	0.	000	0.000
Medium Trucks:	77.72	-16.79		1.46		-1.20		-4.87	0.	000	0.000
Heavy Trucks:	82.99	-17.14		1.46		-1.20		-5.47	0.	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier	attenu	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	· 1	Leg Ev	ening	Leq	Night		Ldn		CNEL
Autos:	66	5.1	64.2		62.4		56	3	65.	0	65.6
Medium Trucks:	61	.2	59.7		53.3		51.	8	60.	2	60.5
Heavy Trucks:	66	5.1	64.7		55.7		56.	9	65.	3	65.4
Vehicle Noise:	69	9.7	58.1		63.7		60	3	68.	8	69.1
Centerline Distan	ce to Noise C	ontour (in feet)								
				70 di	BA	65 (dBA	1	60 dBA		55 dBA
			Ldn:	38	3	8	2		177		381
		CI	IEL:	40)	8	7		187		402

	FH	WA-RD-77-108	HIGHW	AY NO	ISE P	REDICT	ION MO	DEL			
Scena Road Nar Road Segme	rio: HY Withou ne: Santa Ana ent: e/o Sierra	t Project Av. Av.				Project Job N	Name: lumber:	Goodi 12384	man III		
SITE	SPECIFIC IN	NPUT DATA				N	IOISE N	/IODE	L INPUT	s	
Highway Data				Si	te Cor	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	8,368 vehicl	es					Autos.	15		
Peak Hou	r Percentage:	10%			Me	dium Tri	ucks (2 A	Axles).	: 15		
Peak I	Hour Volume:	837 vehicle	s		He	avy Tru	cks (3+ A	Axles).	: 15		
Ve	ehicle Speed:	40 mph		Ve	hicle	Mix					
Near/Far La	ane Distance:	48 feet			Veh	icleType		Dav	Evenina	Nial	ht Dailv
Site Data						/	Autos:	77.5%	6 12.9%	9.	6% 95.52%
Ba	orrier Height	0.0 feet			М	edium Ti	rucks:	84.8%	6 4.9%	10.3	3% 2.339
Barrier Type (0-V	Vall, 1-Berm):	0.0				Heavy Ti	rucks:	86.5%	6 2.7%	10.	8% 2.15
Centerline D	ist. to Barrier:	46.0 feet		N	nise S	ource E	levation	s (in f	eet)		
Centerline Dist.	to Observer:	46.0 feet				Auto	s [.] 01	000	000		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s: 2:	297			
Observer Height	(Above Pad):	5.0 feet			Hear	v Truck	s: 81	104	Grade Ad	iustm	ent: 0.0
F	ad Elevation:	0.0 feet		_	mou	<i>y maon</i>	0. 0.				
Ro	ad Elevation:	0.0 feet		Lá	ne Eq	uivalen	t Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 39.	560			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 39.	336			
	Right View:	90.0 degre	es		Hear	/y Truck	s: 39.	358			
FHWA Noise Mod	lel Calculation	IS									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresr	iel	Barrier Atte	en i	Berm Atten
Autos	66.51	-2.30		1.42		-1.20		-4.63	0.0	00	0.00
Medium Trucks:	77.72	-18.43		1.46		-1.20		-4.87	0.0	00	0.00
Heavy Trucks	82.99	-18.78		1.46		-1.20		-5.47	0.0	00	0.00
Unmitigated Nois	e Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Daj	/ L	eq Eve	ning	Leq	Night		Ldn		CNEL
Autos:	64	1.4	62.5		60.8		54.7	,	63.3	3	63.
Medium Trucks:	59	9.5	58.0		51.7		50.1		58.6	5	58.
Heavy Trucks:	64	1.5	63.1		54.0		55.3	3	63.6	5	63.
Vehicle Noise.	68	3.1	66.5		62.0		58.7	·	67.1		67.
Centerline Distan	ce to Noise C	ontour (in fee	t)					-		-	
			ட	70 dE	8A	65	dBA		60 dBA		55 dBA
		-	Ldn:	30 64 138			297				
		C	NEL:	31		6	57		145		313

	FHW	A-RD-77-108	HIGHW	AY NO	DISE PF	REDICT	ION MO	DEL							
Scenari Road Nam Road Segmer	Scenario: HY Without Project Road Name: Jurupa Av. Road Segment: w/o Cherry Av.						Project Name: Goodman III Job Number: 12384								
SITE										c .					
Highway Data	SFECIFIC IN	FOI DAIA		s	ite Con	ditions	(Hard =	10. Se	c ft = 15	3					
Average Daily	Traffic (Adt)	29.057 vehicle	5					Autos:	15						
Peak Hour	Percentage:	10%	5		Me	dium Tr	ucks (2 A	(xles):	15						
Peak H	our Volume:	2.906 vehicles			He	avy Tru	cks (3+ A	(xles):	15						
Vei	hicle Speed:	45 mph		14	ahiala l	, Miu	•	,							
Near/Far Lar	ne Distance:	80 feet		V	Voh	VIIX icloType		Dav	Evoning	Night	Daily				
Sito Data					Ven	cierype	Autos	77 5%	12 Q%	9.6%	05 52º				
Sile Dala				_	Me	, dium T	nicks:	84.8%	4.9%	10.3%	2 339				
Bar Barriar Turna (0.14)	rier neight:	U.U feet			ŀ	leavv T	rucks:	86.5%	2.7%	10.8%	2.15%				
Centerline Dis	all, 1-Dellil).	0.0													
Centerline Dist	to Observer:	60.0 feet		N	oise Sc	ource E	levation	s (in fe	eet)						
Barrier Distance	to Observer:	0.0 feet				Auto	s: 0.0	000							
Observer Height (Above Pad):	5.0 feet			Mediur	n Truck	s: 2.2	297	Our de Ad						
Pa	d Elevation:	0.0 feet			Heav	y Truck	s: 8.0	004	Grade Adj	ustment.	0.0				
Roa	d Elevation:	0.0 feet		Li	ane Eq	uivalen	t Distand	ce (in	feet)						
ŀ	Road Grade:	0.0%				Auto	s: 45.	000							
	Left View:	-90.0 degree	S		Mediur	n Truck	s: 44.	803							
	Right View:	90.0 degree	5		Heav	y Truck	s: 44.	822							
FHWA Noise Mode	el Calculations	;		1											
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten				
Autos:	68.46	2.60		0.58		-1.20		-4.69	0.0	000	0.00				
Medium Trucks:	79.45	-13.53		0.61		-1.20		-4.88	0.0	000	0.00				
Heavy Trucks:	84.25	-13.88		0.61		-1.20		-5.34	0.0	000	0.00				
Unmitigated Noise	e Levels (witho	out Topo and I	arrier	attenu	ation)										
VehicleType	Leq Peak Hou	r Leq Day	L	eq Eve	ening	Leq	Night		Ldn	CI	VEL				
Autos:	70	4 6	8.5		66.8		60.7		69.3	3	69.				
weaium Trucks:	65.	3 6	3.8		57.5		55.9		64.4	+	б4. co				
rieavy irúčks:	69.		0.4		59.3		00.6		08.9	1	v9.				
venicle Noise:	73.	8 /	2.2		67.9		64.3		72.8	5	73.				
Centerline Distanc	e to Noise Co	ntour (in feet)	-	70 dF	84	65	dBA	6	SO dBA	55	dBA				
		,	dn.	10.02	<i></i>	1	99		429	0	25				
		4	car I.	55					.20	5					
		CA	FL:	98		2	11		454	q	78				

	FH\	WA-RD-77-108	HIGH	WAY N	IOISE PR	EDICTIO	N MODEL				
Scenari Road Nam Road Segmer	o: HY Withou e: Jurupa Av. nt: e/o Cherry	t Project Av.				Project N Job Nur	lame: Goo mber: 1238	dman III 4			
SITE	SPECIFIC IN	IPUT DATA				NC	DISE MOD	EL INPU	TS		-
Highway Data					Site Con	ditions (H	lard = 10,	Soft = 15)			-
Average Daily Peak Hour Peak H	Traffic (Adt): Percentage: our Volume:	25,414 vehicl 10% 2,541 vehicle	es s		Med Hea	dium Truc avy Truck	Auto ks (2 Axles s (3+ Axles	s: 15): 15): 15			
Ve	hicle Speed:	45 mph			Vehicle N	lix					
Near/Far La	ne Distance:	80 feet		F	Vehi	cleTvpe	Dav	Evenine	a Nie	aht	Dailv
Site Data						Au	tos: 77.5	% 12.9%	6 9).6%	95.52%
Bar	rier Heiaht:	0.0 feet			Me	dium Tru	cks: 84.8	% 4.9%	6 10).3%	2.33%
Barrier Type (0-W	all, 1-Berm):	0.0			h	leavy Tru	cks: 86.5	% 2.7%	6 10	.8%	2.15%
Centerline Dis	st. to Barrier:	60.0 feet			Noise So	urce Elev	vations (in	feet)			-
Centerline Dist.	to Observer:	60.0 feet		F		Autos:	0.000				
Barrier Distance	to Observer:	0.0 feet			Mediun	n Trucks:	2.297				
Observer Height (Above Pad):	5.0 feet			Heav	v Trucks:	8.004	Grade A	diustr	nent:	0.0
Pa	ad Elevation:	0.0 feet				,					
Roa	ad Elevation:	0.0 feet		1	Lane Equ	ivalent L	Distance (i	n feet)			
I	Road Grade:	0.0%				Autos:	45.000				
	Left View:	-90.0 degre	es		Mediun	n Trucks:	44.803				
	Right View:	90.0 degre	es		Heav	y Trucks:	44.822				
FHWA Noise Mode	el Calculation	s		I							-
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fresnel	Barrier A	Atten	Bern	n Atten
Autos:	68.46	2.01		0.58	3	-1.20	-4.6	9 (0.000		0.000
Medium Trucks:	79.45	-14.11		0.6	1	-1.20	-4.8	3 (0.000		0.000
Heavy Trucks:	84.25	-14.46		0.6	1	-1.20	-5.3	4 (0.000		0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	r atten	uation)						
VehicleType	Leq Peak Hou	ur Leq Day	/	Leq E	/ening	Leq N	ight	Ldn		CN	EL
Autos:	69	1.9	68.0		66.2		60.1	68	3.8		69.4
Medium Trucks:	64	.7	63.2		56.9		55.3	63	3.8		64.0
Heavy Trucks:	69	1.2	67.8		58.7		60.0	68	3.3		68.5
Vehicle Noise:	73	3.2	71.6		67.3		63.8	7:	2.2		72.6
Centerline Distant	e to Noise C	ontour (in feet)								-
				70 0	1BA	65 dE	BA	60 dBA		55 0	1BA
			Ldn:	8	5	182	2	393		84	+6
		C	NEL:	8	9	193	3	415		89	15

	FH'	WA-RD-77-108	HIGHW	AY NO	DISE PF	REDICTIO	N MO	DEL			
Scenar Road Nan Road Segme	rio: HY Withou ne: Jurupa Av. nt: e/o Beech	t Project Av.				Project N Job Nur	ame: (nber: ·	Goodr 12384	man III		
SITE	SPECIFIC IN	NPUT DATA				NC	ISE N	/IODE	L INPUT	s	
Highway Data				S	ite Con	ditions (H	lard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	25,087 vehicle	es				/	Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 A	(xles).	15		
Peak H	lour Volume:	2,509 vehicle	s		He	avy Truck	s (3+ A	xles).	15		
Ve	hicle Speed:	45 mph			ahiala l	Mise					
Near/Far La	ne Distance:	80 feet		v	Voh	icloTupo		Dav	Evoning	Niaht	Daily
Site Data					Ven	CIET ype	tos:	77 5%	12 Q%	0.6	05 52%
one bata					Me	dium Tru	cks:	84.8%	6 12.0%	10.3	% 2.33%
Barriar Tuna (0.14	rrier Height:	0.0 feet			F	leavy Tru	cks:	86.5%	6 2.7%	10.8	% 2.15%
Contorlino Di	int to Parriar:	0.0 60.0 foot				,					
Contorlino Dist	to Obsonvor:	60.0 feet		N	oise So	ource Ele	vation	s (in f	eet)		
Barrier Distance	to Observer:	0.0 feet				Autos:	0.0	000			
Observer Height	(Above Pad):	5.0 feet			Mediur	n Trucks:	2.2	297			
P	ad Elevation:	0.0 feet			Heav	y Trucks:	8.0	004	Grade Ad	justme	nt: 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent L	Distand	ce (in	feet)		
	Road Grade:	0.0%				Autos:	45.0	000			
	Left View:	-90.0 degree	es		Mediur	n Trucks:	44.8	803			
	Right View:	90.0 degree	es		Heav	y Trucks:	44.8	822			
FHWA Noise Mod	lel Calculation	is									
VehicleType	REMEL	Traffic Flow	Distai	nce	Finite	Road	Fresn	el	Barrier Att	en B	erm Atten
Autos:	68.46	1.96		0.58		-1.20		-4.69	0.0	000	0.000
Medium Trucks:	79.45	-14.17		0.61		-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	84.25	-14.52		0.61		-1.20		-5.34	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier a	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Day	′ L	eq Eve	ening	Leq N	ight		Ldn		CNEL
Autos:	69	9.8	67.9		66.1		60.1		68.	7	69.3
Medium Trucks:	64	1.7	63.2		56.8		55.3		63.	7	64.0
Heavy Trucks:	69	9.1	67.7		58.7		59.9		68.3	3	68.4
Vehicle Noise:	73	3.2	71.5		67.3		63.7	,	72.2	2	72.5
Centerline Distan	ce to Noise C	ontour (in feet)			_			_		_
				70 dl	BA	65 dE	BA	1	60 dBA	5	i5 dBA
			Ldn:	84		181			389		839
		CI	NEL:	89		191			412		887

Wednesday, June 05, 2019

	FH	WA-RD-77-108	B HIGHW	AY NO	ISE P	REDICT	ION MO	DEL			
Scena Road Nar Road Segme	rio: HY Withou ne: Jurupa Av. ent: e/o Poplar	ut Project Av.				Project Job N	Name: (lumber:	Goodi 12384	man III		
SITE	SPECIFIC II	NPUT DATA				N	IOISE N	/IODE	L INPUTS	5	
Highway Data				Si	te Cor	nditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	27,087 vehic	les					Autos.	15		
Peak Hou	r Percentage:	10%			Me	edium Tr	ucks (2 A	(xles)	: 15		
Peak I	Hour Volume:	2,709 vehicle	es		He	avy Tru	cks (3+ A	(xles)	: 15		
Ve	ehicle Speed:	45 mph		Ve	hicle	Mix					
Near/Far La	ane Distance:	80 feet			Veh	icleType	,	Day	Evening	Nigh	Daily
Site Data							Autos:	77.5%	6 12.9%	9.6	% 95.52%
Ba	arrier Heiaht:	0.0 feet			М	edium T	rucks:	84.8%	6 4.9%	10.3	% 2.33%
Barrier Type (0-V	Vall, 1-Berm):	0.0				Heavy T	rucks:	86.5%	6 2.7%	10.8	% 2.15%
Centerline D	ist. to Barrier:	60.0 feet		No	oise S	ource E	levation	s (in f	eet)		
Centerline Dist.	to Observer:	60.0 feet				Auto	s [.] 0 (000	,		
Barrier Distance	e to Observer:	0.0 feet			Mediu	m Truck	s: 2.2	297			
Observer Height	(Above Pad):	5.0 feet			Hea	v Truck	s: 8.0	004	Grade Adj	ustme	nt: 0.0
F	Pad Elevation:	0.0 feet		-							
Ro	ad Elevation:	0.0 feet		La	ne Eq	uivalen	t Distand	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 45.0	000			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 44.8	303			
	Right View:	90.0 degre	es		Hear	vy Truck	s: 44.8	322			
FHWA Noise Mod	lel Calculation	15									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresn	el	Barrier Atte	en B	lerm Atten
Autos:	68.46	2.29		0.58		-1.20		-4.69	0.0	00	0.000
Medium Trucks:	79.45	-13.84		0.61		-1.20		-4.88	0.0	00	0.000
Heavy Trucks:	84.25	-14.19		0.61		-1.20		-5.34	0.0	00	0.000
Unmitigated Nois	se Levels (with	nout Topo and	l barrier	attenua	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	y L	eq Eve	ning	Leq	Night		Ldn		CNEL
Autos:	: 70	D.1	68.2		66.5		60.4		69.0		69.6
Medium Trucks:	: 65	5.0	63.5		57.2		55.6		64.1		64.3
Heavy Trucks:	69	9.5	68.1		59.0		60.3		68.6		68.7
Vehicle Noise.	: 73	3.5	71.8		67.6		64.0		72.5		72.9
Centerline Distan	ice to Noise C	ontour (in fee	t)	_							
				70 dB	A	65	dBA		60 dBA	1	55 dBA
		-	Ldn:	88		1	90		410		883
		C	NEL:	93	93 201 433 933						933

Scenario: Road Name: Road Segment: SITE SF	HY Without Jurupa Av. e/o Citrus A	Project				Project N Job Nur	ame: 0 nber: 1	Goodn	nan III		
Road Name: Road Segment: SITE SE	Jurupa Av. e/o Citrus A	<i>i</i> .				Job Nur	nber: 1	2384			
Road Segment: SITE SI	e/o Citrus A	7.	Road Segment: e/o Citrus Av					2004			
SITE SI											
	PECIFIC IN	PUT DATA				NO	ISE N	IODE	L INPUT	S	
Highway Data				1	Site Con	ditions (H	lard =	10, Sc	oft = 15)		
Average Daily Tr	affic (Adt):	22,439 vehicle	s				A	Autos:	15		
Peak Hour Pe	ercentage:	10%			Me	dium Truc	ks (2 A	xles):	15		
Peak Hou	ır Volume:	2,244 vehicles	;		He	avy Trucks	s (3+ A	xles):	15		
Vehi	cle Speed:	45 mph			Vehicle I	Mix					
Near/Far Lane	Distance:	80 feet			Veh	icleType	1	Day	Evening	Night	Daily
Site Data						Au	tos:	77.5%	12.9%	9.6%	95.52%
Barri	er Heiaht:	0.0 feet	-		Me	edium Truc	cks: 8	84.8%	4.9%	10.3%	2.33%
Barrier Type (0-Wal	l, 1-Berm):	0.0			ŀ	leavy Truc	cks: 1	86.5%	2.7%	10.8%	2.15%
Centerline Dist.	to Barrier:	60.0 feet		H	Noiso Se	urco Elo	ation	(in f	not)		
Centerline Dist. to	Observer:	60.0 feet		Ľ	voise sc	Autoor	auons	s (III 16	el)		
Barrier Distance to	Observer:	0.0 feet			Modiu	n Trucks:	2.0	00			
Observer Height (Al	bove Pad):	5.0 feet			Hoov	v Trucks:	2.2	04	Grade Ad	iustment	0.0
Pad	Pad Elevation: 0.0 feet					y muchs.	0.0	/04	0/440 / 14	dournorn.	0.0
Road	Elevation:	0.0 feet		1	Lane Eq	uivalent D	listanc	e (in t	feet)		
Ro	ad Grade:	0.0%				Autos:	45.0	000			
	Left View:	-90.0 degree	S		Mediur	n Trucks:	44.8	303			
F	Right View:	90.0 degree	S		Heav	y Trucks:	44.8	322			
FHWA Noise Model	Calculations										
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten
Autos:	68.46	1.47		0.58	3	-1.20		4.69	0.0	000	0.000
Medium Trucks:	79.45	-14.65		0.61	1	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	84.25	-15.00		0.61	1	-1.20		-5.34	0.0	000	0.000
Unmitigated Noise L	evels (witho	ut Topo and I	barrie	r atten	uation)						
VehicleType L	eq Peak Houi	· Leq Day		Leq Ev	/ening	Leq Ni	ght		Ldn	CI	VEL
Autos:	69.	3 6	i7.4		65.7		59.6		68.2	2	68.8
Medium Trucks:	64.	26	52.7		56.3		54.8		63.3	3	63.
Heavy Trucks:	68.	/ 6	57.2		58.2		59.5		67.8	5	67.9
Vehicle Noise:	72.	7 7	/1.0		66.8		63.2		71.7	, 	72.1
Centerline Distance	to Noise Co	ntour (in feet)		=0		05.15					10.4
				70 c	1BA	65 dE	\$A	6	и авА	55	dBA
			- day		0	400			004	_	-7/3
			dn:	7	B	168			361	7	79 22

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL Scenario: HY Without Project Road Name: Jurupa Av. Road Segment: e/o Oleander Av. Project Name: Goodman III Job Number: 12384 SITE SPECIFIC INPUT DATA
Highway Data NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15) Autos: 15 Medium Trucks (2 Axles): 15 Unequal Tackle (6 Acts): 15 Average Daily Traffic (Adt): 22,851 vehicles Peak Hour Percentage: 10%

Peak Hour Volume: 2,285 vehicles					He	avy Truck	:s (3+ A	Axles):	15		
Ve	hicle Speed:	45 mph		V	ehicle l	Mix					
Near/Far La	ne Distance:	80 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						AL	itos:	77.5%	12.9%	9.6%	95.52%
Ba	rrier Height	0.0 feet			Me	edium Tru	cks:	84.8%	4.9%	10.3%	2.33%
Barrier Type (0-W	Vall. 1-Berm):	0.0			ŀ	Heavy Tru	cks:	86.5%	2.7%	10.8%	2.15%
Centerline Di	st. to Barrier:	60.0 feet			laiaa Cr	uree Ele	votion	o (in fe	a (1)		
Centerline Dist.	to Observer:	60.0 feet		-	ioise sc	Jurce Ele	vauon		el)		
Barrier Distance	to Observer:	0.0 feet			1 4 K	Autos:	0.0	000			
Observer Height	(Above Pad):	5.0 feet			Mediur	T Trucks:	2.4	297	Crada Ad	livetment	
P	ad Elevation:	0.0 feet			Heav	y Trucks:	8.0	JU4	Grade Ad	jusunem	. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent l	Distand	ce (in f	feet)		
	Road Grade:	0.0%				Autos:	45.0	000			
	Left View:	-90.0 degre	es		Mediur	m Trucks:	44.8	803			
	Right View:	90.0 degre	es		Heav	y Trucks:	44.8	822			
FHWA Noise Mod	el Calculations	5									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresn	iel	Barrier Att	en Bei	rm Atten
Autos:	68.46	1.55		0.58		-1.20		-4.69	0.0	000	0.000
Medium Trucks:	79.45	-14.57		0.61		-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	84.25	-14.92		0.61		-1.20		-5.34	0.0	000	0.000
Unmitigated Nois	e Levels (witho	out Topo and	barrier	r attenu	lation)						
VehicleType	Leq Peak Hou	r Leq Day	· .	Leq Ev	ening	Leq N	ight		Ldn	С	NEL
Autos:	69.	4	67.5		65.7		59.7		68.3	3	68.9
Medium Trucks:	64.	3	62.8		56.4		54.9)	63.3	3	63.6
Heavy Trucks:	68.	7	67.3		58.3		59.5	i	67.9	9	68.0
Vehicle Noise:	72.	8	71.1		66.9		63.3	3	71.8	В	72.1
Centerline Distan	ce to Noise Co	ntour (in feet)								
				70 d	BA	65 di	BA	6	0 dBA	55	dBA
			Ldn:	79)	170)		366	7	'88
		C	VEL:	83		180)		387	8	333

	FH	WA-RD-77-108	BHIGH	WAY N	OISE PF	REDICTIC	ON MODEL			
Scenar Road Nam	io: HY Withou	t Project				Project N	lame: Good	iman III		
Road Segme	nt: e/o Cypres	s Av.				000 / 10	1200	-		
SITE	SPECIFIC IN	IPUT DATA				NC	DISE MOD	EL INPUTS	5	
Highway Data				S	Site Con	ditions (l	Hard = 10, \$	Soft = 15)		
Average Daily	Traffic (Adt):	25,325 vehic	es				Autos	s: 15		
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 Axles): 15		
Peak H	lour Volume:	2,533 vehicle	s		He	avy Truck	s (3+ Axles): 15		
Ve	hicle Speed:	45 mph			/ohiolo l	Also .				
Near/Far La	ne Distance:	80 feet			Voh	icleTvne	Dav	Evening	Night	Daily
Site Data				-	1011	AI	itos: 77.5	% 12.9%	9.6%	95.52%
Pa	rrior Hoight:	0.0 foot			Me	edium Tru	cks: 84.8	% 4.9%	10.3%	2.33%
Barrier Type (0-W	/all 1-Berm)	0.0 1001			F	leavy Tru	cks: 86.5	% 2.7%	10.8%	2.15%
Centerline Di	st. to Barrier:	60.0 feet			1-1 0-			6		
Centerline Dist.	to Observer:	60.0 feet		-	voise so	ource Ele	vations (in	teet)		
Barrier Distance	Barrier Distance to Observer: 0.0 feet					Autos:	0.000			
Observer Height	Observer Height (Above Pad): 5.0 feet				Mealur	n Trucks:	2.297	Crada Adi		0.0
P	Pad Elevation: 0.0 feet				Heav	y Trucks:	8.004	Grade Adji	usunem.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent l	Distance (ir	1 feet)		
	Road Grade:	0.0%				Autos:	45.000			
	Left View:	-90.0 degre	es		Mediur	n Trucks:	44.803			
	Right View:	90.0 degre	es		Heav	y Trucks:	44.822			
FHWA Noise Mod	el Calculation	IS								
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresnel	Barrier Atte	en Berr	n Atten
Autos:	68.46	2.00		0.58	1	-1.20	-4.69	9 0.0	00	0.000
Medium Trucks:	79.45	-14.13		0.61		-1.20	-4.88	3 0.0	00	0.000
Heavy Trucks:	84.25	-14.48		0.61		-1.20	-5.34	4 0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	r atteni	uation)					
VehicleType	Leq Peak Ho	ur Leq Da	/	Leq Ev	ening	Leq N	light	Ldn	CN	IEL
Autos:	69	1.8	67.9		66.2		60.1	68.7		69.4
Medium Trucks:	64	.7	63.2		56.9		55.3	63.8		64.0
Heavy Trucks:	69	0.2	67.8		58.7 60.0 68.3				68.5	
Vehicle Noise:	73	3.2	71.6		67.3		63.7	72.2		72.6
Centerline Distan	ce to Noise C	ontour (in fee	t)							
				70 d	BA	65 d	BA	60 dBA	55 (:IBA
			Ldn:	84 182 392			84	14		
		С	NEL:	89	9 192 414 892)2

