

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
12. NOISE. <i>Would the project result in:</i>				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		✓		
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?		✓		
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				✓
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?				✓
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				✓

Responses:

- a) **Less than significant with mitigation incorporated.**

Background

Sound is measured on a logarithmic scale of sound pressure level known as a decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. The human ear does not respond uniformly to sounds at all frequencies, being less sensitive to low and high frequencies than to medium frequencies that correspond with human speech. In response to this, the A-weighted noise level (or scale) has been developed. It corresponds better with people’s subjective judgment of sound levels. This A-weighted sound level is called the “noise level” referenced in units of dB(A). Because noise is measured on a logarithmic scale, a doubling of sound energy results in a 3 dB(A) increase in noise levels.

However, changes in a community noise level of less than 3 dB(A) are not typically noticed by the human ear. Changes from 3 to 5 dB(A) may be noticed by some individuals who are extremely sensitive to changes in noise. A 5.0 dB(A) increase is readily noticeable, while the human ear perceives a 10 dB(A) increase in sound level to be a doubling of sound.

Noise, on the other hand, is typically defined as unwanted sound. A typical noise environment consists of a base of steady ambient noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from, for example, traffic on a major highway.

Noise sources occur in two forms: (1) point sources, such as stationary equipment or individual motor vehicles; and (2) line sources, such as a roadway with a large number of point sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dB(A) for each doubling of distance from the source to the receptor at acoustically "hard" sites and 7.5 dB at acoustically "soft" sites. For example, a 60.0 dB(A) noise level measured at 50 feet from a point source at an acoustically hard site would be 54.0 dB(A) at 100 feet from the source and 48 dB(A) at 200 feet from the source. Sound generated by a line source typically attenuates (i.e., becomes less) at a rate of 3.0 dB(A) and 4.5 dB(A) per doubling of distance from the source to the receptor for hard and soft sites, respectively. Examples of hard sites include asphalt, concrete, and hard and sparsely vegetated soils. Examples of acoustically soft sites include sand, plowed farmland, grass, crops, and heavy ground cover.

Sound levels can also be attenuated by man-made or natural barriers (e.g., sound walls, berms, ridges), as well as elevation differences. Solid walls and berms may reduce noise levels by 5.0 to 10.0 dB(A) depending on their height and their horizontal distance relative to the noise source and the noise receptor. A higher noise barrier lengthens the path of a sound wave from the source to the receptor. The longer the distance a sound wave needs to travel to reach the receptor, the greater the sound attenuation. Sound levels may also be attenuated 3.0 to 5.0 dB(A) by a first row of houses and 1.5 dB(A) for each additional row of houses in residential environments.

The most frequently used noise descriptors are summarized below:

Leq: The equivalent sound level is used to describe noise over a specified period of time, typically 1 hour, in terms of a single numerical value. The Leq is the constant sound level, which would contain the same acoustic energy as the varying sound level, during the same period (i.e., the average noise exposure level for the given period).

Lmax: The instantaneous maximum noise level for a specified period of time.

L50: The noise level that is equaled or exceeded 50 percent of the specified time. This is the median noise level during the specified time.

L90: The noise level that is equaled or exceeded 90 percent of the specified time. The L90 is often considered the background noise level averaged over the specified time.

DNL: The Day/Night Average Sound Level is the 24-hour day and night A-weighted noise exposure level, which accounts for the greater sensitivity of most people to nighttime noise by

weighting noise levels at night. Noise between 10:00 PM and 7:00 AM is weighted (penalized) by adding 10 dB(A) to take into account the greater annoyance from nighttime noise (also referred to as Ldn).

CNEL: Similar to the DNL, the Community Noise Equivalent Level (CNEL) adds a 5-dB(A) “penalty” for the evening hours between 7:00 PM and 10:00 PM in addition to a 10-dB(A) penalty between the hours of 10:00 PM and 7:00 AM.

The DNL and CNEL values differ by much less than 1 dB(A). In general, changes in a community noise level of less than 3.0 dB(A) are not typically noticed by the human ear. Changes from 3.0 to 5.0 dB(A) may be noticed by some individuals who are extremely sensitive to changes in noise. A greater than 5.0 dB(A) increase is readily noticeable, while the human ear perceives a 10.0 dB(A) change in sound level to be a doubling or halving sound. A 1 dB difference in noise level is not noticed by the human ear. Therefore, as a matter of practice, Ldn and CNEL values are considered to be equivalent and are treated as such in this assessment.

Existing Noise Environment

Noise Measurements and Existing Ambient Noise

Traffic along San Dimas Avenue and Allen Avenue is the dominant source of ambient noise in the project vicinity. One long-term and two 15-minute short-term noise measurements were taken in the vicinity of the Project Area on February 23, 2016 as indicated on the Noise Study, **Appendix E**. The purpose of the measurements was to characterize existing noise levels adjacent to the Project Area and at sensitive receptors. **Exhibit 4** provides an aerial photograph showing the ambient noise measurement and sensitive receiver locations and **Table 12** provides the existing ambient noise at these sites, which ranges between a low of 50.9 dBA along North Cataract Avenue and a high of 72.1 dBA along North San Dimas Avenue adjacent to the Project Area.

Table 12
Summary of Measured Ambient Noise Levels

Receiver	Existing L_{eq} dBA
ST-1	50.9
ST-2	72.1



Exhibit 4

The nearest sensitive receptors are single-family residences adjacent to the project site to the west along the side property line, east across San Dimas Avenue and Chaparral High School to the north of the project site and Project Area. The exterior of these buildings are located within 100-250 feet from the project construction boundary.

Construction Impacts

Construction Noise was only analyzed in conjunction with the proposed 28 parcel subdivision and development of the lots. Construction noise sources cannot be strictly related to a 24-hour City of San Dimas community noise standard because this type of noise typically occurs only during certain hours of the day, and construction source noise levels vary greatly over time. Construction activities are also treated separately in many community noise ordinances because they do not represent a chronic, permanent noise source. To abate the potential nuisance from construction noise, the City of San Dimas Noise Regulations (Chapter 8.36 of the City of San Dimas Municipal Code) regulates construction and building noise in several ways. The applicable noise regulations are described below:

Section 8.36.040 – The allowable noise level or sound level referred to in Section 8.36.030 shall be the higher of the following:

- A. Actual measured ambient level; or
- B. That noise level limit as determined from the following table:

Table 13

Zone	Time	Sound Level (A-weighted) Decibels
Residential – low and medium density	7:00 am to 6:00 pm	50
	6:00 pm to 10:00 pm	45
	Night	40
Residential – high density	7:00 am to 6:00 pm	60
	6:00 pm to 10:00 pm	55
	Night	50
Commercial	7:00 am to 6:00 pm	60
	6:00 pm to 10:00 pm	55
	Night	50
Industrial	7:00 am to 6:00 pm	70
	6:00 pm to 10:00 pm	60
	Night	55

Note: If the measurement location is on a boundary between two different zones, the noise level limit applicable to the lower noise zone shall apply (Ord. 868 Section 1, 1987).

