4.9 NOISE

The County of Santa Barbara Comprehensive Plan Noise Element (1979) includes background information regarding noise and methods for measuring sound and the County's Environmental Thresholds and Guidelines Manual (Thresholds Manual) includes both background information and guidance regarding evaluation of noise impacts. These documents and the noise assessments prepared for the project are available for review as follows:

County Noise Element (2009), http://longrange.sbcountyplanning.org/programs/genplanreformat/PDFdocs/NoiseElement.pdf

County Environmental Thresholds and Guidelines (2015) http://www.sbcountyplanning.org/permitting/ldpp/auth_reg/documents/Environmental%20Thresho lds%20October%202008%20(Amended%20July%202015).pdf

45dB.com Acoustics Consulting, LLC (David Lord) Sound Level Assessment for Proposed OASIS Meeting Center (July 2016), OASIS EIR Appendix D-9 and County webpage for OASIS at <u>http://sbcountyplanning.org/projects/14GPA-00020Oasis/index.cfm</u>

45dB Acoustics, LLC (David Lord), Supplemental Analysis, (March 2017), OASIS EIR Appendix D-9, and County webpage for OASIS at http://sbcountyplanning.org/projects/14GPA-00020Oasis/index.cfm

OVERVIEW OF SOUND MEASUREMENT

The following are brief definitions of terminology used in the assessment of noise, taken from the project noise assessment (45dB.com, 2017):

- Sound: A disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.
- Noise: Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
- Decibel ("dB"): A unitless measure of sound on a logarithmic scale.
- A-Weighted Decibel ("dBA"). An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- Ambient Sound Level: The prevailing general sound level existing at a location or in a space, typically defined by the Leq level.
- Equivalent Continuous Noise Level ("Leq"). The mean of the noise level averaged over the measurement period, regarded as an average level.
- Day-Night Level ("Ldn"). The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the sound levels occurring during the period from 10:00 PM to 7:00 AM.
- Community Noise Equivalent Level ("CNEL"). The energy average of the A-weighted sound levels occurring during a 24-hour period with 5 dB added to the levels occurring during the period from 7:00 PM to 10:00 PM and 10 dB added to the sound levels occurring during the period from 10:00 PM to 7:00 AM.

Table 4.9-1 Decibel Changes, Loudness, Energy Loss			
Sound level change	Relative Loudness	Acoustic Energy Loss	
0 dBA	Reference	0%	
-3 dBA	Barely Perceptible Change	50%	
-5 dBA	Readily Perceptible Change	67%	
-10 dBA	Half as Loud	90%	
-20 dBA	1/4 as Loud	99%	
-30 dBA	1/8 as Loud	99.9%	

Table 4.9-1 below from the project noise assessment (45 dB.com Acoustic Consulting, July 2016) presents the subjective effect of changes in sound levels.

Source: Highway Traffic Noise Analysis and Abatement Policy and Guidance, U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning, Noise and Air Quality Branch, June 1995.

Noise level (or volume) measured in decibels (dB) using the A-weighted sound pressure level (dBA) is an adjustment to better reflect humans' response and sensitivity to sound. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dB changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

There are many variables that can affect noise attenuation, but noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources (e.g., industrial machinery). Other variables which can affect the reduction in noise levels between a noise source and a receptor include the presence/absence of intervening structures (e.g. buildings, sound walls, topographic features), elevation differences between a noise source and receptor, vegetation, weather (e.g., wind, humidity, temperature), and ground type (e.g., dirt, grass fields, concrete).

In addition to the actual instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time can be an annoyance and can cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, an averaged noise level). Typically, Leq is summed over a one-hour period.

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than noise that occurs during the day. Community noise is usually measured using Day-Night Average Level (Ldn), which is the 24-hour average noise level with a 10-dBA penalty for noise occurring during nighttime (10 p.m. to 7 a.m.) hours, or Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a 5 dBA penalty for noise occurring from 7 p.m. to 10 p.m. and a 10 dBA penalty for noise occurring from 10 p.m. to 7 a.m. Noise levels described by Ldn and CNEL usually do not differ by more than 1 dBA.

