

Sand Canyon Plaza Mixed-Use Project Draft Final Environmental Impact Report



Prepared for:

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1. Introduction

This document is the Draft Final Environmental Impact Report (EIR) for the Sand Canyon Plaza Mixed-Use Project. This document, together with the Draft EIR and its technical appendices, comprise the Draft Final EIR. The document has been prepared by the City of Santa Clarita in accordance with the California Environmental Quality Act (CEQA).

The Draft Final EIR is required under §15132 of the CEQA Guidelines to include the Draft EIR, comments and recommendations received on the Draft EIR, the responses of the lead agency to significant environmental issues raised by those comments in the review and consultation process, and any other relevant information added by the lead agency (including minor changes to the Draft EIR). A Mitigation Monitoring and Reporting Program is also required; it can be a separate document, or, as in this case, included in the Draft Final EIR.

The evaluation and responses to comments is an important part of the CEQA process, because it allows the following: 1) the opportunity to review and comment on the methods of analysis contained within the Draft EIR; 2) the ability to detect any omissions that may have occurred during preparation of the Draft EIR; 3) the ability to check for accuracy of the analysis contained within the Draft EIR; 4) the ability to share expertise; and 5) the ability to discover public concerns.

This document provides revisions to the Draft EIR made in response to comments and/or changes to the proposed project. These revisions also correct, clarify, and amplify the text of the Draft EIR, as appropriate, and do not alter the conclusions of the Draft EIR.

1.1 Process

In accordance with §15050 of the CEQA Guidelines, the City of Santa Clarita is the lead agency that prepared both the Draft EIR and the Draft Final EIR for the Project. The Sand Canyon Plaza Mixed-Use Project Draft EIR was prepared and circulated for a period of 45 days, extending from March 3, 2017 to April 17, 2017. The Draft EIR was available for review at the City Hall/Community Development Department at 23920 Valencia Boulevard, Suite 302, Santa Clarita, CA 91355; Canyon Country – JoAnne Darcy Library, 18601 Soledad Canyon Road, Santa Clarita, CA 91351; Old Town Newhall Library, 24500 Main Street, Santa Clarita, CA 91321; and Valencia Library, 23743 W. Valencia Boulevard, Santa Clarita CA 91355. An electronic copy of the Draft EIR was posted on the City of Santa Clarita website. A Notice of Availability of the Draft EIR was transmitted to regulatory agencies and others to request comments on the Draft EIR, pursuant to CEQA Guidelines §15086. A public hearing on the Draft EIR was held by the Planning Commission on March 21, 2017 at the City Council Chambers, Santa Clarita City Hall – First Floor, 23920 Valencia Boulevard, Santa Clarita, CA 91355. Comments on the Draft EIR were received during the comment period, and those comments are responded to in the Draft Final EIR. The Planning Commission will consider the Project and the Draft Final EIR at a regularly scheduled Planning Commission meeting on June 6, 2017. The Planning Commission will then make a recommendation to the City Council. The Draft Final EIR, together with the proposed Project, will be recommended for certification and approval to the City Council (Master Case No. 14-077, Sand Canyon Plaza Mixed-Use Project).

1.2 Content of the Draft Final EIR

As discussed above, the primary intent of the Draft Final EIR is to provide a forum to air and address comments pertaining to the analysis contained within the Draft EIR. Pursuant to §15088 of the CEQA Guidelines, the City has reviewed and addressed all comments received on the Draft EIR by the comment period deadline. Included within the Draft Final EIR are the written comments that were submitted during the public comment period, as well as oral and written comments (relevant to the EIR) received at the public hearings conducted before the Planning Commission.

To adequately address the comments provided by interested agencies and the public in an organized manner, the Draft Final EIR includes the following chapters and appendices:

Section 1: Introduction. This chapter provides a brief introduction to the Draft Final EIR and its contents.

Section 2: Corrections and Additions. This chapter provides a list of corrections and additions to the Draft EIR. None of the changes significantly impact the conclusions presented in the Draft EIR.

Section 3: Responses to Comments. This chapter provides a list of commenting agencies, organizations, and individuals. Responses to all comments on the Draft EIR are also included in this chapter.

Section 4: Project Revisions. This chapter outlines the changes made to the project description.

Section 5: Mitigation Monitoring and Reporting Program. This chapter includes the Mitigation Monitoring and Reporting Program (MMRP) prepared in compliance with the requirements of §21081.6 of the *California Public Resources Code* and §15091(d) and §15097 of the CEQA Guidelines.

The Draft Final EIR also includes the previously circulated Draft EIR, herein incorporated by reference. The Draft EIR was circulated from March 3, 2017 to April 17, 2017.

1.3 Review and Recommended Certification of the Draft Final EIR

Consistent with CEQA (*California Public Resource Code* §21092.5), responses to agency comments are being forwarded to each commenting agency in advance of the Planning Commission's June 6, 2017 meeting where they will consider recommending certification of the Draft Final EIR and recommending approval of the Sand Canyon Plaza Mixed-Use Project to the City Council. Final responses, including the responses within this Draft Final EIR, will be forwarded to each commenting agency 10 days prior to certification of the Final EIR by the City Council. In addition, responses are also being distributed to all commenters who provided an address. The Draft Final EIR is available for public review at:

- City of Santa Clarita, Community Development Department, 23920 Valencia Boulevard, Suite 302, Santa Clarita, California, 91355: Attn: Patrick LeClair, Senior Planner
- Canyon Country – Joanne Darcy Library, 18601 Soledad Canyon Road, Santa Clarita, California, 91351
- Old Town Newhall Library, 24500 Main Street, Santa Clarita, California, 91321
- Valencia Library (Main Office), 23743 W. Valencia Blvd., Santa Clarita, California, 91355

The Draft Final EIR is also located on the City's website at: <http://www.santa-clarita.com/city-hall/departments/community-development/planning/environmental-impact-reports-under-review>.

2. Corrections and Additions

The following corrections and additions are set forth to update the Sand Canyon Plaza Mixed-Use Project Draft EIR in response to the comments received during and after the public review period. Changes to the Draft EIR are listed by section and page number, and new text is noted in underline with ~~strikeout~~ of deleted text.

The following additions and corrections have been reviewed in relation to the standards in §15088.5(a) and (b) of the California Environmental Quality Act (CEQA) Guidelines on when recirculation of a Draft EIR is required prior to certification. The additions and corrections to the Revised Draft Subsequent EIR document do not constitute new significant information requiring recirculation of the Draft Subsequent EIR.

Sections 15088.5(a) and (b) of the CEQA Guidelines state:

- (a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation include, for example, a disclosure showing that:
 - (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
 - (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
 - (3) A feasible project alternative or mitigation measure considerably different from other previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponent decline to adopt it.
 - (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.
- (b) Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.

Changes to the Draft EIR are identified below by the corresponding Draft EIR section and subsection, if applicable, and the page number. Additions are in underline and deletions are shown in ~~striketrough~~ format. Changes to the Draft EIR may be made until action taken by the City Council.

The following pages from the Draft EIR have been revised as a result of comments received during the public review process. Only those pages that have been revised are included in this section.

Changed Pages

2-6 through 2-49	3-35	4.4-29	4.15-11
3-6	4.3-31	4.4-30	4.15-12
3-9	4.4-1	4.4-32	4.15-13
3-12	4.4-2	4.7-1	4.15-32
3-13	4.4-7	4.13-2	4.21-1
3-18	4.4-8	4.13-10	4.21-3
3-26	4.4-11	4.15-1	4.21-4
3-28	4.4-13	4.15-2	4.21-5
3-29	4.4-27	4.15-3	4.21-8
3-30	4.4-28	4.15-4	4.22-20

2.6 – Summary of Impacts and Mitigation Measures

2. Executive Summary

Table 2-1 Summary of Environmental Impacts and Mitigation Measures

Impacts	Mitigation Measures	Significance after Mitigation
<p>Aesthetics</p> <p>Impact Aes-1 – The Project site does not offer any scenic vistas or scenic resources. Impacts to scenic vistas and scenic resources would be less than significant.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Impact Aes-2 – The Project area is not within a state scenic highway and does not contain any unique rock outcroppings. There are no designated scenic highways within the City.</p>	<p>MM Aes-1 Prior to the issuance of a grading permit, the Project Applicant, or responsible party, shall submit a grading plan for review and approval by the City's Director of Public Works and the Director of Community Development. This grading plan shall utilize methods to reduce grading impacts associated with the Project and, to the extent feasible, blend in with the natural contours of the site. Said grading methods shall include landform grading as well as the blending of any manufactured slopes or required drainage benches into the natural topography along with the use of curvilinear street design.</p> <p>MM Aes-2 The Project Applicant, or responsible party, shall submit a final site plan for review and approval by the City's Director of Community Development. This site plan shall utilize building setbacks, building heights, and building forms throughout the site to blend buildings and structures with the terrain and surrounding development as much as possible. Additionally, landscaping with natural vegetation shall be used to minimize the visual effects of grading and construction on hillside areas.</p> <p>MM Aes-3 As part of any grading on the Project site, the Project Applicant, or responsible party, shall be required to 'lay back' and regrade the manufactured slope along Soledad Canyon Road, which will allow for this slope to be landscaped, further softening its appearance from SR-14, Soledad Canyon Road, and areas to the south.</p>	<p>Less than Significant</p>
<p>Impact Aes-3 – Each district's standards and guidelines are designed to reinforce the individual district's desired development pattern, character, and image. These tools would help achieve the Project's overall vision and ensure that future projects are compatible with the surrounding neighborhood character. Therefore, buildout of the Project would not substantially degrade the existing visual character or quality of the Project area, and impacts would be less than significant.</p>	<p>None required</p>	<p>Less than Significant</p>

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Impacts	Mitigation Measures	Significance after Mitigation
<p>Impact Aes-4 – During construction of the Project, nighttime lighting would be maintained on the Project site for security purposes. The Sierra Hills community and Sand Canyon Ranch Apartments to the west, Canyon Collection community to the northwest, and Stetson Ranch community to the north are considered light-sensitive uses nearest to the Project site. The ridgeline on the eastern boundary of the Project site would provide buffers between the construction areas and the light-sensitive uses to the east. Implementation of Mitigation Measures MM Aes-4 and MM Aes-5 would limit the use of construction security lighting to those planning areas requiring illumination, and would require all security lights to be properly shielded and projected downwards. Furthermore, construction lighting would be temporary and removed upon completion of construction activities. Accordingly, with implementation of mitigation, impacts due to light and glare generation during construction are considered less than significant.</p> <p>In compliance with City standards and to minimize impacts to off-site residential uses, the Project would include a Lighting Plan that indicates the proposed locations of all outdoor lighting installations. The lighting must comply with UDC Chapter 17.15, Property Development Standards, which requires all light sources to be directed downward and shielded from streets or adjoining properties and would prevent light spillover to adjacent residential uses. Regardless, mitigation measures have been included to ensure lighting impacts to off-site uses would be less than significant. Therefore, implementation of the Mitigation Measure MM Aes-6 and compliance with the UDC would reduce long-term light and glare impacts to surrounding uses to a less than significant level.</p>	<p>MM Aes-4 The Project Applicant, or responsible party, shall require that the use of nighttime lighting during project construction be limited to only those features on the construction site requiring illumination.</p> <p>MM Aes-5 The Project Applicant, or designee, shall require that all security lights be properly shielded and projected downwards during construction, such that light is directed only onto the work site.</p> <p>MM Aes-6 Prior to the issuance of building permits, the City of Santa Clarita Planning Division shall ensure that the following elements are included in project plans, as appropriate:</p> <ul style="list-style-type: none"> All exterior lighting shall be designed and located as to avoid intrusive effects on adjacent residential properties and undeveloped areas adjacent to the Project site. Low-intensity street lighting and low-intensity exterior lighting shall be used throughout the development to the extent feasible. Lighting fixtures shall use shielding, if necessary, to prevent spill lighting on adjacent off-site uses. Design and placement of site lighting shall minimize glare affecting adjacent properties, buildings, and roadways. Outdoor lighting along the Project site boundary shall consist of low-intensity downlights, or be equipped with louvers, shields, hoods or other screening devices. Fixtures and standards shall conform to state and local safety and illumination requirements. Buildings shall use low-reflective glass and building materials on building exteriors. Automatic timers on lighting shall be designed to maximize personal safety during nighttime use while saving energy. 	<p>Less than Significant after Mitigation</p>
<p>Agriculture and Forestry Resources</p> <p>Impact AG-1 – The effectiveness significance threshold states that a significant impact would occur if a project converts prime agricultural land to non-agricultural uses. The Project site is not within an area of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as identified by the California Department of Conservation's California Important Farmland Finder (accessed March 14, 2016). Therefore, the Project would have no impact to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.</p>	<p>None required</p>	<p>Less than Significant</p>

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Impacts	Mitigation Measures	Significance after Mitigation
<p>Impact AG-2 – Within the City of Santa Clarita, there are no agricultural preserve areas, no land under a Williamson Act contract, and no land zoned exclusively for agricultural use. Horticulture for commercial sale is permitted in the City's Business Park (BP) and Industrial (I) zones and conditionally permitted in the City's Non-Urban zones and Urban Residential zones 1 and 2. The Project is within the Mixed Use Neighborhood (MXN) and Urban Residential 3 (UR-3) zones, which does not allow horticulture for commercial sale. As stated previously, the <u>The</u> Property is not located within a Williamson Act Contract.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Impacts AG-3 and AG-4 – AG-3 and AG-4 address issues regarding the rezoning of timberland lands and the loss of forest land or conversion of forest land, or cause rezoning of, forestland, timberland, or timberland zoned as Timberland Production. It is not the Project site does not exist. The Project site is currently zoned Mixed Use Neighborhood (MXN) and Urban Residential 3 (UR-3) zones and is not located within an area zoned as Open Space-National Forest (OS-NF). Therefore, implementation of the Project would not conflict with the existing zoning for any forestland.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Impact AG-5 – No agricultural operations are currently being conducted on the Project site, and the site is not zoned for agricultural uses. In addition, there is no forest land located on the Project site or in the vicinity of the site, as the area is highly urbanized. No farmland or forest land would be converted to other uses under the Project, and therefore, no impact would occur.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Air Quality</p>		
<p>Impact AQ-1 – The net increase in regional operational emissions generated by the Project would exceed the regional thresholds of significance set by the SCAQMD for ROG and NO_x during the summertime and the wintertime. These emissions are primarily due to motor vehicles and area source emissions associated with the operation of a relatively high number of proposed residential uses. These emissions are typical for a mixed-use commercial and residential project of this size, and there is no feasible mitigation to reduce these emissions to a less-than-significant level. As such, regional operational air quality impacts would be considered significant and unavoidable.</p>	<p>MM AQ-1 The Project Applicant or designee shall require that all commercial-related landscaping activities utilize electric lawn mowers and electric leaf blowers to the extent feasible. No mitigation measures are feasible</p>	<p>Significant and Unavoidable</p>

2.6 – Summary of Impacts and Mitigation Measures

2. Executive Summary

Impacts	Mitigation Measures	Significance after Mitigation
<p>Impact AQ-6 – Will the Project increase the frequency or severity of existing air quality violations or cause or contribute to new air quality violations?</p> <p>Impact AQ-7 Will the Project exceed the assumptions utilized in preparing the AQMP?</p> <p>The Project is consistent with City's 2011 General Plan and the zoning designation of MXN (Mixed Use Neighborhood) zone and the Urban Residential 3 (UR-3) zone, and the Project would be consistent with the site's maximum allowable density of 18 dwelling units per acre planned for the site. Because the Project would be consistent with the planned buildout of the City's 2011 General Plan, the Project's population, housing, and employment increases would not have the potential to conflict with regional growth projections identified in SCAG's RTP/SCS and the AQMP. Furthermore, the Project would be consistent with primary goals of the RTP/SCS including, but not limited to, mixed-use design and the promotion of active transportation (i.e., non-motorized transportation such as walking and bicycling). The Project would be consistent with the City's General Plan, and these impacts would be less than significant.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Impact AQ-4 – The Project would not include the operations of any land uses routinely involving the use, storage, or processing of carcinogenic or non-carcinogenic toxic air contaminants. Thus, no appreciable operational-related toxic airborne emissions would result from Project implementation. With respect to construction, the construction activities associated with the Project would be typical of other similar land use development projects in the region, and would be subject to the regulations and laws relating to toxic air pollutants at the regional, state, and federal level that would protect sensitive receptors from substantial concentrations of these emissions.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Impact AQ-5 – Potential sources that may emit odors during construction activities include the use of architectural coatings and solvents as well as asphalt paving. However, the Project would be consistent with all applicable rules and regulations governing construction equipment and processes. As such, the Project would not create objectionable odors affecting a substantial number of people during construction or long-term operation.</p> <p>Cumulative – Due to the non-attainment status of O₃, PM₁₀, and PM_{2.5}, the generation of daily operational emissions associated with cumulative development would result in a cumulative significant impact associated with</p>	<p>None required</p> <p>No feasible mitigation to reduce cumulative operational impacts</p>	<p>Less than Significant</p> <p>Significant and Unavoidable</p>

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Impacts	Mitigation Measures	Significance after Mitigation
<p>the cumulative net increase of any criteria pollutant for which the region is in non-attainment. With respect to operational emissions, the SCAQMD has indicated that if an individual project results in air emissions of criteria pollutants (CO, ROG, NO_x, SO_x, PM₁₀, and PM_{2.5}) that exceed the SCAQMD-recommended daily thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of these criteria pollutants for which the Project region is in non-attainment under an applicable federal or state ambient air quality standard. As discussed previously, the operational emissions associated with the Project would exceed the established SCAQMD thresholds for ROG and NO_x during the operation of the Project. Because ROG and NO_x are considered O₃ precursors, and given the region's non-attainment status of O₃, the cumulative impact of the Project's operational emissions would be significant.</p>		
<p>Biological Resources</p>		
<p><u>The Project site has been in agricultural production since the early 1950s and presently is being used for flower agricultural production.</u></p> <p><u>The 2011 Santa Clarita General Plan Final Environmental Impact Report (General Plan EIR) reviewed biological resources in Section 4.6, Conservation and Open Space. As shown on General Plan EIR Figure CO-4, Sensitive Species Occurrences, the Project site has not been found to contain special plant species, and none were observed during rare plant surveys conducted in April, May, and June 2014 and 2015. While the surveys of the Project site were conducted following relatively dry winters, and therefore not ideal conditions for detecting rare plants, habitat quality for rare plants is generally poor. However, slender manzanita lily has a moderate potential to occur on the property.</u></p> <p><u>No special-status amphibians or mammals were found or are likely to occur due to lack of habitat. One special-status reptile has been observed on-site, and one other has a moderate occurrence potential.</u></p> <p><u>Seven bird species included in the CDFW Special Animals List were observed or detected during field surveys on the subject property. Three species of bats and two other special-status mammals could also occur on the property.</u></p> <p><u>There is undeveloped property immediately north of the property, but that is also bordered by residential land uses that continue to the north and east.</u></p>	<p>MM Bio-1</p> <p><u>Active nests of native bird species are protected by the Migratory Bird Treaty Act (16 U.S.C. 703) and the California Fish and Game Code (35000).</u> If activities associated with construction or grading are planned during the bird nesting/breeding season, generally February through March for early nesting birds (e.g., Ceepet <u>hummingbirds</u>) and from mid-March through mid-September for most bird species, the Applicant shall have a qualified biologist conduct surveys for active nests. To determine the presence/absence of active nests, pre-construction nesting bird surveys shall be conducted weekly beginning 30 days prior to initiation of ground-disturbing activities, with the last survey conducted no more than 3 days prior to the start of clearance/construction work. If ground-disturbing activities are delayed, additional pre-construction surveys shall be conducted so that no more than 3 days have elapsed between the survey and ground-disturbing activities.</p> <p><u>Surveys shall include examination of trees, shrubs, and the ground for nesting birds. Several bird species such as killdeer and night hawks are known to nest on bare ground.</u> Protected bird nests that are found within the construction zone shall be protected by a buffer deemed suitable by a qualified biologist, and verified by the California Department of Fish and Wildlife. Typically a 300-foot buffer is required for most species and a 500-foot buffer for raptor and special-status</p>	<p>Less than Significant After Mitigation</p>

2.6 – Summary of Impacts and Mitigation Measures

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Impacts	Mitigation Measures	Significance after Mitigation
<p><u>There is currently no linkage to nearby natural habitat areas, or corridors to facilitate movement between such areas and the subject property.</u></p> <p>The 2015 Vegetation General Plan Final Environmental Impact Report (General Plan EIR) reviewed biological resources in Section 4.4. As shown on General Plan EIR Figure 4.4-4, Habitat Types, the Project site is designated as Agriculture, with the areas surrounding the site designated as Urban. Neither of these habitats is considered a sensitive habitat. The California Natural Diversity Database maintains no special status species (sensitive plants and wildlife) from the California Natural Diversity Database (December 2004) were documented for the Project site. A review of the California Department of Fish and Wildlife Biological Information and Observation System (BIOS) files, accessed August 17, 2015, confirmed that no sensitive habitats or sensitive species exist on the Project site.</p> <p>Implementation of the Project would not have a substantial adverse effect on any species identified as a candidate, sensitive, or special-status species nor on any riparian or other sensitive natural community. One special-status plant community, holly leaf cherry chaparral, would be adversely impacted. Given that no sensitive species occur on-site.</p> <p>Implementation of the Project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Also, implementation of the Project would not 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, or reduce the number or restrict the range of a rare or endangered plant or animal. Lastly, implementation of the Project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act as no wetlands exist on-site.</p> <p>A limited number of trees exist on-site along the northern boundary adjacent to SR 126 and mature trees exist off-site immediately adjacent to the eastern boundary. Construction of the Project has the potential to affect mature trees that could support nests by native bird species. Such an impact would be a potentially significant under CEQA and a violation of state and federal laws pertaining to the protection of native bird species.</p>	<p>species (CDFW may reduce these buffers on a site-specific basis). Buffer areas shall be delineated with orange construction fencing or other exclusionary material that would inhibit access within the buffer zone. Installation of the exclusionary material delineating the buffer zone shall be verified by a qualified biologist prior to initiation of construction activities. The buffer zone shall remain intact and maintained while the nest is active (i.e., occupied or being constructed by the adult bird(s)) and until young birds have fledged and no continued use of the nest is observed, as determined by a qualified biologist.</p> <p><u>MM Bio-1A The Project Applicant shall retain a qualified biologist to conduct a pre-construction biological survey for special-status species determined to have potential to occur in suitable habitat within the Project site prior to the start of construction activities. If special-status species are detected during pre-construction surveys, appropriate mitigation plans will be prepared by a qualified biologist and submitted to the City of Santa Clarita for review and approval. Additionally, a biological monitor will be present periodically during construction to ensure that impacts to special-status species are minimized or do not occur.</u></p> <p>MM Bio-2 A qualified biologist, approved by the City and CDFW, shall prepare a detailed capture and relocation plan for San Diego tiger (coastal whiptail and coast horned lizard that will include measures to avoid or minimize take of these sensitive species and identify appropriate relocation sites. The plan shall be submitted to CDFW for approval prior to implementation. The plan shall specify the pre-construction time frame for the biologist to conduct surveys within appropriate habitat areas to capture and relocate individual San Diego tiger whiptail and coast horned lizard in accordance with the approved relocation plan. Results of the surveys and relocation efforts shall be provided to the City with a copy to CDFW.</p> <p>MM Bio-3 A qualified biologist, approved by the City and CDFW, shall prepare a detailed capture and relocation plan for San Diego black-tailed jackrabbit and San Diego desert woodrat that will include measures to avoid or minimize take of these sensitive species and identify appropriate relocation sites. The plan shall be submitted to the city and CDFW for approval prior to implementation. The plan shall specify the pre-construction timeframe for the biologist to conduct surveys within appropriate habitat areas to capture and relocate individual San Diego</p>	

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Impacts	Mitigation Measures	Significance after Mitigation
<p>Impact Bio-2 – Approximately 0.35 acre of holly leaf cherry chaparral occurs in the northwestern portions of the site. 1.31 acres of holly leaf cherry— California buckwheat scrubs and 0.35 acre of holly leaf cherry chaparral are situated in the northern and northwestern portions of the site. Holly leaf cherry alliance have This alliance has a state rank of S3, meaning the covertype is they rare to uncommon; not yet susceptible to becoming extirpated in the state, but may be if additional populations are destroyed. Therefore, this alliance meets, they meet the</p>	<p>MM Bio-4 Black-tailed jackrabbit and San Diego desert woodrat in accordance with the approved relocation plan. Results of the surveys and relocation efforts shall be provided to the City with a copy to CDFW. The Project Applicant shall retain a qualified biologist, approved by the City, to conduct focused bat surveys utilizing visual and electronic detection methods. The qualified biologist shall conduct the surveys between late May and mid-July, the recognized maternity season for most bats in southern California. If any special-status bat species are determined to be roosting on-site, bat boxes of a size and design suitable for the estimated number of bats on-site shall be installed, under the supervision of a qualified bat biologist, in the outer perimeter of the Project site, as close as feasible to adjacent undeveloped land, and a suitable height and solar aspect. Further, if any maternity sites are identified on site, CDFW will be notified immediately, in addition to any other direction by CDFW, no site disturbance shall occur within 300 feet of the occupied roost until it is determined that the maternity roost(s) is no longer active. Additional bat boxes designed to serve as maternity roosts shall be placed as directed by the qualified bat biologist and CDFW. <u>The Project Applicant shall also include the preparation of a relocation and monitoring plan in coordination with the City and CDFW.</u></p> <p>MM Bio-5 A qualified restoration specialist shall ensure that the proposed landscape plants will not naturalize and cause maintenance or vegetation community degradation in open-space areas of the Project site. Container plants to be installed within public areas shall be inspected by a qualified restoration specialist for the presence of disease, weeds, and pests, including Argentine ants. Plants with pests, weeds, or diseases shall be rejected. In addition, landscape plants shall not be on the Cal-IPC California Invasive Plant Inventory.</p>	
<p>Impact Bio-2 – Approximately 0.35 acre of holly leaf cherry chaparral occurs in the northwestern portions of the site. 1.31 acres of holly leaf cherry— California buckwheat scrubs and 0.35 acre of holly leaf cherry chaparral are situated in the northern and northwestern portions of the site. Holly leaf cherry alliance have This alliance has a state rank of S3, meaning the covertype is they rare to uncommon; not yet susceptible to becoming extirpated in the state, but may be if additional populations are destroyed. Therefore, this alliance meets, they meet the</p>	<p>MM Bio-6 The Project Applicant, or the responsible party, shall prepare a holly leaf cherry chaparral restoration plan that details planting plans to mitigate the loss of <u>0.35 acre of holly leaf cherry chaparral, 1.66 acres of holly leaf cherry alliance vegetation.</u> This plan shall entail 5.1 restoration of the removed holly leaf cherry alliances to equal 1.75 acres. The planting palette shall include a range of native plant species typical of this alliance. The plan shall include temporary irrigation and monitoring for 5 years after the initial installation to assure establishment of the</p>	<p>Less than Significant after Mitigation</p>

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<p>Impact Bio-3 – As proposed, all federal and state jurisdictional areas on the property would be removed by Project development. Federal jurisdictional areas impacted would include 0.09 acre of wetland and 1.471 acres of non-wetland waters. State jurisdictional areas impacted would encompass 0.09 acre of wetland and 2.87 of non-wetland waters. Without appropriate authorizations, such a removal would be in violation of federal and state laws, resulting in a significant impact.</p>	<p>MM Bio-7 The Project impacts shall be subject to the regulations set forth by regulatory agencies as part of the jurisdictional permitting process. The Army Corps of Engineers, the California Department of Fish and Wildlife, and/or the Regional Water Quality Control Board shall require the Project Applicant, or the responsible party, to explore alternatives to avoid or reduce impacts and shall also require mitigation for all unavoidable impacts. The Army Corps of Engineers has a "no net loss" policy that requires that any unavoidable impacts to stream values and functions be replaced. In addition, the Regional Water Quality Control Board shall require restrictions to control runoff from the site, require on-site treatment of runoff to improve water quality, and impose Best Management Practices on the construction. All of the features of the Project that address water quality issues shall be mitigated within the Water Quality Management Plan and Storm Water Pollution Prevention Plan.</p>	<p>Less than Significant after Mitigation</p>
<p>installed shrubs. Quantifiable success criteria will be based on species diversity, species richness, abundance, percent cover, and non-native cover. The restoration will be deemed successful when the site has been irrigation-free for at least 5 years and success criteria have remained for 5 years. The planting site may be located within the landscaped areas of the property. The plant shall contain planting species: holly leaf cherry shrub for each holly leaf cherry shrub to be removed. The plant shall include temporary irrigation and mulching for 2 years after the initial installation to ensure establishment of the installed shrubs. The planting site may be located within the landscaped areas of the property.</p>	<p>MM Bio-6 Mitigation Measure MM Bio-6 proposes mitigation through restoration (on-site or off-site), thereby reducing the impact to less than significant.</p>	<p>Less than Significant</p>
<p>Impact Bio-4 – The Project site is completely surrounded on three all-sides by development, is not connected to adjacent natural habitat areas, and does not lie within nor provide a corridor that would facilitate movement between such areas and the subject property. <u>On the fourth side to the north is a small area of undeveloped open space that is bordered by development.</u> The western ephemeral drainage is undergrounder at the existing mobile home development in the southwest portion of the site, and does not serve as a localized movement path, except for a short distance off site to the north. As such, impacts to wildlife movement from Project implementation are anticipated to be less than significant.</p>	<p>None required</p>	<p>Less than Significant</p>

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Impacts	Mitigation Measures	Significance after Mitigation
<p>Impact Bio-5 – Three protected trees have been identified as coast live oak (<i>Quercus agrifolia</i>) on the Project site. The trees are identified as #1, #2 and #3. Tree #2 is classified as a "heritage tree" having a trunk diameter of 46 inches. The coast live oak trees were found to be in average to good condition with no significant insect pest or disease problems. Tree #2 has a sizeable trunk cavity at the root collar; however, the main stem is believed to have a high volume of sound wood, enough to reasonably support the tree with minimal risk at present.</p>	<p>MM Bio-8</p> <p>The Project Applicant, or the responsible party, shall be responsible for implementing the following maintenance and care measures for on-site oak trees prior to, during, and post-construction.</p> <ol style="list-style-type: none"> 1. Thoroughly irrigate all preserved trees 1 week prior to any excavation that takes place within the tree protection zone. 2. Provide quarterly arborist monitoring of Tree #2 for not less than 2 years. 3. Install and maintain protective fencing around trees as illustrated on the plans in the Oak Tree Report. There must be a 3-foot opening in the protective fencing to allow for inspection and maintenance, position openings every 50 to 75 feet. 4. Any work taking place in the ground, grading, trenching, drilling etc., within the tree protection zone shall be supervised by the arborist on record and be performed using hand tools only. 5. Any tree roots encountered, measuring 1-inch or greater must be preserved in place, or if unavoidable, properly pruned as deemed acceptable by project arborist. 6. Preserved tree roots that are left exposed shall be wrapped in butap or other moisture retentive material and must be kept moist. 7. Construction materials or debris shall not be stored or disposed of within the protected zone of any tree. 8. No irrigation shall be installed within the dripline of any oak tree. 9. Any planting within the tree protection zone must maintain a minimum distance of 15 feet from the trunk, and must consist of drought tolerant or native plant species; plant pallet must be approved by the city of Santa Clarita. 10. No changes in soil grade shall be made within the tree protection zone other than in the permitted work area. 11. All drainage shall be directed away from the root zone of all oak trees. 	<p>Less than Significant after Mitigation</p>
<p>Impact Bio-6 – No habitat conservation plans (HCP) or natural community conservation plans (NCCP) are present within the City of Santa Clarita. As such, the Project site is not within a habitat conservation plan (HCP), a natural community conservation plan (NCCP), or other approved local, regional, or state habitat conservation plan. Therefore, the Project would not conflict with any adopted habitat conservation plans, and the Project impacts would be less than significant.</p>	<p>None required</p>	<p>Less than Significant</p>

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Impacts	Mitigation Measures	Significance after Mitigation
<p>Impact Bio-7 – The Project site is not within a Significant Ecological Area as identified on General Plan Conservation and Open Space Element Exhibit CO-5, Significant Ecological Areas. The Project site is also not within a Significant Natural Area identified by the California Department of Fish and Wildlife. Therefore, the Project would not affect a Significant Ecological Area or Significant Natural Area.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Cultural Resources</p>		
<p>Impact CR-1 – Records searches performed for the Project site and a site survey did not identify any historical resources within the Project site. Currently, there are 123 mobile home units on the Project site. Development of the residential or commercial uses proposed by the Project would therefore not affect any historical resources. There are no previously recorded cultural resources within the Project site. Therefore, impacts related to historic resources would be less than significant.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Impact CR-2 – Previous cultural resources technical investigations and archival records for the Project vicinity indicate that there is a low potential for the inadvertent discovery of cultural resources during earth moving activities related to the Project. Furthermore, the Project Applicant has entered into a consultation agreement with the Tataviam that would ensure their involvement through Project implementation. Therefore, impacts would be potentially significant. Thus, a mitigation measure has been provided in the unlikely scenario that artifacts are found during grading and construction activities.</p>	<p>CR-1 Would the project cause a substantial adverse change in the significance of a historical resource, as defined in §15064.5?</p>	<p>Less than Significant</p>
<p>Impact CR-3 – Portions of the Project site are hilly in nature and the site does not contain any prominent geologic features or known paleontological resources. The records search and the site survey performed for the Project site did not identify any existing paleontological resources within the site. Consequently, there is little potential for the Project to disturb or indirectly destroy a unique paleontological resource site or geologic feature, and less than significant impacts would occur.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Impact CR-4 – There are no known cemeteries or burial grounds on the Project site. As previously discussed, the site, as with other areas in the Santa Clarita Valley, has a history of use by Native Americans; therefore, there is potential for archaeological resources, including burial grounds, to exist on the Project site. Because the potential exists for human remains to</p>	<p>MM-CR-2 If human remains are encountered during excavation and grading activities within the project site, the contractor shall stop such activities. In the event of accidental discovery or recognition of any human remains there shall be no further excavation or disturbance of the subject site or any nearby areas reasonably suspected to overlie adjacent human remains and the following steps shall be taken:</p>	<p>Less than Significant after Mitigation</p>

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<p>be unearthed during earthwork and grading of the Project site, impacts would be potentially significant.</p>	<ul style="list-style-type: none"> The coroner of the City in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required and, if the remains are of Native American origin, either of the following steps shall be taken. <ul style="list-style-type: none"> The coroner should contact the Native American Heritage Commission in order to ascertain the proper descendants from the deceased individual. The coroner should make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains. Implementing or local agencies or authorized representatives should retain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance when any of the following conditions occurs. <ul style="list-style-type: none"> The Native American Heritage Commission is unable to identify a descendent. The descendant identified fails to make a recommendation. The implementing agency or its authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner. 	
<p>Geology and Soils</p>		
<p>Geo 1(i) – The Project site is not located in an Alquist-Priolo Earthquake Fault Zone, and no known active faults are located within the Project site. Therefore, the Project would not expose people or structures to the rupture of a known earthquake fault, and no impacts would occur in this regard.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>(ii) The Project site would likely experience moderate to high ground shaking from these fault zones, as well as some background shaking from other seismically active areas of the Southern California region. The Project would be required to incorporate necessary design and structural elements</p>	<p>MM Geo-1 Potential debris flow shall be further evaluated once a 40-scale rough grading plan has been developed for the Project site. Appropriate mitigation measures can be provided for any additional debris flow areas identified on the rough grading plan.</p>	

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<p>To resist strong ground motion in compliance with the California Building Code and the geotechnical report (Mitigation Measures MM Geo-29 through MM Geo-33).</p> <p>Although some structural damage is typically not avoidable during a large earthquake, the Project would be constructed to meet existing City ordinances, the California Building Code, and the geotechnical report (Mitigation Measures MM Geo-29 through MM Geo-33) in order to protect against building collapse and major injury during a seismic event. Thus, potentially significant risks related to strong seismic shaking would be reduced to less than significant.</p> <p>(iii), (iv), Geo-3 – These are all acceptable for the type of development proposed by the project. Future bedrock cut areas would not be impacted by potential liquefaction. Therefore, no liquefaction impacts would occur due to implementation of the Project.</p> <p>A landslide is located in the northern portion of Planning Area 4. The landslide has been observed to a maximum depth of approximately 60 feet below ground surface. Most of the landslide lies within a future fill area, with a small portion of the slide mass extending into proposed Cut Slope CS6. The entire landslide would be removed during grading. As addressed in the "Slope Stability" section of this report below, the landslide removals would impact the cut slope, requiring restoration of the slope grades with engineered fill.</p> <p>Other cut slopes proposed for the site are underlain by bedrock of the Mint Canyon Formation. The Mint Canyon Formation can range from massive to thinly bedded sedimentary rock units of sandstone, conglomerate, and siltstone. Bedding planes within the Mint Canyon Formation range from poorly defined and gradational to sharp and planar and can constitute significant planes of weakness, particularly where sandstone/conglomerate beds are in contact with siltstone. Where bedding is adversely oriented, or "daylighted," with respect to natural or cut slopes, potential for bedding plane, or "block-glide," failure exists.</p> <p>The Project would include grading of 14 cut slopes. Numerous surficial failures are present on the site. As indicated previously, surficial failures located within future cut areas would be eliminated as part of the grading.</p>	<p>MM Geo-2 Cut Slope CS-3: Bedrock shall be eliminated during removals within the adjacent canyons and the slope grades re-established as a 25-foot-wide, 3-foot-deep stability fill slope. The stability fill slope should be constructed with backfills in accordance with the recommendations presented in the "Conclusions and Recommendations" section of the RTF&A report, and as shown on the Stability Fill Details for Grossly Stable Slopes, presented as Figure 4 (Franklin Study)</p> <p>MM Geo-3 Cut Slope CS-6 shall be constructed entirely as a 20-foot-wide, 3-foot-deep stability fill slope after landslide removal.</p> <p>MM Geo-4 Cut Slope CS-7: Bedrock shall be eliminated during the removals within the adjacent canyons and the slope grades reestablished as a 25-foot-wide, 3-foot-deep stability fill slope.</p> <p>MM Geo-5 Cut Slope CS-8: Bedrock shall be eliminated during the removals within the adjacent canyons and the slope grades reestablished as a 25-foot-wide, 3-foot-deep stability fill slope.</p> <p>MM Geo-6 Cut Slope CS-11: A small canyon is situated in the central portion of Cut Slope CS-11, below future Lot Nos. 19 and 20. The removals as part of the canyon cleanout in this area, and eventual fill placement, shall extend to the bottom of the cut slope at "D". Drive to eliminate a potential fill-over-cut condition.</p> <p>MM Geo-7 Site Preparation Requirements:</p> <ul style="list-style-type: none"> • Prior to performing earthwork, the existing vegetation and any deleterious debris should be removed from the site. • All unsuitable soils in the areas of grading that are receiving fill should be removed to competent bedrock materials and replaced with engineered fill. • The depth of removal and recompaction of unsuitable soils is noted on the Geotechnical Map. Any fill required to raise the site grades should be properly compacted. Removal of the exposed natural soils should extend to at least the depths indicated on the Site Geology Map (Figure 4.6-1). <p>MM Geo-8 Removal Depth Requirements: The required depth of removal and recompaction of the natural soils is indicated on the Geotechnical Map.</p> <ul style="list-style-type: none"> • Deeper removals will be required if disturbed or unsuitable soils are encountered. 	

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<p>Surficial failures lying within future fill areas would require removal before placement of engineered fill. Implementation of Mitigation Measures MM Geo-2 through MM Geo-28 would reduce potentially significant impacts to less than significant.</p> <p>To ensure consistency with the conclusion reached above, potential debris flow should be further evaluated once a 40-scale rough grading plan has been developed for the Project site. Mitigation Measures MM Geo-1 and MM Geo-20 would reduce potentially significant impacts to less than significant.</p> <p>Proposed building pads located in a transition zone may experience cracking and movement of the footings and slab due to differing compressibility of the fill, as compared to the bedrock material. Therefore, differential settlement constitutes a potentially significant impact to the Project. As required by Mitigation Measure MM Geo-24, the portion of the Project site in bedrock shall be over-excavated to a depth of at least 5 feet below the proposed finished pad elevation, or 3 feet below the bottom of proposed footings, whichever is greater. The over-excavation shall extend at least 5 feet laterally beyond the building limits. This technique would reduce the potential for differential settlement.</p> <p>Where removal and recompaction for potentially expansive soils or bedrock is also required, 8-foot removals shall be performed. With implementation of Mitigation Measure MM Geo-24, potentially significant impacts would be reduced to less than significant.</p>	<ul style="list-style-type: none"> After excavation of the upper natural soils on hillsides and in canyons, further excavation should be performed, if necessary, to remove slope wash or other unsuitable soils. The Geotechnical Consultant of Record may require that additional shallow excavations be made periodically in the exposed bottom to determine that sufficient removals have been made prior to recompacting the soil in-place. Deeper removals may be recommended by RTF&A, based on observed field conditions during grading. During grading operations, the removal depths should be observed by a representative of RTF&A and surveyed by the Project Civil Engineer for conformance with the recommended removal depths shown on the grading plan (Figure 4.6-1). <p>MM Geo-9 Fill Material Requirements: The on-site soils, less any debris or organic matter, may be used in the required fills.</p> <ul style="list-style-type: none"> Any expansive clays should be mixed with nonexpansive soils to result in a mixture having an expansion index less than .30 if they are to be placed within the upper 8 feet of the proposed rough grades. Rocks or hard fragments larger than 8 inches may not be placed in the fill without special treatment. Rocks or hard fragments larger than 4 inches shall not be clustered or compose more than 25% by weight of any portion of the fill or a lift. Soils containing more than 25% rock or hard fragments larger than 4 inches must be removed or crushed with successive passes (e.g., with a sheepfoot roller) until rock or hard fragments larger than 4 inches constitute less than 25% of the fill or lift. 	
<p>MM Geo-10 Oversized Material Requirements:</p> <ul style="list-style-type: none"> Rocks or material greater than 8 inches in diameter, but not exceeding 4 feet in largest dimension, shall be considered oversized rock. The oversized rocks can be incorporated into deep fills where designated by the Geotechnical Consultant of Record. Rocks should be placed in the lower portions of the fill and should not be placed within the upper 10 feet of compacted fill, or nearer than 15 feet to the surface of any fill slope. Windrows should be excluded from areas of proposed utilities, ponds, and other types of future underground improvements. Additional costs and construction difficulties should be 		

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	<p>anticipated if future improvements are located in areas where there will be conflicts with existing windrows.</p> <ul style="list-style-type: none"> Rocks between 8 inches and 4 feet in diameter shall be placed in windrows or shallow trenches located so that equipment can build up and compact fill on both sides. The width of the windrows shall not exceed 4 feet. The windrows should be staggered vertically so that one windrow is not placed directly above the windrow immediately below. Rock greater than one foot in diameter shall not exceed 30% of the volume of the windrows. Granular fill shall be placed on the windrow, and enough water should be applied so that soil can be flooded into the voids. Fill should be placed along the sides of the windrows and compacted as thoroughly as possible. After the fill has been brought to the top of the rock windrow, additional granular fill should be placed and flooded into the voids. Flooding is not permitted in fill soils placed more than 1 foot above the top of the windrowed rocks. Where utility lines or pipelines are to be located at depths greater than 15 feet, rock shall be excluded in that area. Excess rock that cannot be included in the fill, or that exceeds 4 feet in diameter, should be stockpiled for export or used for landscaping purposes. The oversized material recommendations presented in this report provide for the geotechnical consultant to coordinate with the grading contractor to develop a procedure for construction of compacted fills that have a satisfactory fill performance for the intended use of the fill. It should be understood that it is not feasible and/or cost effective to eliminate all oversized material from constructed fills as part of a conventional grading operation. The exclusion of all oversized material is not necessary for satisfactory fill performance on the majority of projects. <p>MM Geo-11 Compaction Requirements: After the site is cleared and excavated as recommended, the exposed soils should be carefully observed for the removal of all unsuitable material. Next, the exposed subgrade soils should be scarified to a depth of at least 6 inches, brought to above optimum moisture content, and rolled with heavy compaction equipment. The upper 6 inches of exposed soils should be compacted to at least 90% of the maximum dry density obtainable by the ASTM</p>	

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	<p>D1557 Method of Compaction. After compacting the exposed subgrade soils, all required lifts should be placed in loose lifts, not more than 8 inches in thickness, and compacted to at least 90% of their maximum density. For lifts placed at depths greater than 40 feet below proposed finish grade, a minimum compaction of 93% of the maximum dry density is required. The moisture content of the fill soils at the time of compaction should be above the optimum moisture content. Compacted fill should not be allowed to dry out before subsequent lifts are placed.</p> <p>Rough grades should be sloped so as not to direct water flow over slope faces. Finished exterior grades should be sloped to drain away from building areas to prevent ponding of water adjacent to foundations.</p> <p>MM Geo-12 Shrinkage and Bulking Requirements: Shrinkage of about 10% to 15% is estimated for the on-site natural alluvial soils when removed and placed as compacted fill. A bulking value of about 3% to 10% is estimated for materials generated from Mint Canyon Formation bedrock cut areas for use as compacted fill. The actual shrinkage and bulking will depend upon the relative compaction obtained by the contractor during grading operations and would be expected to change on a daily basis.</p> <p>MM Geo-13 Permanent Slope Requirements: Permanent cut and fill slopes may be inclined at 2:1 or flatter. The current site plan indicates that the steepest slope to be constructed at the site during grading will be 2:1.</p> <p>MM Geo-14 Proposed Cut Slope Requirements: Cut slopes proposed for the rough grading of the Project site have been designated as shown on the Geotechnical Map. Each cut slope is discussed with specific recommendations presented below. All grading should conform to the minimum recommendations presented in this report.</p> <p>If these slopes are modified from those that are discussed in this report, the modifications should be reviewed by RTF&A to ascertain the applicability of our recommendations.</p> <p>MM Geo-15 Fill Slope Requirements:</p> <ul style="list-style-type: none"> Where the toe of a fill slope terminates on natural, fill, or cut materials, a keyway is required at the toe of the fill slope. The fill slope keyway should be a minimum width of 12 feet, be founded within competent material, and extend a horizontal distance 	

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	<p>beyond the toe of the fill to the depth of the keyway. The keyway should be sloped back at a minimum gradient of 2% into the slope. The width of fill slopes shall be no less than 8 feet, and under no circumstances should the fill widths be less than what the compaction equipment being used can fully compact. Benches should be cut into the existing slope to bind the fill to the slope. Benches should be step-like in profile, with each bench not less than 4 feet in height and established in competent material. Compressible or other unsuitable soils should be removed from the slope prior to benching. Competent material is defined as being essentially free of loose soil, heavy fracturing or erosion-prone material and is established by the Geotechnical Consultant of Record during grading.</p> <ul style="list-style-type: none"> Where the top or toe of a fill slope terminates on a natural or cut slope and the natural or cut slope is steeper than a gradient of 3:1, a drainage terrace with a width of at least 6 feet is recommended along the contact. As an alternative, the natural or cut portion of the slope can be excavated and reconstructed as a stability fill slope to provide an all-fill slope condition. Where the contact between the face of the fill slope and the face of a lower natural or cut slope is inclined at 45 degrees or steeper, a drainage terrace would not be required. When constructing fill slopes, the grading contractor shall avoid spillage of loose material down the face of the slope during the dumping and rolling operations. Preferably, the incoming load shall be dumped behind the face of the slope and bladed into place. After a maximum of 4 feet of compacted fill has been placed, the contractor shall backroll the outer face of the slope by backing the lamping roller over the top of the slope, thoroughly covering all of the slope surface with overlapping passes of the roller. The foregoing should be repeated after the placement of each 4-foot thickness of fill. As an alternative, the fill slope can be overbuilt and the slope cut back to expose a compacted core, if the required compaction is not obtained on the fill slope. Additional rolling will be required prior to placement of additional fill, or the slope shall be overbuilt and cut back to expose the compacted core. 	

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	<p>MM Geo-16 Stability Fill Requirements: Stability fills have been recommended for several of the cut slopes on-site, as discussed in the 'Slope Stability' section of this report. The stability fill slopes should be constructed in accordance with Stability Fill Details for Grassly Stable Slopes (Figure 4), Frankian study. Backdrains should be installed at the backout of the stability fill as recommended below in Mitigation Measures MM Geo-17 and MM Geo-18.</p> <p>MM Geo-17 Subdrain Requirements:</p> <ul style="list-style-type: none"> Canyon subdrains are recommended to intercept and remove groundwater within canyon fill areas. All subdrains should extend up-canyon, with the drain inlet carried to within 15 feet of final pad grade. The approximate locations for recommended subdrains are shown on Figure 4.6-1, Site Geology Map. Specific subdrain locations should be determined in the field during grading operations. The subdrains should be surveyed by the Project Surveyor to establish line and grade during construction, and for future location reference. Subdrain and backdrain excavations should be observed by the Geotechnical Consultant. The subdrains should be installed in accordance with the manufacturer's specifications. A minimum 2% gradient is to be maintained in the subdrain pipes and the pipe shall have at least eight, uniformly spaced narrow slots per foot. The width of the slots should not exceed one-sixteenth of an inch. If PVC pipe with drilled perforations is utilized, the diameter of the holes should not exceed three-eighths of an inch if gravel and filter fabric is used, or one-eighth inch-diameter perforations if Los Angeles County Flood Control District (LACFCD) Designation F-1 Filter Material is used. There should be at least eight uniformly spaced sets of two perforations per lineal foot of pipe. When constructing the subdrain, the pipe should be placed so that the drilled perforations are positioned on the bottom half of the pipe. The upstream end of subdrains should be capped. The final 20 feet of pipe at the downstream end of canyon, stabilization, buttress, and side hill fills shall not be slotted or perforated. Provisions should be made at all times during construction to prevent damage to the subdrain from 	

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	<p>construction equipment, and to prevent soils from being washed into an exposed subdrain by surface waters.</p> <ul style="list-style-type: none"> For runs up to 500 feet, subdrains for the bottom of canyon fills should consist of at least 6-inch-diameter pipe. For runs of 500 to 1,500 feet, 8-inch-diameter pipe shall be used. For runs over 1,500 feet, 10-inch-diameter pipe shall be used. Canyon subdrains may be installed in a rectangular trench excavated to expose competent material and shall be approved by the Geotechnical Consultant. The subdrains should be surrounded by at least 3 cubic feet per lineal foot of granular filler material and there should be at least 6 inches of compacted granular filler material or gravel on all sides of the pipe. The granular filler material for subdrains should meet the F1 material criteria, or have a gradation approved by the Geotechnical Consultant prior to placement. As an alternative to the granular filler material, three-quarter-inch-diameter gravel may be placed around the pipe. The gravel should be separated from the surrounding soils by a filter fabric such as Mirafi 140N, or equivalent, wrapped around the gravel ("burrito wrapped"). <p>MM Geo-18 Backdrains Requirements: Backdrains are required for all stability fills or buttress fills.</p> <ul style="list-style-type: none"> Backdrains shall consist of 4-inch-diameter perforated or slotted pipe. The vertical spacing of the backdrains shall be a maximum of 15 feet, with a horizontal spacing of 100 feet. Backdrain outlets shall consist of non-perforated pipe. The backdrain gradient shall be at least 2% to the discharge end. The exact location of the backdrains shall be determined in the field by the Geotechnical Consultant after the backcut has been made, so that it can be best positioned to intercept potential seepage. <p>MM Geo-19 Surface Drainage Requirements:</p> <ul style="list-style-type: none"> All surface drainage shall be directed away from proposed structures through non-erosive devices. The ponding of water must not be allowed, especially adjacent to foundations. The pad gradients shall not slope toward any descending slopes in order to reduce the potential for surficial erosion. Water that flows towards slopes shall be conducted to appropriate discharge 	

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	<p>locations via non-erodible drainage devices. Drainage devices, including drainage terraces on graded slopes shall be inspected periodically and kept clear of debris. Drainage and erosion control shall be designed in accordance with the standards set forth in the CBC.</p> <ul style="list-style-type: none"> Any modification of the grades of building pads, parking areas, etc., could adversely affect drainage at the site. Future landscaping, construction of walkways, planters and walls, etc. must never modify site drainage unless additional measures to enhance drainage (e.g., area drains, additional grading) are designed and constructed in accordance with the applicable City of Santa Clara. <p>MM Geo-20 Erosion Protection Requirements</p> <ul style="list-style-type: none"> To reduce the potential for erosion, all permanent cut-and-fill slopes on-site should be seeded or planted with lightweight, deep-rooting, drought-resistant vegetation. A landscaping expert should be consulted for ground cover recommendations. Excessive landscape irrigation or leakage from irrigation lines can cause localized slope failures. Therefore, irrigation systems for slope vegetation should be designed and maintained to minimize leakage onto graded slopes. If automatic sprinkler systems are used, they should be adjusted for seasonal variations in rainfall. Vegetation on natural slopes should remain natural and not be landscaped or irrigated in the same manner as graded slopes. Rodent burrows are known to provide direct conduits for water flow that can decrease slope stability. Therefore, to maintain the integrity of graded slopes, a rodent abatement program shall be instituted. Even with the implementation of these recommendations, it is not possible to eliminate erosion within hillside developments. Removal of debris from drainage devices, slope maintenance, and landscaping shall be required, especially after periods of heavy rainfall. <p>MM Geo-21 General Grading Requirements</p> <ul style="list-style-type: none"> All fills, unless otherwise specifically designed, shall be compacted to at least 90% of the maximum dry unit weight as determined by the ASTM D1557 Method of Soil Compaction. 	

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	<ul style="list-style-type: none"> • No fill shall be placed until the area to receive the fill has been adequately prepared, and subsequently approved by the Geotechnical Consultant of Record or his representative. • Fill soils should be kept free of debris and organic material. • Rocks or hard fragments larger than 8 inches may not be placed in the fill without approval of the Geotechnical Consultant of Record or his representative, and in a manner specified for each occurrence. • Bedrock fragments larger than 8 inches, or fill soils containing greater than 25% of bedrock fragments larger than 4 inches in diameter, must be removed or processed using successive passes of a sheepfoot compactor until rock fragments constitute less than 25% of the fill material. • The fill material shall be placed in layers which, when compacted, shall not exceed 8 inches per layer. Each layer shall be spread evenly and shall be mixed thoroughly during the spreading to ensure uniformity of material and moisture. • When moisture content of the fill material is too low to obtain adequate compaction, water shall be added and thoroughly dispersed until the soil is approximately 2% to 4% above optimum moisture content. • When the moisture content of the fill material is too high to obtain adequate compaction, the fill material shall be aerated by bleeding, or other satisfactory methods, until the soil is approximately 2% to 4% above optimum moisture content. • Fill and cut slopes shall not be constructed at gradients steeper than 2:1 (horizontal vertical). <p>MM Geo-22 Grading Observation. Construction observation shall be made by the Geotechnical Consultant of Record during any grading activities within the Project site, to verify the findings within this report. Additional recommendations may be required for landfill design based on conditions uncovered during grading.</p> <p>MM Geo-23 Temporary Excavation. Based on review of the subject plans, it does not appear that significant temporary excavations will be required during the construction of the proposed development. However, the following recommendations are applicable in areas where excavations are to be made.</p>	

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	<ul style="list-style-type: none"> Temporary excavations are not expected to stand vertically in cuts that exceed 4 feet in height. Temporary excavations in excess of 4 feet may be sloped at a gradient of ¾:1, to a maximum height of 12 feet in favorably oriented Mini Canyon Formation or Terrace Deposits. Temporary slopes within alluvial soils and slopes greater than 12 feet may be sloped at gradients of 1:1. "Temporary" means a period not exceeding 60 days. All regulations of State or Federal OSHA shall be followed. If excavations are made during the rainy season (normally from November through April), particular care shall be taken to protect slopes against erosion. Measures to help mitigate erosion, such as the installation of berms, plastic sheeting, or other devices, may be warranted. Surface water shall be prevented from flowing over or ponding at the top of excavations. <p>MM Geo-24 Expansive Bedrock. It is anticipated that bedrock materials exposed at pad grade may contain expansive claystone beds that could cause differential expansion. Therefore, within building areas at locations where expansive bedrock units are exposed at pad grade, it is recommended that the bedrock be removed and recompacted to a depth at least 8 feet below the proposed final pad elevations or 5 feet below the bottom of proposed footings, whichever is greater. It is also recommended that the bedrock be removed and recompacted to a depth at least 3 feet below proposed soil subgrade in exposed bedrock areas receiving pavement or hardscape improvements. The soils generated by these over-excavations should be mixed with nonexpansive soils to yield a relatively nonexpansive mixture. If the resulting fill soil is still expansive, special construction techniques, such as pad subgrade saturation or post-tensioned slabs, may be required to reduce the potential for expansive soil-related distress.</p> <p>MM Geo-25 Transition Lots. Proposed building pads located in a cut and fill transition zone may experience cracking and movement of the footings and slab due to differing compressibility of the fill, as compared to the bedrock material. To reduce the potential for cracking and differential settlement, the portion of the lot in cut bedrock or terrace deposits should be over-excavated to a depth at least 5 feet below the proposed finished pad elevation or 3 feet below the bottom of proposed footings, whichever is greater. The over-excavation shall extend at least 5 feet laterally beyond the building limits. Where removal and recompaction</p>	

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	<p>for potentially expansive soils or bedrock is also required that the 8-foot removals be performed as described in the "Expansive Bedrock" section of the RTF&A 2015 report.</p> <p>MM Geo-26 The applicability of the preliminary recommendations for foundation and retaining wall design should be confirmed at the completion of grading.</p> <p>MM Geo-27 Paving studies and soil corrosivity tests should be performed at the completion of rough grading. To develop detailed recommendations for protection of utilities and structures and for construction of the proposed roads.</p> <p>MM Geo-28 Expansive Soils. The on-site alluvial soils and terrace deposits are expected to have a very low potential for expansion. Compacted fills generated from the Mint Canyon Formation are expected to have up to a medium potential for expansion. The compacted fills generated by the on-site materials are expected to be classified as having a very low to medium potential for expansion. Samples of the compacted fill shall be obtained at the completion of the rough grading operations to support final foundation design.</p> <p>MM Geo-29 Foundation</p> <ul style="list-style-type: none"> • General: Buildings may be supported on continuous or individual spread footings established in properly compacted fill soils. Foundations and floor slabs should be designed by a structural engineer, in accordance with the minimum requirements of the CBC. • Design Criteria: The recommendations presented in this section are based on the assumption that the proposed structures will have column loads not exceeding approximately 100 kips and continuous foundation loads not exceeding 3 kips per lineal foot. A bearing value of 2,000 pounds per square foot (psf) may be used in the design of spread foundations. This value can be increased by one-third when considering seismic and wind forces. The bearing material shall consist of compacted fill soil. Individual column pads and continuous wall footings shall be designed to meet the minimum width and depth requirements as set forth in the CBC. Foundation depths shall be measured from the lowest adjacent final grade. 	

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	<p>Building Setbacks: Building setbacks for structures located adjacent to either ascending or descending slopes shall be in accordance with the standards set forth in the CBC. All foundation excavations shall be observed and approved by a representative from our firm prior to placement of reinforcing steel. Foundations shall be deepened, where necessary, to prevent surcharge loads from being imposed on adjacent foundations or utilities. Observation of foundation excavations may also be required by the appropriate reviewing governmental agencies. The contractor shall be familiar with the requirements of the governing reviewing agencies.</p> <ul style="list-style-type: none"> Lateral Design: Lateral restraint at the bases of footings or slabs may be assumed to be the product of the dead load and a coefficient of friction of 0.4. Passive pressure on the faces of footings may also be used to resist lateral forces. A passive pressure of zero at the surface of finished grade, increasing at the rate of 250 psf per foot of depth, to a maximum value of 2,500 psf, may be used at this site. The passive pressure and friction may be combined without reduction when evaluating lateral resistance. Settlement: Provided that the proposed buildings are supported on shallow foundations established in compacted fill soils, as recommended, column loads do not exceed 100 kips, and continuous footings do not exceed 3 kips per linear foot, it is estimated that the maximum static settlement will be about 0.75 inches. The total static and seismic settlement is estimated to be about 1.5 inches. It is further estimated that static and seismic differential settlements will be less than 1.0 inches of vertical movement across a horizontal distance of 30 feet. RTF&A shall review the foundation loads after plans are developed to verify the applicability of our recommendations to the proposed structures. <p>MM Geo-30 Floor Slab Support</p> <ul style="list-style-type: none"> General: The floor slab design recommendations presented in this section are based upon the assumption that the soil subgrade in proposed floor slab areas will consist of compacted fill soil and that floor slabs will be subjected to normal loads with no special requirements. Any surficial soils that become dried or 	

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	<p>disturbed during the course of construction shall be moisture-conditioned and compacted prior to casting the floor slab. Conventional floor slabs may be utilized at the subject development, provided the subgrade soils consist of compacted fill soils with a very low (Expansion Index of 0 to 20) potential for expansion. If the subgrade soils are determined to have an expansion potential in the low or higher range (Expansion Index greater than 21), post-tensioned floor slabs, as indicated below, are recommended. Post-tensioned floor slabs can also be used in soils with a very low potential for expansion.</p> <ul style="list-style-type: none"> • Conventional Floor Slabs: Conventional slabs-on-grade should be designed per the recommendations of the CBC. However, as a minimum, the building floor slabs should have a nominal thickness of at least 4 inches and should be reinforced with a No. 4 rebar spaced at 16 inches on center, in each direction, or equivalent. Thicker slabs may be required depending on CBC requirements, the floor loads, and the structural requirements; we defer to the Project Structural Engineer for design of the floor slabs. • Post-Tensioned Floor Slabs: Post-tensioned floor slabs should be designed per the recommendations of the CBC. The design values, presented following this paragraph, assume that the proposed floor slabs will be poured monolithic with continuous perimeter edge footings. Perimeter edge footings should have a minimum depth of 12 inches. Footing depths should be measured from the lowest adjacent grade for perimeter footings or the top of slab for interior footings. • Net Bearing Value: An allowable net bearing value of 2,000 psf may be used for footings with a minimum width of 12 inches and a minimum depth of 12 inches below the top of slab or 12 inches below the lowest adjacent grade. • Coefficient of Friction: 0.75 • Passive Pressure: 250 pcf for level ground condition • Modulus of Subgrade Reaction (K): 150 pounds per cubic inch (pci) for a footing width of one foot. For larger footings or floor slabs, this value should be reduced using the following equation: 	

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	<p style="text-align: center;"> $Kr = K \left[\frac{(B + 1)}{2B} \right]^2$ where: Kr = Reduced Modulus Value K = Modulus of Subgrade Reaction for a 1-Foot-Wide Plate B = Width of Large Footing or Slab </p> <ul style="list-style-type: none"> • Modulus of Elasticity: 1,000 pounds per square inch (psi) • Edge Moisture Variation Distance: Me (Center Lift): 5.25 feet Me (Edge Lift): 2.5 feet • Estimated Differential Movements My (swelling): Low – 0.4; Medium – 0.9 My (shrink): Low – 0.3; Medium – 0.7 • Water Vapor: Water vapor transmitted through floor slabs is a common cause of floor covering problems. An impermeable membrane vapor barrier should be installed to reduce excess vapor drive through the floor slab. The function of the impermeable membrane is to reduce the amount of water vapor transmitted through the floor slab. Vapor-related impacts should be expected in areas where a vapor barrier is not installed. Floor slabs shall be underlain by a vapor barrier surrounded by 2 inches of sand above and below it. The membrane should be at least 10 millimeters thick; care shall be taken to preserve the continuity and integrity of the membrane beneath the floor slab. The sand shall be sufficiently moist to remain in place and be stable during construction; however, if the sand above the membrane becomes saturated before placing concrete, the moisture in the sand can become a source of water vapor. Another factor affecting vapor transmission through floor slabs is a high water-to-cement ratio in the concrete used for the floor slab. A high water-to-cement ratio increases the porosity of the concrete, thereby facilitating the transmission of water and water vapor through the slab. The Project Structural Engineer or a concrete mix specialist should provide recommendations for design of concrete for footings and floor slabs in accordance with CBC. 	