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	FH\	NA-RD-77-108	HIGHWA	Y NOISE	PREDICT	ION MOD	EL		
Scena Road Nar Road Segme	rio: HY Withou ne: Jurupa Av. ent: e/o Juniper	t Project ⁻ Av.			Project Job N	Name: G umber: 1	oodman III 2384		
SITE	SPECIFIC IN	IPUT DATA			N	OISE M	ODEL INPUT	S	
Highway Data				Site C	onditions	(Hard = 1	10, Soft = 15)		
Average Daily	/ Traffic (Adt):	23,804 vehicl	es			A	utos: 15		
Peak Hou	r Percentage:	10%		/	/ledium Tru	icks (2 A	xles): 15		
Peak I	Hour Volume:	2,380 vehicle	s	1	Heavy Truc	cks (3+ A	xles): 15		
Ve	ehicle Speed:	45 mph		Vehic	e Mix				
Near/Far La	ane Distance:	80 feet		V	ehicleType		Day Evening	Nigh	nt Daily
Site Data					A	Autos: 7	7.5% 12.9%	9.6	6% 95.52%
Ba	arrier Height:	0.0 feet			Medium Tr	rucks: 8	4.8% 4.9%	10.3	3% 2.33%
Barrier Type (0-V	Vall, 1-Berm):	0.0			Heavy Ti	rucks: 8	6.5% 2.7%	10.8	3% 2.15%
Centerline D	ist. to Barrier:	60.0 feet		Noise	Source El	evations	(in feet)		
Centerline Dist.	to Observer:	60.0 feet			Autos	s: 0.0	00		
Barrier Distance	Barrier Distance to Observer: 0.0 feet			Med	ium Truck	s: 2.2	97		
Observer Height	Observer Height (Above Pad): 5.0 feet			He	avy Truck	s: 8.0	04 Grade Ad	djustme	ent: 0.0
F	Pad Elevation: 0.0 feet			1		Distance	- (1- (1)		
Ro	ad Elevation:	0.0 feet		Lane	quivalent	Distanc	e (in teet)		
	Road Grade:	0.0%		Maa	AUIOS	5: 45.0	00		
	Left View:	-90.0 degre	es	Web	an Truck	5. 44.8	03		
	Night view.	90.0 degre	25	110	avy much	5. 44.0	22		
FHWA Noise Mod	lel Calculation	s							
VehicleType	REMEL	Traffic Flow	Distand	ce Fin	te Road	Fresne	el Barrier At	ten I	Berm Atten
Autos:	68.46	1.73		0.58	-1.20	-	4.69 0.	000	0.000
Medium Trucks:	79.45	-14.40		0.61	-1.20	-	4.88 0.	000	0.000
Heavy Trucks	84.25	-14.75		0.61	-1.20	-	5.34 0.	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier at	ttenuation	<i>i</i>)				
VehicleType	Leq Peak Hou	ur Leq Day	/ Le	q Evening	Leq	Night	Ldn		CNEL
Autos:	: 69	.6	67.7	65	.9	59.9	68.	5	69.1
Medium Trucks	64	.5	63.0	56	.6	55.0	63.	5	63.7
Heavy Trucks:	- 68	0	67.5 71.3	58	.5	59.7 63.5	68. 72	1	68.2 72.3
Centerline Distan	nce to Noiso C	ontour (in foot	1	0/		55.5	12.	•	72.5
Genternine Distan	100 10 110/30 0	unoui (inteel	, 	70 dBA	65	dBA	60 dBA		55 dBA
			Ldn:	81	17	74	376		810
		C	VEL:	81 174 576 810 86 184 397 856					

	FHV	VA-RD-77-108	HIGHW	AY NO	DISE PF	REDICTI					
Scenar	io: HY Without	Project				Project	Vame: 0	Goodn	an III		
Road Nam	e: Armstrong	Rd.				Job NL	mber: 1	2384			
Road Segme	nt: w/o Sierra /	Av.									
SITE	SPECIFIC IN	PUT DATA				N	DISE N	IODE		S	
Highway Data				S	ite Con	ditions (Hard =	10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	30,543 vehicle	∋s				A	Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 A	xles):	15		
Peak H	lour Volume:	3,054 vehicle	S		He	avy Truc	ks (3+ A	xles):	15		
Ve	hicle Speed:	45 mph		V	ehicle l	Mix					
Near/Far La	ne Distance:	48 feet			Veh	icleType	1	Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	95.52%
Ba	rrier Height	0.0 feet			Me	edium Tri	icks: 8	34.8%	4.9%	10.3%	2.33%
Barrier Type (0-W	(all. 1-Berm):	0.0			ŀ	leavy Tri	icks: 8	36.5%	2.7%	10.8%	2.15%
Centerline Di	st. to Barrier:	59.0 feet			0-			1	- 41		
Centerline Dist.	to Observer:	59.0 feet		N	oise sc	ource Ele	vations		et)		
Barrier Distance	to Observer:	0.0 feet				Autos	0.0	00			
Observer Height	Above Pad):	5.0 feet			Mealur	TTTUCKS	2.2	97	Grada Ad	iustmont	
P	Pad Elevation: 0.0 feet					y Trucks	8.0	04	Grade Auj	usunen	. 0.0
Roi	ad Elevation:	0.0 feet		Li	ane Eq	uivalent	Distanc	e (in i	eet)		
	Road Grade:	0.0%				Autos	54.1	29			
	Left View:	-90.0 degree	es		Mediur	m Trucks	53.9	66			
	Right View:	90.0 degree	es		Heav	ry Trucks	53.9	82			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distan	ice	Finite	Road	Fresn	e/	Barrier Att	en Ber	m Atten
Autos:	68.46	2.81		-0.62		-1.20		4.69	0.0	000	0.000
Medium Trucks:	79.45	-13.31		-0.60		-1.20		4.88	0.0	000	0.000
Heavy Trucks:	84.25	-13.66		-0.60		-1.20		-5.35	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier a	ttenu	ation)						
VehicleType	Leq Peak Hou	r Leq Day	' Le	eq Eve	ening	Leq I	light		Ldn	C	NEL
Autos:	69	.5	67.6		65.8		59.7		68.4	Ļ	69.0
Medium Trucks:	64	.3	62.8		56.5		54.9		63.4	ŀ	63.6
		0	67.4		58.3		59.6		67.9)	68.1
Heavy Trucks:	68	.0									72.2
Heavy Trucks: Vehicle Noise:	68 72	.8	71.2		66.9		63.3		/1.8)	/
Heavy Trucks: Vehicle Noise: Centerline Distan	68 72 ce to Noise Co	.8 ontour (in feet	71.2)		66.9		63.3		/1.8	,	, 2.12
Heavy Trucks: Vehicle Noise: Centerline Distan	68 72 ce to Noise Co	8 ontour (in feet	71.2	70 dE	66.9 BA	65 c	63.3 BA	6	71.8 0 dBA	55	dBA
Heavy Trucks: Vehicle Noise: Centerline Distant	68 72 ce to Noise Co	8 ontour (in feet	71.2) Ldn:	70 dE 78	66.9 BA	65 c 16	63.3 BA 8	6	71.8 0 dBA 363	, 55 7	dBA '81

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	EH/	MA-PD-77-108	HIGH	WAYN		PEDICT		DEI				
	- m	NA-KD-11-100	mor									
Scenar Road Nam	io: HY Withou	t Project				Project	Name:	Goodn	nan III			
Road Seame	nt: w/o 34th St	Ru.				300 1	umber.	12304				
										170		
SITE :	SPECIFIC IN	IPUT DATA			Cito Con	N	UDISE	MODE		JTS		
Highway Dala					Sile Con	anuons	(Haru :	= 10, 30	nt = 15	/		
Average Daily	Traffic (Adt):	43,974 vehicle	es		140	dium Tr	uaka (2	Autos:	15			
Peak Hour	Percentage:	10%	_		Me He	aium Tru	JCKS (2	Axles):	15			
Peak H	iour voiume:	4,397 venicies	5		пе	avy mu	JKS (3+	Axies).	15			
Ve.	nicle Speed:	45 mpn			Vehicle	Mix						
Near/Far La	ne Distance:	48 reet			Veh	icleType	•	Day	Evenir	ng Ni	ight	Daily
Site Data						/	Autos:	77.5%	12.9	%	9.6%	95.52%
Bai	rrier Height:	0.0 feet			M	edium Ti	rucks:	84.8%	4.9	% 1	0.3%	2.33%
Barrier Type (0-W	/all, 1-Berm):	0.0			ŀ	Heavy Ti	rucks:	86.5%	2.7	% 1	0.8%	2.15%
Centerline Dis	st. to Barrier:	59.0 feet			Noise So	ource E	levatio	ns (in fe	et)			
Centerline Dist.	to Observer:	59.0 feet		Ē		Auto	s' 0	000				
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s: 2	.297				
Observer Height (bserver Height (Above Pad): 5.0 feet				Heav	v Truck	s: 8	.004	Grade	Adiust	ment	0.0
Pa	Pad Elevation: 0.0 feet									·		
Roa	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distar	nce (in	teet)			
1	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		Heav	y Truck	s: 53	.982				
FHWA Noise Mode	el Calculation	s										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier	Atten	Ber	m Atten
Autos:	68.46	4.40		-0.6	2	-1.20		-4.69		0.000		0.00
Medium Trucks:	79.45	-11.73		-0.6	0	-1.20		-4.88		0.000		0.000
Heavy Trucks:	84.25	-12.08		-0.6	0	-1.20		-5.35		0.000		0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	er atten	uation)							
VehicleType	Leg Peak Hou	Ir Leg Day		Leg E	vening	Leq	Night		Ldn		CI	VEL
Autos:	. 71	.0	69.1		67.4	,	61.	3	6	69.9		70.
Medium Trucks:	65	.9	64.4		58.0		56.	5	6	65.0		65.3
Heavy Trucks:	70	.4	68.9		59.9		61.	2	6	69.5		69.0
Vehicle Noise:	74	.4	72.7		68.5		64.	9	7	'3.4		73.
Centerline Distant	ce to Noise Ce	ontour (in feet)									
				70 (dBA	65	dBA	e	0 dBA		55	dBA
			Ldn:	10	00	2	15		462		9	96
		CI	VEL:	10	05	2	27		489		1,	053

	FHV	VA-RD-77-108	HIGHV	VATN	UISE PR	EDICTIO	NMODE	-			
Scenar	io: HY With Pr	oject				Project Na	ame: Go	odman III			
Road Nam	e: Citrus Av.					Job Nun	nber: 123	884			
Road Segme	nt: s/o I-10 Ra	mps									
SITE	SPECIFIC IN	PUT DATA				NO	ISE MO	DEL INPL	JTS		
Highway Data				5	Site Cond	litions (H	ard = 10	Soft = 15))		
Average Daily	Traffic (Adt):	35,699 vehicle	es				Aut	os: 15			
Peak Hour	Percentage:	10%			Med	lium Truck	ks (2 Axle	es): 15			
Peak H	lour Volume:	3,570 vehicles	6		Hea	vy Trucks	: (3+ Axle	es): 15			
Ve	hicle Speed:	45 mph		1	/ehicle N	lix					
Near/Far La	ne Distance:	88 feet			Vehic	cleType	Da	y Evenin	g Nig	ht	Daily
Site Data						Aut	os: 77	5% 12.9	% 9	.6%	95.18%
Bai	rrier Height:	0.0 feet			Me	dium Truc	ks: 84	8% 4.9	% 10	.3%	2.38%
Barrier Type (0-W	/all, 1-Berm):	0.0			Н	eavy Truc	ks: 86	5% 2.79	% 10	.8%	2.44%
Centerline Dis	st. to Barrier:	66.0 feet		/	Voise So	urce Elev	ations (i	n feet)			
Centerline Dist.	to Observer:	66.0 feet				Autos:	0.000				
Barrier Distance	to Observer:	0.0 feet			Medium	Trucks:	2.297				
Observer Height (Above Pad):	5.0 feet			Heav	Trucks:	8.004	Grade	Adiustri	nent:	0.0
Pa	ad Elevation:	0.0 feet			,						
Roa	ad Elevation:	0.0 feet		L	.ane Equ	ivalent D	istance	(in feet)			
	Road Grade:	0.0%				Autos:	49.447	,			
	Left View:	-90.0 degree	es		Medium	n Trucks:	49.268	1			
	Right View:	90.0 degree	es		Heavy	/ Trucks:	49.285				
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite I	Road	Fresnel	Barrier J	Atten	Berm	Atten
Autos:	68.46	3.47		-0.03	3	-1.20	-4.	71	0.000		0.000
Medium Trucks:	79.45	-12.54		-0.01		-1.20	-4.	88	0.000		0.000
Heavy Trucks:	84.25	-12.44		-0.01		-1.20	-5.	30	0.000		0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier	atten	uation)						
VehicleType	Leq Peak Hou	ir Leq Day	' L	Leq Ev	rening	Leq Nig	ght	Ldn		CNI	EL
Autos:	70	.7	68.8		67.0		61.0	6	9.6		70.2
Medium Trucks:	65	.7	64.2		57.8		56.3	6	4.7		65.0
Heavy Trucks:	70	.6	69.2		60.1		61.4	6	9.8		69.9
Vehicle Noise:	74	.3	72.7		68.3		64.9	7	3.3		73.7
Centerline Distant	ce to Noise Co	ontour (in feet)								
				70 a	IBA	65 dB	A	60 dBA		55 d	BA
			Ldn:	110 237 511			1,10)2			
		CI	VEL:	11	6	250		540		1,16	32

	FH\	NA-RD-77-108	HIGHV	VAY NC	DISE P	REDICT	ION MO	DEL			
Scena Road Nar Road Segme	rio: HY With Prine: Citrus Av. Ant: s/o Slover	roject Av.				Project Job N	t Name: (lumber: '	Goodi 12384	nan III		
SITE	SPECIFIC IN	IPUT DATA				P	NOISE N	/IODE	L INPUTS	5	
Highway Data				Si	ite Cor	nditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	21,899 vehicl	es					Autos.	15		
Peak Hou	r Percentage:	10%			Me	edium Tr	ucks (2 A	(xles)	15		
Peak I	Hour Volume:	2,190 vehicle	s		He	eavy Tru	cks (3+ A	(xles)	15		
Ve	ehicle Speed:	40 mph		Ve	ehicle	Mix					
Near/Far La	ane Distance:	48 feet		Ē	Veh	nicleTvpe	e	Dav	Evenina	Niah	t Dailv
Site Data							Autos:	77.5%	5 12.9%	9.6	% 94.79%
Ba	nrrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3	% 2.45%
Barrier Type (0-V	Vall, 1-Berm):	0.0				Heavy T	rucks:	86.5%	2.7%	10.8	% 2.76%
Centerline D	ist. to Barrier:	46.0 feet		N	oise S	ource E	levation	s (in f	eet)		
Centerline Dist.	to Observer:	46.0 feet				Auto	s: 0.0	000	,		
Barrier Distance	Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet				Mediu	m Truck	s: 2.2	297			
Observer Height	Observer Height (Above Pad): 5.0 feet				Hear	vy Truck	s: 8.0	004	Grade Adj	ustme	nt: 0.0
F	Pad Elevation: 0.0 feet						1 Distant	//	6		
Ro	ad Elevation:	0.0 feet		Là	ane Eq	uivaien	t Distant	ce (In	reet)		
	Road Grade:	0.0%			11-11-	Auto	IS: 39.	000			
	Left View:	-90.0 degre	es		Mediu	m Truck	is: 39.:	336			
	Right view.	90.0 degre	es		nea	ly much	.3. 39.	550			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresn	el	Barrier Atte	en E	Berm Atten
Autos:	66.51	1.85		1.42		-1.20		-4.63	0.0	00	0.000
Medium Trucks:	77.72	-14.03		1.46		-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	82.99	-13.51		1.46		-1.20		-5.47	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier	attenu	ation)						
Vehicle I ype	Leq Peak Hou	ur Leq Day	/ 1	Leq Eve	ening	Leq	Night		Ldn		CNEL
Autos.	68		00.7		64.9		58.9		67.5		68.1
Medium Trucks	60	.9	62.4		50.1		54.5		60.0		60.0
Vehicle Noise.	72	2.8	71.2		66.4		63.4		71.9		72.2
Centerline Distan	ce to Noise C	ontour (in feet)								
L				70 dE	BA	65	dBA		60 dBA	4	55 dBA
			Ldn:	61		1	32		284		611
		C	NEL:	64	64 138 298 642						642

Scenar	io: HY With Pr	oject				Project I	Vame: (Goodn	nan III		
Road Nam	e: Citrus Av.					Job Nu	mber: 1	2384			
Road Segme	nt: s/o Santa A	ana Av.									
SITE	SPECIFIC IN	IPUT DATA				N	DISE N	IODE	L INPUT	S	
Highway Data				S	Site Con	ditions (Hard =	10, So	oft = 15)		
Average Daily	Traffic (Adt):	16,337 vehicle	s				A	Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Tru	cks (2 A	xles):	15		
Peak H	lour Volume:	1,634 vehicles			Hea	avy Truci	ks (3+ A	xles):	15		
Ve	hicle Speed:	40 mph		V	/ehicle N	<i>lix</i>					
Near/Far La	ne Distance:	48 feet		F	Vehi	cleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	94.28%
Bai	rrier Height:	0.0 feet			Me	dium Tra	icks:	34.8%	4.9%	10.3%	2.56%
Barrier Type (0-W	/all. 1-Berm):	0.0			H	leavy Tru	icks:	36.5%	2.7%	10.8%	3.16%
Centerline Di	st. to Barrier:	46.0 feet		-					4)		
Centerline Dist.	to Observer:	46.0 feet		^	voise So	urce Ele	vations	in fe	eet)		
Barrier Distance	to Observer:	0.0 feet				Autos	0.0	00			
Observer Height ((Above Pad):	5.0 feet			Mediun	n Trucks	2.2	97	Grado Ad	iustmont	
Pa	Pad Elevation: 0.0 feet					y Trucks	8.0	04	Graue Auj	usunem.	0.0
Roa	ad Elevation:	0.0 feet		L	ane Equ	ıivalent	Distand	e (in	feet)		
1	Road Grade:	0.0%				Autos	39.5	60			
	Left View:	-90.0 degree	s		Mediun	n Trucks	39.3	36			
	Right View:	90.0 degree	s		Heav	y Trucks	39.3	58			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL		Dioton								
		Traffic Flow	Distan	се	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten
Autos:	66.51	Traffic Flow 0.55	Distan	ce 1.42	Finite	Road -1.20	Fresn	el -4.63	Barrier Atte 0.0	en Ber 100	m Atten 0.000
Autos: Medium Trucks:	66.51 77.72	Traffic Flow 0.55 -15.11	Distan	ce 1.42 1.46	Finite	Road -1.20 -1.20	Fresn	el -4.63 -4.87	Barrier Atte 0.0 0.0	en Ber 100 100	m Atten 0.000 0.000
Autos: Medium Trucks: Heavy Trucks:	66.51 77.72 82.99	7raffic Flow 0.55 -15.11 -14.20	Distan	ce 1.42 1.46 1.46	Finite	Road -1.20 -1.20 -1.20	Fresn	el -4.63 -4.87 -5.47	Barrier Atte 0.0 0.0 0.0	en Ben 100 100 100	<u>m Atten</u> 0.000 0.000 0.000
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise	66.51 77.72 82.99 • Levels (with	Traffic Flow 0.55 -15.11 -14.20 out Topo and b	Distan	ce 1.42 1.46 1.46	Finite	Road -1.20 -1.20 -1.20	Fresn	el -4.63 -4.87 -5.47	Barrier Atte 0.0 0.0 0.0	en Ben 1000 1000 1000	m Atten 0.000 0.000 0.000
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType	66.51 77.72 82.99 e Levels (with Leg Peak Hou	Traffic Flow 0.55 -15.11 -14.20 out Topo and I I Ir Leq Day	Distan	ce 1.42 1.46 1.46 <i>ttent</i> eq Ev	Finite	Road -1.20 -1.20 -1.20 Leq N	Fresn	el -4.63 -4.87 -5.47	Barrier Atte 0.0 0.0 0.0 0.0	en Ben 100 100 100 100 Cl	m Atten 0.000 0.000 0.000 VEL
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos:	66.51 77.72 82.99 e Levels (with Leg Peak Hou 67	Traffic Flow 0.55 -15.11 -14.20 out Topo and I II Leq Day .3 6	Distant Distant Distant Distant Le	ce 1.42 1.46 1.46 <i>tteni</i> eq Ev	Finite 2 3 3 4 4 4 5 5 5 4 4 5 5 5 5 5 5 5 5 5 5	Road -1.20 -1.20 -1.20 Leq N	Fresn light 57.6	el -4.63 -4.87 -5.47	Barrier Atte 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	en Ben 000 000 000 C/	<u>m Atten</u> 0.000 0.000 0.000 <u>0.000</u> <u>VEL</u> 66.8
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	66.51 77.72 82.99 e Levels (with Leq Peak Hou 67 62	Traffic Flow 0.55 -15.11 -14.20 out Topo and B I Ir Leq Day .3 6 .9 6	bistan barrier a Le 5.4 1.4	ce 1.42 1.46 1.46 ttent	Finite 2 3 3 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5	Road -1.20 -1.20 -1.20 <i>Leq N</i>	Fresn light 57.6 53.4	el -4.63 -4.87 -5.47	Barrier Atti 0.0 0.0 0.0 <u>Ldn</u> 66.2 61.9	en Ben 000 000 000 000 C/	<u>m Atten</u> 0.000 0.000 0.000 <u>VEL</u> 66.8 62.1
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	66.51 77.72 82.99 e Levels (with Leq Peak Hou 67 62 69	Traffic Flow 0.55 -15.11 -14.20 out Topo and L I Ir Leq Day .3 6 .9 6 .0 6	Distan	ce 1.42 1.46 1.46 <i>tteni</i> eq Ev	Finite 2 2 3 3 4 4 4 5 5 5 5 5 5 5 5 5 8 6 5 5 8.6	Road -1.20 -1.20 -1.20 Leq N	Fresn light 57.6 53.4 59.8	el -4.63 -4.87 -5.47	Barrier Atti 0.0 0.0 0.0 <u>Ldn</u> 66.2 61.9 68.2	en Ber 000 000 000 C/ 2 2	<u>m Atten</u> 0.000 0.000 0.000 <u>VEL</u> 66.8 62.1 68.3
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noist VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	66.51 77.72 82.99 e Levels (with Leg Peak Hou 67 62 69 71	Traffic Flow 0.55 -15.11 -14.20 out Topo and L <i>u</i> Leq Day .3 6 .9 6 .0 6 .9 7	Distan parrier a Le 5.4 1.4 7.6 0.3	ce 1.42 1.46 1.46 <i>tteni</i> eq Ev	Finite 2 3 vening 63.6 55.0 58.6 65.2	Road -1.20 -1.20 -1.20 Leq N	Fresn light 57.6 53.4 59.8 62.4	el -4.63 -4.87 -5.47	Barrier Atte 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	en Ben 000 000 000 C/ 2 2 2 2 2 2	m Atten 0.000 0.000 0.000 VEL 66.8 62.1 68.3 71.2
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noist VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distant	66.51 77.72 82.99 e Levels (with Leq Peak Hou 67 62 69 71 2e to Noise Ca	Traffic Flow	Distant Darrier a Le 5.4 11.4 7.6 70.3	ce 1.42 1.46 1.46 ttent	Finite 2 3 rening 63.6 55.0 58.6 65.2	Road -1.20 -1.20 -1.20 Leg N	Fresn light 57.6 53.4 59.8 62.4	el -4.63 -4.87 -5.47	Barrier Atte 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	en Ben 000 000 000 CI 2 9	M Atten 0.000 0.000 0.000 VEL 66.8 62.1 68.3 71.2
Autos: Medium Trucks: Heavy Trucks: VehicleType Autos: Medium Trucks: Vehicle Noise: Centerline Distance	66.51 77.72 82.99 e Levels (with Leq Peak Hou 67 62 69 71 2e to Noise Co	Traffic Flow	Distant Darrier a Le 5.4 1.4 7.6 70.3	ce 1.42 1.46 1.46 <i>tteni</i> <i>eq Ev</i> 70 d	Finite 2 3 vening 63.6 55.0 58.6 65.2 IBA	Road -1.20 -1.20 -1.20 Leg N	Fresn light 57.6 53.4 59.8 62.4 BA	el -4.63 -4.87 -5.47	Barrier Atte 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	en Ben 000 000 000 CI 2 9 2 55	<u>m Atten</u> 0.000 0.000 0.000 <u>VEL</u> 66.8 62.1 68.3 71.2 71.2
Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	66.51 77.72 82.99 e Levels (with Leq Peak Hou 67 62 69 71 2e to Noise Co	Traffic Flow	Distan	ce 1.42 1.46 1.46 1.46 <i>ttenu</i> <i>eq Ev</i> 70 <i>d</i> 53	Finite 2 3	Road -1.20 -1.20 -1.20 Leq N 65 a 11	Fresn light 57.6 53.4 59.8 62.4 BA 4	el -4.63 -4.87 -5.47	Barrier Att. 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	en Ber 000 000 000 CI 2 3 5 5 5	<u>m Atten</u> 0.000 0.000 0.000 <u>VEL</u> 66.8 62.1 68.3 71.2 <i>dBA</i> 28