Section 8.36.090 – Controlled Hours of Operation: It is unlawful for any person to operate, permit, use or cause to operate, any of the following, other than between the hours of 7:00 am to 8:00 pm of any one day:

- A. Powered model vehicles;
- B. Loading and unloading vehicles such as trash collectors, forklifts or cranes within five hundred feet of a residence;
- C. Domestic power tools.

Section 8.36.100, Construction: It is unlawful for any person to within a residential zone, or within a radius of five hundred feet therefrom, to operate equipment or perform any outside construction or repair work on any building, structure or project, or to operate any pile driver, steam shovel, pneumatic hammer, steam or electric hoist or other construction-type equipment or device between the hours of 8:00 pm of one day and 7:00 am of the next day, at any time on Sunday, or at any time on any public holiday in such a manner that a reasonable person of normal sensitivity residing in the area is caused discomfort or annoyance.

Construction of residential land uses requires the use of heavy equipment that would increase noise levels in the immediate Project Area. The noise from construction activity would fluctuate depending on the particular type, number, and duration of use of construction equipment. The

project construction would require the use of heavy construction equipment for activities such as demolition of the existing building and pavement, grading, excavation, installation of utilities, paving, and building fabrication. Development activities would also involve the use of smaller power tools, generators, and other sources of noise. **Table 14** provides the average (L_{eq}) noise levels produced by various types of construction activities at a distance of 50 feet between the construction activity and receptor

Table 14
Construction Equipment Noise Levels

Construction Activity	Noise Level at 50 Feet (dBA, L_{eq}) ¹
Demolition	88
Ground Clearing	84
Excavation	88
Foundations	81
Erection	82
Finishing	88

¹ Average noise levels correspond to a distance of 50 feet from the noisiest piece of equipment associated with a given phase of construction and 200 feet from the rest of the equipment associated with that phase.

Source: USEPA, Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, Table 1-b Domestic Housing, 1971,

During construction of the Project Area, the nearest sensitive receptors would be the single-family residences that are adjacent to the Project Area. Due to the proximity of the residences the proposed project's construction activities would expose the sensitive receptors to increased noise levels. Over the course of a construction day, the highest noise levels would be generated during the excavation and finishing phases of construction.

The project's estimated construction noise levels were calculated based on the loudest construction scenario, which would occur during the demolition, excavation or the finishing phases. The estimated noise levels at the residential uses were calculated using the doubling of distance propagation principle and the reference noise level at 50 feet for the loudest phase of construction. It was determined that noise levels at the closest residential property lines could reach approximately 82 dBA L_{eq} at 100 feet, 76 dBA L_{eq} 150 feet and 70 dBA L_{eq} at 200 feet respectively during project construction. The exact location of the construction activity would vary, however, it was assumed to occur near the project boundary.

Consequently, construction that occurs immediately adjacent to these existing offsite receptors would generate noise levels that would be substantially greater than existing noise levels near the project site. However, it should be noted that this noise level is not anticipated to occur throughout the entire course of a construction day, as construction equipment and activities rarely operate continuously for a full day at a construction site. Typically, the operating cycle for construction equipment would involve one or two minutes of full power operation followed by

three or four minutes at lower power settings. Additionally, construction equipment engines would likely be intermittently turned on and off over the course of a construction day.

Per Section 8.36.100 of the City's Municipal Code, noise sources associated with construction are exempted from the City's established noise standards as long as they do not take place between the hours of 8:00 pm and 7:00 am on weekdays, including Saturday, or any time on a Sunday or public holiday. As the project's construction activities would only occur during the allowable construction hours, the proposed project would be consistent with the City's Municipal Code. Thus, the proposed project would be in compliance with the City's construction related noise standards and **MM-NOI- 1** that requires construction staging as far possible from sensitive receptors, impacts would be less than significant.

It is anticipated that the future build out of the Oak Valley development, the conceptual plan and other projects under construction and/or proposed in the Project Area would not occur at the same time. It is predicted that over the next 20 years only 10 percent of the planned development would be constructed and the various phases of construction would not occur at the same time. The construction levels would be similar to the maximum construction levels predicted for the Oak Valley Development. The construction noise would continue to be exempted from the City's established noise standards, as long as it occurs during the allowable hours. Thus, impacts from potential future build out from 2018 to 2035 would be less than significant.

Proposed Oak Valley Development: With respect to vehicle traffic, the proposed project is estimated to generate a total of 266 daily trips to and from the project site. Of these trips 21 would occur in the AM peak hour and 28 would occur in the PM peak hour (LLG, 2015). The volume of entering (i.e., inbound) vehicles is forecast at no more than 5 trips during the am peak hour and 18 vehicle trips during the pm peak hour, which equates to approximately one vehicle every 12 minutes in the AM peak hour and one vehicle every 3 minutes during the PM peak hour (LLG, 2015). This increase in traffic resulting from implementation of the project would result in a limited increase the ambient noise levels in proximity to the Project Area.

The significance of the project's noise impacts in regards to traffic noise is determined by comparing estimated project-related noise levels to existing no-project noise levels. With respect to the community noise environment, the average healthy ear can barely perceive a noise level change of 3 dBA. A change from 3 to 5 dBA may be noticed by some individuals who are sensitive to changes in noise. A 5 dBA increase is readily noticeable, while the human ear perceives a 10 dBA increase as a doubling of sound. Thus, a significant impact related to traffic noise would occur if the project results in an increase of 3 dBA.

The noise levels were calculated using the FHWA's Highway Traffic Noise Model (TNM 2.5) to predict noise from traffic volumes from the Traffic Impact Study. As shown in **Table 15**, the proposed project would increase noise levels along traffic segments by a maximum of 1.8 dBA L_{eq} and 1.6 dBA L_{eq} above Existing and Ambient noise levels respectively. This increase would not exceed the 3 dBA threshold; thus, impacts related to traffic noise increases to the sensitive receiver locations would be less than significant.

Table 15					
Traffic Noise Levels from the Oak Valley Development (28 Dwelling Units)					
Roadway Segment	Estimated dBA, CNEL at 50 feet from Roadway Centerline				
	Existing (2016)	No Project Ambient Growth (2018)	Project Only (2018)	Change between Project Only and Existing	Change between Project Only and Ambient Growth
Cataract (Cody to Allen)	49.3	49.5	51.1	1.8	1.6
Allen Avenue (Cataract to San Dimas)	64.2	64.3	64.4	0.2	0.1
San Dimas Avenue, Gladstone Street	64.6	64.7	64.8	0.2	0.1

Cumulative Development Growth in 2018: As described below, the cumulative development would include the Oak Valley development of 28 single family units, the Conceptual Lot Plan and proposed development that are currently under construction within the City and nearby the Project Area but outside the limits or boundary of the City of San Dimas. It is estimated that the cumulative growth of all of these projects would result in approximately a total of 5,653 vehicular trips per day in 2018. This increase in traffic resulting from implementation of the project would result in a limited increase the ambient noise levels in proximity to the Project Area. As shown in **Table 16**, the 2018 cumulative all project condition would increase noise levels along traffic segments by a maximum of 2.0 dBA L_{eq} and 1.8 dBA L_{eq} above Existing and Ambient noise levels respectively. This increase would not exceed the 3 dBA threshold; thus, impacts related to traffic noise increases to the sensitive receiver locations would be less than significant.