4.9.1 **PROJECT SETTING**

The majority of Key Site 18 (KS18), including the OASIS property, is currently undeveloped open space. The exceptions to this are the County Flood Control Basin and Southpoint Estates recreational amenities in the northwestern corner of KS18 and single family development in the northeast corner near Foxenwood Lane. As a result, noise generated onsite is limited to vehicles/equipment associated annual mowing of the grassland area and intermittent County Flood Control District and Laguna County Sanitation District maintenance activities in and along Orcutt Creek. The closest noise sensitive receptors are residents of the residential homesite in the northeast corner of the KS18 and of Southpoint Estates to the north, residents to the west along Gray Street, and residents to the south along Clark Avenue. The primary source of noise affecting KS18 is vehicle traffic on Highway 135. Noise is generated to a lesser extent by vehicle traffic along Clark Avenue and Foxenwood Lane and from the Santa Maria Municipal Airport, which is located approximately 2.33 miles northwest of the site. KS18 is located outside of the 60 dBA CNEL noise contour for the airport and there are only occasional aircraft overflights over the project site.

The applicant submitted two noise assessments prepared by David Lord of 45dB Acoustics Consulting, (*Sound Level Assessment for Proposed OASIS Meeting Center, Old Town Orcutt, CA, July, 2016* and a *Supplemental Analysis, March 2017*). These documents address the project setting, the proposed project, the regulatory setting, evaluation of the existing noise environment, assessment of potential short-term (construction-related) noise impacts, assessment of future potential noise impacts (operational impacts), and information on fundamentals of noise. The assessment also addresses related vibration effects.

CNEL day-night averaged/weighted noise levels were used to assess existing and potential future noise levels. Therefore intermittent noise levels would be both higher and lower than the averaged CNEL values listed. Measurement of existing average noise levels onsite were below 60 CNEL across the site, ranging from 47-49 CNEL just south of Orcutt Creek to 56-58 CNEL just north of Clark Avenue.

The sound level monitoring location is west of the proposed building. This location was selected by Mr. Lord to measure the existing noise sources impacting the vicinity of the project site and to provide a baseline for potential noise impacts from construction, development and operation of the proposed project. Recorded sound level data consist of average Leq 1 hour sound levels, dBA. Results of the measurement are shown in Figure 4.9-1. Existing hourly LEQ values were calculated from this measured data.



Figure 4.9-1 - Sound Contours with Traffic Noise (45dB.com 2016 report)

4.9.2 **REGULATORY SETTING**

Federal Regulation

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Promulgating noise emission standards for interstate commerce.
- Assisting state and local abatement efforts.
- Promoting noise education and research.

The Department of Transportation (DOT) assumed a significant role in noise control. The Federal Aviation Administration (FAA) regulates noise of aircraft and airports. Surface transportation system noise is regulated by the Federal Transit Administration (FTA). Freeways that are part of the interstate highway system are regulated by the Federal Highway Administration (FHWA).

STATE

<u>California Department of Health Services Office of Noise Control (ONC)</u>: The ONC has developed regulatory tools to control and abate noise, for use by local agencies.

<u>California Administrative Code, Title 24, Chapter 1, Article 4 of the (California Noise Insulation Standards)</u>: Noise insulation is required for development involving many noise sensitive land uses to reduce indoor noise levels to no more than 45 dBA CNEL.

<u>California Administrative Code, Title 21, Chapter 6, Article 1</u>: This section requires all habitable rooms to have an interior 45 dBA CNEL or less due to aircraft noise.

<u>Government Code Section 65302</u>: The legislative body of each city and county in California is required to adopt a noise element as part of its comprehensive general plan. In addition, the local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable.

LOCAL

<u>Santa Barbara County Comprehensive Plan Noise Element (1979</u>). The County Noise Element policies establish both interior and exterior noise limits for noise compatibility. For noise sensitive land uses, the noise level standard for outdoor activity areas is 65 dBA CNEL. A maximum noise exposure for indoor areas is not to exceed 45 dBA CNEL.

<u>Santa Barbara County Code</u>: The County Code includes restrictions on work with tools, appliances or equipment between the hours of 10:00PM to 7:00 AM that produce noise levels that would "*disturb the sleep or repose of occupants of the neighboring property… which is clearly discernible at a distance of one hundred feet from the property line of the property upon which it is broadcast or which is at any level of sound in excess of sixty decibels at the edge of the property line of the property upon which the sound is broadcast…".*

<u>County of Santa Barbara Environmental Thresholds and Guidelines Manual (March, 2018):</u> In addition to identification of thresholds of significance for determining noise impacts, the Thresholds Manual requires construction within 1,600 feet of sensitive receptors to be limited to weekdays between the hours of 8:00 A.M. and 5:00 P.M, to mitigate construction noise impacts.