	FH	WA-RD-77-108 H	IIGHW#	AY NO	ISE PF	REDICTI	ON MO	DEL				
Scenari Road Nam Road Segmer	o: HY With P e: Juniper Av nt: n/o Santa	roject Ana Av.				Project Job Ni	Name: umber:	Goodr 12384	nan III			
SITE	SPECIFIC IN	IPUT DATA				N	OISE	NODE	L INF	UTS	;	
Highway Data				Sit	e Con	ditions	(Hard =	10, S	oft = 1	5)		
Average Daily Peak Hour	Traffic (Adt): Percentage:	3,032 vehicles			Me	dium Tru	icks (2)	Autos: Axles);	15 15			
Peak H	our Volume:	303 vehicles			He	avy Truc	ks (3+)	Axles)	15			
/outri	hicle Sneed:	40 mph				,						
Near/Far La	ne Distance:	14 feet		Ve	hicle I	Mix			-			
iveai/i ai Eai	le Distance.	14 1001			Vehi	icleType		Day	Even	ing	Night	Daily
Site Data						A	utos:	77.5%	5 12.	9%	9.6%	95.83%
Bar	rier Height:	0.0 feet			Me	edium Tr	ucks:	84.8%	6 4.	9%	10.3%	2.17%
Barrier Type (0-W	all, 1-Berm):	0.0			ŀ	Heavy Tr	ucks:	86.5%	5 2.	7%	10.8%	2.00%
Centerline Dis	st. to Barrier:	34.0 feet		No	ise Sr	ource Fl	evation	s (in f	eet)			
Centerline Dist.	to Observer:	34.0 feet			100 00	Autos	. 0	000	000			
Barrier Distance	Barrier Distance to Observer: 0.0 feet					m Trucks	. 0.	207				
Observer Height (Observer Height (Above Pad): 5.0 feet				Hoan	n Trucks	· 2.	004	Grad	o Adii	istment	· 0.0
Pa	ad Elevation:	0.0 feet			ncav	y mucha	. 0.	004	0/00	<i>5 7</i> (d)c	iounion.	. 0.0
Roa	ad Elevation:	0.0 feet		La	ne Eq	uivalent	Distan	ce (in	feet)			
I	Road Grade:	0.0%				Autos	: 33.	645				
	Left View:	-90.0 degrees			Mediur	m Trucks	: 33.	381				
	Right View:	90.0 degrees			Heav	y Trucks	33.	407				
FHWA Noise Mode	el Calculation	IS										
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fresi	nel	Barrie	r Atte	n Bei	rm Atten
Autos:	66.51	-6.69		2.48		-1.20		-4.53		0.0	00	0.00
Medium Trucks:	77.72	-23.14		2.53		-1.20		-4.86		0.0	00	0.00
Heavy Trucks:	82.99	-23.49		2.52		-1.20		-5.67		0.0	00	0.00
Unmitigated Noise	e Levels (with	out Topo and b	arrier a	ttenua	ition)							
VehicleType	Leq Peak Ho	ur Leq Day	Le	eq Evel	ning	Leq I	Vight		Ldn		С	NEL
Autos:	61	.1 5	9.2		57.4		51.4	4		60.0		60.0
Medium Trucks:	55	5.9 54	1.4		48.0		46.5	5		54.9		55.2
Heavy Trucks:	60).8 59	9.4		50.4		51.6	6		60.0		60.
Vehicle Noise:	64	1.6 63	3.0		58.6		55.7	1		63.6		64.
Centerline Distance	e to Noise C	ontour (in feet)										
				70 dB.	A	65 0	1BA	1	60 dBA	1	55	dBA
		L	dn:	13 28 59 1				28				
		Ldn: CNEL:				13 29 63 135						135

	FH	WA-RD-77-10	8 HIGH	WAY N	OISE PI	REDICT	ION MO	DEL			
Scenai Road Nan Road Segme	rio: HY With P ne: Juniper Av ent: s/o Santa /	roject '. Ana Av.				Project Job N	Name: lumber:	Goodn 12384	nan III		
SITE	SPECIFIC I	VPUT DATA				N	IOISE N	/ODE	L INPUTS	5	
Highway Data				5	Site Con	ditions	(Hard =	10, So	oft = 15)		
Average Daily Peak Hour Peak F	Traffic (Adt): Percentage: Iour Volume:	3,882 vehic 10% 388 vehicle	les		Me He	dium Tri avy True	ucks (2 / cks (3+ /	Autos: Axles): Axles):	15 15 15		
Ve	ehicle Speed:	40 mph			/ohiclo	Miy					
Near/Far La	ne Distance:	14 feet			Veh	icleType		Dav	Evenina	Niaht	Daily
Site Data					1011		, Autos:	77.5%	12.9%	9.6%	96.20%
Barrier Type (0-V	rrier Height: Vall, 1-Berm):	0.0 feet 0.0			Me F	edium T Heavy T	rucks: rucks:	84.8% 86.5%	4.9% 2.7%	10.3% 10.8%	1.97% 1.82%
Centerline Di	ist. to Barrier:	34.0 feet		/	Voise So	ource E	levation	s (in f	eet)		
Centerline Dist. Barrier Distance Observer Height P	Centerline Dist. to Observer: 34.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet				Mediui Heav	Auto m Truck ry Truck	s: 0.0 s: 2.: s: 8.0	000 297 004	Grade Adj	ustmeni	t: 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distan	ce (in	feet)		
	Road Grade: Left View: Right View:	0.0% -90.0 degre 90.0 degre	es es		Autos: 33.645 Medium Trucks: 33.381 Heavy Trucks: 33.407						
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresr	nel	Barrier Atte	en Be	rm Atten
Autos: Medium Trucks: Heavy Trucks:	66.51 77.72 82.99	-5.60 -22.48 -22.83) 3 3	2.48 2.53 2.52	3	-1.20 -1.20 -1.20		-4.53 -4.86 -5.67	0.0 0.0 0.0	00 00 00	0.000
Unmitigated Nois	e l evels (with	nout Topo and	l harrie	er atten	uation)						
VehicleType	Lea Peak Ho	ur Lea Da	V	Lea Ev	enina	Lea	Niaht		Ldn	С	NEL
Autos:	62	2.2	60.3		58.5		52.5	5	61.1		61.7
Medium Trucks:	56	6.6	55.1		48.7		47.1		55.6	;	55.8
Heavy Trucks:	Heavy Trucks: 61.5 60.1				51.0 52.3			60.6	;	60.8	
Vehicle Noise:	65	5.5	63.8		59.6		56.0)	64.5		64.8
Centerline Distan	ce to Noise C	ontour (in fee	t)								
			ί I	70 a	IBA	65	dBA	6	60 dBA	55	i dBA
			Ldn:	15	15 31 68				146		
	Ldn: CNEL:				5	33 72 154					154

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FH	WA-RD-77-108	HIGHW	AY NOIS	SE PI	REDICT	ON MO	DEL				
Scenario: HY With F Road Name: Sierra Av. Road Segment: n/o Slover	Project Av.				Project Job N	Name: umber:	Good 12384	man III			
SITE SPECIFIC I	NPUT DATA				N	OISE N	NODE	L INPUT	S		
Highway Data			Site	Con	ditions	(Hard =	10, S	oft = 15)			
Average Daily Traffic (Adt):	69,027 vehicl	es					Autos	15			
Peak Hour Percentage:	10%			Me	dium Tru	ıcks (2 /	Axles)	: 15			
Peak Hour Volume:	6,903 vehicle	s		He	avy Truc	cks (3+)	Axles)	: 15			
Vehicle Speed:	40 mph		Veh	icle	Mix						
Near/Far Lane Distance:	88 feet			Veh	icleType		Day	Evening	Nic	aht	Daily
Site Data					A	Autos:	77.5%	6 12.9%	9	.6%	95.38%
Barrier Height:	0.0 feet			M	edium Tr	ucks:	84.8%	6 4.9%	10	.3%	2.35%
Barrier Type (0-Wall, 1-Berm):	0.0			ŀ	Heavy Ti	ucks:	86.5%	6 2.7%	10	.8%	2.27%
Centerline Dist. to Barrier:	66.0 feet		Nois	se So	ource El	evation	s (in i	eet)			
Centerline Dist. to Observer:	66.0 feet				Autos	s: 0.	000	,			
Barrier Distance to Observer:	0.0 feet		M	lediui	m Truck	s: 2.:	297				
Observer Height (Above Pad):	5.0 feet			Heav	y Trucks	s: 8.	004	Grade Ad	ljustr	nent:	0.0
Pad Elevation:	0.0 feet		1 20	0 E a	uivalon	Dicton	co (in	foot)			
Road Elevation:	0.0 feet		Lan	ец	Auto	2015tan	447	leel)			
Road Grade.	0.0%			lodiu	m Truck	s. 43.	260				
Right View:	90.0 degre	es		Heav	y Truck	s: 49.	285				
FHWA Noise Model Calculation	ns										
VehicleType REMEL	Traffic Flow	Distar	ce F	inite	Road	Fresr	nel	Barrier At	ten	Bern	Atten
Autos: 66.51	6.86		-0.03		-1.20		-4.71	0.	000		0.000
Medium Trucks: 77.72	-9.22		-0.01		-1.20		-4.88	0.	000		0.000
Heavy Trucks: 82.99	-9.37		-0.01		-1.20		-5.30	0.	000		0.000
Unmitigated Noise Levels (with	hout Topo and	barrier a	ttenuat	ion)							
VehicleType Leq Peak Ho	ur Leq Da	/ Le	eq Eveni	ing	Leq	Night		Ldn		CN	EL
Autos: 7	2.1	70.2		68.5		62.4	1	71.	0		71.6
Medium Trucks: 6	7.3	65.8		59.4		57.9	9	66.	3		66.6
Heavy Trucks: 7	2.4	71.0		62.0		63.2	2	71.	6		71.7
Venicle Noise: 7	5.9	74.3		69.8		66.5)	75.	0		75.3
Centerline Distance to Noise C	contour (in fee	t)	70 dBA		65	dRΔ	1	60 dBA		55.0	IRΔ
		I dn'	141		30	14	1	656		14	13
	С	NEL:	149		32	21		691		1,4	89

FHW	A-RD-77-108	HIGHW	AY N	OISE PF	REDICTIO		DEL			
o: HY With Pro	ject				Project I	Vame: (Goodm	ian III		
e: Sierra Av.					Job Nu	mber: 1	2384			
nt: s/o Slover A	v.									
SPECIFIC IN	PUT DATA				N	DISE N	IODE		S	
			S	Site Con	ditions (Hard =	10, So	ft = 15)		
Traffic (Adt):	4,691 vehicle	es				A	Autos:	15		
Percentage:	10%			Me	dium Tru	cks (2 A	xles):	15		
our Volume:	4,469 vehicles	6		He	avy Truci	ks (3+ A	xles):	15		
hicle Speed:	50 mph		V	/ehicle	Mix					
ne Distance:	88 feet			Veh	icleType		Day	Evening	Night	Daily
					A	utos:	77.5%	12.9%	9.6%	95.29%
rier Height	0.0 feet			Me	edium Tru	icks:	34.8%	4.9%	10.3%	2.37%
all. 1-Berm):	0.0			F	leavy Tru	icks:	36.5%	2.7%	10.8%	2.34%
t. to Barrier:	66.0 feet			1-1 0-			1	- 41		
to Observer:	66.0 feet		n	voise sc	ource Ele	vations	in re	et)		
to Observer:	0.0 feet				Autos	0.0	00			
Above Pad):	5.0 feet			Mediur	n Trucks	2.2	97	Grada Ad	iustmont	
d Elevation:	0.0 feet			Heav	y Trucks	8.0	04	Grade Auj	usuneni	. 0.0
d Elevation:	0.0 feet		L	ane Eq	uivalent	Distand	e (in f	eet)		
Road Grade:	0.0%				Autos	49.4	47			
Left View:	-90.0 degree	es		Mediur	n Trucks	49.2	68			
Right View:	90.0 degree	es		Heav	y Trucks	49.2	85			
el Calculations										
REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresn	el .	Barrier Att	en Ber	m Atten
70.20	4.00		-0.03	5	-1.20		4.71	0.0	000	0.000
81.00	-12.05		-0.01		-1.20		4.88	0.0	000	0.000
85.38	-12.09		-0.01		-1.20		-5.30	0.0	000	0.000
e Levels (witho	ut Topo and	barrier a	atteni	uation)						
Leq Peak Hour	Leq Day	' L	eq Ev	rening	Leq N	light		Ldn	CI	NEL
73.0)	71.1		69.3		63.3		71.9)	72.5
67.3	7	66.2		59.9		58.3		66.8	3	67.0
72.1		70.7		61.6		62.9		71.2	2	71.4
76.3	2	74.6		70.4		66.7		75.2	2	75.6
e to Noise Co	ntour (in feet)								
e to Noise Co	ntour (in feet)	70 d	BA	65 a	BA	6	0 dBA	55	dBA
e to Noise Co	ntour (in feet) Ldn:	70 d	IBA 8	65 a 31	BA 8	6	0 dBA 685	55 1,	dBA 475
	FHW Press Here With Process Fishera Av. SPECIFIC INI Traffic (Adt): 4 Percentage: pur Volume: 4 incle Speed: te Distance:	FHWA-RD-77-108 D: HY With Project Silera Av. tt's fo Slover Av. SPECIFIC INPUT DATA Fraffic (Adt): 44,691 vehicle fold (Adt): 44,691 vehicle bour Volume: 4,469 vehicle bour Volume: 50 mph bistance: 88 feet rrier Height: 0.0 feet all, 1-Berm): 0.0 to Observer: 0.0 feet observer: 0.0 feet d Elevation: 0.0 feet d Elevation: 0.0 feet d Elevation: 0.0 degree HTMEL Traffic Flow TABLO 4.00 81.00 -12.05 85.38 170.0 10.0 12.05 85.38 170.0 10.0 2.0 degree Valuations 12.05 85.38 170.0 10.0 -12.05 85.38 170.0 73.0 67.7 72.1 72.1	FHWA-RD-77-108 HIGHW pp: HY With Project pp: HY With Project pp: Silera Av. str: slo Slover Av. SPECIFIC INPUT DATA Traffic (Adt): 4,469 vehicles percentage: 10% pour Volume: 4,469 vehicles pint Volume: 4,469 vehicles pint Poistance: 88 feet rier Height: rier Height: 0.0 feet all, 1-Berm): 0.0 feet do Dserver: 0.0 feet do Deserver: 0.0 feet do Deserver: 0.0 feet do Clevation: 0.0 feet do Elevation: 0.0 feet dolegrees REMEL Traffic Flow REMEL Traffic Flow 81.00 -12.05 85.38 -12.05 85.38 -12.05 42.9 Peak Hour Leq Day Lag Peak Hour	FHWA-RD-77-108 HIGHWAY N pb: HY With Project pb: Kit: s: Stera Av. str: Stora Av. SPECIFIC INPUT DATA 5 Fraffic (Adt): 44,691 vehicles Percentage: 10% pur Volume: 4,469 vehicles pice Distance: 88 feet rier Height: 0.0 feet all, 1-Berm): 0.0 t. to Barrier: 66.0 feet to Observer: 0.0 feet d Elevation: 0.0 feet d Elevation: 0.0 feet d Elevation: 0.0 degrees REMEL Traffic Flow Distance RAS3 12.05 -0.01 85.38 -12.05 -0.01 85.38 -12.05 -0.01 85.38 -12.05 -0.01 9.04 Degrees -0.01 9.120 A QO -0.02 10 -12.05 -0.01 9.31.00 -12.05 -0.01 </td <td>FHWARD-77-108 HIGHWAY NOISE PF FHWARD-77-108 HIGHWAY NOISE PF bit with Project Siter Av. Site Av. Site Av. Site Com Site Com Traffic (Adt): 44,691 vehicles Percentage: 10% Me Me Me Vehicles Molect So mph Vehicle I Vehicles Molect Mode Molect Mode Above Failt Nolse Sc O Det Medium Above Failt Col Crade O Deserver: 0.0 feet Medium REMEL Taffic Flow Distance Finite Col Grade: 0.0% Laft View: 9.0.0 degrees Medium Medium REMEL <th colspan="2</td><td>FHWA-RD-77-108 HIGHWAY NOISE PREDICTIO FHW With Project Project I Distance Product Site Conditions (Medium True SPECIFIC INPUT DATA Medium True SPECIFIC INPUT DATA Medium True Dark Add Status Medium True Dark Distance: 88 feet Medium True Add Status Medium True Medium True Inter Meight: 0.0 feet Medium True all, 1-Berm): 0.0 The Distance Reavy Trucks: I to Barrier: 66.0 feet Medium Trucks: Heavy Trucks: I co Diserver: 0.0 feet Medium Trucks: Heavy Trucks: I co Diserver: 0.0 feet Mathematical mathmathematical mathematical mathematical mathematical mathematical</td><td>FHWA-RD-77-103 HIGHWAY NOISE PREDICTION MODE Distance Project Name: O s: Siera Av. Job Number: 1 tt: sio Slover Av. Site Conditions (Hard = Site Av. Site Conditions (Hard = Traffic (Adt): 44,691 vehicles Percentage: 10% Medium Trucks (2 A hele Speed: 50 mph Heavy Trucks (3 A hele Speed: 50 mph Vehicle Mix hele Speed: 50 mph Vehicle Mix he Distance: 88 feet Vehicle Mix riter Height: 0.0 feet Medium Trucks: 14 all, 1-Berm): 0.0 1 to Observer: 66.0 feet Autos:: o Observer: 0.0 feet Heavy Trucks: 49.2 d Elevation: 0.0 feet Autos:: 40 d Elevation: 0.0 feet Lane Equivalent Distance Cad Grade: 0.0% Autos:: 49.2 Heavy Trucks: 49.2 Heavy Trucks: 49.2 Heavy Trucks: 49.2 Heavy Tr</td><td>FHWA-RD-77-103 HIGHWAY NOISE PREDICTION MODEL FWWith Project Project Name: Goodn Silter Av. Job Number: 12384 tt: slo Slover Av. NOISE MODEL SPECIFIC INPUT DATA NOISE MODEL Itight 44.691 vehicles Autos: inde Speed: 50 mph Vehicle Mix velocies Tors Medium Trucks: 84.84 Heavy Trucks: 86.5% Values: 0.0 Molise Source Elevations (in fe Observer: 0.0 feet Autos: 1.20 Gal Grade: 0.0% Lare Equivalent Distance (in f Calculations Traffic Flow Distance Finite Road Fresnel T0.20 4.00 -0.01 1.20 -4.88 <td>FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL Project Name: Goodman III D2: HY With Project Project Name: Goodman III Job Number: 12384 Job Number: 12384 tt: slo Slover Av. NOISE MODEL INPUT SPECIFIC INPUT DATA NOISE MODEL INPUT: SPECIFIC INPUT DATA NOISE MODEL INPUT: Ste Conditions (Hard = 10, Soft = 15) Autos: 15 Drandick Speed: Medium Trucks (2 Axiles): 15 Dur Volume: 4,469 vehicles inde Speed: Day Evening Autos: T7.5% 12.9% Heavy Trucks: 86.5% 2.7% Vehicle Type Day Evening Autos: T7.5% 12.9% Observer: 0.0 feet Autos: 0.00 d Elevation: 0.0 feet Autos: 0.00 Observer: 0.0 feet Autos: 4.94/47 Gad Grade: 0.0% Autos: 4.94/47 Left Wiew: 90.0 degrees Finite Road Fresnel Barrier Atth T0.20</td><td>FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL Project Name: Goodman III bit Job Number: 12384 Job Number: 12384 Site Av. Site Conditions (Hard = 10, Soft = 15) Site Conditions (Hard = 10, Soft = 15) Traffic (Adt): 44,691 vehicles Autos: 15 Beter File Key Vehicles Vehicle Mix Ve</td></td></td>	FHWARD-77-108 HIGHWAY NOISE PF FHWARD-77-108 HIGHWAY NOISE PF bit with Project Siter Av. Site Av. Site Av. Site Com Site Com Traffic (Adt): 44,691 vehicles Percentage: 10% Me Me Me Vehicles Molect So mph Vehicle I Vehicles Molect Mode Molect Mode Above Failt Nolse Sc O Det Medium Above Failt Col Crade O Deserver: 0.0 feet Medium REMEL Taffic Flow Distance Finite Col Grade: 0.0% Laft View: 9.0.0 degrees Medium Medium REMEL <th colspan="2</td> <td>FHWA-RD-77-108 HIGHWAY NOISE PREDICTIO FHW With Project Project I Distance Product Site Conditions (Medium True SPECIFIC INPUT DATA Medium True SPECIFIC INPUT DATA Medium True Dark Add Status Medium True Dark Distance: 88 feet Medium True Add Status Medium True Medium True Inter Meight: 0.0 feet Medium True all, 1-Berm): 0.0 The Distance Reavy Trucks: I to Barrier: 66.0 feet Medium Trucks: Heavy Trucks: I co Diserver: 0.0 feet Medium Trucks: Heavy Trucks: I co Diserver: 0.0 feet Mathematical mathmathematical mathematical mathematical mathematical mathematical</td> <td>FHWA-RD-77-103 HIGHWAY NOISE PREDICTION MODE Distance Project Name: O s: Siera Av. Job Number: 1 tt: sio Slover Av. Site Conditions (Hard = Site Av. Site Conditions (Hard = Traffic (Adt): 44,691 vehicles Percentage: 10% Medium Trucks (2 A hele Speed: 50 mph Heavy Trucks (3 A hele Speed: 50 mph Vehicle Mix hele Speed: 50 mph Vehicle Mix he Distance: 88 feet Vehicle Mix riter Height: 0.0 feet Medium Trucks: 14 all, 1-Berm): 0.0 1 to Observer: 66.0 feet Autos:: o Observer: 0.0 feet Heavy Trucks: 49.2 d Elevation: 0.0 feet Autos:: 40 d Elevation: 0.0 feet Lane Equivalent Distance Cad Grade: 0.0% Autos:: 49.2 Heavy Trucks: 49.2 Heavy Trucks: 49.2 Heavy Trucks: 49.2 Heavy Tr</td> <td>FHWA-RD-77-103 HIGHWAY NOISE PREDICTION MODEL FWWith Project Project Name: Goodn Silter Av. Job Number: 12384 tt: slo Slover Av. NOISE MODEL SPECIFIC INPUT DATA NOISE MODEL Itight 44.691 vehicles Autos: inde Speed: 50 mph Vehicle Mix velocies Tors Medium Trucks: 84.84 Heavy Trucks: 86.5% Values: 0.0 Molise Source Elevations (in fe Observer: 0.0 feet Autos: 1.20 Gal Grade: 0.0% Lare Equivalent Distance (in f Calculations Traffic Flow Distance Finite Road Fresnel T0.20 4.00 -0.01 1.20 -4.88 <td>FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL Project Name: Goodman III D2: HY With Project Project Name: Goodman III Job Number: 12384 Job Number: 12384 tt: slo Slover Av. NOISE MODEL INPUT SPECIFIC INPUT DATA NOISE MODEL INPUT: SPECIFIC INPUT DATA NOISE MODEL INPUT: Ste Conditions (Hard = 10, Soft = 15) Autos: 15 Drandick Speed: Medium Trucks (2 Axiles): 15 Dur Volume: 4,469 vehicles inde Speed: Day Evening Autos: T7.5% 12.9% Heavy Trucks: 86.5% 2.7% Vehicle Type Day Evening Autos: T7.5% 12.9% Observer: 0.0 feet Autos: 0.00 d Elevation: 0.0 feet Autos: 0.00 Observer: 0.0 feet Autos: 4.94/47 Gad Grade: 0.0% Autos: 4.94/47 Left Wiew: 90.0 degrees Finite Road Fresnel Barrier Atth T0.20</td><td>FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL Project Name: Goodman III bit Job Number: 12384 Job Number: 12384 Site Av. Site Conditions (Hard = 10, Soft = 15) Site Conditions (Hard = 10, Soft = 15) Traffic (Adt): 44,691 vehicles Autos: 15 Beter File Key Vehicles Vehicle Mix Ve</td></td>	FHWA-RD-77-108 HIGHWAY NOISE PREDICTIO FHW With Project Project I Distance Product Site Conditions (Medium True SPECIFIC INPUT DATA Medium True SPECIFIC INPUT DATA Medium True Dark Add Status Medium True Dark Distance: 88 feet Medium True Add Status Medium True Medium True Inter Meight: 0.0 feet Medium True all, 1-Berm): 0.0 The Distance Reavy Trucks: I to Barrier: 66.0 feet Medium Trucks: Heavy Trucks: I co Diserver: 0.0 feet Medium Trucks: Heavy Trucks: I co Diserver: 0.0 feet Mathematical mathmathematical mathematical mathematical mathematical mathematical	FHWA-RD-77-103 HIGHWAY NOISE PREDICTION MODE Distance Project Name: O s: Siera Av. Job Number: 1 tt: sio Slover Av. Site Conditions (Hard = Site Av. Site Conditions (Hard = Traffic (Adt): 44,691 vehicles Percentage: 10% Medium Trucks (2 A hele Speed: 50 mph Heavy Trucks (3 A hele Speed: 50 mph Vehicle Mix hele Speed: 50 mph Vehicle Mix he Distance: 88 feet Vehicle Mix riter Height: 0.0 feet Medium Trucks: 14 all, 1-Berm): 0.0 1 to Observer: 66.0 feet Autos:: o Observer: 0.0 feet Heavy Trucks: 49.2 d Elevation: 0.0 feet Autos:: 40 d Elevation: 0.0 feet Lane Equivalent Distance Cad Grade: 0.0% Autos:: 49.2 Heavy Trucks: 49.2 Heavy Trucks: 49.2 Heavy Trucks: 49.2 Heavy Tr	FHWA-RD-77-103 HIGHWAY NOISE PREDICTION MODEL FWWith Project Project Name: Goodn Silter Av. Job Number: 12384 tt: slo Slover Av. NOISE MODEL SPECIFIC INPUT DATA NOISE MODEL Itight 44.691 vehicles Autos: inde Speed: 50 mph Vehicle Mix velocies Tors Medium Trucks: 84.84 Heavy Trucks: 86.5% Values: 0.0 Molise Source Elevations (in fe Observer: 0.0 feet Autos: 1.20 Gal Grade: 0.0% Lare Equivalent Distance (in f Calculations Traffic Flow Distance Finite Road Fresnel T0.20 4.00 -0.01 1.20 -4.88 <td>FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL Project Name: Goodman III D2: HY With Project Project Name: Goodman III Job Number: 12384 Job Number: 12384 tt: slo Slover Av. NOISE MODEL INPUT SPECIFIC INPUT DATA NOISE MODEL INPUT: SPECIFIC INPUT DATA NOISE MODEL INPUT: Ste Conditions (Hard = 10, Soft = 15) Autos: 15 Drandick Speed: Medium Trucks (2 Axiles): 15 Dur Volume: 4,469 vehicles inde Speed: Day Evening Autos: T7.5% 12.9% Heavy Trucks: 86.5% 2.7% Vehicle Type Day Evening Autos: T7.5% 12.9% Observer: 0.0 feet Autos: 0.00 d Elevation: 0.0 feet Autos: 0.00 Observer: 0.0 feet Autos: 4.94/47 Gad Grade: 0.0% Autos: 4.94/47 Left Wiew: 90.0 degrees Finite Road Fresnel Barrier Atth T0.20</td> <td>FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL Project Name: Goodman III bit Job Number: 12384 Job Number: 12384 Site Av. Site Conditions (Hard = 10, Soft = 15) Site Conditions (Hard = 10, Soft = 15) Traffic (Adt): 44,691 vehicles Autos: 15 Beter File Key Vehicles Vehicle Mix Ve</td>	FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL Project Name: Goodman III D2: HY With Project Project Name: Goodman III Job Number: 12384 Job Number: 12384 tt: slo Slover Av. NOISE MODEL INPUT SPECIFIC INPUT DATA NOISE MODEL INPUT: SPECIFIC INPUT DATA NOISE MODEL INPUT: Ste Conditions (Hard = 10, Soft = 15) Autos: 15 Drandick Speed: Medium Trucks (2 Axiles): 15 Dur Volume: 4,469 vehicles inde Speed: Day Evening Autos: T7.5% 12.9% Heavy Trucks: 86.5% 2.7% Vehicle Type Day Evening Autos: T7.5% 12.9% Observer: 0.0 feet Autos: 0.00 d Elevation: 0.0 feet Autos: 0.00 Observer: 0.0 feet Autos: 4.94/47 Gad Grade: 0.0% Autos: 4.94/47 Left Wiew: 90.0 degrees Finite Road Fresnel Barrier Atth T0.20	FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL Project Name: Goodman III bit Job Number: 12384 Job Number: 12384 Site Av. Site Conditions (Hard = 10, Soft = 15) Site Conditions (Hard = 10, Soft = 15) Traffic (Adt): 44,691 vehicles Autos: 15 Beter File Key Vehicles Vehicle Mix Ve