Table 16					
2018 Cumulative Traffic Noise Levels					
Roadway Segment	Estimated dBA, CNEL at 50 feet from Roadway Centerline				
	<i>Existing (2016)</i>	<i>No Project Ambient Growth (2018)</i>	<i>Cumulative All Projects (2018)</i>	<i>Change between All Projects (2018) and Existing</i>	<i>Change between All Projects and (2018) Ambient Growth</i>
Cataract (Cody to Allen)	49.3	49.5	51.3	2.0	1.8
Allen Avenue (Cataract to San Dimas)	64.2	64.3	64.8	0.6	0.5
San Dimas Avenue, Gladstone Street	64.6	64.7	64.9	0.3	0.2

Cumulative Development Growth in 2035: As described below, the cumulative development would include the Oak Valley development of 28 single family units, the Conceptual Lot Plan of up to an additional 50 single-family dwelling units and proposed development that is currently under construction. It is estimated that the cumulative growth of all of these projects would result in approximately a total of 12,761 vehicular trips per day in 2035. The increase over the existing planned development in the area is 742 vehicular trips per day. This increase in traffic resulting from implementation of the project would result in a limited increase the ambient noise levels in proximity to the Project Area. As shown in **Table 17**, the 2035 cumulative all project condition would increase noise levels along traffic segments by a maximum of 2.4 dBA L_{eq} and 1.7 dBA L_{eq} above Existing and Ambient noise levels respectively. This increase would not exceed the 3 dBA threshold; thus, impacts related to traffic noise increases to the sensitive receiver locations would be less than significant.

Table 17					
2035 Cumulative Traffic Noise Levels					
Roadway Segment	Estimated dBA, CNEL at 50 feet from Roadway Centerline				
	<i>Existing (2016)</i>	<i>No Project Ambient Growth (2035)</i>	<i>Cumulative All Projects (2035)</i>	<i>Change between All Projects (2035) and Existing</i>	<i>Change between All Projects and (2035) Ambient Growth</i>
Cataract (Cody to Allen)	49.3	50.0	51.7	2.4	1.7
Allen Avenue (Cataract to San Dimas)	64.2	64.8	65.3	1.1	0.5
San Dimas Avenue and Gladstone Street	64.6	65.2	65.4	0.8	0.2

Stationary Noise.

The proposed project would have stationary sources of noise associated with building operations, such as heating, ventilation, and air conditioning (HVAC) systems. Large ground level HVAC systems typically generate noise levels between 50 and 65 dB(A) at 50 feet. Rooftop mounted equipment typically produces noise levels of up to approximately 56 dB(A) at 50 feet. Noise levels would increase about 0.3 dB(A) at the nearest off-site land uses, the residential uses abutting the Project Area and project site line. This increase is considered inaudible and would be less than the 5 dB(A) threshold considered significant in this analysis for long-term ambient noise increases. Therefore, future stationary noise impacts would be considered less-than-significant.

b) Less than significant with mitigation incorporated.

Vibration is sound radiated through the ground. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. The ground motion caused by vibration is measured as particle velocity in inches per second, and in the US is referenced as vibration decibels (VdB).

The background vibration velocity level in residential and educational areas is usually around 50 VdB. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximately dividing line between barely perceptible and distinctly perceptible levels for many people. Sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors causes most perceptible indoor vibration. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from

approximately 50 VdB, which is the typical background vibration velocity level, and 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

The general human response to different levels of groundborne vibration velocity levels is described in **Table 18**.

Table 18
Vibration and Human Response

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.

Note:
VdB = Vibration Decibel
Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.

Construction Impacts

A variety of the equipment used for the proposed project could generate groundborne vibration and noise. Bulldozers and other earth moving equipment would generate the highest vibration VdB levels, but would not involve pile driving or other activities associated with heavy grading. Further, the addition of heavy vehicle traffic at and around the project site will create on-road truck vibration; however this type of vibration is not typically perceptible by humans.

The State CEQA Guidelines do not define the levels at which groundborne vibration or groundborne noise are considered “excessive.” In addition, the City of San Dimas has not adopted any thresholds for groundbone vibration impacts. Therefore, the norm is to use the Federal Transit Administration’s (FTA) vibration impact thresholds for sentive buildings, residences, and institutional land uses under conditions where there are an infrequent number of events per day. Thus, in accordance with the vibration impact thresholds of the FTA, a significant impact may occur if the Proposed Project generates groundborne vibration levels at or exceeding 80VdB at residences where people normally sleep.

Construction activities that would occur on the Project Site may have the potential to generate low levels of groundborne vibration. Table 16, Vibration Source Levels for construction Equipment, identifies various vibration velocity levels for construction equipment that may operate during construction of the Proposed Project.

Table 19

Vibration Source Levels for Construction Equipment

Construction Equipment	Approximate VdB at 25 feet
Large Bulldozer	87
Loaded Trucks	86
Pneumatic Tools	80
Jackhammer	79
Small Bulldozer	58

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

The nearest off-site residential structure is directly adjacent to the project site where occasional heavy equipment activity would occur. Construction activities are expected to produce negligible vibration between .003 and 0.089 inches per second at adjacent receptors, far below the significance threshold of 0.5 inches per second. Based on a distance of about 25 feet from vibration-generating equipment, construction vibration levels would be approximately 87 VdB at the closest portions of the site adjacent residential uses. Overall, the adjacent residences would be exposed to vibration levels that exceed the identified threshold of 80 VdB for buildings where people would normally sleep. However, the construction associated vibration levels would vary according to the phase of construction and would be limited to the daytime hours between 7:00 am and 8:00 pm in accordance with Chapter 8.36 of the San Dimas Municipal code. As such, vibration generated from construction activities would not occur during recognized sleep hours. Therefore, construction vibrations impacts of the proposed project on residential uses would be less than significant. No further analysis is necessary.

Operational Impacts

During operation of the proposed project, there would not be significant stationary sources of ground-borne vibration, such as the use of heavy equipment. Most operational ground-borne vibration in the project vicinity would be generated by vehicular travel on the local roadways, however, project-related traffic vibration levels would not be perceptible by sensitive receptors. Thus, operational vibration impacts would be considered less-than-significant. No further analysis is required.

- c) **Less than significant.** Vehicles traveling to and from the project site could generate long-term noise impacts. As discussed in 12 (a) above, off-site noise generated by traffic from the project was modeled under 2018 no project and with project conditions utilizing the FHWA TNM 2.5 model. When calculating the projected traffic noise levels on the surrounding roadways, twelve potential proposed projects were considered (some outside the City's limits).

The proposed project would increase off-site noise levels on the surrounding roadways. However, as indicated on the tables above **Table 15-17**, the roadway noise increase would be negligible (1.8 db (A) L_{eq}) and would be less than 5 dB(a) significance threshold. No further analysis is required.

- d) **Less than significant with mitigation incorporated.** Construction of the proposed project would contribute to cumulative construction noise levels. There are twelve proposed and/or planned projects that could cause an increase in ambient noise at nearby sensitive receptors if construction of the projects (including the proposed project) were to occur simultaneously.