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	<p>MM Geo-31 Retaining Walls</p> <ul style="list-style-type: none"> General. A bearing value of 2,000 psf may be used in the design of retaining wall footings. Backfill placed behind retaining walls shall be compacted to a minimum of 90% of the maximum dry density, as determined by the Soil Compaction Test Method (ASTM Standard D 1557). When backfilling, walls should be braced. Heavy compaction equipment shall not be used any closer to the back of the wall than the height of the wall. Soils that have an expansion index in excess of 30 shall not be utilized for backfill behind walls that are greater than 3 feet in height. The backs of retaining walls shall be water-proofed where aesthetics are concerned. Lateral Earth Pressure. Cantilevered retaining walls separate and independent of buildings, where the surface of the backfill is level and the retained height of soils is less than 15 feet, may be designed assuming that drained, nonexpansive soils will exert a lateral pressure equal to that developed by a fluid with a density of 30 pounds per cubic foot (pcf). The indicated pressure assumes that a lateral deflection of up to about 1% of the wall height is acceptable at the top of the wall. If it is desired to decrease the amount of potential wall deflection, a greater lateral pressure could be used in the wall design. Where the surface of the backfill is inclined at 2:1, it may be assumed that drained soils will exert a lateral pressure equal to that developed by a fluid with a density of 45 pcf. For the design of a rigid wall where rotation and lateral movement are not acceptable, as in the case of buildings, it may be assumed that drained, nonexpansive soils will exert a rectangular lateral pressure with a maximum pressure equal to 22H psf, where "H" is the wall height in feet. The pressure value and distribution may vary significantly when considering wall rigidity and restraining conditions. The structural characteristics of the wall are referred to the Project Structural Engineer. If requested, we can provide additional geotechnical design parameters for specific restrained conditions. In addition to the recommended earth pressure, walls should be designed to resist any lateral surcharges due to nearby buildings, storage, or traffic loads. A drainage system should be provided behind the walls to reduce the potential for development of hydrostatic pressure. If a drainage system is not installed, walls should be 	

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Impacts	Mitigation Measures	Significance after Mitigation
	<p>designed to resist an additional hydrostatic pressure equal to that developed by a fluid with a density of 55 pcf for the full height of the wall.</p> <ul style="list-style-type: none"> Seismic Lateral Earth Pressure: The preceding recommended values indicate earth pressures for conventional static loading conditions. Ground shaking associated with earthquakes may cause additional pressure on walls. In addition to the previously mentioned lateral earth pressures, it is recommended that all rigid (building) walls of any height, and cantilevered retaining walls greater than 6 feet in height, be designed to support an additional seismic earth pressure equal to an inverted equivalent fluid pressure of 28 pcf. Density of Backfill: When designing retaining walls to resist overturning, it can be assumed that compacted, on-site soils will have a density of 125 pcf. Drainage: A drainage system should be provided behind retaining walls, or the walls should be designed to resist hydrostatic pressures. <ul style="list-style-type: none"> The drainage system could consist of a 4-inch-diameter perforated pipe placed 6 inches from the base of the wall, with the perforations down, and connected to an outlet device. The pipe should be sloped at least 1 inch per 50 feet and surrounded on all sides by at least 6 inches of clean gravel. The gravel should be "burnt-wrapped" with filter fabric, such as Mirafi 140N, or equivalent. As an alternative to the gravel and filter fabric, filter material meeting the requirements of LACFCD Designated F-1 Filter Material, and slotted pipe, may be used. The backside of the wall should be water-proofed. A vertical, 6-inch-wide gravel chimney drain, or a drainage geocomposite such as Miradrain, should be placed against and behind retaining walls that are higher than 3 feet. The top of the back drain should be capped with 18 inches of on-site soils. The installed drainage system should be observed by the Geotechnical Consultant of Record prior to backfilling the 	

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	<p>system. Inspection of the drainage system may also be required by the reviewing governmental agencies.</p> <p>MM Geo-32 Pavement Design: Samples of the on-site soil should be obtained from near final grade elevation in proposed pavement areas, following the grading operations, to perform R-value tests. The R-value test results would be used to prepare pavement section recommendations. The preliminary pavement section recommendations presented below are based on the assumption that the on-site soils have an R-value of at least 20. The final pavement section recommendations could vary depending on the results of the actual R-value tests. We would be pleased to provide pavement section recommendations for alternative Traffic Index values upon request.</p> <table border="1" data-bbox="633 588 747 1029"> <thead> <tr> <th>Traffic Index</th> <th>Asphalt Thickness (inches)</th> <th>(CAB) Base Course Thickness (inches)</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>3</td> <td>5</td> </tr> <tr> <td>6</td> <td>4</td> <td>9</td> </tr> <tr> <td>8</td> <td>5</td> <td>14</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Base course material should consist of crushed aggregate base (CAB), as defined by Section 2002.2 of the Standard Specifications for Public Works Construction ("Greenbook"), or crushed miscellaneous base (CMB), as defined by Section 200-2.4 of the Greenbook. Base course material should be compacted to at least 95% of the maximum dry density of that material. Base course material should be purchased from a supplier who will certify that it will meet or exceed the specifications in the Greenbook, as indicated. We could, upon request, perform sieve analysis and sand equivalency tests on material delivered to the site that appears suspect. Additional tests could be performed, upon request, to determine if the material is in compliance with the remainder of the specifications indicated in the Greenbook. The pavement section recommendations presented above are based upon assumed Traffic Index values. RTF&A does not take responsibility for the numerical determination of the Traffic Index values, nor the areas where they apply within the site. <p>MM Geo-33 Seismic Design. The following factors are recommended for seismic force design of structures at the subject site. The parameters were</p>	Traffic Index	Asphalt Thickness (inches)	(CAB) Base Course Thickness (inches)	4	3	5	6	4	9	8	5	14	
Traffic Index	Asphalt Thickness (inches)	(CAB) Base Course Thickness (inches)												
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	<p>determined using the U.S. Seismic Design Maps at the United States Geological Survey (USGS) Earthquakes Hazard website.</p> <table border="1" data-bbox="423 779 610 999"> <thead> <tr> <th>Site Class</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>Ss</td> <td>2.509</td> </tr> <tr> <td>S1</td> <td>0.898</td> </tr> <tr> <td>SMs</td> <td>2.509</td> </tr> <tr> <td>SM1</td> <td>1.347</td> </tr> <tr> <td>SDs</td> <td>1.673</td> </tr> <tr> <td>SD1</td> <td>0.898</td> </tr> <tr> <td>PGA</td> <td>0.899</td> </tr> </tbody> </table>	Site Class	D	Ss	2.509	S1	0.898	SMs	2.509	SM1	1.347	SDs	1.673	SD1	0.898	PGA	0.899	
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Greenhouse Gas/Climate Change																		
<p>The net increase in GHG emissions generated by the Project Without GHG Reduction Measures Scenario ("BAU Scenario" defined in the City's CAP) would be 13,061.36 MTCO₂e per year and the net increase in GHG emissions generated by the Project With GHG Reduction Measures Scenario would be 11,441.21 MTCO₂e per year. This represents an approximate 12.4% reduction in GHG emissions as a result of the Project's GHG reduction measures and design features as recommended in the City's adopted CAP. This reduction is generally consistent with the overall 12% reduction expected in the CAP. Based on the information provided above, the Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases and these impacts would be less than significant.</p>	<p>None required</p>	<p>Less than Significant</p>																
Hazards and Hazardous Materials																		
<p>Haz-2 – Businesses that store large quantities of hazardous materials (e.g., fuel storage facilities, chemical warehouses) can be subject to accidents that result from transporting, pumping, pouring, emptying, injecting, spilling, and dumping or disposing of hazardous materials and wastes and that could be released into the environment. The severity of potential effects varies with the activity conducted and the concentration and type of waste involved. However, as discussed above, the land uses proposed as part of the Project would not significantly increase the amount of hazardous materials used as it is a residential and commercial project only. No industrial uses are proposed with the Project. Additionally, federal, state, and local regulations and policies governing the use of hazardous materials strictly regulate the proper handling of such materials and their containers.</p>	<p>None required</p>	<p>Less than Significant</p>																

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<p>To ensure that accidents involving the release of toxic materials into the environment do not occur. Compliance with appropriate regulations and policies would limit the impact from release of hazardous materials to less than significant.</p> <p>Haz 3 – The residential and commercial uses associated with the Project uses would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste; and therefore, would not impact any existing or proposed schools within one-quarter mile of the project site. Thus, no impacts would occur in this regard.</p> <p>Haz-4 – In addition, the Project site is not identified on any of the databases searched by EDR and is not within 1.0 mile of a federal Superfund property. There is a low probability that the other listed properties have impacted the Project site.</p> <p>Nonetheless, the mobile homes that are original to the park could contain some asbestos materials. Construction workers could be at risk during earth moving activities. Residents on or adjacent to the hazardous materials sites could be exposed to hazardous materials. Therefore, the hazardous materials sites have the potential to pose a significant hazard to the public or the environment. The impact to the public and the environment from these hazardous materials sites would be potentially significant. Mitigation Measure MM Haz-1 would be implemented to reduce this impact to less than significant.</p>	<p>None required</p> <p>MM Haz-1 The structures on-site were constructed prior to 1981. Based on the age of construction, building materials in on-site structures may include asbestos containing materials (ACM), and certain building materials are presumed to contain ACM (PACM), unless testing has shown otherwise. As of October 1, 1986, OSHA made building owners responsible for complying with the asbestos construction standard, for buildings built in 1981 or earlier. The building owner is responsible for identifying the presence, location and quantity of asbestos containing building materials, if warranted. The building owner must tell employees, other employers, and tenants in the building of the presence and location of asbestos or presumed asbestos containing materials (PACM). If the building owner intends to demolish or remodel the structure(s), the building owner shall hire a California Certified Asbestos Consultant for assistance in compliance.</p>	<p>Less than Significant</p> <p>Less than Significant after Mitigation</p>
<p>Haz 5 and 6 – The Project site is not located within an airport land use plan or within 2 miles of an airport or a private airstrip. There are no airports or private airstrips within or adjacent to the City of Santa Clarita. Thus, implementation of the Project would not expose people residing or working on the Project site to excessive safety hazard impacts from airports or private air strips. Therefore, no impacts would occur in this regard.</p> <p>Haz-7 – Construction activities associated with development of the Project could reduce the number of lanes or temporarily close certain street segments, including those used for evacuation routes. Construction equipment and vehicles may block or slow traffic. Possible street closures and slower traffic during construction could interfere with emergency response including evacuations. However, construction would be temporary and would affect a limited number of streets or intersections at any one time. Additionally, the Los Angeles County Sheriff's Department, which</p>	<p>None required</p> <p>MM Haz-2 Prior to construction, the Project Applicant shall prepare a Traffic Control Plan for review and approval by the City Traffic Engineer that shall be implemented during the construction phase.</p>	<p>Less than Significant</p> <p>Less than Significant after Mitigation</p>

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<p>provide guidance for the City's planned response to extraordinary emergency situations associated with natural disasters, terrorism, technological incidents, and nuclear defense operations, would continue to be implemented. However, the impact to the City of Santa Clarita evacuation routes from construction of the Project would be potentially significant. Implementation of Mitigation Measure MM Haz-2 would reduce the impact to less than significant.</p> <p>Haz-8 – The project site and surrounding areas are predominately built out and no wildlands occur within or immediately adjacent to the project site. The risk of wildfire is greatest in the non-urbanized portion of the City and Los Angeles County where vegetation, varied topography, and slopes are all present. The Project area is exposed to a lesser amount of threat because of its developed character. The Project site is located in close proximity to fire stations and response times would be within the Los Angeles County Fire Department's desired range of 5 minutes. As shown in Figure 4.8-3, the project site is within a Very High Fire Hazard Severity Zone (VHFHSZ). In addition, the Project would be subject to compliance with the Los Angeles County Fire Department's development conditions Refer to Section 4.15, Fire Protection, for additional analysis. Implementation of the recommended Mitigation Measures MM PS-4 through MM PS-6 would reduce impacts to less than significant in this regard.</p>	<p>Refer to Mitigation Measures MM PS-4 through MM PS-6.</p>	<p>Less than Significant</p>
<p>Hydrology and Water Quality</p>		
<p>Hyd-3, Hyd-4, Hyd-5, Hyd-11, Hyd-12 – As expected, runoff volumes increase throughout all the storm events. The 25-Year developed condition volume is shown to increase 3.57 acre-feet (af) above that of the existing condition. Through the use of on-site water quality improvements already incorporated into the project design, this small increase would result in less than significant impacts.</p> <p>The Project would not result in hydrologic impacts related to stream channel hydromodification. Runoff from the 25-year 24-hour storm would be infiltrated on-site. Project runoff above the 25-year storm would be discharged directly to a storm drain system that flows directly to the Santa Clara River. Discharges to the Santa Clara River are exempt from the hydromodification requirements in the MS4 Permit, therefore the Project is exempt. However, the Project would implement a more protective performance standard than what is required by the MS4 Permit.</p>	<p>None required</p>	<p>Less than Significant</p>

Tebo Environmental Consulting, Inc.
March 2017

Sand Canyon Plaza Mixed-Use Project Draft EIR
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<p>Project BMPs include LID site design, source control, and LID treatment control BMPs in compliance with the MS4 Permit, City Municipal Code, and LID Manual requirements. Sizing criteria contained in the MS4 Permit and LID Manual would be met for all LID BMPs because the Project's BMPs would be designed to infiltrate runoff volumes up to the 25-year storm event. Thus, less than significant impacts would occur.</p> <p>Hyd-1, Hyd-5 and Hyd-6 – Prior to the issuance of preliminary or precise grading permits, the landowner or subsequent project applicant would provide the County with evidence that a Notice of Intent (NOI) has been filed with the SWRCB. Such evidence would consist of a copy of the NOI stamped by the SWRCB or Regional Water Quality Control Board, or a letter from either agency stating that the NOI has been filed and a copy of the site's applicable Waste Discharge Identification (WDID) number.</p> <p>On this basis, the impact of Project construction-related runoff is considered less than significant.</p> <p>Project construction phase impacts on water quality are generally caused by soil disturbance and subsequent suspended solids discharge. These impacts would be minimized through implementation of construction BMPs that would meet or exceed measures required by the Construction General Permit and General Dewatering Permit, as well as BMPs that control the other potential construction-related pollutants (PAHs, metals). A SWPPP would be developed as required by, and in compliance with, the Construction General Permit. Erosion control BMPs would be implemented to prevent erosion, whereas sediment controls, including but not limited to silt fence, sedimentation ponds, and secondary containment on stockpiles would be implemented to trap sediment once it has been mobilized. On this basis, the construction-related impact of the Project on water quality is considered less than significant.</p> <p>The infiltration BMPs would prevent the discharge of pollutants of concern to the Santa Clara River originating from wet weather and dry weather flows and would be design as full trash capture BMPs, therefore the Project's impacts on surface receiving water quality would be less than significant.</p> <p>The Project would not be a source of pollutants of concern that could impact water quality. Based on compliance with the federal, state, and local requirements designed to protect water quality and beneficial uses, Project impacts are less than significant.</p>	<p>None required</p>	<p>Less than Significant</p>

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<p>Hyd-2 – Although the Project would increase impervious area compared to the existing condition, increases in runoff volumes up to the 25-year storm event would be infiltrated in the Project LID treatment BMPs. In addition, the Project would include landscape irrigation, which would result in an increase in recharge compared to the existing condition. The Project is required to incorporate LID BMPs that promote groundwater recharge. Therefore, the Project would not significantly deplete groundwater supplies or interfere substantially with groundwater recharge, and less than significant impacts.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Hyd 7 and 8 – According to the Flood Insurance Rate Map (FIRM), Map Number 06037C0645F, Panel Number 0645F, September 26, 2008, published by the Federal Emergency Management Agency (FEMA), the project site is located within Zone D. As indicated previously, the Project would include the construction of drainage facilities (box culvert) to accommodate the existing on-site Sand Canyon wash. These improvements would comply with all City and County requirements and would remove any flood hazard potential to future development associated with the Project. Additionally, the Project site is located north of and at a higher elevation than the Santa Clara River, which is a within a special flood hazard area. Therefore, the Project would not place housing or other structures within the 100-year floodplain and no impacts would occur in this regard.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Hyd 9 and 10 – The Project site is located inland from the Pacific Ocean and not in proximity to any large, continuously filled bodies of surface water, therefore, it is not subject to seiche or tsunamis. There are no dams that occur upstream of the project site. There is no indication that the Project, or other existing or planned projects in the project area, would be at risk a failure of the dam. The Project site is subject to some debris or mudflows; however, adequate building setbacks from natural slopes and debris control facilities proposed in upstream areas of the site would protect the Project development from mudflow hazard. Thus, impacts would be less than significant.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Land Use</p>		
<p>LU-1 – A portion of the Project site is currently developed with mobile home units. Remaining portions of the site are undeveloped. Surrounding uses include single-family residential to the west and north, single-family and</p>	<p>None required</p>	<p>Less than Significant</p>

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<p>multi-family residential to the east; and commercial uses to the south and west along Sand Canyon Road, north of SR14. Redeveloping the site from residential uses to a mixed-use development would not physically divide an established community. Commercial and residential uses already surround the Project site, and redevelopment of the Project site would provide for additional compatible uses adjacent to existing uses.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>LU-2 – The Project site has a General Plan and zoning designation of MXN (Mixed Use Neighborhood) and Urban Residential (UR-3). No changes to the General Plan land use or zoning designations are necessary for the Project.</p>		
<p>Minerals and Energy Resources</p>		
<p>Min 1 and Min 2 – The Project site is not within a mineral area identified on General Plan Conservation and Open Space Element Exhibit CO 2, Mineral Resources, and the site is not otherwise known to contain mineral resources. Therefore, the Project would not result in the loss of availability of a known mineral resource and would have no impacts.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Min 3 – Market-rate conditions encourage the efficient use of materials and manpower during construction. Similarly, the energy and water resources that would be utilized by the Project would be supplied by the regional utility purveyors, which participate in various conservation programs. Furthermore, there are no unique conditions that would require excessive use of nonrenewable resources on-site, and the Project is expected to utilize energy or water resources in the same manner as typical modern development. Therefore, the Project would not use nonrenewable resources in a wasteful and inefficient manner, thus resulting in less than significant impacts.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Noise</p>		
<p>N-1 and N-4 – The Project's construction-related noise levels at the above mentioned sensitive receptors would have the potential to exceed the City's exterior daytime noise standards identified previously. However, it should be noted that the Project would be consistent with Section 11.44.080 of the SCMC (Special Noise Sources—Construction and Building), which states no person shall engage in any construction work which requires a building permit from the City on sites within three hundred (300) feet of a residentially zoned property except between the hours of seven a.m. and seven p.m., Monday through Friday, and eight a.m. to six p.m. on Saturday</p>	<p>Regulatory Compliance Measure MM N-1 – The Project shall adhere to Section 11.44.080 of the SCMC (Special Noise Sources—Construction and Building). As stated therein, no person shall engage in any construction work which requires a building permit from the City on sites within 300 feet of a residentially zoned property except between the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturday. Further, no work shall be performed on the following public holidays: New Year's</p>	<p>Even after Mitigation, impacts are considered significant and unavoidable</p>

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<p>Nevertheless, as temporary construction noise levels would exceed exterior daytime noise standards, construction noise impacts would be potentially significant.</p>	<p>Day, Independence Day, Thanksgiving, Christmas, Memorial Day and Labor Day.</p> <p>Mitigation Measures</p> <p>MM N-2 Noise and ground-borne vibration construction activities whose specific location on the Project site may be flexible (e.g., operation of compressors and generators, cement mixing, general truck idling) shall be conducted as far as possible from the nearest off-site land uses.</p> <p>MM N-3 When possible, construction activities shall be scheduled so as to avoid operating several pieces of equipment simultaneously, which causes high noise levels.</p> <p>MM N-4 Flexible sound control curtains shall be placed around all drilling apparatuses, drill rigs, and jackhammers when in use.</p> <p>MM N-5 The Project contractor shall use power construction equipment with state-of-the-art noise shielding and muffling devices.</p> <p>MM N-6 Barriers such as flexible sound control curtains shall be erected around heavy equipment to minimize the amount of noise on the surrounding land uses to the maximum extent feasible during construction.</p> <p>MM N-7 All construction truck traffic shall be restricted to truck routes approved by the City, which shall avoid residential areas and other sensitive receptors to the extent feasible.</p> <p>MM N-8 A construction notice shall be prepared and shall include the following information: job site address, permit number, name and phone number of the contractor and owner or owner's agent, hours of construction allowed by code or any discretionary approval for the site, and City telephone numbers where violations can be reported. The notice shall be posted and maintained at the construction site prior to the start of construction and displayed in a location that is readily visible to the public and approved by the City.</p>	<p>Significant and Unavoidable</p>
<p>N-2 – With respect to human annoyance, residential sensitive receptors located within 75 feet of the Project site boundaries (Sensitive Receptor No. 1 located as close as 20 feet from Project site) could experience construction related vibration levels of up to approximately 73-87 VdB. These levels would exceed the FTA's vibration impact threshold of 72 VdB for residences and buildings where people normally sleep. However, similar to construction noise sources, it should be noted that the Project would be consistent with Section 11.44.080 of the SCMC (Special Noise Sources—</p>	<p>Even with the implementation of Mitigation Measures MM N-1 through MM N-7, construction vibration levels (human annoyance) would be significant and unavoidable.</p>	<p>Significant and Unavoidable</p>

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<p>Construction and Building), which states no person shall engage in any construction work which requires a building permit from the City on sites within 300 feet of a residentially zoned property except between the hours of seven a.m. to seven p.m., Monday through Friday, and eight a.m. to six p.m. on Saturday. Nevertheless, as temporary construction vibration levels would exceed residential annoyance thresholds, impacts would be potentially significant.</p> <p>N-1, N-3 and N-4 – Uses with greater setbacks and without a direct line-of-sight to these roadways are expected to experience exterior noise levels below the City's exterior noise standard of 65 dBA CNEL (i.e., locations where project building facades along the site's boundary will shield internal on-site uses from the roadway noise). Based on data published by the Federal Highway Administration, such conditions can reduce line-of-sight noise levels by approximately 10 dBA for some locations. Assuming a 10 dBA reduction described above, uses with greater setbacks and without a direct line-of-sight to the roadways would experience exterior noise levels of approximately 61.5 dBA CNEL to 64.7 dBA CNEL. These noise levels would be within the City's exterior noise standard of 65 dBA CNEL. Nevertheless, because exterior spaces fronting Sand Canyon and Soledad Canyon Roads with a direct line-of-sight to these roadways may experience exterior noise levels above the City's exterior noise standard of 65 dBA CNEL, this impact would be potentially significant.</p>	<p>Regulatory Mitigation Measures MM N-9 Consistent with Policy N 3.1.2 of the City's Noise Element, where the projected exterior noise levels could exceed 65 CNEL at single-family residences (rear yards), open space areas, and common recreational and open space areas for multi-family developments, the Applicant shall provide noise barriers, setbacks, and site design standards to reduce future on-site traffic noise levels to the maximum extent feasible.</p> <p>MM N-10 Consistent with Policy N 3.1.9 (Mixed-Use Developments) of the City's Noise Element, the Project shall implement a buyer and renter notification program for residences where appropriate, to educate and inform potential buyers and renters of the sources of noise in the area and/or new sources of noise that may occur in the future. As determined by the reviewing authority, notification may be appropriate in the following areas: within 200 feet of commercial uses in mixed-use developments, potential buyers and renters should receive notice that the commercial uses within the mixed-use developments may generate noise in excess of levels typically found in residential areas, that the commercial uses may change over time, and the associated noise levels and frequency of noise events may change along with the use.</p> <p>MM N-11 The Project shall comply with Title 24 Noise Insulation Standards, which specifies the maximum allowable sound transmission between dwelling units in multi-family residential buildings, and limits allowable interior noise levels in habitable spaces to 45 dBA CNEL.</p> <p>Mitigation Measures MM N-12 Prior to the issuance of building permits for uses fronting Sand Canyon and Soledad Canyon Roads, the project developer shall submit evidence demonstrating that all feasible design features have been considered to meet the City's exterior noise standard of 65 dBA CNEL. Locations that could be exposed to future exterior noise levels above</p>	<p>Even with the implementation of Mitigation Measures MM N-9, MM N-10, MM N-12, and MM N-13, impacts for traffic noise on exterior noise levels would be significant and unavoidable.</p>

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<p>N-5 and N-6 – The project site is not located within an airport land use plan or within 2 miles of an airport or a private airstrip. There are no airports or private airstrips within or adjacent to the City of Santa Clarita. Thus, implementation of the Project would not expose people residing or working on the Project site to excessive noise impacts from airports or private air strips. Therefore, no impacts would occur in this regard.</p> <p>Cumulative mobile source noise impacts would occur primarily as a result of increased traffic on local roadways due to the Project, ambient growth, and related projects/cumulative development within the study area. Although the Project would only contribute a maximum increase of 0.8 dBA CNEL for future 2030 traffic noise levels, cumulative traffic noise level increases would be considered significant for the following roadway segments along Sand Canyon: between N. Silver Saddle Circle and Sand Canyon "C"; Project Driveway, between Sand Canyon "C" Project Driveway and South Silver Saddle Circle, between South Silver Saddle Circle and Sand Canyon "A" Project Driveway, and between Sand Canyon "A" Project Driveway and Soledad Canyon Road. As no feasible mitigation is available to reduce this impact, cumulative traffic noise impacts would be significant and unavoidable.</p>	<p>65 dBA CNEL shall consider at least the following: 1) Increase setbacks along Sand Canyon and Soledad Canyon Roads to the maximum extent feasible; 2) Consider the use of noise barriers between the roadway sources and the receptors (earthfill berms, masonry walls, and vegetation may be appropriate); and/or 3) Prohibit balconies for multi-family units facing Sand Canyon and Soledad Canyon Roads.</p> <p>MM N-13 The Project shall implement a buyer and renter notification program for residences where appropriate, to educate and inform potential buyers and renters that due to traffic levels on Sand Canyon Road, Soledad Canyon Road and the SR-14 Freeway, noise in excess of levels typically found in residential areas may be possible.</p> <p>None required</p>	<p>Less than Significant</p>
<p>Population and Housing</p> <p>PH-1 – In addition to the The City of Santa Clarita General Plan contains numerous other goals, policies, and actions supporting the creation of housing opportunities within the City. The City of Santa Clarita General Plan also includes various policies that encourage infill development and would be expected to reduce vehicle miles traveled (VMT) and associated air</p>	<p>There is no feasible mitigation to reduce cumulative operational noise.</p> <p>None required</p>	<p>Significant and Unavoidable</p> <p>Less than Significant</p>

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<p>pollutant emissions compared to previous low density development within the City. The Project is considered an infill development, as the site is surrounded on all sides by urban development.</p> <p>new Project residential and employment generating land uses would result in a total population increase of 2,261 2,336 persons. The additional population associated with potential employees relocating to the City and occupying existing either vacant housing or new housing has already been accounted for in the City of Santa Clarita General Plan. Further, approximately 3,116 unemployed persons currently reside within the City. Some of these currently unemployed persons could fill jobs created by the Project.</p> <p>In conclusion, the additional <u>149</u> jobs to be provided by the Project have been accounted for in the City of Santa Clarita General Plan and in SCAG's 2020 forecasts. Thus, impacts would be less than significant.</p>	<p>None required</p>	<p>Less than Significant</p>
<p>Parks and Recreation</p>		
<p>Rec-1 and Rec-2 – Based on 3,10 persons per household, the development of 580 single-family and multi-family residential units would result in a population increase of 1,798 persons, which would require a minimum of 5.39 acres of parkland. However, the City's General Plan strongly encourages new development to provide fees and/or parkland at a rate of 5 acres per 1,000 persons. Therefore, consistent with the General Plan the Project would be required to provide 8.99 acres of parkland. On-site recreational areas may receive credit against a portion (up to 30%) of the parkland acreage requirement. Prior to Project development, the Project Applicant will be required to pay for an appraisal to establish the value of a finished acre of land in the Project area. The City will collect fees based on the approved appraisal. The payment of the Quimby fees would satisfy the City's park requirement. Therefore, impacts to parks and recreation are less than significant.</p> <p>New residents of the Project are expected to use the City's and County's existing and proposed trail systems in the Santa Clarita Valley area as they are constructed. Anticipated use of the surrounding trails would increase the density of users on such trails once they are constructed. Once the</p>	<p>None required</p>	<p>Less than Significant</p>

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Impacts	Mitigation Measures	Significance after Mitigation
<p>Project is completed, the trails would connect to those local and regional trails that would be in place at that time. The proposed trail network is considered to have a beneficial impact on the local and regional trail system because it would provide linkages to local and regional trails.</p>		
<p>Public Services</p>		
<p>PS-1 Fire – Although the Project would be in close proximity to existing fire stations, it would increase the demand on existing fire protection resources in the general area. Additional marpower, equipment, and facilities would be needed to accommodate future growth, and the LACoFD has long-range plans to upgrade the level of fire protection in the area as growth occurs. Thus, as required by Mitigation Measure MM PS-1 the Project Applicant would be required to pay fees, under the Developer Fee Program to provide funds for fire protection facilities, which are required by new residential, commercial, or industrial development in an amount proportionate to the demand created by the Project.</p>	<p>MM PS-1 Concurrent with the issuance of building permits, the Project Applicant shall participate in the Developer Fee Program to the satisfaction of the Los Angeles County Fire Department and/or City of Santa Clarita.</p> <p>MM PS-2 Adequate access to all buildings on the Project site shall be provided for emergency vehicles during the building construction process.</p> <p>MM PS-3 Adequate water availability shall be provided to service construction activities.</p> <p>MM PS-4 All on-site development shall comply with the applicable Los Angeles County and City of Santa Clarita code requirements for construction, access, water mains, fire flows, and fire hydrants, as stipulated by the Los Angeles County Fire Department or the City of Santa Clarita through Project approvals or building plan reviews.</p> <p>MM PS-5 Prior to the issuance of building permits, the Project Applicant, or responsible party, shall obtain the necessary clearances from and shall comply with all applicable conditions imposed by Los Angeles County Fire Department, including but not limited to those from the Planning Division, Land Development Unit, Forestry Division, or Fuel Modification Unit.</p> <p>MM PS-6 The Project Applicant, or responsible party, shall file all landscape plans with the Los Angeles County Fire Department Fuel Modification Unit to ensure compliance with the High Fire Hazard Severity Zone.</p>	<p>Less than Significant after Mitigation</p>
<p>Mitigation measures that would reduce construction-related fire impacts to a less than significant level would include availability of adequate water to service construction activities, and that all construction-related requirements of the landscape plan and the irrigation plan be fulfilled, as approved by the LACoFD. Implementation of the applicable General Plan goals and policies, conditions of approval, and Mitigation Measures MM PS-2 and MM PS-3 below would reduce impacts to a less than significant level.</p> <p>Implementation of the applicable General Plan goals and policies and Mitigation Measures MM PS-4 through MM PS-6 would ensure that operational-related fire service impacts are reduced to a less than significant level.</p>		
<p>PS-Police – Due to the presence of building materials, construction equipment, and related temporary office buildings, the potential for vandalism and theft is greater, thereby increasing Sheriff's calls for service demands for property protection. Implementation of the Mitigation Measure MM PS-7 would reduce impacts to less than significant.</p> <p>To prevent slow-moving construction impacts, Mitigation Measure MM PS-8 has been included to prepare a construction traffic control plan prior to the initiation of any construction activities, and reduce impacts to less than significant.</p>	<p>MM PS-7 During construction, private security patrols shall be utilized to protect the Project site.</p> <p>MM PS-8 Prior to construction activities, the Project Applicant shall have a construction traffic control plan approved by the City of Santa Clarita.</p> <p>MM PS-9 Project Applicant, or designee, shall pay the City's law enforcement facilities impact fee in effect at the time of issuance of a building permit.</p> <p>MM PS-10 As final development plans are submitted to the City of Santa Clarita for approval in the future, the Los Angeles County Sheriff's Department</p>	<p>Less than Significant after Mitigation</p>

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<p>The Project would generate an increased demand for police services. To offset this potential increase, the Project as it develops, would create revenues from property and sales taxes that would be deposited into the City of Santa Clarita General Fund. A portion of these revenues would then be allocated, in accordance with the City of Santa Clarita and County of Los Angeles contractual service agreement, to maintain staffing and equipment levels for the Santa Clarita Valley Station in response to related demands.</p> <p>The LASD prescribes to the principles of Crime Prevention Through Environmental Design (CPTED), which includes defensible space, territoriality, surveillance, lighting, landscaping, and physical security. Implementing CPTED principles serves to discourage criminal activity, while encourage the legitimate use of proposed on-site uses. Potentially significant impacts to police protection could arise as a result of Project design. Incorporation of safety design techniques into the Project design (refer to Mitigation Measures MM PS-10) and implementation of applicable General Plan goals and policies, potentially significant security impacts to persons and property would be reduced to a less than significant level.</p>	<p>design requirements that reduce demands for service and ensure adequate public safety shall be incorporated into the building design. The design requirements for this Project shall include:</p> <ul style="list-style-type: none"> • Proper lighting in open areas and parking lots to the satisfaction of the Los Angeles County Sheriff's Department, around and throughout the development to enhance crime prevention and enforcement efforts • Sufficient street lighting for the Project's streets • Good visibility of doors and windows from the streets and between buildings on the Project site • Building address numbers on both residential and commercial/retail uses are lighted and readily apparent from the streets for emergency response agencies • Plant low-growing groundcover and shade trees, to the extent feasible, rather than a predominance of shrubs that could conceal potential criminal activity around buildings and parking areas 	<p>Less than Significant after Mitigation</p>
<p>PS-Schools – The Residential Mitigation Payment shall be adjusted annually with the District's revisions of its SFNA in conformance with California Government Code §65395.5 and §65395.6. In addition, the Project Applicant would receive credit for the assessable square footage of the existing on-site mobile home units as they are removed. Therefore, the Project Applicant would be required to pay the statutory fees as stipulated in the School Facilities Mitigation Agreement (refer to Mitigation Measure MM PS-11), reducing impacts to a less than significant level.</p> <p>The Project Applicant would be required to pay the statutory fees as stipulated in the Agreement for Fair Share Funding of School Facilities (refer to Mitigation Measure MM PS-12), reducing impacts to a less than significant level.</p>	<p>MM PS-11 The Project Applicant, or responsible party, shall pay the required mitigation fees to the Sulphur Springs Union School District as stipulated in the School Facilities Mitigation Agreement.</p> <p>MM PS-12 The Project Applicant, or responsible party, shall enter into an Agreement with the William S. Hart Union High School District prior to final map. All fees shall be paid in accordance with the Agreement.</p>	<p>Less than Significant after Mitigation</p>
<p>PS-Libraries – Residents of the Project would generate new tax revenues and, as noted above, funding sources for the Santa Clarita Public Library consist of property taxes, state assistance, and revenue from fines, fees, and other miscellaneous revenue. According to Library staff, increased tax revenues funding addresses only library operations and, because of uncertainty regarding General Fund contribution levels, it is not adequate to offset the impact of the Project on the Santa Clarita Public Library's ability to construct new libraries and purchase new items (e.g., books, periodicals,</p>	<p>MM PS-13 The Project Applicant shall pay a library facilities mitigation fee. Currently this fee is \$800.00 per residential unit. This is the estimated fee that would be collected to pay for new library construction and items totaling \$464,000.00.</p>	<p>Less than Significant after Mitigation</p>

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<p>audio cassettes, videos). Consequently, the tax revenues collected would not adequately cover all the costs of serving the Project population, and a significant impact on the library system would result.</p> <p>Traffic and Circulation</p> <p>Buildout of the Project would occur over approximately 18 months. During construction of the Project, construction workers would arrive at and depart from the Project site during off-peak hours, minimizing trips during the AM and PM peak traffic periods. As such, construction-related trips associated with buildout of the Project would result in less than significant impact. Based on the mixed-use trip generation modal described above, which was approved by the Santa Clara Department of Public Works, buildout of the Project would generate approximately 393 new AM peak hour trips, 696 new PM peak hour trips, and 7,986 new daily trips.</p> <p>The Project site is not located within an airport land use plan or within 2 miles of an airport or a private airstrip. There are no airports or private airstrips within or adjacent to the City of Santa Clara. Thus, implementation of the Project would not result in any change in air traffic patterns or traffic levels. Therefore, no impact would occur in this regard.</p> <p>Implementation of the Project would not result in the construction and/or operation of hazardous design features (e.g., sharp curves and/or dangerous intersections) or the interaction of incompatible uses. However, the Project's goals and policies do encourage pedestrian linkages, the implementation of bicycle facilities, and the reconfiguration of roadways. Thus, it is imperative that facilities designed for non-automobile modes include enhanced safety features to minimize conflicts between transit riders, bicyclists, pedestrians, and motor vehicles. The Project incorporates street improvement standards that would provide a defined and often separated space for pedestrians, motorists, and bicyclists.</p> <p>All of the freeway mainline segments and ramps in the study area would operate at LOS E or better, except for the segment of SR-14 southbound between Newhall Avenue and Golden Valley Road in both the northbound and southbound directions. These segments are shown to exceed capacity in the AM and PM peak hour under both Without Project and With Project conditions, and to operate at LOS E (based on volume-density calculations). However, based on the CMP impact criteria (V/C-increase</p>	<p>MM T-1 Sand Canyon at Soledad Canyon. Modify traffic signal timing to coordinate with Kenroy Avenue and SR-14 SB Ramp intersections along Soledad Canyon Road.</p> <p>MM T-2 SR-14 SB Ramps at Soledad Canyon. Modify traffic signal to change westbound left-turn phasing from permissive to <u>protected left-turn phasing</u>. protective permissive</p> <p>MM T-3 The Project Developer shall enter into a Mitigation Agreement with Caltrans. Said Mitigation Agreement shall be finalized prior to the recordation of a final map.</p> <p>None required</p>	<p>Less than Significant after Mitigation</p> <p>Less than Significant</p>
<p>All of the freeway mainline segments and ramps in the study area would operate at LOS E or better, except for the segment of SR-14 southbound between Newhall Avenue and Golden Valley Road in both the northbound and southbound directions. These segments are shown to exceed capacity in the AM and PM peak hour under both Without Project and With Project conditions, and to operate at LOS E (based on volume-density calculations). However, based on the CMP impact criteria (V/C-increase</p>	<p>None required</p>	<p>Less than Significant</p>

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Impacts	Mitigation Measures	Significance after Mitigation
<p>greater than 0.02), the Project would not create a significant impact on the SR-14 mainline.</p> <p>The impact to the City of Santa Clarita evacuation routes from construction would be potentially significant. Impacts would be reduced through implementation of Mitigation Measure MM Haz-2, which requires project applicants/developers to prepare a Traffic Control Plan for implementation during the construction phase, as deemed necessary by the City Traffic Engineer, which would ensure that the Los Angeles County Sheriff's Department is aware of temporary roadway closures due to construction activities and alternative travel.</p> <p>The Project is consistent with the General Plan and Development Code. The Project includes the installation of a Class I Trail along Sand Canyon Road and the preservation of the Class II Trail along Soledad Canyon Road. Direct connections from the Project site to the City's trail system would be provided. All required Transit facilities have been incorporated into the project design. As proposed, the Project would not conflict with transit, bicycle and pedestrian facilities, but instead, enhances these facilities. Therefore, less than significant impacts would occur.</p> <p>Even though the amount of increased traffic due to the Project would not exceed the CMP threshold of significance since the V/C increase due to the Project would be less than 0.02 at each location, the Project would contribute its pro-rata share to the anticipated costs for design and implementation of future improvements on SR-14 as required by Caltrans.</p>	<p>See Mitigation Measure Haz-2</p> <p>None required.</p>	<p>Less than Significant after Mitigation</p> <p>Less than Significant</p>
<p>Utilities and Service Systems</p> <p>Util - Solid Waste – The implementation of Mitigation Measures MM Util-2 through MM Util-4 and compliance with the Municipal Code and General Plan goals and policies, long-term operational impacts on a Project-specific basis would be less than significant.</p>	<p>MM T-4 Sand Canyon at Soledad Canyon (Cumulative Conditions). Modify traffic signal timing to coordinate with Kenroy Avenue and SR-14 SB Ramp intersections along Soledad Canyon Road.</p> <p>MM T-5 Sand Canyon at Soledad Canyon (Cumulative Conditions). Modify intersection to resurface one northbound right-turn lane to a through lane (for 2 NB Left, 2 NB Through and 1 NB Right) (Project Share = 24%)</p> <p>MM T-6 SR-14 SB Ramps at Soledad Canyon (Cumulative Conditions). Modify traffic signal to change westbound left-turn phasing from permissive to protective permissive.</p> <p>MM T-7 SR-14 Freeway Mainline (Cumulative Conditions). Contribute pro-rata share to the anticipated costs for design and implementation of future improvements. (Project Share = 1.6%).</p> <p>MM Util-1 The project application shall complete and submit to the Building & Safety Division a Construction and Demolition Materials Management Plan (C&DMMP), approved by the City's Director of Public Works, or the Director's Designee, on a C&DMMP form approved by the City.</p>	<p>Less than Significant after Mitigation</p>

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2.6 – Summary of Impacts and Mitigation Measures

2. Executive Summary

Impacts	Mitigation Measures	Significance after Mitigation
<p>During construction and operation, the Project would be required to comply with all federal, state, and local solid waste regulations, including the 2013 Green Building Standards Code, and AB 939 waste diversion requirements. The 2013 Green Building Standards Code aims to improve the health, safety, and general welfare of the public by incorporating design and construction measures which result in waste reduction by promoting material conservation and the efficient use of resources. As discussed</p>	<p>The completed C&DMMP, at a minimum, shall indicate all of the following:</p> <ol style="list-style-type: none"> 1. the estimated weight of project C&D materials, by materials type, to be generated; 2. the maximum weight of C&D materials that it is feasible to divert, considering cost, energy consumption and delays, via reuse or recycling; 3. the vendor or facility that the Applicant proposes to use to collect, divert, market, reuse or receive the C&D materials; 4. the estimated weight of residual C&D materials that would be transported for disposal in a landfill or transformation facility; and 5. the estimated weight of inert waste to be removed from the waste stream and not disposed of in a solid waste landfill. (General Plan EIR Mitigation Measure 3.17-6) <p>MM Util-2 The Project Applicant shall provide adequate areas for the collection and loading of recyclable materials (i.e., paper products, glass, and other recyclables) in compliance with the State Model Ordinance, implemented on September 1, 1994, in accordance with AB 1327, Chapter 18, California Solid Waste Reuse and Recycling Access Act of 1991. (General Plan EIR Mitigation Measure 3.17-2)</p> <p>MM Util-3 The Project Applicant shall be required to implement waste reduction programs in conformance with the City's Source Reduction and Recycling Element program. (General Plan EIR Mitigation Measure 3.17-4)</p> <p>MM Util-4 Any hazardous waste that is generated on site, or is found on site during demolition, rehabilitation, or new construction activities shall be remediated, stored, handled, and transported in compliance per appropriate local, state, and federal laws, as well as with the City's Source Reduction and Recycling Element. (General Plan EIR Mitigation Measure 3.17-5)</p> <p>None required</p>	<p>Less than Significant</p>

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2. Executive Summary 2.6 – Summary of Impacts and Mitigation Measures

Impacts	Mitigation Measures	Significance after Mitigation
<p>above, the most recent data published by CalRecycle shows that the City met the diversion rate required by AB 939 and AB 1016 in 2014. Thus, impacts would be less than significant.</p> <p>Wastewater Util 3, Util-4 and Util-5 – The CSDLAC requires new users to pay a fee to connect to the CSDLAC's Sewerage System. Therefore, the CSDLAC would require payment of a connection fee to construct any incremental expansion of the SCVJSS to accommodate the Project. Furthermore, the City of Santa Clarita would not issue connection permits to the sewer system if it cannot be demonstrated that sufficient capacity exists to serve the proposed development.</p> <p>Water Supply Util 6 and Util-7 – The development potential of the Project is consistent with the General Plan, and has been accounted for in the associated Environmental Impact Report. In summary, there would be sufficient water supply to meet the project's water demand under an average/normal water year, single dry year, or multiple dry years. In addition, the Project would include development of a distribution system that would provide sufficient capacity for domestic and fire flow requirements.</p>	<p>MM Util-5 Payment of a connection fee to the County Sanitation Districts of Los Angeles County shall be made prior to issuance of a permit to connect (directly or indirectly) to the County Sanitation Districts of Los Angeles County's Sewerage System.</p> <p>None required</p>	<p>Less than Significant after Mitigation</p> <p>Less than Significant</p>

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3.8 Land Use Designations and Zoning

The Project site has a General Plan and zoning designation of MXN (Mixed Use Neighborhood) and Urban Residential 3 (UR-3). This zone is intended for mixed-use development, which is encouraged to create neighborhoods that integrate residential uses with complementary commercial uses. The MXN zone allows for a maximum density of 18 dwelling units per acre. Approximately 2.7 acres of the site are in the Urban Residential 3 (UR-3) General Plan and zoning designations. No development (i.e., buildings) is proposed within the UR-3 zoned area.

Approximately 77 acres of the Project site are dedicated to residential land uses and accompanying open space. Under this designation, and not taking into account hillside ordinance requirements, the Project site could support up to 1,386 residential units. Approximately 10 acres of the site are designated for commercial land use. Under the MXN and UR-3 designations the Project site could accommodate up to 217,800 square feet of commercial uses.

3.9 Phasing

The Sand Canyon Plaza Mixed-Use Project would likely be developed in a single phase. Grading and site development would occur site-wide. It is expected that the three residential product types, the commercial area, and various on-site and off-site infrastructure would be constructed at or near the same time.

3.10 Requested Project Approvals

The Applicant is requesting the Project approvals described below, which would govern development of the proposed Sand Canyon Plaza Mixed-Use Project. Prior to issuing Project approvals, the City must certify that this EIR: 1) has been reviewed and considered; 2) has adequately analyzed the potential impacts of the Project; 3) has been completed in compliance with CEQA, the CEQA Guidelines, and the City's Environmental Guidelines, and reflects the independent judgment of the City Council. The requested Project approvals are described in further detail below.

1. **Tentative Tract Map No. 53074.** The Applicant is proposing to subdivide the property to facilitate construction of 580 residential units (~~119 detached condominium units, 149 attached townhomes/condominium units, 146 small-lot condominium units,~~ 122 attached townhomes/condominium units, and 312 apartment units), up to 60,000 ~~55,600~~ square feet of commercial uses (retail and restaurants), an 85,000-square-foot ~~a 75,000-square-foot~~ assisted living facility (up to 140 ~~120~~ beds), other lots for landscape/open space, private streets, and recreation areas.

3. Project Description

3.10 – Requested Project Approvals

2. **Conditional Use Permit No. 14-014.** The Applicant is requesting approval of a Conditional Use Permit (CUP) to allow for development within a Planned Development (PD) Overlay Zone. Any new proposal for development in a PD Overlay requires the submittal of a Conditional Use Permit, which is intended to provide for additional discretion for previously vacant or underutilized parcels. Additionally, the Applicant is requesting approval of ~~an 85,000-square foot~~ ~~a 75,000-square foot~~ assisted living facility with up to ~~140~~ ~~120~~ beds. A Conditional Use Permit is required to permit the assisted living facility within the MXN zone.
3. **Hillside Development Review No. 14-001.** The Applicant is requesting approval of a Hillside Development Review Permit to allow development on slopes over 10%.
4. **Ridgeline Alteration Permit No. 14-001.** The Applicant is requesting approval of a Ridgeline Alteration Permit to allow for development in a Ridgeline Preservation (RP) Overlay Zone, more specifically to allow for development within 100 feet vertically and horizontally of a significant ridgeline.
5. **Minor Use Permit No. 14-016.** The Applicant is requesting approval of a Minor Use Permit to allow for the commercial floor area ratio (FAR) to be less than the minimum required by the MXN zone. Under the MXN zone requirements, the minimum floor area ratio of commercial uses on the site would be 0.2:1 or ~~83,635~~ ~~87,120~~ square feet of commercial floor area. The Applicant is proposing to develop the site with up to 60,000 ~~55,600~~ square feet of commercial uses, which is a floor area ratio of 0.14 ~~0.13~~.
6. **Oak Tree Permit No. 14-008.** The Applicant is requesting approval of an Oak Tree Permit to allow for removal of two non-heritage oak trees and to permit Project grading to encroach within the protected zone of one heritage oak tree.

Permits and Approvals for the Project are highlighted in Table 3-1 below.

Table 3-1 Future Agency Actions

Agency	Action Required
California Department of Transportation	Encroachment Permit
Regional Water Quality Control Board	National Pollution Discharge Elimination System Permit; Section 401 permit under the federal Clean Water Act
California Department of Fish and Wildlife	Streambed Alteration Agreement per Fish & Wildlife Code Section 1602
U.S. Department of Army Corps of Engineers	Section 404 Permit under the federal Clean Water Act
South Coast Air Quality Management District	Various permits for air emissions regulation found in the Air Quality Management Plan

This table is not intended to provide the complete and final list of future actions required to implement the Project. This is an attempt to identify those actions that are known at this time to be required in the future.

3. Project Description

3.13 – Description of Project

Table 3-2 Sand Canyon Land Use Summary

Planning Area No.	Project Use	Commercial Square Footage	Residential Dwelling	
			Units	Acreage
PA-1	Commercial/retail/restaurant/ assisted living	60,000-55,600 SF commercial retail/restaurant; 85,000-75,000 SF assisted living facility (<u>140 beds</u>) 120 rooms)	n/a	<u>9.6</u> 10.0
	Open Space			
PA-2	Multi-family attached	N/A	312	12.2
PA-3	Multi-family attached	N/A	<u>149</u> 122	<u>10.3</u> 10.1
PA-4	Single-family detached <u>condominiums</u>	N/A	71	7.3
	condos			
PA-5	Single-family detached <u>condominiums</u>	N/A	<u>48</u> 75	<u>6.3</u> 10.0
	condos			
	Streets	N/A	N/A	<u>4.7</u> 7.2
	Drainage basin	N/A	N/A	1.0
	Open space/landscaped areas	N/A	N/A	<u>28.7</u> 28.6
	Right of way dedication	N/A	N/A	<u>1.1</u> 1.0
Total		60,000-55,600 SF commercial retail/restaurant; 85,000-75,000 SF assisted living facility	580	approx. 87

Source: Tentative Tract Map No. 053074, April 2017 ~~November 2016~~

As provided in **Table 3-2** above, the approximately 87-acre Project site would be developed with up to 60,000 ~~55,600~~ square feet of commercial/retail/restaurant uses and 85,000 ~~75,000~~ square feet of assisted living facilities (up to 140 ~~120~~ beds). Also proposed on the Project site are 580 residential units comprising 461 ~~434~~ multi-family units (including up to 312 apartment units and 149 attached townhomes) and 119 single-family detached condominiums, ~~146 single-family condos~~. If approval of the Project is granted, Project conditions of approval would permit modifications to building locations, building footprints, and product types shown on **Figure 3-4, Tentative Tract Map 53074**.

The approximately 87-acre Project site is divided into five Planning Areas. **Figure 3-5** depicts each Planning Area in relationship to the entire Project site. Details further describing the Planning Areas are provided below.

- Planning Area 1 (PA-1), Commercial** – Approximately 145,000 ~~130,600~~ square feet of commercial/residential floor including 60,000 ~~55,600~~ square feet of commercial (retail and restaurants) and an 85,000-square-foot ~~a 75,000-square-foot~~ assisted living facility (up to 140 beds) ~~120 rooms~~ on approximately 9.6 ~~10~~ acres. Planning Area 1 is located at the northeast intersection of Sand Canyon Road and Soledad Canyon Road and is depicted in **Figure 3-6**. PA-1 also includes a water quality/water feature located at the southwest corner of the Project site. Consistent with the requirements of the MXN zone, the maximum building height in PA-1 would be 50 ~~55~~ feet (assisted living facility). The remaining commercial buildings in PA-1 would range in height from 20 to 35 feet. Access to PA-1 would occur via Soledad Canyon Road and "A" Drive (left in/right in and right out) and Sand Canyon Road and "A" Drive (left in/right in and right out). Up to 415 ~~278~~ parking spaces would be provided for the retail commercial area contingent upon final uses and square footage, which includes 151 surface spaces and 264 spaces in a parking structure. Of the 415 parking spaces, up to 70 ~~60~~ spaces would be provided for the assisted living facility contingent upon the final bed count. Illustrative renderings are provided in **Figure 3-7** and **Figure 3-8**.



Figure 3-4 Tentative Tract Map 53074

3. Project Description

3.13 – Description of Project

- Planning Area 2 (Multi-Family Attached)** – 312 multi-family units (intended to be rental units) and required parking per the MXN ~~and UR-3 zone~~ requirements would be developed on 12.2 acres. One private recreational area with a pool, internal drive aisles, water quality improvements, and other open areas would be provided within PA-2. The maximum building height in PA-2 is 50 ~~55~~ feet. Access to PA-2 would be from Sand Canyon Road via "A" and "B" Drives. Approximately 1 acre of the existing Sand Canyon Road right-of-way would be vacated by the City and included in PA-2, as it would no longer be needed for roadway purposes. Planning Area 2 is located directly north of PA-1 along Sand Canyon Road and is depicted in **Figure 3-9, Planning Area 2**. An illustrative rendering is provided in **Figure 3-10**.
- Planning Area 3 (Multi-Family Attached Townhomes)** – 149 ~~122~~ townhomes with required parking (per the MXN ~~and UR-3 zone~~ requirements) on approximately 10.3 ~~10.1~~ acres. ~~One private recreational area, w~~ Water quality improvements, internal drive aisles, trails and other open areas would be provided within PA-3. The maximum building height in PA-3 is 40 feet. Access to PA-3 would be from Sand Canyon Road via "B", "C" and "D" Drives. Planning Area 3 is located north of Planning Area 2 along Sand Canyon Road and is depicted in **Figure 3-11, Planning Area 3**.
- Planning Area 4 (Single-Family Detached Condominiums) ~~Multi-Family Detached or Attached Condos~~** – 71 units with required parking (per MXN and UR-3 zone requirements) on approximately 7.3 acres. Internal drive aisles, water quality improvements, trails, and other open areas would be provided within PA-4. The 2.0-acre private recreational area located in PA-5 would also service PA-4. Access to PA-4 would be from Sand Canyon Road via "B," "C," and "D" Drives. Planning Area 4 is located in the central portion of the Project site north and east of Planning Area 2 and is depicted in **Figure 3-12, Planning Area 4**.
- Planning Area 5 (Single-Family Detached Condominiums) ~~Multi-Family Detached or Attached Condos~~** – 48 ~~75~~ units with required parking (per MXN and UR-3 zone requirements) on approximately 6.3 ~~10.0~~ acres. A 2.0-acre ~~One~~ private recreational area, internal drive aisles, water quality improvements, trails, and other open areas would be provided within PA-5. Access to PA-5 would be from Sand Canyon Road via "B", "C" and "D" Drives. Planning Area 5 is located in the eastern and northern portions of the Project site and is depicted in **Figure 3-13 and Figure 3-14**.

The Project includes a total of 580 residential units (replacing the existing 123 mobile homes), 60,000 ~~55,600~~ square feet of retail commercial uses, and an 85,000-square-foot ~~a 75,000-square-foot~~ assisted living facility.

PDF-12 The Applicant shall implement all control measures required and/or recommended by the SCAQMD (i.e., Rules 403, 1108, and 1113), including but not limited to the following:

- Use watering to control dust generation during demolition of structures or break-up of pavement;
- Water active grading areas and unpaved surfaces at least three times daily;
- Cover stockpiles with tarps or apply non-toxic chemical soil binders;
- Limit vehicle speed on unpaved roads to 15 miles per hour;
- Sweep daily (with water sweepers) all paved construction parking areas and staging areas;
- Provide daily clean-up of mud and dirt carried onto paved streets from the Project site;
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 15 miles per hour over a 30-minute period or more; and
- An information sign shall be posted at the entrance to the construction site that identifies the permitted construction hours and provides a telephone number to call and receive information about the construction project or to report complaints regarding excessive fugitive dust generation. Any reasonable complaints shall be rectified within 24 hours of their receipt.

3.15 Grading

Demolition/Site Clearing

The Project would require demolition of the remaining mobile home units and site clearing. In addition to the removal of the mobile homes, demolition would include the removal of asphalt, concrete, other ancillary structures to the existing mobile home park, trees, fences, and other existing debris.

Grading/Foundation

The Project would include grading approximately ~~2.1~~ 2.2 million cubic yards of cut and fill balanced on-site and is depicted on **Figure 3-15, Cut and Fill Map**. Additional remedial grading (approximately 850,000 cubic yards) would be necessary to accommodate site development.

3.16 Mobility Plan

The Project provides for non-vehicular modes of transportation in a system of trails, sidewalks and pedestrian pathways commonly known as the Mobility Plan). The Mobility Plan achieves Project objectives by creating and enhancing opportunities for non-vehicular travel through encouraging pedestrian mobility from the Project's residential areas to the commercial uses. The Mobility Plan can be found in [Figure 4.19-3, Existing and Future Bicycle Facilities](#) (page [4.19-13](#)), and [Figure 4.14-2, City of Santa Clarita Trail System](#) (page [4.14-10](#)). [Off-site access to surrounding uses and the future Vista Canyon Metrolink Station are shown on Figure 3-16, Off-Site Mobility Plan, and Figure 3-17, Off-Site Mobility Plan to Metrolink.](#)

3.17 Drainage/Water Quality

The Drainage and Water Quality Plan incorporates methodologies to meet or exceed the ongoing National Pollution Discharge Elimination System (NPDES) permit requirements. The plan includes a comprehensive series of drainage, flood control and water quality improvements designed for the Project. Project Design Features (PDFs) incorporated into the Project include site design, source control, treatment control and infiltration. As currently planned, storm water runoff from all developed areas of the Project would be routed to bioretention areas, vegetated swales and infiltration treatment control devices. These water quality improvements would be designed to operate off-line, receiving dry weather flows, small storm flows and the initial portion of large storm flows.

3.18 Conceptual Landscape Plan

The Conceptual Landscape Plan is shown on [Figure 3-18](#). The conceptual landscape plan for the Project focuses primarily on the use of native and drought tolerant trees and plant species to create a natural and vibrant environment. All plant species have been selected due to their ability to thrive in the Santa Clarita climate and their potential to add complexity and texture to the open space/landscaped areas within the Project. The use of turf shall be very limited and only used in locations where it would serve for passive or active recreation.

The irrigation systems would be designed, installed, operated and maintained in conformance with the State Water Efficient Landscape Ordinance and the City of Santa Clarita Landscaping Standards. The main objective for the irrigation design is to minimize water use and maximize efficiency. These objectives would be met using Smart ET Based controllers, hydro-zoning, moisture sensors, rain shut-off devices, and drip irrigation. Although portions of the native planting areas may receive temporary irrigation, a permanent irrigation system is important for a majority of the landscape areas to comply with the Los Angeles County Fire Department Fuel Modification Guidelines.

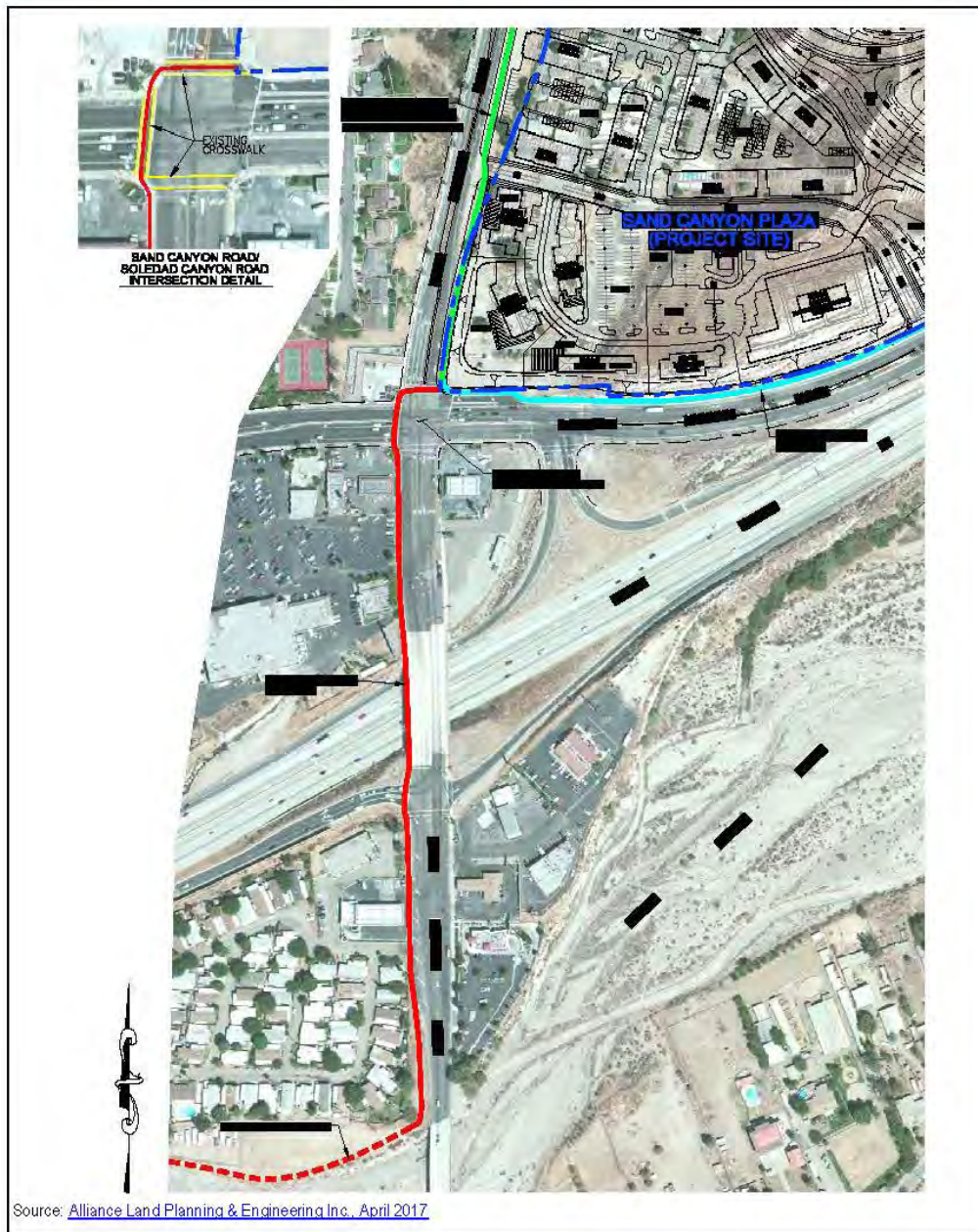
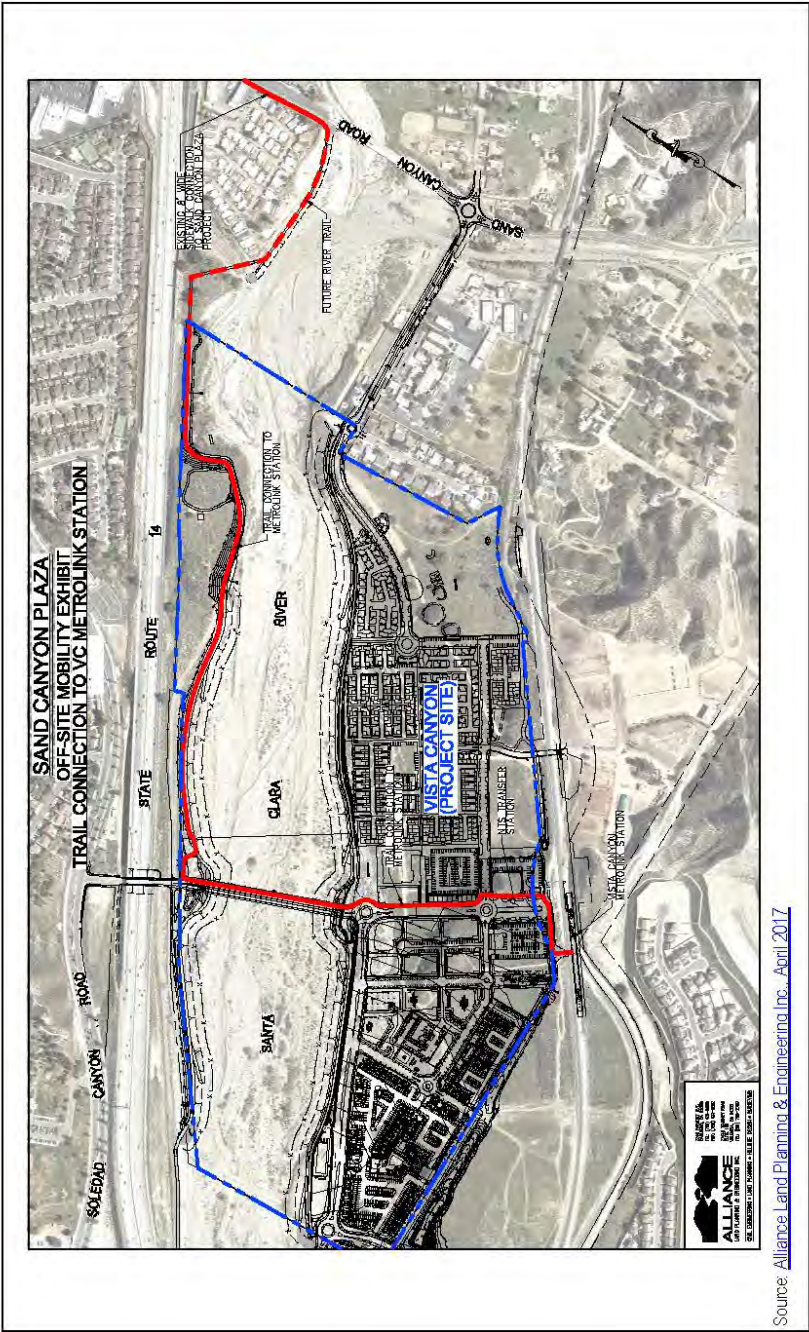


Figure 3-16 Off-Site Mobility Plan

3. Project Description



Source: Alliance Land Planning & Engineering, Inc., April 2017

Figure 3-17 [Off-Site Mobility Plan to Metrolink](#)

3.21 Recreation

Two private recreational areas are planned for the Project, including a 2.0-acre private park. At least one of the facilities would contain a pool, a spa, a restroom facility, and a recreation building.
~~As discussed previously, three private recreational areas are planned for the proposed Project. Each facility would contain a pool, a spa, a restroom facility, and a recreation building.~~

3.22 Open Space

The Project includes 28.7 acres of open space throughout the site, including natural habitat areas along on the northern portion of the ridgeline.

Localized operational air quality emissions would not exceed the SCAQMD thresholds of significance, and these impacts would be considered less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant for regional and localized construction emissions, localized operational emissions, toxic air contaminants, and odors.

Impacts would be potentially significant for regional operational emissions.

Mitigation Measures

MM AQ-1 The Project Applicant, or designee, shall require that all commercial-related landscaping activities utilize electric lawn mowers and electric leaf blowers to the extent feasible.

~~No mitigation is required for regional and localized construction emissions, localized operational emissions, toxic air contaminants, and odors.~~

There is no feasible mitigation to reduce regional operational emissions.

Level of Significance After Mitigation

Impacts would be less than significant for regional and localized construction emissions, localized operational emissions, toxic air contaminants, and odors.

Impacts would be significant and unavoidable for regional operational emissions.

AQMP Consistency

This analysis evaluates the two criteria for consistency with regional plans and the regional AQMP adopted by the SCAQMD.

AQ-6 Will the Project increase the frequency or severity of existing air quality violations or cause or contribute to new air quality violations?

AQ-7 Will the Project exceed the assumptions utilized in preparing the AQMP?

With respect to the first criterion, area air quality planning, including the AQMP, assumes that there will be emissions from new growth, but that such emissions may not impede the attainment and may actually contribute to the attainment of applicable air quality standards within the Basin. As discussed previously, the Project would not result in construction air quality emissions that exceed the SCAQMD thresholds of significance, and the Project would exceed the regional thresholds of significance set by the SCAQMD for ROG and NO_x primarily due to motor vehicles and area source emissions associated with the operation of a relatively high number of proposed residential uses. Construction-related emissions would be temporary in nature, lasting only for the duration of the construction period, and would not have a long-term impact on the region's ability to meet state and federal air quality standards. Furthermore, the Project will be required to comply with applicable SCAQMD rules and regulations for new or modified sources. For example, the Project must comply with SCAQMD Rule 403 for the control of fugitive dust during construction.

4.4 Biological Resources

4.4-1 Summary

No special status plant species have been reported to occur on the Project site, and none were observed during focused rare plant surveys conducted in April, May, and June of 2014 and 2015.

While the surveys of the Project site were conducted following relatively dry winters, and therefore not ideal conditions for detecting rare plants, habitat quality for rare plants is generally poor. However, slender mariposa lily has a moderate potential to occur on the property.

No special-status amphibians or mammals were found or are likely to occur, due to lack of habitat. One special-status reptile has been observed on-site, and one other has a moderate occurrence potential.

Seven bird species included on the CDFW Special Animals List were observed or detected during field surveys on the subject property. Three species of bats and two other special-status mammals could also occur on the property. There is undeveloped property immediately north of the property, but that is also bordered by residential land uses that continue to the north and east. There is currently no linkage to nearby natural habitat areas, or corridors to facilitate movement between such areas and the subject property.

Implementation of mitigation measures would result in less than significant impacts.

4.4-2 Introduction

This section identifies plant and animal resources within and adjacent to the Sand Canyon Plaza Mixed-Use Project site and evaluates the significance of the potential changes in these factors that could result from implementation of the Project.

1. Investigative Methods

A Biological Assessment (Biological Assessment – Sand Canyon Plaza, November 2015) was prepared for the Project by Impact Sciences, Inc. (Appendix 3). The investigative methods used to prepare the Biological Assessment are summarized below.

Literature Search

The California Natural Diversity Database (CNDDDB)¹⁶ and the California Native Plant Society database (CNPS)¹⁷ were queried prior to the site survey to identify previously reported special-status plants and wildlife. The CNDDDB search included the areas within the USGS 7.5-minute Mint Canyon Quadrangle, which contains the site and the surrounding eight quadrangles: Agua Dulce,

16 California Department of Fish and Wildlife (CDFW). California Department of Fish and Game Natural Diversity Data Base. Commercial Version.

17 California Native Plant Society. Inventory of Rare, Threatened, and Endangered Plants of California. Online database available at: <http://www.rareplants.cnps.org/>, accessed 2015.

Green Valley, Newhall, Oat Mountain, San Fernando, Sleepy Valley, Sunland, and Warm Springs Mountain. Fire history maps from the County of Los Angeles were also reviewed, as was the Natural Resources Conservation Service soil map.

Biological Assessment Appendix A, Special-Status Flora, and Appendix B, Special-Status Fauna, list species previously reported as occurring in the Project vicinity and discuss occurrence potential. The potential for each recorded special-status plant and animal species to occur on the subject property was analyzed based on site-specific information such as vegetation and habitat characteristics, topography, elevation, soils, surrounding land uses, known habitat preferences, and geographic ranges.

Vegetation was classified based on the species-dominance approach used by the 2009 Manual of California Vegetation.¹⁸ Where necessary, new names were developed for vegetation alliances not described by the current manual. ~~new names for vegetation alliances were developed because they represent the dominant and co-dominant species observed on the site but are not described by the current manual.~~

For the jurisdictional determination, the National Wetlands Inventory maps and the USGS topographic map were reviewed to identify potentially jurisdictional features. Federal and state guidelines were reviewed for delineation protocols. These are reviewed and summarized in Biological Assessment Appendix C, Jurisdictional Delineation. Delineation criteria defined by the California Department of Fish and Wildlife¹⁹ (CDFW) and the U.S. Code of Federal Regulations²⁰ were followed to determine the amount and location of jurisdictional waters.

Field Surveys

Systematic field techniques were used to assure thorough visual coverage of all accessible on-site habitats of the entire property. Transects of opportunity provided access to all habitats, using unaided and binocular-aided vision. The entire property was walked, with the exception of the very steep areas in the eastern portion of the property; those areas were studied with binoculars. ~~Transects of opportunity were used to provide thorough visual coverage of the entire property, using unaided and binocular-aided vision to access all habitat types.~~ Biological conditions were noted during field surveys conducted in 2014 and 2015 for special-status flora and fauna. Previous mapping and characterizations of the dominant plant communities were field truthed to check for substantial changes since the 2006-2008 surveys. Plant species found during these surveys are listed in Biological Assessment Appendix D, Observed Flora. Wildlife species identified or detected during field surveys are listed in Biological Assessment Appendix E, Observed Fauna.

¹⁸ Sawyer, J.T. Keeler-Wolf and J. Evens. A Manual of California Vegetation, 7th Edition. California Native Plant Society, Sacramento, CA. July 2013.

¹⁹ California Fish & Game Code §§1600-1616.

²⁰ Clean Water Act of 1972 §404. See also 33 U.S.C. §1341

such as sun-cups (*Camissonia bistorta*) and chia (*Salvia columbariae*), are also present in this community.

- **Disturbed Chamise Chaparral – Buckwheat Scrub** is a transitional vegetation type that occurs on the terrace adjacent to Sand Canyon Road, generally parallel to and between Sand Canyon Road and the dry wash, occupying approximately 4.16 acres. It is sparsely vegetated with the indicator species of chamise and California buckwheat, along with non-native weedy species such as mustard, Russian thistle (*Salsola tragus*), red-stem filaree, and various annual grasses. Litter, broken glass, and other debris are common, apparently originating from the adjacent roadway.
- **California Buckwheat – Acton Encelia Scrub – 0.93 Acres (G5 S5)** – This alliance is typical of the Santa Clarita Valley, and is characterized by the co-dominance of California buckwheat and Acton encelia (*Encelia actoni*). One stand occurs in the northern portion of the property.
- **Holly Leaf Cherry Alliances – 1.66 Acres (~~G3 S3~~)** – Two distinct holly leaf cherry alliances occur on the property: holly leaf cherry buckwheat scrub (1.31 acres) and holly leaf cherry chaparral (0.35 acre). The latter occurs in two patches, both ~~is~~ confined to a narrow gully, each below a storm drain outlet in the northwest area of the property. Canopy cover is 100%, with holly leaf cherry forming greater than 50% of the relative cover along with one and includes a mature Fremont cottonwood (*Populus fremontii*) and a group of non-native palms (*Washingtonia* sp.). Holly leaf cherry chaparral (*Prunus ilicifolia*) shrubland alliance is ranked G3 S3 and occupies approximately 0.35 acre. The holly leaf cherry California buckwheat scrub alliance is an open and sparsely vegetated covertype, occupying about ~~alliances occupy~~ 1.31 acres in the wash adjacent to Sand Canyon Road. This community is ~~more~~ open-canopied and more diverse than holly leaf cherry chaparral, with substantial unvegetated areas and widely spaced holly leaf cherry shrubs forming less than 50% relative cover. In addition to holly leaf cherry and California buckwheat is common along with perennial species such as in this community include scalebroom (*Lepidospartum squamatum*), skunkbrush (*Rhus aromatica*), thick leaf yerba santa (*Eriodictyon crassifolium*), chaparral yucca, and blue elderberry (*Sambucus nigra* ssp. *caerulea*).
- **Arroyo Willow Thickets – 0.55 Acre (G4 S4)** – Arroyo willows (*Salix lasiolepis*) occupy the northern section of the wash near Sand Canyon Road, where runoff enters the property from off-site. Fremont cottonwoods are also present but not abundant.

Examination of historical aerial photographs indicates that this riparian vegetation matured sometime after 1978 and coincided with extensive development on the west side of Sand Canyon Road. Runoff is directed from this development into the wash by a large storm drain. Based on presence of holly leaf cherry adjacent to this community and elsewhere in the wash, it appears that the riparian vegetation replaced a more xeric, historical community of holly leaf cherry-buckwheat scrub. Holly leaf cherry occupies relatively mesic sites within chaparral alliances²⁶ but is not known to be associated with riparian zones or wetlands.

²⁶ Sawyer, J.T. Keeler-Wolf and J. Evens. A Manual of California Vegetation. 7th edition. California Native Plant Society, Sacramento, CA. 2009.

- **Thick Leaf Yerba Santa Scrub – 0.40 Acre (G4 S4)** – A stand of thick leaf yerba santa scrub occurs in an ephemeral drainage on the east side of the site. Deerweed is also present but not dominant. This drainage terminates at a detention basin, where storm flows are conveyed through an inlet and buried off-site culvert to the Santa Clara River.

Ornamental Trees/Landscaping

Non-native (ornamental/[landscape](#)) trees are not abundant on the site but include Peruvian pepper (*Schinus molle*), pines (*Pinus sp.*), tamarisk (*Tamarix sp.*), and gum (*Eucalyptus spp.*), [which occur primarily along the boundary of the mobile home park in the southwest portion of the site. A few ornamentals trees were found scattered about the southeast area of the property adjacent to the parcel boundary.](#) Tall, mature tamarisk trees are abundant in the wash off-site to the north. ~~Landscape trees and shrubs occur in the interior and along the perimeter of the mobile home park, but these plants were not surveyed.~~

Special-Status Flora

No special status plant species have been reported to occur on the Project site, and none was observed during focused rare plant surveys conducted in April, May, and June of 2014 and 2015.

While the surveys of the Project site were conducted following relatively dry winters, and therefore not ideal conditions for detecting rare plants, habitat quality for rare plants is generally poor. However, slender mariposa lily has a moderate potential to occur on the property.

- **Slender mariposa lily (*Calochortus clavatus var. gracilis*)** - CNPS List 1B.2 – Slender mariposa lily is a summer-deciduous herb that grows from a perennial bulb. Yellow flowers, club-shaped hairs on the petals, and a dark band above the nectary generally distinguish the subspecies. Populations of this lily have been found nearby on property south of the Santa Clara River, and it is known to occur throughout the Santa Clarita Valley. These adjacent populations were in flower at the same time field surveys were being conducted on the subject property, indicating that the drought did not prevent flowering in the region. Mariposa lily plants were found in seed on the property but could not be identified to the species level without flowers.

Oak Trees

The Oak Tree Report prepared by Arbor Essence (February 2016, Addendum January 2017) ([Appendix 3-2](#)) identified three coast live oak (*Quercus agrifolia*) trees on the Project site. Two non-heritage oak trees are proposed to be removed, while the other (a heritage oak) will be retained with the Project.

2. Fauna

All vertebrate wildlife detected during the course of field surveys conducted in 2014 and 2015 are listed in Appendix F of the Biological Assessment ([Appendix 3](#) to this EIR). Based on the site surveys, wildlife use of the site appears to be limited by the low habitat quality and the apparent high human activity levels. Most birds recorded on site were seen near the upper reaches of the wash adjacent to Sand Canyon Road, where storm drain runoff from off-site periodically provides

- **California horned lark (*Fremophila alpestris actia*) – California special animal.** Horned lark occur in grasslands, disturbed areas, agriculture fields, and beach areas. Suitable habitat is present on the property, but species has not been seen on-site.
- **Bell's sage sparrow (*Amphispiza belli belli*) – California Watch List.** Bell's sage sparrow uses coastal sage scrub and chamise chaparral. Pairs were seen during spring 2015 field surveys, and this sparrow is assumed to be nesting on or near the property; however, no nests were seen.
- **Lawrence's goldfinch (*Spinus [Carduelis] lawrencei*) – California special animal when nesting.** This uncommon species is known to inhabit arid woodlands, chaparral, and open grasslands where they feed on seeds. Lawrence's goldfinch may nest in oaks, conifers or deciduous trees, though nests are consistently located within about 0.3 mile of a stream or other water source. Suitable nesting habitat is extremely limited on the subject property and although this species was seen on the property, it is unlikely to be nesting on the site.
- **~~Coastal~~ California gnatcatcher³⁰ (*Polioptila californica ssp. californica ssp. californica*) – Federal Threatened; California Species of Special Concern.** Protocol surveys were conducted in 2014 and 2015 and no California gnatcatchers were recorded (Appendix G). Coastal sage scrub dominated by California sagebrush is the preferred habitat of California gnatcatcher, though they may also use adjacent chaparral, grassland, riparian, or even disturbed habitats along the margins (ecotones) of the favored coastal sage scrub plant community. Coastal sage scrub is characterized by the prevalence of California sagebrush as dominant, with perennial sages such as black or purple sage (*Salvia mellifera*; *S. leucophylla*) and California buckwheat (*Eriogonum fasciculatum*). There are contiguous stands of coastal sage scrub on the site; however, most of it occurs on steep slopes and is disturbed, with sparse relative cover. Such slopes are typically avoided by nesting California gnatcatchers; therefore, the habitat quality of the property is considered marginal for this species. Further, because none was detected during focused surveys, they are considered absent from the site. Designated Critical Habitat is located approximately 2 miles to the southwest, in the Placerita Canyon area.

Special-Status Mammals

Three species of bats and two other special-status mammals could occur on the property and are discussed below.

- **Townsend's big-eared bat (*Corynorhinus townsendii*) – California threatened (candidate); CDFW Species of Special Concern.** This bat utilizes a variety of habitats, including conifer and oak woodlands and forests, arid grasslands and deserts, active agricultural areas, coastal areas, and high-elevation forests and meadows. Their distribution is strongly correlated with the availability of caves and abandoned mines, with population centers in areas dominated by exposed cavity or cave-forming rock

³⁰ [Previously known as "coastal California gnatcatcher" \(*Polioptila californica*\); now identified as "California gnatcatcher" \(*Polioptila californica*\). The CDFW Special Animals List uses the old nomenclature.](#)

boundaries. Sand Canyon Road to the west and Soledad Canyon Road to the south are high volume heavily traveled roadways that create significant barriers to wildlife movement, ~~particularly larger species such as deer, coyote, and bobcat.~~ Sand Canyon Road along the west side of the property is a busy road, with a speed limit of 45 mph. Soledad Canyon Road, which parallels the south side of the subject property, is a heavily traveled four-lane thoroughfare with a posted speed limit of 50 mph. Although wildlife may attempt to cross to the Santa Clara River to the south, there are no undercrossings of SR-14 directly adjacent to the site, and Soledad Canyon Road forms a barrier to wildlife movement and a mortality sink. There is undeveloped property immediately north of the property, but that is also bordered by residential land uses that continue to the north and east. There is currently no linkage to nearby natural habitat areas or corridors to facilitate movement between such areas and the subject property.

The drainage course along the western side of the property flows into an underground storm drain at the southern perimeter of the site; therefore, this tributary does not provide a wildlife movement corridor or linkage connecting to the Santa Clara River.

4. Jurisdictional Waters, Streambeds and Riparian Resources

Work within the bed, bank, or channel of streams, wetlands, and certain water is regulated by federal and state laws. One jurisdictional area is subject to federal and state regulations, the ephemeral wash parallel to Sand Canyon Road (Figure 4.4-2, Federal and State Jurisdiction). This wash traverses the western edge of the subject property and terminates in a storm drain inlet at the north boundary of the existing mobile home development. Flow is then conveyed via underground culvert to an open ditch, and then to another buried culvert to daylight in the Santa Clara River.

Federal Jurisdiction

Federal jurisdictional areas are restricted to the ephemeral wash, as noted above. Soils sampled in a reach in the north part of wash dominated by arroyo willows (*Salix lasiolepis* – FACW) consisted of gravel and sand with no wetland indicators. Downstream sections are dominated by upland vegetation. Therefore, this reach, and the rest of the wash downstream to the edge of the mobile home development, were determined to be non-wetland waters.

A narrow-maintained drainage swale between Sand Canyon Road and a drain inlet was also determined to be non-wetland waters. While it exhibited no characteristics of a streambed, this appeared due to the highly maintained condition of the swale.

Flows are conveyed through the above-mentioned features to grated inlets adjacent to the north edge of the mobile home park. From these points, flows are conveyed through buried culverts to an open ditch on the west side of the mobile home park. The upper section, totaling about 0.09 acre was determined to be a wetland due to the presence of both hydric soil and the dominance of obligate wetland vegetation. Below this section, the soil substrate transitions to well-drained alluvium sparsely occupied by upland non-native vegetation. This lower section was concluded to be non-wetland waters.

required around active nests. These measures would reduce this potential impact to less than significant.

Mammals

San Diego black-tailed jackrabbit, a California Species of Special Concern, has the potential to inhabit the open, sparse coastal sage scrub found on the Project site. The dense areas of chaparral and sage scrub are suitable habitats for the San Diego desert woodrat, also a California Species of Special Concern. These special-status mammal species were not observed during the general field surveys, but because suitable habitat occurs on-site for these species, there is potential for their presence. Because of their sensitivity status, the loss of individuals of these species within the Project site would be considered a significant impact. Pre-construction surveys for special-status mammals (Mitigation Measure MM Bio-3) are required. With implementation of this mitigation measure, impacts to special status mammals on the Project site would be reduced to levels that are not considered significant.

