



CITY OF HIGHLAND

27215 Base Line, Highland, CA 92346
Telephone (909) 864-6861 FAX: (909) 862-3180

INITIAL STUDY

1. Case No: Tentative Tract Map No. 17604 (TTM 015-001);
Conditional Use Permit 15-006
Project title: Heatherglenn Planned Development
2. Lead agency: City of Highland, 27215 Base Line, Highland, CA 92346
3. Contact person: Kim Stater, Assistant Community Development Director
Tel: (909) 864-6861, Ext. 204
4. Project location: East of Merris Street/Club View Drive, west of Alta Vista,
south of Greenspot Road and north of Abbey Way and
Plunge Creek. The site is 59.03 (gross) acres consisting of
seven Assessor Parcel Numbers: 1210-281-01, 1210-281-
02, 1210-281-03, 1210-281-04, 1210-211-18, 1210-211-
21, 1210-211-23.
5. Project applicant/sponsor: Greenspot Partners 1, Inc., 2011 E. Financial Way,
Glendora, CA 91741

6. Description of project:

Tentative Tract Map (TTM) 17604 is a low density, single-family residential development Project that includes 203 numbered residential lots and 13 lettered lots for various open space uses (entry points, public park, irrigated slopes/easements, infiltration basin, open space habitat preservation, and East Valley Water District facilities). These lettered lots (A through M) total 12.44 acres of the Project site. A public park is planned and is located at the southwest corner of Gold Buckle Road and Street "B." The park (Lot C) is ½ acre and will be improved with a small tot-lot containing a low maintenance multi-faceted play structure with a soft fall zone area, benches, and shade structure. The balance of the park will be a passive play area with water efficient landscaping. The park will be maintained by a Homeowners Association (HOA) or assessment district, as will all of the letter lots. The Project will include a community trail (12 feet wide) along the western boundary of the site from Greenspot Road to the southern boundary of the site. The Project will include construction of the Pole Line Trail (12 feet wide) along southern portion of the Project site. Lot L is 6.53 acres and will not be graded and developed but set aside and preserved for the sensitive habitat and wildlife species that occur there.

A network of local public streets will provide internal circulation and access to Greenspot Road, a four-lane divided major highway along the northern boundary of the site. There will be three access points from Greenspot Road to the Project site. The first access point to Greenspot Road will be via Old Greenspot Road at Club View Drive at the westerly edge of the Project's site. The second is a new street (Gold Buckle Road) generally located in the center of the Project site. The third access point to Greenspot Road will be on the Project site's most easterly edge as Street "P."

Potable water and sewer service would be provided by East Valley Water District (EVWD). EVWD has an existing water main and a sewer pipeline in Greenspot Road. Service to the new residences will require a new connection to these lines and will be extended into the Project site.

Stormwater and non-stormwater runoff from the majority of the site (western) will be conveyed within the site (storm drains within the network of streets) to an infiltration basin located in the southern portion of the Project site. Stormwater and non-stormwater runoff from a small area from the eastern portion of the site will be conveyed through a swale in Lot D to the open space habitat preservation area in Lot L. No off-site stormwater facilities are required or proposed.

Development of the tract will include: grove removal, grubbing, grading, development of internal roadways, and off-site improvements. Grading of the site is estimated to require 107,121 cubic yards of cut and 126,140 cubic yards of fill. With a net import of 19,019 cubic yards of fill required from an off-site location.

7. Present Land Use: Undeveloped, eucalyptus groves, jojoba field, and natural sage scrub habitat
8. General Plan designation: PD/LDR (Planned Development/ Low Density Residential)

9. Zoning: PD-R1 (Single-Family Residential)
10. Is the proposed action a “project” as defined by CEQA? (See Section 2.6 of State CEQA Guidelines. If more than one project is present in the same area, cumulative impact should be considered) Yes No
11. If “yes” on 10, does the project fall into any of the Emergency Projects listed in Section 15269 of the State CEQA Guidelines? Yes No
12. If “no” on 10, does the project fall under any of the Ministerial Acts listed in Section 15268(b) of the State CEQA Guidelines? Yes No
13. If “no” on 12, does the project fall under any of the Statutory Exemptions listed in Article 18 of the State CEQA Guidelines? Yes No
14. If “no” on 13, does the project qualify for one of the Categorical Exemptions listed in Article 19 of the State CEQA Guidelines? (Where there is a reasonable probability that the activity will have a significant effect due to special circumstances, a categorical exemption does not apply). Yes No
15. Surrounding land uses and setting (briefly describe the project’s surroundings):
- North: Greenspot Road, single-family detached residential
 - South: Open space, Upper Santa Ana River Wash Habitat Conservation Plan (HCP) area
 - East: Plunge Creek storm drain channel, open space, Upper Santa Ana River Wash HCP area
 - West: Vacant/ disturbed land, single-family detached residential
16. Surrounding General Plan and Zoning:
- North: Single-Family Residential / PD and R-1 | East Highlands Ranch Planned Unit Development
 - South: Open Space / Open Space
 - East: Open Space / Open Space
 - West: Planned Development (PD), Neighborhood Commercial (NC) and East Highland Village (EHV)

17. Is the proposed project consistent with (if answered “yes” or “n/a”, no explanation is required)
- | | |
|--|--|
| City of Highland General Plan | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> |
| Applicable Specific Plan | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| City of Highland Zoning Code | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> |
| South Coast Air Quality Management Plan | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> |
| San Bernardino International Airport Master Plan | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Other: Redlands Airport Special Compatibility Zone | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> |
18. Are any of the following studies required?
- | | |
|---------------------------|---|
| Soils Report | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Slope Study | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Geological Report | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Traffic Study | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Air Quality Study | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Hydrology | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Sewer Study | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Biological Study | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Noise Study | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Hazardous Materials Study | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Housing Analysis | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Archaeological Report | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Groundwater Analysis | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Water Quality Report | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Other | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |

19. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement). Only required at the time of development.

Public Agencies:

East Valley Water District, State Water Resources Control Board, San Bernardino County Flood Control District, US Fish and Wildlife Service, California Department of Fish and Wildlife, Redlands Municipal Airport

Other service providers:

Cal Disposal Co. Inc., Burrtec Waste Disposal, Southern California Edison, Southern California Gas.

INFORMATION SOURCES CITED: The documents below are incorporated herein by reference and are available for review at Highland City Hall, located at 27215 Base Line, California or online at the website address indicated below.

1. Air Quality and Greenhouse Gas Study. Entech Consulting Group. March 2017. (Appendix A)
2. California Important Farmland Finder, California Department of Conservation, <https://maps.conservation.ca.gov/DLRP/CIFF/>, 2016.
3. CalRecycle, Estimated Solid Waste Generation Rates, <https://www2.calrecycle.ca.gov/wastecharacterization/general/rates>
4. City of Highland General Plan and Environmental Impact Report, Adopted by the City Council March 14, 2006.
5. City of Highland Municipal Code
6. East Valley Water District, "Will Serve" Letter, January 29, 2019. Appendix M)
7. Energy Analysis Technical Memorandum. Entech Consulting Group. May 2019. (Appendix I)
8. Engineering Geology Investigation Proposed Heatherglen Property. Gary S. Rasmussen & Associates, Inc. January 5, 2006. (Appendix J)
9. Flood Insurance Rate Map Number 06071C 8707J, dated September 2, 2016.
10. Focused Nesting Season Burrowing Owl and Raptor Nest Survey Report. L&L Environmental, Inc. September 2005. (Appendix E)
11. Heritage Tree Count and Survey for the Heatherglen Site. L&L Environmental, Inc. April 2006, updated January 2019. (Appendix G)
12. Noise Study Heatherglen Residential Project. Entech Consulting Group. April 2017. (Appendix K)
13. Phase 1 Cultural Resources Assessment for the Heatherglen/Tract 17604 Project. L&L Environmental, Inc. December 11, 2017. (Appendix H)
14. Preliminary Water Quality Management Plan for Tract 17606, Albert A. Webb Associates. November 5, 2014.
15. Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) 2016-2040, Southern California Area of Governments (SCAG), April 7, 2016. <http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx>
16. "San Bernardino County Important Farm Land 2010" Sheet 2 of 2. Farmland Mapping and Monitoring Program. ftp://ftp.consrv.ca.gov/pub/dlrp/wa/SanBernardino_so_15_16_WA.pdf

17. San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*) Population and Distribution Trapping Studies. Highland, California. L & L Environmental, INC. October, 2018. (Appendix F)
18. San Bernardino Valley Regional Water Management Plan, 2015. Water Systems Consulting, Inc., <https://www.sbvmd.com/reports/-folder-1081>
19. Sewer System Management Plan (SSMP), 2014. East Valley Water District, <https://www.eastvalley.org/294/Sewer-System-Management-Plan-SSMP>
20. Traffic Impact Analysis Report. Linscott, Law & Greenspan, Engineers. June 13, 2019. (Appendix L)
21. Updated General Biological and Spring Botanical Surveys for the Greenspot Partners Site East. L&L Environmental, INC. December 2015. (Appendix B)
22. Updated General Biological and Spring Botanical Surveys for the Greenspot Partners Site West. L&L Environmental, INC. December 2015. (Appendix C)
23. Updated Spring Botanical Survey for Greenspot Partners TT 17604. L&L Environmental, INC. March 2018. (Appendix D)

Attachment 1 Location Map



Attachment 2 Project Site



<p>Figure 2</p>	<p><i>Project Site Map</i></p> <p>Heatherglen Planned Development</p> <p>City Of Highland San Bernardino County, CA</p>	<p>Assessor Parcel Numbers:</p> <p>1210-281-01, 1210-281-02, 1210-281-03, 1210-281-04, 1210-211-18, 1210-211-21, 1210-211-23.</p>

1. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” or a “Less Than Significant With Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|---|--|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology /Soils | <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input checked="" type="checkbox"/> Hydrology / Water Quality | <input checked="" type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing | <input checked="" type="checkbox"/> Public Services |
| <input checked="" type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

EVALUATION OF ENVIRONMENTAL IMPACTS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS – Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation:

1a Less Than Significant Impact: The Project site is located across the street from residential development and the nearest scenic vistas defined in the City’s General Plan are the hillsides behind the Project site which consists of background views for most of the community. While the Project would not impact views of the San Bernardino

mountains from surrounding uses, the views from the surrounding uses would change on the 59-acre property with future construction of 203 residential lots and accessory site improvements. However, this residential development would be consistent with views of development already north of Greenspot Road of the proposed Project site. No mitigation measures are required.

- 1b Less Than Significant Impact: The Project site is not located along a designated state scenic highway and the nearest officially designated State Scenic Highway is Route 38, more than ten miles to the east of the Project site. Therefore, the Project does not have the potential to damage trees, rock outcroppings, or historic buildings within state scenic highways. No mitigation measures are required.
- 1c Less Than Significant Impact: The visual character of the Project site includes an undeveloped area with eucalyptus trees, a jojoba grove and natural but disturbed scrub vegetation. This subdivision will require a Design Review Application approval for homes designed to comply with development standards set forth in the Heatherglen Planned Development guidelines and the R-1 zoning designation (See Highland Municipal Code Section 16.16.030); thus, the size and scale of the proposed development would be generally consistent with surrounding properties to the north. Therefore, no significant impacts to the existing visual character or quality of public views of the Site and its surroundings would occur as a result of the proposed Project. No mitigation measures are required.
- 1d Less Than Significant Impact: The proposed Project, once developed with 203 single-family homes, will not be a substantial source of light and glare. All required lighting will be in compliance with city standards, so any light increase will be similar to that in the neighboring residential development. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
2. AGRICULTURE AND FORESTRY RESOURCES				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? ?
- d) Result in the loss of forest land or conversion of forest land to non-forest use?
- e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Explanation:

- 2a Less than Significant Impact: The Project Site is not mapped as Prime, Unique, or Farmland of Statewide Importance. Therefore, Project implementation would not convert Prime, Unique, or Farmland of Statewide Importance. Less than significant impacts would occur. No mitigation measures are required.
- 2b Less than Significant Impact: The proposed Project Site is zoned for Planned Development, Single-Family Residential (PD/R-1) and is consistent with the City's General Plan. The proposed Project is not under a Williamson Act contract. Less than significant impacts would occur.
- 2c-e Less than Significant Impact: There are no mapped areas of Farmland surrounding the Project site and there are no off-site improvements required by the proposed development that would result in indirect conversion of Farmland. The Project site does not include forest land or timberland and there are no off-site improvements required that would result in the indirect conversion of forest land or timberland. Implementation of the proposed Project would not result in any other conversion of Farmland to non-agricultural production on the Site, as the property is vacant. Less than significant impacts would occur.

Mitigation Measures: None required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3. AIR QUALITY				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
- c) Expose sensitive receptors to substantial pollutant concentrations?
- d) Result in other emissions (such as those leading to odors affecting a substantial number of people)?

Explanation:

3a No Impact: An Air Quality and Greenhouse Gas Study was prepared for the proposed Project and is included in Appendix A. The Air Quality Management Plan (AQMP) details goals, policies, and programs for improving air quality in the Basin. In preparation of the AQMP, South Coast Air Quality Management District (SCAQMD) and Southern California Association of Governments (SCAG) use land use designations contained in General Plan documents to forecast, inventory, and allocate regional emissions from land use and development-related sources. For purposes of analyzing consistency with the AQMP, if a proposed Project would have a development density and vehicle trip generation that is substantially greater than what was anticipated in the General Plan, then the proposed project would conflict with the AQMP. On the other hand, if a project’s density is consistent with the General Plan, its emissions would be consistent with the assumptions in the AQMP, and the Project would not conflict with SCAQMD’s attainment plans. SCAQMD’s CEQA Handbook suggests an evaluation of the following two criteria to determine whether a Project involving a legislative land use action would be consistent with or in conflict with the AQMP: 1) The Project would not generate population and employment growth that would be inconsistent with SCAG’s growth forecasts, and 2) The Project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

At the time the Air Quality and Greenhouse Gas Study was prepared (March 2017) the Project site was designated under the 2006 General Plan as AG/EQ, which allows 2 units per acre, and would result in a maximum of 118 single-family dwelling units. The proposed Project would develop up to 203 single-family dwelling units, an increase of 85 single-family units that would be developed beyond the land use designation in the 2006 General Plan that would have been used in developing the AQMP. However, in June 2018 City Council approved a City initiated General Plan Amendment (GPA) and Zone Change (ZC) to update the City’s General Plan land use designations and zoning to change approximately 192 acres of existing Agricultural/Equestrian (AG/EQ) and Public/Quasi Public (P/Q) to an Open Space Designation consistent with the 2008 Upper Santa Ana Wash Land Management Plan and HCP and change approximately 125 acres of existing AG/EQ Land use Designation to Planned Development – Residential Overlay-Low Density Detached Residential (PD/LDR), of which included the proposed Project site. This GPA and ZC was to allow LDR consistent with what was envisioned under the General Plan and designate Open Space consistent with the Upper Santa Ana Wash Land Management Plan and HCP. This GPA/ZC, in general, allowed for a transfer of the density that was lost from conversion to Open Space to the newly designated

PD/LDR use areas. As a result of the GPA/ZC, the proposed Project would not result in residential development beyond the land use designation in the 2006 General Plan and therefore the AQMP.

In addition, the 2016 SCAG Regional Transportation Growth Projections anticipate a 1.5 percent growth rate within the City of Highland through the year 2020. The U.S. Census FactFinder estimated that in 2015 the City of Highland had 16,554 housing units and a very low homeowner vacancy rate of 0.7 percent, which indicates that additional homeowner housing is needed to meet the needs of the City's residents, and to provide a "healthy" housing market. The 203 single-family residences that would be developed by the proposed Project would equate to a 1.3 increase in total residential units within the City, which is below the SCAG anticipated 1.5 percent annual increase in housing and would assist in providing units to fill the City's homeowner housing needs. Thus, the Project would comply with Consistency Criterion No. 1 of the SCAQMD's CEQA Handbook.

In regard to Consistency Criterion No. 2, which evaluates the potential of the proposed Project to increase the frequency or severity of existing air quality violations, the analysis indicates that the Project would not result in impacts related to an increase in air quality violation, and no significant adverse impacts are anticipated. Therefore, the proposed Project is consistent with Consistency Criterion No.2, and impacts related to conflict with or obstruction with an applicable air quality plan would be less than significant.

Overall, implementation of the proposed Project would not conflict with or obstruct the AQMP and there would be no impacts.

- 3b Less Than Significant Impact: Construction activities could generate substantial amounts of dust (including particulate matter less than ten and 2.5 micrometers in diameter, PM₁₀ and PM_{2.5}, respectively) primarily from "fugitive" sources (i.e., emissions released through means other than through a stack or tailpipe) and other criteria air pollutants primarily from the operation of heavy equipment construction machinery (primarily diesel operated) and construction worker automobile trips (primarily gasoline operated).

Fugitive dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the prevailing weather. Sources of fugitive dust during construction could include vehicle movement over paved and unpaved surfaces, demolition, excavation, earth movement, grading, and wind erosion from exposed surfaces.