However, each of these projects would be subject to the City's Noise Ordinance (Chapter 8.36), which limits the hours of allowable construction activities. With incorporation of **MM-NOI-1**, through **MM-NOI-4** the proposed project's cumulative construction noise impact would be considered less than significant. No further analysis is required.

- e) **No Impact.** The proposed project is located over 2 miles southeast of the Project Area. The Project Area is located within the bracket Field Airport Influence Area, but is not within the airport's noise contours. There, the proposed project would not expose people in the Project Area to excessive noise levels associated with airports. No impacts would occur, and no further analysis is required.

- f) **No Impact.** The Project Area is not located in the vicinity of a private airstrip. Therefore, the proposed Project Area would not expose people working in the project area to excessive noise levels associated with a private airstrip. No impacts would occur, and no further analysis is required.

Sensitive Land Uses

Noise sensitive land uses are generally defined to include: places where people sleep, such as residences, hospitals, and hotels; institutional land uses where it is important to avoid interference with speech or reading, including schools, libraries, and churches; and outdoor areas where quiet is fundamental to its specific use (i.e. amphitheaters and National Parks). The closest noise sensitive land uses to the Project Area are the single-family residences, the closest of which is approximately 30 feet west of the project boundary. In addition, Chaparral High School is approximately 90 feet north of the Project Area across Allen Avenue. Construction and operation of the proposed project has the potential to impact these sensitive receivers.

Mitigation Measures

The following mitigation measures are required to reduce potential impacts related to construction noise to a less than significant level.

MM-NOI-1 Construction staging areas for each project site shall be as far from sensitive receptors as possible.

MM-NOI-2 All construction equipment shall be stored on the project site during the construction phase to eliminate daily heavy-duty truck trips on vicinity roadways.

MM-NOI-3 All powered construction equipment shall be equipped with exhaust mufflers or other suitable noise reduction devices.

MM-NOI-4 The project shall comply with the San Dimas Municipal Code Noise Ordinance Chapter 8.36.

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13. POPULATION AND HOUSING. <i>Would the project:</i>			✓	
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			✓	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			✓	
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?			✓	

Responses:

a) **Less than significant impact.** The Southern California Association of Governments (SCAG) is a federally designated metropolitan planning organization for the Southern California region. The project site is located within the six-county jurisdiction of SCAG, which includes Los Angeles, Orange, Riverside, San Bernardino, Imperial, and Ventura counties. One of SCAG’s primary functions is to forecast population, housing, and employment growth for each region, subregion, and city. The latest forecast was completed as part of the 2012–2035 Regional Transportation Plan (RTP) update, which was adopted in April 2012. The project site is located in the San Gabriel Valley Council of Governments (SGVCOG) subregion, which encompasses several cities within the San Gabriel Valley as well as the unincorporated Los Angeles County area of the valley. The population of San Dimas totaled 34,144 in 2016,¹⁸ and is projected to total 35,000 in 2020, and 35,600 in 2035, a 4.2 percent increase over 2016 totals.¹⁹ The number of households

¹⁸ California Department of Finance, E-5 City/County Population and Housing Estimates, 2016.

¹⁹ Southern California Association of Governments, “SCAG Existing Housing Needs Data Report,” <http://rtpscs.scag.ca.gov/pages/viewReport.aspx>.

in San Dimas totaled 12,779 in 2016,²⁰ and is projected to total 12,600 in 2020, and 12,900 in 2035, a 0.94 percent increase over 2016 totals.²¹

Based on 2.79 residents per unit (the approximate number for San Dimas based on 2016 population data), the net resident growth of the Project Area would be 218 residents (78 homes x 2.79 residents/home). Therefore, project population generation would account for approximately 25 percent of the expected population increase of 1,456 residents from 2016 to 2035 (the data for the closest year to project buildout) in the City of San Dimas. This increase is a small percentage of the growth anticipated by 2035 and is accounted for within the 2035 San Dimas projections of 35,600 residents. For this reason, the project is consistent with growth projections and would not directly induce population growth that is substantially higher than expected population growth in the area.

Based on 2.79 residents per unit, the net resident growth of the Oak Valley Subdivision with an addition of 28 residential parcels would be 78 (28 homes x 2.79 residents/home). Therefore, project population generation would account for approximately 9.1 percent of the expected population increase of 856 residents from 2016 to 2020 (the data for the closest year to project buildout) in the City of San Dimas. This increase is a small percentage of the growth anticipated by 2020 and is accounted for within the 2020 San Dimas projections of 35,000 residents. For this reason, the project is consistent with growth projections and would not directly induce population growth that is substantially higher than expected population growth in the area. Therefore, the impact would be less than significant and no further analysis is required.

- b) **Less than significant impact.** The Project Area is being rezone to allow a higher density. Currently, the General Plan Land Use Designation is Single Family Very Low with a zone classification of Single Family Agriculture (SF-A). The new land use classification will allow a higher density by reducing the minimum lot size to 7,500 square feet.

The Oak Valley subdivision project site currently contains two single-family residences and accessory structures which would be demolished. The property owner of the Oak Valley subdivision intends to secure entitlements in the near future for the development of 28 single-family homes. As the subdivision and proposed rezoning envisions residential uses, no replacement housing would need to be constructed elsewhere. The California Department of Finance estimates a 2016 vacancy rate of 5.8 percent for the City of San Dimas.²² Therefore, residents displaced as a result of the proposed project would be able to find housing within the City. Consequently, impact associated with displacement of housing would be less than significant. No further analysis is required.

- c) **Less than significant impact.** The project site currently contains two single-family residences that are currently occupied. The occupants of the units would be required to find new housing. As the proposed project consists of residential uses, no replacement housing would need to be constructed elsewhere in order to accommodate the displaced. As discussed previously, the

²⁰ California Department of Finance, E-5 City/County Population and Housing Estimates, 2016.

²¹ Southern California Association of Governments, "SCAG Existing Housing Needs Data Report," <http://rtpscs.scag.ca.gov/pages/viewReport.aspx>.

²² California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011–2016.

City’s estimated 2016 housing vacancy rate means that other residential units would be available for displaced residents. Consequently, impacts associated with the displacement of people would be less than significant. No further analysis is necessary.

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14. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: a) Fire protection?			✓	
b) Police protection?			✓	
c) Schools?			✓	
d) Parks?			✓	
e) Other public facilities?			✓	

Responses:

- a) **Less than significant impact.** Fire protection is provided in the City of San Dimas by the Los Angeles County Fire Department. The project will be served by fire station #64 located at 164 S. Walnut Avenue and located approximately one mile south of the Project Area. While the rezoning of the 27.41 acres will incrementally increase the demand for fire protection services with the future development of the project areas, all new construction will be in compliance with building and fire codes in place at the time of plan check for any new homes that will minimize and not significantly increase the demand for fire services. As such, the rezoning of the project and envisioned number of units (up to 78 new single family homes) will not require the construction of new fire facilities or alteration to the existing facilities to serve the project. The project will not have a significant fire protection impacts. No further analysis is necessary.