Wednesday, June 05, 2019

Fi	HWA-RD-77-108	HIGHWA	Y NOISE	PREDICTION	MODEL			
Scenario: HY With Road Name: Sierra Av Road Segment: s/o Santa	Project '. a Ana Av.			Project Nar Job Numb	ne: Goodi er: 12384	man III		
SITE SPECIFIC	INPUT DATA			NOIS	SE MODE	L INPUT	s	
Highway Data			Site C	Conditions (Ha	rd = 10, S	oft = 15)		
Average Daily Traffic (Adt):	41,357 vehicl	es			Autos.	15		
Peak Hour Percentage:	10%			Medium Trucks	(2 Axles)	15		
Peak Hour Volume:	4,136 vehicle	S		Heavy Trucks	3+ Axles)	: 15		
Vehicle Speed	50 mph		Vehic	le Mix				
Near/Far Lane Distance:	88 feet		Venic	/ehicleType	Dav	Evenina	Night	Dailv
Site Data				Auto	s: 77.5%	6 12.9%	9.6%	95.13%
Parrier Height	0.0 foot			Medium Truck	s: 84.8%	6 4.9%	10.3%	2.41%
Barrier Type (0-Wall 1-Berm)	0.0 1001			Heavy Truck	s: 86.5%	6 2.7%	10.8%	2.479
Centerline Dist. to Barrier	66.0 feet							
Centerline Dist. to Observer	66.0 feet		Noise	Source Eleva	tions (in 1	eet)		
Barrier Distance to Observer.	0.0 feet			Autos:	0.000			
Observer Height (Above Pad)	5.0 feet		IVIe0	aium Trucks:	2.297	Crada Ad	i colmont	
Pad Elevation	0.0 feet			eavy mucks.	0.004	Graue Auj	usunen	. 0.0
Road Elevation	0.0 feet		Lane	Equivalent Dis	tance (in	feet)		
Road Grade.	0.0%			Autos:	49.447			
Left View.	-90.0 degre	es	Mee	dium Trucks:	49.268			
Right View.	90.0 degre	es	H	eavy Trucks:	49.285			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distan	ce Fin	nite Road F	resnel	Barrier Att	en Ber	m Atten
Autos: 70.2	.0 3.65		-0.03	-1.20	-4.71	0.0	000	0.00
Medium Trucks: 81.0	0 -12.32		-0.01	-1.20	-4.88	0.0	000	0.00
Heavy Trucks: 85.3	8 -12.21		-0.01	-1.20	-5.30	0.0	000	0.00
Unmitigated Noise Levels (wi	thout Topo and	barrier a	ttenuatio	n)				
VehicleType Leq Peak H	our Leq Day	/ Le	q Evening	g Leq Nigl	nt	Ldn	C	NEL
Autos:	72.6	70.7	69	9.0	62.9	71.5	5	72.
Medium Trucks:	67.5	66.0	59	9.6	58.1	66.5	5	66.
Heavy Trucks:	72.0	70.5	61	1.5	62.8	71.1		71.
Vehicle Noise:	76.0	74.3	70	0.1	66.5	75.0)	75.
Centerline Distance to Noise	Contour (in fee)						
			70 dBA	65 dBA		60 dBA	55	dBA
	-	Ldn:	142	306		660	1,	422
	C	VEL:	150	324		698	1,	503

	FH\	NA-RD-77-108	HIGHW	AY NO	OISE PR	REDICTIO	ON MO	DEL			
Scenar	io: HY With Pr	oject				Project N	Varne:	Goodr	nan III		
Road Nam	e: Sierra Av.					Job Nu	mber:	12384			
Road Segme	nt: s/o Jurupa	Av.									
SITE	SPECIFIC IN	IPUT DATA				N	DISE I	MODE	L INPUT	'S	
Highway Data				S	Site Con	ditions (l	Hard =	: 10, So	oft = 15)		
Average Daily	Traffic (Adt):	37,985 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Truo	cks (2 /	Axles):	15		
Peak H	lour Volume:	3,798 vehicles	6		Hea	avy Truck	ks (3+)	Axles):	15		
Ve	hicle Speed:	55 mph		v	ehicle I	Mix					
Near/Far La	ne Distance:	88 feet		-	Vehi	cleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6	% 95.29%
Ba	rrier Height:	0.0 feet			Me	edium Tru	icks:	84.8%	4.9%	10.3	% 2.37%
Barrier Type (0-W	/all, 1-Berm):	0.0			H	leavy Tru	icks:	86.5%	2.7%	10.8	% 2.34%
Centerline Di	st. to Barrier:	66.0 feet		A	loise So	urce Fle	vation	s (in fi	pet)		
Centerline Dist.	to Observer:	66.0 feet				Autos	. 0	000	500		
Barrier Distance	to Observer:	0.0 feet			Mediun	n Trucks	. 2	297			
Observer Height	Above Pad):	5.0 feet			Hoav	v Trucke		004	Grade Ad	liustme	nt 0.0
Pa	ad Elevation:	0.0 feet			neav,	y mucho.	0.	004	0/440/10	ijuouno	. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Equ	uivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%				Autos:	49.	447			
	Left View:	-90.0 degree	es		Mediun	n Trucks:	49.	268			
	Right View:	90.0 degree	es		Heav	y Trucks:	49.	285			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresi	nel	Barrier At	ten B	erm Atten
Autos:	71.78	2.88		-0.03		-1.20		-4.71	0.	000	0.000
Medium Trucks:	82.40	-13.16		-0.01		-1.20		-4.88	0.	000	0.000
Heavy Trucks:	86.40	-13.23		-0.01		-1.20		-5.30	0.	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	L	eq Ev	ening	Leq N	light		Ldn		CNEL
Autos:	73	.4	71.5		69.8		63.	7	72.	.3	72.9
Medium Trucks:	68	.0	66.5		60.2		58.6	6	67.	.1	67.3
Heavy Trucks:	72	.0	70.5		61.5		62.8	3	71.	.1	71.2
Vehicle Noise:	76	.4	74.8		70.8		67.0	D	75.	.5	75.8
Centerline Distan	ce to Noise Co	ontour (in feet)								
				70 di	BA	65 d	BA	6	60 dBA	5	5 dBA
			Ldn:	152	2	32	8		708		1,525
		CI	VEL:	162	2	34	8		750		1,617

	FH	WA-RD-77-108	B HIGHW	AY NO	ISE P	REDICT	ION MO	DEL			
Scena Road Nar Road Segme	rio: HY With P me: Slover Av. ent: w/o Sierra	roject Av.				Project Job N	Name: (umber:	Goodi 12384	man III		
SITE	SPECIFIC II	NPUT DATA				N	IOISE N	/IODE	L INPUTS	5	
Highway Data				Si	te Cor	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	26,374 vehic	les					Autos.	15		
Peak Hou	r Percentage:	10%			Me	dium Tru	ucks (2 A	xles).	15		
Peak I	Hour Volume:	2,637 vehicle	es		He	avy Truc	cks (3+ A	(xles)	: 15		
Ve	ehicle Speed:	45 mph		Ve	hicle	Mix					
Near/Far La	ane Distance:	59 feet		-	Veh	icleTvpe		Dav	Evenina	Niaht	Dailv
Site Data						,	Autos:	77.5%	6 12.9%	9.6	% 95.53%
Ba	arrier Height:	0.0 feet			М	edium Tr	rucks:	84.8%	6 4.9%	10.3	% 2.33%
Barrier Type (0-V	Vall. 1-Berm):	0.0				Heavy Tr	rucks:	86.5%	6 2.7%	10.8	% 2.15%
Centerline D	ist. to Barrier:	52.0 feet		NI	Non C	ouroo El	lovotion	o (in f	(a c f)		
Centerline Dist.	to Observer:	52.0 feet		740	Jise 3	Jurce El	evalion	<u>s (III I</u>	eel)		
Barrier Distance	to Observer:	0.0 feet			1 4 m all	Autos	s: 0.0	000			
Observer Height	(Above Pad):	5.0 feet			Hoo	III TTUCK	5. Z.4	297	Grada Adi	ustma	nt: 0.0
F	Pad Elevation:	0.0 feet			пеа	y muck	5. 0.0	JU4	Grade Auj	usuno	<i>n</i> . 0.0
Ro	ad Elevation:	0.0 feet		La	ne Eq	uivalent	t Distand	ce (in	feet)		
	Road Grade:	0.0%				Autos	s: 43.	113			
	Left View:	-90.0 degre	es		Mediu	m Trucks	s: 42.9	908			
	Right View:	90.0 degre	es		Hea	y Truck	s: 42.9	928			
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresn	el	Barrier Atte	en B	erm Atten
Autos	68.46	2.18		0.86		-1.20		-4.66	0.0	00	0.000
Medium Trucks:	79.45	-13.96		0.89		-1.20		-4.87	0.0	00	0.000
Heavy Trucks:	84.25	-14.31		0.89		-1.20		-5.41	0.0	00	0.000
Unmitigated Nois	se Levels (with	nout Topo and	l barrier	attenua	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	y L	.eq Eve	ning	Leq	Night		Ldn		CNEL
Autos:	: 70	0.3	68.4		66.6		60.6		69.2		69.8
Medium Trucks:	: 65	5.2	63.7		57.3		55.8		64.2		64.5
Heavy Trucks:	69	9.6	68.2		59.2		60.4		68.8		68.9
Vehicle Noise.	: 73	3.7	72.0		67.8		64.2		72.7		73.0
Centerline Distan	nce to Noise C	ontour (in fee	t)								
				70 dB	BA	65	dBA		60 dBA	5	i5 dBA
			Ldn:	78		10	69		364		784
		C	NEL:	83		17	79		385		829

	FHV	VA-RD-77-108	HIGHWA	AY NOIS	SE PREDICTIO	ON MOE	DEL			
Scenari	io: HY With Pr	oject			Project I	Vame: 0	Goodm	an III		
Road Nam	e: Santa Ana	Av.			Job Nu	mber: 1	2384			
Road Segmer	nt: e/o Citrus A	ν.								
SITE	SPECIFIC IN	IPUT DATA			N	DISE M	ODEL	INPUT:	S	
Highway Data				Site	Conditions (Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	9,233 vehicle	s			A	utos:	15		
Peak Hour	Percentage:	10%			Medium Tru	cks (2 A	xles):	15		
Peak H	lour Volume:	923 vehicles			Heavy Truc	ks (3+ A	xles):	15		
Ve	hicle Speed:	40 mph		Veh	nicle Mix					
Near/Far La	ne Distance:	48 feet			VehicleType	l	Day	Evening	Night	Daily
Site Data					A	utos: T	7.5%	12.9%	9.6%	95.65%
Bai	rrier Height:	0.0 feet			Medium Tru	icks: 8	34.8%	4.9%	10.3%	2.26%
Barrier Type (0-W	all, 1-Berm):	0.0			Heavy Tru	icks: 8	36.5%	2.7%	10.8%	2.09%
Centerline Dis	st. to Barrier:	46.0 feet		Noi	aa Sauraa Ek	votiona	(in fo	c .4)		
Centerline Dist.	to Observer:	46.0 feet		NOI	Se Source Ele	vauons		el)		
Barrier Distance	to Observer:	0.0 feet			Autos	0.0	00			
Observer Height (Above Pad):	5.0 feet		N	Healuri Trucks	. 2.2	97	Grada Ad	iustmont.	0.0
Pa	ad Elevation:	0.0 feet			neavy mucks	0.0	04	orade Adj	usunent.	0.0
Roa	ad Elevation:	0.0 feet		Lan	e Equivalent	Distanc	e (in f	eet)		
1	Road Grade:	0.0%			Autos	39.5	60			
	Left View:	-90.0 degree	s	N	ledium Trucks	39.3	36			
	Right View:	90.0 degree	S		Heavy Trucks	39.3	58			
FHWA Noise Mode	el Calculation:	s		-						
VehicleType	REMEL	Traffic Flow	Distan	ce l	inite Road	Fresne	el l	Barrier Att	en Beri	n Atten
Autos:	66.51	-1.87		1.42	-1.20	-	4.63	0.0	000	0.000
Medium Trucks:										0.00/
	77.72	-18.13		1.46	-1.20	-	4.87	0.0	000	0.000
Heavy Trucks:	77.72 82.99	-18.13 -18.48		1.46 1.46	-1.20 -1.20	-	4.87 5.47	0.0 0.0	000 100	0.000
Heavy Trucks: Unmitigated Noise	77.72 82.99 e Levels (with	-18.13 -18.48 out Topo and	barrier a	1.46 1.46 <i>ttenuat</i>	-1.20 -1.20	-	4.87 5.47	0.0	000	0.000
Heavy Trucks: Unmitigated Noise VehicleType	77.72 82.99 E Levels (with Leq Peak Hou	-18.13 -18.48 out Topo and r Leq Day	barrier a	1.46 1.46 ttenuat	-1.20 -1.20 ing Leq N	light	4.87 5.47	0.0 0.0 Ldn	000 000 <i>CI</i>	0.000
Heavy Trucks: Unmitigated Noise VehicleType Autos:	77.72 82.99 e Levels (with Leg Peak Hou 64.	-18.13 -18.48 out Topo and r Leq Day .9 (barrier a Le	1.46 1.46 ttenuat	-1.20 -1.20 ing Leq N 61.2	light 55.1	4.87 5.47	0.0 0.0 Ldn 63.8	000 000 <i>CI</i>	0.000
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	77.72 82.99 <u>e Levels (with</u> Leq Peak Hou 64. 59	-18.13 -18.48 out Topo and r Leq Day .9 (barrier a Le	1.46 1.46 ttenuat	-1.20 -1.20 ing Leq N 61.2 52.0	light 55.1 50.4	4.87 5.47	0.0 0.0 Ldn 63.8 58.9	000 000 <i>Cl</i>	0.000 0.000 <u>IEL</u> 64.4 59.1
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	77.72 82.99 e Levels (with Leq Peak Hou 64. 59. 64.	-18.13 -18.48 out Topo and a r Leq Day .9 (.8 § .8 §	barrier a Le 33.0 58.3 53.3	1.46 1.46 ttenuat	-1.20 -1.20 tion) ting Leq N 61.2 52.0 54.3	light 55.1 50.4 55.6	4.87 5.47	0.0 0.0 <u>Ldn</u> 63.8 58.9 63.9	000 000 <i>CI</i>	0.000 0.000 <u>IEL</u> 64.4 59.1 64.0
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	77.72 82.99 2 Levels (with Leq Peak Hou 64. 59. 64. 68.	-18.13 -18.48 out Topo and rr Leq Day .9 (.8 5 .5 (barrier a Le 33.0 58.3 53.3 56.8	1.46 1.46 ttenuat	-1.20 -1.20 ing Leq N 61.2 52.0 54.3 62.4	light 55.1 50.4 55.6 59.0	4.87 5.47	0.0 0.0 Ldn 63.8 63.9 63.9 67.5	000 000 <i>Ch</i> 3 3 3	0.000 0.000 VEL 64.4 59.7 64.0 67.8
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	77.72 82.99 2 Levels (with Leq Peak Hou 64. 59. 64. 68 ce to Noise Co	-18.13 -18.48 out Topo and a rr Leq Day .9 (.8 5 .5 (ontour (in feet)	barrier a Le 53.0 58.3 53.3 56.8	1.46 1.46 ttenuat q Even	-1.20 -1.20 ion) ing Leq N 51.2 52.0 54.3 62.4	light 55.1 50.4 55.6 59.0	4.87 5.47	0.0 0.0 <u>Ldn</u> 63.8 63.9 67.5	000 000 3 3 3 3 3 5	0.000 0.000 <i>IEL</i> 64.4 59.7 64.0 67.8
Heavy Trucks: Unnittigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	77.72 82.99 a Levels (with Leq Peak Hou 64. 59. 64. 68 ce to Noise Co	-18.13 -18.48 out Topo and a rr Leq Day 9.9 (8.8 8.8 (6.5) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10) (9.10)	barrier a Le 33.0 58.3 53.3 56.8	1.46 1.46 <i>ttenuat</i> <i>q Even</i> 70 <i>dBA</i>	-1.20 -1.20 ion) 61.2 52.0 54.3 62.4	light 55.1 50.4 55.6 59.0 BA	4.87 5.47	0.0 0.0 <u>Ldn</u> 63.8 63.9 67.5 0 dBA	000 000 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0.000 0.000 VEL 64.4 59.1 64.0 67.8 dBA
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	77.72 82.99 <u>e Levels (with</u> Leq Peak Hou 64 59 64 68 ce to Noise Co	-18.13 -18.48 out Topo and r Leq Day 9 (8 5 .5 (ontour (in feet)	barrier a Le 53.0 58.3 53.3 56.8 	1.46 1.46 ttenuat og Even 70 dBA 31	-1.20 -1.20 ion) 61.2 52.0 54.3 62.4 65.0 65.4	light 55.1 50.4 55.6 59.0 BA	4.87 5.47	0.0 0.0 63.8 63.9 67.9 0 dBA 145	000 000 3 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5	0.000 0.000 VEL 64.4 59.1 64.0 67.8 0 dBA

Wednesday, June 05, 2019

	FHW	VA-RD-77-108 H	IIGHW	AY NOIS	E PREDICT	ION MO	DDEL			
Scenar	o: HY With Pro	oject			Project	Name:	Goodn	nan III		
Road Nam	e: Santa Ana /	Av.			Job N	umber:	12384			
Road Segme	nt: e/o Juniper	Av.								
SITE	SPECIFIC IN	PUT DATA			N	IOISE	MODE	L INPUT	s	
Highway Data				Site	Conditions	(Hard :	= 10, So	oft = 15)		
Average Daily	Traffic (Adt):	12,577 vehicles					Autos:	15		
Peak Hour	Percentage:	10%			Medium Tr	ucks (2	Axles):	15		
Peak H	our Volume:	1,258 vehicles			Heavy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	40 mph		Vehi	lo Mix					
Near/Far La	ne Distance:	48 feet		Venn	VehicleTvpe		Dav	Evenina	Niaht	Dailv
Site Data					, , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , . , , , . , , , . , , , . , , , . , , , . , , , , . , , , . , , , , . , , , , . , , , , , , , , , , , , , , , , , , , ,	Autos:	77.5%	12.9%	9.6%	95.66%
Bai	rior Hoight	0.0 feet			Medium T	rucks:	84.8%	4.9%	10.3%	2.26%
Barrier Type (0-W	all, 1-Berm):	0.0			Heavy T	rucks:	86.5%	2.7%	10.8%	2.08%
Centerline Dis	st. to Barrier:	46.0 feet		Nois	e Source E	levatio	ns (in fe	et)		
Centerline Dist.	to Observer:	46.0 feet			Auto	s [.] 0	000			
Barrier Distance	to Observer:	0.0 feet		Me	dium Truck	s: 2	297			
Observer Height (Above Pad):	5.0 feet		F	leavy Truck	s: 8	.004	Grade Ad	iustment	: 0.0
Pa	ad Elevation:	0.0 feet			,					
Roa	ad Elevation:	0.0 feet		Lane	Equivalen	t Distai	nce (in i	feet)		
1	Road Grade:	0.0%			Auto	s: 39	.560			
	Left View:	-90.0 degrees		Me	dium Truck	s: 39	.336			
	Right View:	90.0 degrees		F	leavy Truck	s: 39	.358			
FHWA Noise Mode	el Calculations	S		1						
VehicleType	REMEL	Traffic Flow	Dista	nce Fi	nite Road	Fres	inel	Barrier Att	en Bei	m Atten
Autos:	66.51	-0.52		1.42	-1.20		-4.63	0.0	000	0.00
Medium Trucks:	77.72	-16.79		1.46	-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	82.99	-17.14		1.46	-1.20		-5.47	0.0	000	0.00
Unmitigated Noise	e Levels (with	out Topo and b	arrier	attenuatio	on)					
VehicleType	Leq Peak Hou	r Leq Day	L	eq Evenin	g Leq	Night		Ldn	С	NEL
Autos:	66.	2 64	1.3	6	2.5	56	.5	65.1	1	65.
Medium Trucks:	61.	2 5	9.7	5	3.3	51	.8	60.2	2	60.
Heavy Trucks:	66.	.1 64	1.7	5	5.7	56	.9	65.3	3	65.4
Vehicle Noise:	69.	.8 6	3.2	e	3.8	60	.4	68.8	3	69.:
Centerline Distant	e to Noise Co	ontour (in feet)							1	
				70 dBA	65	dBA	6	i0 dBA	55	dBA
		L	dn:	38	8	13		179	3	385

	FH)	WA-RD-77-108 F	IIGHWA	Y NO	SE PR	EDICTIC	ON MC	DEL				
Scenar Road Nan Road Segme	io: HY With Po ne: Santa Ana nt: e/o Sierra	roject Av. Av.				Project N Job Nu	Vame: mber:	Goodr 12384	man III			
SITE	SPECIFIC IN	IPUT DATA				N	DISE	MODE	L INP	UTS		
Highway Data				Sit	e Con	ditions (Hard =	= 10, S	oft = 1	5)		
Average Daily Peak Hour Peak H	Traffic (Adt): Percentage: lour Volume:	8,614 vehicles 10% 861 vehicles	1		Mec Hea	lium Truc avy Truck	cks (2 ks (3+	Autos: Axles): Axles):	15 15 15			
Ve	hicle Speed:	40 mph		Ve	hicle N	lix						
Near/Far La	ne Distance:	48 feet			Vehi	cleType		Day	Even	ing	Night	Daily
Site Data						A	utos:	77.5%	6 12.	9%	9.6%	95.03%
Ba Barrier Type (0-W	rrier Height: /all, 1-Berm):	0.0 feet 0.0			Me H	dium Tru Ieavy Tru	icks: icks:	84.8% 86.5%	6 4.9 6 2.1	9% 7%	10.3% 10.8%	2.39% 2.58%
Centerline Di	st. to Barrier:	46.0 feet		No	ico So	urco Elo	watio	ne (in f	in of l			
Centerline Dist.	to Observer:	46.0 feet		NO	136 30		vauor	000	eei)			
Barrier Distance	to Observer:	0.0 feet			Modium	Autos.	. 0.	207				
Observer Height	(Above Pad):	5.0 feet			Hoove	Trucks.		004	Grade	a Adiu	istmont	. 0.0
P	ad Elevation:	0.0 feet			Tieavj	/ ITUCKS.	0	.004	0/000	, Auju	Sunon.	0.0
Ro	ad Elevation:	0.0 feet		La	ne Equ	ivalent	Distar	ice (in	feet)			
	Road Grade:	0.0%				Autos:	39	.560				
	Left View:	-90.0 degrees		1	Mediun	n Trucks:	: 39	.336				
	Right View:	90.0 degrees			Heavy	/ Trucks:	39	.358				
FHWA Noise Mod	el Calculation	IS										
VehicleType	REMEL	Traffic Flow	Distand	ce 🛛	Finite I	Road	Fres	nel	Barrie	r Atter	n Ber	m Atten
Autos:	66.51	-2.20		1.42		-1.20		-4.63		0.00	00	0.000
Medium Trucks:	77.72	-18.19		1.46		-1.20		-4.87		0.00	00	0.000
Heavy Trucks:	82.99	-17.86		1.46		-1.20		-5.47		0.00	00	0.000
Unmitigated Nois	e Levels (with	out Topo and b	arrier at	tenua	tion)							
VehicleType	Leq Peak Ho	ur Leq Day	Le	q Ever	ning	Leq N	light		Ldn		CI	VEL
Autos:	64	.5 62	2.6		60.9		54.	8		63.4		64.0
Medium Trucks:	59	.8 58	3.3		51.9		50.	4		58.8		59.1
Heavy Trucks:	65	5.4 64	4.0		54.9		56.	2		64.5		64.7
Vehicle Noise:	68	3.6 6	7.0		62.3		59.	2		67.6		68.0
Centerline Distan	ce to Noise C	ontour (in feet)										
				70 dB/	4	65 d	BA		60 dBA		55	dBA
		L	dn:	32		69)		149		3	20
		CNI	EL:	34		73	5		156		3	37

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	FH\	NA-RD-77-108	HIGHWA	Y NOISE	PREDICT		DEL			
Scenar Road Nam Road Segme	io: HY With Pr ne: Jurupa Av. nt: w/o Cherry	roject Av.			Project Job N	t Name: (lumber: *	Goodn 12384	nan III		
SITE	SPECIFIC IN	IPUT DATA			, r	NOISE N	/IODE	L INPUTS	5	
Highway Data				Site C	Conditions	(Hard =	10, So	oft = 15)		
Average Daily	Traffic (Adt):	29,429 vehicl	es				Autos:	15		
Peak Hour	Percentage:	10%			Medium Tr	rucks (2 A	(xles):	15		
Peak H	lour Volume:	2,943 vehicle	s		Heavy Tru	icks (3+ A	(xles):	15		
Ve	hicle Speed:	45 mph		Vehic	le Mix					
Near/Far La	ne Distance:	80 feet		101110	/ehicleTvp	e	Dav	Evenina	Niaht	Dailv
Site Data						Autos:	77.5%	12.9%	9.6%	95.06%
Ba	rrier Heiaht:	0.0 feet			Medium T	rucks:	84.8%	4.9%	10.3%	2.41%
Barrier Type (0-W	/all, 1-Berm):	0.0			Heavy T	rucks:	86.5%	2.7%	10.8%	2.53%
Centerline Di	st. to Barrier:	60.0 feet		Noise	Source E	levation	s (in fe	eet)		
Centerline Dist.	to Observer:	60.0 feet			Auto	os: 0.0	000	,		-
Barrier Distance	to Observer:	0.0 feet		Me	dium Truck	(s: 2.2	297			
Observer Height ((Above Pad):	5.0 feet		н	eavy Truck	(S: 8.0	004	Grade Adj	ustment:	0.0
Pa	ad Elevation:	0.0 feet								
Roa	ad Elevation:	0.0 feet		Lane	Equivalen	t Distanc	ce (In	teet)		
	Road Grade:	0.0%			Auto	os: 45.0	000			
	Left View:	-90.0 degre	es	Me	aium Truck	(S: 44.8	303			
	Right View:	90.0 degre	es	п	eavy Truck	(S: 44.8	322			
FHWA Noise Mod	el Calculation	S								
VehicleType	REMEL	Traffic Flow	Distand	e Fir	nite Road	Fresn	el	Barrier Atte	en Ber	m Atten
Autos:	68.46	2.63		0.58	-1.20		-4.69	0.0	00	0.000
Medium Trucks:	79.45	-13.33		0.61	-1.20		-4.88	0.0	00	0.000
Heavy Trucks:	84.25	-13.12		0.61	-1.20		-5.34	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier at	tenuatio	n)		r			
VehicleType	Leq Peak Hou	ur Leq Day	/ Le	q Evening	g Leq	Night		Ldn	CI	VEL
Autos:	70	0.5	68.6	6	5.8	60.8		69.4		70.0
Medium Trucks:	65	.5	64.0	5	1.1	56.1		64.6		64.8
Vehicle Noise:	70	1.5	69.1 72.5	6	J.1 3.1	61.3		73.2		69.8 73.5
Centerline Distan	ce to Noise C	ontour (in feet)	0.		0		10.2		10.0
Contentine Distant		enteur (mileet	,	70 dBA	65	dBA	é	60 dBA	55	dBA
			Ldn:	98	2	211		454	9	79
		C	NEL:	103	2	222		479	1,0)32