Bats

Although no focused bat surveys were conducted for this Project, it is reasonable to assume that some bats are present based on the habitats present. One or more bat species may be utilizing the rock crevices and small caves occurring on the steep slopes in the center of the property for daytime roosting, resting between bouts of nighttime feeding, and possibly rearing young. Project implementation would permanently remove this important bat habitat, and all species using those areas would be displaced.

If bats are present, the loss of roosting habitat would be a potentially significant impact. Mitigation Measure MM Bio-4 (requiring pre-construction surveys and implementation of bat boxes) would reduce impacts to special-status mammals to a less than significant level.

The loss of on-site vegetation would be considered less than significant impact to bat feeding, because bats generally fly large to very large distances to forage during the night, and many bat species occurring in the area prefer feeding over water.

Level of Significance Before Mitigation

Impacts would be potentially significant.

Mitigation Measures

MM Bio-1 ~~Active nests of native bird species are protected by the Migratory Bird Treaty Act (16 U.S.C. 704) and the California Fish and Game Code (§3503).~~ If activities associated with construction or grading are planned during the bird nesting/breeding season, generally February through March for early nesting birds (e.g., Cooper's hawks or hummingbirds) and from mid-March through mid-September for most bird species, the Applicant shall have a qualified biologist conduct surveys for active nests. To determine the presence/absence of active nests, pre-construction nesting bird surveys shall be conducted weekly beginning 30 days prior to initiation of ground-disturbing activities, with the last survey conducted no more than 3 days prior to the start of

4. Environmental Impact Analysis

4.4 – Biological Resources

clearance/construction work. If ground-disturbing activities are delayed, additional pre-construction surveys shall be conducted so that no more than 3 days have elapsed between the survey and ground-disturbing activities.

~~Surveys shall include examination of trees, shrubs, and the ground for nesting birds. Several bird species such as killdeer and night hawks are known to nest on bare ground.~~ Protected bird nests that are found within the construction zone shall be protected by a buffer deemed suitable by a qualified biologist, and verified by the California Department of Fish and Wildlife. Typically, a 300-foot buffer is required for most species and a 500-foot buffer for raptor and special-status species (CDFW may reduce these buffers on a site-specific basis). Buffer areas shall be delineated with orange construction fencing or other exclusionary material that would inhibit access within the buffer zone. Installation of the exclusionary material delineating the buffer zone shall be verified by a qualified biologist prior to initiation of construction activities. The buffer zone shall remain intact and maintained while the nest is active (i.e., occupied or being constructed by the adult bird(s)) and until young birds have fledged and no continued use of the nest is observed, as determined by a qualified biologist.

MM Bio-1A The Project Applicant shall retain a qualified biologist to conduct a pre-construction biological survey for special-status species determined to have potential to occur in suitable habitat within the Project site prior to the start of construction activities. If special-status species are detected during pre-construction surveys, appropriate mitigation plans will be prepared by a qualified biologist and submitted to the City of Santa Clarita for review and approval. Additionally, a biological monitor will be present periodically during construction to ensure that impacts to special-status species are minimized or do not occur.

MM Bio-2 A qualified biologist, approved by the City and CDFW, shall prepare a detailed capture and relocation plan for San Diego tiger (coastal) whiptail and coast horned lizard that will include measures to avoid or minimize take of these sensitive species and identify appropriate relocation sites. The plan shall be submitted to CDFW for approval prior to implementation. The plan shall specify the pre-construction time frame for the biologist to conduct surveys within appropriate habitat areas to capture and relocate individual San Diego tiger whiptail and coast horned lizard in accordance with the approved relocation plan. Results of the surveys and relocation efforts shall be provided to the City with a copy to CDFW.

MM Bio-3 A qualified biologist, approved by the City and CDFW, shall prepare a detailed capture and relocation plan for San Diego black-tailed jackrabbit and San Diego desert woodrat that will include measures to avoid or minimize take of these sensitive species and identify appropriate relocation sites. The plan shall be submitted to the city and CDFW for approval prior to implementation. The plan shall specify the pre-construction timeframe for the biologist to conduct surveys within appropriate habitat areas to capture and relocate individual San Diego black-tailed jackrabbit and San Diego desert woodrat in accordance with the approved relocation plan. Results of the surveys and relocation efforts shall be provided to the City with a copy to CDFW.

- MM Bio-4 The Project Applicant shall retain a qualified biologist, approved by the City, to conduct focused bat surveys utilizing visual and electronic detection methods. The qualified biologist shall conduct the surveys between late May and mid-July, the recognized maternity season for most bats in southern California. If any special-status bat species are determined to be roosting on-site, bat boxes of a size and design suitable for the estimated number of bats on-site shall be installed, under the supervision of a qualified bat biologist, in the outer perimeter of the Project site, as close as feasible to adjacent undeveloped land, and a suitable height and solar aspect. Further, if any maternity sites are identified on site, CDFW will be notified immediately. In addition to any other direction by CDFW, no site disturbance shall occur within 300 feet of the occupied roost until it is determined that the maternity roost(s) is no longer active. Additional bat boxes designed to serve as maternity roosts shall be placed as directed by the qualified bat biologist and CDFW. The Project Applicant shall also include the preparation of a relocation and monitoring plan in coordination with the City and CDFW.
- MM Bio-5 A qualified restoration specialist shall ensure that the proposed landscape plants will not naturalize and cause maintenance or vegetation community degradation in open-space areas of the Project site. Container plants to be installed within public areas shall be inspected by a qualified restoration specialist for the presence of disease, weeds, and pests, including Argentine ants. Plants with pests, weeds, or diseases shall be rejected. In addition, landscape plants shall not be on the Cal-IPC California Invasive Plant Inventory.

Level of Significance After Mitigation

With implementation of Mitigation Measures MM Bio-1 through MM Bio-5, impacts would be less than significant.

- Bio-2 Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Holly Leaf Cherry Chaparral – Prunus ilicifolia Shrubland Alliance (G3 S3)

Approximately 0.35 acre ~~1.31 acres~~ of holly leaf cherry-chaparral ~~California buckwheat scrub and 0.35 acre of holly leaf cherry chaparral~~ are situated in the northern and chaparral occurs in the northwestern portions of the site. This alliance has ~~Holly leaf cherry alliance have~~ a state rank of S3, meaning the covertime they are is rare to uncommon; not yet susceptible to becoming extirpated in the state, but may be if additional populations are destroyed. Therefore, this alliance meets ~~they meet meet~~ the CDFW criteria as a sensitive habitat. All Both of the holly leaf cherry chaparral (0.35 acre) occurring on-site would be eliminated with development, equaling 1.66 acres ~~and~~ resulting in a significant impact. Mitigation Measure MM Bio-6 proposes mitigation through restoration (on-site or off-site), thereby reducing the impact to less than significant.

Level of Significance Before Mitigation

Impacts would be significant.

Mitigation Measures

MM Bio-6 The Project Applicant, or the responsible party, shall prepare a holly leaf cherry chaparral restoration plan that details planting plans to mitigate the loss of ~~0.35 acre of holly leaf cherry chaparral, 1.66 acres of holly leaf cherry alliance vegetation.~~ This plan shall entail 5:1 restoration of the removed holly leaf cherry alliances to equal 1.75 acres. The planting palette shall include a range of native plant species typical of this alliance. The plan shall include temporary irrigation and monitoring for 5 years after the initial installation to assure establishment of the installed shrubs. Quantifiable success criteria will be based on species diversity, species richness, abundance, percent cover, and non-native cover. The restoration will be deemed successful when the site has been irrigation-free for at least 5 years and success criteria have remained for 5 years. The planting site may be located within the landscaped areas of the property. ~~This plan shall entail planting one holly leaf cherry shrub for each holly leaf cherry shrub to be removed. The plan shall include temporary irrigation and monitoring for 3 years after the initial installation to assure establishment of the installed shrubs. The planting site may be located within the landscaped areas of the property.~~

Level of Significance After Mitigation

With implementation of Mitigation Measure MM Bio-6, impacts would be less than significant.

Bio-3 Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

As proposed, all federal and state jurisdictional areas on the property would be removed by Project development. Federal jurisdictional areas impacted would include 0.09 acre of wetland and 1.471 acres of non-wetland waters. State jurisdictional areas impacted would encompass 0.09 acre of wetland and 2.87 of non-wetland waters. Without appropriate authorizations, such a removal would be in violation of federal and state laws, resulting in a significant impact.

Federal Jurisdiction Impacts – 0.090-acre Wetland; 1.471 acres Non-Wetland Waters

Permits would be required from the U.S. Army Corps of Engineers and the Regional Water Quality Control Board (RWQCB) for work within Waters of the U.S. in accordance with Sections 401 and 404 of the Clean Water Act.³³

State Jurisdiction Impacts– 0.09-acre Wetland; 2.87 acres Non-Wetland Waters

Any work within the bed, bank, or channel of state waters requires a Lake and Streambed Alteration Agreement.³⁴ The Regional Water Quality Control Board exerts authority over "Waters

³³ Clean Water Act of 1972 §401 & §404. See also 33 U.S.C. §1341

³⁴ California Fish & Game Code §§1600–1616

Level of Significance After Mitigation

With implementation of Mitigation Measure MM Bio-7, impacts would be less than significant.

Bio-4 Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The Project site is ~~completely~~ surrounded on ~~three~~ all sides by development, is not connected to adjacent natural habitat areas, and does not lie within nor provide a corridor that would facilitate movement between such areas and the subject property. On the fourth side to the north is a small area of undeveloped open space that is bordered by development. The western ephemeral drainage is undergrounded at the existing mobile home development in the southwest portion of the site, and does not serve as a localized movement path, except for a short distance off site to the north. As such, impacts to wildlife movement from Project implementation are anticipated to be less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Bio-5 Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Per Unified Development Code §17.51.040 (Oak Tree Preservation), the City requires the preservation of all healthy oak trees unless compelling reasons justify the removal of such trees. The Project site contains three oak trees subject to the City of Santa Clarita's Oak Tree Preservation ordinance. As such, an inventory of on-site oak trees was conducted by a registered arborist, which included an evaluation of the trees' current condition, assessment of the level of encroachment/impact due to proposed construction, and identification of recommendations and mitigation measures for their preservation, if necessary.

Three protected trees have been identified as coast live oak (*Quercus agrifolia*) on the Project site. The coast live oak trees were found to be in average good condition with no significant insect pest or disease problems. The trees are identified as #1, #2 and #3. Tree #2 is classified as a "heritage tree" having a trunk diameter of 46 inches. Tree #2 has a sizeable trunk cavity at the root collar; however, the main stem is believed to have a high volume of sound wood, enough to reasonably support the tree with minimal risk at present.

4.7 Greenhouse Gas Emissions/Climate Change

4.7-1 Summary

The emission of greenhouse ~~gases (GHG) gas (GHG) emissions~~ by a single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHG from more than one project and many sources in the atmosphere that may result in global climate change. The resultant consequences of that climate change can cause adverse environmental effects. A project's GHG emissions typically are relatively very small in comparison to state or global GHG emissions and, consequently would, in isolation, have no significant direct impact on climate change. The Project's GHG emissions would not be considered substantial when compared to California's statewide GHG emissions.

~~Given the Project's mixed-use design, walkability, location, compliance with the CALGreen Code, and consistency with the City's CAP and associated GHG reduction measures, the Project would be consistent with local and statewide goals and policies aimed at reducing the generation of GHGs, including SB 375 and AB 32's goal of achieving 1990 GHG emission levels by 2020. Similarly, related projects would also be subject to these emissions reduction goals and objectives, and related projects would be required to demonstrate consistency on a case-by-case basis.~~

Given the Project's mixed-use design, walkability, location, compliance with the CALGreen Code, and consistency with the City's [Climate Action Plan](#) (CAP) and associated GHG reduction measures, the Project would be consistent with local and statewide goals and policies aimed at reducing the generation of GHGs, including SB 375 and AB 32's goal of achieving 1990 GHG emission levels by 2020. This discussion is discussed in [Section 4.10, Land Use](#). Therefore, the Project's generation of GHG emissions would not make a cumulatively considerable contribution to GHG emissions and climate change, and impacts would be less than significant.

4.7-2 Introduction

This report provides a discussion of global climate change, existing regulations pertaining to global climate change, an inventory of the approximate greenhouse gas (GHG) emissions that would result from the Project, and an analysis of the significance of the impact of these GHGs. The analysis and conclusions reached in this section are based on the Greenhouse Gas Emissions Technical Report (Pomeroy Environmental Services, December 2015) included as [Appendix 6-1](#) to this EIR.

1. General Terms and Scientific Literature

Earth's natural warming process is known as the "greenhouse effect." This greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes. The glass allows solar radiation (sunlight) into Earth's atmosphere, but prevents radiative heat from

2. Existing Population, Housing, and Employment

Population data from the 2000 and 2010 Census, an estimate from the California Department of Finance (CDF) for 2015, and forecasts from SCAG for 2008, 2020, and 2035 are presented in Table 4.13-2 below.

Between 2000 and 2014, the population of the City of Santa Clarita increased from 151,088 residents to 181,559 residents, an increase of 30,471 residents, or approximately 16.78% over a 14-year period.⁸⁹ The CDF estimates the City's 2015 population at 213,331 residents.⁹⁰ The City's average household size is estimated at 3.10 residents for 2015.⁹¹

Between 2000 and 2014, the number of housing units in the City of Santa Clarita increased from 50,787 to 61,405, an increase of 10,618 housing units, or approximately 17.29% over a 14-year period.⁹² The DOF estimates the City's 2015 housing supply at 71,374 units.⁹³

Table 4.13-2 City of Santa Clarita Population, Housing, and Employment: Census Data and Forecasts

	US Census				CDF Estimate	SCAG Forecasts				
	2000	2010	Change 2000–2010			2015	2008	2020	2035	Change 2012–2035
			Total	Percent	Total					Percent
Population	151,088	176,320	25,232	14.31	213,231	175,900	201,300	237,100	61,200	25.81
Housing	50,787	59,507	8,720	14.35	71,374	59,300	70,100	81,900	22,600	27.59
Employment	--	--	--	--	--	92,900	108,700	122,600	29,700	24.23

Sources: US Census Bureau 2014 DP-1, California Department of Finance, 2015

SCAG, 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy, Growth Forecast Appendix, April 2012

The City of Santa Clarita General Plan forecasts the City's population to be 275,000⁹⁴ with a range of 98,322 to 128,850 jobs in the City at buildout of the General Plan.

3. Project Site

A portion of the Project site is currently developed with 123 mobile homes. Fifteen (15) of these mobile home units are owner-occupied. The Applicant has reached relocation and/or purchase

89 Southern California Association of Governments, Profile of the City of Santa Clarita, San Buenaventura, (May 2015).

90 California Department of Finance, E-1 City/County Population Estimates with Annual Percent Change, January 1, 2014 and 2015 (2015).

91 California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011- 2015, with 2010 Benchmark (2015).

92 Southern California Association of Governments, Profile of the City of San Buenaventura (2015).

93 California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011- 2015, with 2010 Benchmark (2015).

94 City of Santa Clarita, One Valley One Vision Program Environmental Impact Report, Table 2.0-1, Summary of Population, Housing, and Employment Projections for the OVOV Planning Area and City's Planning Area at Buildout (May 2011).

Table 4.13-6 Project Employment Forecasts

Land Use	Square Feet	Employment Factor (SF per Employee)	Employment (Jobs) Estimate	Employment Forecasts	Project Percentage of Forecasts
Project					
Retail/Restaurant	60,000 55,600	500 ¹	120 111		
Assisted Living Facility	85,000 75,000	3,000 ²	29 25		
Total Project	130,600		149 136		
2020 RTP/SCS Forecast for City of Santa Clarita				108,700	0.13%
General Plan Forecast (at Buildout)				98,322-128,050	0.14% ³

Notes:

1. Southern California Association of Governments, *Employment Density Study Summary Report*, October 31, 2001.
2. Number of employees extrapolated from City of San Jose, Initial Study/Mitigated Negative Declaration for the Thornton Way Assisted Living Facility, August 2013 (20 employees, 81 units, 60,155 square feet)
3. Calculation based on 98,322 employees in City.

The jobs/housing ratio is used as a general measure of balance between a community's employment opportunities and the housing needs of its residents. A ratio of 1.0 or greater generally indicates that a City provides adequate employment opportunities, potentially allowing its residents to work within the City. The City's current (2013) jobs/housing ratio is approximately 1.12, indicating employment opportunities for residents to work within the City are readily available.⁹⁶

As indicated in Table 4.13-6, implementation of the Project would increase the City's employment by 149 ~~136~~ jobs on the site, as no jobs currently exist. These new jobs have been accounted for in future forecasts, and represent 0.14% ~~0.13%~~ of the SCAG 2020 forecast and 0.15% ~~0.14%~~ of the City's buildout forecast.

This new employment growth would result in population growth within the City, as the potential exists that future employees (and their families) would choose to relocate to the City. However, estimating the number of these future employees who would choose to relocate to the City would be highly speculative, since many factors influence personal housing location decisions. Based on the City's vacancy rate of 4.4%, 3,116 dwelling units were available (vacant) as of January 1, 2015. Therefore, if all 149 ~~136~~ future Project employees occupied existing available dwelling units in the City, implementation of the employment generating uses of the Project could potentially increase the City's population by approximately 436 ~~422~~ persons.

Collectively, new Project residential and employment generating land uses would result in a total population increase of 2,261 ~~2,220~~ persons. The additional population associated with potential employees relocating to the City and occupying existing either vacant housing or new housing has

⁹⁶ Southern California Association of Governments, Local Profiles of SCAG Jurisdictions, Profile of the City of Santa Clarita, May 2015.

4.15 Fire Protection

4.15-1 Summary

Fire protection and emergency medical response services for the Project site and the surrounding area are provided by the Los Angeles County Fire Department. Specifically, ~~16-17~~ fire stations with ~~15-11~~ engine companies, ~~1-assessment engine company~~, 5 paramedic squads, 1 hazardous materials squad, and 2 ladder trucks serve the Santa Clarita Valley.

Fire Station 132 is the jurisdictional engine company that would respond to emergencies on the project site. Fire Station 132, located at 29310 Sand Canyon Road, is also approximately 0.5 mile north (1 minute) from the Project site. Fire Station 107, located at 18239 West Soledad Canyon Road, is approximately 2.8 miles (6 minutes) southwest of the Project site. Fire Station 123, located at 26321 Sand Canyon Road, is approximately 3 miles (6 minutes) south of the Project site.

The Project site is located within an area described by the Forester and Fire Warden for Los Angeles County as a Fire Zone 4, Very High Fire Hazard Severity Zone, which denotes the County Forester's highest fire hazard potential. All applicable fire code and ordinance requirements for construction, access, water mains, fire hydrants, water fire flows, brush clearance and fuel modification plans would need to be met by the Project.

The Project Applicant also would pay fire facility fees, which would be used to help fund the construction of new facilities and purchase of additional equipment. In addition, tax revenues generated by the Project would assist in securing additional equipment and hiring of firefighter personnel for the Los Angeles County Fire Department. The Project would be required to comply with City codes and requirements relative to the provision of adequate fire protection services to the site during both the construction and operational stages of the Project. Thus, the Project would not diminish the staffing or the response times of existing fire stations in the City of Santa Clarita, nor would it create a special fire protection requirement on the Project site that would result in a decline in existing service levels in the City. In summary, the Project with mitigation would result in less than significant project-specific and cumulative impacts on fire protection services in the City of Santa Clarita.

4.15-2 Introduction

This section describes the existing fire protection facilities within the City, identifies the regulatory framework with respect to regulations that address fire protection, and evaluates the significance of the potential changes in these factors that could result from implementation of the Sand Canyon Plaza Mixed-Use Project.

4.15-3 Existing Conditions

Urban Fire Protection Services

As part of the Los Angeles County Consolidated Fire Protection District (a special district of Los Angeles County), the City of Santa Clarita receives urban and wildland fire suppression service from the Los Angeles County Fire Department (LACoFD). Mutual aid or assistance pacts are maintained with several local, state, and federal agencies. As of 2017, the City's Planning Area is served by 16 fire stations with 15 engine companies, 5 paramedic squads, 1 hazardous materials squad, and 2 ladder trucks. As of 2009, there were 13 fire stations with 11 engine companies, one assessment engine, five paramedic squads, one hazardous materials squad, and two ladder trucks serving the City's Planning Area. A nine-person hazardous materials squad operates out of Fire Station 150, Station 76. Approximately ~~75~~ 64 firefighters are on duty every day, 24 hours a day (not including chief officers and fire prevention staff). ~~In 2007, two temporary fire stations with Los Angeles County were moving ahead to build an additional two fire stations within the City's Planning Area. It is expected that 15 stations will be operational by 2016/2017. Since 2008, LACoFD has completed construction of Station 108, and had established temporary Stations 156, 132, and 104.~~ The LACoFD has indicated there are no planned improvements in the immediate vicinity of the Project site. However, the LACoFD's 2016 5-year Developer Fee Detailed Fire Station Plan indicates one replacement station for temporary Station 104 and eight additional stations in the Santa Clarita Valley; of those eight additional stations, Fire Station 143 became operational in October 2016, and nine additional stations in the Santa Clarita Valley.⁹⁸

Aside from the personnel and equipment listed above, the LACoFD has additional resources available to provide back-up services to the City as needed, including additional engine companies, truck companies, paramedic squads, hazardous material squads, firefighting helicopters, other fire camps, and a variety of specialty equipment.

The jurisdictional station for the Project site is Fire Station 132, located at 29310 Sand Canyon Road, is approximately 0.5 mile north of the Project site. Additional fire protection services are provided by Fire Stations 107 and 123. Fire Station 107, located at 18239 West Soledad Canyon Road, is approximately 2.8 miles southwest of the Project site. Fire Station 123, located at 26321 Sand Canyon Road, is approximately 3 miles south of the Project site. If a significant incident occurs, the Project site would be served by the full resources of the LACoFD, not just the stations located closest to the site or that have primary jurisdiction within the Santa Clarita Valley.⁹⁹

⁹⁸ ~~Source: Table 3.15-7, Final Program Environmental Impact Report for the City of Santa Clarita's Proposed One Valley One Vision General Plan, Volume I, One Valley One Vision 2010, Impact Sciences, Inc., dated May 2011, certified June 14, 2011.~~

⁹⁹ Correspondence from Kevin T. Johnson, Acting Chief, Forestry Division, Prevention Services Bureau, County of Los Angeles Fire Department, January 6, 2016.

Table 4.15-1, Los Angeles County Fire Stations Serving the Santa Clarita Valley Area describes the fire stations within the Santa Clarita Valley and their location. A description of the operational characteristics of the stations closest to the Project site and, therefore, most likely to respond is provided below.

- Los Angeles County Fire Station 132 maintains a 4-person engine company (1 fire captain, 1 fire fighter specialist, and 2 fire fighters). All uniform personnel at this station are trained and certified as Emergency Medical Technicians (EMT) and are capable of providing basic life support. The emergency response time from the station to the Project site would be approximately 1 minute.
- Los Angeles County Fire Station 107 maintains a 3-person engine company (1 fire captain, 1 fire fighter specialist, and 1 fire fighter/paramedic) and a 2-person paramedic squad (2 fire fighters/paramedics). In addition to all personnel being certified as EMTs, three of the personnel are certified as paramedics and are capable of providing advanced life support. The emergency response time from the station to the Project site would be approximately 6 minutes.
- Los Angeles County Fire Station 123 maintains one engine company. The emergency response time from the station to the Project site would be approximately 6 minutes.

Table 4.15-1 Los Angeles County Fire Stations Serving the Santa Clarita Valley Area

Fire Station	Location
Fire Station 73 ¹	24875 N. Railroad Avenue, Santa Clarita, CA 91321 24875 N. San Fernando Road, Newhall, CA 91324
Fire Station 76 ^{1,2}	27223 Henry Mayo Drive, Valencia, CA 91355
Fire Station 81	8710 W. Sierra Highway, Aqua Dulce, CA 91350
Fire Station 104 (Temporary)	26201 Golden Valley Road, Santa Clarita, CA 91359
Fire Station 107 ¹	18239 W. Soledad Canyon Road, Canyon Country, CA 91351
Fire Station 108	28799 N. Rock Canyon Drive, Santa Clarita, CA 91390
Fire Station 111 ¹	26829 Seco Canyon Road, Saugus, CA 91350
Fire Station 123	26321 N. Sand Canyon Road, Canyon Country, CA 91387
Fire Station 124 ^{1,2}	25870 Hemingway Avenue, Stevenson Ranch, CA 91381
Fire Station 126	26320 Citrus Street, Avenue , Santa Clarita, CA 91355
Fire Station 128	28450 Whites Canyon Road, Canyon Country, CA 91351
Fire Station 132 (Temporary)	29310 Sand Canyon Road, Santa Clarita, CA 91387
Fire Station 143	28580 Hasley Canyon Road, Castaic, CA 91355
Fire Station 149 ^{1,2}	31770 Ridge Route, Castaic, CA 91387
Fire Station 150	19190 Golden Valley Road, Santa Clarita, CA 91387
Fire Station 156 (Temporary) ²	24525 W. Copper Hill Drive, Santa Clarita, CA 91350

Source: Table 3.15.7, Final Program Environmental Impact Report for the City of Santa Clarita's Proposed One Valley One Vision General Plan, Volume I, One Valley One Vision 2010, Impact Sciences, Inc., dated May 2011, certified June 14, 2011.

- Notes:
1. With paramedic units
 2. Outside City boundaries (including Sphere of Influence)

No LACoFD improvements are planned in the immediate area of the Project site. [Eight additional fire stations are identified in the LACoFD's Developer Fee Detailed Fire Station Plan. Of those eight additional stations, Fire Station 143 became operational in October 2016. However, the LACoFD's 5-year Developer Fee Detailed Fire Station Plan indicates one replacement station for](#)

~~temporary Station 104 and nine additional stations in the Santa Clarita Valley.~~ LACoFD facilities in the Santa Clarita Valley are funded with impact fee revenues generated within the City of Santa Clarita and the unincorporated areas of the Santa Clarita Valley.¹⁰⁰

The LACoFD also maintains three fire camps with three fire crews, which include Los Angeles County Jail inmate teams of 12 to 15 fire laborers. These camps are located in San Francisquito Canyon, in Soledad Canyon, and at the Peter Pitchess Honor Rancho. An additional County non-inmate crew of eight to ten members provides wildland fire fighting protection for the Santa Clarita Valley area.

The level of service provided to areas within the City is determined by the LACoFD, and LACoFD does not calculate service-to-population ratios. Such ratios do not properly reflect the need for fire protection and emergency medical services because they do not account for demand caused by non-residential structures, vacant land with combustible vegetation, vehicular incidents, and transient population. Indicators of need for additional units or fire stations is based on a combination of response times, incident loads, resident and transient populations, and square footage of improvements. Nationally recognized response time targets for urban areas is 5 minutes for a basic life support unit (engine company) and 8 minutes for an advanced life support unit (paramedic squad). The LACoFD uses the following response guidelines:

- In urban areas, a 5-minute or less response time for the first arriving unit for fire and emergency medical service responses, and an 8-minute or less response for the advanced life support (paramedic) unit, or
- In suburban areas, an 8-minute response time for the first arriving unit, and 12 minutes for the advanced life support (paramedic unit).

The LACoFD is currently meeting these guidelines.

The LACoFD annually updates its Five-Year Capital Plan, which identifies anticipated facilities that would be constructed during the specified planning horizon. Funding used for land acquisitions, facility improvements, and partial funding of new equipment is generated through the LACoFD's Developer Fee Program, and funding used for increases in staffing is generated from local property taxes. The LACoFD has a developer fee in effect in the Antelope Valley, Santa Clarita Valley, and Santa Monica/Malibu Area. The Los Angeles County Board of Supervisors and City Council for Santa Clarita recently approved an update to the developer fee amount to ~~\$1.0883~~ \$1.1846 per square foot of new floor areas of buildings, effective February 1, ~~2017, 2016~~. The fee is adjusted on an annual basis. The Applicant is required to pay fees in effect at the time of building permit for the construction of fire stations, and the full cost of firefighting equipment. Application of the developer fees and property tax revenues generated by new development help ensure adequate fire service levels for future developments.

100. Correspondence from Kevin T. Johnson, Acting Chief, Forestry Division, Prevention Services Bureau, County of Los Angeles Fire Department, January 6, 2016.

demand created by the Project. Currently, the developer fee is ~~\$1.1846~~ ~~\$1.0883~~ per square foot of building space, and is due and payable at the time a building permit is issued.

Because the Project site is located within a VHFHSZ, the Project must comply with all applicable Building and Fire Code requirements for such items as types of roofing materials, building construction, brush clearance, water mains, fire hydrant flows, hydrant spacing, access and design, and other hazard reduction programs for a VHFHSZ. The above requirements would ensure that Project operations would not diminish the staffing or the response times of existing fire stations in the Santa Clarita Valley, and that would not create a special fire protection problem on the site that would result in a decline in existing service levels in the Valley. Implementation of the applicable General Plan goals and policies and Mitigation Measures MM PS-4 through MM PS-6 would ensure that operational-related fire service impacts are reduced to a less than significant level.

Wildland Fire Hazards

As indicated previously, pursuant to the Los Angeles County Fire Code, a proposed project would create a significant threat to the safety of future residents and users of the project site if the project would result in the following.

- Be located in a high fire hazard area (such as Very High Fire Hazard Severity Zone).
- Be located in a high fire hazard area, and is served by inadequate access due to length, width, surface material, turnarounds, or grade of access roads.
- Be located in a high fire hazard area and has more than 75 dwelling units on a single means of access.
- Be located in an area having inadequate water and pressure to meet fire flow standards.
- Be located in close proximity to potential dangerous fire hazard conditions or uses such as refineries, storage of flammable materials, or explosives manufacturing.

The Project site is within a VHFHSZ that is comprised of natural brush. As such, the Project would be required to comply with City and County Building and Fire Code requirements for such items as types of roofing materials, building construction, brush clearance, water mains, fire hydrant flows, hydrant spacing, access and design, and other hazard reduction programs for a VHFHSZ. Compliance with the applicable General Plan goals and policies, the City's conditions of approval, and implementation of the recommended Mitigation Measures MM PS-4 through MM PS-6 would reduce impacts to less than significant in this regard.

Level of Significance Before Mitigation

Impacts would be potentially significant.

Mitigation Measures

MM PS-1 Concurrent with the issuance of building permits, the Project Applicant shall participate in the Developer Fee Program to the satisfaction of the Los Angeles County Fire Department and/or City of Santa Clarita.

Construction

MM PS-2 Adequate access to all buildings on the Project site shall be provided for emergency vehicles during the building construction process.

MM PS-3 Adequate water availability shall be provided to service construction activities.

Operational

MM PS-4 All on-site development shall comply with the applicable Los Angeles County and City of Santa Clarita code requirements for construction, access, water mains, fire flows, and fire hydrants, as stipulated by the Los Angeles County Fire Department or the City of Santa Clarita through Project approvals or building plan reviews.

MM PS-5 Prior to the issuance of building permits, the Project Applicant, or responsible party, shall obtain the necessary clearances from and shall comply with all applicable conditions imposed by Los Angeles County Fire Department, including but not limited to those from the Planning Division, Land Development Unit, Forestry Division, or Fuel Modification Unit.

MM PS-6 The Project Applicant, or responsible party, shall file all landscape plans with the Los Angeles County Fire Department Fuel Modification Unit to ensure compliance with the High Fire Hazard Severity Zone.

Level of Significance After Mitigation

With implementation of Mitigation Measures MM PS-1 through MM PS-6, impacts would be less than significant.

4.15-7 Cumulative Impacts

Future development within the City and surrounding unincorporated areas associated with the Project and related projects would be required to pay fees in accordance with the ~~for~~ LACoFD Developer Fees program ~~and to the satisfaction of LACoFD and/or the City. as deemed appropriate by the LACoFD, which would~~. The fees provide the tax revenues for the operation and staffing of local fire service facilities. Furthermore, the Project and related cumulative projects are required to meet City/County codes and requirements relative to providing adequate fire protection services to the site during both the construction and operational stages of the Project. Additionally, because development projects in the Santa Clarita Valley are subject to review and

Table 4.19-23 Freeway Ramp Peak Hour Volumes and V/C Summary – Opening Day Conditions

Interchange	Ramp	Lanes	Peak Hour Capacity	Without Project						With Project					
				AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS
SR-14 at Sand Canyon	SB On	1	1,500	770	.51	A	590	.39	A	870	.58	A	710	.47	A
	NB On	1	1,500	200	.13	A	570	.38	A	220	.15	A	600	.40	A
	SB Off	1	1,500	370	.25	A	240	.16	A	380	.25	A	270	.18	A
	NB Off	1	1,500	490	.33	A	1,080	.72	C	530	.35	A	1,200	.80	C

Source: Table 5-5, Traffic Impact Analysis, Stantec Consulting Services, Inc., dated December 21, 2016 (Appendix 11-1 to this EIR)

LOS – level of service

NB – northbound

V/C – volume/capacity ratio

SB – southbound

Table 4.19-24 Ramp Intersection Peak Hour Queue Length Summary – Opening Day Conditions

Interchange	Lane	Lane Length (feet)	Without Project		With Project	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
			Queue Length (feet)	Queue Length (feet)	Queue Length (feet)	Queue Length (feet)
SR-14 SB Off-Ramp at Soledad Cyn	NBL	1,070	220	112	302	228
	NBLR	450	298	287	286	243
SR-14 NB Off-Ramp at Sand Cyn	EBL	270	117	314	140	461
	EBLT	1,150	89	312	109	473
	EBR	580	68	86	87	381

Source: Table 5-6, Traffic Impact Analysis, Stantec Consulting Services, Inc., dated December 21, 2016 (Appendix 11-1 to this EIR)

NB – northbound; SB – southbound; NBL – northbound left-turn lane; NBLR – northbound shared left- and right- turn lane

EBL – eastbound left-turn lane; EBLT – eastbound shared left-turn and through lane; EBR – eastbound right-turn lane

Level of Significance Before Mitigation

Impacts would be less than significant during Project construction.

Impacts would be significant during Project operations.

Mitigation Measures

MM T-1	Sand Canyon at Soledad Canyon. Modify traffic signal timing to coordinate with Kenroy Avenue and SR-14 SB Ramp intersections along Soledad Canyon Road.
MM T-2	SR-14 SB Ramps at Soledad Canyon. Modify traffic signal to change westbound left-turn phasing from permissive to protected left-turn phasing . protective permissive.
MM T-3	The Project Developer shall enter into a Mitigation Agreement with Caltrans. Said Mitigation Agreement shall be finalized prior to the recordation of a final map.

Level of Significance After Mitigation

Impacts would be less than significant during Project construction.

Impacts during Project operations would be less than significant.

4.21 Wastewater

4.21-1 Summary

Construction related impacts to wastewater disposal would not be significant, because portable, on-site sanitation facilities would be utilized during construction. The Project, at buildout ([based on the Project characteristics provided in Section 3](#)), would generate a worst-case average total of ~~124,304~~ ~~138,942~~ gallons per day of wastewater that would be treated by the Santa Clarita Valley Sanitation District (the Saugus and Valencia Water Reclamation Plants). These facilities have adequate capacity to accommodate the Project's wastewater generation. For this reason and based on supporting analysis provided below, wastewater disposal impacts would not be significant.

4.21-2 Introduction

This section describes the existing wastewater facilities within the City, identifies the regulatory framework with respect to regulations that address wastewater, and evaluates the significance of the potential changes in these factors that could result from implementation of the Sand Canyon Plaza Canyon Mixed-Use Project.

4.21-3 Existing Conditions

Wastewater Service

Most wastewater generated within the Santa Clarita Valley is treated at two existing water reclamation plants, which are operated by the County Sanitation Districts of Los Angeles County (CSDLAC). These two treatment facilities, the Saugus Water Reclamation Plant (SWRP) located at 26200 Springbrook Avenue in Saugus, and the Valencia Water Reclamation Plant (VWRP) located at 28185 The Old Road in Valencia, have been interconnected to form a regional treatment system known as the Santa Clarita Valley Joint Sewerage System (SCVJSS). The relationship between the two water reclamation plants was established through a joint powers agreement that created the regional treatment system and permits the VWRP to accept flows that exceed the capacity of the SWRP.

These two facilities provide primary, secondary, and tertiary treatment. The SCVJSS has a combined permitted treatment capacity of 28.1 million gallons per day (mgd) and currently processes an average flow of ~~17.9~~ ~~18.9~~ mgd.¹¹⁹

The mechanism used to fund expansion projects is the CSDLAC's Connection Fee Program. Prior to the connection of the local sewer network to the CSDLAC system, all new users are required to pay their fair share of the CSDLAC sewerage system expansion through a connection fee. The fees

¹¹⁹ Written correspondence from Adriana Raza, Customer Service Specialist, County Sanitation District of Los Angeles County, January 15, 2016 [and April 17, 2017](#).

Chloride¹²¹

On November 4, 2008, the Santa Clarita Valley Sanitation District Board approved the Santa Clara River Chloride Reduction Ordinance of 2008. The ordinance took effect January 1, 2009. The ordinance prohibits residential automatic water softeners in the Santa Clarita Valley and prescribes measures the Sanitation Districts must undertake to reduce chloride. The standard method of disinfection using chlorine gas would be replaced with an ultraviolet (UV) system in an effort to further reduce all possible sources of chloride in the wastewater.

SWRP and VWRP Upgrade¹²²

The nitrification and denitrification modification was constructed at the VWRP and the SWRP in 2004. The implementation of the Santa Clara River Chloride Reduction Ordinance prohibits residents from owning salt-based water softeners within the Santa Clarita Valley. While removal of these softeners would reduce the chloride discharge to the Santa Clara River, it does not eliminate the need to install some advanced treatment to meet discharge regulations.

Santa Clarita Valley Sanitation District [Recirculated Environmental Impact Report](#) ~~Supplemental Environmental Impact Report for Brine Concentration and Limited Trucking¹²³~~

[In October 2013, after nearly 2 years of extensive public input, meetings, hearings, and environmental review, the SCVSD Board of Directors approved a project to comply with the state-mandated chloride limit \(Chloride Compliance Project\) and certified that the associated 2013 Facilities Plan and EIR complied with the California Environmental Quality Act \(CEQA\).](#)

[The Chloride Compliance Project includes new reverse osmosis equipment at the Valencia WRP. The water passes through a reverse osmosis membrane, becomes ultra-clean water, and the remaining slaty water becomes a byproduct called *brine* that requires proper disposal. Brine was originally to be managed by deep well injection \(DWI\). Based on public input regarding DWI, the SCVSD Board withdrew the DWI proposal and directed staff to investigate alternative deep well sites and additional brine management alternatives. In 2015, the SCVSD proposed to modify the approach to brine management by replacing DWI with the installation of enhanced brine concentration equipment at the Valencia WRP and disposal of the smaller amount of concentrated brine by limited trucking to an existing industrial facility, the Sanitation Districts' Joint Water Pollution Control Point in Carson. A Supplemental Environmental Impact Report for Brine Concentration and Limited Trucking \(Trucking SEIR\) was prepared to describe the environmental impacts from this brine management approach. On March 23, 2016, the SCVSD Board certified the Final Trucking SEIR and approved the change in the method of brine management.](#)

121 Draft Program Environmental Impact Report for the City of Santa Clarita's Proposed One Valley One Vision General Plan, Volume I, One Valley One Vision 2010, Impact Sciences, Inc., September 2010.

122 Draft Program Environmental Impact Report for the City of Santa Clarita's Proposed One Valley One Vision General Plan, Volume I, One Valley One Vision 2010, Impact Sciences, Inc., September 2010.

~~123 Source: Public Notice of Availability, Santa Clarita Valley Sanitation District Supplemental Environmental Impact Report for Brine Concentration and Limited Trucking (Draft), County Sanitation Districts of Los Angeles County website, <http://laesd.org/civicax/filebank/blobload.aspx?blobid=11034>, accessed February 15, 2016.~~

4. Environmental Impact Analysis

4.21 - Wastewater

Most of the chloride compliance solutions investigated in the 2013 Facilities Plan and EIR included the production of brine. Because this brine cannot be discharged to the river, the Chloride Compliance Project would minimally reduce discharge of treated (recycled) water from at least one of SCVSD's WRPs to the river. As analyzed in the Trucking SEIR, the reduction in discharge related to brine management would be a maximum of 52,000 gallons per day or 0.4% of the discharged flow. Unrelated to the chloride compliance solutions, the SCVSD has considered the potential impacts of further reducing the discharge of treated water from the WRPs to the river, under the Recycled Water Project, to permit the direction of recycled water to community reuse such as landscape irrigation. Even though the Chloride Compliance Project and the Recycled Water Project are independent efforts (i.e., implementation of one does not require or necessitate implementation of the other), both projects were addressed in the 2013 Facilities Plan and EIR. The 2013 Facilities Plan and EIR described the Recycled Water Project as "Support for Municipal Reuse of Recycled Water" and contained an analysis of the potential environmental impacts to biological resources (including an endangered fish known as the unarmored threespine stickleback, or UTS) that could occur due to a proposed one-third reduction in discharge. The technical analysis that supported the EIR concluded that no significant impact would occur.

Following the certification of the 2013 Facilities Plan and EIR, the Affordable Clean Water Alliance (ACWA) filed a petition for writ to set aside the District's certification on the grounds that the documents failed to comply with CEQA in a number of respects. While the Trucking SEIR was being finalized, the Los Angeles County Superior Court (Court) ruled in February 2016 that the EIR for the 2013 Facilities Plan failed to comply with CEQA in two particulars. First, the Court determined that additional environmental study was necessary with respect to the impact of reduced discharge to the river resulting from the Recycled Water Project on the UTS. Second, the Court considered SCVSD's pursuit of an alternate method of brine management to be an "abandonment" of deep well injection, which left the SCVSD with an incomplete chloride compliance project because it had no approved method of brine management. The Court did not find fault with the environmental review related to the Chloride Compliance Project, but nonetheless set aside the 2013 Facilities Plan and EIR and related approvals until SCVSD complied with CEQA with respect to the two issues identified by the Court.

On March 23, 2016, the SCVSD Board recertified the 2013 Facilities Plan and EIR without the Recycled Water Project to address the Comt's first issue. SCVSD also certified the Trucking SEIR, approved a new brine management approach, and created a Modified Chloride Compliance Project to address the Court's second issue. As noted in the Trucking SEIR, the modified project would result in no more than a 0.4% reduction in discharge to the river. Such a reduction would have a negligible impact on biological resources, including UTS.

Following the February ruling, SCVSD returned to the Court in April 2016 seeking approval to proceed with the Chloride Compliance Project while deferring implementation of the Recycled Water Project until further UTS study could be completed. On June 2, 2016, the Court determined that SCVSD could not do so because it had not studied the potential impacts of implementing the Chloride Compliance Project separate from the Recycled Water Project, delaying the work to comply with the state chloride mandates.

On August 4, 2016, SCVSD issued a Notice of Preparation of a Supplemental Environmental Impact Report for Study of Impacts to the Unarmored Threespine Stickleback Fish Under Reduced Discharge Conditions from the Santa Clarita Valley Sanitation District's Water Reclamation Plants (Stickleback SEIR). The intent of the Stickleback SEIR is to maintain support of both the Chloride Compliance Project

Tebo Environmental Consulting, Inc.
March 2017

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and the Recycled Water Project under one CEQA document record. Since August, SCVSD and the California Department of Fish and Wildlife have been working together to determine the appropriate criteria for analyzing impacts to UTS. Based on the progress of these discussions and the projected work remaining to complete the study, to minimize fines to ratepayers, SCVSD has decided to pursue the Recycled Water Project separately from the Chloride Compliance Project and recirculate the EIR. In response to the most recent Court ruling with regard to the Chloride Compliance Project, SCVSD is preparing a Recirculated Draft EIR for the Chloride Compliance Project, which is anticipated to be released in late spring 2017.

~~The Santa Clarita Valley Sanitation District (SCVSD) prepared a Draft Supplemental Environmental Impact Report for Brine Concentration and Limited Trucking (Draft SEIR). This effort is part of a project to comply with a state-mandated limit on the level of chloride (salt) that can be discharged from the SCVSD's wastewater (sewage) treatment plants. On October 28, 2013, the SCVSD Board of Directors approved a chloride compliance project and certified the associated Environmental Impact Report (Certified EIR). Under the approved chloride compliance project, advanced treatment facilities will be added at the Valencia Water Reclamation Plant (VWRP) to reduce chloride levels in the Santa Clarita Valley's treated wastewater (sewage) and comply with the state-mandated chloride limit for the Santa Clara River. Brine, a salty water byproduct from advanced treatment, was originally to be managed by deep well injection. The SCVSD now proposes to modify one component of the approved compliance project—the approach to brine management.~~

~~The modification to the approved chloride compliance project is to replace brine management by deep well injection with the addition of brine concentration equipment at the VWRP and limited trucking of concentrated brine (an average of 6 truckloads per day, 10 maximum, during off-peak hours) to an existing industrial facility. The SCVSD would truck during off-peak hours to avoid morning and evening rush hours. The technology proposed would reduce the volume of brine requiring disposal and the resulting number of truckloads per day by 90% (i.e., 6 instead of 60 truckloads per day) compared to the trucking alternative evaluated in the Certified EIR. The brine concentration facilities would be installed within the existing footprint in an area of disturbed but undeveloped land. Trucks would be loaded with concentrated brine at a new truck loading station located adjacent to the brine concentration equipment. Concentrated brine would be trucked to an existing industrial facility. The currently proposed location is the Joint Water Pollution Control Plant (JWPCCP) in Carson, which treats wastewater from much of the Los Angeles Basin (over 270 mgd) and discharges to the ocean. This site is proposed for several reasons. First, the JWPCCP contains authorized disposal stations for trucked wastewater such that no construction would be required to accept SCVSD's brine. Second, the haul route from the freeway to the JWPCCP is less than 1 mile and does not pass any residences.~~

~~As of February 2017, the Draft Supplemental EIR was being revised and continuing through the CEQA process.~~

4.21-6 Impacts Analysis

- Util-3** Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- Util-4** Would the project 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?
- Util-5** Would the project result in a determination by the wastewater treatment provider that 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?

Wastewater flow originating from the project site would discharge to a local sewer line, which is not maintained by the CSDLAC, for conveyance to the CSDLAC's Soledad Canyon Trunk Sewer, Section 5, located in the Sand Canyon Road at Lost Canyon Road.¹²⁴ This pipeline is 18 inches in diameter and has the capacity of 5.7 mgd and conveyed a peak flow of 2.3 mgd when last measured in 2012.¹²⁴ As previously discussed, the SCVJSS provide regional wastewater treatment. Thus, the SCVJSS would accept flows from the project site.

The CSDLAC anticipates the Project would generate an average wastewater flow of ~~124,304~~ ~~138,942~~ gallons per day based on the Project characteristics provided in Section 3.¹²⁴ The wastewater generated by the Project would be approximately ~~0.44%~~ ~~0.497%~~ of the SCVJSS' treatment capacity of 28.1 mgd for average day flows. The Soledad Canyon Trunk Sewer, Section 5, had an available capacity of 3.4 mgd in 2011.¹²⁴ The Project represents 4.09% of the available capacity in Section 5.

As previously discussed, the CSDLAC requires new users to pay a fee to connect to the CSDLAC's Sewerage System. Therefore, the CSDLAC would require payment of a connection fee to construct any incremental expansion of the SCVJSS to accommodate the Project. Furthermore, the City of Santa Clarita would not issue connection permits to the sewer system if it cannot be demonstrated that sufficient capacity exists to serve the proposed development. The Project Applicant has ~~prepare~~ provided a sewer area study that been reviewed and approved by the City. The sewer area study shows that there is adequate capacity for the Project. Thus, the Project could not cause an exceedance of capacity of the wastewater conveyance system or SCVJSS treatment plants, since adequate capacity must be demonstrated in order to contribute flows to the system. Implementation of Mitigation Measure MM Util-5 would ensure impacts to the wastewater conveyance and treatment facilities would be less than significant.

Level of Significance Before Mitigation

Impacts would be potentially significant.

¹²⁴ Written correspondence from Adriana Raza, Customer Service Specialist, County Sanitation District of Los Angeles County, January 15, 2016 and April 17, 2017.

Overall, the current projections estimate that after discharging an instream flow requirement of recycled water to the Santa Clara River to protect aquatic species and habitat, up to 17,400 AF of recycled water would be available for beneficial reuse on golf courses, landscaping and other non-potable uses, as set forth in the 2015 UWMP. The majority of recycled water uses are projected to be landscape and golf course irrigation, both of which have high demands in the summer and low demands in the winter. In optimizing the customers served to eliminate the need to provide a backup supply of potable water in the summer, an anticipated 10,054 AFY is planned to be served in 2050. Refer to Section 4.4 and Table 4.3 of the 2015 UWMP for additional detail.

No recycled water is proposed to be used on the Project site; and, therefore, SCWD is not relying on recycled water as a water source for the Project. If recycled water were to become available in the future for use on the Project site, it would be used for non-potable purposes such as landscape irrigation and in accordance with all applicable and relevant regulatory requirements. Although not part of the Project water supplies, recycled water rights add to the overall water supply availability and reliability in the Santa Clarita Valley as further discussed below.

Effluent from the Valencia and Saugus WRPs has historically been discharged to the Santa Clara River (SCR) and must comply with the Upper Santa Clara River Chloride Total Maximum Daily Limit (TMDL) for chloride established by the Los Angeles Regional Water Quality Control Board (LARWQCB). [In response to the most recent Court ruling with regard to the Chloride Compliance Project, SCVSD is preparing a Recirculated Draft EIR for the Chloride Compliance Project, which is anticipated to be released in late spring 2017. This document updates and supplements the 2013 Facilities Plan and EIR to include brine concentration and limited trucking as the brine disposal option and to separate the Recycled Water Project.](#) ~~The SCVSD prepared a Chloride Compliance Facilities Plan (Facilities Plan) and Final Environmental Impact Report (FEIR) to meet dual objectives of reducing chloride and increasing the use of recycled water to help offset demands of potable water in the Santa Clarita Valley.~~

The production, discharge, distribution, and use of recycled water are subject to federal, state and local regulations and can be affected by court decisions. A specific example of how recycled water supplies can be affected by legal and regulatory factors is the recent litigation filed against the SCVSD in *Affordable Clean Water Alliance v. Santa Clarita Valley Sanitation District of Los Angeles*¹²⁷ and *Affordable Clean Water Alliance v. Santa Clarita Valley Sanitation District of Los Angeles*.¹²⁸ In those cases, the plaintiff alleged that the SCVSD did not adequately analyze whether the amount of recycled water discharged from the Valencia WRP to the SCR would avoid significant environmental impacts to aquatic species and habitat in the SCR. In related decisions issued March 9, 2016 and June 2, 2016, the Los Angeles Superior Court determined that the FEIR requires additional detail and ruled that the SCVSD cannot take further action on its modified chloride compliance project until it completes the additional environmental review.

¹²⁷ Los Angeles County Superior Court Case No. BS 145869


¹²⁸ Los Angeles County Superior Court Case No. BS161742

3. Responses to Comments

3.1 State/Governmental Agencies


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Comment Letter 1
California Department of Fish and Wildlife
April 20, 2017



State of California – Natural Resources Agency
 DEPARTMENT OF FISH AND WILDLIFE
 South Coast Region
 3883 Ruffin Road
 San Diego, CA 92123
 www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director



April 20, 2017

Mr. David Koontz
 City of Santa Clarita
 23920 Valencia Boulevard, Suite 302
 Santa Clarita, CA 91355
Dkoontz@santa-clarita.com

Dear Mr. Koontz:

Sand Canyon Plaza Mixed Use Project (PROJECT)
 DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)
 SCH# 2015051005

The California CDFW of Fish and Wildlife (CDFW) received a Notice of Availability of a DEIR from the City of Santa Clarita for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹ The City of Santa Clarita provided the CDFW an extension to April 20, 2017 to provide comments. 1-1

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code. 1-1

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources, and holds those resources in trust by statute for all the people of the State. [Fish & Game Code, §§ 711.7, subdivision (a) & 1802; Public Resources Code, § 21070; CEQA Guidelines § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802.). Similarly for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources. 1-2

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Public Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & Game Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take", as defined by state law, of any species protected under the California Endangered Species Act (CESA) (Fish & Game Code, § 2050 et seq.), or state-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish and Game Code §1900 et seq.) authorization as provided by the applicable Fish and Game Code will be required. 1-3

PROJECT DESCRIPTION SUMMARY

Proponent: Sand Canyon Plaza, LLC 1-4

Objective: The objective of the Project is to develop the approximately 87-acre Sand Canyon Plaza Mixed-Use Project site with up to 580 residential units, 55,600 square

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000

Response to Comment Letter 1
California Department of Fish and Wildlife
April 20, 2017

- 1-1 The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 1-2 The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 1-3 The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 1-4 The comment restates information contained in the Draft EIR, specifically information relating to the Project Description, and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.

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feet of retail commercial (including restaurants), and a 75,000-square-foot (up to 120-bed) assisted living facility. The Project includes three private recreation areas, commercial plaza areas, various private streets, driveways and landscaped areas, and adjacent roadway improvements to Sand Canyon Road (including the construction of two roundabouts) and Soledad Canyon Road. The Project would result in 2.2 million cubic yards of cut and fill balanced on-site, filling approximately 3-acres of CDFW regulated streams/waterways.

1-4
 cont'd

Project site is located immediately north of Soledad Canyon Road, east of Sand Canyon Road, north of State Route 14 (SR-14), and west of the Pinetree residential community in the City of Santa Clarita.

The site consists of native coast live oak, California sagebrush scrub, holly leaf cherry and riparian vegetation communities.

Location: City of Santa Clarita, Los Angeles County,

Timeframe: Developed in one phase, timeframe not specified.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City of Santa Clarita in adequately identifying and/or mitigating the Project’s significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

Project Description and Related Impact Shortcoming

Issue #1: Use of CBDDDB and BIOS 5 tool to determine impacts.

Issue: The DEIR states the lack of California Natural Diversity Database/BIOS data for the Project site as evidence these species don’t appear on-site. The DEIR states "... the Project site is designated as Agriculture, with the areas surrounding the site designated as Urban. Neither of these habitats is considered a sensitive habitat. The California Natural Diversity Database, indicates no special status species (sensitive plants and wildlife) from the California Natural Diversity Database (December 2004) were documented for the Project site. A review of the California CDFW of Fish and Wildlife Biogeographic Information and Observation System (BIOS) 5 tool, accessed August 17, 2015, confirmed that no sensitive habitats or sensitive species occur on the Project site."

1-5

The DEIR then continues to disclose the site contains state ranked rare holly leaf cherry vegetation communities as well as numerous other native vegetation communities, as well as bats (protected mammals by CDFW), a special status reptile with the potential for numerous other special status species to be present.

1-6

Specific impact: Impacts to sensitive, rare, threatened and/or endangered fish and wildlife resources potentially on-site would be missed using this methodology.

Why impact would occur: The statement that the CNDDDB/BIOS were consulted and due to lack of documentation on the Project site, it is concluded (confirmed) that special status plants and animals do not occur. CNDDDB/BIOS are a positive sighting database. This means that if the site was not surveyed, or if results were not reported, there would be no record of resources on the property. CNDDDB/BIOS disclaimer states that the results obtained from searches cannot and should not be used to determine presence/absence of species for a Project.

1-7

The DEIR also states "transects of opportunity" were used for a baseline biological assessment. The DEIR should define "transects of opportunity" and how this

1-8

- 1-5 The DEIR correctly states that no special status plants, animals, or plant communities have been reported previously for this subject property in the CNDDDB. The report continues by stating that none were found during focused rare plant surveys. The DEIR has been revised to indicate that the site's current use as a mobile home park and that surrounding uses include residential and commercial uses.
- 1-6 The comment restates information contained in the Draft EIR, specifically information relating to the Project Description, and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 1-7 The DEIR discusses each special status species and analyzes its occurrence potential on the subject property, based on existing conditions and known habitat requirements for each species. By definition, the literature search is a desktop predictive tool, the findings of which are verified during on-site field surveys. The findings reported in the DEIR result from the field investigations – not from the literature search.
- 1-8 The DEIR has been revised to clarify that systematic field techniques were used to thoroughly survey all habitats. "Transects of opportunity" is a term intended to indicate that all areas of the site were thoroughly investigated by field biologists. The entire site was walked, with the exception of the very steep areas in the eastern portion of the property; those areas were studied with binoculars. It should be noted that the survey protocols referenced in the CDFW letter do not speak to a requirement for replicable surveys.

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methodology meet CDFW and USFWS protocol standards. Opportunistic broad scale 'surveys' often are not adequate for CEQA disclosure purposes as they are limited to a "snap shot" in time. Biological field surveys should be methodical and repeatable during the appropriate times of year to determine the diversity of the biological resources on-site.

1-8
 cont'd

Evidence impact would be significant: CDFW is unable to determine the extent of impacts based on the biological analysis conducted for the DEIR. CDFW can only speculate on the impacts to biological resources and proposed mitigation measures. Absent survey data, CDFW is unable to provide meaningful avoidance, minimization, or mitigation measures related to biological resources. CDFW recommends the lead agency request the project applicant to conduct appropriate biological surveys and to consult with CDFW for avoidance, minimization and mitigation measures prior to finalizing the DEIR.

1-9

Issue #2: Botanical Surveys during drought conditions

Issue: The DEIR describes botanical survey efforts conducted on the Project site during April, May, and June of 2014 and 2015 and concludes that surveys were conducted during a drought and not ideal for detecting rare plants.

1-10

CDFW is concerned that focused botanical surveys were conducted 2 years ago during an ongoing drought, during conditions that do not maximize detection of flowering plant species. The DEIR also contends the habitat on-site is of "poor quality for rare plants" but gives provides no substantial evidence in the record to support these determinations. CDFW protocols state, especially with periods of extended drought, surveys may need supplemental work to be considered accurate or make a determination of negative finding. Moreover, botanical surveys within one year are typically considered representative of site conditions for determining impact analysis provided they are conducted at the appropriate time of year and proper weather conditions. Because the most recent surveys were conducted over two years ago during a prolonged drought, CDFW recommends that additional botanical surveys be conducted at the appropriate time of year with proper weather conditions and the results incorporated into the environmental document for review and comment.

Specific impact: Project induced native plant population declines or local extirpation of special status plant species may result from immediate death or injury, habitat fragmentation, alteration of soil chemical and physical makeup, increased competition with exotic invasive weeds, and reduce photosynthesis and reproductive capacity. The effects of these impacts would be permanent or occur over several years.

Why impact would occur: Impacts to botanical resources could occur from Project construction, maintenance, mitigation, irrigation, and fuel modification activities that result in vegetation crushing, trimming or removal, human intrusion, and the erosion, crushing and compaction or excavation of soil. The Project may introduce exotic invasive species such as Argentine ant (*Linepithema humile*) onto habitats supporting botanical resources and their arthropod pollinators and dispersal agents. It has been documented that wildlife habitat located within 200 meters of areas infested with Argentine ants were more likely to have been invaded. Within invaded sites, native ants were largely displaced, and their median species richness declined by more than 60% compared with uninvaded sites. (Fisher, Mitrovich, Matsuda and Pease., 2010).

1-11

Evidence impact would be significant: Botanical surveys that are outdated (i.e., greater than 1.5 years as determined by CDFW) or conducted during conditions that do not maximize detection may overlook the presence or actual density of some special status plant species. Botanical surveys should be conducted on the

- 1-9 The DEIR provides species survey data in the form of compendiums for all flora and fauna identified during all field surveys, and provides a vegetation map. Further, the DEIR quantifies impacts to each vegetation covertime, and provides mitigation measures. This information meets the standards for adequacy for EIRs under CEQA.
- 1-10 The DEIR specifically discusses the degraded conditions of the subject property, apparently resulting from a combination of ongoing drought, heavy use by off-road vehicles (motorcycles), and previous fires. The actual text of the DEIR – “...habitat quality for rare plants is generally poor” – is supported previously in the document where existing conditions are described in detail. Finally, at the request of CDFW, sensitive plant surveys are being conducted again in spring and early summer of 2017, and the results will be submitted to CDFW.
- 1-11 The DEIR discusses the potential impact of non-native ants, and includes mitigation measures that would reduce impacts to a less than significant level. See Response to Comment 1-10 above as it relates to updated surveys.

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Project site after optimal precipitation and timing stimulate emergence within the seed bank. Based on the current record, Take of special status plant species including state- and federal- listed species may occur on site without adequate detection, avoidance and mitigation measures. Therefore, the Project may result in a substantial adverse effect, either directly or through habitat modifications, on special status species.

1-11
 cont'd

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure: To reduce impacts to less than significant CDFW recommends that protocol-botanical surveys be repeated using methods to maximize detection of special status plants on the Project site during 2017, a non-drought year, and that these results be disclosed in the DEIR. All botanical surveys should be floristic in nature and follow CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (Survey Protocols) see: (http://www.dfg.ca.gov/biogeodata/vegcamp/natural_communities.asp). Special status plants should be assumed to occur in areas of suitable habitat regardless of survey results during drought conditions.

1-12

As indicated above, reliance on delineations performed during periods of extended drought and surveys over 1 year old should be updated to fully disclose the current condition and botanical resources on-site. CDFW recommends that additional botanical surveys be conducted at the appropriate time of year with proper weather conditions and the results incorporated into the environmental document for review and comment.

CDFW recommends avoidance of any special status plant species. CDFW does not consider translocation, or planting of rare/sensitive plant resource into a developments' landscaping appropriate mitigation to offset biological values.

Issue #3: Inadequate mitigation proposed for impacts to CDFW rare holly leaf cherry vegetation community

Issue: The DEIR MM Bio-6 proposes a 1:1 ratio (one holly leaf shrub to be planted for each holly leaf shrub impacted) to mitigate the loss of 1.66-acres of state rare holly leaf cherry alliance vegetation, and that the planting may be located within the landscaped areas of the property. The measure also specifies a 3 year monitoring period and allows for unspecified temporary irrigation.

1-13

CDFW does not consider planting 1 plant of a diverse vegetation community, within a development, adequate mitigation for impacts to holly leave cherry communities.

Specific impact: Holly leaf cherry communities that occur on-site are made up of many different plants with different percent cover, diversity and abundance of species that comprise these two communities on-site. Simply planting one species, the holly leaf cherry, does not mitigate the two holly leaf cherry vegetation communities found on the Project site. CDFW considers MM Bio-6 inadequate mitigation that would result in the loss of 1.66 acres of rare these vegetation communities.

Additionally, the DEIR should contain a discussion as to the local significance and distribution of these rare holly leaf cherry vegetation communities. CEQA (Guidelines §§ 15125(c)) require the Lead Agency to include information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis placed on analyzing resources that are rare or unique to the region must to be incorporated into the DEIR.

1-14

Evidence impact is significant: CDFW has ranked the holly leaf cherry vegetation communities as S3, rare to uncommon and rare for the purposes of CEQA analysis.

- 1-12 At the request of CDFW, floristic and focused rare plant surveys will be conducted again in the spring and early summer of 2017. A report describing the methodology and findings will be prepared and submitted to CDFW.
- 1-13 The DEIR has been revised to clarify the distinction between the holly leaf cherry chaparral (0.35 acre) and the holly leaf cherry–buckwheat scrub (1.31 acres) alliances on the subject property. Only the holly leaf cherry chaparral is ranked G3 S3, and thus considered rare under CEQA.
- 1-14 The regional distribution of holly leaf cherry vegetation was not found mapped nor discussed in published literature, and was not discussed or included in the list of “Sensitive Communities” in the June 2011 City General Plan, Conservations and Open Space Element (page CO-27). No changes were made to the DEIR, because this information does not appear to be available.

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The continued loss of this vegetation community, without appropriate mitigation, concerns CDFW and could result in local extirpation.

↑ 1-14
 cont'd

Recommended Potentially Feasible Mitigation Measure(s): 1) CDFW recommends avoiding impacts to the 1.66-acres of holly leaf cherry vegetation communities, if avoidance is not feasible, minimizing impacts to the maximum extent possible. 2) Any impacts to the holly leaf cherry vegetation communities should be mitigated at a minimum 5 acres of preservation/restoration for every 1 acre of impact. All mitigation should be held to quantifiable success criteria including species diversity, species richness, abundance, percent cover, and non-native cover below 3%. Success criteria should be based on the composition of the vegetation communities being impacted. Success should not be determined until the site has been irrigation-free for at least 5 years and the metrics for success have remained stable (no negative trend for richness/diversity/abundance/cover and no positive trend for invasive/non-native cover) for at least 5 years.

1-15

Issue #4: Deferred mitigation

Issue: CEQA Guidelines §15070 and §15071 require the DEIR to analyze if the Project may have a significant effect on the environment as well as review if the Project will 'avoid the effect or mitigate to a point where clearly no significant effects would occur'. Relying on future surveys, the preparation of future management plans, or mitigating by obtaining permits from CDFW are considered deferred mitigation under CEQA. In order to analyze if a project may have a significant effect on the environment, the Project related impacts, including survey results for species that occur in the Project footprint need to be disclosed during the public comment period. This information is necessary to allow CDFW to comment on alternatives to avoid impacts, as well as to assess the significance of the specific impact relative to the species (e.g., current range, distribution, population trends, and connectivity)

1-16

Issue #5: MM Bio-4 (requiring pre-construction surveys and implementation of bat boxes)

Issue: MM Bio-4 "If any special-status bat species are determined to be roosting on-site, bat boxes of a size and design suitable for the estimated number of bats on-site shall be installed".

1-17

Bat boxes have a very low success rate, and many bat species, including those with the potential to occur on-site do not utilize bat box type of habitat.

Impacts to Bats: The DEIR states several species of bats have the potential to occur onsite; however, surveys were not conducted prior to circulation of the DEIR. Therefore, the DEIR does not adequately describe the potential for impacts to bats.

The Project site contains mature oak trees, structures, rock outcrops, riparian habitat and is adjacent to a water source (Santa Clara River). The Project site has the potential to support several species of bats. Bats are considered non-game mammals and are protected by state law from take and/or harassment (Fish and Game Code §4150, CCR §251.1). Several bat species are also considered Species of Special Concern (SOC), which meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines §15065). CDFW considers adverse impacts to a SOC, for the purposes of CEQA, to be significant without mitigation.

CDFW recommends bat surveys be conducted by a qualified bat specialist to determine baseline conditions within the Project and within a 500-foot buffer, and analyze the potential significant effects of the proposed Project on the species (CEQA Guidelines §15125). CDFW recommends the DEIR include the use of acoustic recognition technology to maximize detection of bat species to minimize impacts to sensitive bat species. The DEIR should document the presence of any

↓

- 1-15 The DEIR has been revised to clarify that the holly leaf cherry restoration plan shall include an appropriate matrix of native plant species typical of that vegetation alliance at a ratio of 5:1.
- 1-16 The DEIR provides species survey data in the form of compendiums for all flora and fauna identified during all field surveys, and provides a vegetation map. Further, the DEIR quantifies impacts to each vegetation covertype, and provides mitigation measures. This information meets the standards for adequacy for EIRs under CEQA. Furthermore, the biological mitigation measures will be required by the City of Santa Clarita as a condition of approval. With the exception of the holly leaf cherry restoration plan, all other biological mitigations must be conducted immediately prior to ground-disturbing activities.
- 1-17 At the request of CDFW, bat surveys will be conducted during the spring of 2017 by qualified biologists. The results of these surveys will be provided to the City and CDFW. Additionally, Mitigation Measure Bio-4 will be expanded to include the preparation of a relocation and monitoring plan in coordination with the City and the CDFW.

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bats and include species specific mitigation measures to reduce impacts to below a level of significance.

To avoid the direct loss of bats that could result from removal of trees, rock crevices, structures, that may provide roosting habitat (winter hibernacula, summer, and maternity), CDFW recommends the following steps are implemented:

1. Identify the species of bats present on the site;
2. Determine how and when these species utilize the site and what specific habitat requirements are necessary [thermal gradients throughout the year, size of crevices, tree types, location of hibernacula/roost (e.g., height, aspect, etc.)];
3. Avoid the areas being utilized by bats for hibernacula/roosting; if avoidance is not feasible, a bat specialist should design alternative habitat that is specific to the species of bat being displaced and develop a relocation plan in coordination with CDFW.
4. The bat specialist should document all demolition monitoring activities, and prepare a summary report to the Lead Agency upon completion of tree/rock disturbance and/or building demolition activities. CDFW requests copies of any reports prepared related to bat surveys (e.g., monitoring, demolition);
5. If confirmed occupied or formerly occupied bat roosting/hibernacula and foraging habitat is destroyed, habitat of comparable size, function and quality should be created or preserved and maintained at a nearby suitable undisturbed area. The bat habitat mitigation shall be determined by the bat specialist in consultation with CDFW;
6. A monitoring plan should be prepared and submitted to the Lead Agency. The monitoring plan should describe proposed mitigation habitat, and include performance standards for the use of replacement roosts/hibernacula by the displaced species, as well as provisions to prevent harassment, predation, and disease of relocated bats; and,
7. Annual reports detailing the success of roost replacement and bat relocation should be prepared and submitted to Lead Agency and the CDFW for five years following relocation or until performance standards are met, whichever period is longer.

Evidence Impact would be significant. Absent the above requested information, the DEIR does not analyze impacts to bats, and the DEIR does not provide any alternatives discussion or any avoidance strategies and proposes bat boxes that have a very poor success record and are not appropriate habitat for most bats residing in the Project area.

Issue #6: Wildlife Corridor.

Issue: The DEIR does not fully analyze the site for purposes of local and regional wildlife movement potential from the foothills, under SR-14 to the Santa Clara River.

Wildlife Movement and Connectivity. The Project area supports significant biological resources, and is located in the Mint Canyon/Soledad Canyon region. The Project is currently available to facilitate wildlife movement from the foothills to the north, under SR-14 to Santa Clara River. The foothills surrounding the project contain low density development, with pockets of open space. The project area contains habitat connections and supports movement across the broader landscape, sustaining both transitory and permanent wildlife populations.

1-17
 cont'd

1-18

1-18 The DEIR discusses the current conditions of the Project site and surrounding land uses relative to wildlife movement corridors. As described in the DEIR, the site is an island surrounded by residential and commercial development and busy roadways. Wildlife movement from the Project site to the south is currently restricted. Soledad Canyon Road, which parallels the south side of the subject property, is a designated major highway in the City's General Plan with a posted speed limit of 50 mph. Directly south of Soledad Canyon Road is State Route 14, a six- to eight-lane freeway. Although wildlife may attempt to cross to the river, this street is a barrier to wildlife movement and a mortality sink. There is a vehicle underpass of SR 14 at Oak Spring Canyon Road, east of the Project site, which is located in a developed residential neighborhood. To use this undercrossing, wildlife would need to cross Soledad Canyon Road in a residential neighborhood to reach this underpass.

Sand Canyon Road along the west side of the property is secondary highway in the City's General Plan with a speed limit of 45 mph. Residential uses are located directly west of Sand Canyon Road.

The drainage course along the western side of the property flows into an underground storm drain at the southern perimeter of the site; therefore, this tributary does not provide a wildlife movement corridor connecting the Santa Clara River. Based upon the above identified constraints, the City respectfully disagrees with CDFW's assertion that the site could potentially be used as a wildlife corridor.

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The DEIR did not address how the project may be used as a wildlife corridor. The DEIR dismisses any value while providing no rationale or substantial evidence to support this conclusion. The DEIR should include a discussion of current wildlife movement routes available through the foothills to the Santa Clara River. The DEIR should also evaluate if the loss of this passage is the significance. The DEIR should identify other local corridors that exist and will continue to allow wildlife movement to the Santa Clara River from the foothills.

1-18

Evidence impact would be significant. Aspects of the project could create physical barriers to wildlife movement from direct or indirect project-related activities. Indirect impacts from lighting, noise, dust, and increased human activity may displace wildlife in the general area. CDFW recommends the DEIR include studies that track wildlife movement and dispersal across the Project site, including large mammals, and discuss how the Project will affect the use and dispersal patterns. CDFW also recommends the DEIR include maps showing local and regional wildlife movement patterns and analyze how the Project will affect these corridors. The DEIR asserts the Project will not have a significant effect on wildlife movement. CDFW requests the DEIR include data and maps to support these conclusions.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Environmental Setting and Related Impact Shortcoming): CDFW recommends reducing or clustering the development footprint to reduce the total area impacted and providing a larger buffer between housing and preserving the tributary to the Santa Clara River on-site.

Issue #7: Preconstruction Surveys as Mitigation.

Issue: The DEIR addressed the potential for a few sensitive species to be found within the Project footprint, and requires limited preconstruction surveys and relocation as mitigation measures to bring impacts below the significance threshold. Specific surveys were not conducted to disclose if these resources would be impacted and if alternative Project design would avoid or lessen these impacts.

CEQA Guidelines §15070 and §15071 require the document to analyze if the Project may have a significant effect on the environment as well as review if the Project will 'avoid the effect or mitigate to a point where clearly no significant effects would occur'. Relying on future surveys, the preparation of future management plans, or mitigating by obtaining permits from CDFW are considered deferred mitigation under CEQA. In order to analyze if a project may have a significant effect on the environment, the Project related impacts, including survey results for species that occur in the entire Project footprint need to be disclosed during the public comment period. This information is necessary to allow CDFW to comment on alternatives to avoid impacts, as well as to assess the significance of the specific impact relative to the species (e.g., current range, distribution, population trends, and connectivity).

1-19

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

1-20

- 1-19 Two years of field surveys were conducted and did not discover special status species of flora or fauna on the Project site. As previously stated, floristic and focused rare plant surveys will be conducted again in the spring of 2017 at the request of CDFW, as will bat surveys.

Given the typically lengthy timeframe between DEIR preparation, Project approval, and initial construction, it was deemed appropriate to require survey capture, and relocation work to be conducted immediately prior to ground-disturbing activities. These biological mitigations will be required by the City of Santa Clarita as conditions of approval. To further clarify this requirement the following mitigation measure MM Bio-1A has been added to the Draft Final EIR.