- b) **Less than significant impact.** Police protection is provided in the City of San Dimas by the Los Angeles County Sheriff Department. The future growth of the area will be served by the sheriff station located at 270 S. Walnut Avenue and located approximately one mile south of the Project Area. While the project will incrementally increase the demand for police protection services with the construction of up to 78 single-family dwelling units, the future growth anticipated in conjunction with the rezoning of the area will not significantly increase the need

for increased police protection and service calls to cause a decline in the existing levels of police protection services. No further analysis is necessary.

c) **Less than significant impact.** The project will be served by the Bonita Unified School District. The Project Area is estimated to generate approximately 55 students.²³ It is anticipated that 20 of the 55 additional students that would be served by the School District would be generated by the Oak Valley subdivision. Developers would also be required to pay school impact fees. The school impact fee adopted by the Bonita Unified School District for Fiscal Year 2016-2017 is \$3.48 per square foot for residential development. The developer will be required to pay the required impact fee prior to the issuance of a building permit by the City. Payment of fees is considered full mitigation to reduce this impact. Therefore, with the payment of appropriate fees, impact would be less than significant. No further analysis is necessary.

d) **Less than significant impact.** The City of San Dimas Parks and Recreation Department manages park facilities and provides recreation programs to City residents. Currently there are 11 developed neighborhood parks and two developed community parks that have a total of 38.96 and 137.50 acres of park space, respectively. The Swim and Racquet Club, located at 990 W. Covina Blvd., is 2.5 miles southwest of the proposed project site. The Swim and Racquet Club provide competition and training swimming pool, indoor hardwood racquetball courts, fitness services weight room, fitness service at an affordable rate.

Horsethief Canyon Park is located 301 Horsethief Canyon Road, approximately 2.2 miles northwest of the project site. The 110 acres park includes a barbeque area, picnic tables, shade structures, dog park, playground, walking path and multi-purpose hiking trails.²⁴ The increase in population as a result of the Project Area project is not anticipated to negatively impact the use of nearby parks or facilities. As such the rezoning of the Project Area with single family dwelling units will not require the construction of any new park or recreational facilities. In addition, any future development within the Project Area, including the Oak Valley Subdivision, will be required to pay city park development and a Quimby fee to offset any potential impacts to existing services. Therefore impact would be less than significant. No further analysis is necessary.

e) **Less than significant impact.** The proposed rezoning of the Project Area can allow for the future construction of up to 78 single family dwelling units. There is one library in San Dimas, the San Dimas Library, operated by the County of Los Angeles Public Library. The San Dimas Library is 1.3 miles southeast of the proposed Project Area. This increase in population would represent a minimal increase in population and therefore any impacts to other facilities such as libraries would be less than significant and no further analysis is required.

²³ Telephone conversation with Ann Sparks, Assistant Superintendent, Business Service for Bonita Unified School District on June 6, 2016.

²⁴ San Dimas General Plan Open Space Element, 1990.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
15. RECREATION. <i>Would the project:</i> a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?			✓	

Responses:

a-b) Less than significant impact. Refer to **Section 14 - Public Services**, above. The proposed rezoning would allow the construction of up to 78 new single-family residences. As discussed above, the small increase the project would represent not substantially increase demand on local parks. Therefore, impacts to existing neighborhood and regional parks would be less than significant. No further analysis is necessary.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>16. TRANSPORTATION/TRAFFIC. <i>Would the project:</i></p> <p>a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? Examples of conflict include, but are not limited to, an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).</p>			✓	
<p>b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?</p>			✓	
<p>c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?</p>				✓
<p>d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</p>			✓	
<p>e) Result in inadequate emergency access?</p>				✓
<p>f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?</p>				✓

Responses:

- a) **Less than significant impact.** A traffic study was prepared for the proposed project by Linscott Law and Greenspan Engineers). The analysis is attached to this Initial Study as **Appendix B** and is summarized below. The following three intersections were analyzed to determine if the proposed project would result in a potentially significant traffic impact:

1. Cataract Avenue/Allen Avenue
2. San Dimas Avenue/Allen Avenue
3. San Dimas Avenue/Gladstone Street

Existing Conditions

Manual intersection counts at these five intersections were performed in the fall of 2015, during the 7:00 AM to 9:00 AM and 4:00 PM. to 6:00 PM peak periods. The results of the counts were used to determine existing AM and PM peak-hour traffic conditions. The existing levels of service were calculated based on the traffic count levels and intersection geometrics.

In accordance with the City of San Dimas practices, the Intersection Capacity Utilization (ICU) methodology was applied to determine the level of services (LOS) for signalized intersections, and the LOS for unsignalized intersections was calculated using the Highway Capacity Manual (HCM) methodology.

The ICU method compares existing or future projected traffic volumes at an intersection to the capacity of the intersection to produce a volume-to-capacity (v/c) ratio, which in turn determines LOS. The ICU method uses traffic volume-to-roadway capacity (v/c) ratios to determine level-of service. ICU level of service ranges are shown in **Table 20** below.

Study area intersections that are stop-sign-controlled with stop control on the minor street only have been analyzed using the unsignalized intersection methodology of the Highway Capacity Manual (HCM). The HCM method LOS is dependent on the occurrence of gaps occurring in the traffic flow of the main street. The HCM method uses traffic volume and intersection configuration data, which in turn determines LOS. The LOS is determined based on the worst individual movement or movements sharing a single lane. The level of service is determined based on the worst individual movement or movements sharing a single lane. The relationship between the level of service and delay is different than for signalized intersections. **Table 21** provides LOS values for the HCM method. Traffic flow ranges from excellent conditions at LOS A to overloaded conditions at LOS F for both methods.

Table 20
ICU Level of Service Ranges

LOS	Critical Volume to Capacity Ratio
A	0.00 - 0.60
B	0.61 - 0.70
C	0.71 - 0.80
D	0.81 - 0.90
E	0.91 - 1.00
F	>1.00

Table 21
LOS Values for the HCM Method

LOS	Average Control Delay Per Vehicle (seconds)	
	Signalized	Unsignalized
A	0.00-10.00	0.00-10.00
B	10.01-20.00	10.01-15.00
C	20.01-35.00	15.01-25.00
D	35.01-55.00	25.01-35.00
E	55.01-80.00	35.01-50.00
F	>80.01	>50.01

The City of San Dimas traffic analysis guidelines define “significant” project traffic impact as an increase of 2 percent or more in the volume-to-capacity (v/c) ratio if it results in a LOS F at the studied intersection. **Table 22**, Intersection Level of Service (LOS) Summary, indicates the existing LOS at the three study intersections. For Project Buildout (Year 2020) Without Project traffic conditions, all three intersections are projected to operate at acceptable LOS during the peak hours with the exception of the intersection of San Dimas Avenue and Gladstone Street, which is projected to operate at an unacceptable LOS during peak hours.

Table 23, Intersection Level of Service (LOS) Summary, indicates the traffic conditions, all three intersection are projected to operate at acceptable LOS during the peak hours with the exception of San Dimas Avenue and Gladstone Street, which is projected to operate an unacceptable LOS during peak hours. However, the intersection of San Dimas Avenue and Gladstone is anticipated to operate at LOS E with or without subdivision due to growth in the area, which includes development within the surrounding communities.