	FHV	VA-RD-77-108 F	iiGriw,					, L			
Scenar	io: HY With Pr	oject				Project N	ame: (Goodn	nan III		
Road Nan	e: Jurupa Av.					Job Nur	nber: 1	2384			
Road Segme	nt: e/o Cherry	Av.									
SITE	SPECIFIC IN	IPUT DATA				NC	ISE N	ODE	L INPUTS	S	
Highway Data				S	ite Con	ditions (H	lard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	25,806 vehicles	3				A	utos:	15		
Peak Hour	Percentage:	10%			Mee	dium Truc	ks (2 A	xles):	15		
Peak H	lour Volume:	2,581 vehicles			Hea	avy Truck	s (3+ A	xles):	15		
Ve	hicle Speed:	45 mph		V	ehicle I	Nix					
Near/Far La	ne Distance:	80 feet		-	Vehi	cleType	1	Day	Evening	Night	Daily
Site Data						Au	tos:	7.5%	12.9%	9.6%	94.98%
Ba	rrier Height:	0.0 feet			Me	dium Tru	cks: 8	34.8%	4.9%	10.3%	2.42%
Barrier Type (0-V	/all. 1-Berm):	0.0			F	leavy Tru	cks: 8	36.5%	2.7%	10.8%	2.60%
Centerline Di	st. to Barrier:	60.0 feet						11-1			
Centerline Dist.	to Observer:	60.0 feet		N	oise So	ource Ele	ations		eet)		
Barrier Distance	to Observer:	0.0 feet				Autos:	0.0	00			
Observer Height	(Above Pad):	5.0 feet			Mediur	n Trucks:	2.2	97	Grado Adi	iustmont	0.0
P	ad Elevation:	0.0 feet			Heav	y Trucks:	8.0	04	Graue Auj	usuneni	0.0
Ro	ad Elevation:	0.0 feet		L	ane Equ	uivalent E	Distanc	e (in i	feet)		
	Road Grade:	0.0%				Autos:	45.0	00			
	Left View:	-90.0 degrees	8		Mediur	n Trucks:	44.8	03			
	Right View:	90.0 degrees	6		Heav	y Trucks:	44.8	22			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distan	ice	Finite	Road	Fresn	el 🛛	Barrier Atte	en Ber	m Atten
Autos:	68.46	2.06		0.58		-1.20		4.69	0.0	000	0.000
Medium Trucks:	79.45	-13.88		0.61		-1.20		4.88	0.0	000	0.000
Heavy Trucks:	84.25	-13.57		0.61		-1.20		5.34	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and b	arrier a	ttenu	ation)						
Unmitigated Nois VehicleType	e Levels (with Leq Peak Hou	out Topo and b Ir Leq Day	arrier a	ettenu eq Eve	ation) ening	Leq N	ght		Ldn	CI	VEL
Unmitigated Nois VehicleType Autos:	e Levels (with Leq Peak Hou 69	out Topo and b Ir Leq Day .9 6	arrier a Le 8.0	eq Eve	ening 66.2	Leq N	ght 60.2		Ldn 68.8	Cl	VEL 69.4
Unmitigated Nois VehicleType Autos: Medium Trucks:	e Levels (with Leq Peak Hou 69 65	out Topo and b Ir Leq Day .9 6 .0 6	arrier a Le 8.0 3.5	ettenu eq Eve	ening 66.2 57.1	Leq N	ght 60.2 55.6		Ldn 68.8 64.0	CI 3	VEL 69.4 64.3
Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks:	e Levels (with Leq Peak Hou 69 65 70	out Topo and b r Leq Day .9 6 .0 6 .1 6	<i>arrier a</i> <i>Le</i> 8.0 3.5 8.7	ettenu eq Eve	ening 66.2 57.1 59.6	Leq N	ght 60.2 55.6 60.9		Ldn 68.8 64.0 69.2	CI 3 2	VEL 69.4 64.3 69.4
Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	e Levels (with Leq Peak Hou 69 65 70 73	out Topo and b Ir Leq Day .9 6 .0 6 .1 6 .6 7	arrier a Le 8.0 3.5 8.7 2.0	attenu eq Eve	ening 66.2 57.1 59.6 67.5	Leq N	ght 60.2 55.6 60.9 64.2		Ldn 68.8 64.0 69.2 72.7	CI	VEL 69.4 64.3 69.4 73.0
Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distan	e Levels (with Leq Peak Hou 69 65 70 73 ce to Noise Co	Out Topo and b Ir Leq Day .9 6 .0 6 .1 6 .6 7 Ontour (in feet)	arrier a Le 8.0 3.5 8.7 2.0	attenu eq Eve	ening 66.2 57.1 59.6 67.5	Leg N	ght 60.2 55.6 60.9 64.2		Ldn 68.8 64.0 69.2 72.7		VEL 69.4 64.3 69.4 73.0
Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distan	e Levels (with Leq Peak Hou 69 65 70 73 ce to Noise Co	Out Topo and b Ir Leq Day .9 6 .0 6 .1 6 .6 7 Dontour (in feet)	<i>arrier a</i> <i>Le</i> 8.0 3.5 8.7 2.0	eq Eve 70 dl	ening 66.2 57.1 59.6 67.5 BA	Leq Ni 65 dE	ight 60.2 55.6 60.9 64.2	é	Ldn 68.8 64.0 69.2 72.7 60 dBA	C/ 3 2 55	VEL 69.4 64.3 69.4 73.0 dBA
Unmitigated Nois VehicleType Autos: Medium Trucks: Heavy Trucks Vehicle Noise: Centerline Distan	e Levels (with Leq Peak Hou 69 65 70 73 ce to Noise Co	out Topo and b r Leq Day .9 6 .0 6 .1 6 .6 7 ontour (in feet)	arrier a Le 8.0 3.5 8.7 2.0 dn:	rttenu eq Eve 70 dl 90	ation) ening 66.2 57.1 59.6 67.5 BA	Leq N 65 dE	ght 60.2 55.6 60.9 64.2 3A	é	Ldn 68.8 64.0 69.2 72.7 50 dBA 420	CI 3 2 55 9	VEL 69.4 64.3 69.4 73.0 dBA 05

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	FH\	VA-RD-77-108	HIGH	WAY N	OISE PF	REDICTI	ON MO	DEL				
Scenari Road Nam Road Segmei	io: HY With Pr ie: Jurupa Av. nt: e/o Beech	roject Av.				Project Job Ni	Name: umber:	Goodr 12384	nan III			
SITE	SPECIFIC IN	IPUT DATA				N	OISE	MODE	L INPU	ГS		
Highway Data				5	Site Con	ditions	(Hard =	= 10, Se	oft = 15)			
Average Daily	Traffic (Adt):	25,486 vehicle	es					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tru	icks (2	Axles):	15			
Peak H	lour Volume:	2,549 vehicles	5		He	avy Truc	ks (3+	Axles):	15			
Ve	hicle Speed:	45 mph		1	/ohiclo	Mix						
Near/Far La	ne Distance:	80 feet		H	Veh	cleTvpe	1	Dav	Evening	Nie	aht	Daily
Site Data				-	10/1	A	utos:	77.5%	5 12.9%		9.6%	94.94%
Bai	rrior Hoight:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10).3%	2.43%
Barrier Type (0-W	all. 1-Berm):	0.0			ŀ	leavy Tr	ucks:	86.5%	5 2.7%	10).8%	2.63%
Centerline Dis	st. to Barrier:	60.0 feet			loiso Se	urco El	ovatio	ne (in f	(act)			
Centerline Dist.	to Observer:	60.0 feet		-	10/36 30			000	eei)			
Barrier Distance	to Observer:	0.0 feet			Modiuu	n Trucks	. 0	207				
Observer Height (Above Pad):	5.0 feet			Heav	v Trucks	. 2	004	Grade A	diustr	nent [.]	0.0
Pa	ad Elevation:	0.0 feet			near	y mucho	. U	.004	0/000/1	ajaoa	nom.	0.0
Roa	ad Elevation:	0.0 feet		L	.ane Eq	uivalent	Distar	nce (in	feet)			
1	Road Grade:	0.0%				Autos	: 45	.000				
	Left View:	-90.0 degree	es		Mediur	n Trucks	: 44	.803				
	Right View:	90.0 degree	es		Heav	y Trucks	: 44	.822				
FHWA Noise Mode	el Calculation	s										
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fres	nel	Barrier A	tten	Berr	m Atten
Autos:	68.46	2.00		0.58	3	-1.20		-4.69	0	.000		0.000
Medium Trucks:	79.45	-13.92		0.61		-1.20		-4.88	0	.000		0.000
Heavy Trucks:	84.25	-13.58		0.61		-1.20		-5.34	0	.000		0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	r atten	uation)							
VehicleType	Leq Peak Hou	ır Leq Day	'	Leq Ev	rening	Leq I	Vight		Ldn		CI	JEL
Autos:	69	.8	67.9		66.2		60.	1	68	.7		69.4
Medium Trucks:	64	.9	63.4		57.1		55.	5	64	.0		64.2
Heavy Trucks:	70	.1	68.7		59.6		60.	9	69	.2		69.4
Vehicle Noise:	73	.6	72.0		67.5		64.	2	72	.6		73.0
Centerline Distant	ce to Noise Ce	ontour (in feet)									
				70 d	IBA	65 0	/BA	(60 dBA		55	dBA
			Ldn:	90)	19	94		418		9	00
		CI	VEL:	95	5	20)4		440		9	49

	FH\	WA-RD-77-108	HIGHW	AY N		EDICT					
Scenar Road Nam	io: HY With Pr ie: Jurupa Av.	roject				Project Job N	Name: lumber:	Goodr 12384	nan III		
Road Segme	nt: e/o Poplar	Av.									
SITE	SPECIFIC IN	IPUT DATA				ľ	IOISE	MODE	L INPUT	s	
Highway Data				S	ite Con	ditions	(Hard	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	27,553 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,755 vehicles	6		Hea	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	45 mph		v	ehicle I	Nix					
Near/Far La	ne Distance:	80 feet		-	Vehi	cleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	5 12.9%	9.6%	94.95%
Ba	rrier Height:	0.0 feet			Me	dium T	rucks:	84.8%	4.9%	10.3%	2.42%
Barrier Type (0-W	/all. 1-Berm):	0.0			H	leavy T	rucks:	86.5%	2.7%	10.8%	2.62%
Centerline Dis	st. to Barrier:	60.0 feet			laisa Sa	urco E	lovatio	ne (in f	oot)		
Centerline Dist.	to Observer:	60.0 feet		-	0136 30	Auto	evauo.	000	eel)		
Barrier Distance	to Observer:	0.0 feet			Mediun	n Truck	o. u e 2	207			
Observer Height (Above Pad):	5.0 feet			Heav	v Truck	s. 2 s [.] 8	004	Grade Ad	iustmen	0.0
Pa	ad Elevation:	0.0 feet									
Roa	ad Elevation:	0.0 feet		L	ane Equ	iivalen	t Distai	nce (in	feet)		
	Road Grade:	0.0%				Auto	s: 45	.000			
	Left View:	-90.0 degree	es		Mediun	n Iruck	s: 44	.803			
	Right View:	90.0 degree	es		Heav	y Truck	s: 44	.822			
FHWA Noise Mod	el Calculation	IS									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten
Autos:	68.46	2.34		0.58		-1.20		-4.69	0.0	000	0.000
Medium Trucks:	79.45	-13.59		0.61		-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	84.25	-13.25		0.61		-1.20		-5.34	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	attenu	uation)						
VehicleType	Leq Peak Hou	ur Leq Day	' Li	eq Ev	ening	Leq	Night		Ldn	С	NEL
Autos:	70	0.2	68.3		66.5		60	.5	69.1	1	69.7
Medium Trucks:	65	5.3	63.8		57.4		55	.9	64.3	3	64.6
Heavy Trucks:	70).4	69.0		60.0		61	.2	69.6	6	69.7
Vehicle Noise:	73	3.9	72.3		67.8		64	.5	73.0	D	73.3
Centerline Distant	ce to Noise C	ontour (in feet)								
				70 d	BA	65	dBA	(60 dBA	55	i dBA
			Ldn:	95		2	04		440	ę	947
		CI	VEL:	10	C	2	15		463	9	998

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	FH	WA-RD-77-10	B HIGHV	VAY NC	DISE P	REDICT	ION MO	DEL			
Scena Road Nar Road Segme	rio: HY With P ne: Jurupa Av ent: e/o Citrus	roject Av.				Project Job N	Name: umber:	Goodi 12384	man III		
SITE	SPECIFIC II	NPUT DATA			NOISE MODEL INPUTS						
Highway Data				Si	Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	23,261 vehic	les					Autos.	15		
Peak Hou	r Percentage:	10%			Me	edium Tri	ucks (2 A	Axles).	: 15		
Peak	Hour Volume:	2,326 vehicle	es		He	eavy True	cks (3+ A	Axles).	15		
V	ehicle Speed:	45 mph		Ve	ehicle	Mix					
Near/Far La	ane Distance:	80 feet		-	Veh	icleType		Day	Evening	Nigh	t Daily
Site Data							Autos:	77.5%	6 12.9%	9.6	% 93.98%
Ba	arrier Heiaht:	0.0 feet			М	edium Ti	rucks:	84.8%	6 4.9%	10.3	% 2.60%
Barrier Type (0-V	Vall, 1-Berm):	0.0				Heavy Ti	rucks:	86.5%	6 2.7%	10.8	3.42%
Centerline D	ist. to Barrier:	60.0 feet		N	oise S	ource F	levation	s (in f	eet)		
Centerline Dist	to Observer:	60.0 feet				Auto	s: 0.0	200			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s: 2.3	297			
Observer Height	(Above Pad):	5.0 feet			Hea	v Truck	s: 8.0	004	Grade Adj	iustme	ent: 0.0
F	Pad Elevation:	0.0 feet		_					,		
Ro	ad Elevation:	0.0 feet		Lá	ane Eq	uivalen	t Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 45.	000			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 44.	803			
	Right View:	90.0 degre	es		Hear	vy Truck	s: 44.	822			
FHWA Noise Mod	lel Calculation	15									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresr	iel	Barrier Atte	en E	Berm Atten
Autos	68.46	i 1.56		0.58		-1.20		-4.69	0.0	00	0.000
Medium Trucks	79.45	-14.01		0.61		-1.20		-4.88	0.0	00	0.000
Heavy Trucks	84.25	-12.84		0.61		-1.20		-5.34	0.0	00	0.000
Unmitigated Nois	se Levels (with	nout Topo and	l barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	y I	Leq Eve	ening	Leq	Night		Ldn		CNEL
Autos	69	9.4	67.5		65.7		59.7	,	68.3	5	68.9
Medium Trucks	: 64	4.8	63.3		57.0		55.4	ŀ	63.9)	64.1
Heavy Trucks	70	0.8	69.4		60.4		61.6	i	70.0)	70.1
Vehicle Noise	: 73	3.8	72.2		67.3		64.4		72.8	3	73.1
Centerline Distar	nce to Noise C	ontour (in fee	t)								
				70 dE	BA	65	dBA		60 dBA		55 dBA
			Ldn:	93		1	99		430		925
		C	NEL:	97		2	09		451		971

	FHW	/A-RD-77-108	HIGHWA	VY NOIS	SE PREDICTIC	N MODEI			
Scenari	o: HY With Pro	oject			Project N	ame: Goo	dman III		
Road Nam	e: Jurupa Av.				Job Nu	nber: 123	84		
Road Segmen	nt: e/o Oleande	er Av.							
SITE	SPECIFIC IN	PUT DATA			NC	ISE MO	DEL INPUT	s	
Highway Data				Site	Conditions (F	lard = 10,	Soft = 15)		
Average Daily	Traffic (Adt):	23,673 vehicle	s			Auto	os: 15		
Peak Hour	Percentage:	10%			Medium Truc	ks (2 Axle	s): 15		
Peak H	our Volume:	2,367 vehicles			Heavy Truck	s (3+ Axle	s): 15		
Vel	hicle Speed:	45 mph		Veh	icle Mix				
Near/Far Lane Distance: 80 feet					VehicleType	Day	/ Evening	Night	Daily
Site Data					AL	tos: 77.	5% 12.9%	9.6%	94.01%
Bar	rier Height:	0.0 feet			Medium Tru	cks: 84.	8% 4.9%	10.3%	2.60%
Barrier Type (0-W	all, 1-Berm):	0.0			Heavy Tru	cks: 86.	5% 2.7%	10.8%	3.39%
Centerline Dis	t. to Barrier:	60.0 feet		Noi	se Source Ele	ations (ii	1 foot)		
Centerline Dist. I	to Observer:	60.0 feet		1101	Autor:	0.000	riccij		
Barrier Distance t	to Observer:	0.0 feet			Autos. Iodium Trucks:	2 207			
Observer Height (J	Above Pad):	5.0 feet		N.	Hoovy Trucks:	2.257	Grade Ad	iustment	0.0
Pa	d Elevation:	0.0 feet			neavy nacks.	0.004		,	0.0
Roa	d Elevation:	0.0 feet		Lan	e Equivalent I)istance (in feet)		
F	Road Grade:	0.0%			Autos:	45.000			
	Left View:	-90.0 degree	S	N	ledium Trucks:	44.803			
	Right View:	90.0 degree	s		Heavy Trucks:	44.822			
FHWA Noise Mode	el Calculations	;							
VehicleType	REMEL	Traffic Flow	Distan	ce A	inite Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	68.46	1.64		0.58	-1.20	-4.6	69 0.0	000	0.000
Medium Trucks:	79.45	-13.95		0.61	-1.20	-4.8	8 0.0	000	0.000
Heavy Trucks:	84.25	-12.79		0.61	-1.20	-5.3	34 0.0	000	0.000
Unmitigated Noise	e Levels (witho	out Topo and I	barrier a	ttenuat	ion)				
VehicleType	Leq Peak Hou	r Leq Day	Le	q Even	ing Leq N	ght	Ldn	CI	VEL
Autos:	69.	56	67.6		65.8	59.8	68.4	4	69.
		-			FZO	55.5	64.0)	64.:
Medium Trucks:	64.	96	3.4		57.0	00.0			
Medium Trucks: Heavy Trucks:	64. 70.	9 6 9 6	i3.4 i9.5		60.4	61.7	70.0)	70.1
Medium Trucks: Heavy Trucks: Vehicle Noise:	64. 70. 73.	9 6 9 6 8 7	3.4 9.5 72.2		60.4 67.3	61.7 64.4	70.0) 9	70. 73.
Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distanc	64. 70. 73. e to Noise Co	9 6 9 6 8 7 ntour (in feet)	i3.4 i9.5 '2.2	70 -10 *	60.4 67.3	61.7 64.4	70.0)	70.
Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distanc	64. 70. 73. re to Noise Co	9 6 9 6 8 7 ntour (in feet)	3.4 39.5 72.2	70 dBA	60.4 67.3 65 dl	64.4 84	70.0 72.9 60 dBA	55	70. 73. dBA
Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distanc	64. 70. 73. ee to Noise Co	9 6 9 6 8 7 ntour (in feet)	.dn:	70 dBA 93	60.4 67.3 65 dl	61.7 64.4 BA	70.0 72.3 60 dBA 434) 9 55 9	70.1 73.2 dBA 34

Wednesday, June 05, 2019

	EUV	MA_PD_77_109 I		V NI		PEDICT		ושמ				
	FRV	WA-KD-77-108 P	IGHWA	TIN		CEDIC I		JDEL				
Scenari	o: HY With Pr	oject				Project	Name:	Goodn	nan III			
Road Nam	e: Jurupa Av.	- Au				JOD N	umber:	12384				
Road Segmen	n. e/o cypres:	S AV.										
SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS								
Highway Data				s	Site Con	ditions	(Hard =	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	25,463 vehicles	5					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tri	ucks (2	Axles):	15			
Peak H	our Volume:	2,546 vehicles			He	avy Tru	cks (3+	Axles):	15			
Ve	hicle Speed:	45 mph		v	/ehicle	Mix						-
Near/Far La	ne Distance:	80 feet		F	Veh	icleTvpe		Dav	Evenine	a Ni	aht	Dailv
Site Data							Autos:	77.5%	12.99	6 9	9.6%	95.54%
Pa	rior Hoight:	0.0 foot			M	edium Ti	rucks:	84.8%	4.9%	6 10	0.3%	2.32%
Barrier Type (0-W	all 1-Berm)	0.0 1001			ŀ	Heavy Ti	rucks:	86.5%	2.79	6 10	0.8%	2.14%
Centerline Dis	t to Barrier	60.0 feet										
Centerline Dist.	to Observer:	60.0 feet		Λ	loise So	ource El	levatio	ns (in fe	eet)			
Barrier Distance	to Observer:	0.0 feet				Auto	s: 0	.000				
Observer Height (Above Pad):	5.0 feet			Mediu	m Truck	s: 2	.297	O			
Pa	d Elevation:	0.0 feet			Heav	y Truck	s: 8	.004	Grade A	Adjusti	ment:	0.0
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distar	nce (in i	feet)			
I	Road Grade:	0.0%				Auto	s: 45	.000				
	Left View:	-90.0 degrees	5		Mediu	m Truck	s: 44	.803				
	Right View:	90.0 degrees	5		Heav	y Truck	s: 44	.822				
FHWA Noise Mode	el Calculation	s		_								
VehicleType	REMEL	Traffic Flow	Distanc	е	Finite	Road	Fres	nel	Barrier A	Atten	Ber	m Atten
Autos:	68.46	2.02		0.58		-1.20		-4.69	(0.000		0.000
Medium Trucks:	79.45	-14.13		0.61		-1.20		-4.88	(0.000		0.00
Heavy Trucks:	84.25	-14.48		0.61		-1.20		-5.34	(0.000		0.00
Unmitigated Noise	e Levels (with	out Topo and b	arrier at	tenı	uation)							-
VehicleType	Leq Peak Hou	Ir Leq Day	Lee	q Ev	rening	Leq	Night		Ldn		CI	VEL
Autos:	69	.9 6	8.0		66.2		60.	1	68	3.8		69.4
Medium Trucks:	64	.7 6	3.2		56.9		55.	3	63	3.8		64.0
Heavy Trucks:	69	.2 6	7.8		58.7		60.	0	68	3.3		68.
Vehicle Noise:	73	.2 7	1.6		67.3		63.	7	7:	2.2		72.
Centerline Distant	e to Noise Co	ontour (in feet)										-
				70 d	BA	65	dBA	6	60 dBA		55	dBA
		L	dn:	85	5	1	82		392		8	46
		CN	EL:	89)	1	93		415		8	94

	FH	WA-RD-77-108	HIGHW		JISE PF	EDICIIC	JN MC	DEL			
Scenar	io: HY With P	roject				Project I	Vame:	Goodr	nan III		
Road Nan	ne: Jurupa Av.					Job Nu	mber:	12384			
Road Segme	nt: e/o Juniper	r Av.									
SITE	SPECIFIC IN	IPUT DATA			NOISE MODEL INPUTS						
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	24,136 vehicl	es					Autos:	15		
Peak Hour	Percentage:	10%			Mee	dium Tru	cks (2	Axles):	15		
Peak H	lour Volume:	2,414 vehicle	s		Hea	avy Truck	ks (3+	Axles):	15		
Ve	hicle Speed:	45 mph		V	ehicle I	Mix					
Near/Far La	ne Distance:	80 feet			Vehi	cleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	94.49%
Ba	rrier Height	0.0 feet			Me	dium Tru	icks:	84.8%	4.9%	10.3%	2.53%
Barrier Type (0-W	/all, 1-Berm):	0.0			ŀ	leavy Tru	icks:	86.5%	2.7%	10.8%	2.98%
Centerline Di	st. to Barrier:	60.0 feet		N	nise Sr	urco Ele	vation	ne (in fi	aat)		
Centerline Dist.	to Observer:	60.0 feet			0130 00	Autos	· 0	000	5017		
Barrier Distance	to Observer:	0.0 feet			Mediur	n Trucks	. 2	297			
Observer Height	(Above Pad):	5.0 feet			Heav	v Trucks	. 8	004	Grade Ac	liustment	t: 0.0
P	ad Elevation:	0.0 feet								,	
Ro	ad Elevation:	0.0 feet		Li	ane Equ	uivalent	Distar	ce (in	feet)		
	Road Grade:	0.0%				Autos.	: 45	.000			
	Left View:	-90.0 degre	es		Mediur	n Trucks.	: 44	.803			
	Right View:	90.0 degre	es		neavy ITUCKS: 44.822						
FHWA Noise Mod	el Calculation	IS								-	-
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	nel	Barrier At	ten Bei	rm Atten
Autos:	68.46	1.74		0.58		-1.20		-4.69	0.	000	0.000
Medium Trucks:	79.45	-13.99		0.61		-1.20		-4.88	0.	000	0.000
Heavy Trucks:	84.25	-13.27		0.61		-1.20		-5.34	0.	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Day	′ L	eq Eve	ening	Leq N	light		Ldn	C	NEL
Autos:	69	0.6	67.7		65.9		59.	9	68.	5	69.1
Medium Trucks:	64	1.9	63.4		57.0		55.	5	63.	9	64.2
Heavy Trucks:	70).4	69.0		59.9		61.	2	69.	5	69.7
Vehicle Noise:	73	3.6	72.0		67.3		64.	2	72.	7	73.0
Centerline Distan	ce to Noise C	ontour (in feet)								
				70 dE	BA	65 d	BA	6	60 dBA	55	dBA
			Ldn:	91		19	5		420	9	3 05
		C	NEL:	95		20	5		442	ç	152