Construction activities would also result in the emission of other criteria pollutants from equipment exhaust, construction-related vehicular activity and construction worker automobile trips. Emission levels for construction activities would vary depending on the number and type of equipment, duration of use, operation schedules, and the number of construction workers. Criteria pollutant emissions of reactive organic gases (ROG) and oxides of nitrogen (NO_x) from these emission sources would incrementally add to the regional atmospheric loading of ozone precursors during project construction.

Mobile source emissions, primarily NO_x, would result from the use of construction equipment such as graders, backhoes, and cranes. During the finishing phase, paving operations and the application of architectural coatings (i.e., paints) and other building materials would release ROG. The assessment of construction air quality impacts

considers each of these potential sources.

It is mandatory for all construction projects in the South Coast Air Basin (SCAB) to comply with SCAQMD Rule 403 for fugitive dust that include, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the construction site, and maintaining effective cover over exposed areas. SCAQMD Rule 403 regulates operations, which periodically may cause fugitive dust emissions into the atmosphere.

SCAQMD Rule 402 identifies standards to reduce quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause or have natural tendency to cause injury or damage to business or property.

SCAQMD Rule 1108 governs the volatile organic compounds (VOC) content of asphalt, Rules 1113 and 1143 that govern the VOC content in architectural coating, paint, thinners, and solvents, was accounted for in the construction emissions modeling. Furthermore, the use of low VOC coatings was included to reduce the ROG emissions that would be generated from the application of architectural coating.

Construction scheduling was based on CalEEMod defaults and typical construction scheduling, and CalEEMod default equipment was used. As shown in Table 1, the proposed Project would not result in a significant impact to air quality during construction activities. The calculated emission results from CalEEMod demonstrate that the construction of this Project would not exceed the SCAQMD thresholds, and that construction related impacts on regional air quality would be less than significant.

Table 1 Peak-Day Unmitigated Construction Emissions (lbs/day)

Construction Season	ROG	NOx	CO	SO₂	PM₁₀	PM_{2.5}
Summer	30.8	68.0	39.9	0.06	21.1	12.6
Winter	30.8	68.0	39.8	0.06	21.1	12.6
SCAQMD Significance Threshold	75	100	550	150	150	55
Exceed Significance?	No	No	No	No	No	No

However, to reduce potential impacts related to Local Significance Thresholds (LSTs, as described below), mitigation measures (AQ-1) would be implemented during construction, which would reduce emissions further below thresholds, as shown in Table 2.

Table 2 Peak-Day Mitigated Construction Emissions (lbs/day)

Construction Season	ROG	NOx	CO	SO₂	PM₁₀	PM_{2.5}
Summer	30.6	5.4	34.1	0.06	2.8	1.5
Winter	30.6	5.4	34.0	0.06	2.8	1.6
SCAQMD Significance Threshold	75	100	550	150	150	55

Exceed Significance?	No	No	No	No	No	No
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Implementation of the proposed Project would result in long-term regional emissions of criteria air pollutants and ozone precursors associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, in addition to operational mobile emissions. Development of the proposed Project would result in 2,047 weekday daily trips.

Operations emissions associated with the proposed Project were modeled using CalEEMod. Model defaults were adjusted to reflect project-specific data, including the size and type of the proposed land use and project specific trip rates. The highest modeled operations emissions are presented in Table 3. Significance is determined based on the total project contribution to regional criteria pollutant emissions.

Table 3 Operational Emissions (lbs/day)

Source	ROG	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}
Area	14.2	3.9	67.8	0.2	8.4	8.4
Energy	0.2	1.9	0.8	0.01	0.2	0.2
Mobile	4.5	22.2	60.7	0.2	15.1	4.2
Total Emissions	18.9	28.0	129.3	0.4	23.67	12.8
SCAQMD Significance Threshold	55	55	550	150	150	55
Exceed Significance?	No	No	No	No	No	No

As shown in Table 3, the operational emissions of criteria pollutants that would be generated by the Project would be below the SCAQMD’s applicable thresholds. Therefore, the Project’s operational emissions would not substantially contribute to emissions concentrations that exceed the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS).

The CEQA Guidelines require that projects be evaluated with respect to their contribution to the cumulative baseline conditions for criteria pollutants. The SCAB is considered the cumulative study area for air quality. Because the SCAB is currently classified as a state nonattainment area for ozone, PM₁₀, and PM_{2.5}, cumulative development consisting of the proposed Project along with other reasonably foreseeable future projects in the Basin could violate an air quality standard or contribute to an existing or projected air quality violation. However, based on SCAQMD’s cumulative air quality impact methodology, SCAQMD recommends that if an individual project results in air emissions of criteria pollutants (ROG, CO, NO_x, SO_x, PM₁₀, or PM_{2.5}) that exceed the SCAQMD’s 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 shown in Tables 2 and 3, the project’s construction emissions would not exceed SCAQMD’s daily thresholds. Thus, because the proposed project’s construction-period impact would be less than significant, the proposed project would not result in a significant cumulative impact, when considered with other past, present and reasonably foreseeable projects. Operational emissions associated with the proposed project, as

shown in Table 3 would not exceed the SCAQMD's thresholds of significance for any criteria pollutants. Thus, because the proposed project's operational impacts would be less than significant, the proposed Project would not result in a cumulatively considerable net increase in any nonattainment pollutants, and impacts would be less than significant.

Operational emissions associated with the proposed Project, as shown in Table 4 below would not exceed the SCAQMD's thresholds of significance for any criteria pollutants. Thus, because the proposed project's operational impacts would be less than significant, the proposed Project would not result in a cumulatively considerable net increase in any nonattainment pollutants, and impacts would be less than significant.

- 3c Less Than Significant Impact with Mitigation Incorporated: Sensitive receptors are populations that are more susceptible to the effects of air pollution than are the population at large. The SCAQMD identifies the following as sensitive receptors: residences, long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, churches, schools, playgrounds, child care centers, and athletic facilities.

In an urbanized environment, air pollutant concentrations are usually most prominent along busy streets and at busy intersections, where automotive exhausts can build up while vehicles stop and idle or slow down to approach and proceed through or make turning movements. The primary source of potential air toxics associated with operation of the proposed Project include diesel particulates from trucks use and idling on the Project site.

Construction activities would be short-term and sensitive receptors would be exposed to air pollutants from construction emissions for short-term limited time during construction activities. Health risk is evaluated assuming a constant exposure to emissions of a 70-year lifetime, 24 hours a day, seven days a week. As the exposure to receptors would be short-term and limited during development activities, impacts from construction activities would be less than significant. Implementation of the proposed Project would result in new single-family residential land uses that may utilize solvents, cleaners, and generate motor vehicle emissions, which are not anticipated to emit Toxic Air Contaminants (TAC) emissions in appreciable quantities.

Carbon monoxide (CO) concentration is a direct function of motor vehicle activity (e.g., idling time and traffic flow conditions), particularly during peak commute hours and certain meteorological conditions. Under specific meteorological conditions (e.g., stable conditions that result in poor dispersion), CO concentrations may reach unhealthy levels with respect to local sensitive land uses such as residential areas, schools, and hospitals. Because of reduced speeds and vehicle queuing, "hot spots" typically occur at high traffic volume intersections.

As described above, the proposed Project would in 2,047 vehicle trips per day. Of these trips 161 would occur in the a.m. peak hour and 215 would occur in the p.m. peak hour. The Traffic Impact Analysis (TIA) prepared for the proposed Project details that the proposed Project would not result in more than 44,000 vehicles per hour at an intersection, which is the volume of peak hour traffic required to generate or contribute to a CO hotspot. In addition, the project would not result in an impact to a Congestion Management Plan location. Therefore, CO hotspots would not result from the proposed

Project.

As discussed previously, the daily on-site construction emissions generated by the proposed Project were evaluated against SCAQMD’s LSTs for a 5-acre site to determine whether the emissions would cause or contribute to adverse localized air quality impacts. The nearest sensitive receptor is approximately 100 feet to the Project site under construction; thus, the mass rate look-up table receptor distance of 82 feet is used to evaluate the potential localized air quality impacts associated with the peak day construction emissions from the project.

Table 4 identifies the daily unmitigated, localized on-site emissions that are estimated to occur during the project construction. As shown, the daily unmitigated emissions would exceed the applicable SCAQMD LST thresholds for PM₁₀ and PM_{2.5}.

Table 4 Unmitigated Localized Daily Construction Emissions (lbs/day)

Construction Season	NOx	CO	PM ₁₀	PM _{2.5}
Summer	52.3	23.5	20.9	12.6
Winter	52.3	23.5	20.9	12.6
SCAQMD Significance Threshold	270	1,746	14	8
Exceed Significance?	No	No	Yes	Yes

Therefore, Mitigation Measure 1 & 2 (AQ-1 & AQ-2) would be implemented to provide additional requirements beyond Rule 403, which requires watering active sites at three times daily and implementation of Tier IV diesel engine standards. Mitigation Measure AQ-1 requires active areas to be watered three times per day to keep soil moist enough so visible dust plumes (PM₁₀) are eliminated, covering disturbed areas, and requirements for vehicles to travel at a maximum of 25 mph on the Project site during construction activities. Mitigation Measure AQ-2 requires use of Tier IV diesel engine standards for construction operations, which reduces diesel emissions, a source of PM_{2.5}. With implementation of Mitigation Measures AQ-1 and AQ-2, PM₁₀ and PM_{2.5} construction emissions would be reduced below the LST thresholds, as shown in Table 5.

Table 5 Mitigated Localized Daily Construction Emissions (lbs/day)

Construction Season	NOx	CO	PM ₁₀	PM _{2.5}
Summer	2.0	20.9	2.8	1.6
Winter	2.0	20.9	2.8	1.6
SCAQMD Significance Threshold	270	1,746	14	8
Exceed Significance?	No	No	No	No

Mitigation Measure AQ-1

The construction plans and specifications shall state that in addition to standard Rule 403 requirements, the following measures shall be incorporated into project construction activities:

- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.
- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project site are watered at least three times daily during dry weather; preferably in the mid-morning, afternoon, and after work is done for the day.
- The contractor shall ensure that traffic speeds within the Project site areas are

reduced to 15 miles per hour or less.

Mitigation Measure AQ-2

Implementation of Tier IV Diesel Engine Standards shall be required for construction activities.

With implementation of Mitigation Measures AQ-1 and AQ-2, construction emissions would be reduced below the LST thresholds and are less than significant.

- 3d Less Than Significant Impact: The SCAQMD Air Quality Handbook identifies the following uses as having a potential odor issues: wastewater treatment plants, food processing plants, agricultural uses, chemical plants, composting, refineries, landfills, dairies, and fiberglass moldings. The proposed Project would develop single-family residential uses that do not involve the types of uses that would emit emissions including those leading to objectionable odors affecting a substantial number of people.

In addition, odors generated that could be generated by construction activities are required to follow SCAQMD Rule 402 to prevent odor nuisances on sensitive land uses. SCAQMD Rule 402, Nuisance, states:

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

During construction of the proposed project, emissions from construction equipment, such as diesel exhaust, and volatile organic compounds from architectural coatings and paving activities may generate odors. However, these odors would be temporary and localized to the construction site; and therefore, are not expected to affect a substantial number of people. Thus, impacts relating to both operational and construction activity odors from implementation of Project would be less than significant.

Mitigation Measures: Required

4. BIOLOGICAL RESOURCES
Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation:

4a Less than Significant with Mitigation Incorporated:

The following description of vegetation types and sensitive species occurrences is based on information in the following reports: Updated General Biological and Spring Botanical Surveys East (Appendix B), Updated General Biological and Spring Botanical Surveys West (Appendix C), Updated Spring Botanical Survey (Appendix D), Focused Nesting Season Burrowing Owl and Raptor Nest Survey (Appendix E), San Bernardino kangaroo rat Population and Distribution Trapping Studies (Appendix F), and Heritage Tree Count and Survey Report (Appendix G).

Vegetation/ Habitat Types

The proposed Project site encompasses a total of approximately 59 acres. The eastern portion of the site is approximately 38.9 acres and dominated by alluvial fan sage scrub (AFSS) with a dense understory of invasive grasses and forbs. The dominant scrub species are California buckwheat (*Eriogonum fasciculatum*), California sagebrush

(*Artemisia californica*), scalebroom (*Lepidospartum squamatum*), mulefat (*Baccharis salicifolia*), yerba santa (*Eriodictyon wrightii*), and black sage (*Salvia mellifera*). Herbaceous species making up the understory include California croton (*Croton californica*), red brome (*Bromus madritensis*), Mediterranean grass (*Schismus barbatus*), and weedy forbs such as short-podded mustard (*Hirschfeldia incana*). California juniper (*Juniperus californica*) are scattered throughout this area. Small open and sandy areas occur in limited amounts within the denser scrub. The western portion of the property is approximately 20.1 acres and includes eucalyptus groves, jojoba fields, and disturbed areas. Data from previous reports that include information from both the current survey area and the general area in 2005, 2011, and 2014 were used to determine plant and wildlife species that have documented to occur on site or in the general area or those with a probability to occur based on species habitat requirements and range and if suitable habitats for these species occur on site.

Sensitive Plant Species

No special status plant species were identified during past or current surveys conducted on the site. An Updated Spring Botanical Survey was conducted in 2017. The 2016-2017 season produced good precipitation and botanical germination and growth was good. No sensitive botanical species were observed or were determined to have a moderate or high probability of occurring. Only one sensitive plant species, Parry’s spineflower, is still identified as having a low-moderate potential to occur on site within native habitat, as outlined below in Table 6.

Table 6 Potentially Occurring Sensitive Plant

Common Name	Scientific Name	Status or Sensitivity Designation
Parry’s spineflower	Chorizanthe parryi var. <i>parryi</i>	Fed: none Calif: S2 CNPS: List 1B.1
Calif S2 - California Department of Fish and Wildlife Natural Diversity Data Base (CNDDDB) 6-20 occurrences or 1,000-3,000 individuals or 2,000-10,000 acres CNPS 1B.1 - California Native Plant Society (CNPS) plants rare and endangered in California and throughout their range		

Approximately 38.6 acres of the eastern portion of the site contain native AFSS habitat with the potential to support Parry’s spineflower. The proposed Project includes on-site preservation of 6.53 acres (Lot L) in the southeast corner of the site and will not be graded and developed but set aside and preserved for the sensitive habitat and wildlife species that occur there. Parry’s spineflower has not been documented on site but there is still a chance that it could occur. The potential loss of 32.07 acres of marginally suitable habitat for this species and the potential loss of a small number of individual plants is not considered significant and does not require mitigation.

Sensitive Wildlife Species

Amphibians and Reptiles

Four common reptile species were observed during investigations of the site. No amphibians were observed or identified as having a moderate to high potential to occur. No threatened or endangered species were observed or were determined to have a moderate to high potential of occurring. However, five sensitive reptile species, identified in the Table 7 below, either occur or were determined to have a moderate to high

potential of occurring in the Project area.

Table 7 Potentially Occurring Sensitive Reptile Species

Common Name	Scientific Name	Status or Sensitivity Designation
California silvery legless lizard	<i>Anniella pulchra pulchra</i>	Fed: none Calif: SSC CNDDDB: S3
Coastal whiptail	<i>Aspidoscelis tigris stejnegeri</i>	Fed: none Calif: none CNDDDB: S2S3
Northern red-diamond rattlesnake	<i>Crotalus ruber</i>	Fed: none Calif: SSC CNDDDB: S2?
San Bernardino ringneck snake	<i>Diadophis punctatus ssp. modestus</i>	Fed: none Calif: none CNDDDB: S2?
Coast horned lizard	<i>Phrynosoma blainvillii</i>	Fed: none Calif: SSC CNDDDB: S3S4
Calif SSC- Species of Special Concern CNDDDB S2 – California Department of Fish and Wildlife Natural Diversity Data Base Designations, 6-20 occurrences or 1,000-3,000 individuals or 2,000-10,000 acres CNDDDB S3 – California Department of Fish and Wildlife Natural Diversity Data Base Designations, 21-100 occurrences or 3000-10,000 individuals or 10,000-50,000 acres CDDDB S4 – Apparently secure in California; this rank is clearly lower than S3 but factors exist to cause some concern, i.e., there is some threat or somewhat narrow habitat. No threat rank.		

The proposed Project includes on-site preservation of 6.53 acres (Lot L) in the southeast corner of the site and will not be graded and developed but set aside and preserved for the sensitive habitat and wildlife species that occur there. This area could continue to support the sensitive snakes and lizards that do occur or could occur in the Project site and surrounding area. The potential loss of the remaining 52.5 acres of the Project site that supports marginally suitable to suitable habitat for these species and the potential loss of a small number of individuals is not considered significant and does not require mitigation.