Project Trip Generation

The number of trips generated by the proposed project was based upon the Institute of Transportation Engineers *Trip Generation Manual, 9th Edition*. Trip rates for Single Family Detached Housing (ITE Land Use Code 210) were utilized to calculate the trip generation for the proposed project uses. See **Table 24** below for a summary of trip generation factors and distribution. The project at buildout with a total of 78 units would generate approximately 59 AM peak hour trips and 78 PM peak hour trips. The Oak Valley subdivision at buildout would generate approximately 21 AM peak hour trips and 28 PM peak hour trips.

Table 22
Intersection Level of Service Summary

Study Intersection	Peak Hour	Existing Conditions (2016)		Future 2018 Without Project		Future 2018 With Project		Change in ICU/HCM	Sig Impact?
		ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS		
1 Cataract Avenue/Allen Avenue	AM	0.289	B	0.295	B	0.305	B	0.010	No
	PM	0.357	B	0.365	B	0.380	B	0.015	No
2 San Dimas Avenue/Allen Avenue	AM	0.546	A	0.560	A	0.567	A	0.007	No
	PM	0.607	B	0.624	B	0.630	B	0.006	No
3 San Dimas Avenue/Gladstone Street	AM	0.626	B	0.643	B	0.005	B	0.012	No
	PM	0.972	E	1.00	F	0.010	E	0.001	No

Source: Traffic Study by Linscott Law & Greenspan Engineers, March 23, 2016

Unsignalized intersection. The average delay and corresponding LOS are shown for the most constrained movement.

Significant impact if the project increases the V/C ratio by greater than 0.01 and the LOS is E or F.

Table 23
Intersection Level of Service Summary

Study Intersection	Peak Hour	Existing Conditions (2016)		Future 2035 Without Project		Future 2035 With Project		Change in ICU/HCM	Sig Impact?[c]
		ICU/HCM	LOS[b]	ICU/HCM	LOS	ICU/HCM	LOS		
1 Cataract Avenue/Allen Avenue [a]	AM	0.289	B	0.319	B	0.329	B	0.010	No
	PM	0.357	B	0.398	B	0.413	B	0.015	No
2 San Dimas Avenue/Allen Avenue	AM	0.546	A	0.617	B	0.624	B	0.007	No
	PM	0.607	B	0.688	B	0.695	C	0.007	No

Study Intersection	Peak Hour	Existing Conditions (2016)		Future 2035 Without Project		Future 2035 With Project		Change in ICU/HCM	Sig Impact?[c]
		ICU/HCM	LOS[b]	ICU/HCM	LOS	ICU/HCM	LOS		
3 San Dimas Avenue/Gladstone Street	AM	0.626	B	0.710	C	0.715	C	0.005	No
	PM	0.972	E	1.112	F	1.036	F	-0.076	Yes

- [a] Unsignalized intersection. The average delay and corresponding LOS are shown for the most constrained movement.
 [b] Level of Service (LOS) is based on the reported ICU value for the signalized intersection and the delay value for the unsignalized intersection.
 [c] Considered a significant impact if the project increases the V/C ratio by greater than 0.01 and the LOS is E or F.

Source: Traffic Study by Linscott Law & Greenspan Engineers, March 23, 2016
 Unsignalized intersection. The average delay and corresponding LOS are shown for the most constrained movement.
 Significant impact if the project increases the V/C ratio by greater than 0.01 and the LOS is E or F.

Table 24
Trip Generation Summary [1]

Land Use	Intensity	Daily Trip Volume[2]	AM Peak [2]			PM Peak [2]		
			In	Out	Total	In	Out	Total
Oak Valley Subdivision Single-Family Detached Housing	28	266	5	16	21	21	10	28
Adjacent Parcel Development Single-Family Detached Housing Capacity[3]	50	476	10	28	38	32	18	50
Total	78	742	15	44	59	50	28	78

- [1] Source: ITE "Trip Generation Manual", 9th Edition, 2012
 [2] Trips are one-way traffic movements, entering or leaving.
 [3] ITE land Use Code 210 (Single family Detached Housing) trip generation rates
 - Daily Trip Rate: 9.52 trips/dwelling units, 50 % inbound/50% outbound
 - AM Peak Hour Trip Rate: 0.75 trips/dwelling unit, 25% inbound/75% outbound
 - PM Peak Hour Trip Rate: 1.00 trip/dwelling unit; 63% inbound/37% outbound
 Source: Traffic Study by Linscott Law & Greenspan Engineers, March 23, 2016

Table 22, Intersection Level of Service Summary, shows the Future 2018 With Project LOS at the three study intersections. As shown, two out of the intersections would continue to operate

at acceptable levels of service with the proposed project, except at San Dimas Avenue and Gladstone Avenue. The project would cause an increase of 0.066 percent in the v/c ratio at the intersection of San Dimas Avenue and Gladstone Street Avenue, well below the City’s threshold of 2 percent. Therefore, the proposed project would not result in a significant traffic impact. No further study is required.

b) Less than significant impact. The Congestion Management Program (CMP) was created statewide as a result of Proposition 111 in 1990 and has been implemented locally by the Los Angeles County Metropolitan Transportation Authority (LACMTA). As detailed in the "Congestion Management Program for Los Angeles County," CMP analysis is a required provision for a traffic impact study if the geographic area examined in the study includes the following:

- All CMP arterial monitoring intersections, including monitored freeway on or off ramp intersections, where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours (of adjacent street traffic).
- If CMP arterial segments are being analyzed rather than intersections, the study area must include all segments where the proposed project will add 50 or more peak hour trips (total of both directions). Within the study area, the traffic impact analysis must analyze at least one segment between monitored CMP intersections.
- Mainline freeway monitoring locations where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

Table 25
CMP Intersection Monitoring Locations

CMP Station	Freeway Monitoring	Intersection Monitoring
No. 1063	I-210 at San Dimas Avenue	
No. 30		Baseline Road/Foothill Boulevard
No. 132		Arrow Highway

According to the project trip generation and trip distribution estimates, the proposed project would add fewer than 150 peak hour trips to any freeway and fewer than 50 peak hour trips to any CMP arterial monitoring intersection as shown on **Table 25**.²⁵ Based on the project trip distribution assignment the trip generation shown in **Table 24**, the project is forecast to generate at most five (5) trips during the PM peak hour to the Baseline Road/Foothill Boulevard intersection and at most eight (8) trips during the PM hour to the Arrow Highway/San Dimas Avenue intersection. Therefore, CMP freeway and arterial intersection analyses are not required and no significant CMP impact is identified. No further analysis is needed.

²⁵ Linscott, Law & Grenspan, Engineers, *Traffic Impact Study*, (2016), pages 57-58.