Wednesday, June 05, 2019

Scenario: HY With Project Project Name: Goodman III Road Name: Armstrong Rd. Job Number: 12384 Road Segment: wlo Sierra Av. Image: Sierra Av. Image: Sierra Av.	
SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS	
Highway Data Site Conditions (Hard = 10, Soft = 15)	
Average Daily Traffic (Adt): 30,649 vehicles Autos: 15	
Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15	
Peak Hour Volume: 3,065 vehicles Heavy Trucks (3+ Axles): 15	
Vehicle Speed: 45 mph Vehicle Mix	
Near/Far Lane Distance: 48 feet	aily
Site Data Autos: 77.5% 12.9% 9.6% 95	24%
Parrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% 2	.38%
Barrier Type (0-Wall 1-Berm): 0.0 Heavy Trucks: 86.5% 2.7% 10.8% 2	.38%
Centerline Dist. to Barrier: 59 0 feet	
Centerline Dist. to Observer: 59.0 feet	
Barrier Distance to Observer: 0.0 feet	
Observer Height (Above Pad): 5.0 feet Medium Trucks: 2.297	、 、
Pad Elevation: 0.0 feet Heavy Trucks: 8.004 Grade Adjustment. 0.0	,
Road Elevation: 0.0 feet Lane Equivalent Distance (in feet)	
Road Grade: 0.0% Autos: 54.129	
Left View: -90.0 degrees Medium Trucks: 53.966	
Right View: 90.0 degrees Heavy Trucks: 53.982	
FHWA Noise Model Calculations	
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm A	tten
Autos: 68.46 2.81 -0.62 -1.20 -4.69 0.000 0	0.000
Medium Trucks: 79.45 -13.20 -0.60 -1.20 -4.88 0.000 (0.000
Heavy Trucks: 84.25 -13.21 -0.60 -1.20 -5.35 0.000 (0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)	
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL	
Autos: 69.5 67.6 65.8 59.7 68.4	69.0
Medium Trucks: 64.4 62.9 56.6 55.0 63.5	63.7
Heavy Trucks: 69.2 67.8 58.8 60.0 68.4	68.5
Vehicle Noise: 73.0 71.4 67.0 63.6 72.0	72.4
Centerline Distance to Noise Contour (in feet)	
70 dBA 65 dBA 60 dBA 55 dBA	1
Ldn: 81 174 374 807	
CNEL: 85 183 395 852	

	FHV	VA-RD-77-108	HIGHWA	Y NC	ISE PR	EDICTIC	N MOE	DEL _			
Scenari	io: HY With Pr	oject				Project N	ame: C	Goodm	an III		
Road Nam	e: Armstrong	Rd.				Job Nu	nber: 1	2384			
Road Segmer	nt: w/o 34th St										
SITE	SPECIFIC IN	PUT DATA				NC	ISE M	ODE		S	
Highway Data				Si	te Con	ditions (F	lard = '	10, So	oft = 15)		
Average Daily	Traffic (Adt):	44,080 vehicle	s				A	utos:	15		
Peak Hour	Percentage:	10%			Med	lium Truc	ks (2 A	xles):	15		
Peak H	lour Volume:	4,408 vehicles	6		Hea	avy Truck	s (3+ A	xles):	15		
Ve	hicle Speed:	45 mph		Ve	ehicle N	lix					
Near/Far La	ne Distance:	48 feet		-	Vehi	cleType	1	Day	Evening	Night	Daily
Site Data						AL	tos: 7	77.5%	12.9%	9.6%	95.32%
Bai	rrier Height:	0.0 feet			Me	dium Tru	cks: 8	34.8%	4.9%	10.3%	2.37%
Barrier Type (0-W	/all. 1-Berm):	0.0			н	leavy Tru	cks: 8	36.5%	2.7%	10.8%	2.31%
Centerline Dis	st. to Barrier:	59.0 feet		AL.	alaa Sa	uree Ele	untio no	lin fa	a4)		
Centerline Dist.	to Observer:	59.0 feet		140	0158 20	Auto-	vau001S		el)		
Barrier Distance	to Observer:	0.0 feet				Autos:	0.0	00			
Observer Height (Above Pad):	5.0 feet			Meaiun	1 Trucks:	2.2	97	Grada Ad	iustmont	0.0
Pa	ad Elevation:	0.0 feet			neav	/ HUCKS.	0.0	04	Grade Haj	usunom.	0.0
Roa	ad Elevation:	0.0 feet		Lá	ane Equ	ivalent I	Distanc	e (in f	eet)		
1	Road Grade:	0.0%				Autos:	54.1	29			
	Left View:	-90.0 degree	s		Mediun	n Trucks:	53.9	66			
	Right View:	90.0 degree	S		Heavy	/ Trucks:	53.9	82			
FHWA Noise Mode	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite I	Road	Fresne	el i	Barrier Att	en Ber	m Atten
Autos:	68.46	4.40	-	0.62		-1.20	-	4.69	0.0	000	0.000
Medium Trucks:	79.45	-11.65	-	0.60		-1.20	-	4.88	0.0	000	0.000
Heavy Trucks:	84.25	-11.76	-	0.60		-1.20	-	5.35	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	ttenu	ation)						
Unmitigated Noise VehicleType	e Levels (with Leq Peak Hou	o ut Topo and r Leq Day	barrier a	ttenu q Eve	ation) ening	Leq N	ight		Ldn	CI	VEL
Unmitigated Noise VehicleType Autos:	e Levels (with Leq Peak Hou 71	out Topo and r Leq Day 0	barrier a Le 69.1	t tenu q Eve	ation) ening 67.4	Leq N	ight 61.3		Ldn 69.9	CI	VEL 70.5
Unmitigated Noise VehicleType Autos: Medium Trucks:	e Levels (with Leq Peak Hou 71 66	out Topo and r Leq Day 0	barrier a Le 59.1 54.5	ttenu q Eve	ation) ening 67.4 58.1	Leq N	<i>ight</i> 61.3 56.6		Ldn 69.9 65.0	CI	VEL 70.5 65.3
Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	e Levels (with Leg Peak Hou 71 66 70	Dut Topo and r Leq Day .0 .0 .0 .0 .7 .0	barrier a Le 59.1 54.5 59.3	t tenu q Eve	ation) ening 67.4 58.1 60.2	Leq N	ight 61.3 56.6 61.5		Ldn 69.9 65.0 69.8	CI))	VEL 70.5 65.3 70.0
Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	e Levels (with Leq Peak Hou 71 66 70 74	Dut Topo and r Leq Day 0 0 7 0 5 7	barrier a Le 59.1 54.5 59.3 72.9	q Eve	ation) ening 67.4 58.1 60.2 68.6	Leq N	ight 61.3 56.6 61.5 65.1		Ldn 69.9 65.0 69.8 73.6	CI 9 9 9	VEL 70.9 65.3 70.0 73.9
Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	e Levels (with Leq Peak Hou 71 66 70 74 ce to Noise Co	out Topo and r Leq Day 0 0 7 5 5 ontour (in feet	barrier a Le 59.1 54.5 59.3 72.9	q Eve	ation) ening 67.4 58.1 60.2 68.6	Leq N	ight 61.3 56.6 61.5 65.1		Ldn 69.9 65.0 69.8 73.6	<i>CI</i>	VEL 70.5 65.3 70.0 73.9
Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distanc	e Levels (with Leg Peak Hou 71 66 70 74 ce to Noise Co	tout Topo and r Leq Day 0 0 7 5 5 5 5 5 5 5 5 5 5 5 5 5	barrier a Le 39.1 64.5 59.3 72.9	q Eve q Eve 70 dE	ation) ening 67.4 58.1 60.2 68.6	Leq N 65 dl	ight 61.3 56.6 61.5 65.1	6	Ldn 69.8 65.0 69.8 73.6 0 dBA	CI	VEL 70.5 65.3 70.0 73.9 dBA
Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	e Levels (with Leq Peak Hou 71 66 70 74 ce to Noise Co	r Leq Day C Leq Day C Leq Day C C C C C C C C C C C C C C C C C C C	barrier a Le 59.1 54.5 59.3 72.9 Ldn:	q Eve q Eve 70 dE 102	ation) ening 67.4 58.1 60.2 68.6 34	Leq N 65 dl	ight 61.3 56.6 61.5 65.1 3A	6	Ldn 69.8 65.0 69.8 73.6 0 dBA 473	CI 0 3 5 55 1,0	VEL 70.5 65.3 70.0 73.9 dBA 019

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APPENDIX 9.1:

OPERATIONAL NOISE LEVEL CALCULATIONS

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Observer Location: R1

Source: Truck Idle/Reefer Activity Condition: Operational - Interim

Project Name:	Goodman III
Job Number:	12384

Analyst: A. Wolfe

NOISE MODEL INPUTS									
Noise Distance to Observer	546.0 feet	Barrier Height:	45.0 feet						
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	8.0 feet						
Barrier Distance to Observer:	536.0 feet	Observer Height:	5.0 feet						
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0						
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0						
Barrier Elevation:	0.0 feet 20 = 6 dBA per doublin 15 = 4.5 dBA per doub		of distance g of distance						

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	546.0	-25.2	-25.2	-25.2	-25.2	-25.2	-25.2		
Shielding (Barrier Attenuation)	10.0	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8		
Raw (Distance + Barrier)		26.1	-44.0	-44.0	-44.0	-44.0	-44.0		
60 Minute Hourly Adjustmen	nt	26.1	-44.0	-44.0	-44.0	-44.0	-44.0		

S	STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2019									
Observer Location: R1 Source: Roof-Top Condition: Operation	Air Conditioning Unit al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe								
	NOISE MODEL INPUTS									
Noise Distance to Observer	189.0 feet	Barrier Height:	45.0 feet							
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet							
Barrier Distance to Observer:	179.0 feet	Observer Height:	5.0 feet							
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0							
Noise Source Elevation:	45.0 feet	Drop Off Coefficient:	20.0							
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doublin	of distance g of distance							

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	189.0	-31.5	-31.5	-31.5	-31.5	-31.5	-31.5		
Shielding (Barrier Attenuation)	10.0	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5		
Raw (Distance + Barrier)		38.2	-39.0	-39.0	-39.0	-39.0	-39.0		
39 Minute Hourly Adjustmer	nt	36.3	-40.9	-40.9	-40.9	-40.9	-40.9		

Observer Location: R1

Source: Parking Lot Vehicle Movements Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS									
Noise Distance to Observer	96.0 feet	Barrier Height:	0.0 feet						
Noise Distance to Barrier:	96.0 feet	Noise Source Height:	5.0 feet						
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet						
Observer Elevation: 0.0 f	0.0 feet	Barrier Type (0-Wall, 1-Berm): Drop Off Coefficient:	0 20.0						
Noise Source Elevation: Barrier Elevation:	0.0 feet 0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	f distance of distance						

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	96.0	-19.6	-19.6	-19.6	-19.6	-19.6	-19.6		
Shielding (Barrier Attenuation)	96.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		32.6	-19.6	-19.6	-19.6	-19.6	-19.6		
60 Minute Hourly Adjustmer	nt	32.6	-19.6	-19.6	-19.6	-19.6	-19.6		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/201							
Observer Location: R2 Source: Truck Idle/Reefer Activity Condition: Operational - Interim		Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
	NO	ISE MODEL INPUTS					
Noise Distance to Observer	518.0 feet	Barrier Height:	45.0 feet				
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	8.0 feet				
Barrier Distance to Observer:	508.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	518.0	-24.7	-24.7	-24.7	-24.7	-24.7	-24.7		
Shielding (Barrier Attenuation)	10.0	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8		
Raw (Distance + Barrier)		26.6	-43.5	-43.5	-43.5	-43.5	-43.5		
60 Minute Hourly Adjustmer	nt	26.6	-43.5	-43.5	-43.5	-43.5	-43.5		

Observer Location: R2

Source: Roof-Top Air Conditioning Unit *Condition:* Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS									
Noise Distance to Observer	195.0 feet	Barrier Height:	45.0 feet						
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet						
Barrier Distance to Observer:	185.0 feet	Observer Height:	5.0 feet						
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0						
Noise Source Elevation:	45.0 feet	Drop Off Coefficient:	20.0						
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance						

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	195.0	-31.8	-31.8	-31.8	-31.8	-31.8	-31.8		
Shielding (Barrier Attenuation)	10.0	-7.6	-7.6	-7.6	-7.6	-7.6	-7.6		
Raw (Distance + Barrier)		37.8	-39.4	-39.4	-39.4	-39.4	-39.4		
39 Minute Hourly Adjustmen	nt	35.9	-41.3	-41.3	-41.3	-41.3	-41.3		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2019							
Observer Location: R2 Source: Parking Lo Condition: Operation	ot Vehicle Movements al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
	NOISE MO	DEL INPUTS					
Noise Distance to Observer	126.0 feet	Barrier Height:	0.0 feet				
Noise Distance to Barrier:	126.0 feet	Noise Source Height:	5.0 feet				
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	126.0	-22.0	-22.0	-22.0	-22.0	-22.0	-22.0		
Shielding (Barrier Attenuation)	126.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		30.2	-22.0	-22.0	-22.0	-22.0	-22.0		
60 Minute Hourly Adjustmer	nt	30.2	-22.0	-22.0	-22.0	-22.0	-22.0		

Observer Location: R3

Source: Truck Idle/Reefer Activity Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS									
Noise Distance to Observer	264.0 feet	Barrier Height:	0.0 feet						
Noise Distance to Barrier:	264.0 feet	Noise Source Height:	8.0 feet						
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet						
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0						
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0						
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance g of distance						

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	264.0	-18.9	-18.9	-18.9	-18.9	-18.9	-18.9		
Shielding (Barrier Attenuation)	264.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		51.2	-18.9	-18.9	-18.9	-18.9	-18.9		
60 Minute Hourly Adjustmer	nt	51.2	-18.9	-18.9	-18.9	-18.9	-18.9		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/201						
Observer Location: R3 Source: Roof-Top Condition: Operation	Air Conditioning Unit al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe				
	NOISE M	ODEL INPUTS				
Noise Distance to Observer	220.0 feet	Barrier Height:	45.0 feet			
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet			
Barrier Distance to Observer:	210.0 feet	Observer Height:	5.0 feet			
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0			
Noise Source Elevation:	45.0 feet	Drop Off Coefficient:	20.0			
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doublin	of distance g of distance			

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	220.0	-32.9	-32.9	-32.9	-32.9	-32.9	-32.9		
Shielding (Barrier Attenuation)	10.0	-7.9	-7.9	-7.9	-7.9	-7.9	-7.9		
Raw (Distance + Barrier)		36.4	-40.8	-40.8	-40.8	-40.8	-40.8		
39 Minute Hourly Adjustmer	nt	34.5	-42.7	-42.7	-42.7	-42.7	-42.7		

Observer Location: R3

Source: Parking Lot Vehicle Movements Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS									
Noise Distance to Observer	132.0 feet	Barrier Height:	0.0 feet						
Noise Distance to Barrier:	132.0 feet	Noise Source Height:	5.0 feet						
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet						
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0						
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0						
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance							

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	132.0	-22.4	-22.4	-22.4	-22.4	-22.4	-22.4		
Shielding (Barrier Attenuation)	132.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		29.8	-22.4	-22.4	-22.4	-22.4	-22.4		
60 Minute Hourly Adjustmer	nt	29.8	-22.4	-22.4	-22.4	-22.4	-22.4		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2019							
Observer Location: R4		Project Name: Goodman III					
Source: Truck Idle	Reefer Activity	Job Number: 12384					
Condition: Operation	al - Interim	Analyst: A. Wolfe					
	NC	DISE MODEL INPUTS					
Noise Distance to Observer	583.0 feet	Barrier Height:	45.0 feet				
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	8.0 feet				
Barrier Distance to Observer:	573.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doublin	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	583.0	-25.8	-25.8	-25.8	-25.8	-25.8	-25.8		
Shielding (Barrier Attenuation)	10.0	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8		
Raw (Distance + Barrier)		25.5	-44.6	-44.6	-44.6	-44.6	-44.6		
60 Minute Hourly Adjustmer	nt	25.5	-44.6	-44.6	-44.6	-44.6	-44.6		

Observer Location: R4

Source: Roof-Top Air Conditioning Unit *Condition:* Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS									
Noise Distance to Observer	297.0 feet	Barrier Height:	45.0 feet						
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet						
Barrier Distance to Observer:	287.0 feet	Observer Height:	5.0 feet						
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0						
Noise Source Elevation:	45.0 feet	Drop Off Coefficient:	20.0						
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance						

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	297.0	-35.5	-35.5	-35.5	-35.5	-35.5	-35.5		
Shielding (Barrier Attenuation)	10.0	-8.7	-8.7	-8.7	-8.7	-8.7	-8.7		
Raw (Distance + Barrier)		33.0	-44.2	-44.2	-44.2	-44.2	-44.2		
39 Minute Hourly Adjustmer	nt	31.1	-46.1	-46.1	-46.1	-46.1	-46.1		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2019							
Observer Location: R4 Source: Parking Lot Vehicle Movements Condition: Operational - Interim		Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
	NOISE MO	DEL INPUTS					
Noise Distance to Observer	147.0 feet	Barrier Height:	0.0 feet				
Noise Distance to Barrier:	147.0 feet	Noise Source Height:	5.0 feet				
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	147.0	-23.3	-23.3	-23.3	-23.3	-23.3	-23.3		
Shielding (Barrier Attenuation)	147.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		28.9	-23.3	-23.3	-23.3	-23.3	-23.3		
60 Minute Hourly Adjustmer	nt	28.9	-23.3	-23.3	-23.3	-23.3	-23.3		

Observer Location: R5

Source: Truck Idle/Reefer Activity Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS									
Noise Distance to Observer	382.0 feet	Barrier Height:	45.0 feet						
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	8.0 feet						
Barrier Distance to Observer:	372.0 feet	Observer Height:	5.0 feet						
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0						
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0						
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance g of distance						

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	382.0	-22.1	-22.1	-22.1	-22.1	-22.1	-22.1		
Shielding (Barrier Attenuation)	10.0	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8		
Raw (Distance + Barrier)		29.2	-40.9	-40.9	-40.9	-40.9	-40.9		
60 Minute Hourly Adjustmen	nt	29.2	-40.9	-40.9	-40.9	-40.9	-40.9		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/20						
Observer Location: R5 Source: Roof-Top Condition: Operation	Air Conditioning Unit al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe				
NOISE MODEL INPUTS						
Noise Distance to Observer	296.0 feet	Barrier Height:	45.0 feet			
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet			
Barrier Distance to Observer:	286.0 feet	Observer Height:	5.0 feet			
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0			
Noise Source Elevation:	45.0 feet	Drop Off Coefficient:	20.0			
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance			

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	296.0	-35.4	-35.4	-35.4	-35.4	-35.4	-35.4		
Shielding (Barrier Attenuation)	10.0	-8.7	-8.7	-8.7	-8.7	-8.7	-8.7		
Raw (Distance + Barrier)		33.1	-44.1	-44.1	-44.1	-44.1	-44.1		
39 Minute Hourly Adjustmer	nt	31.2	-46.0	-46.0	-46.0	-46.0	-46.0		

Observer Location: R5

Source: Parking Lot Vehicle Movements Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS									
Noise Distance to Observer	351.0 feet	Barrier Height:	6.0 feet						
Noise Distance to Barrier:	341.0 feet	Noise Source Height:	5.0 feet						
Barrier Distance to Observer:	10.0 feet	Observer Height:	5.0 feet						
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0						
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0						
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance g of distance						

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	351.0	-30.9	-30.9	-30.9	-30.9	-30.9	-30.9		
Shielding (Barrier Attenuation)	341.0	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5		
Raw (Distance + Barrier)		15.8	-36.4	-36.4	-36.4	-36.4	-36.4		
60 Minute Hourly Adjustmer	nt	15.8	-36.4	-36.4	-36.4	-36.4	-36.4		

S	TATIONARY SOU	RCE NOISE PREDICTION MODEL	6/4/2019				
Observer Location: R6 Source: Truck Idle/Reefer Activity Condition: Operational - Interim		Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
NOISE MODEL INPUTS							
Noise Distance to Observer	106.0 feet	Barrier Height:	0.0 feet				
Noise Distance to Barrier:	106.0 feet	Noise Source Height:	8.0 feet				
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	f distance of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	106.0	-11.0	-11.0	-11.0	-11.0	-11.0	-11.0		
Shielding (Barrier Attenuation)	106.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		59.1	-11.0	-11.0	-11.0	-11.0	-11.0		
60 Minute Hourly Adjustmer	nt	59.1	-11.0	-11.0	-11.0	-11.0	-11.0		

Observer Location: R6

Source: Roof-Top Air Conditioning Unit *Condition:* Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS							
Noise Distance to Observer	598.0 feet	Barrier Height:	45.0 feet				
Noise Distance to Barrier:	400.0 feet	Noise Source Height:	5.0 feet				
Barrier Distance to Observer:	198.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	45.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	598.0	-41.6	-41.6	-41.6	-41.6	-41.6	-41.6		
Shielding (Barrier Attenuation)	400.0	-12.7	-12.7	-12.7	-12.7	-12.7	-12.7		
Raw (Distance + Barrier)		22.9	-54.3	-54.3	-54.3	-54.3	-54.3		
39 Minute Hourly Adjustmer	nt	21.0	-56.2	-56.2	-56.2	-56.2	-56.2		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2019							
Observer Location: R6 Source: Parking Lot Vehicle Movements Condition: Operational - Interim		Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
NOISE MODEL INPUTS							
Noise Distance to Observer	570.0 feet	Barrier Height:	0.0 feet				
Noise Distance to Barrier:	570.0 feet	Noise Source Height:	5.0 feet				
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	570.0	-35.1	-35.1	-35.1	-35.1	-35.1	-35.1		
Shielding (Barrier Attenuation)	570.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		17.1	-35.1	-35.1	-35.1	-35.1	-35.1		
60 Minute Hourly Adjustmer	nt	17.1	-35.1	-35.1	-35.1	-35.1	-35.1		

Observer Location: R7

Source: Truck Idle/Reefer Activity Condition: Operational - Interim

Project Name:	Goodman III
Job Number:	12384
Analyst:	A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	545.0 feet	Barrier Height:	0.0 feet					
Noise Distance to Barrier:	545.0 feet	Noise Source Height:	8.0 feet					
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	545.0	-25.2	-25.2	-25.2	-25.2	-25.2	-25.2		
Shielding (Barrier Attenuation)	545.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		44.9	-25.2	-25.2	-25.2	-25.2	-25.2		
60 Minute Hourly Adjustmer	nt	44.9	-25.2	-25.2	-25.2	-25.2	-25.2		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/201					
Observer Location: R7 Source: Roof-Top Air Conditioning Unit		Project Name: Goodman III Job Number: 12384			
Noise Distance to Observer Noise Distance to Barrier: Barrier Distance to Observer:	256.0 feet 10.0 feet 246.0 feet	<i>Barrier Height:</i> Noise Source Height: Observer Height:	45.0 feet 5.0 feet 5.0 feet		
<i>Observer Elevation: Noise Source Elevation: Barrier Elevation:</i>	0.0 feet 45.0 feet 0.0 feet	Barrier Type (0-Wall, 1-Berm): Drop Off Coefficient: 20 = 6 dBA per doubling 15 = 4.5 dBA per doublin	0 20.0 of distance g of distance		

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	256.0	-34.2	-34.2	-34.2	-34.2	-34.2	-34.2		
Shielding (Barrier Attenuation)	10.0	-8.4	-8.4	-8.4	-8.4	-8.4	-8.4		
Raw (Distance + Barrier)		34.6	-42.6	-42.6	-42.6	-42.6	-42.6		
39 Minute Hourly Adjustmer	nt	32.7	-44.5	-44.5	-44.5	-44.5	-44.5		

Observer Location: R7

Source: Parking Lot Vehicle Movements Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	36.0 feet	Barrier Height:	0.0 feet					
Noise Distance to Barrier:	36.0 feet	Noise Source Height:	5.0 feet					
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	36.0	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1		
Shielding (Barrier Attenuation)	36.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		41.1	-11.1	-11.1	-11.1	-11.1	-11.1		
60 Minute Hourly Adjustmer	nt	41.1	-11.1	-11.1	-11.1	-11.1	-11.1		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/201						
Observer Location: R8 Source: Truck Idle/Reefer Activity Condition: Operational - Interim		Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe				
	NOI	SE MODEL INPUTS				
Noise Distance to Observer	538.0 feet	Barrier Height:	0.0 feet			
Noise Distance to Barrier:	538.0 feet	Noise Source Height:	8.0 feet			
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet			
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0			
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0			
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance			

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	538.0	-25.1	-25.1	-25.1	-25.1	-25.1	-25.1		
Shielding (Barrier Attenuation)	538.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		45.0	-25.1	-25.1	-25.1	-25.1	-25.1		
60 Minute Hourly Adjustmen	nt	45.0	-25.1	-25.1	-25.1	-25.1	-25.1		

Observer Location: R8

Source: Roof-Top Air Conditioning Unit Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	501.0 feet	Barrier Height:	45.0 feet					
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet					
Barrier Distance to Observer:	491.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	45.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	0 = 6 dBA per doubling of distance 5 = 4.5 dBA per doubling of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	501.0	-40.0	-40.0	-40.0	-40.0	-40.0	-40.0		
Shielding (Barrier Attenuation)	10.0	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6		
Raw (Distance + Barrier)		27.6	-49.6	-49.6	-49.6	-49.6	-49.6		
39 Minute Hourly Adjustmer	nt	25.7	-51.5	-51.5	-51.5	-51.5	-51.5		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/201						
Observer Location: R8 Source: Parking Lo Condition: Operation	ot Vehicle Movements al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe				
	NOISE MO	DEL INPUTS				
Noise Distance to Observer	410.0 feet	Barrier Height:	0.0 feet			
Noise Distance to Barrier:	410.0 feet	Noise Source Height:	5.0 feet			
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet			
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0			
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0			
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance			

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	410.0	-32.3	-32.3	-32.3	-32.3	-32.3	-32.3		
Shielding (Barrier Attenuation)	410.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		19.9	-32.3	-32.3	-32.3	-32.3	-32.3		
60 Minute Hourly Adjustmer	nt	19.9	-32.3	-32.3	-32.3	-32.3	-32.3		