<u>County of Santa Barbara, Orcutt Community Plan</u>: Community-specific restrictions for construction noise are identified in DevStd NSE-O-2.1 which limits standard construction working hours to 7:00 AM to 4:00 PM, Monday through Friday, with flexibility to allow extended hours during on a case-by case basis.

4.9.3 ORCUTT COMMUNITY PLAN (OCP) ENVIRONMENTAL REVIEW

OCP EIR Volume I identifies general noise impacts associated with buildout under the OCP. The Mini-EIR for KS18 in OCP Volume II identifies noise impacts from development of KS18 under OCP buildout assumptions. (OCP buildout assumed residential use in the northeast corner near Foxenwood Lane, commercial development along Clark Avenue and open space and park uses on and around the OASIS property portion of KS18).

The KS18 Mini-EIR identifies the following with regard to noise levels and impacts:

- The primary source of noise affecting KS18 is Highway 135.
- The OCP Noise Levels Map identifies the OASIS project site area outside the 60 dB noise level contour.
- OCP EIR, Volume I: General Impact NSE-3 (Construction Related Noise) is applicable to KS18 development. Potentially significant short-term noise impacts would result from exposure of noise sensitive receptors (residents within 1,600 feet) to significant noise during site preparation activities.
- OCP EIR, Volume II KS18 Mini-EIR: Site Specific Impact KS18-NSE-1 (Long-Term Exposure of Sensitive Receptors to Noise) is associated with development of residential units on APN 105-020-22 in the northeast corner of KS18, next to Highway 135 vehicle noise. This impact would not affect the OASIS development area.

OCP Mitigation Measures NSE-5 (limitations on construction activities) and Mitigation KS18-NSE-1 (design to reduce noise levels) were determined to reduce noise impacts to less than significant levels. These measures were incorporated into the OCP, including as Policy NSE-O-1 (*design to reduce noise level*), Policy NSE-O-2 (minimize construction noise) along with associated implementing development standards.

4.9.4 IMPACT ANALYSIS

METHODOLOGY AND SIGNIFICANCE THRESHOLDS.

The analysis of noise impacts considers the effects of both temporary construction-related noise and long-term noise associated with operation of the proposed project.

THRESHOLDS

Pursuant to Appendix G of the CEQA Guidelines, potentially significant impacts would occur if the project would result in any of the following conditions:

- 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;
- Exposure of persons to or generation of excessive ground-borne vibration or groundborne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels; and/or
- 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.

The County's Thresholds Manual also identifies the following thresholds of significance for assisting in the determination of significant noise impacts. The threshold discussion notes that the noise thresholds are intended to be used with flexibility, as each project must be viewed in its specific circumstances.

- a. A proposed development that would generate noise levels in excess of 65 dB(A) CNEL and could affect sensitive receptors would generally be presumed to have a significant impact.
- b. Outdoor living areas of noise sensitive uses that are subject to noise levels in excess of 65 dB(A) CNEL would generally be presumed to be significantly impacted by ambient noise. A significant impact would also generally occur where interior noise levels cannot be reduced to 45 dB(A) CNEL or less.

- c. A project will generally have a significant effect on the environment if it will increase substantially the ambient noise levels for noise-sensitive receptors adjoining areas. Per item a., this may generally be presumed when ambient noise levels affecting sensitive receptors are increased to 65 dB(A) CNEL or more. However, a significant effect may also occur when ambient noise levels affecting sensitive receptors increase substantially but remain less than 65 dB(A) CNEL, as determined on a case-by-case level.
- d. Noise from grading and construction activity proposed within 1,600 feet of sensitive receptors, including schools, residential development, commercial lodging facilities, hospitals or care facilities, would generally result in a potentially significant impact. According to EPA guidelines (see Figure 2) average construction noise is 95 dB(A) at a 50' distance from the source. A 6 dB drop occurs with a doubling of the distance from the source. Therefore, locations within 1,600 feet of the construction site would be affected by noise levels over 65 dB(A). To mitigate this impact, construction within 1,600 feet of sensitive receptors shall be limited to weekdays between the hours of 8 AM to 5 PM only. Noise attenuation barriers and muffling of grading equipment may also be required. Construction equipment generating noise levels above 95 dB(A) may require additional mitigation.

The County's Thresholds Manual also includes a "Quality of Life" threshold. This threshold notes that Quality of life issues are often primary concerns to the community affected by a project, including concern with nuisance noise that may result from a project. This can be noise levels that do not exceed thresholds, but are nonetheless considered nuisance noise by residents in the surrounding community. The following discussion is included to describe the basis of the Quality of Life threshold:

• The County interprets the CEQA mandate for maintaining a high quality environment strictly, and considers the maintenance of a high quality human environment an important responsibility. The State CEQA Guidelines clearly support the use of local standards in determining what constitutes a significant effect on the environment. Therefore, on a case by case basis, the elements comprising "quality of life" shall be considered. Where a substantial physical impact to the quality of the human environment is demonstrated, the project's effect on "quality of life" shall be considered significant.