MM Bio-1A The Project Applicant shall retain a qualified biologist to conduct a pre-construction biological survey for special-status species determined to have potential to occur in suitable habitat within the Project site prior to the start of construction activities. If special-status species are detected during pre-construction surveys, appropriate mitigation plans will be prepared by a qualified biologist and submitted to the City of Santa Clarita for review and approval. Additionally, a biological monitor will be present periodically during construction to ensure that impacts to special-status species are minimized or do not occur.

- 1-20 The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.

Mr. David Koontz
City of Santa Clarita
April 20, 2017
Page 8

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

1-21

CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist the City of Santa Clarita in identifying and mitigating Project impacts on biological resources. CDFW recommends addressing the information raised in this letter. CDFW also recommends the City and Project Applicant consult with CDFW regarding these issues.

1-22

Questions regarding this letter and further coordination on these issues should be directed to Kelly Schmoker at (949-581-1015), and Kelly.Schmoker@wildlife.ca.gov.

Sincerely,




Betty J. Courtney
Environmental Program Manager I

cc: CDFW
Victoria Chau – Los Alamitos
Scott Harris – Ventura
Erinn Wilson – Los Alamitos

Office of Planning and Research, State Clearinghouse, Sacramento

- 1-21 The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 1-22 The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.

Comment Letter 2
Governor's Office of Planning and Research
April 18, 2017

 EDMUND G. BROWN JR. GOVERNOR	STATE OF CALIFORNIA GOVERNOR'S OFFICE of PLANNING AND RESEARCH STATE CLEARINGHOUSE AND PLANNING UNIT	 KEN ALEX DIRECTOR
April 18, 2017		
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>Patrick LeClair City of Santa Clarita 23920 Valencia Boulevard, Suite 302 Santa Clarita, CA 91355</p> <p>Subject: Sand Canyon-Soledad Canyon Mixed Use Project SCH#: 2015051005</p> <p>Dear Patrick LeClair:</p> <p>The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on April 17, 2017, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.</p> <p>Please note that Section 21104(c) of the California Public Resources Code states that:</p> <p style="padding-left: 40px;">"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."</p> <p>These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.</p> <p>This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.</p> <p>Sincerely,</p>  Scott Morgan Director, State Clearinghouse </div> <div style="width: 35%; text-align: right; border-left: 1px solid black; padding-left: 10px;"> <p>RECEIVED PLANNING DIVISION APR 24 2017 CITY OF SANTA CLARITA</p> <p style="font-size: 24pt; font-weight: bold;">2-1</p> </div> </div>		
<p>Enclosures cc: Resources Agency</p>		
1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044 (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov		

Response to Comment Letter 2
Governor’s Office of Planning and Research
April 18, 2017

- 2-1 The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.

**Document Details Report
State Clearinghouse Data Base**

SCH# 2015051005
Project Title Sand Canyon-Soledad Canyon Mixed Use Project
Lead Agency Santa Clarita, City of

Type EIR Draft EIR

Description The project includes redevelopment of the property with a mixed-use community including five Planning Areas.
 The project includes a total of 580 residential units. Vehicular access to the project site would come from Soledad Canyon Road and Sand Canyon Road. Three private streets would access the remaining Planning Areas from Sand Canyon Road.
 The project would include grading approx. two million cubic yards of cut and fill balanced on-site. Additional remedial grading would be necessary to accommodate the project.

Lead Agency Contact

Name Patrick LeClair
Agency City of Santa Clarita
Phone 661-255-4349 **Fax**
email
Address 23920 Valencia Boulevard, Suite 302
City Santa Clarita **State** CA **Zip** 91355

Project Location

County Los Angeles
City Santa Clarita
Region
Lat / Long 34° 25' 44.00" N / 118° 25' 19.74" W
Cross Streets Sand Canyon/Soledad Canyon Roads
Parcel No. Various
Township **Range** **Section** **Base**

Proximity to:

Highways 14
Airports
Railways
Waterways Santa Clara River
Schools Canyon Springs Elem.
Land Use General Plan/Zoning: MXN-Mixed Use Neighborhood Zone

Project Issues Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects; Aesthetic/Visual

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 5; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 7; Department of Housing and Community Development; State Water Resources Control Board, Division of Water Quality; Regional Water Quality Control Board, Region 4; Department of Toxic Substances Control; Native American Heritage Commission

Date Received 03/03/2017 **Start of Review** 03/03/2017 **End of Review** 04/17/2017

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

EDMUND G. BROW Jr., Governor

DEPARTMENT OF TRANSPORTATION

District 7 – Office of Regional Planning
 100 S. MAIN STREET, MS 16
 LOS ANGELES, CA 90012
 PHONE (213) 897-0673
 FAX (213) 897-1337
 www.dot.ca.gov



*Making Conservation
 a California Way of Life.*

Governor's Office of Planning & Research
 APR 17 2017
 STATE CLEARINGHOUSE

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 E*

April 17, 2017

Mr. Patrick LeClair
 Senior Planner
 City of Santa Clarita
 Community Development Dept.
 23920 Valencia Boulevard, Suite 302
 Santa Clarita, CA 91355

RE: Sand Canyon-Soledad Canyon Mixed
 Use Project
 Draft Environmental Impact Report
 SCH#2015051005
 GTS#07-LA-2016-00723-FL
 Vic. LA/ 14/ PM 33.423

Dear Mr. LeClair:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project.

The proposed project consists of approximately 130,600 square feet (sf) of commercial uses (includes 55,600 sf of retail/restaurants, and a 75,000 sf assisted living facility with up to 120 beds) and 580 residential units (includes 312 apartment units, 122 townhome units, and 146 condominium units), and it currently includes 123 mobile homes that would be removed as part of the proposed project.

After reviewing the Draft Environmental Impact Report (DEIR) dated March 2017 and Traffic Impact Analysis (TIA) in the Appendices (Appendix 11) dated December 21, 2016, Caltrans offers the following comments:

- For Figure 2-3 of #15 intersection on Page 2.4 of the TIA, it is currently labeled "SR-115 On-Ramp", a correction is needed to change to SR-14 On-Ramp.
- TIA, Appendix A, Intersection Count Worksheets, the AM/PM Peak Hours should be between 6-9am for AM and 4-7pm for PM. To fully evaluate the potential impacts, Caltrans will need the counts to include these said hours. Please verify/validate this information with Caltrans Traffic Operations.

*"Provide a safe, sustainable, integrated and efficient transportation system
 to enhance California's economy and livability"*

Mr. Patrick LeClair
04/17/2017
Page 2

- For MM T-2 and MM T-6, “SR-14 SB ramps at Soledad Canyon. Modification traffic signal to change westbound left-turn phasing from permissive to protective permissive.” (DEIR, Executive Summary, Page 2.46-2.47) Caltrans acknowledges the proposed mitigation mentioned above but would recommend protected left-turn phasing.

Caltrans requests that prior to completion of the Caltrans Mitigation Agreement, the applicant shall complete a study for the operations of the off- and on-ramp for SR-14 east of Soledad Canyon Road, especially for the movement and queue analysis of the westbound left-turn phasing from Soledad Canyon on to the SR-14 SB on-ramp. If any improvements to the on-ramp are required as a result of that study, these improvements shall be completed prior to the 100th certificate of occupancy.

- For MM T-3 and MM T-7, “The Project Developer shall enter into a Mitigation Agreement with Caltrans. Said Mitigation Agreement shall be finalized prior to the recordation of a final map.” (DEIR, Executive Summary, Page 2.46-2.47) Caltrans acknowledges that “under cumulative conditions, the intersection of Sand Canyon Road at Soledad Canyon Road would be significantly impacted by the Project. Because of this impact is under cumulative conditions, the Project would contribute its pro rata share of the improvement cost, and the improvement would be implemented when necessary given the anticipated growth in future traffic volumes.” (DEIR, Traffic and Circulation, Page 4.19-1)

Caltrans encourages the applicant to work with Caltrans early on to streamline the process of Mitigation Agreement for the Project’s pro rata share (1.6%) of the SR-14 Freeway mainline (cumulative conditions).

In view of SB 743, the Governor’s Office of Planning and Research (OPR) is working to develop an alternative to LOS for evaluating transportation impacts pursuant to CEQA. Such as using Vehicle Miles Traveled (VMT) as the primary metric in identifying transportation impacts for all future development projects. Once OPR provides new guidance, Caltrans hopes to collaborate with the City to adopt methods of traffic analysis and new thresholds that are mutually acceptable.

Caltrans acknowledges the Project’s goals and policies to encourage pedestrian linkages, the implementation of bicycle facilities, and the reconfiguration of roadways. Such as to include enhanced safety features to minimize conflicts between transit riders, bicyclists, and motor vehicles. (DEIR, Executive Summary, Page 2.45)

Caltrans continues to strive to improve its standards and processes to provide flexibility while maintaining the safety and integrity of the State’s transportation system. It is our goal to implement strategies that are in keeping with our mission statement, which is to “*provide a safe, sustainable, integrated, and efficient transportation system to enhance California’s economy and livability.*”

Good geometric and traffic engineering design to accommodate bicyclists and pedestrians are critical at every on and off ramp and freeway terminus intersection with local streets. Caltrans

“Provide a safe, sustainable, integrated and efficient transportation system to enhance California’s economy and livability”

Mr. Patrick LeClair
04/17/2017
Page 3

will work with the City to look for every opportunity to develop projects that improve safety and connectivity for pedestrians and bicyclists. Opportunities for improvements may exist on State facilities such as: freeway termini, on/off-ramp intersections, overcrossings, under crossings, tunnels, bridges, on both conventional state highways and freeways.

With regard to public transit, we recommend planning for gradual continual improvement of transit stops, bus bays, or other facilities, to accommodate traffic flow, especially on streets that are State Route locations or are near freeway intersections.

As a reminder, storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful of your need to discharge clean run-off water and it is not permitted to discharge onto State highway facilities.

Any work to be performed within the State Right-of-way will need an Encroachment Permit and any transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways, will require a Caltrans transportation permit. For information on the Permit process, please contact Caltrans District 7 Office of Permit at (213) 897-3631.

If you have any questions or concerns regarding these comments and/or wish to schedule a meeting, please feel free to contact the project coordinator, Frances Lee at (213) 897-0673 or electronically at frances.lee@dot.ca.gov.

Sincerely,



DIANNA WATSON
Branch Chief, Community Planning & LD IGR Review

cc: Scott Morgan, State Clearinghouse

*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*

Comment Letter 3
SoCalGas
March 22, 2017



James Chuang
Environmental Specialist

Southern California Gas Company
Sempra Energy utilities
GT17E2
555 Fifth Street
Los Angeles, Ca. 90013
Tel: 213-244-5817
Fax: 323 518 2324

03/22/2017

Mr. Patrick Leclair
Senior Planner
City of Santa Clarita/Community Development Department
23920 Valencia Blvd., Suite 302
Santa Clarita, CA 91355

Re: The Sand Canyon Plaza Mixed Use Project

Dear Mr. Leclair:

Southern California Gas Company (SoCalGas) appreciates the opportunity to review and respond to The Sand Canyon Plaza Mixed Use Project. SoCalGas understands that the proposed project would involve construction of a mixed use project consisting of up to 580 residential dwelling units, 55,600 square-feet of retail commercial (including restaurants), and a 75,000 square-foot (up to 120 bed) assisted living facility. The proposed project also includes three private recreational areas, commercial plaza areas, various private streets, driveways, parking and landscaped areas, and adjacent roadway improvements to Sand Canyon Road and Soledad Canyon Road. The project would abut approximately 0.6 mile along the eastern side of Sand Canyon Road and approximately 0.4 mile along the northern side of Soledad Canyon Road, and impact all internal streets of the existing mobile home park. We respectfully request that the following comments be incorporated in the administrative record.

3-1

- SoCalGas has a distribution pipeline that runs along Sand Canyon Road and along Soledad Canyon Road. SoCalGas has service laterals and distribution pipelines that run along all of the internal streets of the existing mobile home park and single family residences along N Prairie Lane.
- SoCalGas recommends that the project proponent call Underground Service Alert at 811 at least two business days prior to performing any excavation work for the proposed project. Underground Service Alert will coordinate with SoCalGas and other Utility owners in the area to mark the locations of buried utility-owned lines.

3-2

Once again, we appreciate the opportunity to comment on The Sand Canyon Plaza Mixed Use Project. If you have any questions, please feel free to contact me at (213) 244-5817 or wchuang@semprautilities.com.

3-3

Sincerely,

James Chuang
Environmental Specialist
Southern California Gas Company

cc. Abagale Taylor, SoCalGas

Response to Comment Letter 3**SoCalGas****March 22, 2017**

- 3-1 This comment reiterates information contained within the Draft EIR. The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 3-2 This comment reiterates information contained within the Draft EIR. The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 3-3 The comment is a conclusion to the comment letter and does not raise an environmental issue; no further response is required.

Comment Letter 4
Fire Department, County of Los Angeles
March 30, 2017



COUNTY OF LOS ANGELES
 FIRE DEPARTMENT
 1320 NORTH EASTERN AVENUE
 LOS ANGELES, CALIFORNIA 90063-3294

DARYL L. OSBY
 FIRE CHIEF
 FORESTER & FIRE WARDEN

March 30, 2017

Patrick Leclair, Senior Planner
 City of Santa Clarita
 Community Development Department
 23920 Valencia Boulevard
 Santa Clarita, CA 91355

Dear Mr. Leclair:

NOTICE OF AVAILABILITY OF THE DRAFT ENVIRONMENTAL IMPACT REPORT, "SAND CANYON PLAZA MIXED USE PROJECT," IS REQUESTING APPROVAL TO ALLOW FOR THE CONSTRUCTION OF UP TO 580 RESIDENTIAL DWELLING UNITS, RETAIL COMMERCIAL INCLUDING RESTAURANTS, AND ASSISTED LIVING FACILITY, LOCATED NORTH OF SOLEDAD CANYON ROAD EAST OF SAND CANYON ROAD, SANTA CLARITA, FFER 201700032

The Notice of Availability of the Draft Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department.

4-1

The following are their comments:

PLANNING DIVISION:

4.15 FIRE PROTECTION

4.15-1 Summary

Paragraph one should be updated to reflect that there are 16 fire stations servicing the Santa Clarita Valley with 15 engine companies, five paramedic squads, one hazardous materials squad, and two ladder trucks.

4-2

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

- | | | | | | | | |
|--------------|-----------|------------------|----------------------|-----------|----------------------|-----------------------|-----------------|
| AGOURA HILLS | BRADBURY | CUDAHY | HAWTHORNE | LA HABRA | LYNWOOD | PICO RIVERA | SIGNAL HILL |
| ARTESIA | CALABASAS | DIAMOND BAR | HIDDEN HILLS | LA MIRADA | MALIBU | POMONA | SOUTH EL MONTE |
| AZUSA | CARSON | DUARTE | HUNTINGTON PARK | LA PUENTE | MAYWOOD | RANCHO PALOS VERDES | SOUTH GATE |
| BALDWIN PARK | CERRITOS | EL MONTE | INDUSTRY | LAKEWOOD | NORWALK | ROLLING HILLS | TEMPLE CITY |
| BELL | CLAREMONT | GARDENA | INGLEWOOD | LANCASTER | PALMDALE | ROLLING HILLS ESTATES | WALNUT |
| BELL GARDENS | COMMERCE | GLENORA | IRVINDALE | LAWDALE | PALOS VERDES ESTATES | ROSEMead | WEST HOLLYWOOD |
| BELLFLOWER | COVINA | HAWAIIAN GARDENS | LA CANADA-FLINTRIDGE | LOMITA | PARAMOUNT | SAN DIMAS | WESTLAKE VILLAG |
| | | | | | | SANTA CLARITA | WHITTIER |

Response to Comment Letter 4
Fire Department, County of Los Angeles
March 30, 2017

4-1 This comment is an introduction to comments that follow and notes that the Draft Environmental Impact Report (DEIR) was reviewed by the Planning Division, the Land Development Unit, the Forestry Division, and the Health Hazardous Materials Divisions of the County of Los Angeles Fire Department. No further response is required.

4-2 to

4-6 The text changes requested for DEIR Section 4.15, pages 4.15-1 through 4.15-3 by the Los Angeles County Fire Department will be incorporated into the Final Environmental Impact Report (FEIR). The text on DEIR pages 4.15-1 through 4.15-3 will be revised as shown in the FEIR.

DEIR page 4.15-1 (first paragraph, second sentence)

Fire protection and emergency medical response services for the Project site and the surrounding area are provided by the Los Angeles County Fire Department. Specifically, ~~16~~ 13 fire stations with ~~15~~ 11 engine companies, ~~1 assessment engine company~~, 5 paramedic squads, 1 hazardous materials squad, and 2 ladder trucks serve the Santa Clarita Valley.

DEIR Page 4.15-2 (first paragraph under Urban Fire Protection Services heading)

As part of the Los Angeles County Consolidated Fire Protection District (a special district of Los Angeles County), the City of Santa Clarita receives urban and wildland fire suppression service from the Los Angeles County Fire Department (LACoFD). Mutual aid or assistance pacts are maintained with several local, state, and federal agencies. As of 2017, the City's Planning Area is served by 16 fire stations with 15 engine companies, 5 paramedic squads, 1 hazardous materials squad, and 2 ladder trucks. ~~As of 2009, there were 13 fire stations with 11 engine companies, one assessment engine, five paramedic squads, one hazardous materials squad, and two ladder trucks serving the City's Planning Area.~~ A nine-person hazardous materials squad operates out of Fire Station 150. ~~Station 76.~~ Approximately ~~75~~ 64 firefighters are on duty every day, 24 hours a day (not including chief officers and fire prevention staff). ~~In 2007, two temporary fire stations with Los Angeles County were moving ahead to build an additional two fire stations within the City's Planning Area. It is expected that 15 stations will be operational by 2016/2017. Since 2008, LACoFD has completed construction of Station 108, and had established temporary Stations 156, 132, and 104.~~ The LACoFD has indicated there are no planned improvements in the immediate vicinity of the Project site. However, the LACoFD's ~~2016~~ 5-year Developer Fee Detailed Fire Station Plan indicates one replacement station for temporary Station 104 and eight additional stations in the Santa Clarita Valley; of those eight additional stations, Fire Station 143 became operational in October 2016. and nine additional stations in the Santa Clarita Valley.⁹⁸

Patrick Leclair, Senior Planner
 March 30, 2017
 Page 2

4.15-3 Existing Conditions

Urban Fire Protection Services

For paragraph one we have the following updates and/or corrections:

Sentence three should be updated to state, “As of 2017, there are **15** engine companies, five paramedic squads, one hazardous materials squad, and two ladder trucks serving the city’s planning area.”

4-3

Since our last communication some resources in the Santa Clarita Valley have been reassigned; therefore sentence four should be updated to state that a nine-person hazardous materials squad operates out of **Fire Station 150**. Sentence five should be updated to reflect that the daily on-duty firefighter personnel is **75**.

4-4

Sentences six through eight provide obsolete information and should be deleted.

4-5

Sentence ten should be updated to state, “However, the 2016 LACoFD’s Developer Fee Detailed Fire Station Plan indicates one replacement station for temporary Fire Station 104 and **eight** additional stations in the Santa Clarita Valley and of those eight, Fire Station 143 became operational in October 2016.”

4-6

Table 4.15-1 Los Angeles County Fire Stations Serving the Santa Clarita Valley Area should be updated as follows:

4-7

Fire Station	Location
Fire Station 73	<u>24875 N. Railroad Avenue, Santa Clarita, CA 91321</u>
Fire Station 76	27223 Henry Mayo Drive, Valencia, CA 91355
Fire Station 81	8710 W. Sierra Highway, Aqua Dulce, CA 91350
Fire Station 104 (Temporary)	26201 Golden Valley Road, Santa Clarita, CA 91359
Fire Station 107	18239 W. Soledad Canyon Road, Santa Clarita, CA 91351
<u>Fire Station 108</u>	<u>28799 N. Rock Canyon Drive, Santa Clarita, CA 91390</u>
Fire Station 111	26829 Seco Canyon Road, Santa Clarita, CA 91350
Fire Station 123	26321 N. Sand Canyon Road, Santa Clarita, CA 91387
Fire Station 124	25870 Hemingway Avenue, Stevenson Ranch, CA 91381
Fire Station 126	26320 Citrus Street , Santa Clarita, CA 91355
<u>Fire Station 128</u>	<u>28450 Whites Canyon Road, Canyon Country, CA91351</u>
Fire Station 132	29310 Sand Canyon Road, Santa Clarita, CA 91387
<u>Fire Station 143</u>	<u>28580 Hasley Canyon Road, Castaic, CA 91355</u>
Fire Station 149	31770 N. Ridge Route, Castaic, CA 91384
<u>Fire Station 150</u>	<u>19190 Golden Valley Road, Santa Clarita, CA 91387</u>
Fire Station 156	24525 W. Copper Hill Drive, Santa Clarita, CA 91350

- 4-7 The text changes requested for DEIR Section 4.15, Table 4.15-1, page 4.15-3 by the Los Angeles County Fire Department will be incorporated into the Draft FEIR.

Patrick Leclair, Senior Planner
 March 30, 2017
 Page 3

Paragraph five should be updated to state, "There are ***eight*** additional fire stations identified on the LACoFD's Developer Fee Detailed Fire Station Plan and of those eight, Fire Station 143 became operational in October 2016."

4-8

Paragraph eight sentence four should be updated to reflect the current developer fee amount is ***\$1.1846*** per square-foot effective February 1, 2017.

4-9

4.15-6 Impacts Analysis

Operational Impacts

The last sentence in paragraph one should update the developer fee amount to ***\$1.1846*** per square-foot.

4-10

4.15-7 Cumulative Impacts

Level of Significance before Mitigation

Correction:

Impacts could be potentially significant.

4-11

Mitigation Measures

Correction:

All development projects in the Santa Clarita Valley shall participate in the Developer Fee Program to the satisfaction of the Los Angeles County Fire Department and/or City of Santa Clarita.

4-12

LAND DEVELOPMENT UNIT:

1. The proposed development may necessitate multiple ingress/egress access for the circulation of traffic and emergency response issues.
2. The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants.
3. Specific fire and life safety requirements for the construction phase will be addressed at the building fire plan check. There may be additional fire and life safety requirements during this time.



- 4-8 The text changes requested for DEIR Section 4.15, page 4.15-3 (last paragraph, first sentence following Table 4.15-1) by the Los Angeles County Fire Department will be incorporated into the Draft Final EIR.
- 4-9 The text changes requested for DEIR Section 4.15, page 4.15-4 (last full paragraph, fourth sentence) by the Los Angeles County Fire Department will be incorporated into the Draft Final EIR.
- 4-10 The text changes requested for DEIR Section 4.15, page 4.15-11 (top of the page, first full sentence) by the Los Angeles County Fire Department will be incorporated into the Draft Final EIR.
- 4-11 &
- 4-12 The City does not concur with the suggested text change that the Level of Significance Before Mitigation be changed to “Impacts count be potentially significant” from the DEIR statement that “Impacts would be less than significant” for the reasons noted below.
1. The comments provided by the Land Development Unit will be made Conditions of Approval on the Project’s Tentative Tract Map and/or site plans for each planning area. The City acknowledges the Land Development Unit’s input and comment. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project.
 2. Given that development projects are already required to participate in the LACoFD Developer Fees Program, it is not necessary to revise the text as requested. Instead, the text on DEIR Section 4.15, page 4.15-12 (first paragraph, first sentence) will be revised as shown below in the Draft Final EIR.

Future development within the City and surrounding unincorporated areas associated with the Project and related projects would be required to pay [fees in accordance with the ~~for~~ LACoFD Developer Fees program, and to the satisfaction of LACoFD and/or the City. ~~as deemed appropriate by the LACoFD, The fees which would~~ The fees](#) provide the tax revenues for the operation and staffing of local fire service facilities.
- 4-12 The comments provided by the Land Development Unit will be made Conditions of Approval on the Project’s Tentative Tract Map and/or site plans for each of the planning areas. The City acknowledges the Land Development Unit’s input and comment. The comments will be included as part of the record and made available to the decision makers prior to a final decision on the Project.

Patrick Leclair, Senior Planner
 March 30, 2017
 Page 4

4. Every building constructed shall be accessible to Fire Department apparatus by way of access roadways with an all-weather surface of not less than the prescribed width. The roadway shall be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.
5. When involved with subdivision in a city contracting fire protection with the County of Los Angeles Fire Department, Fire Department requirements for access, fire flows, and hydrants are addressed during the subdivision tentative map stage.
6. Fire Department requirements for access, fire flows, and hydrants are addressed during the building permit stage.
7. Fire sprinkler systems are required in some residential and most commercial occupancies. For those occupancies not requiring fire sprinkler systems it is strongly suggested that fire sprinkler systems be installed. This will reduce potential fire and life losses. Systems are now technically and economically feasible for residential use.
8. The development may require fire flows up to 8,000 gallons per minute at 20 pounds per square inch residual pressure for up to a four hour duration as outlined in the 2016 County of Los Angeles Fire Code Appendix B. Final fire flows will be based on the size of buildings, its relationship to other structures, property lines, and types of construction used.
9. Fire hydrant spacing shall be 300 feet and shall meet the following requirements:
 - a) No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.
 - b) No portion of a building shall exceed 400 feet via vehicular access from a properly spaced public fire hydrant.
 - c) Additional hydrants will be required if hydrant spacing exceeds specified distances.
 - d) When cul-de-sac depth exceeds 200 feet on a commercial street, hydrants shall be required at the corner and mid-block.

4-12
 (cont'd)

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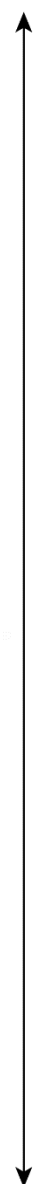
- e) A cul-de-sac shall not be more than 500 feet in-length when serving land zoned for commercial use.
10. Turning radii shall not be less than 32 feet. This measurement shall be determined at the centerline of the road. A Fire Department approved turning area shall be provided for all driveways exceeding 150 feet in-length and at the end of all cul-de-sacs.
 11. All on-site driveways/roadways shall provide a minimum unobstructed width of 28 feet clear-to-sky. The on-site driveway is to be within 150 feet of all portions of the exterior walls of the first story of any building. The centerline of the access driveway shall be located parallel to and within 30 feet of an exterior wall on one side of the proposed structure.
 12. Driveway width for non-residential developments shall be increased when any of the following conditions will exist:
 - a) Provide 34 feet in-width when parallel parking is allowed on one side of the access roadway/driveway. Preference is that such parking is not adjacent to the structure.
 - b) Provide 42 feet in-width when parallel parking is allowed on each side of the access roadway/driveway.
 - c) Any access way less than 34 feet in-width shall be labeled "Fire Lane" on the final recording map and final building plans.
 - d) For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating, "NO PARKING - FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use.
 13. Fire hydrant spacing shall be 300 feet and shall meet the following requirements:
 - a) No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.
 - b) No portion of a building shall exceed 400 feet via vehicular access from a properly spaced fire hydrant.

4-12
(cont'd)

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- c) When cul-de-sac depth exceeds 200 feet hydrants will be required at the corner and mid-block.
- d) Additional hydrants will be required if the hydrant spacing exceeds specified distances.
- 14. Turning radii shall not be less than 32 feet. This measurement shall be determined at the centerline of the road. A Fire Department approved turning area shall be provided for all driveways exceeding 150 feet in-length and at the end of all cul-de-sacs.
- 15. All on-site driveways shall provide a minimum unobstructed width of 28 feet clear-to-sky. The 28 foot width does not allow for parking and shall be designated as a "Fire Lane" and have appropriate signage. The centerline of the on-site driveway shall be located parallel to and within 30 feet of an exterior wall on one side of the proposed structure. The on-site driveway is to be within 150 feet of all portions of the exterior walls of the first story of any building.
- 16. The 28 feet in-width shall be increased to:
 - a) 34 feet in-width when parallel parking is allowed on one side of the access way.
 - b) 36 feet in-width when parallel parking is allowed on both sides of the access way.
 - c) Any access way less than 34 feet in-width shall be labeled "Fire Lane" on the final recording map and final building plans.
 - d) For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating, "NO PARKING - FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use.
- 17. When serving land zoned for residential uses having a density of more than four units per net acre:
 - a) A cul-de-sac shall be a minimum of 34 feet in-width and shall not be more than 700 feet in-length.

4-12
 (cont'd)



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- b) The length of the cul-de-sac may be increased to 1000 feet if a minimum of 36 feet in-width is provided.
 - c) A Fire Department approved turning area shall be provided at the end of a cul-de-sac.
18. Fire hydrant spacing shall be 600 feet and shall meet the following requirements:
- a) No portion of lot frontage shall be more than 450 feet via vehicular access from a public fire hydrant.
 - b) No portion of a structure should be placed on a lot where it exceeds 750 feet via vehicular access from a properly spaced public fire hydrant.
 - c) When cul-de-sac depth exceeds 450 feet on a residential street, hydrants shall be required at the corner and mid-block.
 - d) Additional hydrants will be required if hydrant spacing exceeds specified distances.
19. A Fire Department approved turning area shall be provided for all driveways exceeding 150 feet in-length and at the end of all cul-de-sacs.
20. Fire Department access shall provide a minimum unobstructed width of 28 feet clear-to-sky and be within 150 feet of all portions of the exterior walls of the first story of any single unit. If exceeding 150 feet provide 20 feet minimum paved width "Private Driveway/Fire Lane" clear-to-sky to within 150 feet of all portions of the exterior walls of the unit. Fire Lanes serving three or more units shall be increased to 26 feet.
21. Streets or driveways within the development shall be provided with the following:
- a) Provide 36 feet in-width on all streets where parking is allowed on both sides.
 - b) Provide 34 feet in-width on cul-de-sacs up to 700 feet in-length. This allows parking on both sides of the street.
 - c) Provide 36 feet in-width on cul-de-sacs from 701 to 1000 feet in-length. This allows parking on both sides of the street.

4-12
 (cont'd)

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- d) For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating "NO PARKING - FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use. Turning radii shall not be less than 32 feet. This measurement shall be determined at the centerline of the road.
22. All access devices and gates shall comply with California Code of Regulations, Title 19, Articles 3.05 and 3.16.
23. All access devices and gates shall meet the following requirements:
- a) Any single-gated opening used for ingress and egress shall be a minimum of 26 feet in-width clear-to-sky.
 - b) Any divided gate opening (when each gate is used for a single direction of travel i.e., ingress or egress) shall be a minimum width of 20 feet clear-to-sky.
 - c) Gates and/or control devices shall be positioned a minimum of 50 feet from a public right-of-way and shall be provided with a turnaround having a minimum of 32 feet of turning radius. If an intercom system is used the 50 feet shall be measured from the right-of-way to the intercom control device.
 - d) All limited access devices shall be of a type approved by the Fire Department.
 - e) Gate plans shall be submitted to the Fire Department prior to installation. These plans shall show all locations, widths, and details of the proposed gates.
24. All proposals for traffic calming measures (speed humps/bumps/cushions, traffic circles, roundabouts, etc.) shall be submitted to the Fire Department for review prior to implementation.
25. Disruptions to water service shall be coordinated with the County of Los Angeles Fire Department and alternate water sources shall be provided for fire protection during such disruptions.

4-12
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The County of Los Angeles Fire Department's Land Development Unit appreciates the opportunity to comment on this project.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

The statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed.

4-13

The loss of Oak tree habitat should be mitigated for pursuant to the provisions of the City's Oak Tree Ordinance.

4-14

This property is located in an area described by the Forester and Fire Warden as being in a Very High Fire Severity Zone. The development of this project must comply with all Fire Hazard severity zone code and ordinance requirements for fuel modification. Specific questions regarding fuel modification requirements should be directed to the Fuel Modification Office at (626) 969-2375.

4-15

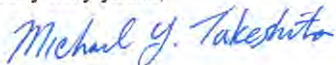
HEALTH HAZARDOUS MATERIALS DIVISION:

The Health Hazardous Materials Division of the Los Angeles County Fire Department has no comments or requirements for the project at this time.

4-16

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,




MICHAEL Y. TAKESHITA, ACTING CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

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- 4-13 The comment notes the statutory responsibilities of the Forestry Division. Erosion control impacts are addressed in DEIR Section 4.9, Hydrology and Water Quality. Rare and endangered species and vegetation impacts are addressed in DEIR Section 4.4, Biological Resources. Very High Fire Hazard Severity Zone impacts are addressed in DEIR Section 4.8, Hazards and Hazardous Materials. Archaeological and cultural resources impacts are addressed in DEIR Section 4.5, Cultural Resources. Oak tree impacts are addressed in Section 4.4, Biological Resources.
- 4-14 DEIR Section 4.4, Biological Resources reviews impacts to oak trees and the Project's compliance with the City's Oak Tree Ordinance. As concluded in DEIR Section 4.4, with implementation of Mitigation Measure BIO-8, impacts to oaks trees would be less than significant.
- 4-15 DEIR Section 4.8, Hazards and Hazardous Materials, reviews impacts relative to the Very High Fire Hazard Severity Zone, while DEIR Section 4.15, Fire Protection, reviews impacts relative to the provision of fire protection services to the Project site. As concluded in DEIR Section 4.8, with implementation of Mitigation Measures PS-4 through PS-6, impacts would be less than significant.
- 4-16 The comment notes that the Health Hazardous Division has no comments or requirements for the project. No further response is required.

Comment Letter 5
Department of Regional Planning, County of Los Angeles
April 5, 2017



Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead



April 5, 2017

Mr. Patrick LeClair
 City of Santa Clarita

[Via e-mail: pleclair@santa-clarita.com]

Dear Mr. LeClair:

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE SAND CANYON PLAZA MIXED-USE PROJECT

The Los Angeles County Department of Regional Planning (DRP) is interested in providing comments regarding the Sand Canyon Plaza Mixed Use Project. The project is located within the City of Santa Clarita, however, it borders unincorporated Los Angeles County and is not far from a small housing tract off of Sand Canyon Road which is unincorporated.

Please find below comments from the DRP regarding the Draft Environmental Impact Report (DEIR).

Land Use

- Properties in the unincorporated areas adjacent to and within ½ mile of the proposed project are designated as follows:

LOS ANGELES COUNTY	
DESIGNATION	DESCRIPTION
H5	Residential 5 (Maximum 5 dwelling units per acre)
RL5	Rural Land 5 (Maximum 1 dwelling unit per 5 acres)
OS-C	Open Space-Conservation

- With the exception of the OS-C, these lands would provide for residential development at densities ranging from one unit per five acres to five units per acre.
- OS-C identifies open space lands preserved as open space or used for passive recreation.
- The concept of the Valley of Villages in the Santa Clarita Valley Area Plan (One Valley One Vision or OVOV) was cited in the DEIR and is applicable and the project is consistent with the OVOV Plan's goals and policies.
- The site is bordered immediately to the north by much less intense rural land use of RL5; sensitivity to that interface with the rural lands area in the unincorporated

5-1

5-2

5-3

5-4

5-5

320 West Temple Street • Los Angeles, CA 90012 • 213-974-6411 • Fax: 213-626-0434 • TDD: 213-617-2292

Response to Comment Letter 5
Department of Regional Planning
April 5, 2017

- 5-1 The comment notes that the County of Los Angeles Department of Regional Planning is providing comments on the Project, which is located within the City of Santa Clarita and borders property within unincorporated Los Angeles County. The comment goes on to note that the Project site is in close proximity to a small housing tract in unincorporated Los Angeles County. The housing tract is the Canyon Collection gated community. The comments are introductory and informational. No further response is required.
- 5-2 The comment provides the Los Angeles County General Plan 2035 land use designations for properties within the unincorporated areas adjacent to and within one-half mile of the Project site. The text below also provides the corresponding zoning designation.
- These General Plan land use/zoning designations include:
- H5 (Residential 5 – maximum 5 dwelling units per acre)/R-1 (minimum 5,000 square foot lot)
 - RL5 (Rural Land 5 – maximum 1 dwelling unit per 5 acres)/A-2-2 (Heavy Agricultural)
 - OS-C (Open Space Conservation)/O-S (Open Space)
- No further response is required.
- 5-3 The comment provides statements as to what uses and/or residential densities the H5, RL5, and OS-C designations permit. No further response is required.
- 5-4 The comment notes that the Project is consistent with the One Valley One Vision Plan’s goals and policies. No further response is required.

- 5-5 The comment notes that the Project site is bordered by RL5 zoning to the north, and the Project should consider the urban-rural interface and the inclusion of additional landscaping and buffering techniques along the northern boundary of the Project site.

County of Los Angeles and City of Santa Clarita General Plans

The Santa Clarita City Council and the Los Angeles County Board of Supervisors initiated a joint planning effort, called One Valley One Vision, in recognition of a mutual need to coordinate land uses and the pace of development with provision of adequate infrastructure, conservation of natural resources, and common objectives for the Valley. The One Valley One Vision planning process reflects the City's and the County's mutual decision to coordinate land uses and the pace of development with provision of adequate infrastructure, conservation of natural resources, and common objectives for the Santa Clarita Valley. Major goals of the One Valley One Vision joint planning effort were to achieve greater cooperation between the County and the City, coordinated planning for roadways, infrastructure, and resource management, and enhanced quality of life for all who live and work in the Santa Clarita Valley.

The One Valley One Vision public outreach efforts resulted in the development of a Vision and Guiding Principles that are the framework of consistent General Plans for the Santa Clarita Valley by the City of Santa Clarita and the County of Los Angeles. The Guiding Principles were incorporated into various elements of the General Plans as part of the policies. In addition, City and County staff compiled growth statistics and projections for the Santa Clarita Valley and collaborated when preparing the Land Use Map and land use designation for the 2012 Area Plan and 2011 General Plan. Implementation of the common One Valley One Vision goals and policies will be managed by the County of Los Angeles through the 2012 Santa Clarita Valley Area Plan for unincorporated portions of the Santa Clarita Valley and by the City of Santa Clarita through the 2011 General Plan.

2012 Area Plan Land Use Designations Adjacent to Project Site

The existing land use designations in the immediate vicinity of the Project site include RL5, H5, H2, and OS-C. The RL5, H5, and H2 designations provide a transition between higher density, urban development in the City of Santa Clarita.

2012 Area Plan Land Use Designation	Land Use Description
RL5	Rural Land 5 (Maximum 1 dwelling per 5 acres)
H5	Residential 5 (Maximum 5 dwelling units per acre)
H2	Residential 2 (Maximum 2 dwelling units per acre)
OS-C	Open Space Conservation

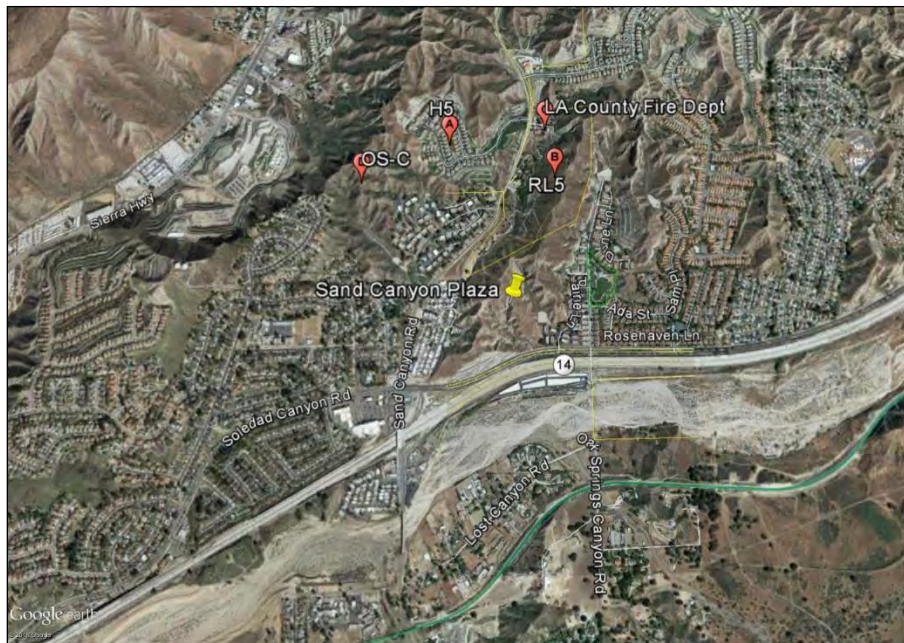
Existing On-Site and Surrounding Land Uses

It is important to provide a context of the character of the Project site and surrounding uses. At stated Draft EIR (DEIR) page 4.10-1 "Residential uses are located to the north,

east, and west, including Stetson Ranch and the Pinetree residential community. Commercial uses are located to the south and west along Sand Canyon Road.”

Additional language on DEIR page 4.10-12 further explains the existing character of the site and surrounding uses, “A portion of the Project site is currently developed with mobile home units. Remaining portions of the site are undeveloped. Surrounding uses include single-family residential to the west and north; single-family and multi-family residential to the east; and commercial uses to the south and west along Sand Canyon Road, north of SR 14.”

This is further exemplified with the following aerial photograph, which illustrates that urban uses surround the project site in all directions.



The four parcels north of the Project site are zoned RL5 (Assessor Parcel Number [APN] 2839-005-021, -025, -026, -027). The northernmost parcel (APN 2839-005-025, approximately 7.57 acres) is occupied by Los Angeles County Fire Station No. 132, which is north of Thompson Road. The parcel immediately to the north (approximately 3.75 acres) is a Los Angeles County Flood Control easement (APN 2839-005-021). The two intermediate parcels (APN 2839-005-027, approximately 9.15 acres; APN 2839-005-026, approximately 3.64 acres) are under private ownership. The Canyon Collection gated residential community, zoned RL5, is located west of these four parcels in unincorporated Los Angeles County, as is the open space zoned O-S that surrounds this residential community. The Canyon Collection gated community includes 75 single-family detached homes that were constructed in 2005.

Given that the four parcels north of the Project site include single-family residences and the Los Angeles County Fire Station, and parcels to the northwest include the Canyon Collection gated residential community, an urban-rural interface is not necessary. The Project site is located within an urban area.

It is worth noting that there is a proposed development for the two parcels immediately north of the Project site to develop a single-family residential detached condominium subdivision with 41 units on APNs 2839-005-021 and 2839-005-027. The Los Angeles County Case Project Number is 03-251, and includes the following requested entitlements:

- Vesting Tentative Tract Map No. 54372 (pending)
- Zone Change No. ZC03-251 (Zone change from A-2-2 to RPD-5,000-3.9U)
- Conditional Use Permit No. CP03-251 (Hillside management area, grading exceeding 100,000 cubic yards)
- Environmental Assessment No. IS03-251

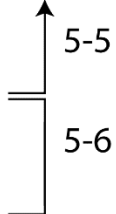
A Los Angeles County Subdivision Committee Meeting report was prepared on December 29, 2016 with a status report to reschedule with the Subdivision Committee pending the requests outlined in the report.

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Mr. Patrick LeClair
 April 5, 2017
 Page 2

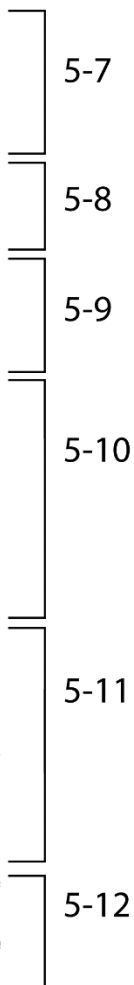
area bordering the proposed development site in its design of the Project Area 3 (multi-family homes) and the Project Area 5 (single family homes) would minimize the impacts to the unincorporated communities adjacent to and near the project.

- Additional landscaping and other buffering techniques are suggested for the northern perimeter of the project area with the final project implementation to ease the transition from a compact urban development to the unincorporated rural land that borders the northern edge of the project site.



Aesthetics

- Offsite aesthetic and other impacts would be lessened in the transition area between the urbanized development project site and the rural unincorporated area to the north with the adoption of Alternative 3: Ridgeline Preservation, which would preserve 1,200 lineal feet of a significant ridgeline and increase internal open space and landscaped areas with only 29 fewer residential units.
- The mitigation measures currently proposed are inadequate in reducing impacts to less than significant as conceptual grading has already been designed to remove ridgeline within property.
- Please review the Los Angeles County Hillside Management Ordinance and consider if these standards can be implemented in the project. Figure 4.1-8 is misleading in averaging slopes within the three areas – it makes it unclear how much development is occurring on over 50% slopes.
- The analysis on pages 4.1-31 relies on the number of homes and the averaging of slope areas as a way to explain that the impacts are less than significant. However, there is no analysis which includes how much development is actually occurring in the steeper areas. Development, which includes the grading footprint, is a more meaningful way of determining the scope of the project and its impact on hillsides. The use of averaging slopes also does not clearly provide information as to how steep these natural slopes are, and how the development is designed with respect to these slopes.
- It is not made clear in the DEIR analysis how the removal of a significant ridgeline is not considered a significant impact when the slope alterations are to this scale. The natural topographic and prominent features are not retained to the extent possible, as stated on page 4.1-27. Clustering 75% of the residential units and commercial land uses mostly in areas of less than 25% slope does not adequately address or lessen the environmental impact to less than significant when considering the entire footprint of the project in the areas of the site which have more than 25% slopes and also contain 50% slopes and a significant ridgeline.
- It is unclear from the information provided in the DEIR why alteration of short-range views, in some cases quite dramatically (such as Viewing Locations 1 through 5), are not considered a significant impact. For some of these Viewing Locations, the short-range view is the only view visible.



- 5-6 Please see Response to Comment 5-5 (page [128](#) above).
- 5-7 The comment states that the Department of Regional Planning’s opinion that the Alternative 3: Ridgeline Preservation lessens aesthetics and other impacts in the urban-rural interface and that Alternative 3 should be adopted for the Project. As noted in Response to Comment 5-5 (page [128](#) above), an urban-rural interface is not needed. Also, the Draft EIR concluded that Alternative 3 is considered to be the “Environmentally Superior Alternative” for purposes of CEQA. The City acknowledges the Department of Regional Planning’s input and comment. It should be noted that one of the Project modifications required by the Planning Commission eliminated grading on the northern portion of the ridgeline. This modification is very similar to DEIR Alternative 3. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.
- 5-8 The Project site includes a Significant Ridgeline identified by the City of Santa Clarita General Plan. As noted on DEIR page 4.1-32, the Project site has been previously disturbed for the development of the existing mobile home park and adjacent roadways, including impacts to the existing ridgeline and hillsides on the site.

The Project as proposed includes the alteration of the ridgeline, and as such, is subject to a Ridgeline Alteration Permit. In addition, the Applicant is requesting approval of a Hillside Development Review Permit to allow development on slopes over 10%. DEIR Section 4.1, Aesthetics, provides a detailed justification of how the Project complies with Hillside Ordinance and Ridgeline Preservation Overlay Zone requirements, which included but are not limited to grading, buffers, setbacks, landscaping, and onsite placement of structures. As detailed on DEIR pages 4.1-23 through 4.1-33, the Project is consistent Hillside Development Ordinance. Also, as stated in the Ridgeline Preservation findings, the Project would be consistent with the overlay zone requirements with the approval of a ridgeline alteration permit.

Mitigation Measures MM Aes-1 through MM Aes-3 ensure that previously disturbed portions of the ridgelines are blended into the neighboring topography and replanted. These mitigation measures supplement the Project’s requirements and compliance with the Hillside Ordinance and Ridgeline Preservation Overlay Zone, and reduce potentially significant impacts to less than significant.

The City acknowledges the Department of Regional Planning’s comment regarding the Project’s proposal to alter the on-site ridgeline. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.

- 5-9 The Project site is located within the City of Santa Clarita, and thus, hillside development is regulated through the Santa Clarita Unified Development Code Chapter 17.51, not the Los Angeles County Hillside Management Ordinance. Unified Development Code Section 17.51.020.C identifies the City’s standards for hillside review and average slopes, and is restated below for your reference.

- C. Development Standards for Hillside Development Review. The development standards shall apply to any use, development or alteration of land included in these regulations.
1. Hillside Classifications. Hillside categories have been identified by percentage of average slope in the following categories:
 - a. Average slopes under ten percent (10%) are considered relatively flat and would not cause any conditions necessary for the implementation of this section.
 - b. Projects with slopes which average ten percent (10%) or greater qualify for hillside plan review and shall be reviewed under the provisions of this section.

Within the DEIR, the Project has been reviewed for its consistency with the City of Santa Clarita's Hillside Development Ordinance. Thus, the Project is not subject to Los Angeles County Hillside Management Ordinance, nor is it necessary to review the Project for its consistency with County Hillside Management Ordinance as the Los Angeles County Department of Regional Planning is not the Lead Agency, nor it is responsible or trustee agency under CEQA.

- 5-10 The analysis on page 4.1-31 is consistent with the requirements of the Ridgeline Preservation Overlay Zone. Also, please see Response to Comment 5-11 below.
- 5-11 The Project is altering a significant ridgeline in the City of Santa Clarita. The ridgeline alteration is subject to requirements in the City of Santa Clarita's Ridgeline Preservation Overlay Zone, as well as approval of a Ridgeline Alteration Permit. The Project does propose 2.2 million cubic yards of cut and fill on-site to create the five planning areas and open space, along with 850,000 cubic yards associated with remedial grading. DEIR Section 4.1 provides analysis showing the Project's consistency with the Hillside Development Ordinance (DEIR pages 4.1-23 through 4.1-28) and the Ridgeline Preservation Overlay Zone (DEIR pages 4.1-28 through 4.1-32).

The analysis within the DEIR provides a review of each of the requirements listed above, and concludes the Project is consistent with and complies with both the Hillside Development Ordinance and Ridgeline Preservation Overlay Zone. Mitigation Measures MM Aes-1 through MM Aes-3 provided additional assurances relative to on-site grading and continued compliance with Hillside Development Ordinance and Ridgeline Preservation Overlay Zone requirements, and do reduce potentially significant aesthetics impacts to less than significant.

- 5-12 From both a land use and visual context, it is important to understand surrounding uses. As stated on DEIR page 4.10-12, "A portion of the Project site is currently developed with mobile home units. Remaining portions of the site are undeveloped. Surrounding uses include single-family residential to the west and north; single-family and multi-family residential to the east; and commercial uses to the south and west along Sand Canyon Road, north of SR 14."

It is also important to understand a site's zoning. As stated on DEIR, page 4.10-17:

The Project site is currently zoned MXN (Mixed Use Neighborhood) and UR-3 (Urban Residential 3). No residential or commercial land uses are proposed in the UR-3 zone. The MXN zone is intended for mixed-use development, which is encouraged to create neighborhoods that integrate residential uses with complementary commercial services, including retail and office uses. Mixed-use neighborhoods should be designed in consideration of surrounding development patterns, proximity to public transit, providing roadway and trail linkages to adjacent development where appropriate."

The Project is consistent with the MXN (Mixed Use Neighborhood) zoning designations, and proposes 2-story/35-foot single-family detached and multi-family detached townhomes, 3-story/50-foot maximum multi-family detached apartments. The heights for the proposed residential uses are at or below the maximum 50 feet. The proposed commercial uses would not exceed 35 feet, which is below the maximum 50 feet.

The analysis on DEIR pages 4.1-15 through 4.1-23 focuses on Project impacts of scenic vistas. The text below is restated from DEIR pages 4.1-15 and 4.1-16.

- **Viewing Location 1**, which is within the Sierra Hills community west of the Project site, would be altered. Middle-ground views would include the multi-family apartment buildings in Planning Area 2, single-family detached homes in Planning Areas 4 and 5, and open space areas in Planning Area 5. Background views of the mountains would remain. Refer to **Figure 4.1-2, Viewing Location 1, Existing and Proposed Views**.
- **Viewing Location 2**, which is from the service station on the southwest corner of the Sand Canyon Road and Soledad Canyon Road, would be altered. Middle-ground views would include the commercial uses in Planning Area 1 and the multi-family apartment buildings in Planning Area 2. The background view would only be of the commercial uses in Planning Area 1, as the manufactured slope along Soledad Canyon Road would be regraded and laid back. Refer to **Figure 4.1-3, Viewing Location 2, Existing and Proposed Views**.
- **Viewing Location 3**, which is from vacant land immediately west of the SR-14 Sand Canyon Road westbound off-ramp, would be altered. The foreground and middle-ground view from Soledad Canyon Road would include the commercial uses and assisted living facility in Planning Area 1 and single-family detached homes in Planning Area 5. Refer to **Figure 4.1-4, Viewing Location 3, Existing and Proposed Views**.
- **Viewing Location 4**, which is from the Santa Clara River and Oak Springs, just north of Lost Canyon Road and south of SR-14, would be altered. The foreground view of the Santa Clara River would not be altered. The middle-ground view would be altered to show the single-family residential homes and open space area in Planning Area 5, the multi-family apartment buildings in Planning Area 2, and the commercial uses and assisted living facility in Planning Area 1. The existing manufactured slope along Soledad Canyon Road would be regraded and laid back to allow for

landscaping. The background view consists of residential development west of the Project site and other prominent ridgelines in the City would remain. Refer to **Figure 4.1-5, Viewing Location 4, Existing and Proposed Views.**

- **Viewing Location 5** is from westbound SR-14, slightly west of the Oak Springs Canyon Road overpass. The foreground view of the highway and the sound wall would not be altered. The middle-ground view would be altered to show the commercial uses and assisted living facility in Planning Area 1 and the multi-family apartment buildings in Planning Area 2. The background view consists of the Santa Susana Mountains west of the City would remain. Refer to **Figure 4.1-6, Viewing Location 5, Existing and Proposed Views.**
- **Viewing Location 6**, which is from Oak Spring Canyon Park east of the Project site, would be partially altered. The foreground view consists of the park and homes along the west side of Oak Canyon Springs Road would not be altered. The background view of the ridgeline would be partially altered to show open space areas and single-family detached homes in Planning Area 5. However, there are no scenic vistas in the foreground view.

The DEIR acknowledges that there is a change in the short-range view from current conditions, and describes what off-site uses would see from the six viewing locations. While the Project would redevelop the site with a mix of single-family, multi-family, and commercial uses, these uses are consistent with the underlying zoning and are compatible with surrounding residential and commercial uses.

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Mr. Patrick LeClair
 April 5, 2017
 Page 3

- The information provided in the DEIR is inadequate as to how the project meets the intent of polices addressing ridgelines and hillside resources in the Santa Clarita General Plan without causing significant environmental impacts. Those relevant polices include:
 - Policy LU 1.3.2: Substantially retaining the integrity and natural grade elevations of significant ridgelines and prominent landforms;
 - Policy LU 1.3.3: Discourage development on ridgelines and on 50% slopes so that they remain natural; open space, and;
 - Policy LU 6.1.3: Ensuring new development protects the scenic backdrop of foothills through compatible hillside management techniques.
- The information provided is inadequate to support a less than significant determination of impacts to ridgelines and sensitive hillside resources and is also not clear how the project meets the intent of the City of Santa Clarita Unified Code Ridgeline Preservation Overlay Zone in Section 17.38.070 without incurring significant environmental impacts.
- The information provided is also inadequate to support a less than significant determination of impacts to hillside management areas or how the project meets the intent of the Hillside Development in Section 17.51 without significant environmental impacts to hillside resources.
- We recommend for your City's consideration a smaller project footprint and the inclusion of more sensitively designed project elements, such as leaving more open space on the slopes above 25% and preserving the significant ridgeline which would require less grading and have less aesthetic and other environmental impacts to the hillsides and significant ridgelines and surrounding areas.
- We also recommend for your City's consideration incorporating some of the hillside design and development standards in the County Hillside Management Ordinance in County Code Section 22.56.217 which address site planning, grading, open space and other sensitive hillside design techniques.
- Mitigation Measures MM Aes-1, MM Aes-2, and MM Aes-3 are inadequate to reduce impacts to less than significant due to the removal of the significant ridgeline on the project site with the conceptual grading plan of 2.2 million cubic yards and additional remedial grading of 850,000 cubic yards of total cut and fill.

Circulation

The following are roadways as designated on the Master Plan of Highways, and intended to provide for regional circulation in the project area:

- Soledad Canyon Road: Major Highway – Existing
- Sand Canyon Road – Proposed Limited Secondary Highway
- The Antelope Valley (14): Freeway – Existing

- 5-13 Table 4.10-1, General Plan Consistency Analysis, in DEIR Section 4.10, provides an analysis of the Project’s consistency with the relevant General Plan Land Use Element policies, inclusive of Policies LU 1.3.2, LU 1.3.3, and 6.1.3 identified in the comment. The consistency analysis for the three policies has been excerpted from Table 4.10-1 and provided below.

Policy LU 1.3.2: Substantially retain the integrity and natural grade elevations of significant natural ridgelines and prominent landforms that form the Valley’s skyline backdrop.	Consistent. The Project’s design substantially retains the integrity and natural grade elevations of the site’s significant natural ridgelines to the extent feasible. Development of the Project site would not impact prominent landforms in the Valley’s skyline backdrop.
Policy LU 1.3.3: Discourage development on ridgelines and lands containing 50% slopes so that these areas are maintained as natural open space.	Consistent. Project development is focused on areas of the site with slopes less than 50%. The Project would impact a small portion of the site containing a manufactured slope previously graded as part of the Soledad Canyon Road widening. This area has an average slope of 73%. As indicated above, the Project would “lay back” this existing slope to soften its appearance to Soledad Canyon Road and SR-14.
Policy LU 6.1.3: Ensure that new development in hillside areas is designed to protect the scenic backdrop of foothills and canyons enjoyed by Santa Clarita Valley communities, through requiring compatible hillside management techniques that may include but are not limited to clustering of development; contouring and landform grading; revegetation with native plants; limited site disturbance; avoidance of tall retaining and build-up walls; use of stepped pads; and other techniques as deemed appropriate.	Consistent. As concluded in Section 4.1, Aesthetics, the Project has been designed to preserve long-range views of scenic resources. In addition, the Project is seeking a Hillside Development Review Permit, which would address hillside management techniques.

The analysis in Table 4.10-1 concludes the Project is consistent with the policies.

- 5-14 Please see Response to Comment 5-11 (page [134](#) above).
- 5-15 Please see Response to Comment 5-11 (page [134](#) above).
- 5-16 The comment suggests the City consider a smaller project footprint, leaving more land as open space on areas with slopes greater than 25%, and not altering the ridgeline. It should be noted that one of the Project modifications made by the Planning Commission included the elimination of grading on the northern portion of this ridgeline, similar to DEIR Alternative 3 in the DEIR. However, the City acknowledges the Department of Regional Planning’s input and comment. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.
- Also, please see Response to Comment 5-7 (page [133](#) above).
- 5-17 Please see Response to Comment 5-9 (page [133](#) above).
- 5-18 Please see Response to Comment 5-11 (page [134](#) above).
- 5-19 The comment identifies three roadways designated on the Master Plan of Highways. No further response is required.

Mr. Patrick LeClair
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 Page 4

Comments:

- There are supportive provisions for bikeways and pedestrian walkways in the project’s design. 5-20
- Local commercial establishments in the development, such as grocery stores, pharmacies and banks, which are frequently used by residents, should be enhanced to include such amenities as ample bicycle parking. 5-21
- Provisions could be made in the project’s design for the operation and charging of electric neighborhood vehicles for the further reduction of project-generated automobile trips, lessening the air quality and greenhouse gas emissions impacts and the impacts of transportation/traffic on the local roadways. 5-22

Biological Resources

Summary of Impacts and Mitigation Measures (p 2-10): Under Biological Resources, the first row cites the Ventura County General Plan Final EIR. This plan is not germane to the project at hand and this is presumed to be a typo. Ensure the proper documents were referenced and the land-use designation for the project site is as stated. 5-23

Use of CNDDDB Data (p 2-10): Statements provided in the Summary of Impacts and Mitigation Measures suggest a misunderstanding of the proper use of CNDDDB. CNDDDB should not be used as a proxy for real on-the-ground surveys. The database is not a complete survey of California and is not suitable as a source for conclusive information regarding presence/absence information on particular parcels; it only provides data on observations where surveys have already been conducted and the information has been voluntarily submitted. The summary seems to rely on the fact that no CNDDDB records exist for species on the parcel to assert that no impacts to sensitive species will occur from project implementation. Los Angeles County recommends revision of these passages. 5-24

Wildlife Movement (p 2-10): The significance threshold referred to here (wildlife movement and nursery sites) pertains to all wildlife, not just sensitive species. Hence all species should be considered. 5-25

Slender Mariposa Lily: Identify the species of mariposa lily referenced on page 4.4-6. Many species in the project region are sensitive, including one that has been determined to be potentially present on this site (*Calochortus clavatus* var. *gracilis*). Fruits of many *Calochortus* spp. are distinctive so dried individuals may have been identifiable if fruit capsules were still attached to the plant. Nevertheless, the 2017 bloom is robust and *C. clavatus* var. *gracilis* should be easily identifiable if present. It would be an easy matter to settle the presence or absence of *C. clavatus* var. *gracilis* prior to the certification of the project DEIR with a spring 2017 survey. 5-26

Wildlife Movement (p 4.4-13): A statement is made that local barriers to wildlife movement are particularly insurmountable to large species such as deer, mountain lion, etc.; however, these species would be the most capable of local wildlife to cross the barriers surrounding the site and access would be particularly difficult for smaller species. 5-27

- 5-20 The comment notes that the Project provides for bikeways and pedestrian walkways. The comment does not raise an environmental issue; therefore, no further response is required.
- 5-21 The City appreciates the comment for the Project to “include such amenities as ample bicycle parking.” As site plans for each of individual planning areas submitted to the City for review, the plans will be required to comply with and provide on-site bicycle parking spaces per Santa Clarita Unified Development Code Section 17.51.060.I.
- 5-22 The City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions, and as such has identified goals, objectives and policies in the General Plan Conservation and Open Space Element. The Project’s consistency with applicable goals are discussed on DEIR page 4.3-33, Table 4.3-9, Project Consistency with Applicable Air Quality Policies of the General Plan. Excerpts from Table 4.3-9 are provided below.

Policy CO 7.1.1: Through the mixed land use patterns and multi-modal circulation policies set forth in the Land Use and Circulation Elements, limit air pollution from transportation sources.	Consistent. The Project’s mixed -use nature and urban location would serve to reduce trips by approximately 9% compared to a project without those features. This reduction in trips would serve to reduce vehicles mile traveled (VMT), congestion and associated air quality emissions.
Policy CO 7.1.2: Support the use of alternative fuel vehicles.	Consistent. The Project would provide on-site electric vehicle (EV) charging stations, supporting and promoting the use of electric vehicles.

In addition, DEIR pages 4.7-27 and 4.7-28 discuss the Project’s primary GHG reduction measures and design features, which include, but are not limited to: Land Use Transportation, Pedestrian Network Improvements, Low-Flow Water Fixtures, Vegetation and Landscape Irrigation Systems, Energy Reduction, and Alternative Fuel Vehicles.

Thus, the Project would both reduce vehicle miles traveled and associated air quality and greenhouse gas emissions, as well as provide on-site electric vehicle charging stations.

- 5-23 The DEIR has been corrected.
- 5-24 The DEIR has been clarified to indicate that the CNDDDB was used to understand the *potential occurrence* of special status species. The report discusses the findings of the field surveys, independent of the results of the literature search. The DEIR continues by discussing each special status species and analyzing its occurrence potential on the subject property, based on existing conditions and known habitat requirements for each species. By definition, the literature search is a desktop predictive tool, the findings of which are verified during on-site field surveys. The findings reported in the DEIR result from the field investigations – not from the literature search.
- 5-25 The language used in the Summary Section 2.0 reflects the Thresholds of Significance defined in Appendix G of the CEQA Statutes and Guidelines. The DEIR has been revised to clarify that all wildlife were considered in the discussion of regional and local wildlife movement.
- 5-26 Seed pods were present during the field surveys, which allowed the lilies to be identified as a species of the genus *Calochortus*. However, flowers are necessary to identify these lilies to the level of species and variety.
- 5-27 The DEIR has been revised to reflect this comment.

Mr. Patrick LeClair
April 5, 2017
Page 5

Wildlife Movement/Nursery Sites (p 4.4-32): In discussion of impact Bio-4, note the potential for impacts to bat roosts (i.e., nursery sites) through implementation of the proposed project.

5-28

If you have any questions regarding these comments, please contact me at (213) 974-6461, or by email at phachiya@planning.lacounty.gov.

5-29

Sincerely,



Patricia L. Hachiya, AICP
Supervising Regional Planner
Environmental Planning and Sustainability Section
Advance Planning Division

PLH:plh:ems

- 5-28 DEIR Section 4.4, Biological Resources, discusses potential impacts to bats and includes Mitigation Measure MM Bio-4, which addresses the potential impacts to bats. The Draft EIR concludes that impacts would be less than significant. Also, at the request of the California Department of Fish and Wildlife, bat surveys are being conducted om spring/summer 2017.
- 5-29 The comment provides contact information for staff at County of Los Angeles Department of Regional Planning Department. No further response is required.

Comment Letter 6
County of Los Angeles Public Health
April 13, 2017



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April 13, 2017

Mr. Patrick Leclair, Associate Planner
City of Santa Clarita
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355

**SUBJECT: Review of Draft Environmental Impact Report (DEIR)-San Canyon Plaza
Mixed Use Project**

Dear Mr. LeClair,

The Los Angeles County Department of Public Health (DPH) Bureau of Toxicology and Environmental Assessment is submitting this comment letter on the San Canyon Plaza Project DEIR. DPH has reviewed the DEIR for potential health impacts from this proposed development. Our review revealed the following:

6-1

1. Air Quality

- Grading and disturbance of the ground surface (up to 6 inches deep) can result in fugitive dust emissions, which can release fungal spores that can cause Valley Fever

6-2

Branch of Toxicology & Environmental Assessment • Cyrus Rangan, M.D., F.A.A.P., F.A.C.M.T., Director
695 South Vermont Avenue South Tower-14th Floor Los Angeles, CA 90005 TEL (213) 738-3220 • FAX (213) 252-4503

Response to Comment Letter 6
County of Los Angeles Public Health
April 13, 2017

- 6-1 This comment is an introduction to comments that follow. No further response is required.
- 6-2 The comment states that the EIR should discuss and disclose Valley Fever and potential effects. The comment appears to misstate the Project location by noting that the Antelope Valley and many parts of California are “known geographical areas where the fungus is ubiquitous.” The Project Site is located in an urbanized area of the City of Santa Clarita. While some areas of the Project site have not been previously developed, the site has historically been occupied by mobile homes on the southwest portion of the site. The site is also bordered by developed land to the west, south, and east, and the Project is considered infill development. The Los Angeles County General Plan Update Draft EIR provides the following summary of Valley Fever and standard control measures to address the issue:

Valley Fever is an infectious disease caused by the fungus *Coccidioides immitis* and *Coccidioides psadasii*. According to the County Department of Public Health (2014), this fungus is a major cause of community-acquired pneumonia in the southwestern United States. Valley Fever fungus is most prevalent in the San Joaquin Valley and the Central Valley where land is arid to semi-arid and receives moderate rainfall (5 to 20 inches per year). Several factors indicate a project’s potential to expose sensitive receptors to Valley Fever: disturbance of the top soil of undeveloped land, dust storms, strong winds, earthquakes, archaeological digs, agricultural activities, and construction activities. There is the potential that construction activities could result in exposure of sensitive receptors to Valley Fever in the arid, desert portions of the unincorporated areas. Individual projects developed under the Proposed Project would be required to reduce potential risk of exposing sensitive receptors to Valley Fever through implementation of AVAPCD¹ and SCAQMD fugitive dust control measures. SCAQMD and AVAQMD² dust control rules would reduce fugitive dust emissions as well as exposure to on-site workers. Proposed General Plan Update policies, including Policy AQ 1.3, would further reduce the impacts from fugitive dust during construction, as described further below. Implementation of SCAQMD and AVAQMD measures and Proposed Project policies would limit exposure of sensitive receptors to Valley Fever.

Policy AQ 1.3: Reduce particulate inorganic and biological emissions from construction, grading, excavation, and demolition to the maximum extent feasible.

1 Antelope Valley Air Pollution Control District
2 Antelope Valley Air Quality Management District

**San Canyon Plaza
Page 2 of 3**

(Coccidioidomycosis). The Antelope Valley or many parts of California for that matter are known geographical areas where the fungus is ubiquitous. Although the DEIR includes mitigation measures to control fugitive dust during construction, there should be a discussion or disclosure to include Valley Fever and how proposed dust mitigation would affect the public’s and construction worker’s exposure to these fungal spores. The DEIR should include a disclosure to prospective tenants on information on Valley Fever and associated health risks. In addition, the DEIR should include measures that would minimize fugitive dust intrusion into sensitive receptors. Weather-proofing of buildings, applying appropriate vegetation in vacant parcels, are some dust control measures that can be applied, if feasible.

6-2
cont'd

- Near roadway (freeway and major vehicular arteries) air pollution is a growing concern especially to children. Given the association between traffic pollution and health, the California Air Resources Board (ARB) recommends that freeways be sited at least 500 feet from residences and other sensitive development. Public Health strongly recommends a buffer of at least 500 ft. between the development of new schools, residences, other sensitive land uses and freeways. In addition, the construction of new schools, housing or other sensitive land uses built within 1,500 ft. of a freeway should adhere to best-practice mitigation measures to reduce exposure to air pollution (please refer to the attached document “Public Health’s Air Quality Recommendations for Local Jurisdictions.”)

6-3

The DEIR, based on the findings in the HRA, recommends project design features (Land-Use: PDF7-11) to minimize the effects of exposure to elevated ambient air quality conditions for sensitive uses. The implementation of the design features should be applied or extended for sensitive land uses within 1,500 ft. of the freeway (refer to Public Health’s document).

6-4

PDF-7 recommends incorporating HVAC systems with air filters meeting or exceeding MERV-11. We suggest incorporating air filtration meeting or exceeding MERV-13. This is based in part on ASHRAE’s Guideline 24-2015, Ventilation and Indoor Air Quality in Low-rise residential Buildings. The air filtration recommended would help to better remove and minimize ultra-fine particles.

6-5

- Regional air quality impacts as well as cumulative air quality impacts would be considered significant and unavoidable. No feasible mitigation measures were proposed. Are there any traffic management plans or other measures that are implemented by other localities that can be included to help to minimize the air quality impacts to surrounding communities?

6-6

2. Noise

- To minimize the construction and operational noise impacts associated with the project, we recommend that the mitigation measures listed in the DEIR (MM-N1-13) be

6-7

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Response to Comment 6-2 (continued)

The Project's Draft EIR concluded that regional and localized air quality emissions would be less than significant, including impacts with respect to fugitive dust emissions. In addition, the Draft EIR included the following project design feature to ensure that all required and recommended dust control measures are implemented:

- PDF-12 The Applicant shall implement all control measures required and/or recommended by the SCAQMD (i.e., Rules 403, 1108, and 1113), including but not limited to the following:
- Use watering to control dust generation during demolition of structures or break-up of pavement;
 - Water active grading areas and unpaved surfaces at least three times daily;
 - Cover stockpiles with tarps or apply non-toxic chemical soil binders;
 - Limit vehicle speed on unpaved roads to 15 miles per hour;
 - Sweep daily (with water sweepers) all paved construction parking areas and staging areas;
 - Provide daily clean-up of mud and dirt carried onto paved streets from the Project site;
 - Suspend excavation and grading activity when winds (instantaneous gusts exceed 15 miles per hour over a 30-minute period or more; and
 - An information sign shall be posted at the entrance to the construction site that identifies the permitted construction hours and provides a telephone number to call and receive information about the construction project or to report complaints regarding excessive fugitive dust generation. Any reasonable complaints shall be rectified within 24 hours of their receipt.

See also Response to Comment 7-8 (page [157](#) below) regarding further information demonstrating compliance with required fugitive dust control measures outlined in SCAQMD Rule 403(e) – Additional Requirements for Large Operations. No further response is required.

- 6-3 This comment restates information contained in the Draft EIR (see DEIR pages 3-25, 4.3-1, 4.3-2, 4.3-12, 4.10-17, 4.10-20, and 4.10-21) regarding placement of sensitive receptors near freeways, including a recommended buffer distance of 500 feet from freeways. The comment also suggests the application of best-practice mitigation measures to reduce exposure for all land uses within 1,500 feet of the freeway, with a reference to a County of Los Angeles document that was not attached to the comment letter. This comment does not specify any feasible best-practice mitigation measures for the Project.

It should be noted that California Supreme Court case law³ has determined that agencies subject to the California Environmental Quality Act (CEQA) generally are not required to analyze or mitigate the impact of existing environmental conditions on a project's future users or residents.

3 *Supreme Court of California, California Building Industry Association v. Bay Area Air Quality Management District* (2015), S213478, Ct.App. 1/5, A135335, A136212, Alameda County, Super. Ct. No. RG10548693.

As such, the Project Draft EIR included a Freeway Adjacent Health Risk Assessment (HRA) (Appendix 2-3 to the Draft EIR) for informational purposes, and as outlined by the California Air Resources Board (CARB) and the City's Unified Development Code, Title 17, Sections 17.53.020.L and 17.57.020.I. As suggested in the comment, the Draft EIR includes several project design features (PDFs) to minimize exposure to existing conditions (see PDF-7 through PDF-11 on pages 3-25 and 4.10-21 of the Draft EIR). No further response is required.