Observer Location: R9

Source: Truck Idle/Reefer Activity Condition: Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS Barrier Height: Noise Distance to Observer 1,334.0 feet 45.0 feet Noise Source Height: 8.0 feet Noise Distance to Barrier: 10.0 feet **Observer Height:** 5.0 feet Barrier Distance to Observer: 1,324.0 feet Barrier Type (0-Wall, 1-Berm): 0 Observer Elevation: 0.0 feet Drop Off Coefficient: 20.0 Noise Source Elevation: 0.0 feet 20 = 6 dBA per doubling of distance Barrier Elevation: 0.0 feet

15 = 4.5 dBA per doubling of distance

NOISE MODEL PROJECTIONS								
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax	
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0	
Distance Attenuation	1,334.0	-33.0	-33.0	-33.0	-33.0	-33.0	-33.0	
Shielding (Barrier Attenuation)	10.0	-18.7	-18.7	-18.7	-18.7	-18.7	-18.7	
Raw (Distance + Barrier)		18.4	-51.7	-51.7	-51.7	-51.7	-51.7	
60 Minute Hourly Adjustmer	nt	18.4	-51.7	-51.7	-51.7	-51.7	-51.7	

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2019						
Observer Location: R9 Source: Roof-Top Condition: Operation	Air Conditioning Unit al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe				
	NOISE M	IODEL INPUTS				
Noise Distance to Observer	916.0 feet	Barrier Height:	45.0 feet			
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet			
Barrier Distance to Observer:	906.0 feet	Observer Height:	5.0 feet			
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0			
Noise Source Elevation:	45.0 feet	Drop Off Coefficient:	20.0			
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doublin	of distance g of distance			

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	916.0	-45.3	-45.3	-45.3	-45.3	-45.3	-45.3		
Shielding (Barrier Attenuation)	10.0	-10.1	-10.1	-10.1	-10.1	-10.1	-10.1		
Raw (Distance + Barrier)		21.8	-55.4	-55.4	-55.4	-55.4	-55.4		
39 Minute Hourly Adjustmer	nt	19.9	-57.3	-57.3	-57.3	-57.3	-57.3		

Observer Location: R9

Source: Parking Lot Vehicle Movements Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	842.0 feet	Barrier Height:	0.0 feet					
Noise Distance to Barrier:	842.0 feet	Noise Source Height:	5.0 feet					
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	= 6 dBA per doubling of distance= 4.5 dBA per doubling of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	842.0	-38.5	-38.5	-38.5	-38.5	-38.5	-38.5		
Shielding (Barrier Attenuation)	842.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		13.7	-38.5	-38.5	-38.5	-38.5	-38.5		
60 Minute Hourly Adjustmer	nt	13.7	-38.5	-38.5	-38.5	-38.5	-38.5		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/20						
Observer Location: R10 Source: Truck Idle, Condition: Operation:	/Reefer Activity al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe				
	NO	ISE MODEL INPUTS				
Noise Distance to Observer	1,227.0 feet	Barrier Height:	45.0 feet			
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	8.0 feet			
Barrier Distance to Observer:	1,217.0 feet	Observer Height:	5.0 feet			
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0			
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0			
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance of distance			

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	1,227.0	-32.2	-32.2	-32.2	-32.2	-32.2	-32.2		
Shielding (Barrier Attenuation)	10.0	-18.7	-18.7	-18.7	-18.7	-18.7	-18.7		
Raw (Distance + Barrier)		19.2	-50.9	-50.9	-50.9	-50.9	-50.9		
60 Minute Hourly Adjustmer	nt	19.2	-50.9	-50.9	-50.9	-50.9	-50.9		

Observer Location: R10

Source: Roof-Top Air Conditioning Unit *Condition:* Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	894.0 feet	Barrier Height:	45.0 feet					
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet					
Barrier Distance to Observer:	884.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	45.0 feet	Drop On Coemcient.	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	894.0	-45.0	-45.0	-45.0	-45.0	-45.0	-45.0		
Shielding (Barrier Attenuation)	10.0	-10.1	-10.1	-10.1	-10.1	-10.1	-10.1		
Raw (Distance + Barrier)		22.1	-55.1	-55.1	-55.1	-55.1	-55.1		
39 Minute Hourly Adjustmer	nt	20.2	-57.0	-57.0	-57.0	-57.0	-57.0		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2019							
Observer Location: R10 Source: Parking L Condition: Operation	ot Vehicle Movements al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
	NOISE MC	DEL INPUTS					
Noise Distance to Observer	768.0 feet	Barrier Height:	6.0 feet				
Noise Distance to Barrier:	758.0 feet	Noise Source Height:	5.0 feet				
Barrier Distance to Observer:	10.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 0 15 = 4.5 dBA per doubling	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	768.0	-37.7	-37.7	-37.7	-37.7	-37.7	-37.7		
Shielding (Barrier Attenuation)	758.0	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5		
Raw (Distance + Barrier)		9.0	-43.2	-43.2	-43.2	-43.2	-43.2		
60 Minute Hourly Adjustmer	nt	9.0	-43.2	-43.2	-43.2	-43.2	-43.2		

Observer Location: R11

Source: Truck Idle/Reefer Activity Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	296.0 feet	Barrier Height:	45.0 feet					
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	8.0 feet					
Barrier Distance to Observer:	286.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	296.0	-19.9	-19.9	-19.9	-19.9	-19.9	-19.9		
Shielding (Barrier Attenuation)	10.0	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8		
Raw (Distance + Barrier)		31.4	-38.7	-38.7	-38.7	-38.7	-38.7		
60 Minute Hourly Adjustmen	nt	31.4	-38.7	-38.7	-38.7	-38.7	-38.7		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/201							
Observer Location: R11 Source: Roof-Top Condition: Operation	Air Conditioning Unit al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
	NOISE M	ODEL INPUTS					
Noise Distance to Observer	177.0 feet	Barrier Height:	45.0 feet				
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet				
Barrier Distance to Observer:	167.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	45.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	177.0	-31.0	-31.0	-31.0	-31.0	-31.0	-31.0		
Shielding (Barrier Attenuation)	10.0	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3		
Raw (Distance + Barrier)		38.9	-38.3	-38.3	-38.3	-38.3	-38.3		
39 Minute Hourly Adjustmer	nt	37.0	-40.2	-40.2	-40.2	-40.2	-40.2		

Observer Location: R11

Source: Parking Lot Vehicle Movements Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	20.0 feet	Barrier Height:	0.0 feet					
Noise Distance to Barrier:	20.0 feet	Noise Source Height:	5.0 feet					
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	20.0	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0		
Shielding (Barrier Attenuation)	20.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		46.2	-6.0	-6.0	-6.0	-6.0	-6.0		
60 Minute Hourly Adjustmen	nt	46.2	-6.0	-6.0	-6.0	-6.0	-6.0		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/207						
Observer Location: R1 Source: Fire Pump Condition: Operation	e Emergency Generator al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe				
	NOISE MOD	DEL INPUTS				
Noise Distance to Observer	134.0 feet	Barrier Height:	0.0 feet			
Noise Distance to Barrier:	134.0 feet	Noise Source Height:	6.0 feet			
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet			
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0			
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0			
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doublin	of distance g of distance			

NOISE MODEL PROJECTIONS								
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax	
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0	
Distance Attenuation	134.0	-8.6	-8.6	-8.6	-8.6	-8.6	-8.6	
Shielding (Barrier Attenuation)	134.0	0.0	0.0	0.0	0.0	0.0	0.0	
Raw (Distance + Barrier)		56.3	-8.6	-8.6	-8.6	-8.6	-8.6	
60 Minute Hourly Adjustmer	nt	56.3	-8.6	-8.6	-8.6	-8.6	-8.6	

Observer Location: R2

Source: Fire Pump Emergency Generator *Condition:* Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	233.0 feet	Barrier Height:	0.0 feet					
Noise Distance to Barrier:	233.0 feet	Noise Source Height:	6.0 feet					
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance J of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	233.0	-13.4	-13.4	-13.4	-13.4	-13.4	-13.4		
Shielding (Barrier Attenuation)	233.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		51.5	-13.4	-13.4	-13.4	-13.4	-13.4		
60 Minute Hourly Adjustmer	nt	51.5	-13.4	-13.4	-13.4	-13.4	-13.4		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2019						
Observer Location: R3 Source: Fire Pump Emergency Generator Condition: Operational - Interim		Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe				
	NOISE MOD	DEL INPUTS				
Noise Distance to Observer	603.0 feet	Barrier Height:	45.0 feet			
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	6.0 feet			
Barrier Distance to Observer:	593.0 feet	Observer Height:	5.0 feet			
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0			
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0			
Barrier Elevation: 0.0 feet		20 = 6 dBA per doubling of distant 15 = 4.5 dBA per doubling of dista				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	603.0	-21.6	-21.6	-21.6	-21.6	-21.6	-21.6		
Shielding (Barrier Attenuation)	10.0	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8		
Raw (Distance + Barrier)		24.5	-40.4	-40.4	-40.4	-40.4	-40.4		
60 Minute Hourly Adjustmer	nt	24.5	-40.4	-40.4	-40.4	-40.4	-40.4		

Observer Location: R4

Source: Fire Pump Emergency Generator *Condition:* Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	238.0 feet	Barrier Height:	0.0 feet					
Noise Distance to Barrier:	238.0 feet	Noise Source Height:	6.0 feet					
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	238.0	-13.6	-13.6	-13.6	-13.6	-13.6	-13.6		
Shielding (Barrier Attenuation)	238.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		51.3	-13.6	-13.6	-13.6	-13.6	-13.6		
60 Minute Hourly Adjustmer	nt	51.3	-13.6	-13.6	-13.6	-13.6	-13.6		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2019							
Observer Location: R5 Source: Fire Pump Condition: Operation	e Emergency Generator al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
	NOISE MOD	DEL INPUTS					
Noise Distance to Observer	356.0 feet	Barrier Height:	45.0 feet				
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	6.0 feet				
Barrier Distance to Observer:	346.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doublin	of distance g of distance				

NOISE MODEL PROJECTIONS								
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax	
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0	
Distance Attenuation	356.0	-17.0	-17.0	-17.0	-17.0	-17.0	-17.0	
Shielding (Barrier Attenuation)	10.0	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8	
Raw (Distance + Barrier)		29.1	-35.8	-35.8	-35.8	-35.8	-35.8	
60 Minute Hourly Adjustme	nt	29.1	-35.8	-35.8	-35.8	-35.8	-35.8	

Observer Location: R6

Source: Fire Pump Emergency Generator *Condition:* Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	621.0 feet	Barrier Height:	0.0 feet					
Noise Distance to Barrier:	621.0 feet	Noise Source Height:	6.0 feet					
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS								
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax	
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0	
Distance Attenuation	621.0	-21.9	-21.9	-21.9	-21.9	-21.9	-21.9	
Shielding (Barrier Attenuation)	621.0	0.0	0.0	0.0	0.0	0.0	0.0	
Raw (Distance + Barrier)		43.0	-21.9	-21.9	-21.9	-21.9	-21.9	
60 Minute Hourly Adjustme	nt	43.0	-21.9	-21.9	-21.9	-21.9	-21.9	

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/201							
Observer Location: R7 Source: Fire Pump Condition: Operation	e Emergency Generator al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
NOISE MODEL INPUTS							
Noise Distance to Observer	271.0 feet	Barrier Height:	0.0 feet				
Noise Distance to Barrier:	271.0 feet	Noise Source Height:	6.0 feet				
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doublin	of distance g of distance				

NOISE MODEL PROJECTIONS								
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax	
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0	
Distance Attenuation	271.0	-14.7	-14.7	-14.7	-14.7	-14.7	-14.7	
Shielding (Barrier Attenuation)	271.0	0.0	0.0	0.0	0.0	0.0	0.0	
Raw (Distance + Barrier)		50.2	-14.7	-14.7	-14.7	-14.7	-14.7	
60 Minute Hourly Adjustmer	nt	50.2	-14.7	-14.7	-14.7	-14.7	-14.7	

Observer Location: R8

Source: Fire Pump Emergency Generator *Condition:* Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS						
Noise Distance to Observer	785.0 feet	Barrier Height:	45.0 feet			
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	6.0 feet			
Barrier Distance to Observer:	775.0 feet	Observer Height:	5.0 feet			
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0			
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0			
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance g of distance			

NOISE MODEL PROJECTIONS								
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax	
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0	
Distance Attenuation	785.0	-23.9	-23.9	-23.9	-23.9	-23.9	-23.9	
Shielding (Barrier Attenuation)	10.0	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8	
Raw (Distance + Barrier)		22.2	-42.7	-42.7	-42.7	-42.7	-42.7	
60 Minute Hourly Adjustmen	nt	22.2	-42.7	-42.7	-42.7	-42.7	-42.7	

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2019							
Observer Location: R9 Source: Fire Pump Condition: Operation	e Emergency Generator al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
NOISE MODEL INPUTS							
Noise Distance to Observer	894.0 feet	Barrier Height:	0.0 feet				
Noise Distance to Barrier:	894.0 feet	Noise Source Height:	6.0 feet				
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance				

NOISE MODEL PROJECTIONS								
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax	
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0	
Distance Attenuation	894.0	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	
Shielding (Barrier Attenuation)	894.0	0.0	0.0	0.0	0.0	0.0	0.0	
Raw (Distance + Barrier)		39.9	-25.0	-25.0	-25.0	-25.0	-25.0	
60 Minute Hourly Adjustmer	nt	39.9	-25.0	-25.0	-25.0	-25.0	-25.0	

Observer Location: R10

Source: Fire Pump Emergency Generator *Condition:* Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS						
Noise Distance to Observer	842.0 feet	Barrier Height:	6.0 feet			
Noise Distance to Barrier:	832.0 feet	Noise Source Height:	6.0 feet			
Barrier Distance to Observer:	10.0 feet	Observer Height:	5.0 feet			
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0			
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0			
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance g of distance			

NOISE MODEL PROJECTIONS								
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax	
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0	
Distance Attenuation	842.0	-24.5	-24.5	-24.5	-24.5	-24.5	-24.5	
Shielding (Barrier Attenuation)	832.0	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	
Raw (Distance + Barrier)		34.9	-30.0	-30.0	-30.0	-30.0	-30.0	
60 Minute Hourly Adjustmer	nt	34.9	-30.0	-30.0	-30.0	-30.0	-30.0	

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2019							
Observer Location: R11 Source: Fire Pump Condition: Operation	e Emergency Generator al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
NOISE MODEL INPUTS							
Noise Distance to Observer	217.0 feet	Barrier Height:	45.0 feet				
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	6.0 feet				
Barrier Distance to Observer:	207.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doublin	of distance g of distance				

NOISE MODEL PROJECTIONS								
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax	
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0	
Distance Attenuation	217.0	-12.7	-12.7	-12.7	-12.7	-12.7	-12.7	
Shielding (Barrier Attenuation)	10.0	-18.9	-18.9	-18.9	-18.9	-18.9	-18.9	
Raw (Distance + Barrier)		33.3	-31.6	-31.6	-31.6	-31.6	-31.6	
60 Minute Hourly Adjustmer	nt	33.3	-31.6	-31.6	-31.6	-31.6	-31.6	
Observer Location: R1

Source: Truck Idle/Reefer Activity Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	546.0 feet	Barrier Height:	45.0 feet					
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	8.0 feet					
Barrier Distance to Observer:	536.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	546.0	-25.2	-25.2	-25.2	-25.2	-25.2	-25.2		
Shielding (Barrier Attenuation)	10.0	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8		
Raw (Distance + Barrier)		26.1	-44.0	-44.0	-44.0	-44.0	-44.0		
60 Minute Hourly Adjustmer	nt	26.1	-44.0	-44.0	-44.0	-44.0	-44.0		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/20						
Observer Location: R1 Source: Roof-Top Condition: Operation	Air Conditioning Unit al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe				
	NOISE M	IODEL INPUTS				
Noise Distance to Observer	189.0 feet	Barrier Height:	45.0 feet			
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet			
Barrier Distance to Observer:	179.0 feet	Observer Height:	5.0 feet			
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0			
Noise Source Elevation:	45.0 feet	Drop Off Coefficient:	20.0			
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance			

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	189.0	-31.5	-31.5	-31.5	-31.5	-31.5	-31.5		
Shielding (Barrier Attenuation)	10.0	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5		
Raw (Distance + Barrier)		38.2	-39.0	-39.0	-39.0	-39.0	-39.0		
39 Minute Hourly Adjustmer	nt	36.3	-40.9	-40.9	-40.9	-40.9	-40.9		

Observer Location: R1

Source: Parking Lot Vehicle Movements Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	96.0 feet	Barrier Height:	0.0 feet					
Noise Distance to Barrier:	96.0 feet	Noise Source Height:	5.0 feet					
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm): Drop Off Coefficient:	0 20.0					
Noise Source Elevation: Barrier Elevation:	0.0 feet 0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	f distance of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	96.0	-19.6	-19.6	-19.6	-19.6	-19.6	-19.6		
Shielding (Barrier Attenuation)	96.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		32.6	-19.6	-19.6	-19.6	-19.6	-19.6		
60 Minute Hourly Adjustmer	nt	32.6	-19.6	-19.6	-19.6	-19.6	-19.6		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/20							
Observer Location: R2 Source: Truck Idle Condition: Operation	/Reefer Activity al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
NOISE MODEL INPUTS							
Noise Distance to Observer	518.0 feet	Barrier Height:	45.0 feet				
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	8.0 feet				
Barrier Distance to Observer:	508.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation: 0.0 feet		20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	518.0	-24.7	-24.7	-24.7	-24.7	-24.7	-24.7		
Shielding (Barrier Attenuation)	10.0	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8		
Raw (Distance + Barrier)		26.6	-43.5	-43.5	-43.5	-43.5	-43.5		
60 Minute Hourly Adjustmer	nt	26.6	-43.5	-43.5	-43.5	-43.5	-43.5		

Observer Location: R2

Source: Roof-Top Air Conditioning Unit *Condition:* Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	195.0 feet	Barrier Height:	45.0 feet					
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet					
Barrier Distance to Observer:	185.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	45.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	195.0	-31.8	-31.8	-31.8	-31.8	-31.8	-31.8		
Shielding (Barrier Attenuation)	10.0	-7.6	-7.6	-7.6	-7.6	-7.6	-7.6		
Raw (Distance + Barrier)		37.8	-39.4	-39.4	-39.4	-39.4	-39.4		
39 Minute Hourly Adjustmen	nt	35.9	-41.3	-41.3	-41.3	-41.3	-41.3		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/201						
Observer Location: R2 Source: Parking Lo Condition: Operation	ot Vehicle Movements al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe				
NOISE MODEL INPUTS						
Noise Distance to Observer	126.0 feet	Barrier Height:	0.0 feet			
Noise Distance to Barrier:	126.0 feet	Noise Source Height:	5.0 feet			
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet			
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0			
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0			
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance			

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	126.0	-22.0	-22.0	-22.0	-22.0	-22.0	-22.0		
Shielding (Barrier Attenuation)	126.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		30.2	-22.0	-22.0	-22.0	-22.0	-22.0		
60 Minute Hourly Adjustmer	nt	30.2	-22.0	-22.0	-22.0	-22.0	-22.0		

Observer Location: R3

Source: Truck Idle/Reefer Activity Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	264.0 feet	Barrier Height:	0.0 feet					
Noise Distance to Barrier:	264.0 feet	Noise Source Height:	8.0 feet					
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	n: 0.0 feet	Barrier Type (0-Wall, 1-Berm): Drop Off Coefficient:	0 20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	264.0	-18.9	-18.9	-18.9	-18.9	-18.9	-18.9		
Shielding (Barrier Attenuation)	264.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		51.2	-18.9	-18.9	-18.9	-18.9	-18.9		
60 Minute Hourly Adjustmer	nt	51.2	-18.9	-18.9	-18.9	-18.9	-18.9		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/201							
Observer Location: R3 Source: Roof-Top Condition: Operation	Air Conditioning Unit al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
NOISE MODEL INPUTS							
Noise Distance to Observer	220.0 feet	Barrier Height:	45.0 feet				
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet				
Barrier Distance to Observer:	210.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	45.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doublin	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	220.0	-32.9	-32.9	-32.9	-32.9	-32.9	-32.9		
Shielding (Barrier Attenuation)	10.0	-7.9	-7.9	-7.9	-7.9	-7.9	-7.9		
Raw (Distance + Barrier)		36.4	-40.8	-40.8	-40.8	-40.8	-40.8		
39 Minute Hourly Adjustmer	nt	34.5	-42.7	-42.7	-42.7	-42.7	-42.7		

Observer Location: R3

Source: Parking Lot Vehicle Movements Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	132.0 feet	Barrier Height:	0.0 feet					
Noise Distance to Barrier:	132.0 feet	Noise Source Height:	5.0 feet					
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	132.0	-22.4	-22.4	-22.4	-22.4	-22.4	-22.4		
Shielding (Barrier Attenuation)	132.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		29.8	-22.4	-22.4	-22.4	-22.4	-22.4		
60 Minute Hourly Adjustmen	nt	29.8	-22.4	-22.4	-22.4	-22.4	-22.4		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/20							
Observer Location: R4		Project Name: Goodman III					
Source: Truck Idle	Reefer Activity	Job Number: 12384					
Condition: Operational - Interim		Analyst: A. Wolfe					
NOISE MODEL INPUTS							
Noise Distance to Observer	583.0 feet	Barrier Height:	45.0 feet				
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	8.0 feet				
Barrier Distance to Observer:	573.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	583.0	-25.8	-25.8	-25.8	-25.8	-25.8	-25.8		
Shielding (Barrier Attenuation)	10.0	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8		
Raw (Distance + Barrier)		25.5	-44.6	-44.6	-44.6	-44.6	-44.6		
60 Minute Hourly Adjustmer	nt	25.5	-44.6	-44.6	-44.6	-44.6	-44.6		

Observer Location: R4

Source: Roof-Top Air Conditioning Unit *Condition:* Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	297.0 feet	Barrier Height:	45.0 feet					
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet					
Barrier Distance to Observer:	287.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	45.0 feet	Drop On Coencient.	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	297.0	-35.5	-35.5	-35.5	-35.5	-35.5	-35.5		
Shielding (Barrier Attenuation)	10.0	-8.7	-8.7	-8.7	-8.7	-8.7	-8.7		
Raw (Distance + Barrier)		33.0	-44.2	-44.2	-44.2	-44.2	-44.2		
39 Minute Hourly Adjustmer	nt	31.1	-46.1	-46.1	-46.1	-46.1	-46.1		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2019							
Observer Location: R4 Source: Parking Lo Condition: Operation	ot Vehicle Movements al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
NOISE MODEL INPUTS							
Noise Distance to Observer	147.0 feet	Barrier Height:	0.0 feet				
Noise Distance to Barrier:	147.0 feet	Noise Source Height:	5.0 feet				
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	147.0	-23.3	-23.3	-23.3	-23.3	-23.3	-23.3		
Shielding (Barrier Attenuation)	147.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		28.9	-23.3	-23.3	-23.3	-23.3	-23.3		
60 Minute Hourly Adjustmer	nt	28.9	-23.3	-23.3	-23.3	-23.3	-23.3		

Observer Location: R5

Source: Truck Idle/Reefer Activity Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	382.0 feet	Barrier Height:	45.0 feet					
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	8.0 feet					
Barrier Distance to Observer:	372.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm): Drop Off Coefficient:	0 20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	382.0	-22.1	-22.1	-22.1	-22.1	-22.1	-22.1		
Shielding (Barrier Attenuation)	10.0	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8		
Raw (Distance + Barrier)		29.2	-40.9	-40.9	-40.9	-40.9	-40.9		
60 Minute Hourly Adjustmen	nt	29.2	-40.9	-40.9	-40.9	-40.9	-40.9		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/20							
Observer Location: R5		Project Name: Goodman III					
Source: Root-Top	Air Conditioning Unit	Job Number: 12384					
Condition: Operational - Interim		Analyst: A. Wolfe					
NOISE MODEL INPUTS							
Noise Distance to Observer	296.0 feet	Barrier Height:	45.0 feet				
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet				
Barrier Distance to Observer:	286.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	45.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	0 feet20 = 6 dBA per doubling of distance15 = 4.5 dBA per doubling of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	296.0	-35.4	-35.4	-35.4	-35.4	-35.4	-35.4		
Shielding (Barrier Attenuation)	10.0	-8.7	-8.7	-8.7	-8.7	-8.7	-8.7		
Raw (Distance + Barrier)		33.1	-44.1	-44.1	-44.1	-44.1	-44.1		
39 Minute Hourly Adjustmer	nt	31.2	-46.0	-46.0	-46.0	-46.0	-46.0		

Observer Location: R5

Source: Parking Lot Vehicle Movements Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	351.0 feet	Barrier Height:	6.0 feet					
Noise Distance to Barrier:	341.0 feet	Noise Source Height:	5.0 feet					
Barrier Distance to Observer:	10.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 0 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	351.0	-30.9	-30.9	-30.9	-30.9	-30.9	-30.9		
Shielding (Barrier Attenuation)	341.0	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5		
Raw (Distance + Barrier)		15.8	-36.4	-36.4	-36.4	-36.4	-36.4		
60 Minute Hourly Adjustmer	nt	15.8	-36.4	-36.4	-36.4	-36.4	-36.4		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/201								
Observer Location: R6		Project Name: Goodman III						
<i>Source:</i> Truck Idle/Reefer Activity <i>Condition:</i> Operational - Interim		Analyst: A. Wolfe						
NOISE MODEL INPUTS								
Noise Distance to Observer	106.0 feet	Barrier Height:	0.0 feet					
Noise Distance to Barrier:	106.0 feet	Noise Source Height:	8.0 feet					
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	Noise Source Elevation: 0.0 feet		20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	106.0	-11.0	-11.0	-11.0	-11.0	-11.0	-11.0		
Shielding (Barrier Attenuation)	106.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		59.1	-11.0	-11.0	-11.0	-11.0	-11.0		
60 Minute Hourly Adjustmer	nt	59.1	-11.0	-11.0	-11.0	-11.0	-11.0		