PROJECT IMPACTS

The project's physical impacts on the environment would result from the proposed construction and long-term use of the OASIS property. Also refer to discussion in section 6.1 (*Growth Inducing Effects*) regarding increased development potential related to the General Plan Amendments, Lot Line Adjustment, and Government Code consistency requests.

Impact N-1 Project grading and construction would temporarily expose sensitive receptors (residential neighbors) to potentially significant short-term noise impacts. (Class II)

County noise threshold "d" generally assumes that sensitive receptors located within 1,600 feet of grading and construction activities would be exposed to noise levels that equal or exceed 65 dBA, which would be considered a potentially significant impact. The closest noise sensitive receptors that would be affected by project grading and development activity noise in are located: south of Clark Avenue (approximately 250 feet from construction activities), to the north at Southpoint Estates (approximately 300 feet) and to the west along Gray Street (approximately 300 feet). Residents in these areas would experience potentially significant, short-term increases in noise during project earthwork and construction activities associated with the proposed OASIS buildings, access road, parking areas, utility extensions, drainage improvements, and trail construction.

Impact N-2: OASIS property visitors and employees would not be exposed to ambient noise levels, which exceed 45 dBA CNEL for indoor areas or 65 dBA CNEL for outdoor areas (Class III)

As identified in the 45dB.com Noise Assessment for the OASIS project (2016, 2017), the average noise level over a 24-hour period, with a penalty applied to night-time noise levels, would range from approximately 45-55 dBA CNEL in the vicinity of the proposed main building and, therefore, would not exceed 65 dBA CNEL for outdoor areas of the proposed OASIS facility. In addition, average noise levels are not expected to exceed 45dBA (assuming standard construction) within the proposed buildings. Therefore, impacts to OASIS visitors from exposure to 24-hour averaged noise levels onsite would be less than significant.

Impact N-3: Sensitive receptors (surrounding residential neighbors) would be exposed to a potentially significant increase/change in noise levels during the life of the OASIS project, compared to existing noise generated from the undeveloped open space. This includes exposure to a considerable increase in periodic peak noise levels compared to the existing setting without the project (Class II).

CEQA Appendix G and County noise threshold "c" identify the potential for significant noise impacts in situations where a project would result in 1) a substantial increase in ambient noise levels, even if noise levels would be below the typical indoor 45dB(A) and outdoor 65dB(A) thresholds, or 2) if a project would result in temporary or periodic increases in ambient noise levels in the project vicinity that would be above existing noise levels without the project. In addition, the particular details of individual noise circumstances (noise source, time of day, location, duration, etc.) may affect whether a sound is merely noticeable or whether receptors consider the sound to be a substantial nuisance.

The project site is an undeveloped open space, which has been restricted to open space and

non-commercial recreational uses since 1981, with approval of the final map for the Southpoint Estates Residential subdivision. The 1997 approval of the Orcutt Community Plan (OCP) continued the restriction on development of the site and also identified the property as a future park site¹. The primary existing noise source onsite is vehicle noise from Highway 135, Clark Avenue, and Foxenwood Lane. Existing noise sources that are generated from the OASIS property itself (undeveloped open space) that would be audible at surrounding residences, include annual mowing of the grassland area for vegetation management and maintenance work along Orcutt Creek by County Flood Control and by Laguna County Sanitation District (the sewer line runs along the Orcutt Creek corridor). Each of these activities is infrequent, perhaps once a year. There are otherwise no known noise sources generated on the OASIS property that would be audible to surrounding noise sensitive receptors (residents).