Birds

A focused survey for the burrowing owl (*Athene cunicularis*) and a focused raptor nest survey were conducted for the site and a 150-meter buffer zone in the 2005. The site was surveyed for owls, potential burrows, and other sign during the Phase II burrow survey. The survey did not identify any burrowing owls, burrows (active or inactive), or other sign (tracks, feathers, pellets, prey remains, eggshells, etc.) indicating presence. Based on the 2005 focused survey it was determined absent from the western portion of the Project site. Although no burrowing owl or sign was observed during the study, habitat to support this species may be present on the western portion of the site where California ground squirrel activity is present.

Based on the results of the 2005 raptor nest survey, several potential nest sites were present within the Eucalyptus groves at the northwestern portion of the site. Red-shouldered hawks may have utilized one or more of the identified nest sites. The identified nests may belong to American crow and/or common raven which construct similarly sized large nests and these birds were observed on site during the study. A single red-tailed hawk (not a sensitive species), Cooper’s hawk, Lawrence’s goldfinch, and loggerhead shrike were observed flying over (foraging) either on site or immediately adjacent to site during surveys. Southern California rufous-crowned sparrow, Bell’s sage sparrow, and California horned lark were determined to have a moderate to high potential to occur on site.

Table 8 Potentially Occurring Sensitive Bird Species

Common Name	Scientific Name	Status or Sensitivity Designation
Burrowing owl	<i>Athene cunicularis</i>	Fed: none Calif: SSC CNDDDB: S3
Cooper’s hawk (nesting)	<i>Accipiter cooperii</i>	Fed: none Calif: SSC CNDDDB: S4
Southern California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	Fed: none Calif: WL CNDDDB: S2S3
Bell’s sage sparrow	<i>Artemisiospiza belli belli</i>	Fed: none Calif: WL CNDDDB: S2?
California horned lark	<i>Eremophila alpestris actia</i>	Fed: none Calif: WL CNDDDB: S3
Loggerhead shrike (nesting)	<i>Lanius ludovicianus</i>	Fed: none Calif: SSC CNDDDB: S4
Lawrence’s goldfinch (nesting)		Fed: none Calif: none CNDDDB: S3
Calif SSC – Species of Special Concern Calif WL – Watch List CNDDDB S2 – California Department of Fish and Wildlife Natural Diversity Data Base Designations, 6-20 occurrences or 1,000-3,000 individuals or 2,000-10,000 acres CNDDDB S3 – California Department of Fish and Wildlife Natural Diversity Data Base Designations, 21-100 occurrences or 3000-10,000 individuals or 10,000-50,000 acres CNDDDB S4 – California Department of Fish and Wildlife Natural Diversity Data Base Designations, apparently secure in California; this rank is clearly lower than S3 but factors exist to cause some concern, i.e., there is some threat or somewhat narrow habitat.		

The proposed Project includes on-site preservation of 6.53 acres (Lot L) in the southeast

corner of the site and will not be graded and developed but set aside and preserved for the sensitive habitat and wildlife species that occur there. This area is expected to continue to provide foraging habitat for raptors and the sensitive birds identified in Table 8 as well as potentially suitable nesting habitat for Cooper’s hawk, southern California rufous-crowned sparrow, Bell’s sage sparrow, California horned lark and loggerhead shrike. All of the observed sensitive species are CSS (with no federal or state listing) and are not generally regulated as individual species; however, all of the bird species are protected by the Migratory Bird Treaty Act, which is intended to prevent impacts to active nests.

Based on the results of multiple years of surveys it can be reasonably concluded that burrowing owl is not currently occupying the Project site. Although no burrowing owl or sign has been observed on the Project site, a 30-day preconstruction clearance survey should be completed prior to site clearing and disturbance. This is based upon presence of suitable vegetative habitat for burrowing owl, California ground squirrel activity, and other information in various biological reports for the property.

The potential impacts to active nests of burrowing owl, Cooper’s hawk, southern California rufous-crowned sparrow, Bell’s sage sparrow, California horned lark and loggerhead shrike from development of the remaining 52.5 acres of the Project site requires implementation of mitigation measures to be reduced to less than significant levels. With implementation of Mitigation Measure (MM) BIO-1 and MM BIO-2, potential impacts to sensitive bird species would be less than significant.

Mammals

Sensitive mammal species detected or with a moderate to high potential to occur in the alluvial scrub include the northwestern San Diego pocket mouse, San Bernardino kangaroo rat, western mastiff bat, San Diego black-tailed jackrabbit, San Diego desert woodrat, and Los Angeles pocket mouse. Only foraging habitat occurs on site for the western mastiff bat, not any suitable roosting habitat occurs.

Table 9 Potentially Occurring Sensitive Mammal Species

Common Name	Scientific Name	Status or Sensitivity Designation
Northwestern San Diego pocket mouse	<i>Chaetodipus fallax fallax</i>	Fed: none Calif: SSC CNDDB: S3S4
San Bernardino kangaroo rat	<i>Dipodomys merriami parvus</i>	Fed: END Calif: SSC CNDDB: S1
Western mastiff bat	<i>Eumops perotis californicus</i>	Fed: none Calif: SSC CNDDB: S1S2
San Diego black-tailed jackrabbit	<i>Lepus californicus bennetii</i>	Fed: none Calif: SSC NDDDB: S3S4
San Diego desert woodrat	<i>Neotoma lepida intermedia</i>	Fed: none Calif: SSC NDDDB: S3S4

Los Angeles pocket mouse	<i>Perognathus longimembris brevinasus</i>	Fed: none Calif: SSC NDDB: S1S2
<p>Fed: END – Federally Endangered Calif SSC- Species of Special Concern Calif S1 – California Department of Fish and Wildlife Natural Diversity Data Base Designations, fewer than 6 occurrences or fewer than 1,000 individuals or less than 2,000 acres CNDDDB S2 – California Department of Fish and Wildlife Natural Diversity Data Base Designations, 6-20 occurrences or 1,000-3,000 individuals or 2,000-10,000 acres CNDDDB S3 – California Department of Fish and Wildlife Natural Diversity Data Base Designations, 21-100 occurrences or 3000-10,000 individuals or 10,000-50,000 acres CNDDDB S4 – California Department of Fish and Wildlife Natural Diversity Data Base Designations, apparently secure in California; this rank is clearly lower than S3 but factors exist to cause some concern, i.e., there is some threat or somewhat narrow habitat.</p>		

The San Diego black-tailed jackrabbit was observed in the alluvial fan sage scrub during site surveys. Focused trapping surveys for San Bernardino kangaroo rat (SBKR) were conducted in 2005, 2011 and 2018. All surveys identified SBKR within Project area (5 trapped in 2005, 8 trapped in 2011, and 11 trapped in 2018). In addition to SBKR, the following special status wildlife species were identified on site during trapping efforts: northwestern San Diego pocket mouse (in 2005, 2011, and 2018), Los Angeles pocket mouse (in 2011 and 2018), and San Diego desert woodrat (in 2018).

The occupied habitat on site for SBKR and the other sensitive small mammals is generally confined to the eastern portion of the property (38.6 acres) within and adjacent to remnant drainages. Habitat quality within this occupied habitat is medium to low due to the density of vegetation cover and lack of open connectivity between capture sites. The western portion of the site is 20.1 acres and includes eucalyptus groves, jojoba fields, and disturbed areas. The eucalyptus groves and disturbed areas in the northwestern portion of the site are currently considered unsuitable for SBKR occupancy or colonization due to duff cover, vegetation type, density of invasive vegetation and current use. In the southwest portion of the site, the abandoned jojoba plantation has suitable soils for occupancy, but supports highly disturbed vegetation. Recent trapping results (2018) indicate that SBKR inhabit the proposed Project area in trace to low densities, or less than 1 to 5 SBKR per acre according to general SBKR density categories. Based on occupied habitat of 38.6 acres, it was estimated that about 58 animals inhabit the native habitat on the site. The construction of storm drains has resulted in the alteration of sheet-flow to areas off site but adjacent to the property. As a result, stormwater flow across the property has been altered and scouring on site has been substantially reduced if not completely eliminated. The upstream construction of Seven Oaks Dam has also limited the potential for major floods occurring adjacent to the site and reduced the potential for regular scouring within the adjacent floodplain. The reduce scouring of the property is resulting in increased scrub cover as well as increased density in cover by grass and forb plant species over time which will continue to limit the available habitat for SBKR unless the vegetation is opened up through mechanical means, fire or other cataclysmic event.

The proposed Project includes on-site preservation of 6.53 acres (Lot L) in the southeast corner of the site and will not be graded and developed but set aside and preserved for the sensitive habitat and wildlife species that occur there. This area could continue to support the sensitive mammals in Table 9 that do occur or could occur in the Project site and surrounding area. The Project site only provides potential foraging habitat for western mastiff bat. The potential loss of the remaining 52.5 acres of the Project site that supports marginally suitable to suitable habitat for these species and the potential loss of a small number of individuals of San Diego black-tailed jackrabbit, northwestern San Diego pocket mouse, Los Angeles pocket mouse, and San Diego desert woodrat is not considered significant and does not require mitigation. However, due to the endangered status of SBKR and limited distribution of this species in San Bernardino and Riverside Counties, direct impacts to SBKR individuals and loss of 32 acres of occupied Critical Habitat would require implementation of mitigation measures BIO-3 and BIO-4 below to be reduced impacts to this species to less than significant levels.

4b Less than Significant with Mitigation Incorporated:

As outlined in the Updated General Biological and Spring Botanical Survey East (Appendix B), a jurisdictional delineation conducted in 2015 found the site neither currently receives nor transmits water within jurisdictional features. A flood control project and road development have cut the eastern portion of the site off from upstream drainages. There is no evidence of flow due to runoff of precipitation on site. As outlined in the Updated General Biological and Spring Botanical Survey West (Appendix C), a 2006 jurisdictional delineation of the western portion of the Project site identified one jurisdictional feature on site; however, the 2015 reevaluation found that the site is cut off from upstream drainages by the placement of a flood control structure. The site no longer receives water from the immediate east. No jurisdictional features are currently present on the property. No evidence of flow due to runoff of precipitation was found on site. Therefore, it is anticipated that the remnant drainages are not water resources under the regulatory authority of the U.S. Army Corps of Engineers (USACE), CDFW, or the Regional Water Quality Control (RWQCB). Therefore, the proposed Project is not anticipated to impact jurisdictional streambed or waters of the US. The site does not contain riparian vegetation or habitat.

As outlined above in 4a, the eastern portion of the site contains approximately 38.9 acres of alluvial fan sage scrub (AFSS), considered a sensitive habitat by CDFW. The AFSS on site is dominated by California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), scalebroom (*Lepidospartum squamatum*), mulefat (*Baccharis salicifolia*), yerba santa (*Eriodictyon wrightii*), and black sage (*Salvia mellifera*). Herbaceous species making up the understory include California croton (*Croton californica*), red brome (*Bromus madritensis*), Mediterranean grass (*Schismus barbatus*), and weedy forbs such as short-podded mustard (*Hirschfeldia incana*). California juniper (*Juniperus californica*) are scattered throughout the AFSS. The proposed Project includes on-site preservation of 6.53 acres (Lot L) in the southeast corner of the site for the preservation of the AFSS sensitive habitat and the wildlife species that it supports. However, implementation of the proposed Project would result in the loss of 32 acres of AFSS and would require implementation of mitigation measure BIO-6 below to reduced impacts to this habitat to less than significant levels.

4c Less Than Significant: As outlined in 4b above, a jurisdictional evaluation of the site in 2015 found that the site is cut off from upstream drainages by the placement of a road and a flood control structure. The site no longer receives water from the immediate north

or east. No jurisdictional features are currently present on the property. No evidence of flow due to runoff of precipitation was found on site. There are no wetlands, marshes or vernal pools on site. Therefore, it is anticipated that the remnant drainages are not water resources under the regulatory authority of the U.S. Army Corps of Engineers (USACE), CDFW, or the Regional Water Quality Control (RWQCB). Therefore, the proposed Project would have less than significant impacts on state or federally protected wetlands.

4d Less than Significant: Immediately north of the Project site is Greenspot Road, a major transportation corridor running east-west in Highland, and primarily residential development north of Greenpot Road. To the south of the Project is the Santa Ana River Wash corridor/floodplain that is oriented in an east-west direction and serves as a major wildlife corridor in the region. Plunge Creek crosses under Greenspot Road east of the Project site and runs in an east to west direction south of the Project site until it converges with City Creek and Santa Ana River southwest of the I-215 freeway. Wildlife using the Santa Ana River Wash corridor/floodplain may utilize the southeast portion of the site for movement as it is adjacent to Plunge Creek within the northern portion of the Santa Ana River Wash corridor/floodplain. However, development of the site would not interfere substantially the movement of wildlife as it is on the northern edge of the Santa Ana River Wash corridor/floodplain and the areas located north and northwest of the Project site are developed and do not provide habitat for native or migratory wildlife. Wildlife would be expected to continue to utilize the Santa Ana River Wash corridor/floodplain to the south of the Project for wildlife movement in an east-west direction. As outlined in 4b and 4c above, there are no drainage features, ephemeral or intermittent, that would support native resident or migratory fish. There are no native wildlife nursery sites in the Project area. Therefore, impacts would be less than significant.

4e Less than Significant: The City of Highland Municipal Code, Section 16.64.040 deals with the preservation of heritage trees and specifies required conditions and permits necessary for removal of heritage trees. Section 16.06.080 defines heritage trees as any live tree, shrub, or plant which meets at least one of the following criteria: 1) All woody plants in excess of 15 feet in height and having a single trunk circumference of 24 inches or more, as measured four and one-half feet above ground level; or 2) Multitrunk trees having a total circumference of 30 inches or more, as measured four and one-half feet from the ground; 3) a stand of trees, the nature of which makes each dependent upon the others for survival; or 4) Any other tree as may be deemed historically or culturally significant by the Community Development Director or designee because of size, condition, location, or aesthetic qualities.

As outlined in the Heritage Tree Count and Survey Report (Appendix G), 114 trees meeting the City of Highland's heritage tree criteria were observed on the Project site, excluding large numbers of non-native *Eucalyptus* trees found within two groves within the northwest corner of the site. Because a majority of trees found within both *Eucalyptus* groves would not individually meet the City of Highland's heritage tree criteria due to small circumference (i.e., less than 24" at breast height of surveyor) and height, both groves were measured as a stand of trees (Municipal Code criteria 3) and statistics for individual trees were estimated by random sampling of approximately 40-50 trees within each grove. The current development plans indicate the Project would avoid approximately 30 of the 114 heritage trees and the remaining 84 trees would be impacted. The avoided trees are located in the southeast corner of the property within the on-site preservation area of 6.53 acres (Lot L).

Removal of Heritage Trees requires an application and approval by the City's Community Development Director. As outlined in the City of Highland Municipal Code, Section 16.64.040, any heritage tree removal subject to a tree removal permit shall require replacement at a ratio of two to one (2:1) with size and species to be determined by the Community Development Director. The Community Development Director or the reviewing authority shall condition tree removal permit for replacement of tree(s) within a specified time period and in accordance with the replacement policy of the Code. The Project is required to comply with the City of Highland Municipal Code, Section 16.64.040 and replace lost heritage trees at a 2:1 ratio. With compliance with the Code, potential impacts are less than significant.

- 4f Less than Significant with Mitigation Incorporated: The proposed Project is not within an adopted state or federal Habitat Conservation Plan (HCP) but it is located directly adjacent to and north of the Upper Santa Ana River Wash Land Management Plan and Habitat Conservation Plan (Wash Plan HCP). The primary goal of the Wash Plan HCP is to balance the ground-disturbing activities of water conservation, aggregate mining, recreational activities, and other public services in the Plan Area with the conservation of natural communities and populations of special-status plants and wildlife. The Wash Plan HCP provides for the conservation of five covered species and their habitat within the Plan boundary, which encompasses approximately 4,892 acres, extending approximately 6 miles westward from Greenspot Road in the City of Highland to Alabama Street in the City of Redlands. The covered species include slender-horned spineflower (*Dodecahema leptoceras*: federally and state Endangered), Santa Ana River woolly-star (*Eriastrum densifolium* ssp. *sanctorum*: federally and state listed as endangered), cactus wren (*Campylorhynchus brunneicapillus*: not federally or state listed), coastal California gnatcatcher (*Polioptila californica californica*: federally listed as threatened and state species of concern), and San Bernardino kangaroo rat (*Dipodomys merriami parvus*: federally listed as endangered and state species of special concern). Implementation of the proposed Project would not directly affect the Wash Plan HCP; however, it could have indirect effects from new residential development uses directly adjacent to the protected habitat and species including disturbance by humans, domestic pets, indirect noise and lighting, etc. Implementation of mitigation measure BIO-5 which includes the installation of a permanent exclusionary wall along the entirety of the southern and eastern boundary of the Project site development footprint, including between the development footprint and Lot L. The location, installation methods, and fence materials shall follow current USFWS avoidance measures for SBKR.