- 6-4 This comment acknowledges the Draft EIR's inclusion of project design features to reduce exposure to existing air quality conditions, and recommends that the project design features be applied to all sensitive uses within 1,500 feet. As stated in Response to Comment 6-3 above, California Supreme Court case law has determined that agencies subject to CEQA generally are not required to analyze or mitigate the impact of existing environmental conditions on a project's future users or residents. As such, the Project's inclusion of the current project design features meets and exceeds environmental planning requirements related to existing conditions. The City acknowledges the County's input, and the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.
- 6-5 This comment suggests the Project should include MERV 13 filters instead of the MERV 11 filters identified in the Draft EIR. It should be noted that there is no state, regional, or local requirement applicable to the Project for the inclusion of MERV 11 or MERV 13 filters for residential or commercial development projects. See also Response to Comment 6-3 above regarding the CEQA-applicability of this comment. The United States Environmental Protection Agency (USEPA) identifies MERV 11 for superior residential uses and states it is effective at filtering some auto emissions.⁴ In addition, the County of Los Angeles' Air Quality Recommendations for Local Jurisdictions (County of Los Angeles Public Health, January 2013) cites the California EPA and CARB publication Status of Research on Potential Mitigation Concepts To Reduce Exposure Nearby Traffic Pollution (CARB, August 2012). The CARB publication states an estimated 80% reduction in outdoor fine mode particles with stand-alone air cleaners using filters in the MERV 11 to 13 range, and the publication also includes that a MERV rating chart identifying filters rated between MERV 9 and MERV 12 are typically reserved for superior residential uses and are effective at filtering auto emissions. As such, the Project Draft EIR's inclusion of MERV 11 would serve to feasibly reduce exposure to existing environmental conditions, and this design feature would meet and exceed all state, regional and local requirements related to this issue. The City acknowledges the County's input, and the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.
- 6-6 This comment restates the Draft EIR's conclusion of significant and unavoidable operational air quality emissions. The comment asks if there are any traffic management plans or other measures to minimize air quality impacts. However, the comment does not provide any suggested measures to reduce impacts. As concluded in the Project's Draft EIR, air quality

4 <https://www.epa.gov/indoor-air-quality-iaq/residential-air-cleaners-second-edition-summary-available-information#defining>

emissions are primarily due to motor vehicles and area source emissions associated with the operation of a relatively high number of proposed residential uses. These emissions are typical for a mixed-use commercial and residential project of this size, and there is no feasible mitigation to reduce these emissions to a less than significant level. However, it should be noted that the Project would be consistent with the City's Climate Action Plan (CAP) and CalGreen Code, which require several project design features that would reduce air quality and greenhouse gas emissions (see Draft EIR pages 4.7-27 and 4.7-28). These features include mixed-use design resulting in VMT reductions, pedestrian network improvements, low-flow water fixtures, low impact vegetation and irrigation, energy reduction (e.g., high efficiency appliances, lighting and solar panels), and on-site electric vehicle charging stations. As such, the Project does include several features that would reduce air quality and GHG emissions. However, the Draft EIR correctly stated that operational air quality impacts would remain significant and unavoidable.

- 6-7 This comment recommends that the noise mitigation measures identified in the Draft EIR be included as conditions of the Project. The comment also states that additional measures may be needed to minimize nuisance problems to neighbors, but the comment does not provide any suggested additional measures to consider. All mitigation measures and project design features identified in the Draft EIR and the Draft Final EIR will be included in the Project's Mitigation Monitoring and Reporting Program (MMRP), which the City will be required to adopt if the Project is approved.

San Canyon Plaza
Page 3 of 3

implemented as conditions of the project. Further mitigation measures may need to be incorporated as needed to minimize nuisance problems to neighboring communities.

↑ 6-7
cont'd

For further questions please contact Evenor Masis or Robert Vasquez at (213) 738-3220.

6-8

Sincerely,



Cyrus Rangan, M.D., F.A.A.P., F.A.C.M.T.
Director, Bureau of Toxicology & Environmental Assessment
Environmental Health Division, Department of Public Health

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- 6-8 This comment is a conclusion to the comment letter, provides contact information, and does not raise an environmental issue. No further response is required.

Comment Letter 7
SCAQMD
April 14, 2017



SENT VIA E-MAIL AND USPS:
pleclair@santa-clarita.com
 Patrick Leclair, Senior Planner
 City of Santa Clarita – Community Development Department
 23920 Valencia Boulevard, Suite 302
 Santa Clarita, CA 91355

April 14, 2017

Draft Environmental Impact Report (Draft EIR) for the Proposed Sand Canyon Plaza Mixed-Use Project

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the lead agency and should be incorporated into the Final EIR.

7-1

Project Description and Air Quality Analysis

The Lead Agency proposes to demolish the existing mobile home community and construct a mixed-use development consisting of 580 residential units, 55,600 square feet of retail commercial space, a 75,000-square-foot assisted living facility with up to 120 beds, and two roundabouts to the roadway improvements on an 87-acre site. In the Air Quality Section, the Lead Agency quantified the proposed project’s construction and operational air quality impacts and compared those impacts to the SCAQMD’s regional and localized significance thresholds. Based on the analyses, the Lead Agency found that the proposed project’s operational air emissions would exceed the SCAQMD’s regional operational thresholds for ROG and NOx emissions.

7-2

SCAQMD’s 2016 Air Quality Management Plan

Adopted on March 3, 2017, the 2016 Air Quality Management Plan (2016 AQMP) is a regional blueprint for achieving air quality standards and healthful air in the South Coast Air Basin. Built upon the progress in implementing the 2007 and 2012 AQMPs, the 2016 AQMP provides a regional perspective on air quality and lays out the challenges facing the South Coast Air Basin. The most significant air quality challenge in the Basin is to reduce an additional 45 percent reduction in nitrogen oxide (NOx) emissions in 2023 and an additional 55 percent reduction in NOx emissions beyond 2031 levels for ozone attainment. For more information on the 2016 AQMP, please visit the SCAQMD’s website, at: <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan>.

7-3

As described in the 2016 AQMP, to achieve NOx emissions reductions in a timely manner is critical to attaining the National Ambient Air Quality Standard (NAAQS) for ozone before the 2023 and 2031 deadlines. SCAQMD is committed to attain the ozone NAAQS as expeditiously as practicable. Therefore, the SCAQMD staff recommends additional mitigation measures to further reduce air emissions, particularly from NOx. Please see the attachment for more information.

7-4

Pursuant to Public Resources Code Section 21092.5, SCAQMD staff requests that the Lead Agency provide the SCAQMD with written responses to all comments contained herein prior to the certification of the Final EIR. Further, when the Lead Agency makes the finding that the above-mentioned mitigation measure is infeasible, the Lead Agency shall describe the specific reasons for rejecting it in the Final EIR (CEQA Guidelines Section 15091).

7-5

Response to Comment Letter 7**SCAQMD****April 14, 2017**

- 7-1 This comment is an introduction to comments that follow. No further response is required.
- 7-2 This comment restates the project description, air quality analysis, and significant air quality impact conclusion disclosed in the Draft EIR. The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 7-3 This comment provides information regarding the 2016 Air Quality Management Plan and notes that the reduction of nitrogen oxide (NO_x) emissions is the most significant challenge facing the Basin. The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 7-4 This comment notes that SCAQMD staff has recommended mitigation measures to further reduce air emissions, particularly from NO_x. These recommendations are addressed in Responses to Comments 7-13 through 7-20.
- 7-5 The comment requests written responses to all comments prior to certification of the Final EIR, and requests that if the Lead Agency rejects the recommended mitigation measures, the Lead Agency should describe the reasons for rejecting them in the Final EIR. Consistent with CEQA, the City, as Lead Agency, will provide a written response to all public agencies on comments made by that public agency at least 10 days prior to certifying an environmental impact report. In this case, the responses have been provided to each commenting public agency in advance of the Planning Commission's final meeting to consider recommending certification of the Draft FEIR. Responses will also be forwarded again to each public agency at least 10 days prior to the City Council taking final action on the Draft Final EIR. With respect to the inclusion or rejection of the comment's suggested mitigation measures, Responses to Comments 7-13 through 7-20 provide a detailed response to each recommendation.

Mr. Patrick Leclair

April 14, 2016

SCAQMD staff is available to work with the lead agency to address these issues and any other questions that may arise. Please contact Jack Cheng, Air Quality Specialist, CEQA IGR Section, at (909) 396-2448, if you have any questions regarding the enclosed comments.

7-6

Sincerely,

Lijin Sun

Lijin Sun, J.D.
Program Supervisor, CEQA IGR
Planning, Rule Development & Area Sources

LS:JC
LAC170322-02
Control Number

- 7-6 This comment is a conclusion to the comment letter, provides contact information, references attached information, and does not raise an environmental issue; no further response is required.

Mr. Patrick Leclair

April 14, 2016

ATTACHMENT

Compliance with SCAQMD Rules 1403 and 403(e)

1. SCAQMD Rule 1403. Since the proposed project includes demolition, the Lead Agency should discuss and provide additional information to demonstrate compliance with SCAQMD Rule 1403 – Asbestos Emissions from Demolition/Renovation in the Final EIR.
2. SCAQMD Rule 403(e). Since the proposed project is considered a large operation on a 87-acre site (50 acres or more of disturbed surface area; or daily earth-moving operations of 3,850 cubic yards or more on three days in any year) in the South Coast Air Basin, the Lead Agency is required to comply with all SCAQMD Rule 403(e) – Additional Requirements for Large Operations¹. The requirements may include, but not limited to, Large Operation Notification (Form 403N), appropriate signage, additional dust control measures, and employment of a dust control supervisor that has successfully completed the Dust Control in the South Coast Air Basin training class². Therefore, the Final EIR should contain a detailed description to demonstrate compliance with SCAQMD Rule 403(e).

7-8

Project Design Features (PDFs)

3. **PDF-7 in the Draft EIR:** The Lead Agency requires air filtration systems with filters meeting or exceeding the ASHRAE 52.2 Minimum Efficiency Reporting Value (MERV) of 11 for sensitive uses within 500 feet of the SR-14 Freeway..

7-9

SCAQMD Staff Recommendation: The SCAQMD staff believes that there are limitations to enhanced filtration units. The Lead Agency should consider the limitations of MERV filters on housing residents. For example, in a study that SCAQMD conducted to investigate filters³ similar to those proposed for this project, costs were expected to range from \$120 to \$240 per year to replace each filter. In addition, because the filters would not have any effectiveness unless the HVAC system is running, there may be increased energy costs to the resident. The proposed PDF assumes that the filters operate 100 percent of the time while residents are indoors and does not account for the times when the residents have their windows or doors open or are in common space areas of the project. MERV filters are effective in improving indoor air quality as compared to lower efficiency filters for PM10 and PM2.5 but they have no ability to filter out any toxic gasses from vehicle exhaust. The presumed effectiveness and feasibility of this PDF should therefore be evaluated in more detail prior to assuming that it will sufficiently alleviate near roadway exposures. Therefore, the SCAQMD staff recommends that the Lead Agency evaluate the effectiveness of MERV filters and include a discussion on the effectiveness of this PDF-7 in the Final EIR.

7-10

4. **PDF-9 in the Draft EIR:** The Lead Agency requires planting vegetation between sensitive receptors and freeway sources.

7-11

SCAQMD Staff Recommendation: The SCAQMD staff recommends the Lead Agency provide information on vegetation and landscaping types, materials, and design details that will be used to improve near road air quality in the Final EIR. This information will assist the SCAQMD staff in reviewing the effectiveness of these features in mitigating air quality impacts on sensitive receptors

7-12

¹ SCAQMD Rule 403. Last amended June 3, 2005. Available at: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf>.

² SCAQMD Compliance and Enforcement Staff Contact Information for Rule 403(e) Large Operations is (909) 396-2608 or by e-mail at dustcontrol@aqmd.gov.

³ This study evaluated filters rated MERV 13+ while the proposed mitigation calls for less effective MERV 11 or better filters. Accessed at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf>.

- 7-8 This comment states that the Project is subject to SCAQMD 403(e) requirements for large operations. The Draft EIR stated that the Project will be required to comply with all applicable SCAQMD rules and regulations, including Rule 403. See PDF-12 in the Draft EIR. Because Rule 403 is 23 pages long, and to ensure that the entire rule is captured herein, the rule as has been added as an attachment to PDF-12 and will be included in the Project's MMP contained in this Draft Final EIR. The MMP will describe how the Project will comply with all applicable SCAQMD rules and mitigation measures. In addition, as required by CEQA, the MMP will identify the appropriate monitoring phase for each measure (e.g., project construction), the party responsible for implementing the measure, the agency with the authority to enforce the measure, and the agency responsible for monitoring compliance and implementation of the measure.
- 7-9 This comment restates PDF-7 from the Project's Draft EIR. The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 7-10 This comment provides information related to the potential effectiveness of MERV 11 filtration. It should be noted that California Supreme Court case law⁵ has determined that agencies subject to CEQA generally are not required to analyze or mitigate the impact of existing environmental conditions on a project's future users or residents. As such, the Project Draft EIR included a Freeway Adjacent HRA (Appendix 2-3 to the Draft EIR) for informational purposes, and as outlined by the California Air Resources Board (CARB) and the City's Unified Development Code, Title 17, §17.53.020.L and §17.57.020.I. Thus, the inclusion of this PDF is intended as a best-management practice.

It should also be noted there is no state, regional, or local requirement applicable to the Project for the inclusion of MERV 11 filters for residential or commercial development projects. The United States Environmental Protection Agency (USEPA) identifies MERV 11 for superior residential uses and states that MERV 11 it is effective at filtering some auto emissions.⁶ In addition, a CARB publication Status of Research on Potential Mitigation Concepts To Reduce Exposure Nearby Traffic Pollution (CARB, August 2012), states an estimated 80% reduction in outdoor fine mode particles with stand-alone air cleaners using filters in the MERV 11 to 13 range, and the publication also includes a MERV rating chart identifying that filters rated between MERV 9 and MERV 12 are typically reserved for superior residential uses and are effective at filtering auto emissions. As such, the Project Draft EIR's inclusion of MERV 11 would serve to feasibly reduce exposure to existing environmental conditions, and this design feature would meet and exceed all state, regional, and local requirements related to this issue. The City acknowledges the SCAQMD's input, and the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.

5 *Supreme Court of California, California Building Industry Association v. Bay Area Air Quality Management District* (2015), S213478, Ct.App. 1/5, A135335, A136212, Alameda County, Super. Ct. No. RG10548693.

6 <https://www.epa.gov/indoor-air-quality-iaq/residential-air-cleaners-second-edition-summary-available-information#defining>

- 7-11 This comment restates PDF-9 from the Project’s Draft EIR. The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.

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Mr. Patrick Leclair

April 14, 2016

potential mitigating effects. For additional information on road side vegetation barriers, please visit: <https://www.epa.gov/air-research/recommendations-constructing-roadside-vegetation-barriers-improve-near-road-air-quality>.

7-12
cont'd

Additional Mitigation Measures

5. CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. The SCAQMD staff recommends the Lead Agency incorporate the following mitigation measures in the Final EIR to further reduce air emissions, particularly from NOx. Additional information on potential mitigation measures as guidance to the Lead Agency are available on the SCAQMD CEQA Air Quality Handbook website⁴.
 - a) Improve walkability design and pedestrian network.
 - b) Increase transit accessibility and frequency by incorporating Bus Rapid Transit lines with permanent operational funding stream.
 - c) Limit parking supply and unbundle parking costs. Lower parking supply below ITE rates and separate parking costs from property costs.
 - d) Require use of electric lawn mowers and leaf blowers.
 - e) Require that 240-Volt electrical outlets or Level 2 chargers be installed in residential garages onsite that would enable charging of NEVs and/or battery powered vehicles.
 - f) Require at least 5% of all commercial vehicle parking spaces include EV charging stations. At a minimum, electrical panels should appropriately sized to allow for future expanded use.
 - g) Vehicles that can operate at least partially on electricity have the ability to substantially reduce the significant NOx impacts from this project. It is important to make this electrical infrastructure available when the project is built so that it is ready when this technology becomes commercially available. The cost of installing electrical charging equipment onsite is significantly cheaper if completed when the project is built compared to retrofitting an existing building. Therefore, the SCAQMD staff recommends the Lead Agency require the proposed project to be constructed with the appropriate infrastructure to facilitate sufficient electric charging for vehicles to plug-in.

7-13

7-14

7-15

7-16

7-17

7-18

7-19

7-20

⁴ South Coast Air Quality Management District. <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>.

- 7-12 This comment requests information related to the Project’s landscape plan to assess potential effectiveness of the proposed PDF. As stated in Response to Comment 7-10, California Supreme Court case law has determined that agencies subject to CEQA generally are not required to analyze or mitigate the impact of existing environmental conditions on a project’s future users or residents. Thus, the inclusion of this PDF is intended as a best-management practice. The Project’s Landscape Plan is discussed in detail in Section 3. Project Description of the Draft EIR, and the Conceptual Landscape Plan is illustrated on Figure 3-16 therein. The City acknowledges the SCAQMD’s input, and the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.
- 7-13 This comment states that the SCAQMD has recommended the incorporation of additional mitigation measures in the Final EIR to further reduce operational air quality emissions. Each recommendation has been responded to below.
- 7-14 This comment suggests “improve walkability design and pedestrian network.” However, this comment provides no direction on how best to improve these features, and the comment fails to recognize the existing walkability design and pedestrian network already identified in the Project’s Draft EIR. Consistent with goals of the City’s Climate Action Plan (CAP), the Project would include pedestrian network improvements (see Draft EIR page 4.7-27). As stated therein, the Project would create and enhance opportunities for non-vehicular travel and encourage pedestrian mobility by providing an internal pedestrian circulation system that links residential neighborhoods to on-site recreation areas, regional trail systems, and neighborhood retail/commercial areas. The City acknowledges the SCAQMD’s input, and the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.
- 7-15 This comment suggests to “increase transit accessibility and frequency by incorporating Bus Rapid Transit lines with permanent operational funding stream.” A Bus Rapid Transit program is initiated and administered by public transportation authority agencies and is outside the scope of authority for an individual development project. The Project Site is currently served by existing public transportation. As stated on page 4.19-11 of the Draft EIR, the Project site is currently serviced by City of Santa Clarita Transit (SCT) Route 5, with the nearest stop at the intersection of Kenroy Avenue and Soledad Canyon Road. SCT Route 5 travels along Soledad Canyon Road and provides services between the east side of the City and Stevenson Ranch with stops at the Santa Clarita and Newhall Metrolink stations, as well as at the McBean Regional Transit Center. Additional routes, accessible from this route, provide service to the greater Santa Clarita Valley area. SCT Commuter Express offers express commuter bus travel to Los Angeles, Warner Center, Van Nuys, Century City, and the Antelope Valley. Three Metrolink stations exist within the City of Santa Clarita, which serve the Antelope Valley line. This line travels between Lancaster and Union Station, Los Angeles. The City acknowledges the SCAQMD’s input, and the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.

7-16 This comment suggests to “limit parking supply, unbundle parking costs, lower parking supply below ITE rates, and separate parking costs from property costs.” The Project’s parking supply is based on the City’s zoning requirements for a Mixed Use Neighborhood (MXN) and Urban Residential 3 (UR-3). As such, the comment’s suggestion to reduce parking spaces would be infeasible and inconsistent with the City’s planning and zoning code. The City acknowledges the SCAQMD’s input, and the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.

7-17 This comment suggests to “require the use of electric lawn mowers and leaf blowers.” A large portion of the Project is private residential uses, and the enforcement of electric lawn mowers and leaf blowers would be infeasible on the private residents associated with the Project. However, the Project Applicant is committed to implementing this suggestion as feasible for the commercial components of the Project, and the following mitigation measure will be included in the Project’s MMP contained in the Final EIR:

MM AQ-1: The Project Applicant, or designee, shall require that all commercial-related landscaping activities utilize electric lawn mowers and electric leaf blowers to the extent feasible.

7-18 This comment suggests to “require that 240-Volt electrical outlets or Level 2 chargers be installed in residential garages on-site that would enable charging of NEVs and/or battery powered vehicles.” The Project would be consistent with residential mandatory measures of the CalGreen Code Sections 4.106.4.1 and 4.106.4.2 to facilitate future installation and use of Electric Vehicle (EV) chargers. Relevant and applicable components of the code include the following:

- **4.106.4.1** New one- and two-family dwellings and townhouses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit.
- **4.106.4.2** New multifamily dwellings. Where 17 or more multifamily dwelling units are constructed on a building site, 3 percent of the total number of parking spaces provided for all types of parking facilities, but in no case less than one, shall be electric vehicle charging spaces (EV spaces) capable of supporting future EVSE.

No additional mitigation measures are warranted. The City acknowledges the SCAQMD’s input, and the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.

7-19 This comment suggests to “require at least 5% of all commercial vehicle parking spaces include EV charging stations, and, at a minimum, electrical panels should appropriately sized to allow for future expanded use.” The Project would be consistent with non-residential mandatory measures of the CalGreen Code §5.106.5.3 Electric vehicle (EV) charging. [N] Construction shall comply with §5.106.5.3.1 or §5.106.5.3.2 to facilitate future installation of electric vehicle supply equipment (EVSE). As stated in the Project Draft EIR, up to 278 parking spaces would be provided for the commercial component of the Project contingent upon final uses and square footages. Based on this estimate and per CalGreen Code §5.106.5.3.2, up to 6% of the total commercial spaces would be required to support EVSE. The code also stipulates that the service

panel or subpanel(s) shall have sufficient capacity to accommodate the required number of dedicated branch circuit(s) for the future installation of the EVSE. No additional mitigation measures are warranted. The City acknowledges the SCAQMD's input, and the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.

- 7-20 This comment restates the recommendations in Responses to Comments 7-18 and 7-19 associated with EV charging and necessary infrastructure. See those responses above.

Comment Letter 8**Department of Animal Care and Control, County of Los Angeles****April 17, 2017**

Dr. Mr. LeClair:

Thank you for making available the DEIR for the Sand Canyon Plaza Mixed Use Project available for the County to assess impact. Our department would like to advise that based on the number of new residences to be constructed (580) and the current average monthly net city costs for Animal Care and Control services in Santa Clarita, we project that the impact to city costs will be minimal, with a projected increase of less than 1% per year, when the project is fully constructed and populated.

8-1

This is based on the following:

- Estimating the current population of the City of Santa Clarita at 220,000
- Estimating that 580 additional new residences may add about 1,600 residents net, after replacing residents from the 123 existing mobile homes.
- Average monthly net city costs for animal care and control services has been \$18,399 over the last 12 months, and increasing the population by .73% would commensurately mean about \$135 more in net costs per month, or \$1,620 annually.

8-2

Please note that we have advised all contract cities that our billing methodology is currently under review, and any adopted changes may increase future costs. We will promptly notify you of any such changes.

We hope this information is helpful to you. Please let us know if you have any questions.

8-3

Ann Marie Johansen
 Administrative Deputy
 County of Los Angeles
 Department of Animal Care and Control
 5898 Cherry Avenue
 Long Beach, CA 90805
 Tel (562)256-2400/Fax(562)256-2400
ajohansen@animalcare.lacounty.gov

Webpage: <http://animalcare.lacounty.gov>
 Follow us: <http://twitter.com/LACoAnimalCare>
 Like us: <http://facebook.com/CountyofLosAngelesAnimalCare>

Response to Comment Letter 8
Department of Animal Care and Control
April 17, 2017

- 8-1 The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 8-2 The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 8-3 The comment is a conclusion to the comment letter and does not raise an environmental issue; no further response is required.

Comment Letter 9
County of Los Angeles Public Health
April 17, 2017



BARBARA FERRER, Ph.D., M.P.H., M. Ed.
Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

CYNTHIA A. HARDING, M.P.H.
Chief Deputy Director

ANGELO J. BELLOMO, REHS, QEP
Deputy Director for Health Protection

TERRI S. WILLIAMS, REHS
Director of Environmental Health

BRENDA J. LOPEZ, REHS
Assistant Director of Environmental Health

5050 Commerce Drive
Baldwin Park, California 91706
TEL (626) 430-5100 • FAX (626) 813-3000

www.publichealth.lacounty.gov

April 17, 2017

TO: Patrick LeClair, Senior Planner
City of Santa Clarita
Community Development Department
Planning Division

FROM: Jeanne Biehler, REHS
Department of Public Health
Environmental Health Division
Environmental Protection Branch

SUBJECT: CEQA CONSULTATION
DRAFT ENVIRONMENTAL IMPACT REPORT
Sand Canyon Plaza Mixed-Use Project

The Department of Public Health - Environmental Health Division – Environmental Protection Branch has reviewed the Draft Environmental Impact Report (DEIR) for the project identified above. The project is for a mixed-use development with up to 480 residential units, retail/commercial including restaurants, an assisted living facility, recreation areas, and appurtenant infrastructure such as private streets, landscaped areas and roadway improvements.

9-1

Potable Water Supply

The 2015 Water Supply Assessment (WSA) that was prepared by the Santa Clarita Water District (SCWD) for The Sand Canyon Plaza Mixed-Use Project. An update with the EIR for the Water Supply was also conducted in March 2017 that noted an increase in the water demand numbers and an additional water demand augmentation due to the potential for a 10% buildout increase. The water demand could be 428 Acre Feet per Year for the Project.

9-2

While the Sand Canyon Plaza WSA notes that there should be sufficient water to meet the projected water demand for this development, it is recommended that the following be required before final map approval:



BOARD OF SUPERVISORS

- Hilda L. Sofis
First District
- Mark Ridley-Thomas
Second District
- Shella Kuehl
Third District
- Janice Hahn
Fourth District
- Kathryn Barger
Fifth District

Response to Comment Letter 9
County of Los Angeles Public Health
April 17, 2017

- 9-1 This comment is an introduction to comments that follow. No further response is required.
- 9-2 Consistent with California law, Santa Clarita Water Division will be required to provide the City with a water verification letter prior to the City approving a final map for the Project.

DRAFT ENVIRONMENTAL IMPACT REPORT
 Sand Canyon Plaza Mixed-Use Project
 4/17/17
 Page 2 of 2

A written contract, proof of entitlement, or water will-serve letter from the SCWD that notes the project’s final buildout phase water demand in acre-feet in addition to the amount of water that the SCWD will guarantee in acre-feet for the Sand Canyon Plaza Mixed Use project.

9-2
cont'd

For questions regarding this potable water supply section, please contact Vincent Gallegos of the Drinking Water Program at 626 430-5420 or at vgallegos@ph.lacounty.gov.

9-3

Stormwater Harvesting, Potable Water Protection, and Recycled Water

The Department’s Cross Connections and Water Pollution Control Program is actively involved with stormwater harvesting. The Program requests to be updated and notified during the design phase of stormwater capture system as described on page 1330 of the EIR Appendices (<http://filecenter.santa-clarita.com/Planning/SandCanyonPlaza/Sand%20Canyon%20DEIR%20-%20Vol%202%20Appendices.pdf>).

9-4

The Program also requests to be involved with all industrial and irrigation use of potable water use throughout the project.

9-5

In addition, will recycled water be incorporated into the project since it is available in the City of Santa Clarita?

9-6

For questions regarding this section, please contact Daniel Bacani of the Cross Connections and Water Pollution Control Program at 626 430-5290 or at dbacani@ph.lacounty.gov.

9-7

For questions regarding this comment letter, please contact Jeanne Biehler of the Land Use Program at jbiehler@ph.lacounty.gov or at 626 430-5380.

- 9-3 The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 9-4 The Project Applicant will contact the County of Los Angeles, Department of Public Health, regarding the design phase of the storm water capture system as described on page 1330 of the Draft EIR Appendices.
- 9-5 The comment states that the “Program also requests to be involved with industrial and irrigation use of potable water use throughout the Project.” The Project does not include any industrial uses. Additionally, the City does not understand the comment related to potable use of water for irrigation and what involvement the County Department of Health Services has in the potable water distribution on-site. Regardless, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.
- 9-6 Recycled water is not available in this area of the City of Santa Clarita and therefore will not be incorporated into the Project design. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.
- 9-7 The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.

Comment Letter 10
California Department of Transportation
April 17, 2017

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

EDMUND G. BROW Jr., Governor

DEPARTMENT OF TRANSPORTATION

District 7 – Office of Regional Planning
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-0673
FAX (213) 897-1337
www.dot.ca.gov



*Making Conservation
a California Way of Life.*

April 17, 2017

Mr. Patrick LeClair
Senior Planner
City of Santa Clarita
Community Development Dept.
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355

RE: Sand Canyon-Soledad Canyon Mixed
Use Project
Draft Environmental Impact Report
SCH#2015051005
GTS#07-LA-2016-00723-FL
Vic. LA/ 14/ PM 33.423

Dear Mr. LeClair:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project.

10-1

The proposed project consists of approximately 130,600 square feet (sf) of commercial uses (includes 55,600 sf of retail/restaurants, and a 75,000 sf assisted living facility with up to 120 beds) and 580 residential units (includes 312 apartment units, 122 townhome units, and 146 condominium units), and it currently includes 123 mobile homes that would be removed as part of the proposed project.

After reviewing the Draft Environmental Impact Report (DEIR) dated March 2017 and Traffic Impact Analysis (TIA) in the Appendices (Appendix 11) dated December 21, 2016, Caltrans offers the following comments:

10-2

- For Figure 2-3 of #15 intersection on Page 2.4 of the TIA, it is currently labeled “SR-115 On-Ramp”, a correction is needed to change to SR-14 On-Ramp.
- TIA, Appendix A, Intersection Count Worksheets, the AM/PM Peak Hours should be between 6-9am for AM and 4-7pm for PM. To fully evaluate the potential impacts, Caltrans will need the counts to include these said hours. Please verify/validate this information with Caltrans Traffic Operations.

10-3

*“Provide a safe, sustainable, integrated and efficient transportation system
to enhance California’s economy and livability”*

Response to Comment Letter 10
California Department of Transportation
April 17, 2017

- 10-1 This comment is an introduction to comments that follow. No further response is required.
- 10-2 In Appendix 11 of the DEIR – Traffic Impact Analysis (TIA), Intersection #15 of Figure 2-3 on page 2.4, the label “SR-115 On-Ramp” is changed to “SR-14 On-Ramp.”
- 10-3 In Appendix 11 of the DEIR – Traffic Impact Analysis (TIA), Intersection Count Worksheets pages A.11 and A.39, the Caltrans intersections were counted for 8 hours based on discussions with Caltrans staff. City intersections were counted for the time periods used by the City. The time periods counted are 6:00 to 9:00 a.m., 11:00 a.m. to 1:00 p.m., and 3:00 to 6:00 p.m. The 15-minute period with the highest volume of traffic occurs at 5:15 p.m. for each ramp intersection. Therefore, counting page 6:00 p.m. is not necessary.

Mr. Patrick LeClair
04/17/2017
Page 2

- For MM T-2 and MM T-6, “SR-14 SB ramps at Soledad Canyon. Modification traffic signal to change westbound left-turn phasing from permissive to protective permissive.” (DEIR, Executive Summary, Page 2.46-2.47) Caltrans acknowledges the proposed mitigation mentioned above but would recommend protected left-turn phasing.

10-4

Caltrans requests that prior to completion of the Caltrans Mitigation Agreement, the applicant shall complete a study for the operations of the off- and on-ramp for SR-14 east of Soledad Canyon Road, especially for the movement and queue analysis of the westbound left-turn phasing from Soledad Canyon on to the SR-14 SB on-ramp. If any improvements to the on-ramp are required as a result of that study, these improvements shall be completed prior to the 100th certificate of occupancy.

10-5

- For MM T-3 and MM T-7, “The Project Developer shall enter into a Mitigation Agreement with Caltrans. Said Mitigation Agreement shall be finalized prior to the recordation of a final map.” (DEIR, Executive Summary, Page 2.46-2.47) Caltrans acknowledges that “under cumulative conditions, the intersection of Sand Canyon Road at Soledad Canyon Road would be significantly impacted by the Project. Because of this impact is under cumulative conditions, the Project would contribute its pro rata share of the improvement cost, and the improvement would be implemented when necessary given the anticipated growth in future traffic volumes.” (DEIR, Traffic and Circulation, Page 4.19-1)

10-6

Caltrans encourages the applicant to work with Caltrans early on to streamline the process of Mitigation Agreement for the Project’s pro rata share (1.6%) of the SR-14 Freeway mainline (cumulative conditions).

10-7

In view of SB 743, the Governor’s Office of Planning and Research (OPR) is working to develop an alternative to LOS for evaluating transportation impacts pursuant to CEQA. Such as using Vehicle Miles Traveled (VMT) as the primary metric in identifying transportation impacts for all future development projects. Once OPR provides new guidance, Caltrans hopes to collaborate with the City to adopt methods of traffic analysis and new thresholds that are mutually acceptable.

10-8

Caltrans acknowledges the Project’s goals and policies to encourage pedestrian linkages, the implementation of bicycle facilities, and the reconfiguration of roadways. Such as to include enhanced safety features to minimize conflicts between transit riders, bicyclists, and motor vehicles. (DEIR, Executive Summary, Page 2.45)

10-9

Caltrans continues to strive to improve its standards and processes to provide flexibility while maintaining the safety and integrity of the State’s transportation system. It is our goal to implement strategies that are in keeping with our mission statement, which is to “provide a safe, sustainable, integrated, and efficient transportation system to enhance California’s economy and livability.”

10-10

Good geometric and traffic engineering design to accommodate bicyclists and pedestrians are critical at every on and off ramp and freeway terminus intersection with local streets. Caltrans

10-11

“Provide a safe, sustainable, integrated and efficient transportation system to enhance California’s economy and livability”

- 10-4 The comment acknowledges the proposed mitigation but recommends the use of protected left-turn phasing instead of protected/permissive left-turn phasing, which the City traffic engineers are in agreement with. Accordingly, Mitigation Measures T-2 and T-6 have been modified to require the use of protected left-turn phasing at this intersection.
- 10-5 An operational analysis of the ramp intersection has been completed as requested by Caltrans, and ramp modifications are not necessary to mitigate impacts due to the proposed Project (see Appendix 11, TIA Chapter 5.0 – Supplemental Analysis). Separately from this project, the City has been coordinating with Caltrans to implement dual left-turn lanes for the WB to SB Ramp movement.
- 10-6 The comment acknowledges review of the Draft EIR and concurs with Mitigation Measures MM T-3 and MM T-7 as they relate to impacts to intersections. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.
- 10-7 The City acknowledges Caltrans' input and comment. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 10-8 The City acknowledges Caltrans' input and comment. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.
- 10-9 The comment acknowledges the Project goals and policies related to pedestrian, biking, and circulation improvements. The comment will be forwarded to the decision makers for their consideration prior to taking any action on the Project.
- 10-10 The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 10-11 The City acknowledges Caltrans' input and comment. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.

Mr. Patrick LeClair
04/17/2017
Page 3

will work with the City to look for every opportunity to develop projects that improve safety and connectivity for pedestrians and bicyclists. Opportunities for improvements may exist on State facilities such as: freeway termini, on/off-ramp intersections, overcrossings, under crossings, tunnels, bridges, on both conventional state highways and freeways.

↑
10-11
cont'd

With regard to public transit, we recommend planning for gradual continual improvement of transit stops, bus bays, or other facilities, to accommodate traffic flow, especially on streets that are State Route locations or are near freeway intersections.

10-12

As a reminder, storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful of your need to discharge clean run-off water and it is not permitted to discharge onto State highway facilities.

10-13

Any work to be performed within the State Right-of-way will need an Encroachment Permit and any transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways, will require a Caltrans transportation permit. For information on the Permit process, please contact Caltrans District 7 Office of Permit at (213) 897-3631.

10-14

If you have any questions or concerns regarding these comments and/or wish to schedule a meeting, please feel free to contact the project coordinator, Frances Lee at (213) 897-0673 or electronically at frances.lee@dot.ca.gov.

10-15

Sincerely,




DIANNA WATSON
Branch Chief, Community Planning & LD IGR Review

cc: Scott Morgan, State Clearinghouse

*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*

- 10-12 The City acknowledges Caltrans' input and comment. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.
- 10-13 The City acknowledges Caltrans' input and comment. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.
- 10-14 The City acknowledges Caltrans' input and comment. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project.
- 10-15 The comment is a conclusion to the comment letter and does not raise an environmental issue; no further response is required.

Comment Letter 11
Sanitation Districts of Los Angeles County
April 17, 2017



1955 Workman Mill Road, Whittier, CA 90601-1400
 Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
 Telephone: (562) 699-7411, FAX: (562) 699-5422
 www.lacsd.org

**COUNTY SANITATION DISTRICTS
 OF LOS ANGELES COUNTY**

GRACE ROBINSON HYDE
 Chief Engineer and General Manager

April 17, 2017

Ref. Doc. No.: 4070472

Mr. Patrick Leclair, Senior Planner
 Community Development Department
 City of Santa Clarita
 23920 Valencia Boulevard
 Suite 302
 Santa Clarita, CA 91355

Dear Mr. Leclair:

**Response to the DEIR
 for the Sand Canyon Plaza Mixed-Use Project**


The Sanitation Districts of Los Angeles County (Districts) received a Draft Environmental Impact Report (DEIR) for the subject project on March 7, 2017. Previous comments submitted by the Districts in correspondence dated June 2, 2015 (copy enclosed), to Ms. Collette L. Morse of the Morse Planning Group, still apply to the subject project with the following comments and updates:

1. 4.21-1 Summary, *page 4.21-1*, under Summary – The Project, at buildout (as described in 2.2-1 Project Characteristics of the DEIR – 55,600 square feet of general retail, an assisted living facility of up to 120 rooms, 312 multi-family rental units, 122 townhomes, a total of 146 single family homes, and the demolition of the existing 123 mobile home units), would generate a worst-case average total of ~~138,942~~ 124,304 gallons per day of wastewater that would be treated by the Santa Clarita Valley Sanitation District (the Saugus and Valencia Water Reclamation Plants). 11-1
2. 4.21-3 Existing Conditions, *page 4.21-1*, under Wastewater Service – These two facilities provide primary, secondary, and tertiary treatment. The SCVJSS has a combined permitted treatment capacity of 28.1 million gallons per day (mgd) and currently processes an average flow of ~~18.9~~ 17.9 mgd. 11-2
3. 4.21-3 Existing Conditions, *pages 4.21-3 to 4.21-4*, under Santa Clarita Valley Sanitation District Supplemental Environmental Impact Report for Brine Concentration and Limited Trucking Recirculated Environmental Impact Report – ~~The Santa Clarita Valley Sanitation District (SCVSD) prepared a Draft Supplemental Environmental Impact Report for Brine Concentration and Limited Trucking (Draft SEIR). This effort is part of a project to comply with a state-mandated limit on the level of chloride (salt) that can be discharged from the SCVSD’s wastewater (sewage) treatment plants. On October 28, 2013, the SCVSD Board of Directors approved a chloride compliance project and certified the associated Environmental Impact Report (Certified EIR). Under the approved chloride compliance project, advanced treatment facilities will be added at the Valencia Water Reclamation Plant (VWRP) to reduce chloride levels in the~~ 11-3

11-4

↓

DOC: #4121666.SCVSD99

Recycled Paper 

Response to Comment Letter 11
Sanitation Districts of Los Angeles County
April 17, 2017

- 11-1 In this introductory paragraph, the County Sanitation Districts of Los Angeles County acknowledges receipt of the Draft Environmental Impact Report (DEIR). In addition, the correspondence provided by the County Sanitation Districts of Los Angeles County to the environmental consultant remains applicable with the comments and updates identified in the remainder of the letter. No further response is required.
- 11-2 The text changes requested for DEIR Section 4.21, page 4.21-1 (first paragraph, second sentence) by the County Sanitation Districts of Los Angeles County will be incorporated into the Final Environmental Impact Report (FEIR). The text on page 4.21-1 will be revised as shown in the Draft FEIR.
- Construction related impacts to wastewater disposal would not be significant, because portable, on-site sanitation facilities would be utilized during construction. The Project, at buildout [\(based on the project characteristics provided in Section 3\)](#), would generate a worst-case average total of ~~139,942~~ 124,304 gallons per day of wastewater that would be treated by the Santa Clarita Valley Sanitation District (the Saugus and Valencia Water Reclamation Plants).
- 11-3 The text change for DEIR Section 4.21-3, page 4.21-1 requested by the County Sanitation Districts of Los Angeles County will be incorporated into the Draft FEIR.
- 11-4 The text changes requested for DEIR Section 4.21-3, page 4.21-3 to 4.21-4 starting with the heading Santa Clarita Valley Sanitation District Supplemental Environmental Impact Report for the Brine Concentration and Limited Trucking will be incorporated into the Draft FEIR.

Mr. Patrick Leclair

-2-

April 17, 2017

Santa Clarita Valley's treated wastewater (sewage) and comply with the state-mandated chloride limit for the Santa Clara River. Brine, a salty water byproduct from advanced treatment, was originally to be managed by deep well injection. The SCVSD now proposes to modify one component of the approved compliance project — the approach to brine management.

The modification to the approved chloride compliance project is to replace brine management by deep well injection with the addition of brine concentration equipment at the VWRP and limited trucking of concentrated brine (an average of 6 truckloads per day, 10 maximum, during off-peak hours) to an existing industrial facility. The SCVSD would truck during off-peak hours to avoid morning and evening rush hours. The technology proposed would reduce the volume of brine requiring disposal and the resulting number of truckloads per day by 90% (i.e., 6 instead of 60 truckloads per day) compared to the trucking alternative evaluated in the Certified EIR. The brine concentration facilities would be installed within the existing footprint in an area of disturbed but undeveloped land. Trucks would be loaded with concentrated brine at a new truck loading station located adjacent to the brine concentration equipment. Concentrated brine would be trucked to an existing industrial facility. The currently proposed location is the Joint Water Pollution Control Plant (JWPCP) in Carson, which treats wastewater from much of the Los Angeles Basin (over 270 mgd) and discharges to the ocean. This site is proposed for several reasons. First, the JWPCP contains authorized disposal stations for trucked wastewater such that no construction would be required to accept SCVSD's brine. Second, the haul route from the freeway to the JWPCP is less than 1 mile and does not pass any residences.

As of February 2017, the Draft Supplemental EIR was being revised and continuing through the CEQA process.

122 — Source: Public Notice of Availability, Santa Clarita Valley Sanitation District Supplemental Environmental Impact Report for Brine Concentration and Limited Trucking (Draft), County Sanitation Districts of Los Angeles County website, <http://laacd.org/eivicax/filebank/blobdload.aspx?blobid=11034>, accessed February 15, 2016.

In October 2013, after nearly two years of extensive public input, meetings, hearings, and environmental review, the SCVSD Board of Directors (SCVSD Board) approved a project to comply with the State-mandated chloride limit (Chloride Compliance Project) and certified that the associated 2013 Facilities Plan and EIR complied with the California Environmental Quality Act (CEQA).

The Chloride Compliance Project includes new reverse osmosis equipment at the Valencia WRP. The water that passes through a reverse osmosis membrane becomes ultra-clean water and the remaining salty water becomes a byproduct called brine that requires proper disposal. Brine was originally to be managed by deep well injection (DWI). Based on public input regarding DWI, the SCVSD Board withdrew the DWI proposal and directed staff to investigate alternative deep well sites and additional brine management alternatives. In 2015, the SCVSD proposed to modify the approach to brine management by replacing DWI with the installation of enhanced brine concentration equipment at the Valencia WRP and disposal of the smaller amount of concentrated brine by limited trucking to an existing industrial facility, the Sanitation Districts' Joint Water Pollution Control Point in Carson. A Supplemental Environmental Impact Report for Brine Concentration and Limited Trucking (Trucking SEIR) was prepared to describe the environmental impacts from this brine management approach. On March 23, 2016, the SCVSD Board certified the Final Trucking SEIR and approved the change in the method of brine management.

Most of the chloride compliance solutions investigated in the 2013 Facilities Plan and EIR included the production of brine. Because this brine cannot be discharged to the River, the Chloride Compliance Project would minimally reduce discharge of treated (recycled) water from

DOC: #4121666.SCVDP99

11-4
cont'd

Mr. Patrick Leclair

-3-

April 17, 2017

at least one of SCVSD's WRPs to the River. As analyzed in the Trucking SEIR the reduction in discharge related to brine management would be a maximum of 52,000 gallons per day or 0.4 percent of the discharged flow. Unrelated to the chloride compliance solutions, the SCVSD has considered the potential impacts of further reducing the discharge of treated water from the WRPs to the River, under the Recycled Water Project, to permit the direction of recycled water to community reuse such as landscape irrigation. Even though the Chloride Compliance Project and the Recycled Water Project are independent efforts (i.e., implementation of one does not require or necessitate implementation of the other), both projects were addressed in the 2013 Facilities Plan and EIR. The 2013 Facilities Plan and EIR described the Recycled Water Project as "Support for Municipal Reuse of Recycled Water" and contained an analysis of the potential environmental impacts to biological resources (including an endangered fish known as the unarmored threespine stickleback, or UTS) that could occur due to a proposed one-third reduction in discharge. The technical analysis that supported the EIR concluded that no significant impact would occur.

Following the certification of the 2013 Facilities Plan and EIR, the Affordable Clean Water Alliance ("ACWA") filed a petition for writ to set aside the District's certification on the grounds that the documents failed to comply with CEQA in a number of respects. While the Trucking SEIR was being finalized, the Los Angeles County Superior Court (Court) ruled in February 2016 that the EIR for the 2013 Facilities Plan failed to comply with CEQA in two particulars. First, the Court determined that additional environmental study was necessary with respect to the impact of reduced discharge to the River resulting from the Recycled Water Project on the UTS. Secondly, the Court considered SCVSD's pursuit of an alternate method of brine management to be an "abandonment" of deep well injection, which left the SCVSD with an incomplete chloride compliance project because it had no approved method of brine management. The Court did not find fault with the environmental review related to the Chloride Compliance Project, but nonetheless set aside the 2013 Facilities Plan and EIR and related approvals until SCVSD complied with CEQA with respect to the two issues identified by the Court.

On March 23, 2016, the SCVSD Board recertified the 2013 Facilities Plan and EIR without the Recycled Water Project to address the Court's first issue. SCVSD also certified the Trucking SEIR, approved a new brine management approach, and created a Modified Chloride Compliance Project to address the Court's second issue. As noted in the Trucking SEIR, the modified project would result in no more than a 0.4 percent reduction in discharge to the River. Such a reduction would have a negligible impact on biological resources, including UTS.

Following the February ruling, SCVSD returned to the Court in April 2016 seeking approval to proceed with the Chloride Compliance Project while deferring implementation of the Recycled Water Project until further UTS study could be completed. On June 2, 2016, the Court determined that SCVSD could not do so because it had not studied the potential impacts of implementing the Chloride Compliance Project separate from the Recycled Water Project, delaying the work to comply with the State chloride mandates.

On August 4, 2016, SCVSD issued a Notice of Preparation of a Supplemental Environmental Impact Report for Study of Impacts to the Unarmored Threespine Stickleback Fish Under Reduced Discharge Conditions from the Santa Clarita Valley Sanitation District's Water Reclamation Plants (Stickleback SEIR). The intent of Stickleback SEIR is to maintain support of both the Chloride Compliance Project and the Recycled Water Project under one CEQA document record. Since August, SCVSD and California Department of Fish and Wildlife have been working together to determine the appropriate criteria for analyzing impacts to UTS. Based

11-4
cont'd

DOC: #4121666.SCVSD99

Mr. Patrick Leclair

-4-

April 17, 2017

on the progress of these discussions and the projected work remaining to complete the study, to minimize fines to ratepayers, SCVSD has decided to pursue the Recycled Water Project separately from the Chloride Compliance Project and recirculate the EIR.

In response to the most recent Court ruling with regard to the Chloride Compliance Project, SCVSD is preparing a Recirculated Draft EIR for the Chloride Compliance Project, which is anticipated to be released in late spring 2017.

11-4
cont'd

- 4. 4.21-6 Impact Analysis, *page 4.21-8*, second paragraph under Util-5 – The CSDLAC anticipates the Project would generate an average wastewater flow of ~~138,942~~ 124,304 gallons per day (based on the project characteristics provided 2.2-1 Project Characteristics of the DEIR – 55,600 square feet of general retail, an assisted living facility of up to 120 rooms, 312 multi-family rental units, 122 townhomes, a total of 146 single family homes, and the demolition of the existing 123 mobile home units). The wastewater generated would be approximately ~~0.497%~~ 0.44% of the SCVJSS' treatment capacity of 28.1 mgd for average day flows.

11-5

- 5. 4.22-3 Existing Conditions, *page 4.22-20*, third paragraph down – ~~The SCVSD prepared a Chloride Compliance Facilities Plan (Facility Plan) and Final Environmental Impact Report (FEIR) to meet dual objectives of reducing chloride and increasing the use of recycled water to help offset demands of potable water in the Santa Clarita Valley.~~

11-6

In response to the most recent Court ruling with regard to the Chloride Compliance Project, SCVSD is preparing a Recirculated Draft EIR for the Chloride Compliance Project, which is anticipated to be released in late spring 2017. This document updates and supplements the 2013 Facilities Plan and EIR to include brine concentration and limited trucking as the brine disposal option and to separate the Recycled Water Project.

- 6. All other information concerning Districts' facilities and sewerage service contained in the document is current.

11-7

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

11-8

Very truly yours,



Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

Enclosure

cc: M. Sullivan
M. Tatalovich

DOC: #4121666.SCVSD99

- 11-5 The text changes for DEIR Section 4.21-6, page 4.21-8 (second paragraph) requested by the County Sanitation Districts of Los Angeles County will be incorporated into the Draft FEIR. The text on DEIR page 4.21-8 will be revised as shown in the Draft FEIR.

The CSDLAC anticipates the Project would generate an average wastewater flow of 124,304 ~~138,942~~ gallons per day based on the project characteristics provided in Section 3.0.¹²⁴ The wastewater generated by the Project would be approximately 0.44% ~~0.497%~~ of the SCVJSS' treatment capacity of 28.1 mgd for average day flows.

- 11-6 The text changes for DEIR Section 4.22-3, page 4.22-20 requested by the County Sanitation Districts of Los Angeles County will be incorporated into the Draft FEIR.
- 11-7 The comment notes that all other information concerning the County Sanitation Districts of Los Angeles County's facilities and sewerage service in the DEIR is current. No further response is required.
- 11-8 The comment provides contact information for staff at the County Sanitation Districts of Los Angeles County. No further response is required.



1955 Workman Mill Road, Whittier, CA 90601-1400
 Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
 Telephone: (562) 699-7411, FAX: (562) 699-5422
 www.lacsd.org

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

GRACE ROBINSON HYDE
 Chief Engineer and General Manager

January 15, 2016

Ref File No.: 3559576

Ms. Collette L. Morse, AICP Principal
 Morse Planning Group
 145 North C Street
 Tustin, CA 92780

Dear Ms. Morse:

Response Letter for Sand Canyon- Soledad Canyon Mixed Use Project Questionnaire

This is in reply to your questionnaire, which was received by the Santa Clarita Valley Sanitation District (District) on December 22, 2015. We offer the following responses to your inquiry:

1. **Please indicate the location of facilities which serve the project area and present available capacity for the affected trunk line and treatment plant.**

The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the District, for conveyance to the District's Soledad Canyon Trunk Sewer Section 5, located in Soledad Canyon Road at Lost Canyon Road. The District's 18-inch diameter trunk sewer has a design capacity of 5.7 million gallons per day (mgd) and conveyed a peak flow of 2.3 mgd when last measured in 2012.

2. **What is the estimated sewage flow for the project based upon information provided?**

The expected average wastewater flow from the proposed project, identified as 55,600 square feet of commercial development, 148 single family homes, 120 town homes, 312 apartments, and 120 assisted living units, is 138,942 gallons per day. For a copy of the District's average wastewater generation factors, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and click on the [Table 1, Loadings for Each Class of Land Use](#) link.

3. **Would implementation of the proposed project present a significant increase in service demand based upon project development?**

As indicated in item 1 above, the available capacity for the District's Soledad Canyon Trunk Sewer Section 5 is 3.4 mgd as of 2011. Please note availability of sewer capacity depends upon project size and timing of connection to the sewerage system. Because there are other proposed developments in the area, the availability of trunk sewer capacity should be verified as the project advances. Please submit a copy of the project's build-out schedule to the undersigned to ensure the project is considered when planning future sewerage system relief and replacement projects.

DOC: #3586172.SCVDD99

Recycled Paper 

Ms. Collette L. Morse

-2-

January 15, 2016

4. **Does the wastewater treatment provider which serves or may serve the project area have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

The District operates two water reclamation plants (WRPs), the Saugus WRP and the Valencia WRP, which provide wastewater treatment in the Santa Clarita Valley. These facilities have a combined design capacity of 28.1 mgd and currently process an average flow of 18.9 mgd.

5. **Is there any other relevant information regarding significant project impacts of the proposed project?**

Portions of the project area are outside the jurisdictional boundaries of the District and will require annexation into the District before sewerage service can be provided to the proposed development. For a copy of the District's Annexation Information and Processing Fee sheets, go to www.lacsd.org, Wastewater & Sewer Systems, Will Serve Program, and click on the appropriate link. For more specific information regarding the annexation procedure and fees, please contact Ms. Donna Curry at (562) 908-4288, extension 2708.

6. **Do you have any assessment fees for other required or recommended mitigation measures for the proposed project?**

The District is empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the District's Sewerage System or for increasing the strength or quantity of wastewater discharged from connected facilities. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. Payment of a connection fee will be required before a permit to connect to the sewer is issued. For more information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and search for the appropriate link. In determining the impact to the Sewerage System and applicable connection fees, the District's Chief Engineer will determine the user category (e.g. Condominium, Single Family home, etc.) that best represents the actual or anticipated use of the parcel or facilities on the parcel. For more specific information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at (562) 908-4288, extension 2727.

7. **Please include any additional information you feel is pertinent to the Environmental Impact Report analysis for the proposed project.**

In order for the District to conform to the requirements of the Federal Clean Air Act (CAA), the design capacities of District wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CCA. All expansions of District facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of District treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the District intends to provide this

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Ms. Collette L. Morse

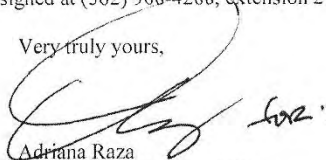
-3-

January 15, 2016

service up to the levels that are legally permitted and to inform you of the currently existing capacity and any proposed expansion of District facilities.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,



Adriana Raza
Customer Service Specialist
Facilities Planning Department


AR:ar

cc: D. Curry
M. Sullivan
M. Tatalovich

DOC: #3586172.SCV099


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Comment Letter 12
County of Los Angeles Public Library
April 17, 2017



**County
Library**
Los Angeles
Skye Patrick
County Librarian

County of Los Angeles Public Library
7400 East Imperial Hwy., Downey, CA 90242 • (562) 940-8400 • colapublib.org



April 17, 2017

Patrick LeClair
23920 Valencia Blvd, Suite 300
Santa Clarita, CA 91355

Dear Mr. Patrick LeClair:

**NOTICE OF PREPARATION OF DRAFT ENVIRONMENTAL IMPACT REPORT
SAND CANYON PLAZA, MASTER CASE 06-143**

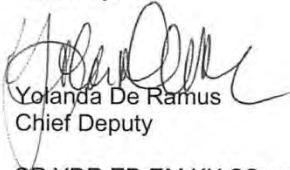
This is in response to the Sand Canyon Plaza Project Draft Environmental Impact Report.] 10-1

The project includes 580 residential units and the development's overall impact to the County of Los Angeles Public Library (Public Library) as follows:] 10-2

- The project site is located in the City of Santa Clarita and the jurisdiction is not served by the Public Library. The City of Santa Clarita withdrew from the County Library system in 2011. The closest Public Libraries are Stevenson Ranch Library (14.5 miles), San Fernando Library (16.8 miles) and Castaic Library (22.7 miles).
- There will be no impact on the Library Mitigation Fee or special tax as the project area is served by the City of Santa Clarita.] 10-3

If you have any questions or require additional information regarding this matter, please contact Elsa Muñoz at (562) 940-8450.] 10-4

Sincerely,



Yojanda De Ramus
Chief Deputy

SP:YDR:EB:EM:KK:SS:cn
U:\STAFFSERVICES\DEVELOPER FEE\EIR\Sand Canyon Plaza, LLC.doc

c: Ting Fanti, Head, Budget and Fiscal Services, Public Library
Jesse Walker-Lanz, Library Administrator, Public Library
Jason Tajima, Chief Executive Office

Response to Comment Letter 12
County of Los Angeles Public Library
April 17, 2017

- 12-1 This comment is an introduction to comments that follow. No further response is required.
- 12-2 The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 12-3 The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.
- 12-4 The comment is a conclusion to the comment letter and does not raise an environmental issue; no further response is required.

Comment Letter 13
Office of the Sheriff, County of Los Angeles
May 5, 2017



OFFICE OF THE SHERIFF

COUNTY OF LOS ANGELES

HALL OF JUSTICE

JIM McDONNELL, SHERIFF

Patrick



RECEIVED
PLANNING DIVISION
MAY 10 2017
CITY OF SANTA CLARITA

May 5, 2017

Mr. Patrick Leclair, Senior Planner
Community Development Department
City of Santa Clarita
23920 Valencia Boulevard, Suite 320
Santa Clarita, California 91355

Dear Mr. Leclair:

REVIEW COMMENTS
DRAFT ENVIRONMENTAL IMPACT REPORT
SAND CANYON PLAZA MIXED-USE PROJECT
(STATE CLEARINGHOUSE NO. 2015051005)

Thank you for inviting the Los Angeles County Sheriff's Department (Department) to review and comment on the March 2017 Draft Environmental Impact Report (DEIR) for the Sand Canyon Plaza Mixed-Use Project (Project). The proposed Project site encompasses 87 acres north of Soledad Canyon Road, east of Sand Canyon Road, north of State Route 14, and west of the Pinetree residential community in the City of Santa Clarita.

The proposed Project will remove an existing 123-unit mobile home park from the Project site, and will construct up to 580 residential units, 55,600 square feet of retail commercial spaces, and a 120-bed assisted living facility. The proposed Project will also construct related site amenities and improvements adjacent to Sand Canyon Road.

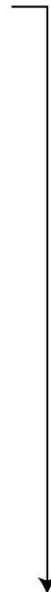
The Project is located within the service area of the Department's Santa Clarita Valley Station (Station). Accordingly, the Station reviewed the DEIR and authored the attached review comments (see correspondence, dated April 17, 2017, from Captain Robert J. Lewis).

For future reference, the Department provides the following updated contact information for all requests for review comments, law enforcement service information, California Environmental Quality Act documents, and other related correspondence:

211 WEST TEMPLE STREET, LOS ANGELES, CALIFORNIA 90012

A Tradition of Service
Since 1850

13-1



Response to Comment Letter 13
Office of the Sheriff, County of Los Angeles
May 5, 2017

- 13-1 Staff has received this comment, but did not receive the referenced attachment. Staff has contacted the Sheriff Department but has not received a copy of the attachment.

Mr. Leclair

- 2 -

May 5, 2017

Tracey Jue, Director
Facilities Planning Bureau
Los Angeles County Sheriff's Department
4700 Ramona Boulevard, Fourth Floor
Monterey Park, California 91754

Attention: Maynora Castro, Facilities Planner II
MGCastro@lasd.org

Should you have any questions regarding this matter, please contact me at (323) 526-5657, or your staff may contact Ms. Maynora Castro of my staff at (323) 526-5578.

Sincerely,

JIM McDONNELL, SHERIFF



Tracey Jue, Director
Facilities Planning Bureau

13-1

Mr. Leclair

- 3 -

May 5, 2017

TJ:MC:mc/mm

Attachment

c: Robert J. Lewis, Captain, Santa Clarita Valley Station (SCV)
Justin Diez, Operations Lieutenant, SCV
David Culver, Assistant Director, Facilities Planning Bureau (FPB)
Meghan Wang, Supervising Facilities Project Manager, FPB
Maynora Castro, Departmental Facilities Planner II, FPB
Chrono
(EIR-Sand Canyon Plaza)

3.2 Public Comments

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Comment Letter 14
Sherilyn Koss
March 27, 2017

From: Sherilyn Koss [mailto:sherilynjk@sbcglobal.net]
Sent: Monday, March 27, 2017 1:13 AM
To: Patrick Leclair
Subject: Sand Canyon Plaza Project - Koss

RE: Request for Altering plan of Sand Cyn Plaza Bldg's G-H-I and PA-2

Hello Patrick,

Since I met with you last week, my husband and I have had time to look over the newest renderings you provided me (Plan 2, 3, and our view of Sand Canyon Plaza from 28702 Macklin Ave). We now have greater concerns over Cumulative noise and light, specifically because of the current layout of Apartment Buildings G-H-I around the PA-2 parking lot.

14-1

As they are planned now, the buildings are in a 'U' shape with the open end on Sand Canyon Rd (and directly adjacent to us), plus the plan has no substantial berm indicated along that segment of Sand Canyon Rd. In this layout, generous trees would be our only recourse to shield noise and light from us, and still may not guarantee a reasonable reduction of noise and light. We are concerned the layout itself would nullify the benefits of both trees and a berm (if added).

We have read that the DEIR foresees a substantial increase in sound and light for us (Cumulative). However we believe the 'U' shape could potentially create a WORSE noise problem than the DEIR may have projected, because all the noise (and light) from the parking lot will reverberate out/up towards Macklin Ave. We believe this potential cumulative outcome is highly likely, considering we (and our neighbors) already experience a considerable 'bowl effect' with sound from the direction of the mobile home park; noise 'carries' uphill and we can often hear a far-off conversation from the mobile home park as easily as if it's 10 feet away. Currently, most winds that blow to us travel through the small valley in which the Sand Canyon Plaza is to be built, and uphill to us (hence the 'bowl effect').

After making these considerations, we looked closer at Mr. Clark's plan for a possible change for the better. We believe that the layout of the buildings around the parking lot (BLDG's G-H-I and PA-2) can be changed to our benefit (and other Macklin neighbors') by simply 'flipping the U shape' of the buildings to open in the opposite direction. I have attached a MOCK UP 'flip' image of what I am describing, with the hope that we can communicate better through imagery. This mock up is not to scale and probably not entirely accurate – but I hope it is close enough to help you judge whether this could be a feasible alternative plan.

14-2

You should note: I have flipped BLDG's I,H, but only moved BLDG G to the right. I have kept the same number of parking spaces, and added covered parking to the left of BLDG G to keep noise and light minimal. I have lengthened the parking structures at center (PA-2) to gain 4 parking places.

14-3

We believe that by moving BLDG I to the street, the light and noise we might be subjected to from within the 'U' of the current plan can be greatly reduced. Additionally, we believe that sounds on the street may increase by way of reverberating from BLDG I towards us, but we hope this noise can be diminished by trees planted along the perimeter of Sand Canyon Plaza, along our side of Sand Canyon, and on our own property. Faced with the choice, we would prefer the increase of 'road noise' to 'parking lot noise and light.'

We have discussed this idea with our neighbor at 28712 Macklin Ave., and they feel this idea is a good one.

14-4

If this idea isn't acceptable, please let me know. Maybe we can find another solution to help mitigate potential cumulative noise and light.

14-5

Patrick, it is my hope that you will look this over first, and if you believe this is a reasonable idea, please forward it to Mr. Clark for his consideration (royalclarkdevco@aol.com). If either of you need to meet with me, or want to discuss anything further please contact me anytime. I hope the picture shown is enough to convey our idea. Thank you!!

14-6

See attached: 2 files- '3-2017 Sand Cyn Plaza flip copy' and '...orig copy' (for reference).

Sherilyn (and Mark) Koss
28702 Macklin Ave
Canyon Country, CA 91387
hm. (661) 251-5797
email: sherilynjk@sbcglobal.net

Response to Comment Letter 14**Sherilyn Koss****March 27, 2017**

14-1 through

14-6 The commenter is requesting that the City and Project applicant make changes to the building configuration in PA-2 to address potential noise and lighting issues. The commenter lives directly to the west of the Project site across Sand Canyon Road. The Project Applicant has agreed to make the change suggested by the commenter and said the change will be incorporated into the Project design prior to approval. Furthermore, the City has added a condition of approval requiring enhanced landscaping along Sand Canyon Road to further reduce potential noise and lighting impacts.



“Original”



“Flip”

Comment Letter 15
Golden State Environmental Justice Alliance
April 8, 2017

Page 1 of 8



P.O. Box 79222
Corona, CA 92877

April 8, 2017

VIA ELECTRONIC MAIL

Patrick LeClair, Associate Planner
City of Santa Clarita
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355
pleclair@santa-clarita.com

SUBJECT: SAND CANYON PLAZA MIXED USE PROJECT EIR

To whom it may concern:

Thank you for the opportunity to comment on the Environmental Impact Report (EIR) for the proposed Sand Canyon Mixed Use project. Please accept and consider these comments on behalf of Golden State Environmental Justice Alliance. Also, Golden State Environmental Justice Alliance formally requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all communications to Golden State Environmental Justice Alliance P.O. Box 79222 Corona, CA 92877.

15-1

Response to Comment Letter 14
Golden State Environmental Justice Alliance
April 8, 2017

- 15-1 This comment does not address the adequacy of the environmental analysis in the Draft Environmental Impact Report (EIR). No response is required.

The Project applicant notes that the commenter did not contact City staff or attend any Project hearings before submitting the April 8, 2017 comment letter on the Draft EIR. Many of the issues raised in the comment letter could have been addressed and resolved by communications with City Staff or by presenting questions during the Project processing effort over the last three years since the Project application was filed.

1.0 Summary

As we understand it, the proposed project includes the development of the 87.5 acre Sand Canyon Plaza Mixed-Use Project site with 580 residential units, 55,600 square feet of retail commercial (including restaurants), and a 75,000-square-foot (120-bed) assisted living facility. The General Plan and Zoning designations on the project site are MXN (Mixed Use Neighborhood) and UR-3 (Urban Residential). No buildings are proposed on the portion of the site designated UR-3.

15-2

The project includes three private recreation areas, commercial plaza areas, various private streets, driveways and landscaped areas, and adjacent roadway improvements to Sand Canyon Road (including the construction of two roundabouts) and Soledad Canyon Road.

15-3

To implement the project, the City will need to approve the following entitlements: 1) a tentative tract map, 2) a conditional use permit, 3) a hillside review, including a ridgeline alteration permit, 4) a minor use permit, and 5) an oak tree permit. Additional subsequent ministerial actions, such as grading permits, building plan review, and building permits, would be required by the City prior to actual grading and construction of the Project.

15-4

3.0 Project Description

3.8 Land Use Designations and Zoning

The EIR states that the project site has a General Plan and zoning designation of MXN (Mixed Use Neighborhood) and Urban Residential 3 (UR-3). However, a map of the project site demonstrating the land use designation at the project site is not provided. Based on a review of the project site in comparison to the General Plan Land Use map, it appears that the project site has a designation of MXN and UR-2. It appears that the UR-3 designation is located on the northwest side of Sand Canyon Road where the existing Sand Canyon Ranch Apartments are located. The EIR must be revised to clarify this discrepancy and adequately inform the public and decision makers of the Land Use designations at the project site.

15-5

3.13 Description of Project

The EIR states that the assisted living facility located in Planning Area 1 will be “consistent with the requirements of the MXN zone” because the maximum building height is 55 feet. The MXN

15-6

- 15-2 This comment does not address the adequacy of the environmental analysis in the Draft EIR. No response is required.
- 15-3 This comment does not address the adequacy of the environmental analysis in the Draft EIR. No response is required.
- 15-4 This comment does not address the adequacy of the environmental analysis in the Draft EIR. No response is required.
- 15-5 A Project Site Development Plan with the applicable MXN and UR-3 General Plan designations and zoning classifications overlay is attached (page 227). The General Plan designations and zoning classifications are based on the November 2016 updated City General Plan and Zoning maps found at <http://www.santa-clarita.com/home/showdocument?id=6975> (General Plan Map) and <http://www.santa-clarita.com/home/showdocument?id=6970> (Zoning Map). The Project site has MXN and UR-3 General Plan designations and zoning classifications as accurately stated in the Draft EIR. A UR-3 designation and zoning covers only a 2.7-acre area on the southeast edge of the Project site, which area will not be developed with any buildings or structures as explained in Draft EIR Section 4.10-6, page 4.10-13. No UR-2 General Plan designation exists on the Project site. No revision to the Draft EIR is required.
- 15-6 As discussed in Draft EIR Section 4.10-6, page 4.10-18, the 2-story assisted living facility within Planning Area 1 will be 40 feet in height, which is below the maximum 50-foot height limit for the MXN designation and zone. The statement at Draft EIR Section 3.13, page 3-12, that the assisted living facility would be 55 feet high is in error.
- No building heights in the Project development will be above 50 feet in height. All building heights in the Project development comply with General Plan designations and zoning regulations.

zone of the General Plan states that “Building heights shall not exceed 50 feet”. The EIR is misleading to the public and decision makers by stating that a 55 foot tall building is consistent with the MXN maximum 50 foot height requirement. In the Land Use analysis section, the EIR discloses that a conditional use permit is required for building heights exceeding 50 feet. The Project Description is deficient by not including the required conditional use permit for exceeding the 50 foot height limit.

15-6
cont'd

Planning Areas 2 -5 proposes a total of 580 attached and detached residential units. The EIR states that “required parking per the MXN and UR-3 zone requirements” will be provided in each Planning Area. However, the EIR stated earlier that no buildings are proposed in the UR-3 area of the proposed project. Since there is no land use designation map provided, the public and decision makers are unable to verify if Planning Areas 2-5 are located within the UR-3 zone or not. The EIR does not provide any reasoning for applying the MXN and UR-3 parking requirements when it has stated that no building is proposed within the UR-3 designated area of the project site.

15-7

4.3 Air Quality

The Air Quality Analysis assumes a maximum 8 hour day of construction, 5 days per week. Section 11.44.080 Special Noise Sources—Construction and Building of the Santa Clarita Municipal Code permits construction between the hours of 7:00 AM - 7:00 PM, Monday - Friday and 8:00 AM - 6:00 PM on Saturday. The AQA does not present the “worst-case scenario” of construction equipment emitting pollutants for the legal 12 hours per weekday plus 10 hours on Saturday. The Air Quality modeling must be revised to account for these legally possible longer construction days and increased number of construction days.

15-8

General Plan Consistency

The EIR indicates that the proposed project is consistent with General Plan Objective CO 7.1: Reduce air pollution from mobile sources and Policy CO 7.1.1: Through the mixed land use patterns and multi-modal circulation policies set forth in the Land Use and Circulation Elements, limit air pollution from transportation sources. However, the Air Quality Analysis concludes that significant and unavoidable operational emissions impacts from ROG and NOx will occur as a result of the project. These emissions are attributed to mobile vehicle sources. The EIR does not propose any mitigation measures for this significant impact. The EIR is erroneous and misleading to the public and decision makers by stating that the proposed project is consistent

15-9

- 15-7 The comment accurately states that Project Areas 2 through 5 propose a total of 580 attached and detached residential units, and that no development will occur in the UR-3 designation and zone located in the southeast portion of the Project site. (See the attached Project Site Development Plan (page 227) with the applicable MXN and UR-3 General Plan designations and zoning classifications overlay.) Accordingly, all Project parking in Planning Areas 1 through 5 will comply with the parking requirements of the MXN zone pursuant to Section 17.55.050 of the City's Unified Development Code. The statement at Draft EIR Section 3.13, page 3-18, that any Project parking will conform to the UR-3 zone requirements is in error.
- 15-8 This comment questions some of the assumptions utilized in the Draft EIR's construction air quality analysis, including the hours per construction day and number of construction days per week.

Section 15151 of the CEQA Guidelines states:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

Section 15003 of the CEQA Guidelines states:

CEQA does not require technical perfection in an EIR, but rather adequacy, completeness, and a good-faith effort at full disclosure. A court does not pass upon the correctness of an EIR's environmental conclusions, but only determines if the EIR is sufficient as an informational document. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692)

Section 15124(c) of the CEQA Guidelines states:

A general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities.

With these factors in mind, the Draft EIR presented and analyzed a realistic and conservative (i.e., worst-case) construction schedule, and applied a set of daily construction assumptions consistent with survey data from the South Coast Air Quality Management District (SCAQMD).

With respect to the comment's assertion that the number of daily construction hours could vary from the assumptions utilized, the Draft EIR assumed the use of heavy equipment that generate air quality emissions in a manner consistent with SCAQMD survey data for projects of this size,

type and location.⁷ The Draft EIR also applied SCAQMD data related to the equipment's usage hours, horsepower, and load factor⁸ for each piece of equipment. As such, the Project assumed heavy equipment in a manner consistent with published SCAQMD survey data and applied SCAQMD data for use and operations of such equipment. It is also important to note that construction hours do not directly translate to the number of hours per day that heavy equipment would operate on a given day. The air quality analysis is intended to identify the daily air quality emissions associated with the operation of heavy equipment, fugitive dust generated by use of equipment and vehicles, worker, vendor, and haul trips, and off-gas from coatings. As such, many other construction activities such as the use of hammers, nail guns, framing work, and use of other electric tools would have no direct impact on the generation of air quality emissions. It should also be noted that if construction was to occur more days per week as suggested by the comment, the daily emissions would decrease. This is due to the fact that the model averages various emissions over the course of the construction period. These factors would include but not be limited to: 1) more hauling days would result in fewer daily hauling trips, 2) a longer construction period would result in decreased vendor trips associated with bringing building materials to the site, and 3) likely a reduction in daily worker trips due to a longer and slower build-out process. These factors would all lead to lower daily emissions, and the thresholds of significance are based on daily maximums.

In conclusion, the Draft EIR includes a schedule of construction equipment that operates 8 hours per day, 5 day per week, which is built into the CalEEMod programs (Version 2016.3.1 and Version 2013.2.2) used to calculate construction emissions, and the schedule is based on detailed survey data collected by SCAQMD about construction projects comparable in size and scope to the Project. The CalEEMod programs (Version 2016.3.1 and Version 2013.2.2) are the industry standard programs used to model construction emissions. The 8-hour-per-day, 5-day-per-week construction equipment operating schedule is therefore reasonable and recognizes that construction equipment is often not operating even when other daily construction activities are occurring on a site.

- 15-9 As discussed at Draft EIR Table 4.3-9 (page 4.3-33) and Table 4.10-1 (page 4.10-17), the Project's mixed-use nature and urban location will reduce project-related traffic trips by approximately 9% compared to a project without those features. This reduction in trips would reduce vehicle miles traveled (VMT), congestion, and associated air quality emissions. In addition, it should be noted that the Project would be consistent with the City's Climate Action Plan (CAP) and CalGreen Code, which require several project design features that would reduce air quality and greenhouse gas emissions as discussed at Draft EIR pages 4.7-27 and 4.7-28. These features include: mixed-use design resulting in VMT reductions, pedestrian network improvements, low-flow water fixtures, low impact vegetation and irrigation, energy reduction (e.g., high efficiency appliances and lighting, and solar panels), and on-site electric vehicle charging

7 Based on construction activity surveys performed by the SCAQMD (see Appendix E to the CalEEMod 2013.2 User's Guide, July 2017).

8 The load factor is the ratio of the actual output to the maximum output of a piece of equipment.

stations. As such, the Project does include several features that would serve to reduce air quality and GHG emissions.

Further, as discussed at Draft EIR section 4.19-6, page 4.19-21, the Project would generate nearly 40% less traffic than what was analyzed for the site in the General Plan. The General Plan estimated that a future development of the site with commercial and residential uses would generate approximately 13,400 ADT. The Project would generate 8,163 ADT.⁹

In addition, as discussed at Draft EIR section 4.19-6, pages 4.19-29 and 4.19-32, MM T-1 and MM T-2 modify and coordinate traffic signal timing to reduce traffic queues and congestion on nearby road segments and improve transportation systems, which reduces air quality impacts from mobile vehicle sources.