The proposed project consists of a senior center and meeting facility with a variety of programs and activities, including health screenings, exercise and craft classes, hot lunches, senior services and other educational and recreational activities for all ages. The proposed indoor and outdoor facilities would also be available for events and rental activities. The project includes a proposed any given time maximum attendance of 200 people onsite, whether for regular OASIS programs/activities or for non-OASIS activities, including but not limited to facility rentals. Residential neighbors, who are considered noise sensitive receptors, are located to the north, south and west of the OASIS site on Hartnell Road, Foxenwood Lane, Clark Avenue, Gray Street, Park Avenue, Pacific Avenue, and North Avenue. The closest residences are located approximately 250 to 500 feet from the project development and outdoor patio/lawn area. Noise exposure at individual residences would be dependent on a variety of factors, including but not limited to, weather, the property elevation, height and orientation of windows and patio/balcony doors, the type/height/location of fences and walls, as well as the source and level of noise generated on the OASIS project site (e.g., non-amplified spoken voice vs. a party band). Therefore, the project would generate varying levels of noise, some of which would be audible from surrounding residences. The project would generate noise from regular OASIS operations, such as vehicles arriving and leaving the center, from maintenance activities, indoor and outdoor OASIS classes, gatherings and barbeques, use of the internal trails, from activities associated with proposed rental activities and special events (e.g., weddings, celebrations of life, art shows, etc.). Some of these activities would involve music (recorded, live, acoustic and amplified). Amplification for OASIS activities, including for the spoken voice (e.g., instructor for outdoor exercise classes, DJ for a party, speaker at a celebration of life) and for instrumental or recorded music, would be permitted indoors and outdoors. All amplification for non-OASIS activities would be restricted to use indoors.

The project sound measurements in the OASIS Noise Assessment (45 dB.com Acoustics Consulting, 2016) conclude that the project (including with an amplified event) would result in 24-hour averaged noise levels at the OASIS property lines of less than 60 dBA CNEL. The results of 24-hour weighted CNEL noise measurements are valuable when evaluating whether visitors/employees/residents on a project site would be exposed to average daily noise levels in excess of 45 dBA CNEL indoors and 65 dBA CNEL outdoors. However, noise measurements based on averaging noise over a 24-hour period address a different noise impact (Impact N-2, County noise thresholds "b" described earlier in this section) than the noise concerns raised in comments from project neighbors (County noise threshold "c").

Public comments received from residential neighbors to the north and west (in response to the

¹ Normal hours of operation for Santa Barbara County neighborhood parks are dawn to dusk (C. Garciacelay, County Parks).

superseded Draft Mitigated Negative Declaration (MND) and the EIR Notice of Preparation (NOP), address the potential for nuisance noise. Comments include concern with an overall increase in noise levels from general facility operations, OASIS activities, voices, vehicles entering and leaving the site, deliveries, etc. However, the majority of noise concerns identified in public comments are associated with the potential for nuisance noise from periodic and peak noise levels from use of the site for large gatherings, loud activities involving music, activities involving amplification (spoken voice or music), and activities that would take place in the evenings or on weekends, when residents are most likely to be home and accustomed to noise levels associated with the adjacent undeveloped open space.

Noise levels which are averaged (e.g., 24-hour CNEL averaged noise levels, Leq 1-hour averaged noise levels), do not specifically identify periodic or peak noise levels. Examples of nuisance noise/peak noise levels that are not represented by averaged noise measurements include, but are not limited to:

- Amplified spoken voice for a DJ at an event;
- Amplified spoken voice for an instructor teaching an outdoor class (with or without music);
- Amplified live music or recorded music playing in the outdoor area, on a weekday or weekend;
- Amplified music or recorded music playing in one of the buildings (noise levels would vary if windows/doors are open or closed);
- Acoustic music involving loud instruments (e.g., horns, bagpipes, percussion) playing indoors or outdoors;
- Outdoor meetings, meals, celebrations with up to 200 people;
- Delivery truck back-up beeping;

In addition, the following factors contribute to whether/the extent to which noise would be merely noticeable (background) versus annoying (nuisance noise) as perceived by surrounding sensitive receptors:

- The day of the week (weekday versus weekend or holidays);
- The specific hours of the noise exposure (e.g., early morning, mid- day, evening);
- The duration of the noise (e.g., 15 minutes versus 4 hours, etc.);
- Specific sound (e.g., harp music versus bagpipes, 30 people clapping versus an announcer on loudspeaker)

The OASIS project description includes the following criteria to limit noise levels:

- 1. No programs or activities would exceed noise levels of 60 dBA at the OASIS property line.
- 2. Amplification (e.g., for spoken voice, music) would be permitted for both indoor and outdoor OASIS activities.
- 3. Amplified music and amplification/sound equipment (including for the spoken voice) for non-OASIS activities would be restricted to use inside the building.