Mitigation Measures:

Mitigation Measure BIO-1

To the extent practical, all vegetation removal associated with Project development (including grubbing and cutting down trees) shall be conducted outside of the nesting season (February 1 to August 31st). If avoidance of the nesting season is not feasible, then a qualified biologist shall conduct a preconstruction nesting bird survey no more than 30 days prior to the removal of any vegetation. If vegetation is not removed within 30 days of the survey, then the survey shall be repeated. If no nests are found the biologist conducting the clearance survey shall document a negative survey with a report. If active nests are found during the pre-construction nesting bird surveys, a Nesting Bird Plan (NBP) shall be prepared and implemented. At a minimum the NBP shall include guidelines for addressing active nests, establishing buffers, monitoring, and

reporting. The NBP will include a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be determined by the biologist in consultation with CDFW, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. The nests and buffer zones shall be field checked by a qualified biological monitor as recommended by the biologist. The approved buffer zone shall be visually marked in the field, which no vegetation clearing, or ground disturbance shall commence until the qualified biologist has determined the nest in question has become inactive (failed or successful with fledged young birds) and a monitoring report has been submitted to the CDFW for review and approval. Construction within the designated buffer area shall not proceed until approved by the monitoring biologist.

Mitigation Measure BIO-2

Pre-construction presence/absence surveys for burrowing owls shall be conducted for all properties within the Specific Plan area within 30 days prior to any on-site ground-disturbing activity. The burrowing owl survey shall be conducted pursuant to current recommended guidelines established by the California Department of Fish and Wildlife. In the event this species is not identified within the Project limits, no further mitigation is required. If during the pre-construction survey burrowing owls are identified, then the following shall be implemented:

- Active nests within the areas scheduled for disturbance or degradation shall be avoided from February 1 through August 31, and a minimum of 250-foot buffer shall be provided until fledging has occurred. Following fledging, owls may be passively relocated by a qualified biologist.
- If impacts on occupied burrows in the non-nesting period are unavoidable, on-site passive relocation techniques may be used if approved by the CDFW to encourage owls to move to alternative burrows outside of the impact area.
- If relocation of the owls is approved for the site by CDFW, the City shall require the developer to hire a qualified biologist to prepare a plan for relocating the owls to a suitable site. The relocation plan must include all of the following:
 - The location of the nest and owls proposed for relocation.
 - The location of the proposed relocation site.
 - The number of owls involved and the time of year when the relocation is proposed to take place.
 - The name and credential of the biologist who will be retained to supervise the relocation.
 - The proposed method of capture and transport for the owls to the new site.
 - A description of site preparation at the relocation site (e.g., enhancement of existing burrows, creation of artificial burrows, one-time or long-term vegetation control).

Mitigation Measure BIO-3

The loss of 32 acres of occupied on-site SBKR Critical Habitat shall be mitigated with off-site habitat at ratio agreed to by both USFWS and CDFW. The on-site preservation of 6.53 acres (Lot L) of AFSS habitat shall be improved/enhanced as required by USFWS and CDFW and shall be protected from disturbance by humans, domestic pets, indirect noise and lighting, etc. as required by USFWS and CDFW. The proposed location, configuration, and enhancements, maintenance and long-term management of the on-site 6.53-acre preservation area (Lot L) shall be approved by USFWS and CDFW prior to the issuance of the first Project development permit from the City of Highland.

Mitigation Measure BIO-4

Prior to disturbance of 32 acres of occupied SBKR Critical Habitat on site, a trapping and re-location plan shall be submitted to USFWS and CDFW for review and approval. SBKR shall be re-located to the on-site preserved area (Lot L) or other off-site location as approved by USFWS and CDFW.

Mitigation Measure BIO-5

In order to avoid or minimize potential direct and indirect impacts to SBKR and SBKR habitat that occur outside the 32-acre development footprint area, including the Wash Plan HCP, the following shall be implemented:

- The Project site boundaries and construction limits shall be clearly identified and posted;
- Construction staging areas shall be located outside of occupied SBKR habitat;
- The use of rodenticides, herbicides, insecticides, or other chemicals that could potentially harms SBKR is prohibited;
- Construction personnel shall be informed of required SBKR habitat avoidance and conservation measures. Locations of SBKR habitat that must be avoided shall be identified on affected development plans;
- Prior to issuance of a grading permit a temporary SBKR exclusionary fence shall be constructed along the entirety of the southern and eastern boundary of the Project site development footprint and maintained for the entire duration of construction.
- Prior to issuance of a building permit a permanent exclusionary wall shall be installed along the entirety of the southern and eastern boundary of the Project site development footprint (inside the temporary SBKR exclusionary fence), including between the development footprint and Lot L. The location, installation methods, and fence materials shall follow current USFWS avoidance measures for SBKR;
- To ensure compliance with the measures above, a biological monitor shall be present during clearing, grubbing, grading and other construction activities until the permanent exclusion wall along the southern and eastern boundary of the development and the SBKR re-location plan has been implemented and approved by USFWS and CDFW.

Mitigation Measure BIO-6

The loss of 32 acres of AFSS habitat shall be mitigated with off-site habitat at a ratio agreed to by CDFW.

5. CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation:

5a Less Than Significant with Mitigation Incorporated: A Phase I Cultural Resources Assessment was conducted for the proposed Project is included in Appendix H for

reference. A records search at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton indicated that five resources have been mapped within or partially within the Project area. In addition, the records search showed that 100 percent of the Project area has been previously inventoried via two reports. Including the two reports that address the project area, a total of 16 studies have been completed within one mile. These studies have addressed approximately 30 percent of the land within the search radius and have recorded 39 cultural resources. Various structures have been located within the southwestern portion of the Project area over time and in association with a historic age citrus and poultry ranching complex. This complex includes several structures and active fields or groves that were present by at least 1938 and the structures were removed by 2009.

After two visits to the site in July and October 2017, two of the five historical resources could not be located and are considered destroyed, no known artifacts or features for these two resources would be impacted by the Project, and no further work is recommended prior to Project implementation. The other three historical resources currently lack the artifact content or features once recorded at each site and all three sites have been subject to soil disturbances associated with erosion. These three resources do not appear to retain sufficient integrity to be considered eligible for inclusion in the California Register of Historical Resources (CRHR) and no evidence was detected to indicate that any of these resources have the potential to yield additional information important to history (Criterion 4). Therefore, it is recommended as not eligible for inclusion in the CRHR and not significant pursuant to CEQA. In addition, these sites are recommended as not eligible as cultural resources under Section 16.32.060 of the City of Highland Municipal Code. Therefore, implementation of the proposed Project would not result in a substantial adverse change to documented historic age resources and no further work or mitigation is recommended for these sites. However, the Project site is considered to have a high sensitivity for historic age resources based on the intensive historic era use of the project area and surrounding lands. Mitigation is required to reduce the potential adverse impacts to historic age resources that may be encountered during ground-disturbing construction activities. With implementation of Mitigation Measure (MM) CR-1 and MM CR-2, potential impacts would be less than significant.

- 5b Less Than Significant with Mitigation Incorporated: Based on the results of a records search, pedestrian survey, site visits, and the research, recording, and evaluation efforts, no known historical or archaeological resources pursuant to CEQA are located in the Project area. However, archaeological monitoring is recommended during Project implementation because the Project area appears to have a high sensitivity for historic age resources and moderate to low sensitivity for prehistoric resources. With implementation of Mitigation Measure (MM) CR-1 and MM CR-2 impacts would be less than significant.
- 5c Less Than Significant with Mitigation Incorporated: No human remains are known to exist within the Project site. However, should any human remains be uncovered during construction activities, implementation of the following MM CR-3 would reduce this potential impact to below a level of significance. Therefore, no significant impacts related to human remains will be result from the proposed Project.

Mitigation Measures:

Mitigation Measure CR-1

The Project area has a high sensitivity for historic age resources and a moderate to low sensitivity for prehistoric resources. This is based on the intensive historic era use of the Project area and surrounding lands. To address this sensitivity, an archaeological monitor with at least 3 years of regional experience in archaeology shall be present for all ground-disturbing activities that occur within the proposed Project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/ grubbing, grading, excavation, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls seat walls, fountains, etc.], and archaeological work.) A sufficient number of archaeological monitors shall be present each workday to ensure that simultaneously occurring ground-disturbing activities receive thorough levels of monitoring coverage. A monitoring and treatment plan that is reflective of the Project mitigation (“Cultural Resources” and “Tribal Cultural Resources”) shall be completed by the archaeologist and submitted to the Lead Agency for dissemination to the San Manuel Band of Mission Indians (SMBMI) Cultural Resources Department. Once all parties review and agree to the plan, it shall be adopted by the Lead Agency – the plans must be adopted prior to permitting for the Project. Any and all findings will be subject to the protocol detailed within the monitoring and treatment plan.

Mitigation Measure CR-2

Per CR-1, an archaeologist will be present for any and all ground-disturbing activity. If a pre-contact or post-contact cultural resource is discovered during project implementation, ground-disturbing activities shall be suspended 60 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. Representatives from the San Manuel Band of Mission Indians (SMBMI) Cultural Resources Department, the Archaeological Monitor/applicant, and the Lead Agency shall confer regarding treatment of the discovered resource, as detailed within the monitoring and treatment plan. A research design shall be developed and will include a plan to evaluate the resource for significance under CEQA criteria. The research design shall also acknowledge that, regardless of significance under CEQA, all pre-contact discoveries, as well as post-contact resources associated with the citrus industry shall be subject, if feasible, to avoidance and preservation in place as treatment.

Should any resources not be a candidate for avoidance or preservation in place, and full data recovery is necessary, the research design shall include a comprehensive discussion of resource processing, analysis, curation, and reporting protocols and obligations. All analysis shall be conducted in conference with the SMBMI Cultural Resources Department. All removed material shall be temporarily curated on site and a fully executed reburial agreement shall be developed with the SMBMI Cultural Resources Department. This agreement shall include measures and provisions to protect the future reburial area from any future impacts (vis a vis project plans, conservation/preservation easements, deed riders, etc.). Reburial shall not occur until all ground-disturbing activities associated with the Project have been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to Lead Agency, CHRIS, and the SMBMI Cultural Resources Department.

Should it occur that avoidance, preservation in place, or on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with the SMBMI Cultural Resources Department to identify an American Association of Museums (AAM)-accredited facility within San Bernardino County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriate qualified repository

shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project developer/applicant to pay for those fees.

All draft reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the Lead Agency and the SMBMI Cultural Resources Department for their review and comment. After approval from all parties, the final reports are to be submitted to the local CHRIS Information Center, the Lead Agency, and the SMBMI Cultural Resources Department.

Mitigation Measure CR-3

The Lead Agency and the applicant/developer shall immediately contact the County Coroner and the San Manuel Band of Mission Indians (SMBMI) Cultural Resources Department in the event that any human remains are discovered during implementation of the Project. If the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the Native American Heritage Commission (NAHC) within 24 hours of the determination, as required by California Health and Safety Code § 7050.5 (c). The NAHC-identified Most Likely Descendant (MLD), shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and funerary objects shall be treated and disposed of with appropriate dignity. The MLD, Lead Agency, and landowner agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes. The MLD shall complete its inspection and make recommendations within 48 hours of receiving notification from either the Developer or the NAHC, as required by California Public Resources Code § 5097.98.

Reburial of human remains and/or funerary objects (those artifacts associated with any human remains or funerary rites) shall be accomplished in compliance with the California Public Resources Code § 5097.98 (a) and (b). The MLD in consultation with the landowner, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains and funerary objects. All parties are aware that the MLD may wish to rebury the human remains and associated funerary objects on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The applicant/developer/landowner should accommodate on-site reburial in a location mutually agreed upon by the Parties.

It is understood by all Parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, parties, and Lead Agencies will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r).

6. ENERGY – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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- a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Explanation:

6a-b Less than Significant Impact: An Energy Analysis was prepared for the proposed Project and is included in Appendix I. Construction activities are expected to last for approximately four years. Construction activities would consume energy through the operation of heavy off-road equipment, trucks, and worker traffic. Construction equipment fuel consumption was based on equipment lists generated using California Emissions Estimator Model (CalEEMod) default values and input from the Project applicant. The fuel consumption of off-road equipment calculated in the analysis was based on the fuel consumption rates in the OFFROAD 2011 statewide data sets as well as the horsepower, usage hours, and load factors from CalEEMod as part of the proposed Project's air quality analysis. Construction equipment would result in the consumption of an estimated 272,397 gallons of diesel fuel over the entire construction period. Worker, vendor, and haul trips would result in approximately 15,935 Vehicle Miles Traveled (VMT) over the entire construction period. A countywide average fuel consumption of 20.48 miles per gallon (mpg) was used to determine fuel consumption from worker and vendor trips because these trips would occur in a variety of different vehicle types and classes. The construction worker and vendor trips would result in the consumption of an estimated 344,421 gallons of gasoline/fuel during the construction phase.

Although the Project would result in the consumption of an estimated 272,397 gallons of diesel and 344,421 gallons of gasoline during construction, the Project is designed to balance the grading on site. This would substantially reduce the amount of potential haul trips associated with the import and export of soil for construction of the proposed Project, which in turn would reduce the amount of fuel required by the Project. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with local, state and federal regulations limiting engine idling times and requiring recycling of construction debris, would further reduce the amount of transportation fuel demand during the Project's construction. Considering these reductions in transportation fuel use, the proposed Project would not result in the wasteful and inefficient use of energy resources during construction and impacts would be less than significant.

During operations the proposed Project would consume natural gas for space heating, water heating, and cooking associated with the proposed residential land use. The natural gas consumption was estimated using CalEEMod default values to consume approximately 7,536,660 thousand British thermal units of natural gas per year.

During operations the proposed Project would use electricity for lighting, appliances, and other uses. Annual electricity demand was estimated using CalEEMod default values to be 1,901,510 kilowatt-hours (kWh) of electricity. The Project's design includes installation of solar panels; however, the number of solar panels has not yet been

determined.

The proposed Project would result in a long-term increase in demand for electricity and natural gas. However, the Project would be designed according to the most recent Title 24 standards of the California Code of Regulations. Part 6 of Title 24 specifically establishes energy efficiency standards for residential and non-residential buildings constructed in the State of California in order to reduce energy demand and consumption. Part 6 is updated periodically to incorporate and consider new energy efficiency technologies and methodologies. The most recent amendments, referred to as the 2016 standards, became effective January 1, 2017. The proposed Project would meet current Title 24 requirements. These measures would reduce inefficient, wasteful and unnecessary use of electricity or natural gas during operation of the Project and impacts would be less than significant.

Water used for both indoor and outdoor requires electricity for water treatment, conveyance, and distribution. The Project's water demand was calculated based on default values in CalEEMod for the project's specific land uses. The proposed Project is estimated to use approximately 13.22 million gallons of indoor water per year as well as 8.33 million gallons of outdoor water per year. This would result in a total of approximately 299,085 kWh per year of electricity for indoor and outdoor water treatment, conveyance, and distribution. All water fixtures would be required to be compliant with the California Green Building Standards Code which would reduce the amount of water used by the Project. Energy demand related to wastewater treatment is accounted for in the energy consumption associated with the Project's water demand above. The proposed Project is not expected to result in wasteful or inefficient use of electricity for water or wastewater treatment or conveyance and impacts would be less than significant.

During operation of the proposed Project, vehicle trips would be generated. The proposed Project's specific land uses were modeled in CalEEMod using default vehicle trip generation rates with vehicle trips generated at approximately 6,830,784 Vehicle Miles Traveled (VMT). Based on a countywide average fuel consumption of 20.43 mpg, the Project would result in consumption of an estimated 334,351 gallons of fuel for transportation. Various federal and state regulations including the Low Carbon Fuel Standard, Pavley Clean Car Standards, and Low Emission Vehicle Program would serve to reduce the Project's transportation fuel consumption progressively into the future. Therefore, the Project would be designed to avoid the wasteful and inefficient use of transportation fuel during operations and impacts would be less than significant.

Mitigation Measures: Not Required

7. GEOLOGY AND SOILS -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				

- | | | | | |
|--|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ii) Strong seismic ground shaking? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iii) Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iv) Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (2001), creating substantial direct or indirect risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Explanation:

7a) i) Less Than Significant Impact with Mitigation Incorporated: The City of Highland General Plan identifies in Figure 6-2, Potential Geological Hazards that the San Andres Fault System is located out of the Project site to the north. An Engineering Geology Investigation was conducted for the Project site in 2006 in which information from that is used herein and can be found in Appendix J. The site does not lie within or immediately adjacent to an Earthquake Fault Zone as defined by the Alquist-Priolo Earthquake Fault Zoning Act. The closest Alquist-Priolo Earthquake Fault Zone is located approximately 3/4-mile northeast of the site associated with the San Andreas Fault. Due to the proximity of the site to the San Andreas Fault, strong ground motion associated with a large earthquake along this fault may occur at the site. As outlined in the Engineering Geology Investigation, a northwest trending groundwater barrier traversing the northwest portion of the site was mapped in 1963 and referred to as Fault "K." Northwest trending tonal lineaments were observed traversing the site on the aerial photographs reviewed as part of the Engineering Geology Investigation. However, no evidence for active faulting was observed associated with Fault "K" on or in the vicinity of the site, on the aerial photographs reviewed, or in the field. Ground surface rupture associated with Fault "K" is not expected during the lifetime of the proposed residences. Therefore, setbacks for human occupancy structures from Fault "K" are not recommended. Due to the potential of tensional ground surface fracturing on the site as a result of differential response of

geological materials across the suspected traces of Fault “K” in the event of a large nearby earthquake, subsidence, differential compaction, or seismic settlement, Mitigation Measure GEO-1 shall be implemented. In addition, all structures constructed at the Project site would be required to follow California Building Code (CBC) and to be designed and constructed to resist the effects of strong ground motion. Less than significant impacts would occur with implementation of Mitigation Measure GEO-1.