- c) **No Impact.** The uses proposed by the project are not associated with a substantial increase in air traffic. The project is not located within an airport safety zone nor does the project propose any structure that will conflict with air traffic patterns. No impact will occur and no further analysis is needed.
- d) **Less than significant impact.** Access to the project site would be provided via a public street off San Dimas Avenue. The new public street will be constructed to standard widths (minimum 50 foot wide). The width of the new street will be adequate to accommodate emergency vehicles access. The impact would be less than significant and no further study is required.
- e) **Less than significant impact.** The project is not anticipated to interfere with an emergency response plan or evacuation plan. The project would be developed in consultation with the Fire Department and will comply with all applicable access standards during construction and operation. Therefore, the impact would be less than significant and no further study is required.
- f) **Less than significant impact.** The project proposes the rezoning of 27.41 acres that would allow construction of up to 78 single-family detached dwelling units. Future dwelling units will need to comply with the development standards as set forth in the San Dimas Municipal Code that requires a minimum of two enclosed garage spaces, a 5-foot side yard and twelve-foot side yard setback on the closest side of the driveway. Therefore, the impact related to parking would be less than significant and no further study is required.
- g) **Less than significant impact.** The project site is located within an urbanized area that is served by bus transit lines operated by the Foothill Transit. The City provides three (3) Park and Ride locations to facilitate the use of public transportation. Construction and implementation of the proposed project would not interfere with nearby bus facilities or other alternative transportation policies. The impact related to alternative transportation would be less than significant and no further study is required.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
17. UTILITIES AND SERVICE SYSTEMS. <i>Would the project:</i>			✓	
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			✓	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	

c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			✓	
e)	Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			✓	
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			✓	
g)	Comply with Federal, State, and local statutes and regulations related to solid waste?			✓	

Responses

- a) **Less than significant impact.** Wastewater from the City of San Dimas is treated at the Sanitation Districts of Los Angeles County San Jose Creek Wastewater Reclamation Plant (WRP) near the City of Whittier. The WRP has been designed to treat typical wastewater effluent generated by residential uses, up to 100 million gallons of wastewater per day. The project would generate wastewater effluent typical of residential uses. Therefore, the proposed project would not generate wastewater that would exceed the wastewater treatment requirements of the Regional Water Quality Control Board. The anticipated impact would be less than significant and no further study is needed.
- b) **Less than significant impact.** The project site will be served by an existing wastewater treatment facility with capacity to serve the proposed project. All private infrastructure improvements shall be funded entirely by the project applicant as well as the payment of applicable fees to the City of San Dimas and/or other agencies due to connection and/or capacity expansion fees. Therefore, all necessary infrastructure and utilities are available to support the project.

Water:

Water will be supplied to the Project Area by Golden State Water Company (GSWC), which is a subsidiary water supplier of the American States Water Company. Located in Los Angeles County at the foothills of the San Gabriel Mountains, the San Dimas System serves the City of San Dimas, portions of the cities of La Verne, Walnut, Covina and a portion of the adjacent unincorporated area of Los Angeles County. The service area is primarily characterized by residential land use, with some commercial and industrial land use. The GSWC obtains its water supply for the San Dimas System from local groundwater from the Main San Gabriel Groundwater Basin, purchased water from the Three Valley Municipal Water District (TVMWD), and local surface water from the Covina Irrigating Company (CIC). TVMWD obtains its imported

water supply from the Metropolitan Water District of Southern California (Metropolitan). The CIC diverts surface water from the San Gabriel River. In addition, CSWC also diverts surface water from San Dimas Canyon Creek for use as golf course irrigation

The California Urban Water Management Planning Act (California Water Code Division 6, Part 2.6, Sections 10610–10656) requires every municipal water supplier who serves more than 3,000 customers or provides more than 3,000 acre-feet per year (afy) of water to prepare an Urban Water Management Plan (UWMP). In the UWMP, the water supplier must describe the water supply projects and programs that may be undertaken to meet the total water use of the service area. An UWMP must be developed every five years to identify short-term and long-term water demand management measures to meet growing water demands during normal, dry, and multiple-dry years. The UWMP develops projections of demand based on population estimates provided by the areas served. The project's population is within SCAG's growth forecast for the City of San Dimas which is also used as the growth parameters considered within the UWMP.

The average monthly water usage of residential customers with a 5/8 x 3/4 meter in the San Dimas Customer Service Area is 12 Ccf, the equivalent of 1,200 cubic feet or 8,976 gallons. The average water bill for a metered customer is currently \$48.16, excluding any applicable temporary credits or surcharges.²⁶ The water usage of for the 78 dwelling units would increase water demand by approximately 93,600 cubic feet or 700,128 gallons. The proposed project would be served by an 8-inch water line for both domestic and fire service.

Water delivered to customers is a blend of groundwater pumped from the Main San Gabriel Basin and purchased water from the Three Valley Municipal Water District (TVMWD) and Covina Irrigating Company (CIC).

GSCW anticipates limited growth in water demand due to the built out nature of its service areas, and assumes water demand will be generally consistent as most opportunities for development would be infill projects similar to the proposed project. The TVMWD, in conjunction with GSCW and other TVMWD customers, has planned water supply project to increase reliability within its service area.

The TVMWD's 2010 Urban Water Management Plan (UWMP) finds that the region is continuing to improve its water reliability by designing programs to protect and ensure water quality, maximize local supplies (local groundwater, surface water, and recycled water), promote conservation increase storage capacity, encourage recycled water use and meet its demands during shortages. TVMWD's 2010 UWMP suggests that TVMW has a water service plan that will provide 100 percent reliability to its customers for the next 25 years²⁷. Therefore, anticipated impacts would be less than significant and no further analysis is needed.

Wastewater:

As described above, project implementation would add new residential land uses to the project site. The proposed new uses would generate approximately 20,280 gallons of wastewater per

²⁶ <http://www.gswater.com/san-dimas/> accessed on June 24, 2016.

²⁷ 2010 Urban Water Management Plan – San Dimas Golden State Water Company

day.²⁸ The San Jose Creek WRP currently operates at approximately 63.3 percent of capacity²⁹. In addition, wastewater lines in the vicinity of the project site have sufficient capacity to transport the wastewater generated by the proposed project. Therefore, because the wastewater treatment provider has adequate capacity to meet the anticipated project demand in addition to existing demand, no new wastewater treatment facilities or expansion of existing wastewater treatment facilities would be necessary.

Facilities required to provide the necessary sanitary services shall be provided by the applicant or future developer. The project will convey wastewater through a proposed 8-inch sewer lines and 4-inch laterals, which will be maintained by the City upon acceptance. The 8-inch sewer line will connect into a 15-inch Trunk sewer line that is maintained by the Los Angeles County Sanitation District. Additionally, the Oak Valley Subdivision proposes to reroute the 15-inch trunk sewer on the east side of the subdivision. The applicant for the subdivision will be required to design the rerouting of the sewer to accept all current and future planned flows, grant the necessary easements, and construct the new Trunk Sewer portion in accordance with Los Angeles County Sanitation District Standards.

- c) **Less than significant impact.** Following buildout at the Project Area, the area would be covered almost entirely with pervious surfaces, with the exception of landscaped areas. The Oak Valley Subdivision would be required to reroute the existing storm drain system and channel across the subdivision. The applicant for the subdivision will be required to design the rerouting of the storm drain to accept all current and future planned flows, grant the necessary easement, and construct the new storm drain system in accordance with City of San Dimas and Los Angeles County standards. Upon acceptance, the public storm drain system will be accepted for maintenance by the City. Additionally, the applicant proposes to build a private storm drain system that will treat onsite water and prevent hydromodification of the downstream channel. In addition, the project would comply with all applicable water quality standards and waste discharge requirements. Consequently, the impact of the proposed project on storm water drainage facilities would be less than significant. No further analysis is required.
- d) **Less than significant impact.** Senate Bill 221 and Senate Bill 610 amended existing California law regarding land use planning and water supply availability by requiring more information and assurance of supply than is currently required in an UWMP. As of January 1, 2002, California law requires water retail providers, like the Golden State Water Company, to demonstrate that sufficient and reliable supplies are available to serve large-scale developments (i.e., 500 dwelling units, 500,000 square feet of commercial space, or a project that would increase the number of the public water system's existing service connections by 10%) prior to completion of the environmental review process and approval of such large-scale projects.