The 45dB.com Noise Assessment (Appendix D-9) concludes that general facility operations would not result in changes in ambient noise levels at surrounding residential properties (47 to 58 CNEL). This conclusion accounts for vehicles driving in and out of the site, operation of mechanical equipment, and assumes no use of amplification onsite. Noise levels were also evaluated for unmitigated amplified sound from an 88 dBA speaker located at the northwest corner of the proposed facility. The sound contours show noise levels of 61 dBA CNEL at the OASIS northern property line, which could be reduced to 54 dBA CNEL with incorporation of a backdrop wall. These measurements are averaged based on a weighted, 24-hour period. Therefore, these projected noise levels do not address the level of noise during the specific time period that the 88 dBA speaker would be in use.

The 45dB.com Supplemental Analysis evaluates an additional scenario of 1-hour averaged noise levels for an 80.5 dBA amplified music performance. The supplemental analysis concludes that noise from this modelled performance would be inaudible or barely perceptible at any residence south of Clark Avenue. However, the tall, steep slope near the OASIS' southern property line provides better attenuation of noise for the residences to the south than does the more distant, mildly sloping hillside to the north of OASIS, approaching the residences at Southpoint Estates. Therefore, noise levels at Southpoint Estates, which are not identified in the Supplemental Analysis figure, may be higher than noise levels at residences south of Clark Avenue during an amplified music performance.

In addition, many musical instruments and combinations of instruments (e.g., in rock, jazz, or mariachi bands) normally exceed the assumed 80.5 dBA noise level in the 1-hour averaged noise projections individually, even without amplification, as indicated below².

INSTRUMENT	SOUND LEVEL RANGE	PEAK SOUND LEVEL
Trumpet	88-108 dBA	113 dB (peak)
Percussion	68-94 dBA	125 dB peak
Bagpipes:	108-111 dBA	122 dB peak

In addition to the above acoustic (no amplification) instrument noise levels, standard amplification for a party band typically exceeds this noise level, with amplified rock music ranging from 102-108 dBA and peak noise levels that can exceed 140 dB.

Further, given the variety of noise levels associated with different musical instruments, combinations of instruments, and musical styles, actual noise levels could vary considerably. As a result, an assumption of 80.5 dBA for an event involving amplification onsite would not be considered a reasonable worst case assumption in evaluating potential noise impacts under CEQA, unless specific restrictions are placed on music and amplification onsite.

As noted, noise measurements that weight average noise levels throughout a 24-hour day/night period are helpful in many situations, such as determining average noise levels for apartments located adjacent to a freeway. However, averaging noise levels over a period of time that includes both periods of nuisance noise and quiet times does not address the noticeable increases in intermittent or peak noise levels. For example, the change in background noise levels on a weekend afternoon or weekday evening will be noticed during the specific time

² Noise levels for instruments from <u>http://www.daviddarling.info/encyclopedia_of_music/D/decibel.html</u> and <u>https://www.kinnairdbagpipes.com/index.php/blog/posts/what_is_the_best_hearing_protection_while_playing_bagpip</u> <u>es</u>

period that a noise generating activity is occurring. Without noise event specific measurements, it is reasonable to assume that intermittent noise levels would be substantially greater than existing noise levels and greater than the limited scenarios evaluated in the noise assessments.

Noise levels from outdoor events, from activities involving large numbers of attendees, and from activities involving amplified music or voice can be considered nuisance noise and generate neighborhood compatibility complaints from nearby residents who are accustomed to existing ambient noise levels. The proposed OASIS operations have the potential to expose nearby residents to substantial, intermittent increases in noise levels compared to the existing setting. This is considered a potentially significant impact, which can be reduced to less than significant levels through implementation of mitigation.

CUMULATIVE IMPACTS

Increased noise levels resulting from the project are considered potentially significant, but mitigable to less than significant levels with implementation of identified mitigation below. In addition, the project's contribution to increased noise levels in the surrounding neighborhood from development associated with the cumulative projects listed in Section 3.0 of this EIR or with OCP buildout would not be considered cumulatively considerable. Therefore, the project's contribution to cumulative noise impacts is considered adverse, but less than significant.

Approval of the General Plan Amendment components, Recorded Map Modifications and Government Code 65402 Consistency requests may encourage similar requests for the other Southpoint Estates (KS18) open space parcels, as well as for other designated open space parcels in the Orcutt area or elsewhere in the County. Approval of such requests would increase the development potential of additional open space areas, which were set aside as part of past land use decisions for the purpose of preserving resources and offsetting various environmental impacts of development projects. The amount and types of increased development that could result from similar requests throughout the County's unincorporated area are not specifically known. However, conversion of such open space areas to development and other uses would generally expose sensitive noise receptors to potentially excessive noise levels either due to proximity of new development to excessive noise levels or because the specific development would generate noise that would expose onsite and/or offsite noise sensitive receptors to significant noise levels. Noise impacts from increased conversion of open space to development would be dependent on project details including the location and types of development as well as whether the surrounding properties include noise sensitive receptors/land use uses. (Also see Section 6.1, Growth Inducing Effects).