7a) ii Less Than Significant Impact with Mitigation Incorporated: The site is located in a seismically active area of Southern California and will likely be subjected to very strong seismically related ground shaking over the anticipated life span of the Project. Structures within the site would be required to be designed and constructed to resist the effects of strong ground motion in accordance with the most recent California Building Code. As outlined above, due to the potential of tensional ground surface fracturing on the site as a result of differential response of geological materials across the suspected traces of Fault “K” in the event of a large nearby earthquake, subsidence, differential compaction, or seismic settlement, Mitigation Measure GEO-1 shall be implemented. Less than significant impacts would occur with implementation of Mitigation Measure GEO-1.

7a) iii Less Than Significant Impact with Mitigation Incorporated: Figure 6.3 of the City of Highland General Plan shows that the Proposed site is located within the High Liquefaction Susceptibility Area, which includes the southern portion. No evidence for spring activity or perched ground-water conditions was observed on or in the immediate vicinity of the site during the geologic field reconnaissance or on the aerial photographs reviewed.

However, the sediments on the site are considered to have a high potential for liquefaction from a geologic standpoint based on 1) high groundwater, 2) sandy sedimentary deposits, 3) recent age of material, and 4) close proximity to an active fault. Damage from earthquake-induced ground failure associated with liquefaction could be high in buildings constructed on improperly engineered fills or saturated alluvial sediments that have not received adequate compaction or treatment in accordance with current building code requirements. Structures within the site are required to be designed and constructed to in accordance with the most recent California Building Code requirements and standard industry practices and all recommendations for site preparation (including compaction and treatment) made by the Geotechnical Engineer shall be implemented as outlined in Mitigation Measure GEO-2. Less than significant impacts would occur.

7a) iv No Impact: According to Figure 6.3 of the City of the Highland General Plan, a portion of the proposed site is susceptible to landslide. Per the Engineering Geology Investigation, no evidence for landsliding was observed on or in the immediate vicinity of the site, in the field or on the aerial photographs reviewed. The proposed site is relatively flat and gently sloping with no substantial hills, slopes nor drop offs. Due to the lack of significant topography, landsliding is not expected on the site. No mitigation measures are required.

7b Less Than Significant Impact: This Project’s future development of the property may result in minor soil erosion or loss of topsoil during construction activities from wind and water erosion. The City would condition the Project to submit grading plans and a Storm

Water Pollution and Prevention Plan (SWPPP), as well as, be in conformity with the Water Quality Management Plan (WQMP) for post-construction drainage. Less than significant impacts would occur, and no mitigation measures are required.

- 7c Less Than Significant Impact With Mitigation Incorporated: As outlined in 6a) i and ii above, due to the potential of tensional ground surface fracturing on the site as a result of differential response of geological materials across the suspected traces of Fault “K” in the event of a large nearby earthquake, subsidence, differential compaction, or seismic settlement, Mitigation Measure GEO-1 shall be implemented. In addition, all structures constructed at the Project site would be required to follow California Building Code (CBC) and to be designed and constructed to resist the effects of strong ground motion. Less than significant impacts would occur with implementation of Mitigation Measure GEO-1. As outlined in 6a) iii above, due to the site’s potential for liquefaction implementation of Mitigation Measure GEO-2 is required to reduce potential impacts to less than significant.
- 7d No Impact: The Project site is not located on known or mapped expansive soil. Structures within the site are required to be designed and constructed to in accordance with the most recent California Building Code requirements and standard industry practices. No mitigation measures are required.
- 7e No Impact: The proposed Project will connect to the local water and sewer delivery system, therefore no impacts. No mitigation measures are required.
- 7f Less Than Significant with Mitigation Incorporated: No paleontological resources or unique geologic features were identified within the Project Site. While no paleontological resources have currently been identified within the Project Site, there is still potential for the presence of paleontological resources to be uncovered during grading activities. With the monitoring of ground-disturbing activities from implementation of MM CR -1 and CR-2, impacts would be less than significant.

Mitigation Measures:

Mitigation Measure GEO-1

Due to the potential hazard of tensional ground surface fracturing on the site as a result of differential response of geological materials across the suspected traces of Fault “K” in the event of a large, nearby earthquake, subsidence, differential compaction, or seismic settlement, the foundations and slabs of the proposed residences shall be reinforced to resist tensional ground cracking.

Mitigation Measure GEO-2

Due to the potential for liquefaction at the site the additional parameters of soil density, grain size distribution and exact depth to groundwater shall a geotechnical engineer to ascertain the final susceptibility of the site to liquefaction. A depth to groundwater of 10 feet from the ground surface shall be used for calculating the liquefaction potential of the site. The Geotechnical/Soils evaluation shall be submitted to the City with building plans for review and approval and all site preparation recommendations shall be implemented by the grading contractor. The final grading plan for the site shall be reviewed and approved by an engineering geologist prior to grading of the site and grading of the site should be evaluated by the engineering geologist by in-grading inspections.

8. GREENHOUSE GAS EMISSIONS – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation:

8a-b Less than Significant Impact: An Air Quality and Greenhouse Gas Study was prepared for the proposed Project and is included in Appendix A. Construction activities would be temporary but could contribute to global climate change impacts. Construction activities would result in the emission of greenhouse gases (GHGs) from equipment exhaust, construction-related vehicular activity and construction worker automobile trips. Emission levels for construction activities would vary depending on the number and type of equipment, duration of use, operation schedules, and the number of construction workers.

Total estimated construction-related GHG emissions for the proposed Project are shown in Table 10 below (page 48, Table 11 of the Air Quality and Greenhouse Gas Study). As shown, the total estimated unmitigated and mitigated GHG emissions during construction would equal approximately 460 MTCO_{2e}. This would equal to approximately 15.3 MTCO_{2e} per year after amortization over 30 years per SCAQMD methodology.

Table 10 Estimated Total Construction-Related GHG Emissions

Emission Source	Estimated CO_{2e} Emissions
Total Construction Emissions	460
Annual Construction (Amortized over 30 years)	15.3
Notes: CO _{2e} = carbon dioxide equivalent; MT =metric tons; MT/yr = metric tons per year.	

Area and indirect sources of GHG emissions associated with the proposed Project would primarily result from electricity and natural gas consumption, water transport (the energy used to pump water), and solid waste generation. GHG emissions from electricity consumed within the Project site would be generated off site by fuel combustion at the electricity provider. GHG emissions from water transport are also indirect emissions resulting from the energy required to transport water from its source. In addition, the Project would generate GHG emissions from motor vehicle trips.

As shown in Table 11 below (page 49, Table 12 of the Air Quality and Greenhouse Gas Study), the proposed Project’s annual GHG emission generation would be approximately 4,326.3 MTCO_{2e} per year, which would exceed SCAQMD’s Tier 3 threshold of 3,500 MTCO_{2e} per year for residential land uses. Vehicular emissions

related to operations would consists of 70.4 percent of these emissions; and energy consumption from heating, cooling, lighting, and appliance usage would generate 23.4 percent of these emissions.

Table 11 Estimated Construction and Operations-Related GHG Emissions

Emission Source	Estimated Emissions CO2e (MT/yr)
Construction	15.3
Annual Mitigated Construction (Amortized over 30 years)	
Project Operations	
Area Sources	45.19
Energy Consumption	1,012.6
Mobile Sources	3,046.0
Solid Waste	119.8
Water Consumption	102.7
Total (Construction and Operational Emissions)	4,326.3
Threshold	3,500
Exceed Threshold?	Yes
Notes: CO2e= carbon dioxide equivalent; MT/yr = metric tons per year; %=percent.	

However, the proposed Project would meet the Tier 2 threshold of being consistent with the applicable greenhouse gas reduction plan. Although most of the “local measures” in the SANBAG Regional Greenhouse Gas Reduction Plan apply to city-wide actions that are not related to specific development projects, such as the proposed Project, the following project design features of the proposed Project are consistent with the Regional Greenhouse Gas Reduction Plan and include: incorporation of passive solar design techniques including building orientation, energy-saving materials, roof overhangs, and window and door placement; participate in incentive programs for incorporation of solar and photovoltaic panels (active solar); provision of secure space for bicycle storage; use of native and drought-tolerant landscaping (xeriscaping) and drip irrigation to conserve water resources.

The City of Highland has selected a goal to reduce its community GHG emissions to a level that is 22 percent below its projected emissions in 2020. The City will meet and exceed this goal subject to reduction measures that are technologically feasible and cost-effective per AB 32 through a combination of state and local efforts. The City would exceed the goal with only state/county level actions but has committed to several additional local measures. The Pavley vehicle standards, the state’s low carbon fuel standards, the Renewable Portfolio Standard (RPS), and other state measures will reduce GHG emissions in Highlands’s on-road, solid waste, and building energy sectors in 2020. An additional reduction will be achieved by local measures related to water efficiency, solar energy, SmartBus technologies and wastewater treatment, as well as a performance standard for new development that seeks to achieve a 29 percent reduction below projected BAU emissions for new projects.

In addition, and as described previously, the Project includes design features that are consistent with the Regional Greenhouse Gas Reduction Plan, and the City of Highland would require the Project to meet the performance standard of 29 percent reduction

below projected Business as Usual (BAU) emissions for new projects. The Regional Greenhouse Gas Reduction Plan anticipates these measures to include energy-efficient appliances and alternative energy sources, water conservation, landscaping, and site design, which are included in the proposed Project, as described above. Implementation of the performance standards for new development is ensured during the City's approval and development permitting process. Thus, the proposed Project would be consistent with the Regional Greenhouse Gas Reduction Plan and would meet the Tier 2 threshold. Therefore, impacts related to the generation of GHGs would be less than significant.

As described above, the City of Highland is a participant in the SANBAG Regional Greenhouse Gas Reduction Plan. The specific goals and actions included in the SANBAG Regional Greenhouse Gas Reduction Plan that are applicable to the proposed Project include those pertaining to energy and water use reduction, promotion of green building measures, waste reduction, and reduction in vehicle miles traveled. The proposed Project would be required to include all mandatory green building measures for new developments under the CALGreen Code, as required by the City's Municipal Code Chapter 15.38, which requires that the new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant emitting finish materials. In addition, the code requires that all landscaping comply with water efficient landscaping requirements. Furthermore, implementation of CALGreen compliant building and appliance standards would result in water, energy, and construction waste reductions for the proposed Project.

Additionally, as described above, the Project includes design features that are consistent with the Regional Greenhouse Gas Reduction Plan, and the City of Highland would require the Project to meet the performance standard of 29 percent reduction below projected BAU emissions for new projects. Thus, the proposed Project would not conflict with any applicable plan, policy or regulation of an agency adopted for reducing the emissions of greenhouse gases, and impacts would be less than significant.

Mitigation Measures: Not Required

9. HAZARDS AND HAZARDOUS MATERIALS – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation:

9a Less Than Significant: While grading and construction activities of the proposed Project may involve the limited transport, storage, use or disposal of hazardous materials, such as demolition and removal of material on site, and in the fueling/servicing of construction equipment on site, these activities would be short-term or one-time in nature and would be subject to Federal, State, and local health and safety requirements. Long-term use of the project consists of residential use and would not involve the routine transport, use, and disposal of hazardous materials. Therefore, impacts would be less than significant. No mitigation measures are required.

9b Less Than Significant: No significant quantities of hazardous materials are known to be

located on the site. Future development on the site of single-family homes is not an activity or use typically associated hazardous materials and therefore none are expected to be released. No mitigation measures are required.

- 9c No Impact: The proposed project would permit future development of single-family residences beyond a quarter mile of a school. Therefore, the proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials in the proximity of a school. Any hazardous materials on site would be those typically associated with residential developments including household cleaners, lawn care chemicals, and automotive care products. None of these hazardous materials would pose a hazard to a school. No mitigation measures are required.
- 9d No Impact: The Site is not known to have been listed as a Site with Hazardous Materials. No mitigation measures are required.
- 9e Less Than Significant Impact with Mitigation Incorporated: The southern portion of the proposed Project site is located approximately 1.5 miles away from the western extent of the Redlands Municipal Airport runway (the closest to the Project site) and approximately 2.8 miles from the eastern extent of the San Bernardino International runway. There are no private airports near the project site. Per the General Plan Figure 6-7, San Bernardino International Airport Influence Area (AIA)/Redlands Municipal Airport Compatibility Map, the Project site is located just outside of the San Bernardino International Airport Influence Area while the southern portion of the Project site is located within the Redlands Municipal Airport Area of Special Compatibility Concern. Policy 2.2.4 of the Redlands Municipal Airport Land Use Compatibility Plan (ALUCP) states:

Areas of Special Compatibility Concern – The purpose of this designation is to take note of the locations which: (1) are routinely overflown by aircraft approaching and/or departing the Redlands Municipal Airport, but at some distance from the airport; and (2) have existing and planned land uses which are compatible with airport activity.

(a) Notation of areas of special compatibility concern is limited to serve as a reminder that airport impacts should be carefully considered in any decision to change the current land use designation.

(b) These areas are not part of the Redlands Municipal Airport influence area and are not subject to the review policies contained in this Compatibility Plan, except with respect to the notification requirements indicated in Paragraph 1.8.4. Also, establishment of a buyer awareness program is encouraged if any of these areas are to be converted to residential uses.

(c) The only portion of the Redlands Municipal Airport environs designated in this manner is the southern edge of the City of Highland.

The notification requirements in 1.8.4 are for any proposal for construction located within 20,000 feet (approximately 3.8 miles) of the runway. The proposed Project involves construction of single-family residences within 20,000 feet of the runway; therefore, with notification from the City of Highland to the City of Redlands regarding this Project, the Project is in compliance with the Redlands Municipal ALUCP. It is the City's policy to have notices & disclosures included on the map and provided to all potential homebuyers. Less than significant impacts would occur with implementation of Mitigation Measure HAZ-1.

- 9f Less Than Significant Impact: The primary access to the Project site is from Greenspot Rd. and is within Fire Severity Zone II. Internally the roadways connected to the site are looped together and a total of three ingress/egress points can be taken out of the neighborhood. Development of the site would not involve street closures during construction nor operations and would not impair implementation or interfere with an adopted emergency response plan within the City. No mitigation measures are required.
- 9g Less Than Significant Impact: The proposed Project is located within the limits of Fire Severity Zone II and adjacent to existing undeveloped land and natural vegetation. When a residential development plan is submitted, design and construction methods will be required to be in compliance with all current building and fire codes and regulations designed for safe development in Fire Severity Zones. With development in compliance with these building and fire code standards, no persons or structures will be placed at significant risk of loss, injury or death involving wildland fires. Therefore, no mitigation measures are required.

Mitigation Measures:

Mitigation Measure HAZ-1

The City will condition the Project to provide notices & disclosures on the map that the southern portion of the site is located in the Redlands Municipal Airport *Area of Special Compatibility Concern*, and notice shall be given to all potential home buyers that the property is in *Area of Special Compatibility Concern* that is routinely overflowed by aircraft approaching and/or departing the Redlands Municipal Airport.

10. HYDROLOGY AND WATER QUALITY -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner, which would;				
i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- | | | | | |
|--|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Explanation:

10a Less Than Significant Impact: This Project would not violate water or waste discharge requirements. Development on the Project site will be required to comply with Storm Water Regulations for new developments. Construction related impacts are regulated by a Storm Water Pollution Prevention Plan (SWPPP), while long-term impacts generated by development are regulated through the project-specific Water Quality Management Plan (WQMP) for City compliance. Compliance with existing regulations and standard conditions reduce the opportunity for violations. No mitigation measures are required.