Furthermore, as discussed at Draft EIR section 4.14-6, pages 4.14-16 to 4.14-17, the Project would provide a Class II bike lane along the Project's frontage on Soledad Canyon Road. A Class I trail would be provided along the east side of Sand Canyon Road along the Project's frontage. Internal trails would connect to each of these facilities allowing for access to regional trail systems such as the Stetson Ranch trails, the Sand Canyon Trail, and the Santa Clara River Trail. All on-site trails would be accessible to homeowners, as well as to the public.

Additionally, as discussed at Draft EIR Table 4.3-9 (page 4.3-33), the Project will provide on-site electric vehicle (EV) charging stations, supporting and promoting the use of electric vehicles. This Project Design Features will be included by the City as Project elements in the entitlement approvals for the Project and will be enforceable.

Moreover, consistent with goals of the City's CAP, the Project would include walkability design and pedestrian network improvements (see Draft EIR page 4.7-27). As stated therein, the Project would create and enhance opportunities for non-vehicular travel and encourage pedestrian mobility by providing an internal pedestrian circulation system that links residential neighborhoods to on-site recreation areas, regional trail systems, and neighborhood retail/commercial areas.

As discussed at Draft EIR Sections 4.3-6.3 (page 4.3-29) and 4.3-6.4 (page 4.3-31), localized operational air quality emissions would not exceed the South Coast Air Quality Management District ("SCAQMD") thresholds of significance, and these impacts would be considered less than significant. Further, as concluded at Draft EIR Sections 4.3-6.3 (pages 4.3-28 to 4.3-29) and 4.3-6.4 (page 4.3-30), the Project has a net increase in regional operational emissions that would exceed the regional thresholds of significance set by the SCAQMD for ROG and NO_x during the summertime and the wintertime. These emissions are primarily due to motor vehicles and area source emissions associated with the operation of a relatively high number of proposed residential uses. These emissions are typical for a mixed-use commercial and residential project of this size, and there is no feasible mitigation to reduce these emissions to a less-than-

9 As determined in Stantec's May 19, 2017 Traffic Study Supplemental Memorandum for the Project, the Project modifications discussed in footnote 4 would generate a net increase of only 176 daily traffic trips, for a total of 8,136 ADT.

significant level. There is currently no approved regional plan or program in place into which the project applicant could pay its fair share toward reduction of regional operational emissions that would exceed the regional thresholds of significance set by the SCAQMD for ROG and NOX during the summertime and the wintertime. Therefore, mitigation is infeasible. An EIR is not required to identify and discuss infeasible mitigation measures. *Clover Valley Foundation v. City of Rocklin* (2011) 197 Cal.App.4th 200, 245 (“Nothing in CEQA requires an EIR to explain why certain mitigation measures are infeasible.”); see *Cherry Valley Pass Acres & Neighbors v. City of Beaumont* (2010) 190 Cal.App.4th 316, 351. Regional operational air quality impacts will remain regionally significant and unavoidable.

Also as discussed at Draft EIR 4.3-6.4 (pages 4.3-31 to 4.3-32), while the Project would exceed regional thresholds of significance primarily related to motor vehicle travel, the Project would not exceed the assumptions utilized in preparing the SCAQMD Air Quality Management Plan (AQMP) and would not have the potential to impair implementation of the AQMP. However, the thresholds of significance developed by the SCAQMD are not sensitive to property or project size, or the type of use proposed by a project. As discussed in more detail below, projects, land uses, and activities that are consistent with the applicable assumptions used in the development of the AQMP would not necessarily jeopardize attainment of the air quality levels identified in the AQMP if they exceed the SCAQMD’s recommended daily emissions thresholds. The AQMP was prepared to achieve national and state air pollution standards within the region. A project that is considered to be consistent with the AQMP would not interfere with attainment of AQMP goals, because the growth from the Project is included in the regional projections used to formulate the AQMP. Therefore, projects, land uses, and activities that are consistent with the applicable assumptions used in the development of the AQMP (i.e., the RTP/SCS) would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD’s project-level daily emissions thresholds.

The Project is a mixed-use commercial and residential development that would increase the City’s population, housing, and employment. However, the Project is consistent with City’s 2011 General Plan and the zoning designations of MXN (Mixed Use Neighborhood) and Urban Residential 3 (UR-3), and the Project would be consistent with the site’s maximum allowable density of 18 dwelling units per acre planned for the site. Because the Project would be consistent with the planned build out of the City’s 2011 General Plan, the Project’s population, housing, and employment increases would not have the potential to conflict with regional growth projections identified in SCAG’s RTP/SCS and the AQMP. Furthermore, the Project would be consistent with primary goals of the RTP/SCS including, but not limited to, mixed-use design and the promotion of active transportation (i.e., non-motorized transportation such as walking and bicycling). Specifically, the Project’s traffic analysis indicates the Project’s mixed-use nature reduces motor vehicle trips by approximately 9% due to internal capture. As presented in more detail in the Project’s Greenhouse Gas Emissions Technical Report, this design feature would result in a reduction of approximately 2,378,560 vehicle miles traveled (VMT) compared to a project without similar design features. Therefore, the Project’s design would be consistent with the regional VMT reduction strategies identified in the RTP/SCS and AQMP. Based on the information presented above, the Project would not exceed the

assumptions utilized in preparing the AQMP and would not have the potential to impair implementation of the AQMP. Therefore, impacts with respect to regional plans and AQMP consistency would be less than significant. Accordingly, the Project is consistent with City General Plan objectives and policies regarding limiting mobile source air pollution.

with any General Plan objective or policy related to limiting mobile source air pollution as mobile vehicle sources will generate a significant and unavoidable impact to air quality.

15-9
cont'd

Further, the EIR states that the proposed project is consistent with General Plan Objective CO 7.2: Apply guidelines to protect sensitive receptors from sources of air pollution as developed by the CARB, where appropriate and Policy CO 7.2.1: Ensure adequate spacing of sensitive land uses from the following sources of air pollution: high traffic freeways and roads; distribution centers; truck stops; chrome plating facilities; dry cleaners using perchloroethylene; and large gas stations, as recommended by CARB. The EIR determines consistency with this policy because “the project would be consistent with CARB’s recommendations regarding the siting of sensitive receptors” even though a 120 bed assisted living facility is proposed to be located within 500 feet of SR-14. The EIR does not provide evidence in this section of how the project is consistent with the siting requirements when an assisted living facility is proposed to be located within 500 feet of SR-14.

15-10

4.10 Land Use

4.10-3 Existing General Plan and Zoning Designations

The EIR does not provide a General Plan Land Use map or Zoning map to verify the designations of the project site. The EIR states that the MXN designation permits a maximum density of 18 dwelling units per acre but does not include other pertinent information such as the maximum floor area ratio of 0.5 for non-residential development and maximum building heights of 50 feet. The EIR is inadequate as an informational document and must be revised to include this information.

15-11
15-12

LU-2 Local Land Use Consistency - Santa Clarita General Plan

The EIR states that the proposed project is consistent with Policy LU 1.1.4: Preserve community character by maintaining natural features that act as natural boundaries between developed areas, including significant ridgelines, canyons, rivers and drainage courses, riparian areas, topographical features, habitat preserves, or other similar features, where appropriate. The EIR maintains that the project is consistent even though alteration of a significant ridgeline is proposed. The EIR continues by stating that “the Project would still maintain natural boundaries between developed areas to the east” but does not provide details on what these natural boundaries consist of or supporting evidence for this statement. Further, it is stated that “the

15-13
15-14

- 15-10 The comment addresses the potential impact of the existing environment on the proposed Project. CEQA does not require the City to analyze the impact of existing environmental conditions on the Project's future users or residents. *California Bldg. Indus. Ass'n v. Bay Area Air Quality Mgmt. Dist.* (2015) 62 Cal.4th 369, 377.

Notwithstanding, as discussed in Draft EIR Section 4.10-6, page 4.10-17, a Freeway Adjacent Health Risk Assessment (HRA), Draft EIR Appendix 2-3, was prepared for the Project in January 2016, which addressed the potential exposure and health risks associated with locating sensitive land uses within 500 feet of the SR-14 Freeway. The HRA identified elevated ambient air quality and health conditions for locations on the Project site within 500 feet of the SR-14 Freeway. As discussed in Draft EIR Sections 3.14 and 4.10-6 (page 4.10-21), the Project includes 5 specific Project Design Features intended to minimize the effects of exposure to elevated ambient air quality conditions for sensitive uses. These Project Design Features will be included by the City as Project elements in the entitlement approvals for the Project and will be enforceable. Also, Project Design Feature PDF-11 (identified at Draft EIR Section 3.14, p. 3-25) will be changed from "consider options for mechanical and ventilation systems ..." to "utilize options for mechanical and ventilation systems"

Further, the Project Design Features are consistent with the recommendations of the California Air Resources Board (CARB) Technical Advisory, Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways (April 2017) as discussed at pages 32 through 39 of the CARB Technical Advisory. Accordingly, substantial evidence demonstrates the Project's compliance with City General Plan Objective CO 7.2 and Policy CO 7.2.1 regarding applying guidelines developed by CARB to protect sensitive receptors from sources of air pollution.

- 15-11 A Project Site Development Plan with the applicable MXN and UR-3 General Plan designations and Zoning classifications overlay is attached (page [227](#)).
- 15-12 As discussed in Draft EIR Section 4.10-6, page 4.10-18, the commercial portion of the Project includes up to 60,000 square feet¹⁰ in Planning Area 1, resulting in a floor area ratio (FAR) of 0.17, which is below the maximum of 0.5, but is also below the minimum of 0.2. Thus, the Project requires a Minor Use Permit for the commercial uses. All commercial development complies with City Unified Development Code standards for maximum floor area ratio.

The Project applicant is processing minor modifications to the Project Site Development Plan in Planning Area 1. The minor modifications include an addition of 1) 4,400 square feet of commercial, retail and restaurant space up to 60,000 total square feet -- an approximately eight percent (8%) increase in this land use type, and 2) 10,000 square feet for the assisted living

10 The Project Applicant is processing minor modifications to the Site Development Plan, which modifications include (1) a reduction in grading and the development footprint at and along the ridgeline in Planning Area 5, (2) the transfer of 27 detached dwelling units from Planning Area 5 to Planning Area 3, (3) an increase of up to 4,400 square feet of commercial retail or restaurant land uses in Planning Area 1, (4) the addition of about 10,000 square feet and 20 beds in the assisted living facility in Planning Area 1, and (5) construction of a three (3) level parking structure with a total of 264 parking spaces in Planning Area 1. No increase in any Project development footprint will occur, but will substantially decrease in Planning Area 5. Total residential dwelling units will remain at 580.

facility (20 additional beds). The Project FAR is still well below the maximum .5 FAR even with this additional commercial and assisted living square footage. The development footprint of Planning Area 1 will not increase with these minor modifications. The modifications to the Project Site Development Plan are being considered by the City Planning Commission at its June 6, 2017 Regular Meeting.

Additionally, as stated in Draft EIR Section 4.10-6, page 4.10-18, all building heights in the Project development will be at 50 feet in height or below, which complies with all applicable General Plan designations and zoning regulations. Refer to response to comment 15-6 (page [201](#) above).

- 15-13 As discussed in Draft EIR Table 4.10-1, page 4.10-13, although alteration of a significant ridgeline is proposed, the Project will still maintain natural boundaries between developed areas to the east. This is demonstrated on the Project's revised tentative tract map. As shown on the revised tentative tract map, open space lots would be located between developed areas on the project site and the existing residential development to the east maintaining natural features between developed areas.

The Project applicant is also processing minor modifications to the Project Site Development Plan in Planning Area 5. The minor modifications include the transfer of 27 detached residential dwelling units from Planning Area 5 to Planning Area 3, which would reduce the development footprint of Planning Area 5 and reduce related impacts to the ridgeline. Approximately 700 linear feet of the ridgeline proposed for development under the original plan would now be preserved under the minor modifications to the Project Site Development Plan. The modifications to the Project Site Development Plan are being considered by the City Planning Commission at its June 6, 2017 Regular Meeting.

- 15-14 As discussed in Draft EIR Table 4.10-1, page 4.10-13, portions of the ridgeline on the Property were previously altered for the widening of Soledad Canyon Road. One benefit of the Project includes the "laying back" of the existing manufactured cut slope to soften its appearance along SR-14 and Soledad Canyon Road. As discussed in the Draft EIR Finding No. 7, page 4.1-28, the visual character of most of the Project site would be altered from its current condition; however, the impact would not be considered significant, because the project site is located immediately adjacent to urban areas and is of similar scale and intensity; approximately 40% of the site would be retained as landscaped and open areas; portions of the ridgeline that extend into the site have been disturbed by previous development and adjacent roadways; and the Project would "lay back" the existing manufactured slope along Soledad Canyon Road, which would allow for this slope to be landscaped, further softening its appearance from SR-14, Soledad Canyon Road and areas to the south.

Furthermore, as discussed in the Draft EIR, condition a. on page 4.1-25, the Project has been designed consistent with the Hillside Development Ordinance, because nearly all of the commercial development and one-half of the residential development proposed with the Project has been concentrated within disturbed portions of the site. The Project would also utilize building setbacks, building heights, compatible structures, and building forms throughout the site to blend buildings and structures with the terrain and surrounding development as much as possible.

Project would “lay back” an existing cut slope to soften its appearance along SR-14 and Soledad Canyon Road” but does not indicate how softening the appearance of a ridge line along SR-14 and Soledad Canyon Road complies with Policy LU 1.1.4 to preserve significant ridgelines.

15-14
cont'd

The EIR does not address consistency with Policy LU 2.3.6: Provide parking alternatives in mixed-use developments, including subterranean parking and structured parking to limit the amount of surface area devoted to vehicle storage. The exact number of parking spaces for each of the five Planning Areas is not provided in the EIR, but Figure 3-4 provides a site plan layout that depicts surface parking lots in each of the Planning Areas. The EIR must address the project’s consistency or inconsistency with Policy LU 2.3.6.

15-15

Project Design Features

The HRA provides design suggestions for the assisted living facility that will be located within 500 feet of SR-14. The language of the HRA is unenforceable, which has translated to unenforceable project design features. The PDF that states to “*consider* options for mechanical and ventilation systems (i.e., supply or exhaust based systems). If a supply-based system is proposed (i.e., actively bringing outside air through intake ducts), *consider* locating intakes as far from the freeway sources as possible” is unenforceable. For another PDF, the unenforceable language of the HRA to “*Consider* site plan design minimizing operable windows and building entries along the freeway” was changed to be implemented as “*Utilize* site plan design minimizing operable windows and building entries along the freeway”. The EIR language that is unenforceable must be revised to be meaningfully implemented.

15-16

4.12 Noise

Figure 4.12-1 Noise Monitoring and Sensitive Receptor Location Map indicates that sensitive receptors were not placed at their property lines nearest the project site for the noise analysis and modeling. The Noise Analysis must be revised to model sensitive receptors at their property lines closest to the project site. Further, Table 4.12-3 Existing Noise Levels in the Vicinity of the Project Site does not include the time of day that the measurements were taken. The Noise Analysis must be revised to include a daytime, afternoon, and evening noise measurement in order to provide the most accurate and meaningful analysis.

15-17

The EIR lists applicable General Plan Noise Element goals, policies, and objectives, but does not include the following applicable policies and objectives:

15-18

15-15 The Project applicant is processing minor modifications to the Project Site Development Plan in Planning Area 1. The minor modifications include construction of a 3-level parking structure with a total of 264 parking spaces. The development footprint of Planning Area 1 will not increase with these minor modifications. The modifications to the Project Site Development Plan are being considered by the City Planning Commission at its June 6, 2017 Regular Meeting. With the addition of the multi-level parking structure, the Project continues to be consistent with General Plan Policy LU 2.3.6.

15-16 The comment addresses the potential impact of the existing environment on the proposed Project. CEQA does not require the City to analyze the impact of existing environmental conditions on the Project's future users or residents. *California Bldg. Indus. Ass'n v. Bay Area Air Quality Mgmt. Dist.* (2015) 62 Cal.4th 369, 377.

Notwithstanding, as discussed in Draft EIR Section 4.10-6, page 4.10-17, a Freeway Adjacent Health Risk Assessment (HRA), Draft EIR Appendix 2-3, was prepared for the Project in January 2016, which addressed the potential exposure and health risks associated with locating sensitive land uses within 500 feet of the SR-14 Freeway. The HRA identified elevated ambient air quality and health conditions for locations on the Project site within 500 feet of the SR-14 Freeway. As discussed in Draft EIR Sections 3.14 and 4.10-6 (page 4.10-21), the Project includes five specific Project Design Features intended to minimize the effects of exposure to elevated ambient air quality conditions for sensitive uses. These Project Design Features will be included by the City as Project elements in the entitlement approvals for the Project and will be enforceable. Also, Project Design Feature PDF-11 (identified at Draft EIR Section 3.14, p. 3-25) will be changed from "consider options for mechanical and ventilation systems ..." to "utilize options for mechanical and ventilation systems"

Further, the Project Design Features are consistent with the recommendations of the CARB Technical Advisory, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways* (April 2017) as discussed at pages 32 through 39 of the CARB Technical Advisory. Accordingly, substantial evidence demonstrates the Project's compliance with City General Plan Objective CO 7.2 and Policy CO 7.2.1 regarding applying guidelines developed by CARB to protect sensitive receptors from sources of air pollution.

15-17 As discussed in Draft EIR Section 4.12-3.3 (page 4.12-6) and Table 4.12-10 (page 4.12-20), noise measurements to model the noise impact analysis occurred at the closest property lines to the Project boundaries. The noise monitoring locations shown on Figure 4.12-1 (page 4.12-7) did not exactly replicate the actual location where noise monitoring equipment was placed, which locations were often closer to the Project boundaries than shown in the Figure.

Further, the Noise Technical Report (Appendix 9 to the Draft EIR), at Appendix A, Noise Monitoring Data, identifies the time of day when each measurement of noise levels at a monitoring location occurred. The measurements and monitoring occurred during the day, when construction activities would occur.

Policy N 2.1.2: Encourage the use of noise absorbing barriers, where appropriate.

↑ 15-18
cont'd

Policy N 2.1.5: Encourage employers to develop van pool and other travel demand management programs to reduce vehicle trip-generated noise in the planning area.

15-19

Objective N 4.1: Prevent, mitigate, and minimize noise spillover from commercial and industrial uses into adjacent residential neighborhoods and other noise sensitive uses.

15-20

Policy N 4.1.1: Implement and enforce the applicable Noise Ordinance to control noise from commercial and industrial sources that may adversely impact adjacent residential neighborhoods and other sensitive uses.

15-21

Policy N 4.1.2: Require appropriate noise buffering between commercial or industrial uses and residential neighborhoods and other sensitive uses.

15-22

The EIR does not discuss consistency or inconsistency with any Noise Element goals, policies, or objectives in the Noise Analysis. The project could incorporate ideas from the Noise Element policies to mitigate significant and unavoidable impacts to construction related noise and vibrations.

15-23

4.19 Traffic and Circulation

The proposed project would result in potentially significant impacts to traffic and circulation. Mitigation Measure T-3 states that “the Project Applicant and Caltrans are negotiating a traffic mitigation agreement that would require the Applicant to pay an in-lieu fee to Caltrans for future improvements to SR-14 based on the Project’s fair share”. Mitigation Measure T-7 states that the applicant will “Contribute pro-rata share to the anticipated costs for design and implementation of future improvements. (Project Share = 1.6%)”. An assessment of fees is appropriate when linked to a specific mitigation program. (*Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173, *Save our Peninsula Comm. v. Monterey County Bd. Of Supers.* (2001) 87 Cal.App.4th 99, 141.) Payment of fees is not sufficient where there is no evidence mitigation will actually result. (*Gray v. County of Madera* (2008) 167 Cal.App.4th 1099,1122.)

15-24

The assessment of fees here is not adequate as there is no evidence mitigation will actually result. MM T-3 indicates that the in-lieu fee will be paid for “future improvements” to SR-14 but does not provide details on the specific program or the improvements that will be made. MM T-7 indicates that the improvements to SR-14 are only *anticipated* and have not yet been

15-25
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- 15-18 City General Plan Noise Element Policy N 2.1.2 is listed at Draft EIR Section 4.12-4.3 (page 4.12-14). The comment incorrectly states that this Policy was not included in the Draft EIR.

Further, the Project complies with Noise Element Policy N 2.1.2. As discussed in Draft EIR Section 4.12-5, pages 4.12-20 through 4.12-21, construction noise levels are temporary and not continuous. Also, as identified in Draft EIR Section 4.12-5, page 4.12-21, Mitigation Measures MM N-4 through MM N-6 address barriers and physical sound control measures to be implemented during construction activities. Accordingly, substantial evidence demonstrates the Project's compliance with City General Plan Noise Element Policy N 2.1.2 during construction.

As discussed in Draft EIR Section 4.12-5 (page 4.12-24) and Table 4.12-12, the Project's traffic-related off-site noise level increases would be less than the 3 dBA and 5 dBA applicable CNEL thresholds of significance. As such, the off-site traffic noise levels associated with the Project would be less than significant. No use of noise-absorbing barriers would be appropriate, and substantial evidence demonstrates the Project's compliance with City General Plan Noise Element Policy N 2.1.2 as to traffic-related noise levels at off-site locations.

As discussed in Draft EIR Section 4.12-5, pages 4.12-24 through 4.12-27, the impacts for Project parking noise, stationary sources, and traffic noise on interior noise levels would be less than significant. No use of noise absorbing barriers would be appropriate, and substantial evidence demonstrates the Project's compliance with City General Plan Noise Element Policy N 2.1.2 as to Project parking noise, stationary sources, and traffic noise on interior noise levels.

As discussed in Draft EIR Section 4.12-5, pages 4.12-27 through 4.12-28, MM N-9, MM N-11 and MM N-12 address barriers and physical sound control measures to be implemented during Project build out to address traffic noise on exterior noise levels. Accordingly, substantial evidence demonstrates the Project's compliance with City General Plan Noise Element Policy N 2.1.2 for traffic noise on exterior noise levels.

- 15-19 The comment addresses a General Plan Policy that does not apply to the Project. The Project does not propose to be a major employment center with significant commercial office or industrial manufacturing uses. Rather, its commercial, retail, and restaurant use types are about 60,000 square feet in size. Accordingly, the use of van pools by employers is not feasible.

On the portion of the comment about reducing vehicle trip-generated noise, as discussed at Draft EIR Table 4.3-9 (page 4.3-33) and Table 4.10-1 (page 4.10-17), the Project's mixed-use nature and urban location will reduce project-related traffic trips by approximately 9% compared to a project without those features. This reduction in trips would reduce vehicle miles traveled (VMT). In addition, it should be noted that the Project would be consistent with the City's Climate Action Plan (CAP) and CalGreen Code, which require several project design features that would reduce traffic trips and related noise impacts (see Draft EIR page 4.7-27 and 4.7-28). Consistent with goals of the City's CAP, the Project would include walkability design and pedestrian network improvements. The Project would therefore create and enhance opportunities for non-vehicular travel and encourage pedestrian mobility by providing an internal pedestrian circulation system that links residential neighborhoods to on-site recreation

areas, regional trail systems, and neighborhood retail/commercial areas, such as mixed-use design resulting in VMT reductions and pedestrian network improvements.

Further, as discussed at Draft EIR section 4.19-6, page 4.19-21, the Project would generate nearly 40% less traffic than what was analyzed for the site in the General Plan. The General Plan estimated that a future development of the site with commercial and residential uses would generate approximately 13,400 ADT. The Project would generate 8,163 ADT.

Furthermore, as discussed at Draft EIR section 4.14-6, pages 4.14-16 to 4.14-17, the Project would provide a Class II bike lane along the Project's frontage on Soledad Canyon Road. A Class I trail would be provided along the east side of Sand Canyon Road along the Project's frontage. Internal trails would connect to each of these facilities allowing for access to regional trail systems such as the Stetson Ranch trails, the Sand Canyon Trail, and the Santa Clara River Trail. All on-site trails would be accessible to homeowners, as well as to the public.

- 15-20 As discussed at Draft EIR section 4.12-6, pages 4.12-27 to 4.12-28, MM N-10 provides mitigation for possible spillover noise from the Project's commercial uses by requiring the Project Applicant to implement a notification program to inform prospective buyers and renters adjacent to commercial uses that the commercial uses may generate noise in excess of levels typically found in residential areas. Further, with respect to interior noise levels, consistent with State and City standards, all habitable spaces associated with the Project would be required to provide indoor noise levels of 45 dBA CNEL or less. This will occur based on mandatory compliance with CCR Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings under MM N-11 (Draft EIR page 4.12-28), which requires substantial building insulation, improving exterior-to-interior noise reductions as discussed at Draft EIR page 4.12-26.
- 15-21 The comment addresses a General Plan Policy that does not apply to the Project. Enforcing City noise control policies is outside of the capability and authority of the Project Applicant. Regarding the Project's overall compliance with the City's General Plan Noise Element, refer to Responses to Comments 15-18 (page [215](#) above) and 15-20 (page [216](#) above).
- 15-22 Refer to Response to Comment 15-20 above.
- 15-23 Information provided in responses to comments 18 through 22 above, and information contained in Draft EIR Section 4.12-5, pages 4.12-18 through 4.12-28, discuss and demonstrate the Project's compliance with applicable provisions of the City General Plan Noise Element.
- Further, as discussed in Draft EIR Section 4.12-5, pages 4.12-18 through 4.12-23, Mitigation Measures N-1 through N-7 are required to reduce Project construction-related noise and vibrations. Accordingly, substantial evidence demonstrates the Project's compliance with City General Plan Noise Element Policy N 2.1.2 for construction-related noise and vibrations.
- 15-24 As discussed in Draft EIR Section 4.19-6, page 4.19-25, based on the Los Angeles County Congestion Management Plan (CMP) impact criteria (V/C increase greater than 0.02), the Project would *not* create a significant impact on the SR-14 mainline. Notwithstanding this fact, the Project Applicant and Caltrans are negotiating a traffic mitigation agreement (Mitigation

Measure MM T-3) that would require the Applicant to pay an in-lieu fee to Caltrans for future improvements to SR-14 based on the Project's fair share. The agreement would be signed by both parties prior to recordation of a final map for the Project. (Draft EIR p. 4.19-32). Caltrans will not execute any agreement before possible Project entitlement approvals and certification of the Final EIR by the City. The agreement is a coordination effort between Caltrans and the Project Applicant to ensure that Project impacts to mainline SR-14 remain below a level of significance. Further, no improvement plan has yet been finalized by Caltrans for the SR-14 improvements. Nonetheless, MM T-3 requires the subject improvements and related funding amount to be developed in consultation and negotiation with Caltrans, and Caltrans is charged with the duty to ensure that SR-14 improvements are designed and constructed to facilitate continued acceptable operations and LOS on mainline SR-14. MM T-3 (although for a non-significant impact) is proper and enforceable under such circumstances. *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal.App.4th 899, 945.

- 15-25 As discussed in Draft EIR Section 4.19-6, page 4.19-25, based on the Los Angeles County CMP impact criteria (V/C increase greater than 0.02), the Project would not create a significant impact on the SR-14 mainline. Notwithstanding this fact, the Project Applicant and Caltrans are negotiating a traffic mitigation agreement (Mitigation Measure MM T-3) that would require the Applicant to pay an in-lieu fee to Caltrans for future improvements to SR-14 based on the Project's fair share. The agreement would be signed by both parties prior to recordation of a final map for the Project. (Draft EIR p. 4.19-32). Caltrans will not execute any agreement before possible Project entitlement approvals and certification of the Final EIR by the City. The agreement is a coordination effort between Caltrans and the Project Applicant to ensure that Project impacts to mainline SR-14 remain below a level of significance. Further, no improvement plan has yet been finalized by Caltrans for the SR-14 improvements. Nonetheless, MM T-3 requires the subject improvements and related funding amount to be developed in consultation and negotiation with Caltrans, and Caltrans is charged with the duty to ensure that SR-14 improvements are designed and constructed to facilitate continued acceptable operations and LOS on mainline SR-14. MM T-3 (although for a non-significant impact) is proper and enforceable under such circumstances. *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal.App.4th 899, 945.

designed. MM T-3 and MM T-7 represent uncertain mitigation and are improperly deferred in violation of CEQA.

15-25
cont'd

The EIR is not consistent with the following General Plan goals, policies, and objectives:

15-26

Goal C 3: Reduction of vehicle trips and emissions through effective management of travel demand, transportation systems, and parking.

Objective C 3.1: Promote the use of travel demand management strategies to reduce vehicle trips.

15-27

Policy C 3.1.1: In evaluating new development projects, require trip reduction measures as feasible to relieve congestion and reduce air pollution from vehicle emissions.

15-28

Policy C 3.1.2: Promote home-based businesses and live-work units as a means of reducing home-to-work trips.

15-29

Objective C 3.3: Make more efficient use of parking and maximize economic use of land, while decreasing impervious surfaces in urban areas, through parking management strategies.

15-30

Policy C 3.3.2: In pedestrian-oriented, high density mixed use districts, provide for common parking facilities to serve the district, where appropriate.

15-31

No trip reduction methods are discussed in the EIR. No live-work units are proposed as part of the project design. No parking management strategies are analyzed in the EIR and all parking at the project site appears to be surface parking lots, which does not maximize the economic use of land.

15-32

5.4 Alternatives to be Analyzed

CEQA requires analysis of a “reasonable range” of alternatives. Here, since the No Project Alternative is required, the EIR analyzes only three. This does not comply with a reasonable range of alternatives. Additional alternatives for analysis could include, but are not limited to:

15-33

1. A project design that avoids the removal of two non-heritage oak trees and project grading that encroaches within the protected zone of one heritage oak tree.

15-34

15-26 As discussed at Draft EIR Tables 4.3-9 (page 4.3-33) and 4.10-1 (page 4.10-17), the Project's mixed-use nature and urban location will reduce project-related traffic trips by approximately 9% compared to a project without those features. This reduction in trips would reduce vehicles mile traveled (VMT), congestion and associated air quality emissions. In addition, it should be noted the Project would be consistent with the City's Climate Action Plan (CAP) and CalGreen Code, which require several project design features that would serve to reduce air quality and greenhouse gas emissions as discussed at Draft EIR pages 4.7-27 and 4.7-28. These features include: mixed-use design resulting in VMT reductions, pedestrian network improvements, low-flow water fixtures, low impact vegetation and irrigation, energy reduction (e.g., high efficiency appliances and lighting, solar panels), and on-site electric vehicle charging stations. As such, the Project does include several features that would serve to reduce air quality and GHG emissions.

Further, as discussed at Draft EIR section 4.19-6, page 4.19-21, the Project would generate nearly 40% less traffic than what was analyzed for the site in the General Plan. The General Plan estimated that a future development of the site with commercial and residential uses would generate approximately 13,400 ADT. The Project would generate 8,163 ADT.

Moreover, the Project applicant is processing minor modifications to the Project Site Development Plan in Planning Area 1. The minor modifications include construction of a 3-level parking structure with a total of 264 parking spaces. The modifications to the Project Site Development Plan are being considered by the City Planning Commission at its June 6, 2017 Regular Meeting.

In addition, as discussed at Draft EIR section 4.19-6, pages 4.19-29 and 4.19-32, MM T-1 and MM T-2 modify and coordinate traffic signal timing to reduce traffic queues and congestion on nearby road segments and improve transportation systems to reduce congestion.

Furthermore, as discussed at Draft EIR section 4.14-6, pages 4.14-16 to 4.14-17, the Project would provide a Class II bike lane along the Project's frontage on Soledad Canyon Road. A Class I trail would be provided along the east side of Sand Canyon Road along the Project's frontage. Internal trails would connect to each of these facilities allowing for access to regional trail systems such as the Stetson Ranch trails, the Sand Canyon Trail, and the Santa Clara River Trail. All on-site trails would be accessible to homeowners, as well as to the public.

Moreover, consistent with goals of the City's CAP, the Project would include walkability design and pedestrian network improvements (see Draft EIR page 4.7-27). As stated therein, the Project would create and enhance opportunities for non-vehicular travel and encourage pedestrian mobility by providing an internal pedestrian circulation system that links residential neighborhoods to on-site recreation areas, regional trail systems, and neighborhood retail/commercial areas.

For the reasons stated above, substantial evidence demonstrates the Project's compliance with City General Plan Goal C.3.

15-27 As discussed at Draft EIR Tables 4.3-9 (page 4.3-33) and 4.10-1 (page 4.10-17), the Project's mixed-use nature and urban location will serve to reduce project-related traffic trips by approximately 9% compared to a project without those features. This reduction in trips would serve to reduce vehicles mile traveled (VMT), congestion and associated air quality emissions.

Also, as discussed at Draft EIR section 4.14-6, pages 4.14-16 to 4.14-17, the Project would provide a Class II bike lane along the Project's frontage on Soledad Canyon Road. A Class I trail would be provided along the east side of Sand Canyon Road along the Project's frontage. Internal trails would connect to each of these facilities allowing for access to regional trail systems such as the Stetson Ranch trails, the Sand Canyon Trail, and the Santa Clara River Trail. All on-site trails would be accessible to homeowners, as well as to the public.

For the reasons stated above, substantial evidence demonstrates the Project's compliance with City General Plan Objective C.3.1.

15-28 Refer to response to comment A-27. In addition, as discussed at Draft EIR section 4.19-6, pages 4.19-29 and 4.19-32, MM T-1 and MM T-2 modify and coordinate traffic signal timing to reduce traffic queues on nearby road segments and improve transportation systems to reduce congestion.

15-29 The comment refers to a General Plan Policy directed toward the City and its land use strategies and programs. The Project Applicant has no mechanism to promote home based businesses and live to work units as a means to reduce home-to-work trips. Nonetheless, the Project does not preclude residents from utilizing home office opportunities for home-based business uses that are allowed under the City Code.

15-30 Refer to response to comment A-7. All Project parking in Planning Areas 1 through 5 will comply with the efficient parking requirements of the MXN zone pursuant to Section 17.55.050 of the City's Unified Development Code.

Further, the Project applicant is processing minor modifications to the Project Site Development Plan in Planning Area 1. The minor modifications include construction of a 3-level parking structure with a total of 264 parking spaces. The modifications to the Project Site Development Plan are being considered by the City Planning Commission at its June 6, 2017 Regular Meeting. For the reasons stated above, substantial evidence demonstrates the Project's compliance with City General Plan Policy C.3.3.

15-31 Refer to response to comment A-30. Substantial evidence demonstrates the Project's compliance with City General Plan Policy C.3.3.2.

15-32 Refer to Responses to Comments 15-26 through 15-30.

15-33 The Draft EIR discusses a reasonable range of alternatives consistent with Title 14 Cal Code Regs (CEQA Guidelines) §15126.6(a) and §15126.6(c). Draft EIR Section 2.4 properly identifies Project alternatives that: 1) achieve project objectives, 2) have the ability to reduce impacts, 3) are feasible to implement, and 4) are reasonable. See CEQA Guidelines §15126.6(a). There is no ironclad rule as to the nature or scope of alternatives to be discussed in the Draft EIR. CEQA

Guidelines §15126.6(a). The range of alternatives discussed in the Draft EIR is reasonable and complies with CEQA. See *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 234 Cal.App.4th 214, 256 (EIR upheld where only two environmentally superior alternatives were identified).

- 15-34 “CEQA does not require that an agency consider specific alternatives that are proposed by members of the public or other outside agencies.” *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 234 Cal.App.4th 214, 256.

Notwithstanding, as discussed at Draft EIR Section 4.4-6, pages 4.4-32 to 4.4-33, two non-heritage oak trees are proposed for removal due to required road improvements/widening of Sand Canyon Road and on-site land development. A heritage oak tree (Tree #2) would be preserved in place with minimal impacts. The proposed project alternative to avoid removal of Tree #1 would interfere with improvements to Sand Canyon Road fronting the Project. This would prevent achievement of Project Objective No. 11 (integrate a new community into the City’s existing and planned circulation network) as discussed at Draft EIR Section 3.11. Further, the proposed project alternative to avoid removal of Tree #3 would significantly interfere with the development plan of Project Area 3, which would cause the elimination of dozens of townhome units. This would prevent achievement of Project Economic Objectives No. 1 (enhance and augment the housing market by providing a variety of housing types and densities) and No. 3 (provide a tax base to support public services and infrastructure) as discussed at Draft EIR Section 3.11. Grading within the protected zone of Tree No. 2 would not significantly impact the tree, as the City has added conditions of approval related to this Oak Tree that includes requirements to mitigate the impact of this encroachment. Accordingly, this proposed project alternative would not achieve project objectives, would not be feasible to implement under the circumstances, and would not be reasonable as required under CEQA Guidelines §15126.6(a).

- 2. A project design that sites the assisted living facility more than 500 feet from SR-14. 15-35
- 3. A project design that incorporates parking and travel management strategies to reduce vehicle miles traveled and emissions from mobile vehicle sources. 15-36
- 4. A reduced intensity alternative that reduces the scope of the project enough to avoid significant impacts to noise. 15-37
- 5. A reduced intensity alternative that reduces the scope of the project enough to avoid significant impacts to air quality. 15-38
- 6. A project design with landscaped setbacks along the sides of the site adjacent to sensitive receptors in order to mitigate significant noise impacts associated with the construction and operation of the project. 15-39

Conclusion

For the foregoing reasons, GSEJA believes the EIR is flawed and an amended EIR must be prepared for the proposed project and recirculated for public review. Golden State Environmental Justice Alliance requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all communications to Golden State Environmental Justice Alliance P.O. Box 79222 Corona, CA 92877. 15-40
15-41

Sincerely,



Board of Directors
Golden State Environmental Justice Alliance

- 15-35 “CEQA does not require that an agency consider specific alternatives that are proposed by members of the public or other outside agencies.” *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 234 Cal.App.4th 214, 256.

The comment proposes an alternative to addresses the potential impact of the existing environment on the proposed Project. CEQA does not require the City to analyze the impact of existing environmental conditions on the Project’s future users or residents. *California Bldg. Indus. Ass’n v. Bay Area Air Quality Mgmt. Dist.* (2015) 62 Cal.4th 369, 377.

Notwithstanding, as discussed in Draft EIR Section 4.10-6, page 4.10-21, impacts relating to locating sensitive land uses within 500 feet of the SR-14 Freeway are less than significant and do not require any mitigation. Notwithstanding, as discussed in Draft EIR Sections 3.14 and 4.10-6 (page 4.10-21), the Project includes 5 specific Project Design Features intended to minimize the potential effects of exposure to elevated ambient air quality conditions for sensitive uses. These Project Design Features will be included by the City as Project elements in the entitlement approvals for the Project and will be enforceable. Also, Project Design Feature PDF-11 (identified at Draft EIR Section 3.14, p. 3-25) will be changed from “consider options for mechanical and ventilation systems ...” to “utilize options for mechanical and ventilation systems” Relocating the assisted living facility as proposed with this suggested project alternative would not substantially lessen a significant effect of the Project on the environment and therefore would not be consistent with CEQA Guidelines section 15126.6(a).

Further, relocating the assisted living facility significantly to the north as proposed with this suggested project alternative would displace a substantial number of multi-family units in adjacent Planning Area 2 and would disrupt the internal street network of the Project. This would prevent achievement of Project Economic Objectives No. 1 (enhance and augment the housing market by providing a variety of housing types and densities) and No. 3 (provide a tax base to support public services and infrastructure) as discussed at Draft EIR Section 3.11. Accordingly, this proposed project alternative would not achieve project objectives, would not be feasible to implement under the circumstances, and would not be reasonable as required by CEQA Guidelines section 15126.6(a).

- 15-36 “CEQA does not require that an agency consider specific alternatives that are proposed by members of the public or other outside agencies.” *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 234 Cal.App.4th 214, 256.

The proposed project alternative is vague and does not identify any specific requested Project modifications or changes as to development intensity and scope. Accordingly, the proposed project alternative is not feasible to implement under the circumstances and is not reasonable as required CEQA Guidelines §15126.6(a).

Additionally, the Project already includes the general design and outcome objectives of this proposed project alternative. As discussed at Draft EIR Tables 4.3-9 (page 4.3-33) and 4.10-1 (page 4.10-17), the Project’s mixed-use nature and urban location will reduce project-related traffic trips by approximately 9% compared to a project without those features. This reduction in trips would serve to reduce vehicle miles traveled (VMT), congestion and associated air quality

emissions. In addition, it should be noted the Project would be consistent with the City's Climate Action Plan (CAP) and CalGreen Code, which require several project design features that would serve to reduce air quality and greenhouse gas emissions as discussed at Draft EIR pages 4.7-27 and 4.7-28. These features include mixed-use design resulting in VMT reductions, walkability design and pedestrian network improvements, low-flow water fixtures, low impact vegetation and irrigation, energy reduction (high efficiency appliances and lighting, solar panels, etc.), and on-site electric vehicle charging stations. The Project would create and enhance opportunities for non-vehicular travel and encourage pedestrian mobility by providing an internal pedestrian circulation system that links residential neighborhoods to on-site recreation areas, regional trail systems, and neighborhood retail/commercial areas. As such, the Project does include several features that would serve to reduce air quality and GHG emissions.

Further, as discussed at Draft EIR section 4.19-6, page 4.19-21, the Project would generate nearly 40% less traffic than what was analyzed for the site in the General Plan. The General Plan estimated that a future development of the site with commercial and residential uses would generate approximately 13,400 ADT. The Project would generate 8,163 ADT.

Moreover, the Project applicant is processing minor modifications to the Project Site Development Plan in Planning Area 1. The minor modifications include construction of a 3-level parking structure with a total of 264 parking spaces. The modifications to the Project Site Development Plan are being considered by the City Planning Commission at its June 6, 2017 Regular Meeting.

In addition, as discussed at Draft EIR section 4.19-6, pages 4.19-29 and 4.19-32, MM T-1 and MM T-2 modify and coordinate traffic signal timing to reduce traffic queues and congestion on nearby road segments and improve transportation systems.

Furthermore, as discussed at Draft EIR section 4.14-6, pages 4.14-16 to 4.14-17, the Project would provide a Class II bike lane along the Project's frontage on Soledad Canyon Road. A Class I trail would be provided along the east side of Sand Canyon Road along the Project's frontage. Internal trails would connect to each of these facilities allowing for access to regional trail systems such as the Stetson Ranch trails, the Sand Canyon Trail, and the Santa Clara River Trail. All on-site trails would be accessible to homeowners, as well as to the public.

15-37 "CEQA does not require that an agency consider specific alternatives that are proposed by members of the public or other outside agencies." *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 234 Cal.App.4th 214, 256.

The proposed project alternative is vague and does not identify any specific requested Project modifications or changes as to development intensity and scope. Accordingly, the proposed project alternative is not feasible to implement under the circumstances and is not reasonable as required CEQA Guidelines section 15126.6(a).

Refer to Response to Comment 15-18 (page [215](#) above) for discussion about the many less than significant noise impacts resulting from the Project.

- 15-38 “CEQA does not require that an agency consider specific alternatives that are proposed by members of the public or other outside agencies.” *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 234 Cal.App.4th 214, 256.

The proposed project alternative is vague and does not identify any specific requested Project modifications or changes as to development intensity and scope. Accordingly, the proposed project alternative is not feasible to implement under the circumstances and is not reasonable as required by CEQA Guidelines §15126.6(a).

Refer to Response to Comment 15-9 (page [204](#) above) for discussion about the many less than significant air quality impacts resulting from the Project.

- 15-39 “CEQA does not require that an agency consider specific alternatives that are proposed by members of the public or other outside agencies.” *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 234 Cal.App.4th 214, 256.

The proposed Project alternative is vague and does not identify any specific depth of setback or type and scope of landscaping along Soledad Canyon Road and Sand Canyon Road. Significant landscape setbacks along these roads fronting the Project (as suggested by the comment) would substantially impact and reduce the land uses and residential densities proposed in Planning Areas 1, 2 and 3. This would prevent achievement of Project Economic Objectives No. 1 (enhance and augment the housing market by providing a variety of housing types and densities) and No. 3 (provide a tax base to support public services and infrastructure) as discussed at Draft EIR Section 3.11. Accordingly, the proposed project alternative would not achieve project objectives, would not be feasible to implement under the circumstances, and would not be reasonable as required by CEQA Guidelines §15126.6(a).

- 15-40 No recirculation of the Draft EIR is required. The Draft EIR is detailed, informative, well-researched and documented, and supported by substantial evidence. No basis under CEQA Guidelines §15088.5(a)(4) exists to require recirculation of the document.

Further, the minor modifications to the Project result in a reduced development footprint in Planning Area 5 and reduced impacts to the ridgeline, no increase in the Project’s development footprint, and no increase in any previously identified development footprint for the Project. As discussed in Stantec’s Traffic Study Supplemental Memorandum dated May 19, 2017, which is attached (pages [228-270](#)), the minor modifications made during Planning Commission hearings would not change the conclusions and mitigation measures identified in the Project’s Traffic Study. The minor Project modifications would result in a net increase of only 176 ADT, which is only about a 2.2% change in traffic generation. Further, as identified by Stantec, the minor Project modifications would result in only 1 additional traffic trip in the AM Peak hour, and only 12 additional traffic trips during the PM Peak hour. Based on a review of the Revised Project Description and modifications: 1) The original impact conclusions and mitigation measures addressed in the 2016 traffic study will not change; 2) No new significant traffic or circulation impacts would result from the Revised Project Description and modifications; 3) No new mitigation measures relating to any new significant traffic or circulation impacts are proposed to be implemented or are required; and 4) The Revised Project Description and

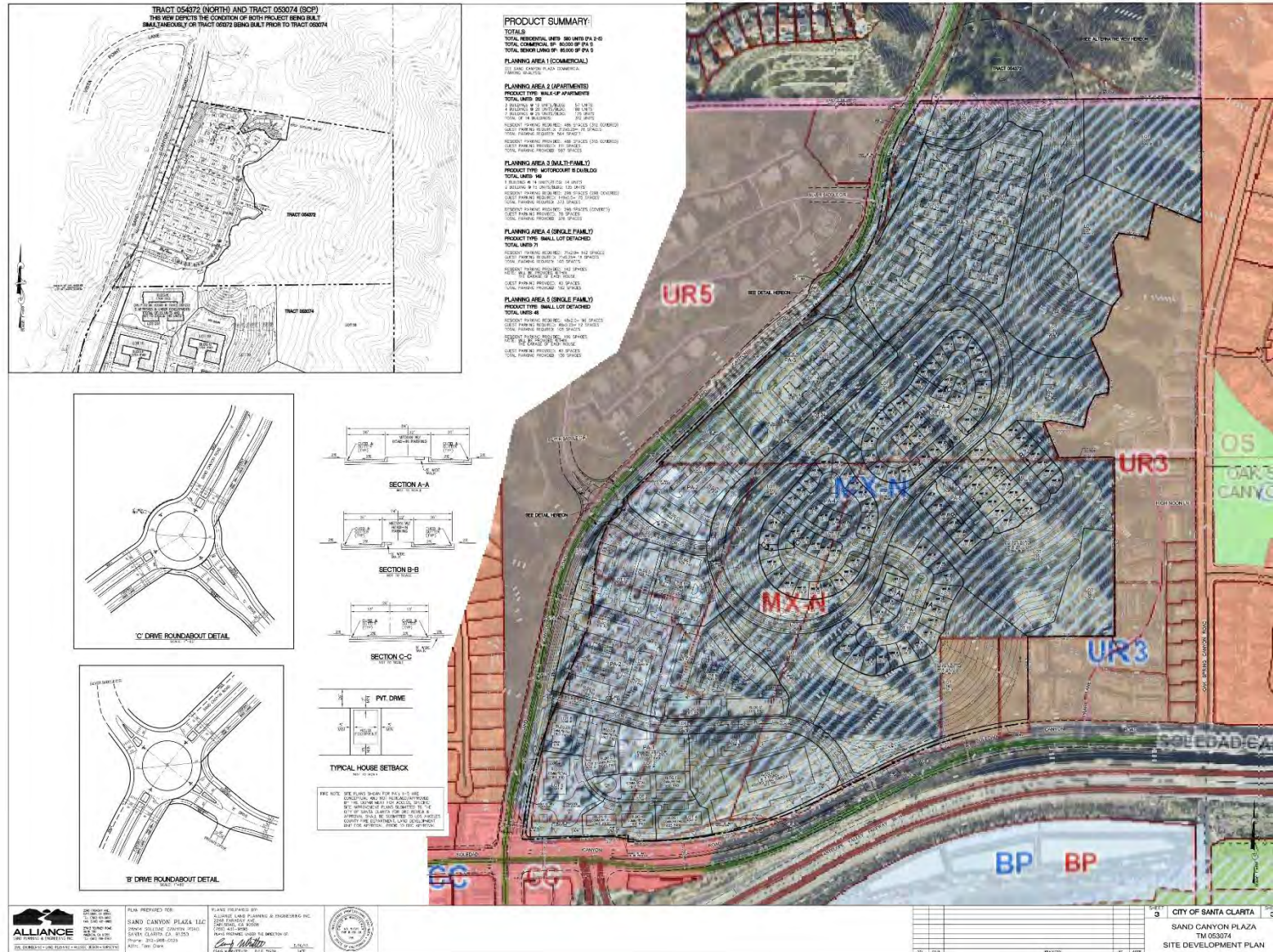
modifications will not result in a substantial increase in the severity of any previously identified traffic or circulation impacts that would require mitigation measures to reduce any impact to a level of insignificance.

Further, as determined in Pomeroy Environmental Services' May 19, 2017 letter, which is attached (page [271](#)), the minor increase in daily traffic trips from the Project modifications do not change any of the impact conclusions or identified mitigation measures for air quality, GHG, and noise as discussed in detail in the Draft EIR.

No basis under CEQA Guidelines §15088.5(a)(4) therefore exists to require recirculation of the Draft EIR.

15-41 Comment noted.

Site Development Plan



Stantec Traffic Study Supplemental Memorandum dated May 19, 2017



Memo

To:	Patrick Leclair & Ian Pari City of Santa Clarita	From:	Charlie Ho & Daryl Zerfass Stantec
File:	2073008930	Date:	May 19, 2017

Reference: Sand Canyon Plaza Mixed Use Project – Traffic Study Supplemental

This memorandum presents supplemental traffic analysis data for the proposed Sand Canyon Plaza Mixed Use development (Project) in the City of Santa Clarita. In December 2016, a comprehensive traffic impact analysis was prepared (2016 traffic study) and included in the Project's Draft Environmental Impact Report (DEIR). The following memorandum addresses the changes made by the Planning Commission during its hearings on the project.

Revised Project Description

The 2016 traffic study was based on the project description prior to Planning Commission hearings, which included development of a mixed-use community consisting of approximately 130,600 square feet of commercial uses (including 55,600 square feet of general retail and restaurants and a 75,000 square foot assisted living facility with up to 120 beds), 312 apartment units, 122 townhome units, and 146 detached condominium units, for a total of 580 units. The project site also includes 123 mobile homes (as of 2016) that will be removed as part of the proposed development. The updated project description includes the following project modifications:

- 1) a 4,400 square foot increase to the general retail and restaurant component of the project (from 55,600 square feet to 60,000 square feet); and,
- 2) an increase to the assisted living facility of 20 beds (from 120 beds to up to 140 beds; a total of 85,000 square feet).
- 3) 27 detached condos in Planning Area 5 were removed and relocated to Planning Area 3 (attached condos). Planning Area 5 now has a total of 48 detached condos and Planning Area 3 now has 149 units.

Table 1 on the following page lists the trip generation rates used for the traffic study.

When taking into account the removal of the existing mobile homes and the internal capture trips, the 2016 traffic study estimated that the Project would generate approximately 393 new AM peak hour trips, 695 new PM peak hour trips, and 7,986 new daily trips.

In comparison, the Revised Project Description would generate one additional trip in the AM peak hour, an additional 12 trips in the PM peak hour, and an additional 176 ADT, as shown in **Table 2**. This trip generation change is negligible, and because the volume of project traffic during the AM peak hour is effectively equal to the volume of traffic evaluated in the 2016 traffic study, and because the volume of additional project traffic in the PM peak hour is only 12 trips, which when distributed throughout the area of potential impact results in fewer than 7 additional project trips at any given study area intersection, it can be definitively concluded that the original impact conclusions and mitigation measures addressed in the 2016 traffic study will not change.

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Reference: Sand Canyon Plaza Mixed Use Project – Traffic Study Supplemental

Table 1 Trip Generation Rates

Category	ITE Code	Units	AM Peak Hour			PM Peak Hour			Average Daily Tripends
			In	Out	Total	In	Out	Total	
1. Single-Family Detached Housing	210	DU	0.19	0.56	0.75	0.63	0.37	1.00	9.52
2. Condominium/Townhouse	NA	DU	0.06	0.48	0.54	0.47	0.26	0.73	8.00
3. Apartment	220	DU	0.10	0.41	0.51	0.40	0.22	0.62	6.65
4. Assisted Living	254	Beds	0.09	0.05	0.14	0.1	0.12	0.22	2.66
5. Mobile Home Park	240	DU	0.09	0.35	0.44	0.37	0.22	0.59	4.99
6. Shopping Center (Retail & Rest.)	820	TSF	AM PM ADT	Ln(T) = 0.61 Ln(X)+2.24, 62% IB / 38% OB Ln(T) = 0.67 Ln(X)+3.31, 48% IB / 52% OB Ln(T) = 0.65 Ln(X)+5.83, 50% IB / 50% OB					
DU = Dwelling Unit			X = Amount of Land Use in Thousand Square Feet						
TSF = Thousand Square Feet			IB = Inbound						
ADT = Average Daily Tripends			OB = Outbound						
T = Tripends									

Table 2 Land Use and Trip Generation Summary – Revised Project Description

Category	Amount	Units	AM Peak Hour			PM Peak Hour			Average Daily Tripends
			In	Out	Total	In	Out	Total	
Revised Project									
1. Detached Housing (Condo Lots)	119	DU	23	67	90	75	44	119	1,133
2. Townhouse	149	DU	9	72	81	70	39	109	1,192
3. Apartment	312	DU	31	128	159	125	69	194	2,075
4. Assisted Living	140	Beds	13	7	20	14	17	31	372
6. Shopping Center (Retail & Rest.)	60	TSF	71	43	114	204	221	425	4,872
Revised Project Total			147	317	464	488	390	878	9,644
Internal %			5%	3%	3%	10%	12%	11%	9%
Internal			7	9	16	50	48	98	868
External			140	308	448	438	342	780	8,776
Existing Trips to be Removed			11	43	54	46	27	73	614
Total Trips Added to Roadways (Revised Land Use)			129	265	394	392	315	707	8,163
Total Trips Added to Roadways (Previous Land Use)			128	265	393	386	309	695	7,986
Net Trips Added vs. Previous Land Use			1	0	1	6	6	12	176
Note: See attached for detailed calculation worksheet									

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Reference: Sand Canyon Plaza Mixed Use Project – Traffic Study Supplemental

Lost Canyon Road Roundabout Analysis

In addition, the Planning Commission requested additional information on the Lost Canyon Road/Sand Canyon Road intersection. The Lost Canyon Road/Sand Canyon Road intersection is a four-way intersection located approximately 0.5 mile south of the proposed Sand Canyon Plaza Mixed Use Project, and is currently controlled by stop signs at all four legs of the intersection. The intersection was analyzed in the 2016 traffic study, and it was concluded that this location would not be significantly impacted by the project under either existing-plus-project conditions or cumulative conditions based on the current stop-control configuration.

A roundabout is approved for construction at the Lost Canyon Road/Sand Canyon Road intersection as part of another project (Vista Canyon). Therefore, a roundabout intersection level of service (LOS) analysis has subsequently been conducted to evaluate the long-term traffic conditions after the construction of the roundabout. This cumulative analysis includes traffic from the Sand Canyon Mixed Use project as well as the nearby Vista Canyon project.

Methodology outlined in the 2010 Highway Capacity Manual (HCM 2010) produces estimates of average vehicle delay as a function of intersection capacity and the volume of traffic passing through the intersection. From this a corresponding LOS is defined. Traffic LOS is designated "A" through "F" with LOS "A" representing free flow conditions and LOS "F" representing severe traffic congestion. LOS for arterial roadway intersections is determined based on operating conditions during the AM and PM peak hours and the geometric configuration of the intersection. **Table 3** summarizes the range of vehicle delay that corresponds to LOS "A" through "F" for arterial intersections. The ranges are those defined in the HCM 2010 and are used by the City of Santa Clarita for estimating intersection LOS.

Table 3 Roundabout Delay Level of Service Ranges

LOS	Highway Capacity Manual (HCM) Average Delay (sec/veh) for Signalized Intersections and Roundabouts
A	≤10
B	>10 – 20
C	>20 – 35
D	>35 – 55
E	>55 – 80
F	>80

The City of Santa Clarita has established performance standards for determining impact significance using both the level of delay and the LOS. An intersection is considered to be significantly impacted if the proposed project would worsen an intersection maintained by the City of Santa Clarita from LOS "D" or better to LOS "E" or "F", or if the project would cause more than a 4-second increase in delay at an intersection that operates at LOS "D" with the project, or more than a 2-second increase in delay at an intersection that operates at LOS "E" or "F".

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Reference: Sand Canyon Plaza Mixed Use Project – Traffic Study Supplemental

To assess the LOS for the Lost Canyon Road/Sand Canyon Road roundabout intersection, Sidra Intersection, a specialized micro-analytical modeling software is used. Sidra Intersection is widely accepted for roundabout analysis, and is recognized by HCM 2010 and the TRB-FHWA Roundabout Guide.

The geometry of the Lost Canyon Road/Sand Canyon Road intersection roundabout is based on the design included in Appendix H of the May 2010 "Transportation Impact Study for Vista Canyon Transit-Oriented Development", and the traffic volumes used for this analysis are based on the cumulative conditions forecast volumes in the December 2016 "Sand Canyon Plaza Traffic Impact Analysis" report.

The results of this peak hour intersection LOS analysis are summarized in **Table 4**, and the detailed LOS calculation worksheets are attached at the end of this memorandum.

Table 4 Sand Canyon Road and Lost Canyon Road Intersection LOS Summary

Location	Traffic Control	Cumulative No-Project				Cumulative With-Project			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS
Sand Canyon & Lost Canyon	Roundabout	12.3	B	8.4	A	14.4	B	11.1	B

As shown in **Table 4**, the Lost Canyon Road/Sand Canyon Road intersection would operate at LOS "B" or better under the cumulative conditions with or without the proposed Project, and it would not be significantly impacted by the proposed Project.

Soledad Canyon Road Left-turn Signal at Freeway Ramp

The Planning Commission also requested additional information on the operation of the Soledad Canyon Road/SR-14 Southbound Ramp intersection. The Project's mitigation measures include modifications to the existing traffic signal at the Soledad Canyon Road/SR-14 Southbound Ramp intersection. Currently, left-turns from Soledad Canyon Road onto the freeway on-ramp do not have a dedicated signal phase (i.e., left-turn arrow), and must wait for a gap in the opposing traffic to make a turn. This configuration is referred to as "permissive" control. Project mitigation includes adding left-turn arrows such that left-turning vehicles have a dedicated, or "protected", phase to make turns.

The 2016 traffic study recommended "protected/permissive" left-turn phasing, which provides a left-turn arrow in a dedicated left-turn signal phase, but also allows left-turns during the standard green phase when gaps in opposing traffic allow. Subsequent consideration by City engineering staff has led to a recommendation that the signal be configured as a standard "protected" left-turn arrow. Caltrans has also been consulted and recommends use of the standard "protected" left-turn arrow at this location.

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Reference: Sand Canyon Plaza Mixed Use Project – Traffic Study Supplemental

With the current "permissive" left-turn configuration, vehicles have been observed having to wait through multiple cycles of the light when opposing traffic is heavy. When opposing traffic is light to moderate, vehicles generally can make left-turns during one cycle. During the PM peak hour, when opposing traffic volumes are the heaviest, delays can be substantial and vehicles may have to wait through several signal cycles before turning left. The intersection operations are also influenced by the freeway conditions, as more traffic uses Soledad Canyon Road when the freeway is congested.

An analysis of cumulative conditions with the project and the addition of a "protected" left-turn signal phase has been prepared using the Synchro and SimTraffic micro-analytical modeling software. The microsimulation, which has been provided to City staff for their use to develop signal timing parameters, indicates that by providing a left-turn arrow, all left-turning vehicles would typically be able to make a turn in a single signal cycle, significantly reducing delay for the left-turn movement. The left-turn queue length would be expected to be no greater than 375 feet, which can be accommodated by the proposed 500 foot turn-pocket length.

Conclusion

This supplemental analysis evaluated an update to the project's trip generation estimates, an evaluation of the Lost Canyon Road roundabout, and the evaluation of a "protected" left-turn phase for the Soledad Canyon Road/SR-14 Southbound Ramps intersection. In each case, based on the results of this supplemental analysis as discussed above, it is concluded that no new significant traffic or circulation impacts would result from the Revised Project Description and modifications. Furthermore, no new mitigation measures relating to any new significant traffic or circulation impacts are proposed to be implemented or are required.

The Revised Project Description and modifications will not result in a substantial increase in the severity of any previously identified traffic or circulation impacts that would require mitigation measures to reduce any impact to a level of insignificance. Based on the above analysis, it is concluded that the original impact conclusions and mitigation measures addressed in the 2016 Traffic Study will not change.

STANTEC CONSULTING SERVICES INC.

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Attachment: Internal Capture Calculation Worksheets
Roundabout Delay and LOS Calculation Worksheets
Soledad/SR-14 Ramp Delay, LOS and Queue Calculation Worksheets

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NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Sand-Soledad	Organization:	Stantec Consulting
Project Location:	Santa Clarita, CA	Performed By:	Charlie Ho
Scenario Description:	Project Buildout	Date:	5/15/2017
Analysis Year:	2030	Checked By:	
Analysis Period:	AM Street Peak Hour	Date:	

Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ¹		
	ITE LUCs ²	Quantity	Units	Total	Entering	Exiting
Office						
Retail	820	80	TSF	114	71	43
Restaurant						
Cinema/Entertainment						
Residential	210/220	580	DU	330	63	267
Hotel						
All Other Land Uses ²	254	140	Beds	20	13	7
				484	147	317

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office						
Retail	1.17	0%	0%	1.16	0%	0%
Restaurant						
Cinema/Entertainment						
Residential	1.13	0%	4%	1.09	0%	2%
Hotel						
All Other Land Uses ¹						1%

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	1	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	3	0	0		0
Hotel	0	0	0	0	0	

	Total	Entering	Exiting
All Person-Trips	515	187	348
Internal Capture Percentage	2%	2%	1%
External Vehicle-Trips ²	448	140	308
External Transit-Trips ³	0	0	0
External Non-Motorized Trips ³	9	3	6

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	4%	2%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	1%	1%
Hotel	N/A	N/A

¹ Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

² Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

³ Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

⁴ Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

⁵ Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

⁶ Person-Trips

⁷ Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	Sand-Soledad
Analysis Period:	AM Street Peak Hour

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends						
Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.17	71	83	1.16	43.15420194	50
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.13	63	71	1.09	267	291
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	15		7	0	7	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	6	3	58	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		27	0	0	0	0
Retail	0		0	0	1	0
Restaurant	0	7		0	4	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	14	0	0		0
Hotel	0	3	0	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)						
Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ³
Office	0	0	0	0	0	0
Retail	3	80	83	68	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	70	71	59	0	3
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	13	13	13	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)						
Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ³
Office	0	0	0	0	0	0
Retail	1	49	50	42	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	3	288	291	259	0	6
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	7	7	7	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A
²Person-Trips
³Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator
⁴Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Sand-Soledad	Organization:	Stantec Consulting
Project Location:	Santa Clarita, CA	Performed By:	Charlie Ho
Scenario Description:	Project Buildout	Date:	5/15/2017
Analysis Year:	2030	Checked By:	
Analysis Period:	PM Street Peak Hour	Date:	

Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ²		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	820	60	TSF	425	204	221
Restaurant				0		
Cinema/Entertainment				0		
Residential	210	590	DU	422	270	152
Hotel				0		
All Other Land Uses ³	254	140	Beds	31	14	17
				878	488	390

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ¹	% Transit	% Non-Motorized	Veh. Occ. ¹	% Transit	% Non-Motorized
Office						
Retail	1.21	0%	0%	1.18	0%	0%
Restaurant						
Cinema/Entertainment						
Residential	1.15	0%	3%	1.21	0%	4%
Hotel						
All Other Land Uses ²						

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail					2000	
Restaurant						
Cinema/Entertainment						
Residential		2000				
Hotel						

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	43	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	8	0	0		0
Hotel	0	0	0	0	0	

	Total	Entering	Exiting
All Person-Trips	1,034	572	462
Internal Capture Percentage	10%	9%	11%
External Vehicle-Trips ⁵	780	438	342
External Transit-Trips ⁶	1	1	0
External Non-Motorized Trips ⁶	14	7	7

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	3%	16%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	14%	4%
Hotel	N/A	N/A

¹ Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.
² Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
³ Enter trips assuming no transit or non-motorized trips (as assumed in *ITE Trip Generation Manual*).
⁴ Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made.
⁵ Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.
⁶ Person-Trips
^{*} Indicates computation that has been rounded to the nearest whole number.
 Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	Sand-Soledad
Analysis Period:	PM Street Peak Hour

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips ^a	Veh. Occ.	Vehicle-Trips	Person-Trips ^a
Office	1.00	0	0	1.00	0	0
Retail	1.21	204	247	1.18	221.4769848	261
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.15	270	311	1.21	152	184
Hotel	1.00	0	0	1.00	0	0

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	5		76	10	43	13
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	7	25	39	0		6
Hotel	0	0	0	0	0	

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		20	0	0	12	0
Retail	0		0	0	143	0
Restaurant	0	124		0	50	0
Cinema/Entertainment	0	10	0		12	0
Residential	0	8	0	0		0
Hotel	0	5	0	0	0	

Destination Land Use	Person-Trip Estimates			External Trips by Mode ^a		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	0	0	0	0	0	0
Retail	8	239	247	198	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	43	268	311	226	1	7
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	14	14	14	0	0

Origin Land Use	Person-Trip Estimates			External Trips by Mode ^a		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	0	0	0	0	0	0
Retail	43	218	261	185	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	8	176	184	140	0	7
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	17	17	17	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P
²Person-Trips
³Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator
⁴Indicates computation that has been rounded to the nearest whole number.

Table 7.1a Adjusted Internal Trip Capture Rates for Trip Origins within a Multi-Use Development			
Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
From OFFICE	To Office	0.0%	0.0%
	To Retail	28.0%	20.0%
	To Restaurant	63.0%	4.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	1.0%	2.0%
	To Hotel	0.0%	0.0%
From RETAIL	To Office	29.0%	2.0%
	To Retail	0.0%	0.0%
	To Restaurant	13.0%	29.0%
	To Cinema/Entertainment	0.0%	4.0%
	To Residential	14.0%	16.4%
	To Hotel	0.0%	5.0%
From RESTAURANT	To Office	31.0%	3.0%
	To Retail	14.0%	41.0%
	To Restaurant	0.0%	0.0%
	To Cinema/Entertainment	0.0%	8.0%
	To Residential	4.0%	18.0%
	To Hotel	3.0%	7.0%
From CINEMA/ENTERTAINMENT	To Office	0.0%	2.0%
	To Retail	0.0%	21.0%
	To Restaurant	0.0%	31.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	8.0%
	To Hotel	0.0%	2.0%
From RESIDENTIAL	To Office	2.0%	4.0%
	To Retail	1.0%	13.4%
	To Restaurant	20.0%	21.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	0.0%
	To Hotel	0.0%	3.0%
From HOTEL	To Office	75.0%	0.0%
	To Retail	14.0%	16.0%
	To Restaurant	9.0%	68.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	2.0%
	To Hotel	0.0%	0.0%

Table 7.2a Adjusted Internal Trip Capture Rates for Trip Destinations within a Multi-Use Development

Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
To OFFICE	From Office	0.0%	0.0%
	From Retail	4.0%	31.0%
	From Restaurant	14.0%	30.0%
	From Cinema/Entertainment	0.0%	6.0%
	From Residential	3.0%	57.0%
	From Hotel	3.0%	0.0%
To RETAIL	From Office	32.0%	8.0%
	From Retail	0.0%	0.0%
	From Restaurant	8.0%	50.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	17.0%	3.2%
	From Hotel	4.0%	2.0%
To RESTAURANT	From Office	23.0%	2.0%
	From Retail	50.0%	29.0%
	From Restaurant	0.0%	0.0%
	From Cinema/Entertainment	0.0%	3.0%
	From Residential	20.0%	14.0%
	From Hotel	6.0%	5.0%
To CINEMA/ENTERTAINMENT	From Office	0.0%	1.0%
	From Retail	0.0%	26.0%
	From Restaurant	0.0%	32.0%
	From Cinema/Entertainment	0.0%	0.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To RESIDENTIAL	From Office	0.0%	4.0%
	From Retail	2.0%	46.0%
	From Restaurant	5.0%	16.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To HOTEL	From Office	0.0%	0.0%
	From Retail	0.0%	17.0%
	From Restaurant	4.0%	71.0%
	From Cinema/Entertainment	0.0%	1.0%
	From Residential	0.0%	12.0%
	From Hotel	0.0%	0.0%

INPUT VOLUMES

Vehicles and pedestrians per 60 minutes

▼ Site: Sand Canyon & Lost Canyon Cumulative No-Project AM Peak Hour

Sand Canyon & Lost Canyon

Volume Display Method: Total and %

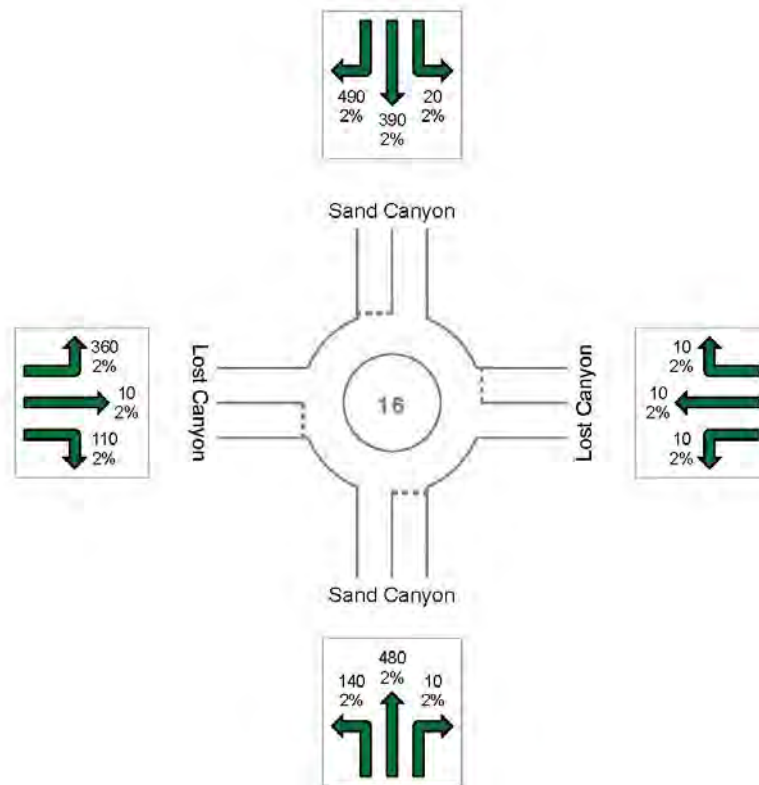
Volumes are shown for Movement Class(es): All Classes and Heavy Vehicles

Total Intersection Volumes (veh)

All Movement Classes: 2040

Light Vehicles (LV): 1999

Heavy Vehicles (HV): 41



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**SIDRA
INTERSECTION 6**

DELAY (AVERAGE)

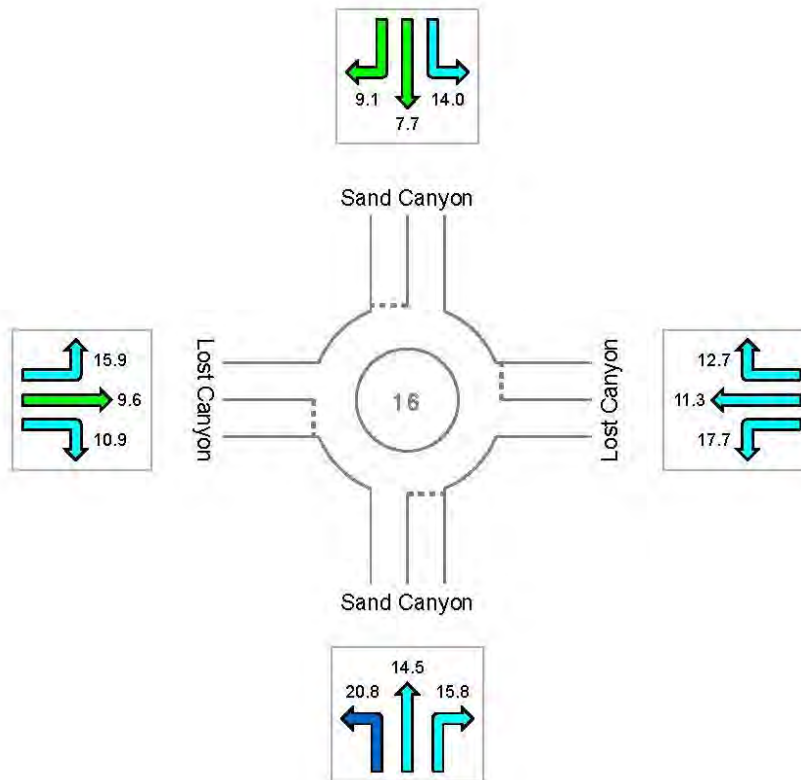
Average control delay per vehicle, or average pedestrian delay (seconds)

Site: Sand Canyon & Lost Canyon Cumulative No-Project AM Peak Hour

Sand Canyon & Lost Canyon Roundabout

All Movement Classes

	South	East	North	West	Intersection
Delay (Average)	15.9	13.9	8.6	14.6	12.3
LOS	B	B	A	B	B



Colour code based on Level of Service



Level of Service Method: Delay & v/c (HCM 2010)

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Roundabout Level of Service Method: Same as Signalised Intersections

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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**SIDRA
INTERSECTION 6**

Detailed Output

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DETAILED OUTPUT

Site: Sand Canyon & Lost Canyon Cumulative No-Project AM Peak Hour

Sand Canyon & Lost Canyon Roundabout

OUTPUT TABLE LINKS

- Roundabouts
 - Roundabout Basic Parameters
 - Roundabout Circulating / Exiting Stream Parameters
 - Roundabout Gap Acceptance Parameters
 - Roundabout Flow Rates
- Movements
- Lanes
 - Lane, Approach and Intersection Performance
- Other
 - Model Settings Summary
 - Diagnostics

Roundabouts

Roundabout Basic Parameters
Site: Sand Canyon & Lost Canyon Cumulative No-Project AM Peak Hour

Intersection ID: 16
Roundabout

Central Island Diam	Circ Width	Insc Diam	Entry Radius	Entry Angle	Circ Lanes	Entry Lanes	Av. Entry Lane Width
ft	ft	ft	ft	deg			ft
South: Sand Canyon							
90.0	20.0	130.0	65.0	30.0	1	1	15.00
East: Lost Canyon							
90.0	20.0	130.0	65.0	30.0	1	1	15.00
North: Sand Canyon							
90.0	20.0	130.0	65.0	30.0	1	1	15.00
West: Lost Canyon							
90.0	20.0	130.0	65.0	30.0	1	1	15.00

Roundabout Capacity Model: SIDRA Standard

[Go to Table Links \(Top\)](#)

Roundabout Circulating / Exiting Stream Parameters
Site: Sand Canyon & Lost Canyon Cumulative No-Project AM Peak Hour

Intersection ID: 16
Roundabout

Dest	Turn	Lane No.	Lane Type	Opng Flow	HVE	Adj.	%Near	%Exit	Cap. Const.	O-D Factor	Aver Speed	In-Bunch Headway	Prop. Bunched
				veh/h	veh	pcu/h	Only	Incl.	Effect		mph	sec	
South: Sand Canyon													
W	L2	1	Dominant	411	1.02	419	0.0	0.0	N	0.907	15.3	2.00	0.400
N	T1	1	Dominant	411	1.02	419	0.0	0.0	N	0.907	15.3	2.00	0.400
E	R2	1	Dominant	411	1.02	419	0.0	0.0	N	0.907	15.3	2.00	0.400
East: Lost Canyon													
S	L2	1	Dominant	1032	1.02	1052	0.0	0.0	N	0.745	19.2	2.00	0.756

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4/26/2017

Detailed Output

W	T1	1	Dominant	1032	1.02	1052	0.0	0.0	N	0.745	19.2	2.00	0.756
N	R2	1	Dominant	1032	1.02	1052	0.0	0.0	N	0.745	19.2	2.00	0.756
North: Sand Canyon													
E	L2	1	Dominant	168	1.02	172	0.0	0.0	N	0.960	15.6	2.00	0.188
S	T1	1	Dominant	168	1.02	172	0.0	0.0	N	0.960	15.6	2.00	0.188
W	R2	1	Dominant	168	1.02	172	0.0	0.0	N	0.960	15.6	2.00	0.188
West: Lost Canyon													
N	L2	1	Dominant	442	1.02	451	0.0	0.0	N	0.884	23.0	2.00	0.424
E	T1	1	Dominant	442	1.02	451	0.0	0.0	N	0.884	23.0	2.00	0.424
S	R2	1	Dominant	442	1.02	451	0.0	0.0	N	0.884	23.0	2.00	0.424

Roundabout Capacity Model: SIDRA Standard

[Go to Table Links \(Top\)](#)

Roundabout Gap Acceptance Parameters

Site: Sand Canyon & Lost Canyon Cumulative No-Project AM Peak Hour

Intersection ID: 16
Roundabout

Dest	Turn	Lane No.	Lane Type	In-Bunch Headway sec	Prop. Bunched	Priority Sharing	HVE for Entry	Critical Gap		Follow-up Headway sec
								Headway sec	Dist ft	
South: Sand Canyon										
Environment Factor: 1.20										
Entry/Circ. Flow Adjustment: Medium										
W	L2	1	Dominant	2.00	0.400	Y	1.02	4.66	104.3	2.87
N	T1	1	Dominant	2.00	0.400	Y	1.02	4.66	104.3	2.87
E	R2	1	Dominant	2.00	0.400	Y	1.02	4.66	104.3	2.87
East: Lost Canyon										
Environment Factor: 1.20										
Entry/Circ. Flow Adjustment: Medium										
S	L2	1	Dominant	2.00	0.756	Y	1.02	3.96	111.7	2.68
W	T1	1	Dominant	2.00	0.756	Y	1.02	3.96	111.7	2.68
N	R2	1	Dominant	2.00	0.756	Y	1.02	3.96	111.7	2.68
North: Sand Canyon										
Environment Factor: 1.20										
Entry/Circ. Flow Adjustment: Medium										
E	L2	1	Dominant	2.00	0.188	Y	1.02	4.63	105.8	2.72
S	T1	1	Dominant	2.00	0.188	Y	1.02	4.63	105.8	2.72
W	R2	1	Dominant	2.00	0.188	Y	1.02	4.63	105.8	2.72
West: Lost Canyon										
Environment Factor: 1.20										
Entry/Circ. Flow Adjustment: Medium										
N	L2	1	Dominant	2.00	0.424	Y	1.02	4.70	158.2	2.91
E	T1	1	Dominant	2.00	0.424	Y	1.02	4.70	158.2	2.91
S	R2	1	Dominant	2.00	0.424	Y	1.02	4.70	158.2	2.91

Roundabout Capacity Model: SIDRA Standard

Priority sharing means Follow-up Headway plus Intra-bunch Headway is larger than the Critical Gap.