4.9.5 MITIGATION.

The following mitigation measures are required to reduce potentially significant short-term noise impacts to less than significant levels.

- NS-1 Noise-02 Construction Hours. The Owner /Applicant, including all contractors and subcontractors shall limit construction activity, including equipment maintenance and site preparation, to the hours between 7:00 a.m. and 4:00 p.m. Monday through Friday. No construction shall occur on weekends or State holidays. Non-noise generating interior construction activities such as plumbing, electrical, drywall and painting (which does not include the use of compressors, tile saws, or other noise-generating equipment) are not subject to these restrictions. Any subsequent amendment to the Comprehensive General Plan, applicable Community or Specific Plan, or Zoning Code noise standard upon which these construction hours are based shall supersede the hours stated herein. PLAN REQUIREMENTS: The Owner/Applicant shall provide and post a sign stating these restrictions at all construction site entries. **TIMING**: Signs shall be posted at least one week prior to commencement of construction and maintained throughout construction. MONITORING: The Owner/Applicant shall demonstrate that required signs are posted prior to grading/building permit issuance and pre-construction meeting. Building inspectors and permit compliance staff shall spot check and respond to complaints.
- NS-2 Noise-04 Equipment Shielding-Construction. Stationary construction equipment that generates noise which exceeds 65 dBA at the closest residential property line shall be shielded with appropriate acoustic shielding to P&D's satisfaction. PLAN REQUIREMENTS: The Owner/Applicant shall designate the equipment area with appropriate acoustic shielding on building and grading plans. TIMING: Equipment and shielding shall be installed prior to construction and remain in the designated location throughout construction activities. MONITORING: The Owner/Applicant shall demonstrate that the acoustic shielding is in place prior to commencement of construction activities. P&D compliance staff shall perform site inspections throughout construction to ensure compliance.

- NS-3 Special Noise Limiters: Noise limiters shall be used for activities involving indoor and outdoor amplification (recorded music, instruments, voice) and for all outdoor music (acoustic or amplified). The noise limiters shall restrict the sound level of amplified music or voice to the 80.5 dBA level identified in the 45 dB.com Supplemental Noise Assessment. If amplification will be used indoors, the noise limiter may measure noise levels on the exterior of the building, at the location where noise levels would be highest. In order to accommodate this sound level, the applicant may incorporate measures to reduce noise levels (e.g., 8-foot partition walls, noise insulated party tent, etc.). This requirement shall apply to all OASIS and non-OASIS activities, events, and programs onsite. For non-amplified music which exceeds this noise level, the music shall be performed indoors unless measures can be implemented that effectively limit the sound level of the music to no more than 80.5 dBA.. PLAN REQUIREMENTS AND TIMING: The requirements of this condition shall be included on the plans prior to zoning clearance. Noise limiters shall be operational consistent with this condition prior to commencing any activities involving amplification and before commencing activities involving outdoor music. In addition, this condition language shall be included in all rental agreements for use of any OASIS facilities, including indoor and outdoor areas. In response to comments received from neighbors regarding onsite noise, the applicant shall provide a hand-out with the language of this condition and P&D contact information. **MONITORING:** P&D shall confirm condition language on plans, condition language in a sample rental agreement, and in hand-out for interested members of the public with noise concerns prior to zoning clearance.
- NS-4 Special Amplification: Use of amplification shall be limited. PLAN REQUIREMENTS AND TIMING: Amplification (e.g., voice, music, bullhorns, etc.) and loud acoustic music (e.g., bagpipes, horns, drums, etc.) shall be limited as follows:
 - a. Maximum of three hours per day.
 - b. Sunday through Thursday, limited to the hours of 10:00 AM to 7:00 PM.
 - c. Friday and Saturday, limited to the hours of 10:00 AM to 9:00 PM.

These limits shall be included on all rental agreements, but shall apply to all amplification and loud acoustic music (OASIS and Non-OASIS). **MONITORING**: P&D shall confirm condition language on plans, condition language in a sample rental agreement, and in hand-out for interested members of the public with noise concerns prior to zoning clearance.