10b Less Than Significant Impact: Water service would be provided to the Project by East Valley Water District (EVWD), which provides water to an approximately 30 square mile area in San Bernardino County. The EVWD derives its water sources from local groundwater and surface sources and supplements these sources with imported water from the San Bernardino Valley Municipal Water District (SBVMWD). The 2015 San Bernardino Valley Regional Urban Water Management Plan (RUWMP) for the San Bernardino Valley area, is represented by the SBVMWD service area, and nine participating retail water purveyors: City of Colton, East Valley Water District, City of Loma Linda, City of Redlands, City of Rialto, Riverside Highland Water Company, City of San Bernardino Municipal Water Department, West Valley Water District, and Yucaipa Valley Water District. The Urban Water Management Planning Act of 1983 requires urban water suppliers servicing 3,000 or more connections or supplying more than 3,000 acre-feet (AF) of water annually, to prepare an UWMP. For wholesale water agencies (like SBVMWD), without retail connections, the requirement is triggered by the annual delivery of 3,000 AF or more. The RUWMP is intended to function as a planning tool to guide broad-perspective decision making by the management of water suppliers. SBVMWD and the retail water purveyors wish to deliver a sufficient, reliable, and high-quality water supply for their customers, even during dry periods. Based on conservative water supply and demand assumptions over the next 25 years, in combination with conservation of non-essential demand during certain dry years, the RUWMP successfully achieves this goal. (2015 RUWMP)

The groundwater basins utilized by the RUWMP agencies includes the San Bernardino Basin Area (SBBA), which encompasses several names basins, including the Bunker Hill and Lytle Creek Basins. The basins of the RUWMP area are among the most rigorously managed in the State. Planning and management efforts evaluating needs and supplies have been established for most of the basins with in the watershed throughout the next 20 to 40 years. Groundwater extractions and conditions are monitored and tracked by the Western-San Bernardino Watermaster and Basin Technical Advisory Committee. (2015 RUWMP) As outlined in 3a above, the proposed Project would not result in residential

development beyond the land use designation in the 2006 General Plan and therefore would not exceed planned or anticipated growth in the region. With implementation of the 2015 RUWMP by EVWD, the proposed Project would not substantially decrease groundwater supplies or impede sustainable groundwater management of the SBBA. Also, San Bernardino Valley Water Conservation District recharges groundwater in spreading basins located to the east of the Project site; none are located on site. The Project site does not currently serve as a significant location for groundwater recharge. Development of the Project site will increase the extent of impervious surfaces however, it will not substantially interfere with groundwater recharge. Therefore, significant impacts would not occur from the implementation of the Project. No mitigation measures are required.

10c Less Than Significant Impact: There are no streams or rivers located within the Project site. Refer to Section 4b above for a discussion of streambeds regulated by the California Department of Fish and Wildlife and lack of occurrence of these on site. Although, the site will be graded and improved the proposed Project would not significantly alter drainage patterns currently developed on or off the Site. As outlined in the WQMP, stormwater is generally conveyed through storm drain pipes into a proposed water quality infiltration basin located in the southwest portion of the Project site. No mitigation measures are required.

10c i-iii) Less Than Significant Impact: As outlined in the WQMP, stormwater is generally conveyed through storm drain pipes into a proposed water quality infiltration basin located in the southwest portion of the Project site. With the Implementation of the Water Quality Management Plan (WQMP), the proposed development will not increase off-site runoff or result in substantial erosion or siltation on or off site or substantially increase the rate or amount of surface runoff in a manner which would cause flooding on site or off site. In addition, the area to the south of the Project site is not developed and is designated as open space. Stormwater runoff from the site generally sheet flows in a north to south direction. The area to the south is in the historic floodplain of the Santa Ana River and its tributaries, including Plunge Creek. There are no planned stormwater channels or underground storm drains for the area south of the Project site and therefore the project would not exceed the capacity of existing or planned stormwater drainage systems. With implementation of the WQMP, the Project would not provide substantial additional sources of polluted runoff. No mitigation measures are required.

10d Less than Significant with Mitigation Incorporated: The Project site is within the 100-year flood hazard area and the site is located in Zone AE of the Flood Insurance Rate Map (FIRM) Panel 8706H OF 9400, dated August 28, 2008. Zone AE Areas are determined to be within the 1 percent annual chance floodplains. Design and development of the Project is required to take into consideration the area to assure no development occurs within the flood zone that impedes flood flows nor locate a home within this area. As outlined in the WQMP, a flood control channel runs in a southerly direction just east of the site and has an adequate levee to prevent storm flows from entering the Project site. However, the Project also includes a proposed floodwall that runs along a portion of the western boundary adjacent to lots 106-113, 131, 132 and the Plunge Creek Channel, and along a portion of the southern boundary, along lots 79-85, the East Valley Water District property (APN 1210-211-24 that is not a part of TTM 17604), and lot E with the proposed infiltration basin. The proposed flood wall would vary in height, but based on the design included in the WQMP, would typically be 9 feet tall above the existing ground level and the height would be at a minimum of 3 inches above the 100-year water surface elevation.

The Project's developer is currently in the process of processing a CLOMR (Conditional Letter of Map Revision) with FEMA (Federal Emergency Management Agency). A CLOMR is FEMA's comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective Base Flood Elevations (BFEs), or the Special Flood Hazard Area (SFHA). The letter does not revise an effective NFIP map, it indicates whether the project, if built as proposed, would be recognized by FEMA. Building permits cannot be issued based on a CLOMR, because a CLOMR does not change the National Flood Insurance Program (NFIP) map. Once a project is completed, the community must request a revision to the Flood Insurance Rate Map (FIRM) to reflect the project.¹ Potential impacts from flooding are less than significant with implementation of Mitigation Measure HYDRO-1.

The Project Site is located within the Seven Oaks Dam inundation area. The Seven Oaks Dam is a single purpose flood control project located just outside the Highland's northeastern boundary. The Dam is a major feature of the Santa Ana River Mainstem Project designed to protect Orange, Riverside, and San Bernardino County from flood. The Dam was designed to resist an earthquake measuring 9.0 on the Richter scale with any point able to sustain a displacement of four feet without causing any overall structural damage; therefore, impacts from flooding as a result of failure of the dam is remote and considered less than significant.

Seiche are of concern relative to water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water. No such water storage facilities are planned on site or nearby. As a result, the proposed development would not be adversely impacted by the reservoirs. No tsunamis are anticipated due to the distance from ocean waves. Therefore, the proposed Project is not anticipated to release pollutants due to inundation from tsunami or seiche. With compliance with the WQMP and Mitigation Measure HYDRO-1 potential impacts from flooding and release of pollutants is reduced to less than significant levels.

- 10e Less Than Significant Impact: As outlined in 10a and 10b above, the proposed Project is not anticipated to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. No mitigation measures are required.

Mitigation Measures:

Mitigation Measure HYDRO-1

The City will condition the Project to provide notices & disclosures to all potential home buyers that the property is within the 100-year flood hazard area, in Zone AE of the Flood Insurance Rate Map (FIRM), and the purchase of flood insurance is required. Mandatory flood insurance purchase requirements and floodplain management standards apply until the National Insurance Program (NFIP) map for the project area is revised and it is no longer in the 100-year flood hazard area.

¹ <https://www.fema.gov/conditional-letter-map-revision>

11. LAND USE AND PLANNING - Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation:

- 11a No Impact: The proposed Project would result in the conversion of vacant land to residential uses. There are no existing residences or established community at the Project site. This Project would include the development of residential units and associated infrastructure consistent with the City’s Development Code and General Plan. The proposed Project will not physically divide an established community. No mitigation measures are required.

- 11b Less Than Significant Impact: This Project would result in the conversion of vacant land to residential uses. The General Plan Land Use Designation for the site is Planned Development/ Low Density Residential (PD/LDR) which limits uses to single-family detached residential, and mobile homes with a maximum intensity of six dwelling units per 1.0 acre. The existing zoning for the site is PD/R-1 Single-Family Residential which allows for small lot single-family detached and mobile homes parks and subdivisions at a maximum allowable density of six dwelling units per gross acre and further establishes minimum parcel sizes of 7,200, 10,000, 15,000, and 20,000 square feet. The proposed development proposes 203 single-family residences on approximately 59 acres, with a density of one dwelling unit per 3.4 acres that is within the allowable intensity. Therefore, the proposed development is consistent with the existing General Plan Land Use Designation and zoning for the site. No mitigation measures are required.

12. MINERAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation:

12a,b Less Than Significant Impact: The proposed Project is located within a Mineral Resource Zone 2 (MRZ 2). Category 2 indicates that significant deposits are likely to be present. More than half of the City is underlain by MRZ-2 rated mineral resources. The General Plan provides for areas south of the Project site within the Santa Ana River Wash as Open Space which allows for mining of sand and gravel in MRZ 1). Development of the Project site would not result in a less than significant loss of land with potential sand and gravel resources. There are no other known mineral resource or important mineral resource recovery site within the Project site. No mitigation measures are required.

Mitigation Measures: Not Required

13. NOISE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

13a Less Than Significant Impact with Mitigation Incorporated: Construction, although short-term, can be a significant source of noise. Construction activity noise levels fluctuate depending on the particular type, number, and duration of uses of various pieces of construction equipment. Construction of the proposed Project would require the use of heavy construction equipment for activities such as excavation, grading, installation of utilities, paving, and building fabrication. Development activities would also involve the

use of smaller power tools, generators, and other sources of noise. During each stage of construction, a different mix of equipment operating noise levels would occur and would vary based on the amount of equipment in operation and the location of the activity.

The Federal Highway Administration (FHWA) has compiled data for outdoor noise levels for typical construction activities. Table 12 provides average (Leq) noise levels produced by various types of construction equipment at a distance of 50 feet between the equipment and noise receptor. These noise levels would diminish with distance from a construction site at a rate of approximately 6 dBA per doubling of distance. For example, a noise level of 84 dBA Leq measured at 50 feet from the noise source to the receptor would reduce to 78 dBA Leq at 100 feet from the source to the receptor.

Table 12 Construction Equipment Noise Levels

Construction Equipment	Noise Level at 50 Feet (dBA, Leq)
Air Compressor	78
Backhoe	78
Chain Saw	84
Compactor	83
Concrete Mixer	79
Concrete Pump	81
Dozer	82
Generator	81
Grader	85
Dump Truck	76
Paver	77
Pneumatic Tools	85
Jackhammer	89
Roller	80
Front End Loader	79
Scraper	84
Tractor	84
Truck	75
Source: FHWA Construction Noise Handbook.	

The construction activities would expose the nearby existing uses to increased noise levels. The highest construction noise would occur during the excavation and grading activities. As shown in Table 8, use of grading equipment generates noise levels of approximately 85 dBA at a distance of 50 feet; at a distance of 100 feet the noise would attenuate to approximately 79 dBA.

A Noise Study was completed for the Project (Appendix K) and as described above, the closest sensitive receptors to the Project site and used in the analysis would be the adjacent single-family residences approximately 100 feet to the north and west. The loudest construction related exterior noise would be approximately 79 dBA Leq at this

receptor (100 feet from the site) when the loudest equipment is used.

However, per the City’s Municipal Code, because the Project site is not adjacent to residential uses, construction noise is exempt as long as construction activities do not commence prior to 7:00 a.m. and end no later than 7:00 p.m. Monday through Saturday with no construction activities performed during city or federal observed holidays. The proposed Project would not involve the need for construction during these hours, and the construction activities related to the Project would be consistent with the City’s Municipal Code. Thus, the proposed Project would be in compliance with the City’s construction related noise standards, and impacts would be less than significant.

With respect to operational noise levels, the City has established exterior noise standards that are correlated with land use classifications. As described above, the exterior noise standards are 60 dBA CNEL during the daytime and 55 dBA during the nighttime for residential land uses.

Ambient noise levels within and surrounding the Project area are influenced primarily by traffic on local roadways. With respect to vehicle traffic generated by the Project, approximately 2,047 daily trips are anticipated. The increase in traffic resulting from implementation of the Project would increase the ambient noise levels at land uses fronting roadways. To evaluate the future traffic noise environment in the Project area, the future traffic noise levels were estimated based on future traffic volumes provided in the Project’s traffic study using the FHWA’s TNM 2.5 model. As described above in Section 3.1, Noise Criteria, a significant impact related to a substantial increase in noise would occur if the Project results in an increase of 5 dBA, which would be readily noticeable.

As shown in Table 13, existing noise levels at sensitive receptors in the Project area range from 48.9 dBA to 68.3 dBA. Traffic resulting from the proposed Project would increase noise levels to a maximum of 0.5 dBA. Because the project-related increase in noise is less than the 5 dBA threshold, noise impacts would be less than significant.

Table 13 Increase in Noise Levels from Operational Traffic

Receptor	Existing CNEL	Existing with Project CNEL	Increase
R1	48.9	49.3	0.4
R2	52.7	53.2	0.5
R3	59.1	59.6	0.5
R4	61.6	62.1	0.5
R5	56.4	56.9	0.5
R6	63	63.5	0.5
R7	61.8	62.3	0.5
R8	64	64.5	0.5
R9	56.4	56.9	0.5
R10	67.9	68.1	0.2
R11	62.3	62.4	0.1
R12	68.3	68.4	0.1

Once the proposed residences are operational, noise levels generated at the Project site would occur from new stationary equipment such as heating, ventilation, and air conditioning (HVAC) units that would be installed for the building. Although the operation of this equipment would generate noise, the design of these on-site HVAC units and exhaust fans would be required to comply with the noise limit regulations of the City's Noise Element that does not allow exterior noise to exceed 55 dBA CNEL between 10:00 p.m. and 7:00 a.m., and 60 dBA CNEL between 7:00 a.m. and 10:00 p.m. Meeting these exterior standards would also meet the City's interior noise standards with implementation of standard construction, which would be required by the City. Therefore, impacts related to generation of noise in excess of standards would not occur from operation of the proposed Project. However, CEMEX Construction Materials Pacific, LLC (CEMEX) has an aggregate mining and processing operation, which is considered a heavy industrial activity, south and southwest of the Project site in the Santa Ana River floodplain and within the Upper Santa Ana River Wash and Habitat Conservation Plan area.

13b Less Than Significant Impact: As described previously, construction activities for the Project would include excavation and grading activities, which has the potential to generate groundborne vibration. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Site ground vibrations from construction activities very rarely reach the levels that can damage structures, but they can be perceived in the audible range and be felt in buildings very close to a construction site.

The construction that would occur by the project would involve the temporary use of construction equipment, which can result in the generation of groundborne vibration levels. The various Peak Particle Velocity (PPV) vibration velocities for several types of construction equipment that can generate perceptible vibration levels are identified in Table 14. As shown, vibration velocities could range from approximately 0.003 to 0.089 inch-per-second PPV at 25 feet from the source activity, depending on the type of construction equipment in use. For the purpose of this analysis, the vibration level for a large bulldozer provided in Table 10 was used to evaluate vibration source levels at the nearest sensitive receptor from construction activity. In comparison to the Caltrans vibration criteria, vibration impacts from construction activities would not exceed the criteria.

Table 14 Vibration Source Levels for Construction Equipment at 25 Feet

Equipment	PPV (in/sec) at 25 Feet	PPV (in/sec) at 50 Feet	PPV (in/sec) at 100 Feet
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Jackhammer	0.035	0.012	0.004
Small Bulldozer	0.003	0.001	<0.000
SOURCE: FTA, 2006			

As described above, the closest sensitive uses to the Project site are the residences, which are modern structures that are located 100 feet away. At this distance, the maximum vibration of 0.011 in/sec PPV is estimated to occur during construction. Table 10 shows that the vibration levels generated would be below levels that could create structural damage to modern buildings (0.5 in/sec PPV), and below the strongly perceptible level for human response (0.9 in/sec PPV). Thus, vibration at 100 feet away from construction activity would be less than significant, and construction of the Project would not generate excessive generation of ground-borne vibration.

The proposed residential uses do not involve activities or operation of stationary or mobile equipment that would result in high vibration levels, which are more typical for large industrial projects that employ heavy machinery. During project operations, the primary source of vibration would likely be delivery/garbage truck circulation within and adjacent to the Project area. However, the FTA’s Transit Noise and Vibration Impact Assessment states that it is unusual for vibration from vehicular sources (including buses and trucks) to be perceptible, even in locations close to major roads. As such, no sources of “excessive” groundborne vibration or noise levels are anticipated during project operations. Less than significant impacts would occur. No mitigation measures are required.

- 13c Less Than Significant Impact: There are no private airports or airstrips in the vicinity of this Project site. The proposed Project is located approximately 1.5 miles away for Redlands Municipal Airport and approximately 2.9 miles from the San Bernardino International Airport. Although aircraft flyovers may be heard, they will not significantly impact the proposed Project site. Less than significant impacts would occur. No mitigation measures are required.

Mitigation Measures:

Mitigation Measure NOISE-1

The City will condition the Project to provide notices & disclosures to all potential home buyers that the property is adjacent to and/or in close proximity to a “Quarry” that is utilized for permitted quarry mining and processing operations, and/or other industrial uses, and that by their acquisition or occupancy of any property in TTM 17604, purchaser or other occupant acknowledges that the permitted Quarry uses may produce noise, vibration, light or increased traffic, odor or other disturbances.

14. POPULATION AND HOUSING -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Explanation:

- 14a Less Than Significant Impact: The proposed development proposes 203 lots for single-family residences on approximately 59 acres, with a density of one dwelling unit per 3.4 acres that is within the allowable intensity. Therefore, the proposed development is consistent with the existing General Plan Land Use Designation and zoning for the site. Thus, development potential is limited to these parameters and the proposed Project's population projection will be within those planned for within the City's General Plan and is not considered significant. No mitigation measures are required.
- 14b No Impact: The proposed Project site is currently vacant thus the proposed Project does not have the potential to displace people or existing housing. No impacts to housing would occur. No mitigation measures are required.