Under SB 610, it is the responsibility of the water service provider to prepare a Water Supply Assessment requested by a City or County for any "project" defined by Section 10912 of the Water Code that is subject to CEQA. Section 10912 of the Water Code defines a "project" as

- a proposed residential development of more than 500 dwelling units;

²⁸ Based on a wastewater generation rate of 260 gal/dwelling unit. Source: Sanitation Districts of Los Angeles County and City of Los Angeles Sewage Generation Factors.

²⁹ Sanitation Districts of Los Angeles County, telephone conversation with Ed Stewart, P.E., June 28, 2016.

- a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- a proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- a proposed hotel or motel, or both, having more than 500 rooms;
- a proposed industrial, manufacturing or processing plant, or industrial park, planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor space;
- a proposed mixed-use project that includes one or more of the previously listed projects; or
- a proposed project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling-unit project.

The proposed project would not meet any of the criteria resulting in the need for a water supply assessment; therefore, no Water Supply Assessment is needed. For these reasons, implementation of the proposed project would have a less than significant impact associated with water demand. No further analysis is required.

- e) **Less than significant impact.** In 1989, the State of California passed the California Integrated Waste Management Act (CIWMA) in response to reduced landfill capacity. This legislation (generally known by the name of the enacting bill AB 939) required cities and counties to reduce the amount of solid wastes entering existing landfills, through recycling, reuse and waste prevention efforts. AB 939 required every city and county in the state to prepare a Source Reduction and Recycling Element to its Solid Waste Management Plan that identified how each jurisdiction would meet the mandatory state waste diversion goals of 25 percent by the year 1995 and 50 percent by the year 2000. On June 30, 2008, the State Assembly amended Senate Bill 1252 to include further waste diversion goals of 60 percent by the year 2015 and 75 percent by the year 2025.³⁰ The purpose of AB 939 was to “reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible.” In 2006, the City of San Dimas diverted 73 percent of waste generated within the City from landfills.³¹ Solid waste service in the City of San Dimas is provided by Waste Management. After collection, the waste goes to the Waste Management Materials Recovery Facility for separation of recyclable materials before the solid waste is transferred to a nearby contracted landfill.

Construction of the proposed project would generate minimal amounts of construction and demolition debris. Waste materials generated during construction are expected to be typical construction debris, including concrete, stucco, asphalt, rocks, building materials, wood, paper, glass, plastic, metals, cardboard, and other inert wastes (i.e., wastes that are not likely to

³⁰ CWIMB, *Senate Bill 1252 Amendment*, June 30, 2008.

³¹ California Department of Resources Recycling and Recovery
<http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionDetail.aspx?JurisdictionID=436&Year=2006>, accessed June 28, 2016.

produce leachates of environmental concern), as well as green wastes. To meet the stringent State of California (AB 939) diversions requirements, all new building projects are required to recycle 50% of all construction and demolition debris and inert materials which requires the applicant to provide proof of the recycling to the City's Building. Much of this debris would be recycled and salvaged to the greatest extent possible. Waste generated during demolition and construction that is not recycled would result in an incremental and intermittent increase in solid waste disposal at landfills and other waste disposal facilities generally within Los Angeles County. Given the sufficiency of available capacity, demolition and construction debris impacts to solid waste facilities would be less than significant. This additional solid waste represents a negligible fraction of the solid waste generated within the region and, therefore, would not significantly impact available landfill capacity. No further analysis is necessary.

The proposed new uses would generate approximately 174 tons per year of refuse.³² This quantity represents a worst-case scenario, with no recycling activities in place. The City has contracted with Waste Management to provide waste disposal services. Under Waste Management residential weekly trash service, the residents are provided with three different containers for household waste that include one 64 gallon black cart for household trash, one 96 gallon green or burgundy cart for green waste and one 64 gallon grey recycling cart for glass, plastic, and aluminum.

This process has increased the City's diversion rate and would result in the project meeting at least the minimum recycling level established by Los Angeles County in accordance with AB 939. Meeting the City of San Dimas 2006 recycling levels (73 percent, the most current rate available) would result in the project sending approximately 47 tons of waste to local landfills annually. This increase in demand represents a negligible fraction of the solid waste generated within the region and, therefore, would not significantly impact available landfill capacity. No further analysis is necessary.

- f) **Less than significant impact.** During construction and operation of the project, the project applicant would comply with all applicable City, County, and state solid waste diversion, reduction, and recycling mandates, including compliance with the City's Source Reduction and Recycling Element (SRRE) and the City of San Dimas Municipal Code. Compliance with these regulations and mandates would assist in reducing the amount of waste deposited in local landfills. Therefore, impacts related to regulatory compliance would be less than significant, and no further analysis is necessary.

³² Based upon a generation rate of 12.23 lbs/household/day for residential uses. Source: California Integrated Waste Management. Board Estimated Solid Waste Generation Rates for Residential Establishments. <http://www.calrecycle.ca.gov/wastechar/wastegenrates/Residential.htm>, accessed June 2, 2016

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
18. MANDATORY FINDINGS OF SIGNIFICANCE a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?		✓		
b) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?		✓		
c) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		✓		
d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		✓		

Responses:

- a) **Less than significant with mitigation incorporated.** Based on the preceding discussion, the project would neither degrade the quality of the environment nor affect any endangered fauna or flora. Because the Project Area is within a developed area, the rezoning of the 27.41 acres and Oak Valley Subdivision of 10.03 acres within the Project Area, it would not impact the habitat or population level of fish or wildlife species, nor would it threaten a plant or animal community, nor impact the range of a rare or endangered plant or animal. Trees to be removed as part of development of the area would need to be replaced at a ratio of 2:1. Potential impacts related to archaeological and paleontological resources would be reduced to less than significant levels with implementation of the required mitigation measures, and impacts related to potential historic resources would be less than significant. No further analysis is needed.

- b) **Less than significant with mitigation incorporated.** As indicated in the above analysis, project implementation would not result in significant environmental impacts with incorporation of mitigation measures. No potential for the project to achieve short-term, to the disadvantage of long-term, environmental goals has been identified. No further analysis is needed.
- c) **Less than significant with mitigation incorporated.** The project will have cumulative impacts, including increased noise, traffic and increased demand for public services and utilities. However, none of the cumulative impacts will be cumulatively considerable. Based on the preceding discussion, with implementation of the required mitigation measures, the proposed project would not result in any unmitigated significant adverse impacts. No impact would occur. No further analysis is needed.
- d) **Less than significant with mitigation incorporated.** As discussed in the above analyses for the project, with implementation of the required mitigation measures, the proposed project would not result in any unmitigated significant adverse impacts. Thus, the project would not have the potential to result in substantial adverse effect on human beings. No further analysis is needed.