NS-5 Acoustical Leaks: The following measures are required to maximize noise attenuation in the proposed main building from common acoustic leaks, such as electrical outlets, pipes, vents, ducts, flues and other breaks in the integrity of the wall, ceiling or roof insulation shall be insulated, sealed and caulked with putty pads and a resilient, non-hardening caulking material, as appropriate. All such openings and joints shall be airtight to maintain sound isolation.

- Windows: Windows on the north side of the buildings shall be of double glazed construction and installed in accordance with the recommendations of the manufacturer. The windows shall be fully gasketed, with an STC rating of 30 or better, as determined in testing by an accredited acoustical laboratory.
- **Doors:** Doors shall be solid core with sound dampening and fully gasketed, sealed jambs and grouted frames, with an overall STC rating of 30 or better, as determined in testing by an accredited acoustical laboratory. Doors meeting "Double Door Construction" criteria, the addition of a laminated glazed second door at least 3 inches from the primary door, shall be considered to meet the STC 30 rating.

PLAN REQUIREMENTS AND TIMING. All construction techniques shall be incorporated and detailed on building plans. Plans shall note all noise-resistant construction measures. An acoustical engineer shall confirm compliance with these requirements and/or shall demonstrate the achievement of equivalent noise reduction construction methods. **MONITORING:** Building & Safety shall ensure that all noise control measures have been included according to the approved plans.

- NS-6 Special Windows/Doors Closed: Windows and doors shall remain closed, as indicated below, to minimize nuisance noise to residential neighbors. PLAN REQUIREMENTS AND TIMING: The north and west facing windows and doors shall remain closed (except for entering and exiting the buildings) when the indoor areas of the facility are rented and when indoor OASIS activities involve music or amplification (voice or instruments). This requirement shall be included on all rental agreements and shall be posted at all times to facilitate neighborhood compatibility. MONITORING: P&D shall review example rental agreement language and signs for posting in buildings prior to zoning clearance and shall respond to complaints as necessary.
- NS-7 Noise Contact: OASIS shall identify a contact person to promptly respond to noise complaints, hours of operation and attendee numbers. PLAN REQUIREMENTS AND TIMING: OASIS shall designate a contact person to facilitate resolution of potential complaints involving noise levels, number of attendees (larger attendance increases noise levels) and hours of use (if activities extend past dusk outdoors and past 9:00 PM indoors). The contact information shall be listed in a prominent location on the OASIS website. The OASIS noise contact shall be available during rental activities to promptly address neighbor complaints and to ensure activities are consistent with identified noise mitigation, including use of noise limiters, door/window closures, hours of operation, etc. MONITORING: P&D shall confirm a contact to address noise issues is included on the OASIS website and in a hand-out prior to zoning clearance. The hand-out shall be made available upon request to interested members of the public with noise concerns.

NS-8 Special Deliveries: To reduce noise from vehicle back-up beeping before 8:00 AM and after 7:00 PM (e.g., trucks delivering supplies, food for hot lunches, rental supplies pick-up/drop-offs, etc.), vehicles shall avoid backing into loading areas to the maximum extent feasible during these times. **PLAN REQUIREMENTS AND TIMING**: This requirement shall be included in rental agreements and OASIS shall communicate this requirement to their clients and vendors. **MONITORING**: P&D shall confirm this inclusion in sample rental agreement and in hand-out for interested members of the public with noise concerns prior to zoning clearance.

IMPACTS AFTER MITIGATION

Impact N-1 Project grading and construction would temporarily expose sensitive receptors (residential neighbors) to potentially significant short-term noise impacts. (Class II)

Impact N-1 would be reduced to an adverse but less than significant level by implementation of Mitigation Measures NS-1 and NS-2.

Impact N-2: OASIS property visitors and employees would not be exposed to ambient noise levels, which exceed 45 dBA CNEL for indoor areas or 65 dBA CNEL for outdoor areas (Class III)

No mitigation is required. Ambient noise exposure would be below indoor and outdoor thresholds.

Impact N-3: Sensitive receptors (surrounding residential neighbors) would be exposed to a potentially significant increase/change in noise levels during the life of the OASIS project, compared to existing noise generated from the undeveloped open space. This includes exposure to a considerable increase in periodic peak noise levels compared to the existing setting without the project (Class II).

Impact N-3 would be reduced to an adverse, but less than significant level by implementation of Mitigation Measures NS-3 through NS-8 (Class II).

Cumulative Noise: The project's contribution to increased noise levels in the surrounding neighborhood from development associated with the cumulative projects listed in Section 3 of this EIR or with OCP buildout would not be considered cumulatively considerable or significant.

Section 4.9 Noise