Mitigation Measures: Not required

15. PUBLIC SERVICES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation:

15a No Impact: Fire suppression, prevention, and medical services are critical to the protection of people, property, and the natural environment. The CalFire provides fire protection and emergency medical services to the City of Highland through a cooperative agreement. The City has three fire stations: Station 541 located at 26974 Base Line; Station 542 located at 29507 Base Line; and Station 543 located at 7469 Sterling Avenue. The Project will have no impacts on Fire protection and future development would be negligible. No mitigation measures are required.

15b No Impact: The protection of City’s residents, visitors, businesses, and property from crime depends on the adequate provisions of law enforcement services, supporting facilities, and prevention strategies. The City of Highland contracts with the San Bernardino County Sheriff’s Department for its law enforcement and police services. With approval of the Project, impacts from future development on Police protection are negligible. No mitigation measures are required.

15c. No Impact: The proposed Project is located within the service boundaries of the Redlands Unified School District. In the future school fees are required to be paid to the Redlands Unified School District for every unit constructed. No mitigation measures are required.

15d No Impact: The City’s Community Center and Park is located to the west on Central Avenue just north of 5th Street. Both of the facilities were constructed within the past 10 years. The YMCA of the East Valley currently provides recreation programs to residents. It is not anticipated that the residents of the Project Site would affect the YMCA services.

A second park, Aurantia Park, is located on Greenspot Road, approximately one-half mile to the east of the Project Site. This ten-acre Park has a combination of natural habitat, orange grove, tot lot, and a dog park. The park will serve as an amenity to the proposed future residents of the proposed Project. No mitigation measures are required.

15e No Impact. The Sam J. Racadio Library and Environmental Learning Center is located to the west on Central Avenue just north of 5th Street. The facility was constructed in 2008 and is the only such facility in the City. The County of San Bernardino currently operates the facility and is part of the County library system. The facility was planned to accommodate the future growth of the City’s east end and therefore, the proposed Project would not affect the City’s ability to provide library services to its residents. No mitigation measures are required.

Mitigation Measures: Not Required

16. RECREATION	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Explanation:

16a,b Less Than Significant Impact: A public park is planned for construction within the proposed Project property. The park is 50,821 square feet or 1.2 acres and is envisioned to include a small tot-lot containing a low maintenance multi-faceted play structure with a soft fall zone area, benches, and shade structure. The balance of the park will be a passive play area, bounded by landscaping that will be both water efficient and open to provide a safe and inviting environment. The proposed park will be maintained by an HOA or assessment district, as will all of the letter lots. No mitigation measures are required.

Mitigation Measures: Not Required

17. TRANSPORTATION -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation:

- 17a Less Than Significant with Mitigation Incorporated: A Traffic Impact Analysis (TIA) was conducted for the proposed Project (Appendix L). The analysis in this section is a summary of the results of the TIA. For more details on the traffic analysis for this Project refer to the TIA in Appendix L. The TIA was conducted to determine the potential traffic impacts that the Project may have on the local and/or regional transportation network in the vicinity of the Project site.

Local Transportation Network

The TIA evaluates the operating conditions at nine existing key study intersections and one future Project driveway within the Project vicinity, estimates the trip generation potential of the Project and forecasts future (near-term and long-term) operating conditions without and with the Project. In addition, the TIA also includes a Caltrans facilities analysis which includes freeway mainline segments and merge/diverge segments. Nine key study intersections and one future Project driveway were designated for evaluation based on City of Highland Traffic Impact analysis criteria and discussions with City staff. The key intersections that were evaluated as part of the TIA provide local and regional access to the study area and include:

1. SR-210 EB Ramps at 5th Street
2. SR-210 WB Ramps at Greenspot Road
3. Lowes Center at Greenspot Road
4. Shopping Center at Greenspot Road
5. Boulder Avenue at Greenspot Road
6. Orange Street at Greenspot Road
7. Church Street at Greenspot Road
8. Club View Drive/Merris Street at Greenspot Road
9. Gold Buckle Road at Greenspot Road
10. Project Driveway 2 at Greenspot Road [future intersection with Street "P"].

The Project site was visited and an inventory of adjacent area roadways and intersections was performed. Existing (i.e. baseline) peak hours and daily traffic information was collected at the nine intersections on a "typical" weekday for use in preparation of intersection and roadway segment level of service calculations. The TIA analyzed existing and future (near-term and long-term) weekday AM and PM peak hour traffic conditions for existing, Year 2019, and Year 2040 traffic conditions with and without the proposed Project. Peak hour traffic forecasts for the Year 2019 traffic conditions were projected by increasing existing traffic volumes by an annual growth rate of two percent per year and adding the traffic from ten related projects.

The City of Highland General Plan Circulation Element states that the City of Highland considers LOS D to be the minimum acceptable LOS for all intersections for peak operating periods. Therefore, any intersection operating at LOS E or LOS F is considered deficient. For the Existing traffic conditions, all of the nine key intersections currently operate at acceptable LOS D or better during the AM and PM peak hours.

For the **Existing With Project** traffic conditions show two of the nine key intersections are forecast to operate at unacceptable levels of service during the AM and /or PM peak hours and they are: 8. Club View Drive/Merris at Greenspot Road and 9. Gold Buckle

Road at Greenspot Road. The remaining seven key intersections are forecast to operate at acceptable levels of service under the Existing With Project traffic conditions. However, with implementation of recommended mitigation measures (below), these impacted intersections are forecast to operate at the acceptable LOS.

The results of the **Year 2019 With Project** traffic conditions show three of the nine key intersections are forecast to operate at unacceptable levels of service during the AM and /or PM peak hours and they are: 6. Orange Street at Greenspot Road, 8. Club View Drive/Merris at Greenspot Road, and 9. Gold Buckle Road at Greenspot Road. The remaining intersections are forecast to operate at acceptable levels of service under the Year 2019 With Project traffic conditions. However, with implementation of recommended mitigation measures, these impacted intersections are forecast to operate at the acceptable LOS.

For the **Year 2040 With Project** traffic conditions show five of the nine key intersections are forecast to operate at unacceptable levels of service during the AM and /or PM peak hours and they are: 1. SR-210 EB Ramps at 5th Street, 6. Orange Street at Greenspot Road, 7. Church Street at Greenspot Road, 8. Club View Drive/Merris at Greenspot Road, and 9. Gold Buckle Road at Greenspot Road. However, with implementation of recommended mitigation measures, these impacted intersections are forecast to operate at the acceptable LOS.

Improvements listed in MM TRANS-1 through MM TRANS-6 below would be implemented and have been identified within the TIA to address the traffic impacts at the intersections significantly impacted by the Existing With Project traffic, Year 2019 With Project Traffic, and Year 2040 With Project traffic scenarios. Implementation of these mitigation measures would reduce potential impacts to intersections in the local transportation network to less than significant levels.

Regional Transportation Network

Caltrans requires the use of methods provided in the HCM 2010 for the analysis of basic freeway segments and freeway merge and diverge segments. Based on the Caltrans Traffic Impact Study Guidelines, dated 2002, Caltrans endeavors to maintain a target LOS at the transition between LOS C and D on State highway facilities and Caltrans District 8 has typically established that LOS D is the operating standard for all Caltrans facilities. However, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway is operating at less than appropriate target LOS, the existing service level should be maintained.

Basic Freeway Segment Analysis for freeway mainlines was conducted for the following four Caltrans freeway segments:

1. SR-210 WB south of 5th Street/ Greenspot Road
2. SR-210 WB north of 5th Street/ Greenspot Road
3. SR-210 EB south of 5th Street/ Greenspot Road
4. SR-210 EB north of 5th Street/ Greenspot Road

Additionally, Freeway Merge and Diverge Segment Analysis for ramp junctions was conducted for the following four Caltrans freeway merge and diverge segments:

1. SR-210 WB Off-Ramp to 5th Street/ Greenspot Road

2. SR-210 WB On-Ramp from 5th Street/ Greenspot Road
3. SR-210 EB Off-Ramp to 5th Street/ Greenspot Road
4. SR-210 EB On-Ramp from 5th Street/ Greenspot Road

The results of the **Existing With Project** traffic conditions level of service analyses indicate that one of the four basic freeway segments and two of the four merge and diverge segments are forecast to have an unacceptable LOS. However, the addition of the Project trips is not anticipated to result in any new deficient service levels at these locations and are forecast to remain an unacceptable LOS E. In compliance with Caltrans impact criteria, the Project's contribution to the freeway segment SR-210 Eastbound south of 5th Street/Greenspot Road and the freeway merge and diverge segments SR-210 Westbound Off-Ramp to 5th Street/Greenspot Road and SR-210 Eastbound On-Ramp from 5th Street/Greenspot Road can be considered insignificant under the Existing With Project traffic analysis scenario. The remaining freeway segments and freeway merge and diverge segments are forecast to operate at acceptable levels of service.

The results of the **Year 2019 With Project** traffic conditions level of service analyses indicate that the proposed Project would have significant cumulative impacts at three of the four basic freeway segments and three of four freeway merge and diverge segments. Note the mitigation is included for the SR-210 Westbound Off-Ramp to 5th Street/Greenspot Road freeway merge segment due to the unacceptable level of service at the adjacent basic freeway segment. Improvements to SR-210 Westbound and Eastbound south and north of 5th Street/Greenspot Road and Westbound and Eastbound Off-Ramps and On-Ramps are needed to address the traffic impacts at basic freeway segments significantly impacted by the Year 2019 With Project Traffic and Year 2040 With Project traffic scenarios. The results of the Year 2040 With Project traffic conditions level of service analyses indicate that the proposed Project will have significant cumulative impacts at one of the four freeway merge and diverge segments. Implementation of mitigation measure MM TRANS-7 is required to address the traffic impacts at the basic freeway segment cumulatively impacted by the Year 2040 With Project traffic. Caltrans is currently in the process of improving the SR-210 Freeway with the Mixed Flow Lane Addition Project which will widen SR-210 from Sterling Avenue to San Bernardino Avenue in the cities of Highland, San Bernardino, and Redlands as well as a portion of unincorporated San Bernardino County. This Caltrans project will add a mixed flow lane along the study corridor, add an auxiliary lane in each direction between the Baseline and 5th Street/Greenspot Road interchanges, and extend the acceleration lane at the 5th Street eastbound on-ramp. The anticipated start of construction is Fall 2019. Implementation Caltrans' Mixed Flow Lane Addition Project and mitigation measure MM TRANS-7 would reduce potential impacts to basic freeway segments and freeway merge and diverge segments to less than significant levels.

There are no public transit routes along the Project site's frontage on Greenspot Road, including train (Metrolink) or bus routes or bus stops (Omnitrans). Greenspot Road, along the proposed Project's northerly boundary, includes existing bike lanes in both directions. There is an existing sidewalk along the northern side of Greenspot Road and partially along the southern side along the Project site's frontage. The proposed Project would be required to extend the sidewalk on the southern side of Greenspot Road, along the Project's frontage and would not conflict with existing or planned bicycle or pedestrian facilities. Therefore, with implementation of mitigation measures MM TRANS-1 through MM TRANS-7, the project would not conflict with a program, plan, ordinance

or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

- 17b Less Than Significant Impact: The City of Highland does not have an adopted threshold of significance for Vehicle Miles Traveled (VMT), therefore the proposed Project's VMT is evaluated qualitatively herein. The proposed development is consistent with the existing General Plan Land Use Designation and zoning for the site. The General Plan Land Use Designation for the site is Planned Development/ Low Density Residential (PD/LDR) which limits uses to single-family detached residential, and mobile homes with a maximum intensity of 6 dwelling units per 1.0 acre. The existing zoning for the site is PD/R-1 Single-Family Residential which allows for small lot single-family detached and mobile homes parks and subdivisions at a maximum allowable density of six dwelling units per gross acre and further establishes minimum parcel sizes of 7,200, 10,000, 15,000, and 20,000 square feet. The proposed development proposes 203 single-family residences on approximately 59 acres, with a density of one dwelling unit per 3.4 acres that is within the allowable intensity. Therefore, the proposed Project's population projection will be within those planned for in the City's General Plan and the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals.

The proposed Project is located directly adjacent to and south of Greenspot Road, a designated Major Highway in the General Plan Circulation Element (Figure 3-2 Roadway Network), with a four-lane 80-foot roadway curb-to-curb (including a 12-foot median) with two vehicle lanes in each direction and a bicycle lane and sidewalk in each direction. There are Omnitrans bus stops along Greenspot Road, west of the Project site, at Church Street, Valencia Court, and Orange Street. Greenspot Road is considered an existing high-quality transit corridor in the City of Highland.

The Village at East Highlands Retail center, located at the northeast corner of Greenspot Road and Church Street, is located approximately 1,500 linear feet or approximately 1/3 of a mile from the Project site. The Retail Center includes an anchor grocery store, bank, hair and nail salons, dry cleaning, multiple restaurants, medical offices (dentist and optometrist) and an improved Omnitrans bus stop (bench, shade structure, trash container and signage). Access to the Retail Center from the Project site is provided via Greenspot Road, vehicle lanes, bicycle lanes (Class II On-Street), and sidewalk with a signalized intersection of Greenspot Road and Church Street, including striped crosswalks. Additional retail is located approximately 2 miles east of the Project site at Greenspot Road and the I-210 which includes major retail (Lowe's Home improvement, Staples, AT&T), a gas station, fitness gym, medical offices and multiple restaurants.

Arroyo Verde Elementary School is located directly north of the Village at East Highland Retail Center. Cram Elementary School is located approximately 1-mile northeast of the site, Highland Grove Elementary and Beattie Middle School are located approximately 1.5 miles northeast of the Project site, as well as a US Post Office. Aurantia Park is a ten-acre park with a combination of natural habitat, orange grove, tot lot, and dog park located on Greenspot Road approximately one-half mile to the east of the Project Site.

As the proposed Project is consistent with the City's General Plan, is located along Greenspot Road, considered a high-quality transit corridor, is located within 1/3 mile of a retail center and an improved bus stop, and within 2 miles of additional retail, schools,

a park and a US Post office, it is not anticipated to result in significant impacts related to VMT. Potential impacts are less than significant, and no mitigation measures are required.

- 17c **No Impact:** The proposed Project would include the development of single-family homes on property adjacent to an existing and improved street system designed in accordance with City standards. Access to the site is provided from Greenspot Road, designated a Major Highway in the General Plan Circulation Element (Figure 3-2 Roadway Network), a four-lane 80-foot roadway curb-to-curb (including a 12-foot median). The proposed Project does not include any geometric changes to Greenspot Road. A new signal and crosswalks will be installed at the Project's main entrance at Gold Buckle Road on Greenspot Road for safe ingress and egress from the site. There will be no impact thus no mitigation measures are required.
- 17d **No Impact:** The proposed Project site is adjacent to an existing roadway with full emergency ingress and egress off of Greenspot Road, a major highway, that are considered acceptable for emergency access. No mitigation measures are required.

Mitigation Measures:

Mitigation Measure TRANS-1

SR-210 EB Ramps at 5th Street (TIA Intersection 1): Widen and/or restripe the southbound off-ramp to provide a second exclusive left-turn lane. Modify the existing traffic signal as needed. Pay Project's fair share contribution for these improvements.

Mitigation Measure TRANS-2

Orange Street at Greenspot Road (TIA Intersection 6): Restripe the southbound through lane on Orange Street to a shared through-right-turn lane. Restripe the westbound right-turn lane on Greenspot Road to a shared through-right-turn lane. Modify the existing traffic signal as needed. Pay Project's fair share contribution for these improvements.

Mitigation Measure TRANS-3

Church Street at Greenspot Road (TIA Intersection 7): Restripe the southbound through lane on Church Street to a shared through-right-turn lane. Modify the existing traffic signal as needed. Pay Project's fair share contribution for these improvements.

Mitigation Measure TRANS-4

Club View Drive/Merris Street at Greenspot Road (TIA Intersection 8): Install a traffic signal and design for five-phase operation with protected left-turn phasing on Greenspot Road. Pay Project's fair share contribution for these improvements.

Mitigation Measure TRANS-5

Gold Buckle Road at Greenspot Road (TIA Intersection 9): Install crosswalks on all four legs. Install a traffic signal and design for two-phase operation. Pay Project's fair share contribution for these improvements.

Mitigation Measure TRANS-6

Project Driveway 2 at Greenspot Road (TIA Intersection 10): The intersection is proposed to be a one-way stop-controlled three-legged intersection with no north leg. The northbound movement will consist of a right-turn only lane. The westbound movement will consist of an

exclusive left-turn lane and two through lanes.

For impacts to Freeway Segments

Mitigation Measure TRANS-7

SR-210 Westbound Off-Ramp to 5th Street/Greenspot Road: Add one off-ramp lane. The Project's fair share contribution to offset all Year 2040 With Project freeway diverge impacts is 6.75 percent or an estimated \$23,625.50.