Observer Location: R6

Source: Roof-Top Air Conditioning Unit *Condition:* Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	598.0 feet	Barrier Height:	45.0 feet					
Noise Distance to Barrier:	400.0 feet	Noise Source Height:	5.0 feet					
Barrier Distance to Observer:	198.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	45.0 feet	Drop On Coemcient.	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	598.0	-41.6	-41.6	-41.6	-41.6	-41.6	-41.6		
Shielding (Barrier Attenuation)	400.0	-12.7	-12.7	-12.7	-12.7	-12.7	-12.7		
Raw (Distance + Barrier)		22.9	-54.3	-54.3	-54.3	-54.3	-54.3		
39 Minute Hourly Adjustmer	nt	21.0	-56.2	-56.2	-56.2	-56.2	-56.2		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2019							
Observer Location: R6 Source: Parking Lo Condition: Operation	ot Vehicle Movements al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
NOISE MODEL INPUTS							
Noise Distance to Observer	570.0 feet	Barrier Height:	0.0 feet				
Noise Distance to Barrier:	570.0 feet	Noise Source Height:	5.0 feet				
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	570.0	-35.1	-35.1	-35.1	-35.1	-35.1	-35.1		
Shielding (Barrier Attenuation)	570.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		17.1	-35.1	-35.1	-35.1	-35.1	-35.1		
60 Minute Hourly Adjustmer	nt	17.1	-35.1	-35.1	-35.1	-35.1	-35.1		

Observer Location: R7

Source: Truck Idle/Reefer Activity Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	545.0 feet	Barrier Height:	0.0 feet					
Noise Distance to Barrier:	545.0 feet	Noise Source Height:	8.0 feet					
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	20 = 6 dBA per doubling of distance 15 = 4.5 dBA per doubling of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	545.0	-25.2	-25.2	-25.2	-25.2	-25.2	-25.2		
Shielding (Barrier Attenuation)	545.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		44.9	-25.2	-25.2	-25.2	-25.2	-25.2		
60 Minute Hourly Adjustmer	nt	44.9	-25.2	-25.2	-25.2	-25.2	-25.2		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2							
Observer Location: R7 Source: Roof-Top Air Conditioning Unit Condition: Operational - Interim		Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
NOISE MODEL INPUTS							
Noise Distance to Observer	103.0 feet	Barrier Height:	45.0 feet				
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet				
Barrier Distance to Observer:	93.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	45.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doublin	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	103.0	-26.3	-26.3	-26.3	-26.3	-26.3	-26.3		
Shielding (Barrier Attenuation)	10.0	-5.2	-5.2	-5.2	-5.2	-5.2	-5.2		
Raw (Distance + Barrier)		45.7	-31.5	-31.5	-31.5	-31.5	-31.5		
39 Minute Hourly Adjustmer	nt	43.8	-33.4	-33.4	-33.4	-33.4	-33.4		

Observer Location: R7

Source: Parking Lot Vehicle Movements Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	36.0 feet	Barrier Height:	0.0 feet					
Noise Distance to Barrier:	36.0 feet	Noise Source Height:	5.0 feet					
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	36.0	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1		
Shielding (Barrier Attenuation)	36.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		41.1	-11.1	-11.1	-11.1	-11.1	-11.1		
60 Minute Hourly Adjustmer	nt	41.1	-11.1	-11.1	-11.1	-11.1	-11.1		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/201							
Observer Location: R8 Source: Truck Idle Condition: Operation	/Reefer Activity al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
NOISE MODEL INPUTS							
Noise Distance to Observer	538.0 feet	Barrier Height:	0.0 feet				
Noise Distance to Barrier:	538.0 feet	Noise Source Height:	8.0 feet				
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	538.0	-25.1	-25.1	-25.1	-25.1	-25.1	-25.1		
Shielding (Barrier Attenuation)	538.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		45.0	-25.1	-25.1	-25.1	-25.1	-25.1		
60 Minute Hourly Adjustmen	nt	45.0	-25.1	-25.1	-25.1	-25.1	-25.1		

Observer Location: R8

Source: Roof-Top Air Conditioning Unit Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	501.0 feet	Barrier Height:	45.0 feet					
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet					
Barrier Distance to Observer:	491.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	45.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	501.0	-40.0	-40.0	-40.0	-40.0	-40.0	-40.0		
Shielding (Barrier Attenuation)	10.0	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6		
Raw (Distance + Barrier)		27.6	-49.6	-49.6	-49.6	-49.6	-49.6		
39 Minute Hourly Adjustmer	nt	25.7	-51.5	-51.5	-51.5	-51.5	-51.5		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2019							
Observer Location: R8 Source: Parking Lo Condition: Operation	ot Vehicle Movements al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
NOISE MODEL INPUTS							
Noise Distance to Observer	410.0 feet	Barrier Height:	0.0 feet				
Noise Distance to Barrier:	410.0 feet	Noise Source Height:	5.0 feet				
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	410.0	-32.3	-32.3	-32.3	-32.3	-32.3	-32.3		
Shielding (Barrier Attenuation)	410.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		19.9	-32.3	-32.3	-32.3	-32.3	-32.3		
60 Minute Hourly Adjustmer	nt	19.9	-32.3	-32.3	-32.3	-32.3	-32.3		

Observer Location: R9

Source: Truck Idle/Reefer Activity Condition: Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS Barrier Height: Noise Distance to Observer 1,334.0 feet 45.0 feet Noise Source Height: 8.0 feet Noise Distance to Barrier: 10.0 feet Observer Height: 5.0 feet Barrier Distance to Observer: 1,324.0 feet Barrier Type (0-Wall, 1-Berm): 0 Observer Elevation: 0.0 feet Drop Off Coefficient: 20.0 Noise Source Elevation: 0.0 feet 20 = 6 dBA per doubling of distance Barrier Elevation: 0.0 feet

15 = 4.5 dBA per doubling of distance

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	1,334.0	-33.0	-33.0	-33.0	-33.0	-33.0	-33.0		
Shielding (Barrier Attenuation)	10.0	-18.7	-18.7	-18.7	-18.7	-18.7	-18.7		
Raw (Distance + Barrier)		18.4	-51.7	-51.7	-51.7	-51.7	-51.7		
60 Minute Hourly Adjustmer	nt	18.4	-51.7	-51.7	-51.7	-51.7	-51.7		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/20						
Observer Location: R9		Project Name: Goodman III				
Source: Roof-Top	Air Conditioning Unit	Job Number: 12384				
Condition: Operation	al - Interim	Analyst: A. Wolfe				
	NOISE N	NODEL INPUTS				
Noise Distance to Observer	916.0 feet	Barrier Height:	45.0 feet			
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet			
Barrier Distance to Observer:	906.0 feet	Observer Height:	5.0 feet			
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0			
Noise Source Elevation:	45.0 feet	Drop Off Coefficient:	20.0			
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doublin	of distance g of distance			

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	916.0	-45.3	-45.3	-45.3	-45.3	-45.3	-45.3		
Shielding (Barrier Attenuation)	10.0	-10.1	-10.1	-10.1	-10.1	-10.1	-10.1		
Raw (Distance + Barrier)		21.8	-55.4	-55.4	-55.4	-55.4	-55.4		
39 Minute Hourly Adjustmer	nt	19.9	-57.3	-57.3	-57.3	-57.3	-57.3		

Observer Location: R9

Source: Parking Lot Vehicle Movements Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	842.0 feet	Barrier Height:	0.0 feet					
Noise Distance to Barrier:	842.0 feet	Noise Source Height:	5.0 feet					
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	842.0	-38.5	-38.5	-38.5	-38.5	-38.5	-38.5		
Shielding (Barrier Attenuation)	842.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		13.7	-38.5	-38.5	-38.5	-38.5	-38.5		
60 Minute Hourly Adjustmer	nt	13.7	-38.5	-38.5	-38.5	-38.5	-38.5		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2						
Observer Location: R10 Source: Truck Idle, Condition: Operation:	/Reefer Activity al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe				
	NO	ISE MODEL INPUTS				
Noise Distance to Observer	1,227.0 feet	Barrier Height:	45.0 feet			
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	8.0 feet			
Barrier Distance to Observer:	1,217.0 feet	Observer Height:	5.0 feet			
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0			
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0			
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance of distance			

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	30.0	70.1	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	1,227.0	-32.2	-32.2	-32.2	-32.2	-32.2	-32.2		
Shielding (Barrier Attenuation)	10.0	-18.7	-18.7	-18.7	-18.7	-18.7	-18.7		
Raw (Distance + Barrier)		19.2	-50.9	-50.9	-50.9	-50.9	-50.9		
60 Minute Hourly Adjustmen	t	19.2	-50.9	-50.9	-50.9	-50.9	-50.9		

Observer Location: R10

Source: Roof-Top Air Conditioning Unit Condition: Operational - Interim Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	894.0 feet	Barrier Height:	45.0 feet					
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	5.0 feet					
Barrier Distance to Observer:	884.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	45.0 feet	Drop On Coemcient.	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	5.0	77.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	894.0	-45.0	-45.0	-45.0	-45.0	-45.0	-45.0		
Shielding (Barrier Attenuation)	10.0	-10.1	-10.1	-10.1	-10.1	-10.1	-10.1		
Raw (Distance + Barrier)		22.1	-55.1	-55.1	-55.1	-55.1	-55.1		
39 Minute Hourly Adjustmer	nt	20.2	-57.0	-57.0	-57.0	-57.0	-57.0		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2019							
Observer Location: R10 Source: Parking Lot Vehicle Movements Condition: Operational - Interim		Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe					
	NOISE MC	DEL INPUTS					
Noise Distance to Observer	768.0 feet	Barrier Height:	6.0 feet				
Noise Distance to Barrier:	758.0 feet	Noise Source Height:	5.0 feet				
Barrier Distance to Observer:	10.0 feet	Observer Height:	5.0 feet				
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0				
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0				
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 0 15 = 4.5 dBA per doubling	of distance g of distance				

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	10.0	52.2	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	768.0	-37.7	-37.7	-37.7	-37.7	-37.7	-37.7		
Shielding (Barrier Attenuation)	758.0	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5		
Raw (Distance + Barrier)		9.0	-43.2	-43.2	-43.2	-43.2	-43.2		
60 Minute Hourly Adjustmer	nt	9.0	-43.2	-43.2	-43.2	-43.2	-43.2		

Observer Location: R1

Source: Fire Pump Emergency Generator *Condition:* Operational - Interim

ator *Project Name:* Goodman III *Job Number:* 12384 *Analyst:* A. Wolfe

NOISE MODEL INPUTS									
Noise Distance to Observer	134.0 feet	Barrier Height:	0.0 feet						
Noise Distance to Barrier:	134.0 feet	Noise Source Height:	6.0 feet						
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet						
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0						
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0						
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance g of distance						

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	134.0	-8.6	-8.6	-8.6	-8.6	-8.6	-8.6		
Shielding (Barrier Attenuation)	134.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		56.3	-8.6	-8.6	-8.6	-8.6	-8.6		
60 Minute Hourly Adjustmer	nt	56.3	-8.6	-8.6	-8.6	-8.6	-8.6		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/201						
Observer Location: R2 Source: Fire Pump Condition: Operation	Emergency Generator al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe				
	NOISE MOD	DEL INPUTS				
Noise Distance to Observer	233.0 feet	Barrier Height:	0.0 feet			
Noise Distance to Barrier:	233.0 feet	Noise Source Height:	6.0 feet			
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet			
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0			
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0			
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance			

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	233.0	-13.4	-13.4	-13.4	-13.4	-13.4	-13.4		
Shielding (Barrier Attenuation)	233.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		51.5	-13.4	-13.4	-13.4	-13.4	-13.4		
60 Minute Hourly Adjustmer	nt	51.5	-13.4	-13.4	-13.4	-13.4	-13.4		

Observer Location: R3

Source: Fire Pump Emergency Generator *Condition:* Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	603.0 feet	Barrier Height:	45.0 feet					
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	6.0 feet					
Barrier Distance to Observer:	593.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	603.0	-21.6	-21.6	-21.6	-21.6	-21.6	-21.6		
Shielding (Barrier Attenuation)	10.0	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8		
Raw (Distance + Barrier)		24.5	-40.4	-40.4	-40.4	-40.4	-40.4		
60 Minute Hourly Adjustmer	nt	24.5	-40.4	-40.4	-40.4	-40.4	-40.4		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/201						
Observer Location: R4 Source: Fire Pump Condition: Operation	e Emergency Generator al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe				
	NOISE MOD	EL INPUTS				
Noise Distance to Observer Noise Distance to Barrier: Barrier Distance to Observer:	238.0 feet 238.0 feet 0.0 feet	Barrier Height: Noise Source Height: Observer Height:	0.0 feet 6.0 feet 5.0 feet			
<i>Observer Elevation: Noise Source Elevation: Barrier Elevation:</i>	0.0 feet 0.0 feet 0.0 feet	Barrier Type (0-Wall, 1-Berm): Drop Off Coefficient: 20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	0 20.0 of distance g of distance			

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	238.0	-13.6	-13.6	-13.6	-13.6	-13.6	-13.6		
Shielding (Barrier Attenuation)	238.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		51.3	-13.6	-13.6	-13.6	-13.6	-13.6		
60 Minute Hourly Adjustmer	nt	51.3	-13.6	-13.6	-13.6	-13.6	-13.6		

Observer Location: R5

Source: Fire Pump Emergency Generator *Condition:* Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	356.0 feet	Barrier Height:	45.0 feet					
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	6.0 feet					
Barrier Distance to Observer:	346.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance g of distance					

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	356.0	-17.0	-17.0	-17.0	-17.0	-17.0	-17.0		
Shielding (Barrier Attenuation)	10.0	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8		
Raw (Distance + Barrier)		29.1	-35.8	-35.8	-35.8	-35.8	-35.8		
60 Minute Hourly Adjustmer	nt	29.1	-35.8	-35.8	-35.8	-35.8	-35.8		

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/201						
Observer Location: R6 Source: Fire Pump Condition: Operation	e Emergency Generator al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe				
	NOISE MOD	DEL INPUTS				
Noise Distance to Observer	621.0 feet	Barrier Height:	0.0 feet			
Noise Distance to Barrier:	621.0 feet	Noise Source Height:	6.0 feet			
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet			
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0			
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0			
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doublin	of distance g of distance			

NOISE MODEL PROJECTIONS									
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax		
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0		
Distance Attenuation	621.0	-21.9	-21.9	-21.9	-21.9	-21.9	-21.9		
Shielding (Barrier Attenuation)	621.0	0.0	0.0	0.0	0.0	0.0	0.0		
Raw (Distance + Barrier)		43.0	-21.9	-21.9	-21.9	-21.9	-21.9		
60 Minute Hourly Adjustmen	nt	43.0	-21.9	-21.9	-21.9	-21.9	-21.9		

Observer Location: R7

Source: Fire Pump Emergency Generator *Condition:* Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS								
Noise Distance to Observer	91.0 feet	Barrier Height:	0.0 feet					
Noise Distance to Barrier:	91.0 feet	Noise Source Height:	6.0 feet					
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet					
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0					
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0					
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling of 15 = 4.5 dBA per doubling	of distance of distance					

NOISE MODEL PROJECTIONS							
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0
Distance Attenuation	91.0	-5.2	-5.2	-5.2	-5.2	-5.2	-5.2
Shielding (Barrier Attenuation)	91.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		59.7	-5.2	-5.2	-5.2	-5.2	-5.2
60 Minute Hourly Adjustmer	nt	59.7	-5.2	-5.2	-5.2	-5.2	-5.2

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/20				
Observer Location: R8 Source: Fire Pump Condition: Operation	Emergency Generator al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe		
	NOISE MOD	DEL INPUTS		
Noise Distance to Observer	785.0 feet	Barrier Height:	45.0 feet	
Noise Distance to Barrier:	10.0 feet	Noise Source Height:	6.0 feet	
Barrier Distance to Observer:	775.0 feet	Observer Height:	5.0 feet	
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0	
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0	
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doublin	of distance g of distance	

NOISE MODEL PROJECTIONS							
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0
Distance Attenuation	785.0	-23.9	-23.9	-23.9	-23.9	-23.9	-23.9
Shielding (Barrier Attenuation)	10.0	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8
Raw (Distance + Barrier)		22.2	-42.7	-42.7	-42.7	-42.7	-42.7
60 Minute Hourly Adjustmer	nt	22.2	-42.7	-42.7	-42.7	-42.7	-42.7

Observer Location: R9

Source: Fire Pump Emergency Generator *Condition:* Operational - Interim

Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe

NOISE MODEL INPUTS					
Noise Distance to Observer	894.0 feet	Barrier Height:	0.0 feet		
Noise Distance to Barrier:	894.0 feet	Noise Source Height:	6.0 feet		
Barrier Distance to Observer:	0.0 feet	Observer Height:	5.0 feet		
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0		
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0		
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling o 15 = 4.5 dBA per doubling	of distance of distance		

NOISE MODEL PROJECTIONS							
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0
Distance Attenuation	894.0	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0
Shielding (Barrier Attenuation)	894.0	0.0	0.0	0.0	0.0	0.0	0.0
Raw (Distance + Barrier)		39.9	-25.0	-25.0	-25.0	-25.0	-25.0
60 Minute Hourly Adjustmer	nt	39.9	-25.0	-25.0	-25.0	-25.0	-25.0

STATIONARY SOURCE NOISE PREDICTION MODEL 6/4/2019				
Observer Location: R10 Source: Fire Pump Condition: Operation	Emergency Generator al - Interim	Project Name: Goodman III Job Number: 12384 Analyst: A. Wolfe		
	NOISE MOD	DEL INPUTS		
Noise Distance to Observer	842.0 feet	Barrier Height:	6.0 feet	
Noise Distance to Barrier:	832.0 feet	Noise Source Height:	6.0 feet	
Barrier Distance to Observer:	10.0 feet	Observer Height:	5.0 feet	
Observer Elevation:	0.0 feet	Barrier Type (0-Wall, 1-Berm):	0	
Noise Source Elevation:	0.0 feet	Drop Off Coefficient:	20.0	
Barrier Elevation:	0.0 feet	20 = 6 dBA per doubling 15 = 4.5 dBA per doubling	of distance g of distance	

NOISE MODEL PROJECTIONS							
Noise Level	Distance (feet)	Leq	L50	L25	L8	L2	Lmax
Reference (Sample)	50.0	64.9	0.0	0.0	0.0	0.0	0.0
Distance Attenuation	842.0	-24.5	-24.5	-24.5	-24.5	-24.5	-24.5
Shielding (Barrier Attenuation)	832.0	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5
Raw (Distance + Barrier)		34.9	-30.0	-30.0	-30.0	-30.0	-30.0
60 Minute Hourly Adjustmer	nt	34.9	-30.0	-30.0	-30.0	-30.0	-30.0

APPENDIX 10.1:

CONSTRUCTION NOISE ASSESSMENT



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September 4, 2019

Ms. Tracy Zinn T&B Planning 17542 17th St. #100 Tustin, CA 92780

SUBJECT: GOODMAN INDUSTRIAL PARK FONTANA III CONSTRUCTION NOISE ASSESSMENT

Dear Ms. Tracy Zinn:

Urban Crossroads, Inc. is pleased to submit this Construction Noise Assessment for the Goodman Industrial Park Fontana III ("Project"), which is located north of Jurupa Avenue, between Cypress Avenue and Juniper Avenue, in the City of Fontana. The purpose of the Construction Noise Assessment is to describe the potential construction noise levels associated with simultaneous construction of the both the Project and the planned construction activities at the neighboring St. Mary's Church.

Construction activities are expected to create temporary and intermittent high-level noise conditions at receivers surrounding the Project site. Using the sample reference noise levels shown on Table 1 to represent the construction activities, this analysis estimates the Project-related construction noise levels at nearby sensitive receiver locations as shown on Exhibit A. To present a conservative approach, the highest measured reference noise level of each piece of equipment is used to describe the noise impacts in this assessment.

ID	Noise Source	Duration (h:mm:ss)	Reference Distance From Source (Feet)	Reference Noise Levels @ Reference Distance (dBA L _{eq})	Reference Noise Levels @ 50 Feet (dBA L _{eq}) ³
1	Truck Pass-Bys & Dozer Activity ¹	0:01:15	30'	63.6	59.2
2	Dozer Activity ¹	0:01:00	30'	68.6	64.2
3	Rough Grading Activities ²	0:05:00	30'	77.9	73.5

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

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

³ Reference noise levels are calculated at 50 feet using a drop off rate of 6 dBA per doubling of distance (point source).



EXHIBIT A: CONSTRUCTION ACTIVITY AND RECEIVER LOCATIONS



GOODMAN INDUSTRIAL PARK FONTANA III CONSTRUCTION NOISE ANALYSIS

The June 2019 Goodman Industrial Park Fontana III Noise Impact Analysis (1) evaluated the potential impacts resulting from the short-term construction activities. This includes a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. The analysis described the potential construction impacts for six different stages of activity. Table 2 presents the highest Project construction noise levels associated with grading activities.

Reference Construction Activity ¹	Reference Noise Level @ 50 Feet (dBA Leq)
Truck Pass-Bys & Dozer Activity	59.2
Dozer Activity	64.2
Rough Grading Activities	73.5
Highest Reference Noise Level at 50 Feet (dBA Leq):	73.5

TABLE 2: GOODMAN INDUSTRIAL HIGHEST CONSTRUCTION NOISE LEVELS

Noise- Sensitive Receiver Location	Distance to Construction Activity (Feet) ²	Distance Attenuation (dBA L _{eq}) ³	Estimated Noise Barrier Attenuation (dBA L _{eq}) ⁴	Construction Noise Level (dBA L _{eq})
R1	90'	-5.1	0.0	68.4
R2	118'	-7.5	0.0	66.0
R3	120'	-7.6	0.0	65.9
R4	152'	-9.7	0.0	63.8
R5	214'	-12.6	-5.0	55.8
R6	101'	-6.1	0.0	67.4
R7	30'	4.4	0.0	77.9
R8	405'	-18.2	0.0	55.3
R9	847'	-24.6	0.0	48.9
R10	771'	-23.8	-5.0	44.7
R11	30'	4.4	0.0	77.9

 $^{\rm 1}$ Reference construction noise level measurements taken by Urban Crossroads, Inc.

 $^{\rm 2}$ Distance from the nearest point of construction activity to the nearest receiver.

 $^{\rm 3}$ Point (stationary) source drop off rate of 6.0 dBA per doubling of distance.

⁴ Estimated barrier attenuation from existing barriers in the Project study area.

Based on the reference construction noise levels shown on Table 1, the Project-related construction noise levels when the highest reference noise level is operating at the edge of primary construction



activity nearest each sensitive receiver location will range from 44.7 to 77.9 dBA L_{eq} at the sensitive receiver locations, as shown on Table 2.

ST. MARY'S CHURCH CONSTRUCTION NOISE ANALYSIS

Using the same reference noise levels and grading construction equipment outlined in Tables 1 and 2, Table 3 presents a summary of the potential construction activities associated with St. Mary's Church. Table 3 shows that construction noise levels associated with the St. Mary's Church are estimated to range from 43.8 to 67.4 dBA dBA L_{eq} at the sensitive receiver locations.

Reference Construction Activity ¹	Reference Noise Level @ 50 Feet (dBA Leq)
Truck Pass-Bys & Dozer Activity	59.2
Dozer Activity	64.2
Rough Grading Activities	73.5
Highest Reference Noise Level at 50 Feet (dBA Leq):	73.5

TABLE 3: ST. MARY'S CHURCH HIGHEST CONSTRUCTION NOISE LEVELS

Noise- Sensitive Receiver Location	Distance to Construction Activity (Feet) ²	Distance Attenuation (dBA L _{eq}) ³	Estimated Noise Barrier Attenuation (dBA L _{eq}) ⁴	Construction Noise Level (dBA L _{eq})
R1	1,512'	-29.6	0.0	43.9
R2	1,516'	-29.6	0.0	43.8
R3	1,108'	-26.9	0.0	46.6
R4	773'	-23.8	0.0	49.7
R5	398'	-18.0	-5.0	50.4
R6	101'	-6.1	0.0	67.4
R7	211'	-12.5	0.0	61.0
R8	984'	-25.9	0.0	47.6
R9	847'	-24.6	0.0	48.9
R10	771'	-23.8	-5.0	44.7
R11	292'	-15.3	0.0	58.1

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

² Distance from the nearest point of construction activity to the nearest receiver.

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

⁴ Estimated barrier attenuation from existing barriers in the Project study area.



SIMULTANEOUS CONSTRUCTION NOISE LEVELS

To assess the potential worst-case construction noise levels with simultaneous construction of both the Project and St. Mary's Church, the noise levels for both have been estimated at each of the sensitive receiver locations. Table 4 presents the simultaneous noise levels associated with the cumulative combined and concurrent construction activities.

Receiver Location ¹	Construction Noise Levels (dBA L _{eq})			Cumulative
	Goodman Industrial	St. Mary's Church	Combined Total	Construction Increase
R1	68.4	43.9	68.4	0.0
R2	66.0	43.8	66.0	0.0
R3	65.9	46.6	65.9	0.1
R4	63.8	49.7	64.0	0.2
R5	55.8	50.4	56.9	1.1
R6	67.4	67.4	70.4	3.0
R7	77.9	61.0	78.0	0.1
R8	55.3	47.6	56.0	0.7
R9	48.9	48.9	51.9	3.0
R10	44.7	44.7	47.7	3.0
R11	77.9	58.1	77.9	0.0

TABLE 4: CUMULATIVE CONSTRUCTION NOISE LEVELS

¹Noise receiver locations are shown on Exhibit A.

² Estimated construction noise levels during peak operating conditions.

Table 4 suggests that the cumulative construction noise levels impacts associated will approach 3.0 dBA Leq at the sensitive receiver locations. A change of 3 dBA are considered *barely perceptible*, and changes of 5 dBA are considered *readily perceptible*. (2)

CONCLUSIONS

Construction activities are expected to create temporary and intermittent high-level noise conditions at receivers surrounding the Project site. The analysis suggests that receiver locations R6, R9 and R10 may experience cumulative construction noise level increases approaching a *barely perceptible* 3 dBA. However, a closer review of the analysis shows that R6 represents the source of construction at St. Mary's Church. Receiver locations R9 and R10 are located over 700 feet from St. Mary's Church and while the cumulative contribution is estimated at 3 dBA Leq the actual noise levels are well below the existing ambient noise conditions. The combined exterior noise levels at nearest residential receiver R5 are estimated at 56.9 dBA Leq. The expected cumulative construction noise levels at receiver R5 will likely be overshadowed by the background traffic noise from Jurupa Avenue.



If you have any questions, please contact me directly at (949) 336-5979.

Respectfully submitted,

URBAN CROSSROADS, INC.

Bilde

Bill Lawson, P.E., INCE Principal

REFERENCES

- 1. Urban Crossroads, Inc. Goodman Industrial Park Fontana III. June 13, 2019.
- 2. U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning, Noise and Air Quality Branch. *Highway Traffic Noise Analysis and Abatement Policy and Guidance*. December 2011.