Dist (Distance): Spacing, i.e. distance between the front ends of two successive vehicles across all lanes in the circulating or exiting stream

[Go to Table Links \(Top\)](#)

Roundabout Flow Rates

Site: Sand Canyon & Lost Canyon Cumulative No-Project AM Peak Hour

Intersection ID: 16
Roundabout

CIRCULATING LANE FLOW RATES

Lane No.	Circulating Flow Rates	
	veh/h	pcu/h Percent

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4/26/2017

Detailed Output

South: Sand Canyon			
1	411	419	100.0%
Total	411	419	

East: Lost Canyon			
1	1032	1052	100.0%
Total	1032	1052	

North: Sand Canyon			
1	168	172	100.0%
Total	168	172	

West: Lost Canyon			
1	442	451	100.0%
Total	442	451	

APPROACH LANE FLOW RATES

Lane No.	Approach Flows (veh/h)		
	Out	To Downst	Total

South: Sand Canyon			
1	11	652	663
Total	11	652	663

East: Lost Canyon			
1	11	21	32
Total	11	21	32

North: Sand Canyon			
1	516	431	947
Total	516	431	947

West: Lost Canyon			
1	116	389	505
Total	116	389	505

[Go to Table Links \(Top\)](#)

Movements

Lanes

Lane, Approach and Intersection Performance
 Site: Sand Canyon & Lost Canyon Cumulative No-Project AM Peak Hour

Intersection ID: 16
 Roundabout

Lane No.	Demand Flow (veh/h)	Adj. \$HV Satf.	Deg Basic Satf.	Aver. Delay sec	Longest Queue ft	Shrt. Lane ft

South: Sand Canyon						
1	663	2	0.856	15.9	348	900
	663	2	0.856	15.9	348	

East: Lost Canyon						
1	32	2	0.087	13.9	13	700
	32	2	0.087	13.9	13	

North: Sand Canyon						
1	947	2	0.872	8.6	433	1100
	947	2	0.872	8.6	433	

West: Lost Canyon						
1	505	2	0.701	14.6	189	250

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4/26/2017

Detailed Output

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-----
          505      2      0.701  14.6  189
-----
ALL VEHICLES
  Total      %      Max      Aver.      Max
  Flow      HV      X      Delay      Queue
  2147      2      0.872  12.3  433
-----
Peak flow period = 15 minutes.

Queue values in this table are 95% queue (feet)
Note: Basic Saturation Flows are not adjusted at roundabouts or sign-
      controlled intersections and apply only to continuous lanes.
    
```

[Go to Table Links \(Top\)](#)

Other

Model Settings Summary

Site: Sand Canyon & Lost Canyon Cumulative No-Project AM Peak Hour

Intersection ID: 16
Roundabout

* Basic Parameters:
 Intersection Type: Roundabout
 Driving on the right-hand side of the road
 Input data specified in US units
 Model Defaults: US HCM (Customary)
 Peak Flow Period (for performance): 15 minutes
 Unit time (for volumes): 60 minutes.
 SIDRA Standard Delay model used
 HCM Queue Model option used
 Level of Service based on: Delay and v/c (HCM 2010)
 Queue percentile: 95%

[Go to Table Links \(Top\)](#)

Diagnostics

Site: Sand Canyon & Lost Canyon Cumulative No-Project AM Peak Hour

[Go to Table Links \(Top\)](#)

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4/26/2017

INPUT VOLUMES

Vehicles and pedestrians per 60 minutes

Site: Sand Canyon & Lost Canyon Cumulative No-Project PM Peak Hour

Volume Display Method: Total and %

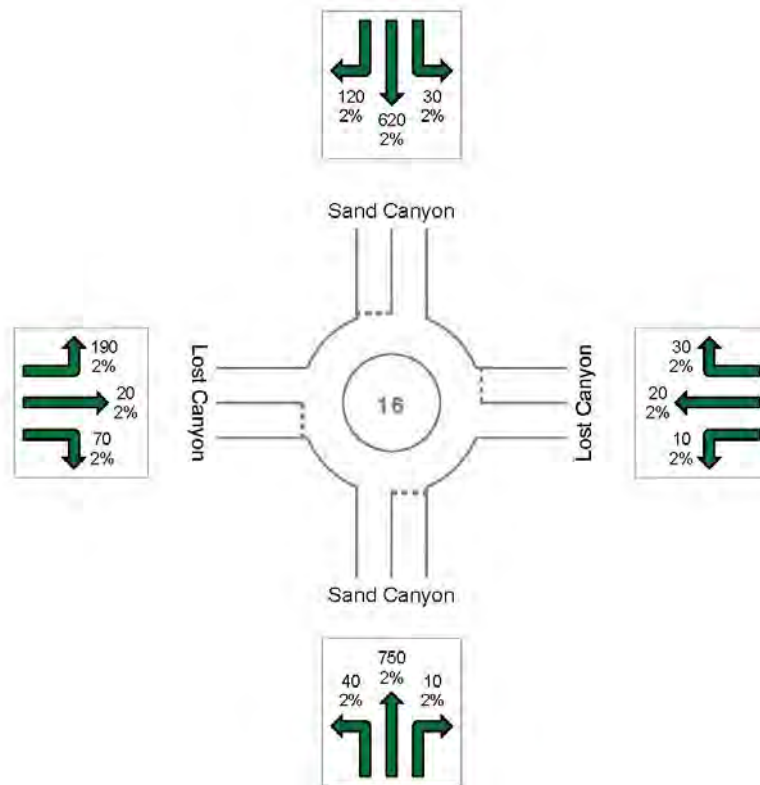
Volumes are shown for Movement Class(es): All Classes and Heavy Vehicles

Total Intersection Volumes (veh)

All Movement Classes: 1910

Light Vehicles (LV): 1872

Heavy Vehicles (HV): 38



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**SIDRA
INTERSECTION 6**

DELAY (AVERAGE)

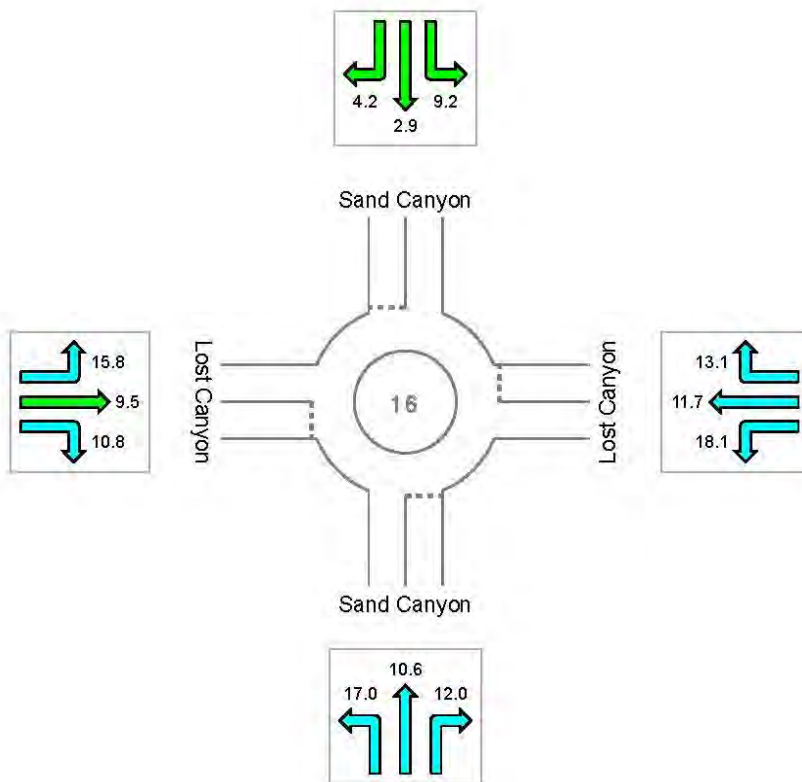
Average control delay per vehicle, or average pedestrian delay (seconds)

Site: Sand Canyon & Lost Canyon Cumulative No-Project PM Peak Hour

Roundabout

All Movement Classes

	South	East	North	West	Intersection
Delay (Average)	11.0	13.5	3.3	14.1	8.4
LOS	B	B	A	B	A



Colour code based on Level of Service



Level of Service Method: Delay & v/c (HCM 2010)

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Roundabout Level of Service Method: Same as Signalised Intersections

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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**SIDRA
INTERSECTION 6**

DETAILED OUTPUT

Site: Sand Canyon & Lost Canyon Cumulative No-Project PM Peak Hour

Roundabout

OUTPUT TABLE LINKS

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 - Roundabout Circulating / Exiting Stream Parameters
 - Roundabout Gap Acceptance Parameters
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- Movements
- Lanes
 - Lane, Approach and Intersection Performance
- Other
 - Model Settings Summary
 - Diagnostics

Roundabouts

Roundabout Basic Parameters

Site: Sand Canyon & Lost Canyon Cumulative No-Project PM Peak Hour

Intersection ID: 16
Roundabout

Central Island Diam ft	Circ Width ft	Insc Diam. ft	Entry Radius ft	Entry Angle deg	Circ Lanes	Entry Lanes	Av. Entry Lane Width ft
South: Sand Canyon							
90.0	20.0	130.0	65.0	30.0	1	1	15.00
East: Lost Canyon							
90.0	20.0	130.0	65.0	30.0	1	1	15.00
North: Sand Canyon							
90.0	20.0	130.0	65.0	30.0	1	1	15.00
West: Lost Canyon							
90.0	20.0	130.0	65.0	30.0	1	1	15.00

Roundabout Capacity Model: SIDRA Standard

[Go to Table Links \(Top\)](#)

Roundabout Circulating / Exiting Stream Parameters

Site: Sand Canyon & Lost Canyon Cumulative No-Project PM Peak Hour

Intersection ID: 16
Roundabout

Dest	Turn	Lane No.	Lane Type	Opng Flow veh/h	HVE pcu/veh	Adj. Flow pcu/h	%Near Lane Only	%Exit Flow Incl.	Cap. Const. Effect	O-D Factor	Aver Speed mph	In-Bunch Headway sec	Prop. Bunched
South: Sand Canyon													
W	L2	1	Dominant	253	1.02	258	0.0	0.0	N	0.954	15.7	2.00	0.269
N	T1	1	Dominant	253	1.02	258	0.0	0.0	N	0.954	15.7	2.00	0.269
E	R2	1	Dominant	253	1.02	258	0.0	0.0	N	0.954	15.7	2.00	0.269
East: Lost Canyon													
S	L2	1	Dominant	1032	1.02	1052	0.0	0.0	N	0.675	21.6	2.00	0.756

Detailed Output

W	T1	1	Dominant	1032	1.02	1052	0.0	0.0	N	0.675	21.6	2.00	0.756
N	R2	1	Dominant	1032	1.02	1052	0.0	0.0	N	0.675	21.6	2.00	0.756
North: Sand Canyon													
E	L2	1	Dominant	74	1.02	75	0.0	0.0	N	0.986	17.5	2.00	0.087
S	T1	1	Dominant	74	1.02	75	0.0	0.0	N	0.986	17.5	2.00	0.087
W	R2	1	Dominant	74	1.02	75	0.0	0.0	N	0.986	17.5	2.00	0.087
West: Lost Canyon													
N	L2	1	Dominant	695	1.02	709	0.0	0.0	N	0.903	23.1	2.00	0.588
E	T1	1	Dominant	695	1.02	709	0.0	0.0	N	0.903	23.1	2.00	0.588
S	R2	1	Dominant	695	1.02	709	0.0	0.0	N	0.903	23.1	2.00	0.588

Roundabout Capacity Model: SIDRA Standard

[Go to Table Links \(Top\)](#)

Roundabout Gap Acceptance Parameters

Site: Sand Canyon & Lost Canyon Cumulative No-Project PM Peak Hour

Intersection ID: 16
Roundabout

Dest	Turn	Lane No.	Lane Type	In-Bunch Headway sec	Prop. Bunched	Priority Sharing	HVE for Entry	Critical Gap		Follow-up Headway sec
								Headway sec	Dist ft	
South: Sand Canyon										
Environment Factor: 1.20										
Entry/Circ. Flow Adjustment: Medium										
W	L2	1	Dominant	2.00	0.269	Y	1.02	4.67	108.0	2.79
N	T1	1	Dominant	2.00	0.269	Y	1.02	4.67	108.0	2.79
E	R2	1	Dominant	2.00	0.269	Y	1.02	4.67	108.0	2.79
East: Lost Canyon										
Environment Factor: 1.20										
Entry/Circ. Flow Adjustment: Medium										
S	L2	1	Dominant	2.00	0.756	Y	1.02	3.96	125.4	2.68
W	T1	1	Dominant	2.00	0.756	Y	1.02	3.96	125.4	2.68
N	R2	1	Dominant	2.00	0.756	Y	1.02	3.96	125.4	2.68
North: Sand Canyon										
Environment Factor: 1.20										
Entry/Circ. Flow Adjustment: Medium										
E	L2	1	Dominant	2.00	0.087	Y	1.02	4.54	116.3	2.61
S	T1	1	Dominant	2.00	0.087	Y	1.02	4.54	116.3	2.61
W	R2	1	Dominant	2.00	0.087	Y	1.02	4.54	116.3	2.61
West: Lost Canyon										
Environment Factor: 1.20										
Entry/Circ. Flow Adjustment: Medium										
N	L2	1	Dominant	2.00	0.588	Y	1.02	4.35	147.2	2.81
E	T1	1	Dominant	2.00	0.588	Y	1.02	4.35	147.2	2.81
S	R2	1	Dominant	2.00	0.588	Y	1.02	4.35	147.2	2.81

Roundabout Capacity Model: SIDRA Standard

Priority sharing means Follow-up Headway plus Intra-bunch Headway is larger than the Critical Gap.

Dist (Distance): Spacing, i.e. distance between the front ends of two successive vehicles across all lanes in the circulating or exiting stream

[Go to Table Links \(Top\)](#)

Roundabout Flow Rates

Site: Sand Canyon & Lost Canyon Cumulative No-Project PM Peak Hour

Intersection ID: 16
Roundabout

CIRCULATING LANE FLOW RATES

Lane No.	Circulating Flow Rates		
	veh/h	pcu/h	Percent

about:blank

4/26/2017

Detailed Output

South: Sand Canyon			
1	253	258	100.0%
Total	253	258	
East: Lost Canyon			
1	1032	1052	100.0%
Total	1032	1052	
North: Sand Canyon			
1	74	75	100.0%
Total	74	75	
West: Lost Canyon			
1	695	709	100.0%
Total	695	709	

APPROACH LANE FLOW RATES

Lane No.	Approach Flows (veh/h)		
	Out	To Downst	Total
South: Sand Canyon			
1	11	831	842
Total	11	831	842
East: Lost Canyon			
1	32	31	63
Total	32	31	63
North: Sand Canyon			
1	126	685	811
Total	126	685	811
West: Lost Canyon			
1	74	221	295
Total	74	221	295

[Go to Table Links \(Top\)](#)

Movements

Lanes

Lane, Approach and Intersection Performance
 Site: Sand Canyon & Lost Canyon Cumulative No-Project PM Peak Hour

Intersection ID: 16
 Roundabout

Lane No.	Demand Flow (veh/h)	Adj. HV	Basic Satf.	Deg s	Aver. Delay sec	Longest Queue ft	Shrt Lane ft
South: Sand Canyon							
1	842	2		0.867	11.0	404	900
	842	2		0.867	11.0	404	
East: Lost Canyon							
1	63	2		0.191	13.5	30	700
	63	2		0.191	13.5	30	
North: Sand Canyon							
1	811	2		0.638	3.3	163	1100
	811	2		0.638	3.3	163	
West: Lost Canyon							
1	295	2		0.485	14.1	88	250

about:blank

4/26/2017

Detailed Output

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```

-----
          295      2      0.485  14.1   88
-----
ALL VEHICLES
  Total      %      Max  Aver.   Max
  Flow  HV      X  Delay  Queue
  2011      2      0.867  8.4   404
-----
Peak flow period = 15 minutes.

Queue values in this table are 95% queue (feet)
Note: Basic Saturation Flows are not adjusted at roundabouts or sign-
      controlled intersections and apply only to continuous lanes.
    
```

[Go to Table Links \(Top\)](#)

Other

Model Settings Summary

Site: Sand Canyon & Lost Canyon Cumulative No-Project PM Peak Hour

Intersection ID: 16
Roundabout

- * Basic Parameters:
- Intersection Type: Roundabout
- Driving on the right-hand side of the road
- Input data specified in US units
- Model Defaults: US HCM (Customary)
- Peak Flow Period (for performance): 15 minutes
- Unit time (for volumes): 60 minutes.
- SIDRA Standard Delay model used
- HCM Queue Model option used
- Level of Service based on: Delay and v/c (HCM 2010)
- Queue percentile: 95%

[Go to Table Links \(Top\)](#)

Diagnostics

Site: Sand Canyon & Lost Canyon Cumulative No-Project PM Peak Hour

[Go to Table Links \(Top\)](#)

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about:blank

4/26/2017

INPUT VOLUMES

Vehicles and pedestrians per 60 minutes

Site: Sand Canyon & Lost Canyon Cumulative With-Project AM Peak Hour

Volume Display Method: Total and %

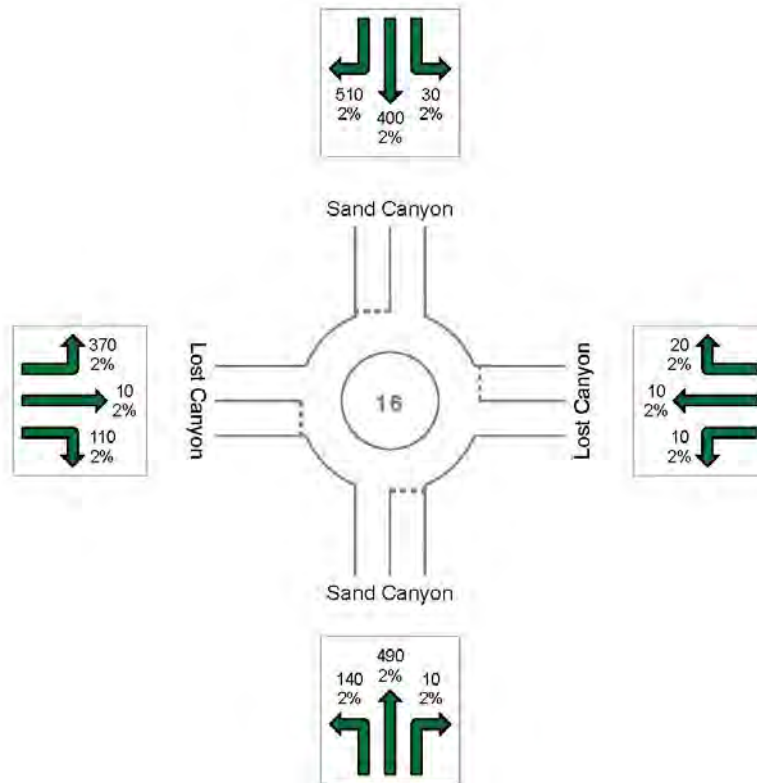
Volumes are shown for Movement Class(es): All Classes and Heavy Vehicles

Total Intersection Volumes (veh)

All Movement Classes: 2110

Light Vehicles (LV): 2068

Heavy Vehicles (HV): 42



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**SIDRA
INTERSECTION 6**

DELAY (AVERAGE)

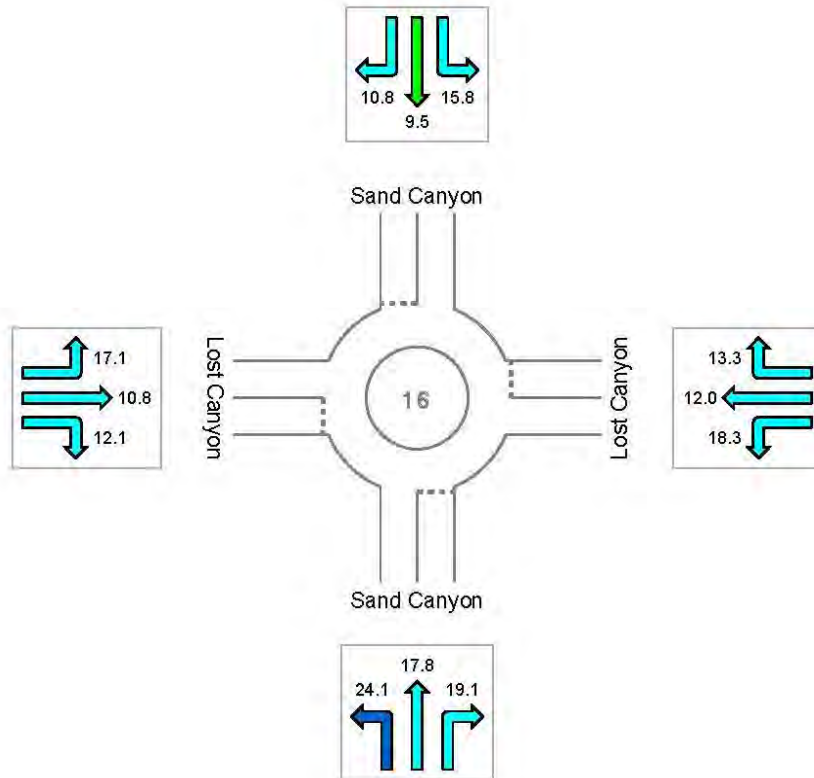
Average control delay per vehicle, or average pedestrian delay (seconds)

Site: Sand Canyon & Lost Canyon Cumulative With-Project AM Peak Hour

Roundabout

All Movement Classes

	South	East	North	West	Intersection
Delay (Average)	19.2	14.2	10.4	15.8	14.4
LOS	B	B	B	B	B



Colour code based on Level of Service



Level of Service Method: Delay & v/c (HCM 2010)

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Roundabout Level of Service Method: Same as Signalised Intersections

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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**SIDRA
INTERSECTION 6**

DETAILED OUTPUT

Site: Sand Canyon & Lost Canyon Cumulative
With-Project AM Peak Hour

Roundabout

OUTPUT TABLE LINKS

- Roundabouts
 - Roundabout Basic Parameters
 - Roundabout Circulating / Exiting Stream Parameters
 - Roundabout Gap Acceptance Parameters
 - Roundabout Flow Rates
- Movements
- Lanes
 - Lane, Approach and Intersection Performance
- Other
 - Model Settings Summary
 - Diagnostics

Roundabouts

Roundabout Basic Parameters
Site: Sand Canyon & Lost Canyon Cumulative With-Project AM Peak Hour

Intersection ID: 16
Roundabout

Central Island Diam	Circ Width	Insc Diam	Entry Radius	Entry Angle	Circ Lanes	Entry Lanes	Av. Entry Lane Width
ft	ft	ft	ft	deg			ft
South: Sand Canyon							
90.0	20.0	130.0	65.0	30.0	1	1	15.00
East: Lost Canyon							
90.0	20.0	130.0	65.0	30.0	1	1	15.00
North: Sand Canyon							
90.0	20.0	130.0	65.0	30.0	1	1	15.00
West: Lost Canyon							
90.0	20.0	130.0	65.0	30.0	1	1	15.00

Roundabout Capacity Model: SIDRA Standard

[Go to Table Links \(Top\)](#)

Roundabout Circulating / Exiting Stream Parameters
Site: Sand Canyon & Lost Canyon Cumulative With-Project AM Peak Hour

Intersection ID: 16
Roundabout

Dest	Turn	Lane No.	Lane Type	Opng Flow	HVE	Adj.	%Near	%Exit	Cap. Const.	O-D Factor	Aver Speed	In-Bunch Headway	Prop. Bunched
				veh/h	veh	pcu/h	Lane Only	Flow Incl.	Effect		mph	sec	
South: Sand Canyon													
W	L2	1	Dominant	432	1.02	440	0.0	0.0	N	0.900	15.2	2.00	0.416
N	T1	1	Dominant	432	1.02	440	0.0	0.0	N	0.900	15.2	2.00	0.416
E	R2	1	Dominant	432	1.02	440	0.0	0.0	N	0.900	15.2	2.00	0.416
East: Lost Canyon													
S	L2	1	Dominant	1053	1.02	1074	0.0	0.0	N	0.740	19.2	2.00	0.765

Detailed Output

W	T1	1	Dominant	1053	1.02	1074	0.0	0.0	N	0.740	19.2	2.00	0.765
N	R2	1	Dominant	1053	1.02	1074	0.0	0.0	N	0.740	19.2	2.00	0.765
North: Sand Canyon													
E	L2	1	Dominant	168	1.02	172	0.0	0.0	N	0.960	15.6	2.00	0.188
S	T1	1	Dominant	168	1.02	172	0.0	0.0	N	0.960	15.6	2.00	0.188
W	R2	1	Dominant	169	1.02	172	0.0	0.0	N	0.960	15.6	2.00	0.188
West: Lost Canyon													
N	L2	1	Dominant	463	1.02	472	0.0	0.0	N	0.877	22.8	2.00	0.439
E	T1	1	Dominant	463	1.02	472	0.0	0.0	N	0.877	22.8	2.00	0.439
S	R2	1	Dominant	463	1.02	472	0.0	0.0	N	0.877	22.8	2.00	0.439

Roundabout Capacity Model: SIDRA Standard

[Go to Table Links \(Top\)](#)

Roundabout Gap Acceptance Parameters

Site: Sand Canyon & Lost Canyon Cumulative With-Project AM Peak Hour

Intersection ID: 16
Roundabout

Dest	Turn	Lane No.	Lane Type	In-Bunch Headway sec	Prop. Bunched	Priority Sharing	HVE For Entry	Critical Gap		Follow-up Headway sec
								Headway sec	Dist ft	
South: Sand Canyon										
Environment Factor: 1.20										
Entry/Circ. Flow Adjustment: Medium										
W	L2	1	Dominant	2.00	0.416	Y	1.02	4.64	103.8	2.87
N	T1	1	Dominant	2.00	0.416	Y	1.02	4.64	103.8	2.87
E	R2	1	Dominant	2.00	0.416	Y	1.02	4.64	103.8	2.87
East: Lost Canyon										
Environment Factor: 1.20										
Entry/Circ. Flow Adjustment: Medium										
S	L2	1	Dominant	2.00	0.765	Y	1.02	3.94	111.1	2.68
W	T1	1	Dominant	2.00	0.765	Y	1.02	3.94	111.1	2.68
N	R2	1	Dominant	2.00	0.765	Y	1.02	3.94	111.1	2.68
North: Sand Canyon										
Environment Factor: 1.20										
Entry/Circ. Flow Adjustment: Medium										
E	L2	1	Dominant	2.00	0.188	Y	1.02	4.62	105.4	2.71
S	T1	1	Dominant	2.00	0.188	Y	1.02	4.62	105.4	2.71
W	R2	1	Dominant	2.00	0.188	Y	1.02	4.62	105.4	2.71
West: Lost Canyon										
Environment Factor: 1.20										
Entry/Circ. Flow Adjustment: Medium										
N	L2	1	Dominant	2.00	0.439	Y	1.02	4.67	156.2	2.90
E	T1	1	Dominant	2.00	0.439	Y	1.02	4.67	156.2	2.90
S	R2	1	Dominant	2.00	0.439	Y	1.02	4.67	156.2	2.90

Roundabout Capacity Model: SIDRA Standard

Priority sharing means Follow-up Headway plus Intra-bunch Headway is larger than the Critical Gap.

Dist (Distance): Spacing, i.e. distance between the front ends of two successive vehicles across all lanes in the circulating or exiting stream

[Go to Table Links \(Top\)](#)

Roundabout Flow Rates

Site: Sand Canyon & Lost Canyon Cumulative With-Project AM Peak Hour

Intersection ID: 16
Roundabout

CIRCULATING LANE FLOW RATES

Lane No.	Circulating Flow Rates	
	veh/h	pcu/h Percent

about:blank

4/26/2017

Detailed Output

South: Sand Canyon			
1	432	440	100.0%
Total	432	440	

East: Lost Canyon			
1	1053	1074	100.0%
Total	1053	1074	

North: Sand Canyon			
1	168	172	100.0%
Total	168	172	

West: Lost Canyon			
1	463	472	100.0%
Total	463	472	

APPROACH LANE FLOW RATES

Lane No.	Approach Flows (veh/h)		Total
	Out	To Downst	

South: Sand Canyon			
1	11	663	674
Total	11	663	674

East: Lost Canyon			
1	21	21	42
Total	21	21	42

North: Sand Canyon			
1	537	452	989
Total	537	452	989

West: Lost Canyon			
1	116	400	516
Total	116	400	516

[Go to Table Links \(Top\)](#)

Movements

Lanes

Lane, Approach and Intersection Performance
 Site: Sand Canyon & Lost Canyon Cumulative With-Project AM Peak Hour

Intersection ID: 16
 Roundabout

Lane No.	Demand Flow (veh/h)	Adj. \$HV Satf.	Deg Basic Satf.	Aver. Delay sec	Longest Queue ft	Shrt Lane ft

South: Sand Canyon						
1	674	2	0.893	19.2	407	900
	674	2	0.893	19.2	407	

East: Lost Canyon						
1	42	2	0.119	14.2	18	700
	42	2	0.119	14.2	18	

North: Sand Canyon						
1	989	2	0.908	10.4	534	1100
	989	2	0.908	10.4	534	

West: Lost Canyon						
1	516	2	0.734	15.8	210	250

about:blank

4/26/2017

Detailed Output

Page 4 of 4

```

-----
          516      2      0.734  15.8  210
-----
ALL VEHICLES
  Total   %      Max   Aver.   Max
  Flow   HV      X   Delay  Queue
-----
  2221   2      0.908  14.4   534
-----
Peak flow period = 15 minutes.

Queue values in this table are 95% queue (feet)
Note: Basic Saturation Flows are not adjusted at roundabouts or sign-
      controlled intersections and apply only to continuous lanes.
    
```

[Go to Table Links \(Top\)](#)

Other

Model Settings Summary

Site: Sand Canyon & Lost Canyon Cumulative With-Project AM Peak Hour

Intersection ID: 16
Roundabout

* Basic Parameters:
 Intersection Type: Roundabout
 Driving on the right-hand side of the road
 Input data specified in US units
 Model Defaults: US HCM (Customary)
 Peak Flow Period (for performance): 15 minutes
 Unit time (for volumes): 60 minutes.
 SIDRA Standard Delay model used
 HCM Queue Model option used
 Level of Service based on: Delay and v/c (HCM 2010)
 Queue percentile: 95%

[Go to Table Links \(Top\)](#)

Diagnostics

Site: Sand Canyon & Lost Canyon Cumulative With-Project AM Peak Hour

[Go to Table Links \(Top\)](#)

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INPUT VOLUMES

Vehicles and pedestrians per 60 minutes

Site: Sand Canyon & Lost Canyon Cumulative With-Project PM Peak Hour

Sand Canyon & Lost Canyon

Volume Display Method: Total and %

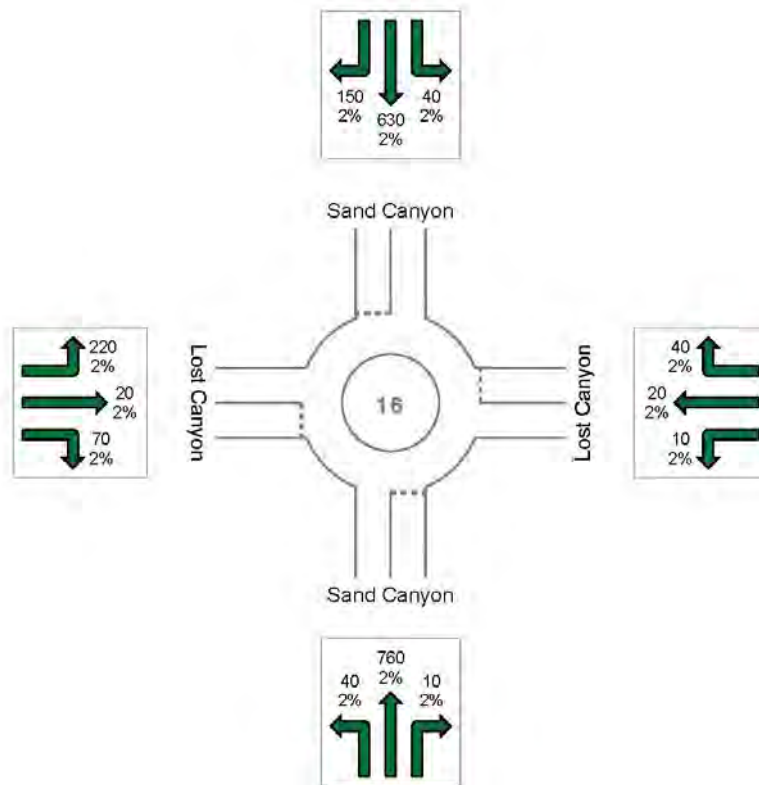
Volumes are shown for Movement Class(es): All Classes and Heavy Vehicles

Total Intersection Volumes (veh)

All Movement Classes: 2010

Light Vehicles (LV): 1970

Heavy Vehicles (HV): 40



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**SIDRA
INTERSECTION 6**

DELAY (AVERAGE)

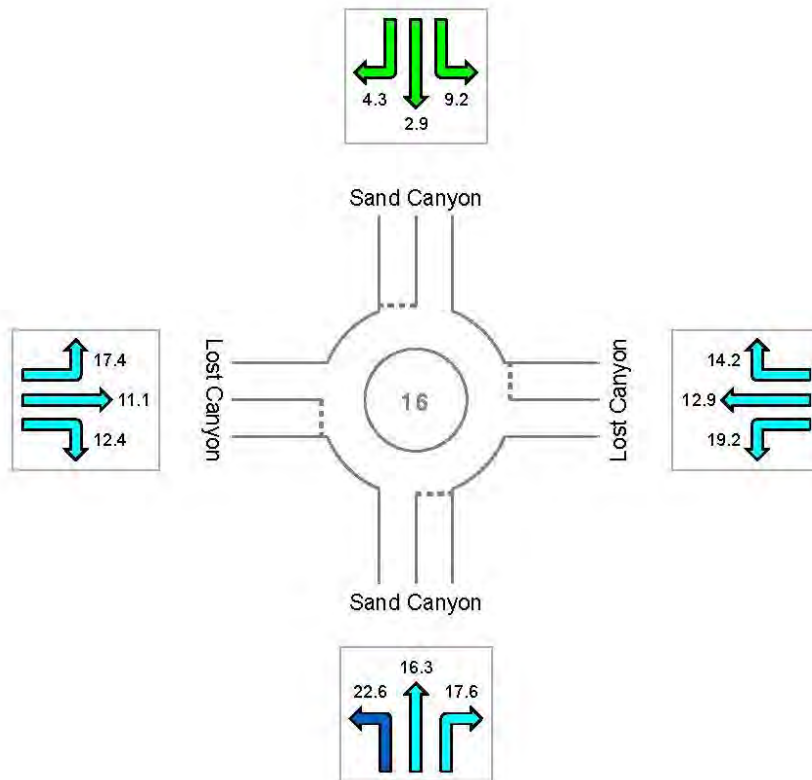
Average control delay per vehicle, or average pedestrian delay (seconds)

Site: Sand Canyon & Lost Canyon Cumulative With-Project PM Peak Hour

Sand Canyon & Lost Canyon Roundabout

All Movement Classes

	South	East	North	West	Intersection
Delay (Average)	16.6	14.5	3.5	15.9	11.1
LOS	B	B	A	B	B



Colour code based on Level of Service



Level of Service Method: Delay & v/c (HCM 2010)

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Roundabout Level of Service Method: Same as Signalised Intersections

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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**SIDRA
INTERSECTION 6**

DETAILED OUTPUT

Site: Sand Canyon & Lost Canyon Cumulative
With-Project PM Peak Hour

Sand Canyon & Lost Canyon
Roundabout

OUTPUT TABLE LINKS

- Roundabouts
 - Roundabout Basic Parameters
 - Roundabout Circulating / Exiting Stream Parameters
 - Roundabout Gap Acceptance Parameters
 - Roundabout Flow Rates
- Movements
- Lanes
 - Lane, Approach and Intersection Performance
- Other
 - Model Settings Summary
 - Diagnostics

Roundabouts

Roundabout Basic Parameters
Site: Sand Canyon & Lost Canyon Cumulative With-Project PM Peak Hour

Intersection ID: 16
Roundabout

Central Island Diam ft	Circ Width ft	Insc Diam. ft	Entry Radius ft	Entry Angle deg	Circ Lanes	Entry Lanes	Av. Entry Lane Width ft
South: Sand Canyon							
90.0	20.0	130.0	65.0	30.0	1	1	15.00
East: Lost Canyon							
90.0	20.0	130.0	65.0	30.0	1	1	15.00
North: Sand Canyon							
90.0	20.0	130.0	65.0	30.0	1	1	15.00
West: Lost Canyon							
90.0	20.0	130.0	65.0	30.0	1	1	15.00

Roundabout Capacity Model: SIDRA Standard

[Go to Table Links \(Top\)](#)

Roundabout Circulating / Exiting Stream Parameters
Site: Sand Canyon & Lost Canyon Cumulative With-Project PM Peak Hour

Intersection ID: 16
Roundabout

Dest	Turn	Lane No.	Lane Type	Opng Flow veh/h	HVE pcu/veh	Adj. Flow pcu/h	%Near Lane Only	%Exit Flow Incl.	Cap. Const. Effect	O-D Factor	Aver Speed mph	In-Bunch Headway sec	Prop. Bunched
South: Sand Canyon													
W	L2	1	Dominant	295	1.02	301	0.0	0.0	N	0.945	15.6	2.00	0.306
N	T1	1	Dominant	295	1.02	301	0.0	0.0	N	0.945	15.6	2.00	0.306
E	R2	1	Dominant	295	1.02	301	0.0	0.0	N	0.945	15.6	2.00	0.306
East: Lost Canyon													
S	L2	1	Dominant	1074	1.02	1095	0.0	0.0	N	0.670	21.4	2.00	0.774

Detailed Output

W	T1	1	Dominant	1074	1.02	1095	0.0	0.0	N	0.670	21.4	2.00	0.774
N	R2	1	Dominant	1074	1.02	1095	0.0	0.0	N	0.670	21.4	2.00	0.774
North: Sand Canyon													
E	L2	1	Dominant	74	1.02	75	0.0	0.0	N	0.986	17.5	2.00	0.087
S	T1	1	Dominant	74	1.02	75	0.0	0.0	N	0.986	17.5	2.00	0.087
W	R2	1	Dominant	74	1.02	75	0.0	0.0	N	0.986	17.5	2.00	0.087
West: Lost Canyon													
N	L2	1	Dominant	716	1.02	730	0.0	0.0	N	0.890	22.9	2.00	0.600
E	T1	1	Dominant	716	1.02	730	0.0	0.0	N	0.890	22.9	2.00	0.600
S	R2	1	Dominant	716	1.02	730	0.0	0.0	N	0.890	22.9	2.00	0.600

Roundabout Capacity Model: SIDRA Standard

[Go to Table Links \(Top\)](#)

Roundabout Gap Acceptance Parameters

Site: Sand Canyon & Lost Canyon Cumulative With-Project PM Peak Hour

Intersection ID: 16
Roundabout

Dest	Turn	Lane No.	Lane Type	In-Bunch Headway sec	Prop. Bunched	Priority Sharing	HVE for Entry	Critical Gap		Follow-up Headway sec
								Headway sec	Dist ft	
South: Sand Canyon										
Environment Factor: 1.20										
Entry/Circ. Flow Adjustment: Medium										
W	L2	1	Dominant	2.00	0.306	Y	1.02	4.66	106.9	2.80
N	T1	1	Dominant	2.00	0.306	Y	1.02	4.66	106.9	2.80
E	R2	1	Dominant	2.00	0.306	Y	1.02	4.66	106.9	2.80
East: Lost Canyon										
Environment Factor: 1.20										
Entry/Circ. Flow Adjustment: Medium										
S	L2	1	Dominant	2.00	0.774	Y	1.02	3.92	123.0	2.67
W	T1	1	Dominant	2.00	0.774	Y	1.02	3.92	123.0	2.67
N	R2	1	Dominant	2.00	0.774	Y	1.02	3.92	123.0	2.67
North: Sand Canyon										
Environment Factor: 1.20										
Entry/Circ. Flow Adjustment: Medium										
E	L2	1	Dominant	2.00	0.087	Y	1.02	4.52	115.8	2.60
S	T1	1	Dominant	2.00	0.087	Y	1.02	4.52	115.8	2.60
W	R2	1	Dominant	2.00	0.087	Y	1.02	4.52	115.8	2.60
West: Lost Canyon										
Environment Factor: 1.20										
Entry/Circ. Flow Adjustment: Medium										
N	L2	1	Dominant	2.00	0.600	Y	1.02	4.33	145.6	2.81
E	T1	1	Dominant	2.00	0.600	Y	1.02	4.33	145.6	2.81
S	R2	1	Dominant	2.00	0.600	Y	1.02	4.33	145.6	2.81

Roundabout Capacity Model: SIDRA Standard

Priority sharing means Follow-up Headway plus Intra-bunch Headway is larger than the Critical Gap.

Dist (Distance): Spacing, i.e. distance between the front ends of two successive vehicles across all lanes in the circulating or exiting stream

[Go to Table Links \(Top\)](#)

Roundabout Flow Rates

Site: Sand Canyon & Lost Canyon Cumulative With-Project PM Peak Hour

Intersection ID: 16
Roundabout

CIRCULATING LANE FLOW RATES

Lane No.	Circulating Flow Rates		
	veh/h	pcu/h	Percent

Detailed Output

South: Sand Canyon			
1	295	301	100.0%
Total	295	301	
East: Lost Canyon			
1	1074	1095	100.0%
Total	1074	1095	
North: Sand Canyon			
1	74	75	100.0%
Total	74	75	
West: Lost Canyon			
1	716	730	100.0%
Total	716	730	

APPROACH LANE FLOW RATES

Lane No.	Approach Flows (veh/h)		
	Out	To Downst	Total
South: Sand Canyon			
1	11	842	853
Total	11	842	853
East: Lost Canyon			
1	42	32	74
Total	42	32	74
North: Sand Canyon			
1	158	705	863
Total	158	705	863
West: Lost Canyon			
1	74	252	326
Total	74	252	326

[Go to Table Links \(Top\)](#)

Movements

Lanes

Lane, Approach and Intersection Performance
 Site: Sand Canyon & Lost Canyon Cumulative With-Project PM Peak Hour

Intersection ID: I6
 Roundabout

Lane No.	Demand Flow (veh/h)	Adj. HV	Basic Satf.	Deg s	Aver. Delay sec	Longest Queue ft	Shrt. Lane ft
South: Sand Canyon							
1	853	2		0.925	16.6	537	900
	853	2		0.925	16.6	537	
East: Lost Canyon							
1	74	2		0.236	14.5	38	700
	74	2		0.236	14.5	38	
North: Sand Canyon							
1	863	2		0.676	3.5	187	1100
	863	2		0.676	3.5	187	
West: Lost Canyon							
1	326	2		0.554	15.9	111	250

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4/26/2017

Detailed Output

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-----
          326      2      0.554  15.9  111
-----
ALL VEHICLES
  Total      %      Max  Aver.  Max
  Flow  HV      X  Delay  Queue
  2116    2      0.925  11.1  537
-----
Peak flow period = 15 minutes.

Queue values in this table are 95% queue (feet)
Note: Basic Saturation Flows are not adjusted at roundabouts or sign-
      controlled intersections and apply only to continuous lanes.
    