18. TRIBAL CULTURAL RESOURCES_--

Would the project result in

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | | |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Explanation:

18a-b) Less Than Significant with Mitigation Incorporated: Consultation was initiated by the City of Highland as lead agency with a letter dated February 23, 2016 to the following tribes: San Manuel Band of Mission Indians (SMBMI), Soboba Band of Luiseño Indians, and Gabrieleño Band of Mission Indians – Kizh Nation.

The City received email correspondence from SMBI on March 1, 2016 that indicated the following: “The project is located within the Tribe’s ancestral territory. We do not have any specific information about tribal cultural resources at the project location. We recommend that a records search including a minimum of one-mile radius of information be prepared and that a copy of the results be forwarded to our office. Once we receive the results, we will comment on what we think the next steps ought to be for this project. We do know that the project area was an important prehistoric plant gathering area. If you are unable to provide the records search results prior to the AB 52 response deadline, we will opt for consultation for this project and review the information as soon as it can be provided to us.”

The City provided the Phase I Cultural Resources Assessment, dated December 11, 2017 to SMBMI via email on September 27, 2018. SMBMI responded via email on October 1,

2018 indicating “In reviewing the cultural resources report, SMBMI noted that there are historic resources that exist within the project area that overlap with SMBMI’s historic presence in the area. The San Manuel Reservation was established in 1891, though Serrano men were working in the citrus industry in the area both before and after that date. Highland in particular contained a great deal of Serrano labor, given its proximity to the reservation, and consequently this project area is quite sensitive. Should there be any feasibility in avoiding the resources on the surface of the site, SMBMI would prefer that option. However, if avoidance is not feasible, the next option would be collection of artifacts and reburial in a place that will be protected from future disturbance. Additionally, SMBMI requests an archaeologist be on site during all ground-disturbing activity to ensure any additional resources are treated in the same way. Please see the attached MM language for the Cultural Resources and Tribal Resources sections for the City’s use...”

The Mitigation Measure language that was provided in the attachment from SMBMI were incorporated as mitigation measures CR-1, CR-2, and CR-3 above in Section 5. Cultural Resources. Implementation of mitigation measures CR-1, CR-2, and CR-3 would reduce potential impacts to Tribal Cultural Resources to less than significant levels.

The Soboba Band of Luiseño Indians provided a response letter dated March 22, 2016 indicating “The Soboba Band of Luiseño Indians appreciates your observance of Tribal Cultural Resources and their preservation in your project. The information provided to us on said project(s) has been assessed through our Cultural Resources Department. At this time the Soboba Band does not have any specific concerns regarding known cultural resources in the specified areas that the project encompasses but does request that the appropriate consultation continue to take place between concerned tribes, project proponents, and local agencies.” “Also, working in and around traditional use areas intensifies the possibility of encountering cultural resources during any future construction/excavation phases that may take place. For this reason, the Soboba Band of Luiseño Indians requests that approved Native American Monitor(s) be present during any future ground-disturbing proceedings, including surveys and archaeological testing, associated with the project. The Soboba Band wishes to defer tot the San Manuel Band of Mission Indians, who are in closer proximity to the Project.”

The Gabrieleño Band of Mission Indians – Kizh Nation provided a response letter dated March 7, 2016 indicating “Due to the project location and the high sensitivity of the area location , we would like to request one of our certified Native American Monitors to be on the site during any and all ground disturbances to protect any cultural resources which may be effected during construction development.” “While the property may be located in an area that has been previously developed, numerous examples can be shared to show that there still is a possibility that unknown, yet significant, cultural resources will be encountered during ground disturbance activities. Please note, if they haven’t been listed with the NAHC [Native American Heritage Commission], it doesn’t mean that they aren’t there. Not everyone reports what they know.”

Mitigation Measures: CR-1, CR-2, and CR-3 above in Section 5. Cultural Resources.

19. UTILITIES AND SERVICE SYSTEMS – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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- a) Require or result in the relocation or construction of new or expanded water, wastewater, or storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
- c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Explanation:

19a Less Than Significant Impact: The proposed Project is located directly adjacent to Greenspot Road. There are existing water, wastewater, electric power, natural gas, and telecommunication facilities in the Greenspot Road public right-of-way. The proposed Project will include the construction of connections to these existing utilities along Greenspot Road and will not require or result in the relocation or construction of any other new or expanded facilities which would cause significant environmental effects. As outlined above in Section 10 Hydrology and Water Quality, the site will be graded and improved the proposed Project would not significantly alter drainage patterns currently developed on or off the Site. As outlined in the WQMP, stormwater is generally conveyed through storm drain pipes into a proposed water quality infiltration basin located in the southwest portion of the Project site. No new off-site stormwater drainage facilities are required or required to be upgraded. Potential impacts are less than significant. No mitigation measures are required.

18b-c Less Than Significant Impact: The proposed Project would permit future construction of single-family units. East Valley Water District (EVWD) will provide water and wastewater (sewer) collection services to the Project for domestic, fire protection, and sanitary sewer purposes, as outlined in a Will Serve Letter dated January 29, 2019 (Appendix M). According to EVWD, the wastewater service provider (SBMWD) has adequate capacity to serve the development.

As outlined above in Section 10 Hydrology and Water Quality (10b), water service would be provided to the Project by East Valley Water District (EVWD), which provides water to an approximately 30 square mile area in San Bernardino County. The EVWD derives its water sources from local groundwater and surface sources and supplements these

sources with imported water from the San Bernardino Valley Municipal Water District (SBVMWD). The 2015 San Bernardino Valley Regional Urban Water Management Plan (RUWMP) for the San Bernardino Valley area, is represented by the SBVMWD service area, and nine participating retail water purveyors: City of Colton, East Valley Water District, City of Loma Linda, City of Redlands, City of Rialto, Riverside Highland Water Company, City of San Bernardino Municipal Water Department, West Valley Water District, and Yucaipa Valley Water District. The Urban Water Management Planning Act of 1983 requires urban water suppliers servicing 3,000 or more connections or supplying more than 3,000 acre-feet (AF) of water annually, to prepare an UWMP. For wholesale water agencies (like SBVMWD), without retail connections, the requirement is triggered by the annual delivery of 3,000 AF or more. The RUWMP is intended to function as a planning tool to guide broad-perspective decision making by the management of water suppliers. SBVMWD and the retail water purveyors wish to deliver a sufficient, reliable, and high-quality water supply for their customers, even during dry periods. Based on conservative water supply and demand assumptions over the next 25 years, in combination with conservation of non-essential demand during certain dry years, the RUWMP successfully achieves this goal. (2015 RUWMP)

The sewerage system would have adequate capacity to serve the proposed residential development. EVWD's Sewer System Management Plan (SSMP) outlines the standards for operation and maintenance of the sewer collection system, improvements for reliable service capacity now and in the future, and compliance with the State Water Resources Control Board (SWRCB) adopted *Order No. 2006-0003, Statewide General Waste Discharge Requirements (WERs) for Sanitary Sewer Systems*. EVWD has existing water and sewer lines within the Greenspot Road right-of-way to adequately provide services to the proposed Project. No additional facilities would be required to serve water to or handle the wastewater flows from the proposed development. No mitigation measures are required.

- 18d Less Than Significant Impact: The proposed Project is served by the San Timoteo Sanitary Landfill in Redlands, California. According to the California Department of Resources Recycling and Recovery (CalRecycle), over 66 percent of the San Timoteo Sanitary Landfill's 20,400,000 cubic yard capacity has been used. The average inflow to the landfill each day is 854 tons, while the maximum permitted inflow is 2,000 tons per day. The San Tomoteo Sanitary Landfill's estimated closure date is 2043. The proposed Project includes 203 new single-family residences. With an estimated waste generation rate of approximately 12.23 pounds of waste per day per household, in accordance with the California Integrated Waste Management Board, the proposed Project is forecast to generate approximately 2,483 pounds (lbs) of waste per day, or approximately 453 tons per year. Thus, the San Timoteo Sanitary Landfill has the capacity to accept waste from the proposed Project.

The proposed Project is subject to Assembly Bill 1327, Chapter 18, Solid Waste Reuse and Recycling Access Act of 1991 (Act). This Act requires that adequate areas be provided for collecting and loading recyclable materials such as paper products, glass, and other recyclables. The Project must conform to the City's requirements to ensure compliance with this Act. Based on these factors, it is anticipated that the proposed Project would have a less than significant impact related to solid waste. No mitigation measures are required.

- 18e Less Than Significant Impact: The proposed Project is subject to Assembly Bill 1327, Chapter 18, Solid Waste Reuse and Recycling Access Act of 1991 (Act). This Act requires

that adequate areas be provided for collecting and loading recyclable materials such as paper products, glass, and other recyclables. The project must conform to the City's requirements to ensure compliance with this Act. Based on these factors, it is anticipated that the proposed Project would have a less than significant impact from solid waste resources. No mitigation measures are required.

Mitigation Measures: Not Required

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
20. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation:

20a Less Than Significant Impact: The primary access to the Project site is from Greenspot Rd. The Project site is located within Fire Severity Zone II (General Plan Safety Element Figure 6-6, Fire Hazards and Safety Overlay Areas). Internally the roadways connected to the site are looped together and a total of three ingress/egress points can be taken out of the development. Development of the site would not involve street closures during construction or operations and would not impair implementation or interfere with an adopted emergency response plan within the City. Potential impacts are less than significant, and no mitigation measures are required.

20b Less Than Significant Impact: Although the Project site is located within the limits of Fire Severity Zone II it includes the development of residential units and associated infrastructure consistent with the City's Development Code and General Plan. The proposed Project is located adjacent to existing residential development to the west, north and northeast. The Project site is not located on steep slopes or immediately adjacent to the foothills of the San Bernardino Mountains. When a residential development plan is submitted, design and construction methods must be in compliance with all current building and fire codes and regulations designed for safe development in

Fire Severity Zones. Due to the Project's location and with development in compliance with these building and fire code standards, the Project would not be expected to significantly exacerbate wildfire risks. Therefore, potential impacts are less than significant, and no mitigation measures are required.

- 20c Less Than Significant Impact: The primary access to the Project site is from Greenspot Rd. Internally the roadways connected to the site are looped together and a total of three ingress/egress points can be taken out of the development. The proposed Project does not require the installation of infrastructure (roads, power lines, etc.) in undeveloped natural areas that are susceptible to fire. Therefore, the proposed Project would not be expected to exacerbate fire risk and potential impacts are less than significant. No mitigation measures are required.
- 20d Less Than Significant Impact: The proposed Project is located adjacent to existing residential development to the west, north and northeast. The Project site is not located on steep slopes or immediately adjacent to the foothills of the San Bernardino Mountains. As outlined in 7a iv above, according to Figure 6.3 of the City of the Highland General Plan, a portion of the proposed site is susceptible to landslide. However, per the Engineering Geology Investigation, no evidence for landsliding was observed on or in the immediate vicinity of the site, in the field or on the aerial photographs reviewed. The proposed site is relatively flat and gently sloping with no substantial hills, slopes nor drop offs. Due to the lack of significant topography, landsliding is not expected on the site. As outlined in 10c ii above, with the Implementation of the Water Quality Management Plan (WQMP), the proposed development will not increase off-site runoff or result in substantial erosion or siltation on- or off-site or substantially increase the rate or amount of surface runoff in a manner which would cause flooding on site or off site. Therefore, the proposed Project is not expected to result in downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. Potential impacts are less than significant, and no mitigation measures are required.

Mitigation Measures: Not Required

21. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation:

21a Less Than Significant Impact with Mitigation Incorporated: The proposed Project can be implemented without causing significant adverse environmental effects with implementation of mitigation measures outlined in the preceding analysis. The City will require implementation of mitigation measures to ensure that potentially significant impacts do not occur to any of the following resource values or physical conditions that occur within the proposed improvements area: air quality, biological resources, cultural resources, geology & soils, hazards and hazardous materials, hydrology and water quality, noise, transportation, and tribal cultural resources. Therefore, with mitigation, the proposed Project would have 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

21b Less Than Significant Impact: As discussed in the respective issue areas of this study, the proposed Project would not have cumulatively considerable environmental impacts. Any potential significant impacts associated with future development would be analyzed and mitigated to a level of insignificance. The proposed Project would have less than significant cumulatively considerable environmental impacts. No mitigation measures are required.

21c Less Than Significant Impact with Mitigation Incorporated: Mitigation measures were

identified to ensure the nearest sensitive receptors (i.e. residences) are not exposed to substantial pollutant concentrations during construction activities. Mitigation Measure AQ-1 requires active areas to be watered three times per day to keep soil moist enough so visible dust plumes (PM₁₀) are eliminated, covering disturbed areas, and requirements for vehicles to travel at a maximum of 25 mph on site the Project site during construction activities. Mitigation Measure AQ-2 requires use of Tier IV diesel engine standards for construction operations, which reduces diesel emissions, a source of PM_{2.5}. With implementation of Mitigation Measures AQ-1 and AQ-2, PM₁₀ and PM_{2.5} construction emissions would be reduced below significance thresholds.

This report analyzed the proposed Project's potential impacts related to geology issues because of the Project site's proximity to a fault zone. As explained in the Geology section of the report due to the potential of tensional ground surface fracturing on the site as a result of differential response of geological materials across the suspected traces of Fault "K" in the event of a large nearby earthquake, subsidence, differential compaction, or seismic settlement, Mitigation Measure GEO-1 shall be implemented. In addition, all structures constructed at the Project site would be required to follow California Building Code (CBC) and to be designed and constructed to resist the effects of strong ground motion. Due to the potential for liquefaction at the site the additional parameters of soil density, grain size distribution and exact depth to groundwater shall a geotechnical engineer to ascertain the final susceptibility of the site to liquefaction. A depth to groundwater of 10 feet from the ground surface shall be used for calculating the liquefaction potential of the site. The Geotechnical/Soils evaluation shall be submitted to the City with building plans for review and approval and all site preparation recommendations shall be implemented by the grading contractor. The final grading plan for the site shall be reviewed and approved by an engineering geologist prior to grading of the site and grading of the site should be evaluated by the engineering geologist by in-grading inspections. Less than significant impacts would occur with implementation of Mitigation Measures GEO-1 and GEO-2.

The southern portion of the proposed Project site is located approximately 1.5 miles away from the western extent of the Redlands Municipal Airport runway (the closest to the Project site) and approximately 2.8 miles from the eastern extent of the San Bernardino International Airport runway. It is the City's policy to have notices & disclosures included on the map and provided to all potential homebuyers. Mitigation measure HAZ-1 indicates the City condition will the Project to provide notices & disclosures on the map that the southern portion of the site is located in the Redlands Municipal Airport *Area of Special Compatibility Concern*, and notice shall be given to all potential home buyers that the property is in *Area of Special Compatibility Concern* that is routinely overflown by aircraft approaching and/or departing the Redlands Municipal Airport.

The Project Site is within the 100-year flood hazard area and the site is located in Zone AE of the Flood Insurance Rate Map (FIRM) Panel 8706H OF 9400, dated August 28, 2008. Zone AE Areas are determined to be within the 1 percent annual chance floodplains. Design and development of the Project is required to take into consideration the area to assure no development occurs within the flood zone that impedes flood flows nor locate a home within this area. Mitigation measure HYDRO-1 indicates the City will condition the Project to provide notices & disclosures to all potential home buyers that the property is within the 100-year flood hazard area, in Zone AE of the Flood Insurance Rate Map (FIRM), and the purchase of flood insurance is required. Mandatory flood

insurance purchase requirements and floodplain management standards apply until the National Insurance Program (NFIP) map for the Project area is revised and it is no longer in the 100-year flood hazard area.

CEMEX Construction Materials Pacific, LLC (“CEMEX”) has an aggregate mining and processing operation, which is considered a heavy industrial activity, south and southwest of the Project site in the Santa Ana River floodplain and within the Upper Santa Ana River Wash and Habitat Conservation Plan area. Mitigation measure NOISE-1 indicates the City will condition the Project to provide notices & disclosures to all potential home buyers that the property is adjacent to and/or in close proximity to a “Quarry” that is utilized for permitted quarry mining and processing operations, and/or other industrial uses, and that by their acquisition or occupancy of any property in TTM 17604, purchaser or other occupant acknowledges that the permitted Quarry uses may produce noise, vibration, light or increased traffic, odor or other disturbances.

For pedestrian and traffic safety, the proposed Project will be required to pay its fair share contribution towards installing a new two-phase traffic signal at the intersection of Greenspot Road and Gold Buckle Road (full access driveway/entrance to the Project) and crosswalks on all four legs of the intersection. These improvements are outlined in mitigation measure TRANS-5; therefore, the proposed Project would not have a substantial adverse effect on human beings, either directly or indirectly.

Mitigation Measures: AQ-1 & 2, GEO-1 & 2, HAZ-1, HYDRO-1, NOISE-1, and TRANS-5.

DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.



 Kim Stater, Assistant Community Development Director

7/23/19

 Date