```

[Go to Table Links \(Top\)](#)

Other

Model Settings Summary

Site: Sand Canyon & Lost Canyon Cumulative With-Project PM Peak Hour

Intersection ID: 16
Roundabout

- * Basic Parameters:
- Intersection Type: Roundabout
- Driving on the right-hand side of the road
- Input data specified in US units
- Model Defaults: US HCM (Customary)
- Peak Flow Period (for performance): 15 minutes
- Unit time (for volumes): 60 minutes.
- SIDRA Standard Delay model used
- HCM Queue Model option used
- Level of Service based on: Delay and v/c (HCM 2010)
- Queue percentile: 95%

[Go to Table Links \(Top\)](#)

Diagnostics

Site: Sand Canyon & Lost Canyon Cumulative With-Project PM Peak Hour

[Go to Table Links \(Top\)](#)

Processed: Wednesday, April 26, 2017 8:41:43 PM Copyright © 2000-2013 Akcelik and Associates Pty Ltd
 SIDRA INTERSECTION 6.0.11.3995 www.sidrasolutions.com
 Project: V:\2073\active\2073008930\analysis\sidra\2073008930-SandCyn&LostCyn.sip6
 8001309, STANTEC CONSULTING SVCS INC, PLUS / 1PC



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4/26/2017

**Opening Day (2018) w/Proj Mit AM Peak Hour
4: SR-14 SB Ramps & Soledad Canyon**

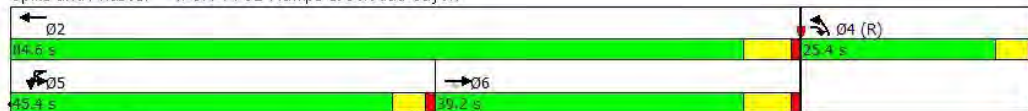
Synchro 9 Report
Lanes, Volumes, Timings

	→	↘	↙	↖	←	↗	↘
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↓	↑↑	↘↘	
Traffic Volume (vph)	480	440	20	410	1160	370	10
Future Volume (vph)	480	440	20	410	1160	370	10
Satd. Flow (prot)	3639	1583	0	1770	3639	3434	0
Flt Permitted				0.950		0.954	
Satd. Flow (perm)	3639	1583	0	1770	3639	3434	0
Satd. Flow (RTOR)		240				2	
Lane Group Flow (vph)	505	463	0	453	1221	400	0
Turn Type	NA	pm+ov	Prot	Prot	NA	Prot	
Protected Phases	6	4	5	5	2	4	
Permitted Phases		6			2		
Detector Phase	6	4	5	5	2	4	
Switch Phase							
Minimum Initial (s)	10.0	10.0	5.0	5.0	10.0	10.0	
Minimum Split (s)	39.2	22.6	9.5	9.5	24.2	22.6	
Total Split (s)	39.2	25.4	45.4	45.4	84.6	25.4	
Total Split (%)	35.6%	23.1%	41.3%	41.3%	76.9%	23.1%	
Yellow Time (s)	5.2	3.6	3.5	3.5	5.2	3.6	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	
Total Lost Time (s)	6.2	4.6			4.5	4.6	
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	C-Max	None	None	Max	C-Max	
Act Effct Green (s)	40.7	67.7			33.2	78.4	20.8
Actuated g/C Ratio	0.37	0.62			0.30	0.71	0.19
v/c Ratio	0.39	0.43			0.85	0.48	0.62
Control Delay	16.5	4.8			50.8	7.7	45.4
Queue Delay	0.5	0.9			0.0	0.1	0.3
Total Delay	17.1	5.7			50.8	7.8	45.7
LOS	B	A			D	A	D
Approach Delay	11.6					19.4	45.7
Approach LOS	B					B	D

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 81 (74%), Referenced to phase 4:NBL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 20.4
 Intersection LOS: C
 Intersection Capacity Utilization 60.7%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 4: SR-14 SB Ramps & Soledad Canyon



Startec Consulting

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Opening Day (2018) w/Proj Mit PM Peak Hour
4: SR-14 SB Ramps & Soledad Cayon

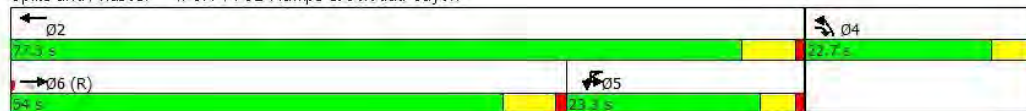
Synchro 9 Report
 Lanes, Volumes, Timings

	→	↘	↙	←	↗
Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations	↑↑	↗	↘	↑↑	↙↘
Traffic Volume (vph)	1510	480	210	570	250
Future Volume (vph)	1510	480	210	570	250
Turn Type	NA	pm+ov	Prot	NA	Prot
Protected Phases	6	4	5	2	4
Permitted Phases		6		2	
Detector Phase	6	4	5	2	4
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	39.2	22.6	9.5	24.2	22.6
Total Split (s)	54.0	22.7	23.3	77.3	22.7
Total Split (%)	54.0%	22.7%	23.3%	77.3%	22.7%
Yellow Time (s)	5.2	3.6	3.5	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	4.6	4.5	6.2	4.6
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	C-Max	None	None	Max	None
Act Effect Green (s)	51.9	72.1	18.8	75.2	14.0
Actuated g/C Ratio	0.52	0.72	0.19	0.75	0.14
w/c Ratio	0.87	0.42	0.73	0.23	0.59
Control Delay	18.4	5.0	52.4	4.2	43.8
Queue Delay	10.4	1.8	0.0	0.0	0.0
Total Delay	28.8	6.9	52.4	4.2	43.8
LOS	C	A	D	A	D
Approach Delay	23.5			18.1	43.8
Approach LOS	C			B	D

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 6:EBT, Start of Green, Master Intersection
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum w/c Ratio: 0.87
 Intersection Signal Delay: 23.9
 Intersection Capacity Utilization 75.6%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service D

Splits and Phases: 4: SR-14 SB Ramps & Soledad Cayon



Startec Consulting

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Queuing and Blocking Report

Opening Day (2018) w/Proj Mit AM Peak Hour

05/04/2017

Intersection: 4: SR-14 SB Ramps & Soledad Cayon

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	UL	T	T	L	LR
Maximum Queue (ft)	193	198	175	420	228	224	306	286
Average Queue (ft)	79	90	60	251	133	133	177	152
95th Queue (ft)	154	156	116	376	204	202	271	250
Link Distance (ft)	209	209	209		846	846	1461	1461
Upstream Blk Time (%)	0	0	0					
Queuing Penalty (veh)	0	1	0					
Storage Bay Dist (ft)				550				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Queuing and Blocking Report

Opening Day (2018) w/Proj Mit PM Peak Hour

05/04/2017

Intersection: 4: SR-14 SB Ramps & Soledad Cayon

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	UL	T	T	L	LR
Maximum Queue (ft)	249	245	175	234	237	198	558	518
Average Queue (ft)	223	226	76	130	99	78	319	276
95th Queue (ft)	247	238	143	204	207	173	684	637
Link Distance (ft)	209	209	209		846	846	1461	1461
Upstream Blk Time (%)	13	18	0					
Queuing Penalty (veh)	82	113	0					
Storage Bay Dist (ft)				550				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Pomeroy Environmental Services' May 19, 2017

May 19, 2017

Mr. Patrick Leclair & Mr. Ian Pari
City of Santa Clarita
Community Development, Planning Division
23920 Valencia Blvd., Suite 300
Santa Clarita, CA 91355

**Re: Sand Canyon Plaza Mixed Use Project – Draft Environmental Impact Report
Air Quality, Greenhouse Gas and Noise Analyses**

Dear Mr. Leclair & Mr. Pari:

Pomeroy Environmental Services (PES) prepared the Air Quality, Greenhouse Gas (GHG), and Noise Technical Reports associated with the Sand Canyon Plaza Mixed-Use Project (Project) Draft Environmental Impact Report (DEIR) published by the City of Santa Clarita (City) in March 2017. The following discussion addresses the project description changes made by the City's Planning Commission during its hearings on the Project. Per City Planning Commission direction, the updated project description includes the following project modifications:

1. A 4,400 square-foot increase to the general retail and restaurant component of the project (from 55,600 square feet to 60,000 square feet);
2. An increase to the assisted living facility of 20 beds (from 120 beds to up to 140 beds; a total of 85,000 square feet); and
3. 27 detached condos in Planning Area 5 were removed and relocated to Planning Area 3 (attached condos). Planning Area 5 now has a total of 48 detached condos and Planning Area 3 now has 149 units.

Based on a review of the Project Traffic Engineer's memorandum,¹ these changes would result in a net increase of 176 daily trips compared to the previously estimated 7,986 daily trips. This represents an approximate 2.2% increase in motor vehicle trips. As motor vehicle trips are the primary source of Project impacts associated with air quality, GHG and noise, this small increase would not have the potential to alter the impact conclusions disclosed in the DEIR. Further,

¹ Sand Canyon Plaza Mixed Use Project – Traffic Study Supplemental Memo, Stantec, May 15, 2017.

Pomeroy Environmental Services
25101 The Old Road #246
Santa Clarita, CA 91381
Tel: (661) 388-2422
www.pomeroyes.com

Mr. Patrick Leclair & Mr. Ian Pari
City of Santa Clarita
Re: Sand Canyon Plaza Mixed-Use Project
May 17, 2017
Page 2 of 2

based on a review of the DEIR sections discussing the Project's air quality, GHG and noise impacts, these minor traffic trip modifications would not constitute "Significant new information" defined in CEQA Guidelines 15088.5, would not result in a new significant air quality, GHG or noise impact identified in the DEIR, would not cause a substantial increase in the severity of an identified air quality, GHG or noise impact identified in the DEIR, and would not require any new, modified or increased mitigation measures for any air quality, GHG or noise impacts identified in the DEIR.

Mr. Leclair & Mr. Pari, if you have any questions with these conclusions please do not hesitate to contact me at (661) 388-2422 or brett@pomeroyes.com.

Sincerely,

Pomeroy Environmental Services (PES)



Brett Pomeroy
President/Owner

Pomeroy Environmental Services
25101 The Old Road #246
Santa Clarita, CA 91381
Tel: (661) 388-2422
www.pomeroyes.com

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**Comment Letter 16
Castaic Lions Club
undated**



Castaic Lions Club
PO Box 312
Castaic, CA 91384

501 (c)(3) #95-4790421

Dear Patrick LeClair,

The Castaic/Santa Clarita Lions Club has long been concerned about the wellbeing of our cherished senior citizens. For 30+ years, we have put on the Thanksgiving Day Feast at the SCV Senior Center. We are fully aware of the desperate need for local, well planned Senior Assisted Living communities in all parts of our valley.

For this reason (and others), we are pleased to endorse the building of the "Sand Canyon Plaza" project. In addition to beautiful Assisted Living facilities, the project provides gorgeous destination restaurants, a safety increase on Soledad Canyon Road with the removal of a dangerous vertical cliff, replaced by a gentle, stable hill, and more. For many years, Castaic/Santa Clarita Lions Club members have joined with all of Santa Clarita to oppose the mammoth CEMEX Sand and Gravel mine. Approval of the "Plaza" project will allow public ownership of some 200 plus acres of unique wilderness park land.

This property directly borders the CEMEX mine proposal, and would strengthen the fight to stop that huge mine, if owned by the public. Please rapidly approve this amazing development, and please include this endorsement from the Castaic Lions Club (now folded with the Santa Clarita Lions Club) in all reports, including the pending EIR.

Thank you for considering our endorsement.

Warm regards,

A handwritten signature in black ink, appearing to read 'Flo Lawrence'.

Flo Lawrence
President
Castaic Lions Club
(310) 592-4705

16-1

Response to Comment Letter 15
Castaic Lions Club
undated

- 16-1 The comment is informational in nature and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is required.

4. Project Revisions

4.1 Revisions to Project Description

Beginning in February 2017, the Project was reviewed by the Planning Commission. As of May 31, 2017, the Planning Commission held three public hearings: February 21, 2017; March 21, 2017; and May 16, 2017. In response to issues raised throughout the public hearing process with the Planning Commission, the Applicant revised the Project as follows:

- Increased the retail commercial use by 4,400 square feet in Planning Area 1 from 55,600 square feet to 60,000 square feet.
- Increased the assisted living facility in Planning Area 1 from 120 beds (75,000 square feet) to 140 beds (85,000 square feet).
- Transferred 27 residential units from Planning Area 5 to Planning Area 3 and eliminated approximately 700 lineal feet of grading on the northern portions of the significant ridgeline.
- Created a 2-acre private park in Planning Area 5.
- Included a three-level parking structure (one level partially below grade) for the commercial uses in Planning Area 1.

4.1-1 Revised Project Components

As a result of direction by the Planning Commission, the Applicant revised the Site Plan to:

1) reduce impacts to the ridgeline on the Project site and 2) increase the amount of commercial uses proposed.

1. Ridgeline and Recreation/Open Space Components (Planning Areas 3 and 5)

To reduce impacts to the undisturbed portions of the northern portions of the significant ridgeline on the Project site, the Project has been revised to eliminate grading on approximately 700 lineal feet of the ridgeline. This modification results in the transfer of 27 of units from Planning Area 5 to Planning Area 3. This transfer would reduce impacts to the ridgeline and would shrink the development footprint of Planning Area 5.

Some grading would still be necessary to blend the proposed grading into the hillsides on the Project site. The Applicant would take advantage of this grading to create a 2-acre private park in Planning Area 5.

The Applicant has incorporated the revisions for Planning Areas 3 and 5 as shown on the revised site plan (refer to the DEIR Figure 3-4, page 3-13).

2. Commercial Space Component (Planning Area 1)

To address the Planning Commission's concern regarding the amount of commercial space provided with the proposed Project, the Applicant increased the commercial space in Planning Area 1 as follows: 1) added 10,000 square feet (up to 20 additional beds) to the assisted living facility; and 2) added 4,400 square feet to the retail commercial component to increase the total square footage to 60,000 square feet. In addition, a three-level parking structure has been included to provide required parking for the commercial uses for the project.

The Applicant has incorporated the increase in commercial square footage for Planning Area 1 into the revised site plan (refer to the DEIR Figure 3-4, page 3-13).

4.1-2 Environmental Conclusion Regarding Project Revisions

1. Traffic Impacts

Stantec prepared a comprehensive traffic impact analysis (2016 Traffic Study) in December 2016, which was included in the Project's Draft Environmental Impact Report (DEIR). Stantec prepared a supplemental traffic analysis memorandum in May 2017 (2017 Supplemental Traffic Memorandum) to address the Project changes made by the Planning Commission.

When taking into account the removal of the existing mobile homes and the internal capture trips, the 2016 Traffic Study estimated that the Project would generate approximately 393 new AM peak hour trips, 695 new PM peak hour trips, and 7,986 new daily trips.

In comparison, the Revised Project Description would generate one additional trip in the AM peak hour, an additional 12 trips in the PM peak hour, and an additional 176 ADT, as shown in Table 2 (2017 Supplemental Traffic Memorandum). This trip generation change is negligible, and because the volume of Project traffic during the AM peak hour is effectively equal to the volume of traffic evaluated in the 2016 Traffic Study, and because the volume of additional Project traffic in the PM peak hour is only 12 trips, which when distributed throughout the area of potential impact results in fewer than 7 additional project trips at any given study area intersection, it can be definitively concluded that the original conclusions and mitigation measures addressed in the 2016 Traffic Study would not change.

Thus, based on a review of the DEIR sections discussing the Project's traffic impacts, these minor traffic trip modifications would not: 1) constitute "significant new information" defined in CEQA Guidelines §15088.5; 2) result in a new significant traffic impact identified in the DEIR; 3) cause a substantial increase in the severity of an identified traffic impact identified in the DEIR, or 4) require any new, modified or increased mitigation measures for any traffic impacts identified in the DEIR.

2. Air Quality, Greenhouse Gas, and Noise Impacts

Pomeroy Environmental Services (PES) prepared the Air Quality, Greenhouse Gas (GHG), and Noise Technical Reports associated with the Sand Canyon Plaza Mixed-Use Project (Project) Draft Environmental Impact Report (DEIR), March 2017. The following discussion addresses the Project changes made by the Planning Commission, as described above in Section 4.1, Revisions to Project Description.

Based on PES's review of the Project Traffic Engineer's memorandum, these changes would result in a net increase of 176 daily trips compared to the previously estimated 7,986 daily trips. This represents an approximate 2.2% increase in motor vehicle trips. As motor vehicle trips are the primary source of Project impacts associated with air quality, GHG, and noise, this small increase would not increase the impacts such that they exceed the identified thresholds, and thus would not alter the impact conclusions in the DEIR.

Thus, based on a review of the DEIR sections discussing the Project's air quality, GHG, and noise impacts, these minor traffic trip modifications would not: 1) constitute "significant new information" defined in CEQA Guidelines §15088.5; 2) result in a new significant air quality, GHG, or noise impact identified in the DEIR; 3) cause a substantial increase in the severity of an identified air quality, GHG, or noise impact identified in the DEIR, or 4) require any new, modified, or increased mitigation measures for any air quality, GHG or noise impacts identified in the DEIR.

3. Land Use Impacts

Consistency with Unified Development Code

The commercial portion of the Project originally included 55,600 square feet in Planning Area 1 (10.0 acres), which results in a Floor Area Ratio (FAR) of 0.17, which is below the maximum of 0.5, but is also below the recommended minimum of 0.2. The Revised Project Description includes 60,000 square feet in Planning Area 1 (9.6 acres), resulting in a FAR of 0.14, which is also below the maximum of 0.5, but is also still below the recommended minimum of 0.2. The Revised Project Description still requires a Minor Use Permit for commercial uses, as they are below the recommended minimum FAR of 0.2, as did the original Project. For either the original Project or the Revised Project Description, the commercial uses are anticipated to be one to two stories in height (35 feet), which is below the maximum 50 feet allowed.

Thus, based on a review of the DEIR sections discussing the Project's land use impacts, the minor land use modifications would not: 1) constitute "significant new information" defined in CEQA Guidelines §15088.5; 2) result in a new significant land use impact identified in the DEIR; 3) cause a substantial increase in the severity of an identified land use impact identified in the DEIR, or 4) require any new, modified or increased mitigation measures for any land use impacts identified in the DEIR.

Other Impact Areas

All other impacts identified in the DEIR remain unchanged.

In conclusion, the revisions to the Project Description, noted above, do not result in any new substantial environmental impacts, and do not constitute significant new information requiring recirculation pursuant to CEQA §21092.1 or CEQA Guidelines §15088.5.

4.2 Revised Project Description for Final EIR

The following sections in Chapter 3 will be revised as follows in the Final EIR.

3.10 Requested Project Approvals

The Applicant is requesting the Project approvals described below, which would govern development of the proposed Sand Canyon Plaza Mixed-Use Project. Prior to issuing Project approvals, the City must certify that this EIR: 1) has been reviewed and considered; 2) has adequately analyzed the potential impacts of the Project; 3) has been completed in compliance with CEQA, the CEQA Guidelines, and the City's Environmental Guidelines, and reflects the independent judgment of the City Council. The requested Project approvals are described in further detail below.

1. **Tentative Tract Map No. 53074.** The Applicant is proposing to subdivide the property to facilitate construction of 580 residential units (119 detached condominium units, 149 attached townhomes/condominium units, 146 small lot condominium units, ~~122 attached townhomes/condominium units,~~ and 312 apartment units), up to 60,000 ~~55,600~~-square feet of commercial uses (retail and restaurants), an 85,000-square-foot a ~~75,000-square-foot~~ assisted living facility (up to 140 ~~120~~-beds), other lots for landscape/open space, private streets, and recreation areas.
2. **Conditional Use Permit No. 14-014.** The Applicant is requesting approval of a Conditional Use Permit (CUP) to allow for development within a Planned Development (PD) Overlay Zone. Any new proposal for development in a PD Overlay requires the submittal of a Conditional Use Permit, which is intended to provide for additional discretion for previously vacant or underutilized parcels. Additionally, the Applicant is requesting approval of an 85,000-square foot a ~~75,000-square foot~~ assisted living facility with up to 140 ~~120~~-beds. A Conditional Use Permit is required to permit the assisted living facility within the MXN zone.
3. **Hillside Development Review No. 14-001.** The Applicant is requesting approval of a Hillside Development Review Permit to allow development on slopes over 10%.
4. **Ridgeline Alteration Permit No. 14-001.** The Applicant is requesting approval of a Ridgeline Alteration Permit to allow for development in a Ridgeline Preservation (RP) Overlay Zone, more specifically to allow for development within 100 feet vertically and horizontally of a significant ridgeline.
5. **Minor Use Permit No. 14-016.** The Applicant is requesting approval of a Minor Use Permit to allow for the commercial floor area ratio (FAR) to be less than the minimum required by the MXN zone. Under the MXN zone requirements, the minimum floor area ratio of commercial uses on the site would be 0.2:1 or 83,635 ~~87,120~~ square feet of commercial floor area. The Applicant is proposing to develop the site with up to 60,000 ~~55,600~~-square feet of commercial uses, which is a floor area ratio of 0.14. ~~0.13.~~

6. **Oak Tree Permit No. 14-008.** The Applicant is requesting approval of an Oak Tree Permit to allow for removal of two non-heritage oak trees and to permit Project grading to encroach within the protected zone of one heritage oak tree.

Permits and Approvals for the Project are highlighted in **Table 4-1** below.

Table 4-1 Future Agency Actions

Agency	Action Required
California Department of Transportation	Encroachment Permit
Regional Water Quality Control Board	National Pollution Discharge Elimination System Permit; Section 401 permit under the federal Clean Water Act
California Department of Fish and Wildlife	Streambed Alteration Agreement per Fish & Wildlife Code Section 1602
U.S. Department of Army Corps of Engineers	Section 404 Permit under the federal Clean Water Act
South Coast Air Quality Management District	Various permits for air emissions regulation found in the Air Quality Management Plan

This table is not intended to provide the complete and final list of future actions required to implement the Project. This is an attempt to identify those actions that are known at this time to be required in the future.

3.13 Description of Project

The following discussion describes the types and amounts of new land uses proposed by the Applicant and the infrastructure improvements necessary to construct the development. This description is intended to provide a sufficient level of detail from which an evaluation and review of the environmental impacts of the Project can be made.

Table 4-2 below summarizes the statistics associated with the Project.

Table 4-2 Sand Canyon Land Use Summary

Planning Area No.	Project Use	Commercial Square Footage	Residential Dwelling Units	Acreage
PA-1	Commercial/retail/restaurant/assisted living	60,000-55,600 SF commercial retail/restaurant; 85,000-75,000 SF assisted living facility (<u>140 beds</u> 120 rooms)	n/a	<u>9.6</u> 10.0
	Open Space			
PA-2	Multi-family attached	N/A	312	12.2
PA-3	Multi-family attached	N/A	<u>149</u> 122	<u>10.3</u> 10.1
PA-4	Single-family detached <u>condominiums</u> condos	N/A	71	7.3
PA-5	Single-family detached <u>condominiums</u> condos	N/A	<u>48</u> 75	<u>6.3</u> 10.0
	Streets	N/A	N/A	<u>4.7</u> 7.2
	Drainage basin	N/A	N/A	1.0
	Open space/landscaped areas	N/A	N/A	<u>28.7</u> 28.6
	Right of way dedication	N/A	N/A	<u>1.1</u> 1.0
Total		60,000-55,600 SF commercial retail/restaurant; 85,000-75,000 SF assisted living facility	580	approx. 87

Source: Tentative Tract Map No. 053074, April 2017 ~~November 2016~~

As provided in **Table 3-2** above, the approximately 87-acre Project site would be developed with up to ~~60,000~~ ~~55,600~~-square feet of commercial/retail/restaurant uses and ~~85,000~~ ~~75,000~~-square feet of assisted living facilities (up to ~~140~~ ~~120~~-beds). Also proposed on the Project site are 580 residential units comprising ~~461~~ ~~434~~-multi-family units (including up to 312 apartment units and 149 attached townhomes) and 119 single-family detached condominiums. ~~146 single-family condos~~. If approval of the Project is granted, Project conditions of approval would permit modifications to building locations, building footprints, and product types shown on **Figure 3-4, Tentative Tract Map 53074**.

The approximately 87-acre Project site is divided into five Planning Areas. **Figure 3-5** depicts each Planning Area in relationship to the entire Project site. Details further describing the Planning Areas are provided below.

- **Planning Area 1 (PA-1), Commercial** – Approximately ~~145,000~~ ~~130,600~~-square feet of commercial/residential floor including ~~60,000~~ ~~55,600~~-square feet of commercial (retail and restaurants) and an 85,000-square-foot ~~a 75,000-square-foot~~-assisted living facility (up to 140 beds) ~~120 rooms~~) on approximately ~~9.6~~ ~~10~~-acres. Planning Area 1 is located at the northeast intersection of Sand Canyon Road and Soledad Canyon Road and is depicted in **Figure 3-6**. PA-1 also includes a water quality/water feature located at the southwest corner of the Project site. Consistent with the requirements of the MXN zone, the maximum building height in PA-1 would be 50 ~~55~~-feet (assisted living facility). The remaining commercial buildings in PA-1 would range in height from 20 to 35 feet.

Access to PA-1 would occur via Soledad Canyon Road and “A” Drive (left in/right in and right out) and Sand Canyon Road and “A” Drive (left in/right in and right out). Up to 415 ~~278~~-parking spaces would be provided for the retail commercial area contingent upon final uses and square footage, which includes 151 surface spaces and 264 spaces in a parking structure. Of the 415 parking spaces, up to 70 ~~60~~-spaces would be provided for the assisted living facility contingent upon the final bed count. Illustrative renderings are provided in **Figure 3-7** and **Figure 3-8**.

- **Planning Area 2 (Multi-Family Attached)** – 312 multi-family units (intended to be rental units) and required parking per the MXN ~~and UR-3 zone~~ requirements would be developed on 12.2 acres. One private recreational area with a pool, internal drive aisles, water quality improvements, and other open areas would be provided within PA-2. The maximum building height in PA-2 is 50 ~~55~~-feet. Access to PA-2 would be from Sand Canyon Road via “A” and “B” Drives. Approximately 1 acre of the existing Sand Canyon Road right-of-way would be vacated by the City and included in PA-2, as it would no longer be needed for roadway purposes. Planning Area 2 is located directly north of PA-1 along Sand Canyon Road and is depicted in **Figure 3-9, Planning Area 2**. An illustrative rendering is provided in **Figure 3-10**.



Figure 3-4 Tentative Tract Map 53074

- **Planning Area 3 (Multi-Family Attached Townhomes)** – ~~149~~ ~~122~~ townhomes with required parking (per the MXN ~~and UR-3~~ zone requirements) on approximately ~~10.3~~ ~~10.1~~ acres. ~~One private recreational area, w~~ Water quality improvements, internal drive aisles, trails and other open areas would be provided within PA-3. The maximum building height in PA-3 is 40 feet. Access to PA-3 would be from Sand Canyon Road via “B”, “C” and “D” Drives. Planning Area 3 is located north of Planning Area 2 along Sand Canyon Road and is depicted in **Figure 3-11, Planning Area 3**.
- **Planning Area 4 (Single-Family Detached Condominiums)** ~~Multi-Family Detached or Attached Condos~~ – 71 units with required parking (per MXN and UR-3 zone requirements) on approximately 7.3 acres. Internal drive aisles, water quality improvements, trails, and other open areas would be provided within PA-4. The ~~2.0-acre~~ private recreational area located in PA-5 would also service PA-4. Access to PA-4 would be from Sand Canyon Road via “B,” “C,” and “D” Drives. Planning Area 4 is located in the central portion of the Project site north and east of Planning Area 2 and is depicted in **Figure 3-12, Planning Area 4**.
- **Planning Area 5 (Single-Family Detached Condominiums)** ~~Multi-Family Detached or Attached Condos~~ – ~~48~~ ~~75~~ units with required parking (per MXN and UR-3 zone requirements) on approximately ~~6.3~~ ~~10.0~~ acres. ~~A 2.0-acre~~ ~~One~~ private recreational area, internal drive aisles, water quality improvements, trails, and other open areas would be provided within PA-5. Access to PA-5 would be from Sand Canyon Road via “B”, “C” and “D” Drives. Planning Area 5 is located in the eastern and northern portions of the Project site and is depicted in **Figure 3-13** and **Figure 3-14**.

The Project includes a total of 580 residential units (replacing the existing 123 mobile homes), ~~60,000~~ ~~55,600~~ square feet of retail commercial uses, and ~~an 85,000-square-foot~~ ~~a 75,000-square-foot~~ assisted living facility.

3.15 Grading

Demolition/Site Clearing

The Project would require demolition of the remaining mobile home units and site clearing. In addition to the removal of the mobile homes, demolition would include the removal of asphalt, concrete, other ancillary structures to the existing mobile home park, trees, fences, and other existing debris.

Grading/Foundation

The Project would include grading approximately ~~2.1~~ ~~2.2~~ million cubic yards of cut and fill balanced on-site and is depicted on **Figure 3-15, Cut and Fill Map**. Additional remedial grading (approximately 850,000 cubic yards) would be necessary to accommodate site development.

3.16 Mobility Plan

The Project provides for non-vehicular modes of transportation in a system of trails, sidewalks and pedestrian pathways commonly known as the Mobility Plan). The Mobility Plan achieves Project objectives by creating and enhancing opportunities for non-vehicular travel through encouraging pedestrian mobility from the Project's residential areas to the commercial uses. The Mobility Plan can be found in Error! Reference source not found., Error! Reference source not found. (page [Error! Bookmark not defined.](#)), and Error! Reference source not found., Error! Reference source not found. (page [Error! Bookmark not defined.](#)). [Off-site access to surrounding uses and the future Vista Canyon Metrolink Station are shown on 0, Figure 3.16 Off-Site Mobility Plan, and 0, Figure 3.17 Off-Site Mobility Plan to Metrolink.](#)

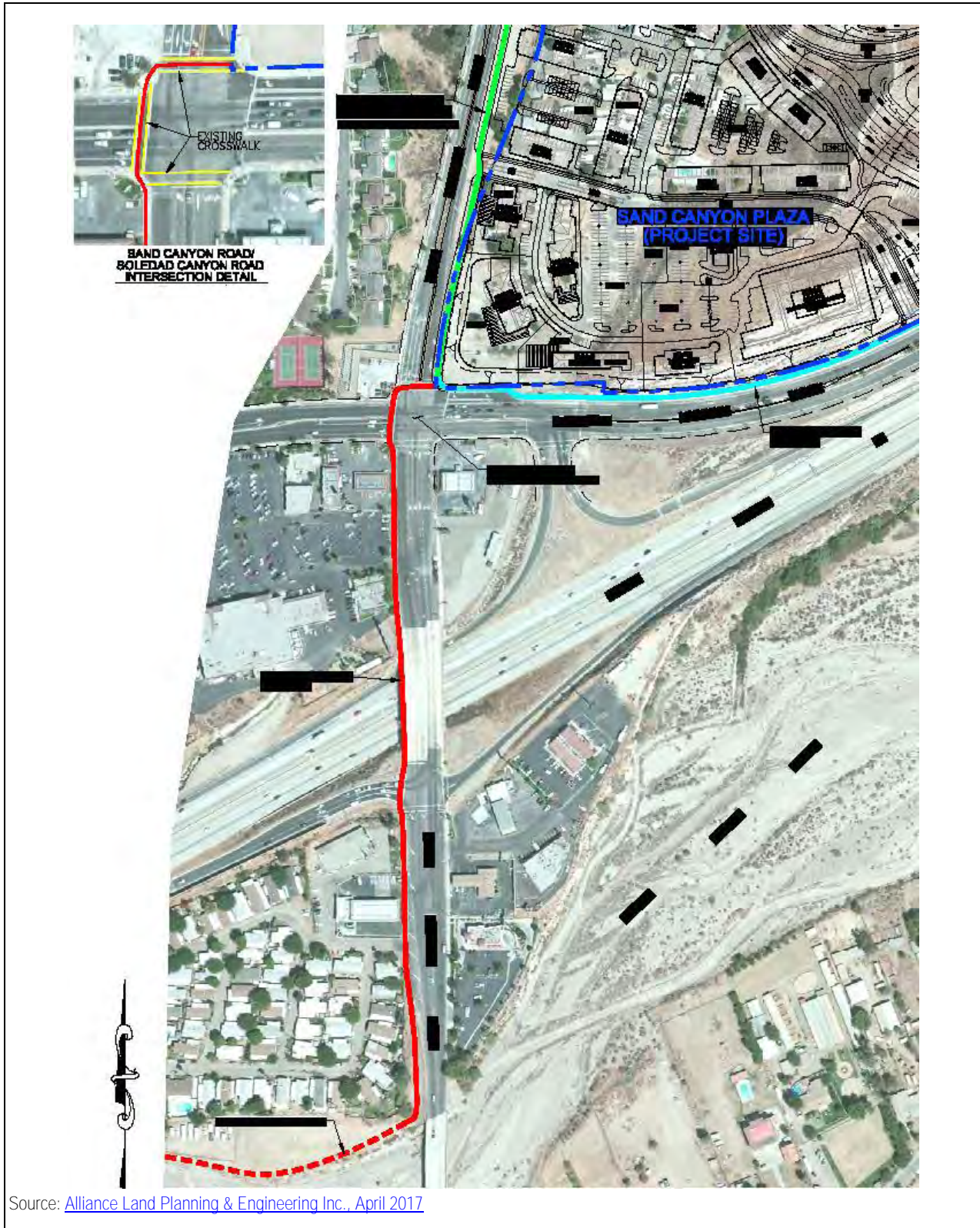


Figure 3.16 Off-Site Mobility Plan

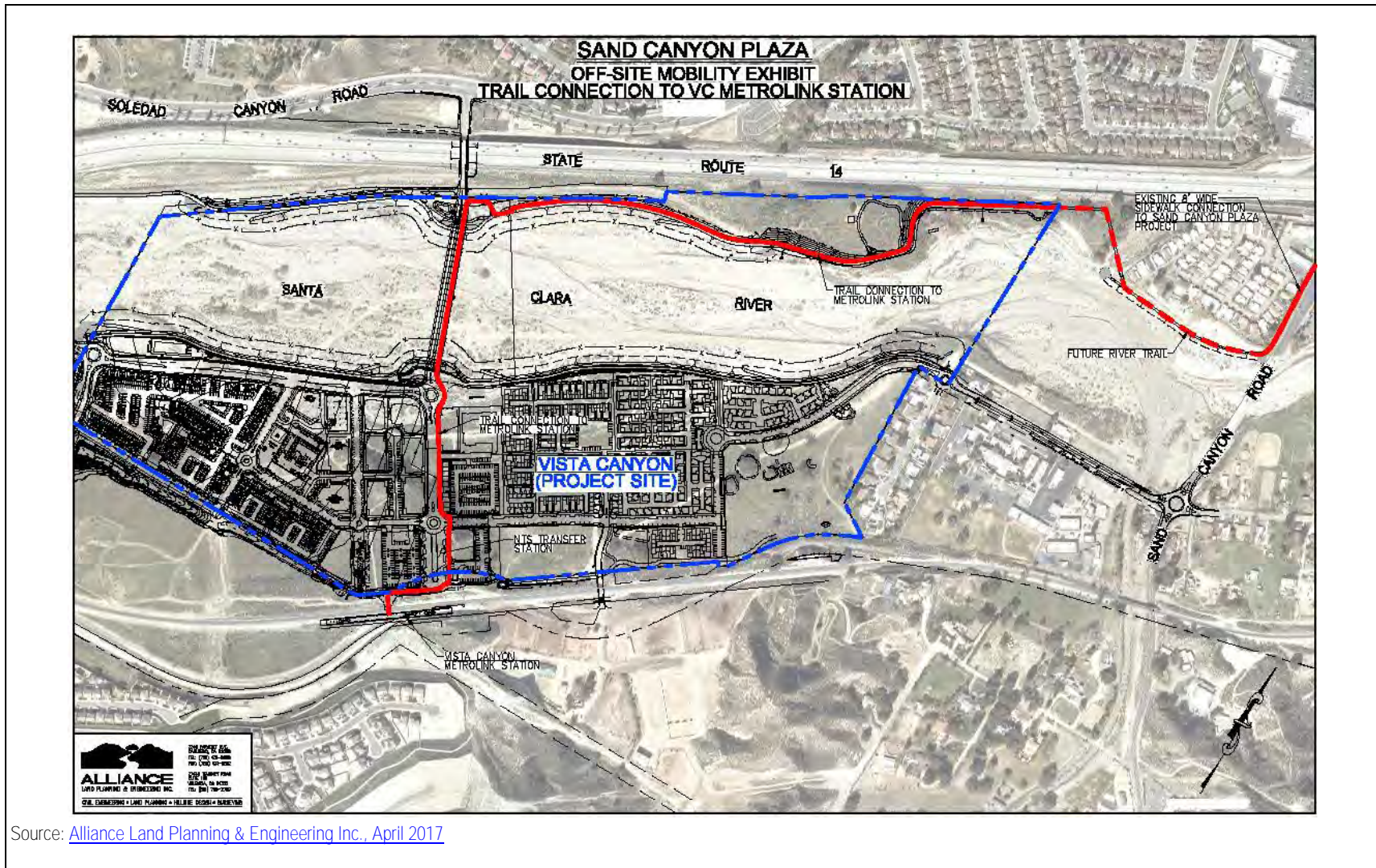


Figure 3.17 Off-Site Mobility Plan to Metrolink

5. Mitigation Monitoring and Reporting Program

This section of the Draft FEIR identifies the mitigation measures that will be implemented to reduce the impacts associated with the Sand Canyon Plaza Mixed Use Project. The California Environmental Quality Act (CEQA) requires a public agency to adopt a monitoring and reporting program for assessing and ensuring compliance with any required mitigation measures applied to proposed development. As stated in *California Public Resources Code* §21081.6,

. . . the public agency shall adopt a reporting or monitoring program for the changes to the project which it has adopted, or made a condition of project approval, in order to mitigate or avoid significant effects on the environment.

Public Resources Code §21081.6 provides general guidelines for implementing mitigation monitoring programs and indicates that specific reporting and/or monitoring requirements, to be enforced during project implementation, shall be defined prior to certification of the Environmental Impact Report.

The mitigation monitoring table that follow lists those mitigation measures that may be included as conditions of approval for the Project. These measures correspond to those outlined in the DEIR, Chapter 4, Environmental Impact Analysis. To ensure that the mitigation measures are properly implemented, a monitoring program has been devised that identifies the timing and responsibility for monitoring each measure. The City of Santa Clarita will have the responsibility for implementing the measures, and the Project Applicant will have the primary responsibility for monitoring and reporting the implementation of the mitigation measures.

**Environmental Impact Report
Sand Canyon Plaza Mixed Use Project
Mitigation Monitoring and Reporting Program**

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
Aesthetics						
MM Aes-1	Prior to the issuance of a grading permit, the Project Applicant, or responsible party, shall submit a grading plan for review and approval by the City's Director of Public Works and the Director of Community Development. This grading plan shall utilize methods to reduce grading impacts associated with the Project and, to the extent feasible, blend in with the natural contours of the site. Said grading methods shall include landform grading as well as the blending of any manufactured slopes or required drainage benches into the natural topography along with the use of curvilinear street design.	Prior to Issuance of Grading Permit	City of Santa Clarita Community Development Department (Planning Division) and Public Works Department (Engineering Services Division)			
MM Aes-2	The Project Applicant, or responsible party, shall submit a final site plan for review and approval by the City's Director of Community Development . This site plan shall utilize building setbacks, building heights, and building forms throughout the site to blend buildings and structures with the terrain and surrounding development as much as possible. Additionally, landscaping with natural vegetation shall be used to minimize the visual effects of grading and construction on hillside areas.	Final Site Plan Submittal	City of Santa Clarita Community Development Department (Planning Division)			
MM Aes-3	As part of any grading on the Project site, the Project Applicant, or responsible party, shall be required to "lay back" and regrade the manufactured slope along Soledad Canyon Road, which will allow for this slope to be landscaped, further softening its appearance from SR-14, Soledad Canyon Road, and areas to the south.	Prior to Issuance of Grading Permit	City of Santa Clarita Community Development Department (Planning Division) and Public Works Department (Engineering Services Division)			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
MM Aes-4	The Project Applicant, or responsible party, shall require that the use of nighttime lighting during project construction be limited to only those features on the construction site requiring illumination.	During Construction	City of Santa Clarita Community Development Department (Planning Division)			
MM Aes-5	The Project Applicant, or designee, shall require that all security lights be properly shielded and projected downwards during construction, such that light is directed only onto the work site.	During Construction	City of Santa Clarita Community Development Department (Planning Division)			
MM Aes-6	<p>Prior to the issuance of building permits, the City of Santa Clarita Planning Division shall ensure that the following elements are included in project plans, as appropriate:</p> <ul style="list-style-type: none"> • All exterior lighting shall be designed and located as to avoid intrusive effects on adjacent residential properties and undeveloped areas adjacent to the Project site. Low-intensity street lighting and low-intensity exterior lighting shall be used throughout the development to the extent feasible. Lighting fixtures shall use shielding, if necessary, to prevent spill lighting on adjacent off-site uses. • Design and placement of site lighting shall minimize glare affecting adjacent properties, buildings, and roadways. • Outdoor lighting along the Project site boundary shall consist of low-intensity downlights, or be equipped with louvers, shields, hoods or other screening devices. • Fixtures and standards shall conform to state and local safety and illumination requirements. • Buildings shall use low-reflective glass and building materials on building exteriors. • Automatic timers on lighting shall be designed to maximize personal safety during nighttime use while saving energy. 	Prior to Issuance of Building Permit	City of Santa Clarita Community Development Department (Planning Division)			
Air Quality						
MM AQ-1	The Project Applicant, or designee, shall require that all commercial-related landscaping activities utilize electric lawn mowers and electric leaf blowers to the extent feasible.	During Project Operations	City of Santa Clarita Community Development			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
			Department (Planning Division)			
Biological Resources						
MM Bio-1	<p>If activities associated with construction or grading are planned during the bird nesting/breeding season, generally February through March for early nesting birds and from mid-March through mid-September for most bird species, the Applicant shall have a qualified biologist conduct surveys for active nests. To determine the presence/absence of active nests, pre-construction nesting bird surveys shall be conducted weekly beginning 30 days prior to initiation of ground-disturbing activities, with the last survey conducted no more than 3 days prior to the start of clearance/ construction work. If ground-disturbing activities are delayed, additional pre- construction surveys shall be conducted so that no more than 3 days have elapsed between the survey and ground-disturbing activities.</p> <p>Protected bird nests that are found within the construction zone shall be protected by a buffer deemed suitable by a qualified biologist, and verified by the California Department of Fish and Wildlife. Typically, a 300-foot buffer is required for most species and a 500-foot buffer for raptor and special-status species (CDFW may reduce these buffers on a site-specific basis). Buffer areas shall be delineated with orange construction fencing or other exclusionary material that would inhibit access within the buffer zone. Installation of the exclusionary material delineating the buffer zone shall be verified by a qualified biologist prior to initiation of construction activities. The buffer zone shall remain intact and maintained while the nest is active (i.e., occupied or being constructed by the adult bird(s)) and until young birds have fledged and no continued use of the nest is observed, as determined by a qualified biologist.</p>	Prior to Issuance of Grading and/or Building Permit	City of Santa Clarita Community Development Department (Planning Division)			
MM Bio 1A	The Project Applicant shall retain a qualified biologist to conduct a pre-construction biological survey for special-status species determined to have potential to occur in suitable habitat within the Project site prior to the start of construction activities. If special-status species are detected during pre-construction surveys,	Prior to Issuance of Grading and/or Building Permit	City of Santa Clarita Community Development Department (Planning Division)			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	appropriate mitigation plans will be prepared by a qualified biologist and submitted to the City of Santa Clarita for review and approval. Additionally, a biological monitor will be present periodically during construction to ensure that impacts to special-status species are minimized or do not occur.					
MM Bio-2	A qualified biologist, approved by the City and CDFW, shall prepare a detailed capture and relocation plan for San Diego tiger (coastal) whiptail and coast horned lizard that will include measures to avoid or minimize take of these sensitive species and identify appropriate relocation sites. The plan shall be submitted to CDFW for approval prior to implementation. The plan shall specify the pre-construction time frame for the biologist to conduct surveys within appropriate habitat areas to capture and relocate individual San Diego tiger whiptail and coast horned lizard in accordance with the approved relocation plan. Results of the surveys and relocation efforts shall be provided to the City with a copy to CDFW.	Prior to Issuance of Grading and/or Building Permit	City of Santa Clarita Community Development Department (Planning Division)			
MM Bio-3	A qualified biologist, approved by the City and CDFW, shall prepare a detailed capture and relocation plan for San Diego black-tailed jackrabbit and San Diego desert woodrat that will include measures to avoid or minimize take of these sensitive species and identify appropriate relocation sites. The plan shall be submitted to the city and CDFW for approval prior to implementation. The plan shall specify the pre-construction timeframe for the biologist to conduct surveys within appropriate habitat areas to capture and relocate individual San Diego black-tailed jackrabbit and San Diego desert woodrat in accordance with the approved relocation plan. Results of the surveys and relocation efforts shall be provided to the City with a copy to CDFW.	Prior to Issuance of Grading and/or Building Permit	City of Santa Clarita Community Development Department (Planning Division)			
MM Bio-4	The Project Applicant shall retain a qualified biologist, approved by the City, to conduct focused bat surveys utilizing visual and electronic detection methods. The qualified biologist shall conduct the surveys between late May and mid-July, the recognized maternity season for most bats in southern California. If any special-status bat species are determined to be roosting on-site, bat boxes of a size and design suitable for the estimated number of bats on-site shall be installed, under the supervision of a qualified	Prior to Issuance of Grading and/or Building Permit	City of Santa Clarita Community Development Department (Planning Division)			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	bat biologist, in the outer perimeter of the Project site, as close as feasible to adjacent undeveloped land, and a suitable height and solar aspect. Further, if any maternity sites are identified on site, CDFW will be notified immediately. In addition to any other direction by CDFW, no site disturbance shall occur within 300 feet of the occupied roost until it is determined that the maternity roost(s) is no longer active. Additional bat boxes designed to serve as maternity roosts shall be placed as directed by the qualified bat biologist and CDFW. The Project Applicant shall also include the preparation of a relocation and monitoring plan in coordination with the City and CDFW.					
MM Bio-5	A qualified restoration specialist shall ensure that the proposed landscape plants will not naturalize and cause maintenance or vegetation community degradation in open-space areas of the Project site. Container plants to be installed within public areas shall be inspected by a qualified restoration specialist for the presence of disease, weeds, and pests, including Argentine ants. Plants with pests, weeds, or diseases shall be rejected. In addition, landscape plants shall not be on the Cal-IPC California Invasive Plant Inventory.	Prior to Installation of On-Site Landscaping	City of Santa Clarita Community Development Department (Planning Division)			
MM Bio-6	The Project Applicant, or the responsible party, shall prepare a holly leaf cherry chaparral restoration plan that details planting plans to mitigate the loss of 0.35 acres of holly leaf cherry chaparral. This plan shall entail five-to-one restoration of the removed holly leaf cherry alliances to equal 1.75 acres. The planting palette shall include a range of native plant species typical of this alliance. The plan shall include temporary irrigation and monitoring for five years after the initial installation to assure establishment of the installed shrubs. Quantifiable success criteria will be based on species diversity, species richness, abundance, percent cover, and non- native cover. The restoration will be deemed successful when the site has been irrigation-free for at least five years and success criteria have remained for five years. The planting site may be located within the landscaped areas of the property.	Prior to Issuance of Grading and/or Building Permit	City of Santa Clarita Community Development Department (Planning Division)			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
MM Bio-7	<p>The Project impacts shall be subject to the regulations set forth by regulatory agencies as part of the jurisdictional permitting process. The Army Corps of Engineers, the California Department of Fish and Wildlife, and/or the Regional Water Quality Control Board shall require the Project Applicant, or the responsible party, to explore alternatives to avoid or reduce impacts and shall also require mitigation for all unavoidable impacts. The Army Corps of Engineers has a "no net loss" policy that requires that any unavoidable impacts to stream values and functions be replaced. In addition, the Regional Water Quality Control Board shall add restrictions to control runoff from the site, require on the site treatment of runoff to improve water quality, and impose Best Management Practices on the construction. All of the features of the Project that address water quality issues shall be mitigated within the Water Quality Management Plan and Storm Water Pollution Prevention Plan.</p>	Prior to Issuance of Grading and/or Building Permit	City of Santa Clarita Community Development Department (Planning Division)			
MM Bio-8	<p>The Project Applicant, or the responsible party, shall be responsible for implementing the following maintenance and care measures for on-site oak trees prior to, during, and post-construction.</p> <ol style="list-style-type: none"> 1. Thoroughly irrigate all preserved trees one-week prior to any excavation that takes place within the tree protection zone. 2. Provide quarterly Arborist monitoring of Tree #2 for not less than 2 years. 3. Install and maintain protective fencing around trees as illustrated on the plans in the Oak Tree Report. There must be a three-foot opening in the protective fencing to allow for inspection and maintenance, position openings every 50 to 75 feet. 4. Any work taking place in the ground, grading, trenching, drilling etc., within the tree protection zone shall be supervised by the arborist on record and be performed using hand tools only. 5. Any tree roots encountered, measuring 1-inch or greater must be preserved in place, or if unavoidable, properly pruned as deemed acceptable by project arborist 	Prior to, During, and Post- Construction	City of Santa Clarita Community Development Department (Planning Division)			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure	Monitoring Timing	Monitoring Agency	Verification of Compliance		
			Initials	Date	Remarks
6. Preserved tree roots that are left exposed shall be wrapped in burlap or other moisture retentive material and must be kept moist. 7. Construction materials or debris shall not be stored or disposed of within the protected zone of any tree. 8. No irrigation shall be installed within the dripline of any oak tree 9. Any planting within the tree protection zone must maintain a minimum distance of 15 feet from the trunk, and must consist of drought tolerant or native plant species, plant pallet must be approved by the city of Santa Clarita. 10. No changes in soil grade shall be made within the tree protection zone other than in the permitted work area. 11. All drainage shall be directed away from the root zone of all oak trees.					
Cultural Resources					
MM CR-1	In the unlikely event that artifacts are found during grading within the City's Planning Area or future roadway extensions, an archaeologist will be notified to stabilize, recover and evaluate such finds. Furthermore, the Project Applicant will comply with the consultation requirements between the Tataviam and the Applicant.	During Construction	City of Santa Clarita Community Development Department (Planning Division)		
MM CR-2	If human remains are encountered during excavation and grading activities within the project site, the contractor shall stop such activities. In the event of accidental discovery or recognition of any human remains there shall be no further excavation or disturbance of the subject site or any nearby areas reasonably suspected to overlie adjacent human remains and the following steps shall be taken: <ul style="list-style-type: none"> • The coroner of the City in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required; and, If the remains are of Native American origin, either of the following steps shall be taken: <ul style="list-style-type: none"> • The coroner should contact the Native American Heritage Commission in order to ascertain the proper descendants from the deceased individual. The coroner should make a recommendation to the landowner or the person responsible 	During Construction	City of Santa Clarita Community Development Department (Planning Division)		

5. Mitigation Monitoring and Reporting Program

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	<p>for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains.</p> <ul style="list-style-type: none"> Implementing or local agencies or authorized representatives should retain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance when any of the following conditions occurs: The Native American Heritage Commission is unable to identify a descendent. The descendant identified fails to make a recommendation. The implementing agency or its authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner. 					
Geology and Soils						
MM Geo-1	Potential debris flow shall be further evaluated once a 40-scale rough grading plan has been developed for the Project site. Appropriate mitigation measures can be provided for any additional debris flow areas identified on the rough grading plan.	Review and Approval of Rough Grading Plan	City of Santa Clarita Public Works Department (Engineering Services Division)			
MM Geo-2	Cut Slope CS-3: Bedrock shall be eliminated during removals within the adjacent canyons and the slope grades re-established as a 25-foot-wide, 3-foot-deep stability fill slope. The stability fill slope should be constructed with backdrains in accordance with the recommendations presented in the "Conclusions and Recommendations" section of the RTF&A report, and as shown on the Stability Fill Details for Grossly Stable Slopes, presented as Figure 4 (Frankian Study).	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			
MM Geo-3	Cut Slope CS-6 shall be constructed entirely as a 20-foot-wide, 3-foot-deep stability fill slope after landslide removal.	During Grading	City of Santa Clarita Public Works			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
			Department (Engineering Services Division)			
MM Geo-4	Cut Slope CS-7: Bedrock shall be eliminated during the removals within the adjacent canyons and the slope grades reestablished as a 25-foot-wide, 3-foot-deep stability fill slope.	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			
MM Geo-5	Cut Slope CS-8: Bedrock shall be eliminated during the removals within the adjacent canyons and the slope grades reestablished as a 25-foot-wide, 3-foot-deep stability fill slope.	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			
MM Geo-6	Cut Slope CS-11: A small canyon is situated in the central portion of Cut Slope CS-11, below future Lot Nos. 19 and 20. The removals as part of the canyon cleanout in this area, and eventual fill placement, shall extend to the bottom of the cut slope at "D" Drive to eliminate a potential fill-over-cut condition.	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			
MM Geo-7	Site Preparation Requirements: Prior to performing earthwork, the existing vegetation and any deleterious debris should be removed from the site. All unsuitable soils in the areas of grading that are receiving fill should be removed to competent bedrock materials and replaced with engineered fill. The depth of removal and recompaction of unsuitable soils is noted on the Geotechnical Map. Any fill required to raise the site grades should be properly compacted. Removal of the exposed natural soils should extend to at least the depths indicated on the Site Geology Map (Figure 4.6-1).	Prior to and During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			
MM Geo-8	Removal Depth Requirements: The required depth of removal and recompaction of the natural soils is indicated on the Geotechnical Map. <ul style="list-style-type: none"> Deeper removals will be required if disturbed or unsuitable soils are encountered. 	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure	Monitoring Timing	Monitoring Agency	Verification of Compliance		
			Initials	Date	Remarks
<ul style="list-style-type: none"> After excavation of the upper natural soils on hillsides and in canyons, further excavation should be performed, if necessary, to remove slope wash or other unsuitable soils. The Geotechnical Consultant of Record may require that additional shallow excavations be made periodically in the exposed bottom to determine that sufficient removals have been made prior to recompacting the soil in-place. Deeper removals may be recommended by RTF&A, based on observed field conditions during grading. During grading operations, the removal depths should be observed by a representative of RTF&A and surveyed by the Project Civil Engineer for conformance with the recommended removal depths shown on the grading plan (Figure 4.6-1). 					
<p>MM Geo-9</p> <p>Fill Material Requirements: The on-site soils, less any debris or organic matter, may be used in the required fills.</p> <ul style="list-style-type: none"> Any expansive clays should be mixed with nonexpansive soils to result in a mixture having an expansion index less than 30 if they are to be placed within the upper 8 feet of the proposed rough grades. Rocks or hard fragments larger than 8 inches may not be placed in the fill without special treatment. Rocks or hard fragments larger than 4 inches shall not be clustered or compose more than 25% by weight of any portion of the fill or a lift. Soils containing more than 25% rock or hard fragments larger than 4 inches must be removed or crushed with successive passes (e.g., with a sheepsfoot roller) until rock or hard fragments larger than 4 inches constitute less than 25% of the fill or lift. 	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			
<p>MM Geo-10</p> <p>Oversized Material Requirements:</p> <ul style="list-style-type: none"> Rocks or material greater than 8 inches in diameter, but not exceeding 4 feet in largest dimension, shall be considered oversized rock. The oversized rocks can be incorporated into deep fills where designated by the Geotechnical Consultant of Record. Rocks should be placed in the lower portions of the fill and should not be placed within the upper 10 feet of compacted fill, or nearer than 15 feet to the surface of any fill slope. Windrows should be excluded from areas of proposed utilities, 	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	<p>pools, and other types of future underground improvements. Additional costs and construction difficulties should be anticipated if future improvements are located in areas where there will be conflicts with existing windrows.</p> <ul style="list-style-type: none"> • Rocks between 8 inches and 4 feet in diameter shall be placed in windrows or shallow trenches located so that equipment can build up and compact fill on both sides. The width of the windrows shall not exceed 4 feet. The windrows should be staggered vertically so that one windrow is not placed directly above the windrow immediately below. • Rock greater than one foot in diameter shall not exceed 30% of the volume of the windrows. Granular fill shall be placed on the windrow, and enough water should be applied so that soil can be flooded into the voids. Fill should be placed along the sides of the windrows and compacted as thoroughly as possible. After the fill has been brought to the top of the rock windrow, additional granular fill should be placed and flooded into the voids. Flooding is not permitted in fill soils placed more than 1 foot above the top of the windrowed rocks. • Where utility lines or pipelines are to be located at depths greater than 15 feet, rock shall be excluded in that area. Excess rock that cannot be included in the fill, or that exceeds 4 feet in diameter, should be stockpiled for export or used for landscaping purposes. • The oversized material recommendations presented in this report provide for the geotechnical consultant to coordinate with the grading contractor to develop a procedure for construction of compacted fills that have a satisfactory fill performance for the intended use of the fill. It should be understood that it is not feasible and/or cost effective to eliminate all oversized material from constructed fills as part of a conventional grading operation. The exclusion of all oversized material is not necessary for satisfactory fill performance on the majority of projects. 					
MM Geo-11	Compaction Requirements: After the site is cleared and excavated as recommended, the exposed soils should be carefully observed for the removal of all unsuitable material. Next, the exposed	During Grading	City of Santa Clarita Public Works Department			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	<p>subgrade soils should be scarified to a depth of at least 6 inches, brought to above optimum moisture content, and rolled with heavy compaction equipment. The upper 6 inches of exposed soils should be compacted to at least 90% of the maximum dry density obtainable by the ASTM D1557 Method of Compaction. After compacting the exposed subgrade soils, all required fills should be placed in loose lifts, not more than 8 inches in thickness, and compacted to at least 90% of their maximum density. For fills placed at depths greater than 40 feet below proposed finish grade, a minimum compaction of 93% of the maximum dry density is required. The moisture content of the fill soils at the time of compaction should be above the optimum moisture content. Compacted fill should not be allowed to dry out before subsequent lifts are placed.</p> <p>Rough grades should be sloped so as not to direct water flow over slope faces. Finished exterior grades should be sloped to drain away from building areas to prevent ponding of water adjacent to foundations.</p>		(Engineering Services Division)			
MM Geo-12	<p>Shrinkage and Bulking Requirements: Shrinkage of about 10% to 15% is estimated for the on-site natural alluvial soils when removed and placed as compacted fill. A bulking value of about 3% to 10% is estimated for materials generated from Mint Canyon Formation bedrock cut areas for use as compacted fill. The actual shrinkage and bulking will depend upon the relative compaction obtained by the contractor during grading operations and would be expected to change on a daily basis.</p>	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			
MM Geo-13	<p>Permanent Slope Requirements: Permanent cut and fill slopes may be inclined at 2:1 or flatter. The current site plan indicates that the steepest slope to be constructed at the site during grading will be 2:1.</p>	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			
MM Geo-14	<p>Proposed Cut Slope Requirements: Cut slopes proposed for the rough grading of the Project site have been designated as shown on the Geotechnical Map. Each cut slope is discussed with specific recommendations presented below. All grading should conform to the minimum recommendations presented in this report.</p>	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			

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	If these slopes are modified from those that are discussed in this report, the modifications should be reviewed by RTF&A to ascertain the applicability of our recommendations.					
MM Geo-15	<p>Fill Slope Requirements:</p> <ul style="list-style-type: none"> Where the toe of a fill slope terminates on natural, fill, or cut materials, a keyway is required at the toe of the fill slope. The fill slope keyway should be a minimum width of 12 feet, be founded within competent material, and extend a horizontal distance beyond the toe of the fill to the depth of the keyway. The keyway should be sloped back at a minimum gradient of 2% into the slope. The width of fill slopes shall be no less than 8 feet, and under no circumstances should the fill widths be less than what the compaction equipment being used can fully compact. Benches should be cut into the existing slope to bind the fill to the slope. Benches should be step-like in profile, with each bench not less than 4 feet in height and established in competent material. Compressible or other unsuitable soils should be removed from the slope prior to benching. Competent material is defined as being essentially free of loose soil, heavy fracturing, or erosion-prone material and is established by the Geotechnical Consultant of Record during grading. Where the top or toe of a fill slope terminates on a natural or cut slope and the natural or cut slope is steeper than a gradient of 3:1, a drainage terrace with a width of at least 6 feet is recommended along the contact. As an alternative, the natural or cut portion of the slope can be excavated and reconstructed as a stability fill slope to provide an all-fill slope condition. Where the contact between the face of the fill slope and the face of a lower natural or cut slope is inclined at 45 degrees or steeper, a drainage terrace would not be required. When constructing fill slopes, the grading contractor shall avoid spillage of loose material down the face of the slope during the dumping and rolling operations. Preferably, the incoming load shall be dumped behind the face of the slope and bladed into place. After a maximum of 4 feet of compacted fill has been placed, the contractor shall backroll the outer face of the slope by backing the tamping roller over the top of the slope, 	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			

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	thoroughly covering all of the slope surface with overlapping passes of the roller. The foregoing should be repeated after the placement of each 4-foot thickness of fill. As an alternative, the fill slope can be overbuilt and the slope cut back to expose a compacted core. If the required compaction is not obtained on the fill slope, additional rolling will be required prior to placement of additional fill, or the slope shall be overbuilt and cut back to expose the compacted core.					
MM Geo-16	Stability Fill Requirements: Stability fills have been recommended for several of the cut slopes on-site, as discussed in the “Slope Stability” section of this report. The stability fill slopes should be constructed in accordance with Stability Fill Details for Grossly Stable Slopes (Figure 4), Frankian study. Backdrains should be installed at the backcut of the stability fill as recommended below in Mitigation Measures MM Geo-17 and MM Geo-18.	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			
MM Geo-17	Subdrain Requirements: <ul style="list-style-type: none"> • Canyon subdrains are recommended to intercept and remove groundwater within canyon fill areas. All subdrains should extend up-canyon, with the drain inlet carried to within 15 feet of final pad grade. The approximate locations for recommended subdrains are shown on Figure 4.6-1, Site Geology Map. Specific subdrain locations should be determined in the field during grading operations. The subdrains should be surveyed by the Project Surveyor to establish line and grade during construction, and for future location reference. Subdrain and backdrain excavations should be observed by the Geotechnical Consultant. • The subdrains should be installed in accordance with the manufacturer's specifications. • A minimum 2% gradient is to be maintained in the subdrain pipes and the pipe shall have at least eight uniformly spaced narrow slots per foot. The width of the slots should not exceed one-sixteenth of an inch. If PVC pipe with drilled perforations is utilized, the diameter of the holes should not exceed three-eighths of an inch if gravel and filter fabric is used, or one-eighth inch-diameter perforations if Los Angeles County Flood Control District (LACFCD) Designation F-1 Filter Material is used. There 	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			

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	<p>should be at least eight uniformly spaced sets of two perforations per lineal foot of pipe. When constructing the subdrain, the pipe should be placed so that the drilled perforations are positioned on the bottom half of the pipe. The upstream end of subdrains should be capped. The final 20 feet of pipe at the downstream end of canyon, stabilization, buttress, and side hill fills shall not be slotted or perforated. Provisions should be made at all times during construction to prevent damage to the subdrain from construction equipment, and to prevent soils from being washed into an exposed subdrain by surface waters.</p> <ul style="list-style-type: none"> • For runs up to 500 feet, subdrains for the bottom of canyon fills should consist of at least 6-inch-diameter pipe. For runs of 500 to 1,500 feet, 8-inch-diameter pipe shall be used. For runs over 1,500 feet, 10-inch-diameter pipe shall be used. • Canyon subdrains may be installed in a rectangular trench excavated to expose competent material and shall be approved by the Geotechnical Consultant. The subdrains should be surrounded by at least 3 cubic feet per lineal foot of granular filter material and there should be at least 6 inches of compacted granular filter material or gravel on all sides of the pipe. The granular filter material for subdrains should meet the F1 material criteria, or have a gradation approved by the Geotechnical Consultant prior to placement. As an alternative to the granular filter material, three-quarter-inch-diameter gravel may be placed around the pipe. The gravel should be separated from the surrounding soils by a filter fabric such as Mirafi 140N, or equivalent, wrapped around the gravel ("burrito wrapped"). 					
MM Geo-18	<p>Backdrains Requirements: Backdrains are required for all stability fills or buttress fills.</p> <ul style="list-style-type: none"> • Backdrains shall consist of 4-inch-diameter perforated or slotted pipe. • The vertical spacing of the backdrains shall be a maximum of 15 feet, with a horizontal spacing of 100 feet. • Backdrain outlets shall consist of non-perforated pipe. 	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			

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<ul style="list-style-type: none"> The backdrain gradient shall be at least 2% to the discharge end. The exact location of the backdrains shall be determined in the field by the Geotechnical Consultant after the backcut has been made, so that it can be best positioned to intercept potential seepage. 					
<p>MM Geo-19 Surface Drainage Requirements:</p> <ul style="list-style-type: none"> All surface drainage shall be directed away from proposed structures through non-erosive devices. The ponding of water must not be allowed, especially adjacent to foundations. The pad gradients shall not slope toward any descending slopes in order to reduce the potential for surficial erosion. Water that flows towards slopes shall be conducted to appropriate discharge locations via non-erodible drainage devices. Drainage devices, including drainage terraces on graded slopes shall be inspected periodically and kept clear of debris. Drainage and erosion control shall be designed in accordance with the standards set forth in the CBC. Any modification of the grades of building pads, parking areas, etc., could adversely affect drainage at the site. Future landscaping, construction of walkways, planters and walls, etc. must never modify site drainage unless additional measures to enhance drainage (e.g., area drains, additional grading) are designed and constructed in accordance with the applicable City of Santa Clarita. 	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			
<p>MM Geo-20 Erosion Protection Requirements</p> <ul style="list-style-type: none"> To reduce the potential for erosion, all permanent cut-and-fill slopes on-site should be seeded or planted with lightweight, deep-rooting, drought-resistant vegetation. A landscaping expert should be consulted for ground cover recommendations. Excessive landscape irrigation or leakage from irrigation lines can cause localized slope failures. Therefore, irrigation systems for slope vegetation should be designed and maintained to minimize leakage onto graded slopes. If automatic sprinkler systems are used, they should be adjusted for seasonal variations in rainfall. Vegetation on natural slopes should remain 	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			

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	<p>natural and not be landscaped or irrigated in the same manner as graded slopes.</p> <ul style="list-style-type: none"> Rodent burrows are known to provide direct conduits for water flow that can decrease slope stability. Therefore, to maintain the integrity of graded slopes, a rodent abatement program shall be instituted. Even with the implementation of these recommendations, it is not possible to eliminate erosion within hillside developments. Removal of debris from drainage devices, slope maintenance, and landscaping shall be required, especially after periods of heavy rainfall. 					
MM Geo-21	<p>General Grading Requirements</p> <p>All fills, unless otherwise specifically designed, shall be compacted to at least 90% of the maximum dry unit weight as determined by the ASTM D1557 Method of Soil Compaction.</p> <p>No fill shall be placed until the area to receive the fill has been adequately prepared, and subsequently approved by the Geotechnical Consultant of Record or his representative.</p> <p>Fill soils should be kept free of debris and organic material.</p> <p>Rocks or hard fragments larger than 8 inches may not be placed in the fill without approval of the Geotechnical Consultant of Record or his representative, and in a manner specified for each occurrence.</p> <p>Bedrock fragments larger than 8 inches, or fill soils containing greater than 25% of bedrock fragments larger than 4 inches in diameter, must be removed or processed using successive passes of a sheepsfoot compactor until rock fragments constitute less than 25% of the fill material.</p> <p>The fill material shall be placed in layers which, when compacted, shall not exceed 8 inches per layer. Each layer shall be spread evenly and shall be mixed thoroughly during the spreading to ensure uniformity of material and moisture.</p> <p>When moisture content of the fill material is too low to obtain adequate compaction, water shall be added and thoroughly dispersed until the soil is approximately 2% to 4% above optimum moisture content.</p>	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			

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	When the moisture content of the fill material is too high to obtain adequate compaction, the fill material shall be aerated by blading, or other satisfactory methods, until the soil is approximately 2% to 4% above optimum moisture content. Fill and cut slopes shall not be constructed at gradients steeper than 2:1 (horizontal:vertical).					
MM Geo-22	Grading Observation. Construction observation shall be made by the Geotechnical Consultant of Record during any grading activities within the Project site, to verify the findings within this report. Additional recommendations may be required for landfill design based on conditions uncovered during grading.	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			
MM Geo-23	<p>Temporary Excavation. Based on review of the subject plans, it does not appear that significant temporary excavations will be required during the construction of the proposed development. However, the following recommendations are applicable in areas where excavations are to be made.</p> <ul style="list-style-type: none"> • Temporary excavations are not expected to stand vertically in cuts that exceed 4 feet in height. Temporary excavations in excess of 4 feet may be sloped at a gradient of ¾:1, to a maximum height of 12 feet in favorably oriented Mint Canyon Formation or Terrace Deposits. Temporary slopes within alluvial soils and slopes greater than 12 feet may be sloped at gradients of 1:1. “Temporary” means a period not exceeding 60 days. All regulations of State or Federal OSHA shall be followed. • If excavations are made during the rainy season (normally from November through April), particular care shall be taken to protect slopes against erosion. Measures to help mitigate erosion, such as the installation of berms, plastic sheeting, or other devices, may be warranted. Surface water shall be prevented from flowing over or ponding at the top of excavations. 	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			
MM Geo-24	Expansive Bedrock. It is anticipated that bedrock materials exposed at pad grade may contain expansive claystone beds that could cause differential expansion. Therefore, within building areas at locations where expansive bedrock units are exposed at pad grade, it is recommended that the bedrock be removed and	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			

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	recompacted to a depth at least 8 feet below the proposed final pad elevations or 5 feet below the bottom of proposed footings, whichever is greater. It is also recommended that the bedrock be removed and recompacted to a depth at least 3 feet below proposed soil subgrade in exposed bedrock areas receiving pavement or hardscape improvements. The soils generated by these over-excavations should be mixed with nonexpansive soils to yield a relatively nonexpansive mixture. If the resulting fill soil is still expansive, special construction techniques, such as pad subgrade saturation or post-tensioned slabs, may be required to reduce the potential for expansive soil-related distress.					
MM Geo-25	Transition Lots. Proposed building pads located in a cut and fill transition zone may experience cracking and movement of the footings and slab due to differing compressibility of the fill, as compared to the bedrock material. To reduce the potential for cracking and differential settlement, the portion of the lot in cut bedrock or terrace deposits should be over-excavated to a depth at least 5 feet below the proposed finished pad elevation or 3 feet below the bottom of proposed footings, whichever is greater. The over-excavation shall extend at least 5 feet laterally beyond the building limits. Where removal and recompaction for potentially expansive soils or bedrock is also required that the 8-foot removals be performed as described in the "Expansive Bedrock" section of the RTF&A 2015 report.	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			
MM Geo-26	The applicability of the preliminary recommendations for foundation and retaining wall design should be confirmed at the completion of grading.	During Grading	City of Santa Clarita Public Works Department (Engineering Services Division)			
MM Geo-27	Paving studies and soil corrosivity tests should be performed at the completion of rough grading, to develop detailed recommendations for protection of utilities and structures and for construction of the proposed roads.	At Completion of Rough Grading, Conduct Paving Studies and Soil Corrosivity Tests	City of Santa Clarita Public Works Department (Engineering Services Division)			
MM Geo-28	Expansive Soils. The on-site alluvial soils and terrace deposits are expected to have a very low potential for expansion. Compacted	At Completion of Rough Grading,	City of Santa Clarita Public Works			

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	fills generated from the Mint Canyon Formation are expected to have up to a medium potential for expansion. The compacted fills generated by the on-site materials are expected to be classified as having a very low to medium potential for expansion. Samples of the compacted fill shall be obtained at the completion of the rough grading operations to support final foundation design.	Collect Samples of Compacted Fill	Department (Engineering Services Division)			
MM Geo-29	<p>Foundation</p> <ul style="list-style-type: none"> • General: Buildings may be supported on continuous or individual spread footings established in properly compacted fill soils. Foundations and floor slabs should be designed by a structural engineer, in accordance with the minimum requirements of the CBC. • Design Criteria: The recommendations presented in this section are based on the assumption that the proposed structures will have column loads not exceeding approximately 100 kips and continuous foundation loads not exceeding 3 kips per lineal foot. A bearing value of 2,000 pounds per square foot (psf) may be used in the design of spread foundations. This value can be increased by one-third when considering seismic and wind forces. The bearing material shall consist of compacted fill soil. Individual column pads and continuous wall footings shall be designed to meet the minimum width and depth requirements as set forth in the CBC. Foundation depths shall be measured from the lowest adjacent final grade. • Building Setbacks: Building setbacks for structures located adjacent to either ascending or descending slopes shall be in accordance with the standards set forth in the CBC. All foundation excavations shall be observed and approved by a representative from our firm prior to placement of reinforcing steel. Foundations shall be deepened, where necessary, to prevent surcharge loads from being imposed on adjacent foundations or utilities. Observation of foundation excavations may also be required by the appropriate reviewing governmental agencies. The contractor shall be familiar with the requirements of the governing reviewing agencies. • Lateral Design: Lateral restraint at the bases of footings or slabs may be assumed to be the product of the dead load and a 	During Construction	City of Santa Clarita Public Works Department (Engineering Services Division)			

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	<p>coefficient of friction of 0.4. Passive pressure on the faces of footings may also be used to resist lateral forces. A passive pressure of zero at the surface of finished grade, increasing at the rate of 250 psf per foot of depth, to a maximum value of 2,500 psf, may be used at this site. The passive pressure and friction may be combined without reduction when evaluating lateral resistance.</p> <ul style="list-style-type: none"> Settlement: Provided that the proposed buildings are supported on shallow foundations established in compacted fill soils, as recommended, column loads do not exceed 100 kips, and continuous footings do not exceed 3 kips per lineal foot, it is estimated that the maximum static settlement will be about 0.75 inches. The total static and seismic settlement is estimated to be about 1.5 inches. It is further estimated that static and seismic differential settlements will be less than 1.0 inches of vertical movement across a horizontal distance of 30 feet. RTF&A shall review the foundation loads after plans are developed to verify the applicability of our recommendations to the proposed structures. 					
MM Geo-30	<p>Floor Slab Support</p> <ul style="list-style-type: none"> General: The floor slab design recommendations presented in this section are based upon the assumption that the soil subgrade in proposed floor slab areas will consist of compacted fill soil and that floor slabs will be subjected to normal loads with no special requirements. Any surficial soils that become dried or disturbed during the course of construction shall be moisture-conditioned and compacted prior to casting the floor slab. Conventional floor slabs may be utilized at the subject development, provided the subgrade soils consist of compacted fill soils with a very low (Expansion Index of 0 to 20) potential for expansion. If the subgrade soils are determined to have an expansion potential in the low or higher range (Expansion Index greater than 21), post-tensioned floor slabs, as indicated below, are recommended. Post-tensioned floor slabs can also be used in soils with a very low potential for expansion. Conventional Floor Slabs: Conventional slabs-on-grade should be designed per the recommendations of the CBC. However, as 	During Construction	City of Santa Clarita Public Works Department (Engineering Services Division)			

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<p>a minimum, the building floor slabs should have a nominal thickness of at least 4 inches and should be reinforced with a No. 4 rebar spaced at 16 inches on center, in each direction, or equivalent. Thicker slabs may be required depending on CBC requirements, the floor loads, and the structural requirements; we defer to the Project Structural Engineer for design of the floor slabs.</p> <ul style="list-style-type: none"> • Post-Tensioned Floor Slabs: Post-tensioned floor slabs should be designed per the recommendations of the CBC. The design values, presented following this paragraph, assume that the proposed floor slabs will be poured monolithic with continuous perimeter edge footings. Perimeter edge footings should have a minimum depth of 12 inches. Footing depths should be measured from the lowest adjacent grade for perimeter footings or the top of slab for interior footings. • Net Bearing Value: An allowable net bearing value of 2,000 psf may be used for footings with a minimum width of 12 inches and a minimum depth of 12 inches below the top of slab or 12 inches below the lowest adjacent grade. • Coefficient of Friction: 0.75 • Passive Pressure: 250 pcf for level ground condition • Modulus of Subgrade Reaction (K): 150 pounds per cubic inch (pci) for a footing width of one foot. For larger footings or floor slabs, this value should be reduced using the following equation: $K_r = K \left[\frac{(B + 1)}{2B} \right]^2$ where: Kr = Reduced Modulus Value K = Modulus of Subgrade Reaction for a One-Foot-Wide Plate B = Width of Large Footing or Slab • Modulus of Elasticity: 1,000 pounds per square inch (psi) 					

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	<ul style="list-style-type: none"> Edge Moisture Variation Distance: Me (Center Lift): 5.25 feet Me (Edge Lift): 2.5 feet Estimated Differential Movements My (swelling): Low – 0.4; Medium – 0.9 My (shrink): Low – 0.3; Medium – 0.7 Water Vapor: Water vapor transmitted through floor slabs is a common cause of floor covering problems. An impermeable membrane vapor barrier should be installed to reduce excess vapor drive through the floor slab. The function of the impermeable membrane is to reduce the amount of water vapor transmitted through the floor slab. Vapor-related impacts should be expected in areas where a vapor barrier is not installed. Floor slabs shall be underlain by a vapor barrier surrounded by 2 inches of sand above and below it. The membrane should be at least 10 millimeters thick; care shall be taken to preserve the continuity and integrity of the membrane beneath the floor slab. The sand shall be sufficiently moist to remain in place and be stable during construction; however, if the sand above the membrane becomes saturated before placing concrete, the moisture in the sand can become a source of water vapor. Another factor affecting vapor transmission through floor slabs is a high water-to-cement ratio in the concrete used for the floor slab. A high water-to-cement ratio increases the porosity of the concrete, thereby facilitating the transmission of water and water vapor through the slab. The Project Structural Engineer or a concrete mix specialist should provide recommendations for design of concrete for footings and floor slabs in accordance with CBC. 					
MM Geo-31	<p>Retaining Walls</p> <ul style="list-style-type: none"> General: A bearing value of 2,000 psf may be used in the design of retaining wall footings. Backfill placed behind retaining walls shall be compacted to a minimum of 90% of the maximum dry density, as determined by the Soil Compaction Test Method (ASTM Standard D1557). When backfilling, walls should be braced. Heavy compaction equipment shall not be used any closer to the back of the wall than the height of the wall. Soils 	During Construction	City of Santa Clarita Public Works Department (Engineering Services Division)			

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	<p>that have an expansion index in excess of 30 shall not be utilized for backfill behind walls that are greater than 3 feet in height. The backs of retaining walls shall be water-proofed where aesthetics are concerned.</p> <ul style="list-style-type: none"> • Lateral Earth Pressure: Cantilevered retaining walls separate and independent of buildings, where the surface of the backfill is level and the retained height of soils is less than 15 feet, may be designed assuming that drained, nonexpansive soils will exert a lateral pressure equal to that developed by a fluid with a density of 30 pounds per cubic foot (pcf). The indicated pressure assumes that a lateral deflection of up to about 1% of the wall height is acceptable at the top of the wall. If it is desired to decrease the amount of potential wall deflection, a greater lateral pressure could be used in the wall design. Where the surface of the backfill is inclined at 2:1, it may be assumed that drained soils will exert a lateral pressure equal to that developed by a fluid with a density of 45 pcf. For the design of a rigid wall where rotation and lateral movement are not acceptable, as in the case of buildings, it may be assumed that drained, nonexpansive soils will exert a rectangular lateral pressure with a maximum pressure equal to $22H$ psf, where "H" is the wall height in feet. The pressure value and distribution may vary significantly when considering wall rigidity and restraining conditions. The structural characteristics of the wall are referred to the Project Structural Engineer. If requested, we can provide additional geotechnical design parameters for specific restrained conditions. In addition to the recommended earth pressure, walls should be designed to resist any lateral surcharges due to nearby buildings, storage, or traffic loads. A drainage system should be provided behind the walls to reduce the potential for development of hydrostatic pressure. If a drainage system is not installed, walls should be designed to resist an additional hydrostatic pressure equal to that developed by a fluid with a density of 55 pcf for the full height of the wall. • Seismic Lateral Earth Pressure: The preceding recommended values indicate earth pressures for conventional static loading conditions. Ground shaking associated with earthquakes may 					

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	<p>cause additional pressure on walls. In addition to the previously mentioned lateral earth pressures, it is recommended that all rigid (building) walls of any height, and cantilevered retaining walls greater than 6 feet in height, be designed to support an additional seismic earth pressure equal to an inverted equivalent fluid pressure of 29 pcf.</p> <ul style="list-style-type: none"> • Density of Backfill: When designing retaining walls to resist over-turning, it can be assumed that compacted, on-site soils will have a density of 125 pcf. • Drainage: A drainage system should be provided behind retaining walls, or the walls should be designed to resist hydrostatic pressures. • The drainage system could consist of a 4-inch-diameter perforated pipe placed 6 inches from the base of the wall, with the perforations down, and connected to an outlet device. • The pipe should be sloped at least 1 inch per 50 feet and surrounded on all sides by at least 6 inches of clean gravel. The gravel should be "burrito-wrapped" with filter fabric, such as Mirafi 140N, or equivalent. As an alternative to the gravel and filter fabric, filter material meeting the requirements of LACFCD Designated F-1 Filter Material, and slotted pipe, may be used. • The backside of the wall should be water-proofed. • A vertical, 6-inch-wide gravel chimney drain, or a drainage geocomposite such as Miradrain, should be placed against and behind retaining walls that are higher than 3 feet. The top of the back drain should be capped with 18 inches of on-site soils. • The installed drainage system should be observed by the Geotechnical Consultant of Record prior to backfilling the system. Inspection of the drainage system may also be required by the reviewing governmental agencies. 					
MM Geo-32	<p>Pavement Design: Samples of the on-site soil should be obtained from near final grade elevation in proposed pavement areas, following the grading operations, to perform R-value tests. The R-value test results would be used to prepare pavement section recommendations. The <i>preliminary</i> pavement section recommendations presented below are based on the assumption that the on-site soils have an R-value of at least 20. The <i>final</i></p>	During Construction	City of Santa Clarita Community Public Works Department (Engineering Services Division)			

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<p>pavement section recommendations could vary depending on the results of the actual R-value tests. We would be pleased to provide pavement section recommendations for alternative Traffic Index values upon request.</p> <table border="1"> <thead> <tr> <th>Traffic Index</th> <th>Asphalt Thickness (inches)</th> <th>(CAB) Base Course Thickness (inches)</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>3</td> <td>5</td> </tr> <tr> <td>6</td> <td>4</td> <td>9</td> </tr> <tr> <td>8</td> <td>5</td> <td>14</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Base course material should consist of crushed aggregate base (CAB), as defined by Section 2002.2 of the Standard Specifications for Public Works Construction (“Greenbook”), or crushed miscellaneous base (CMB), as defined by Section 200-2.4 of the Greenbook. Base course material should be compacted to at least 95% of the maximum dry density of that material. • Base course material should be purchased from a supplier who will certify that it will meet or exceed the specifications in the Greenbook, as indicated. We could, upon request, perform sieve analysis and sand equivalency tests on material delivered to the site that appears suspect. Additional tests could be performed, upon request, to determine if the material is in compliance with the remainder of the specifications indicated in the Greenbook. • The pavement section recommendations presented above are based upon assumed Traffic Index values. RTF&A does not take responsibility for the numerical determination of the Traffic Index values, nor the areas where they apply within the site. 	Traffic Index	Asphalt Thickness (inches)	(CAB) Base Course Thickness (inches)	4	3	5	6	4	9	8	5	14					
Traffic Index	Asphalt Thickness (inches)	(CAB) Base Course Thickness (inches)															
4	3	5															
6	4	9															
8	5	14															
<p>MM Geo-33</p> <p>Seismic Design. The following factors are recommended for seismic force design of structures at the subject site. The parameters were determined using the U.S. Seismic Design Maps at the United States Geological Survey (USGS) Earthquakes Hazard website.</p> <table border="1"> <thead> <tr> <th>Site Class</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>Ss</td> <td>2.509</td> </tr> <tr> <td>S1</td> <td>0.898</td> </tr> <tr> <td>SMs</td> <td>2.509</td> </tr> </tbody> </table>	Site Class	D	Ss	2.509	S1	0.898	SMs	2.509	During Construction	City of Santa Clarita Public Works Department (Engineering Services Division)							
Site Class	D																
Ss	2.509																
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	SM1 1.347 SDs 1.673 SD1 0.898 PGA 0.899					
Hazards and Hazardous Materials						
MM Haz-1	The structures on-site were constructed prior to 1981. Based on the age of construction, building materials in on-site structures may include asbestos containing materials (ACM), and certain building materials are presumed to contain ACM (PACM), unless testing has shown otherwise. As of October 1, 1995, OSHA made building owners responsible for complying with the asbestos construction standard, for buildings built in 1981 or earlier. The building owner is responsible for identifying the presence, location and quantity of asbestos containing building materials, if warranted. The building owner must tell employees, other employers, and tenants in the building of the presence and location of asbestos or presumed asbestos containing materials (PACM). If the building owner intends to demolish or remodel the structure(s), the building owner shall hire a California Certified Asbestos Consultant for assistance in compliance.	Prior to Demolition and Construction	City of Santa Clarita Community Development Department (Planning Division) and Public Works Department (Building and Safety Division)			
MM Haz-2	Prior to construction, the Project Applicant shall prepare a Traffic Control Plan for review and approval by the City Traffic Engineer that shall be implemented during the construction phase.	Prior to Construction	City of Santa Clarita Public Works Department (Traffic and Transportation Planning Division)			
Noise						
MM N-1	The Project shall adhere to Section 11.44.080 of the SCMC (Special Noise Sources—Construction and Building). As stated therein, no person shall engage in any construction work which requires a building permit from the City on sites within 300 feet of a residentially zoned property except between the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturday. Further, no work shall be performed on the following public holidays: New Year's Day, Independence Day, Thanksgiving, Christmas, Memorial Day and Labor Day.	During Construction	City of Santa Clarita Community Development Department (Planning Division) and Public Works Department (Building and Safety Division)			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
MM N-2	Noise and ground-borne vibration construction activities whose specific location on the Project site may be flexible (e.g., operation of compressors and generators, cement mixing, general truck idling) shall be conducted as far as possible from the nearest off-site land uses.	During Construction	City of Santa Clarita Community Development Department (Planning Division) and Public Works Department (Building and Safety Division)			
MM N-3	When possible, construction activities shall be scheduled so as to avoid operating several pieces of equipment simultaneously, which causes high noise levels.	During Construction	City of Santa Clarita Community Development Department (Planning Division) and Public Works Department (Building and Safety Division)			
MM N-4	Flexible sound control curtains shall be placed around all drilling apparatuses, drill rigs, and jackhammers when in use.	During Construction	City of Santa Clarita Community Development Department (Planning Division) and Public Works Department (Building and Safety Division)			
MM N-5	The Project contractor shall use power construction equipment with state-of-the-art noise shielding and muffling devices.	During Construction	City of Santa Clarita Community Development Department (Planning Division) and Public Works Department (Building and Safety Division)			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
MM N-6	Barriers such as flexible sound control curtains shall be erected around heavy equipment to minimize the amount of noise on the surrounding land uses to the maximum extent feasible during construction.	During Construction	City of Santa Clarita Community Development Department (Planning Division) and Public Works Department (Building and Safety Division)			
MM N-7	All construction truck traffic shall be restricted to truck routes approved by the City, which shall avoid residential areas and other sensitive receptors to the extent feasible.	During Construction	City of Santa Clarita Community Development Department (Planning Division) and Public Works Department (Building and Safety Division)			
MM N-8	A construction notice shall be prepared and shall include the following information: job site address, permit number, name and phone number of the contractor and owner or owner's agent , hours of construction allowed by code or any discretionary approval for the site, and City telephone numbers where violations can be reported. The notice shall be posted and maintained at the construction site prior to the start of construction and displayed in a location that is readily visible to the public and approved by the City.	Prior to and During Construction	City of Santa Clarita Community Development Department (Planning Division) and Public Works Department (Building and Safety Division)			
MM N-9	Consistent with Policy N 3.1.2 of the City's Noise Element, where the projected exterior noise levels could exceed 65 CNEL at single-family residences (rear yards), open space areas, and common recreational and open space areas for multi-family developments, the Applicant shall provide noise barriers, setbacks, and site design standards to reduce future on-site traffic noise levels to the maximum extent feasible.	Review and Approval of Site Plan	City of Santa Clarita Community Development Department (Planning Division)			
MM N-10	Consistent with Policy N 3.1.9 (Mixed-Use Developments) of the City's Noise Element, the Project shall implement a buyer and renter notification program for residences where appropriate, to	Prior to Certificate of Occupancy	City of Santa Clarita Community Development			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	educate and inform potential buyers and renters of the sources of noise in the area and/or new sources of noise that may occur in the future. As determined by the reviewing authority, notification may be appropriate in the following areas: within 200 feet of commercial uses in mixed-use developments, potential buyers and renters should receive notice that the commercial uses within the mixed-use developments may generate noise in excess of levels typically found in residential areas, that the commercial uses may change over time, and the associated noise levels and frequency of noise events may change along with the use.		Department (Planning Division)			
MM N-11	The Project shall comply with Title 24 Noise Insulation Standards, which specifies the maximum allowable sound transmission between dwelling units in multi-family residential buildings, and limits allowable interior noise levels in habitable spaces to 45 dBA CNEL.	Review and Approval of Site Plan	City of Santa Clarita Community Development Department (Planning Division)			
MM N-12	Prior to the issuance of building permits for uses fronting Sand Canyon and Soledad Canyon Roads, the project developer shall submit evidence demonstrating that all feasible design features have been considered to meet the City's exterior noise standard of 65 dBA CNEL . Locations that could be exposed to future exterior noise levels above 65 dBA CNEL shall consider at least the following: 1) Increase setbacks along Sand Canyon and Soledad Canyon Roads to the maximum extent feasible; 2) Consider the use of noise barriers between the roadway sources and the receptors (earthen berms, masonry walls, and vegetation may be appropriate); and/or 3) Prohibit balconies for multi-family units facing Sand Canyon and Soledad Canyon Roads.	Prior to Issuance of Building Permit	City of Santa Clarita Community Development Department (Planning Division) and Public Works Department (Building and Safety Division)			
MM N-13	The Project shall implement a buyer and renter notification program for residences where appropriate, to educate and inform potential buyers and renters that due to traffic levels on Sand Canyon Road, Soledad Canyon Road and the SR-14 Freeway, noise in excess of levels typically found in residential areas may be possible.	Prior to Certificate of Occupancy	City of Santa Clarita Community Development Department (Planning Division)			
Public Services						
MM PS-1	Concurrent with the issuance of building permits, the Project Applicant shall participate in the Developer Fee Program to the	Payment of Fees at Issuance of Building Permit	City of Santa Clarita Community Development			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	satisfaction of the Los Angeles County Fire Department and/or City of Santa Clarita.		Department (Planning Division) and Los Angeles County Fire Department			
MM PS-2	Adequate access to all buildings on the Project site shall be provided for emergency vehicles during the building construction process.	During Construction	City of Santa Clarita Community Development Department (Planning Division)			
MM PS-3	Adequate water availability shall be provided to service construction activities.	During Construction	City of Santa Clarita Community Development Department (Planning Division)			
MM PS-4	All on-site development shall comply with the applicable Los Angeles County and City of Santa Clarita code requirements for construction, access, water mains, fire flows, and fire hydrants, as stipulated by the Los Angeles County Fire Department or the City of Santa Clarita through Project approvals or building plan reviews.	Review and Approval of Final Site Plan	City of Santa Clarita Community Development Department (Planning Division) and Los Angeles County Fire Department			
MM PS-5	Prior to the issuance of building permits, the Project Applicant, or responsible party, shall obtain the necessary clearances from and shall comply with all applicable conditions imposed by Los Angeles County Fire Department, including but not limited to those from the Planning Division, Land Development Unit, Forestry Division, or Fuel Modification Unit.	Prior to Issuance of Building Permit	City of Santa Clarita Community Development Department (Planning Division) and Los Angeles County Fire Department			
MM PS-6	The Project Applicant, or responsible party, shall file all landscape plans with the Los Angeles County Fire Department Fuel Modification Unit to ensure compliance with the High Fire Hazard Severity Zone.	Review and Approval of Landscape Plans	City of Santa Clarita Community Development Department (Planning Division) and			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
			Los Angeles County Fire Department			
MM PS-7	During construction, private security patrols shall be utilized to protect the Project site.	During Construction	City of Santa Clarita Community Development Department (Planning Division)			
MM PS-8	Prior to construction activities, the Project Applicant shall have a construction traffic control plan approved by the City of Santa Clarita.	Prior to Construction	City of Santa Clarita Community Development Department (Planning Division)			
MM PS-9	The Project Applicant, or designee, shall pay the City's law enforcement facilities impact fee in effect at the time of issuance of a building permit.	Payment of Fees at Issuance of Building Permit	City of Santa Clarita Community Development Department (Planning Division) and Los Angeles County Sheriff's Department			
MM PS-10	As final development plans are submitted to the City of Santa Clarita for approval in the future, the Los Angeles County Sheriff's Department design requirements that reduce demands for service and ensure adequate public safety shall be incorporated into the building design. The design requirements for this Project shall include: <ul style="list-style-type: none"> • Proper lighting in open areas and parking lots to the satisfaction of the Los Angeles County Sheriff's Department, around and throughout the development to enhance crime prevention and enforcement efforts • Sufficient street lighting for the Project's streets • Good visibility of doors and windows from the streets and between buildings on the Project site • Building address numbers on both residential and commercial/retail uses are lighted and readily apparent from the streets for emergency response agencies 	Review and Approval of Final Site Plan	City of Santa Clarita Community Development Department (Planning Division) and Los Angeles County Sheriff's Department			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure	Monitoring Timing	Monitoring Agency	Verification of Compliance		
			Initials	Date	Remarks
<ul style="list-style-type: none"> Plant low-growing groundcover and shade trees, to the extent feasible, rather than a predominance of shrubs that could conceal potential criminal activity around buildings and parking areas 					
MM PS-11	The Project Applicant, or responsible party, shall pay the required mitigation fees to the Sulphur Springs Union School District as stipulated in the School Facilities Mitigation Agreement.	Payment of Fees at Issuance of Building Permit	City of Santa Clarita Community Development Department (Planning Division)		
MM PS-12	The Project Applicant, or responsible party, shall enter into an Agreement with the William S. Hart Union High School District prior to final map. All fees shall be paid in accordance with the Agreement.	Agreement with School District and Payment of Fees at Issuance of Building Permit	City of Santa Clarita Community Development Department (Planning Division)		
MM PS-13	The Project Applicant shall pay a library facilities mitigation fee. Currently this fee is \$800.00 per residential unit. This is the estimated fee that would be collected to pay for new library construction and items totaling \$464,000.00.	Payment of Fees at Issuance of Building Permit	City of Santa Clarita Community Development Department (Planning Division)		
Traffic and Circulation					
MM T-1	Sand Canyon at Soledad Canyon. Modify traffic signal timing to coordinate with Kenroy Avenue and SR-14 SB Ramp intersections along Soledad Canyon Road.	Prior to Certificate of Occupancy	City of Santa Clarita Public Works Department (Traffic and Transportation Planning Division) and Caltrans		
MM T-2	SR-14 SB Ramps at Soledad Canyon. Modify traffic signal to change westbound left-turn phasing from permissive to protected left-turn phasing.	Prior to Certificate of Occupancy	City of Santa Clarita Public Works Department (Traffic and Transportation Planning Division) and Caltrans		

5. Mitigation Monitoring and Reporting Program

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
MM T-3	The Project Developer shall enter into a Mitigation Agreement with Caltrans. Said Mitigation Agreement shall be finalized prior to the recordation of a final map.	Final Mitigation Agreement Prior to Recordation of Final Map	City of Santa Clarita Public Works Department (Traffic and Transportation Planning Division) and Caltrans			
MM T-4	Sand Canyon at Soledad Canyon (Cumulative Conditions). Modify traffic signal timing to coordinate with Kenroy Avenue and SR-14 SB Ramp intersections along Soledad Canyon Road.	Prior to Certificate of Occupancy	City of Santa Clarita Public Works Department (Traffic and Transportation Planning Division) and Caltrans			
MM T-5	Sand Canyon at Soledad Canyon (Cumulative Conditions). Modify intersection to restripe one northbound right-turn lane to a through lane (for 2 NB Left, 2 NB Through and 1 NB Right) (Project Share = 24%).	Prior to Certificate of Occupancy	City of Santa Clarita Public Works Department (Traffic and Transportation Planning Division) and Caltrans			
MM T-6	SR-14 SB Ramps at Soledad Canyon (Cumulative Conditions). Modify traffic signal to change westbound left-turn phasing from permissive to protected left-turn phasing.	Prior to Certificate of Occupancy	City of Santa Clarita Public Works Department (Traffic and Transportation Planning Division) and Caltrans			
MM T-7	SR-14 Freeway Mainline (Cumulative Conditions). Contribute pro-rata share to the anticipated costs for design and implementation of future improvements. (Project Share = 1.6%).	Prior to Certificate of Occupancy	City of Santa Clarita Public Works Department (Traffic and Transportation Planning Division) and Caltrans			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure	Monitoring Timing	Monitoring Agency	Verification of Compliance			
			Initials	Date	Remarks	
Utilities and Service Systems						
MM Util-1	The project application shall complete and submit to the Building & Safety Division a Construction and Demolition Materials Management Plan (C&DMMP), approved by the City's Director of Public Works, or the Director's Designee, on a C&DMMP form approved by the City. The completed C&DMMP, at a minimum, shall indicate all of the following: 1. the estimated weight of project C&D materials, by materials type, to be generated; 2. the maximum weight of C&D materials that it is feasible to divert, considering cost, energy consumption and delays, via reuse or recycling; 3. the vendor or facility that the Applicant proposes to use to collect, divert, market, reuse or receive the C&D materials; 4. the estimated weight of residual C&D materials that would be transported for disposal in a landfill or transformation facility; and 5. the estimated weight of inert waste to be removed from the waste stream and not disposed of in a solid waste landfill. (General Plan EIR Mitigation Measure 3.17-6)	Prior to Construction	City of Santa Clarita Public Works Department (Building and Safety Division)			
MM Util-2	The Project Applicant shall provide adequate areas for the collection and loading of recyclable materials (i.e., paper products, glass, and other recyclables) in compliance with the State Model Ordinance, implemented on September 1, 1994, in accordance with AB 1327, Chapter 18, California Solid Waste Reuse and Recycling Access Act of 1991. (General Plan EIR Mitigation Measure 3.17-2)	Review and Approval of Site Plans, and During Project Operations	City of Santa Clarita Community Development Department (Planning Division) and City of Santa Clarita Public Works Department (Building and Safety Division)			
MM Util-3	The Project Applicant shall be required to implement waste reduction programs in conformance with the City's Source Reduction and Recycling Element program. (General Plan EIR Mitigation Measure 3.17-4)	During Project Operations	City of Santa Clarita Community Development Department (Planning Division)			

5. Mitigation Monitoring and Reporting Program

Mitigation Measure		Monitoring Timing	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
MM Util-4	Any hazardous waste that is generated on site, or is found on site during demolition, rehabilitation, or new construction activities shall be remediated, stored, handled, and transported in compliance per appropriate local, state, and federal laws, as well as with the City's Source Reduction and Recycling Element. (General Plan EIR Mitigation Measure 3.17-5)	During Project Operations	City of Santa Clarita Community Development Department (Planning Division)			
MM Util-5	Payment of a connection fee to the County Sanitation Districts of Los Angeles County shall be made prior to issuance of a permit to connect (directly or indirectly) to the County Sanitation Districts of Los Angeles County's Sewerage System.	Payment of Fee Prior to Issuance of Connection Permit	City of Santa Clarita Public Works Department (Building and Safety Division) and County Sanitation Districts of Los Angeles County			