

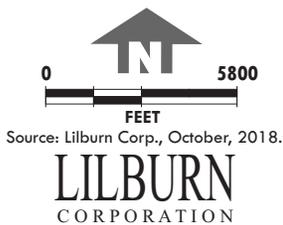
CITY OF REDLANDS
ENVIRONMENTAL CHECKLIST FORM
AND INITIAL STUDY

1. **Project Title:** TTM 20065
2. **Lead Agency Name and Address:**
City of Redlands
Development Services Department
35 Cajon Street, Suite 20
Redlands, CA 92373
3. **Contact Person and Phone Number:**
Catherine Lin, AICP
Principal Planner
(909) 798-7555
4. **Project Location:** The 10.44-acre Project Site is located on the east side of East Highland Avenue between Ford Street and Redlands Street in the City of Redlands (refer to Figure 1: Regional Location Map; and Figure 2: Vicinity Map). The Assessor's Parcel Number is (APN) 0174-161-25. Surrounding land uses include residential development to the north, east, west, and agriculture (i.e., orange groves) and residential uses occur to the south. Moore Middle School is located 0.15 miles east of the Project Site.
5. **Project Sponsor's Name and Address:**
Daniel J. Buoye
5225 Canyon Crest Drive
Riverside, CA 93507
6. **General Plan Designation:** Low Density Residential
7. **Zoning:** Education (E)
8. **Project Description:** The Applicant is requesting approval of Tentative Tract Map (TTM) 20065 to allow for the subdivision of a 10.44 acre-site into 30 lots including 29 single-family residential lots and one lettered lot. Lot sizes would vary in size from 10,012 square-feet to 19,529 square feet (refer to Figure 3: Site Plan). Access to the site would be provided via East Highland Avenue. The Applicant is also requesting approval of a Zone Change (ZC) from Education (E) to Suburban Residential (R-S) to allow for the Proposed Project.
9. **Surrounding Land Uses and Setting:** The Project Site was formerly an orange grove which has been removed from the site. The Project Site is an irregularly-shaped undeveloped parcel that is relatively level, sloping toward the north at an average gradient of approximately four percent. The elevation within the Project Site ranges between 1,580 and 1,600 feet above mean sea level.



PROJECT SITE

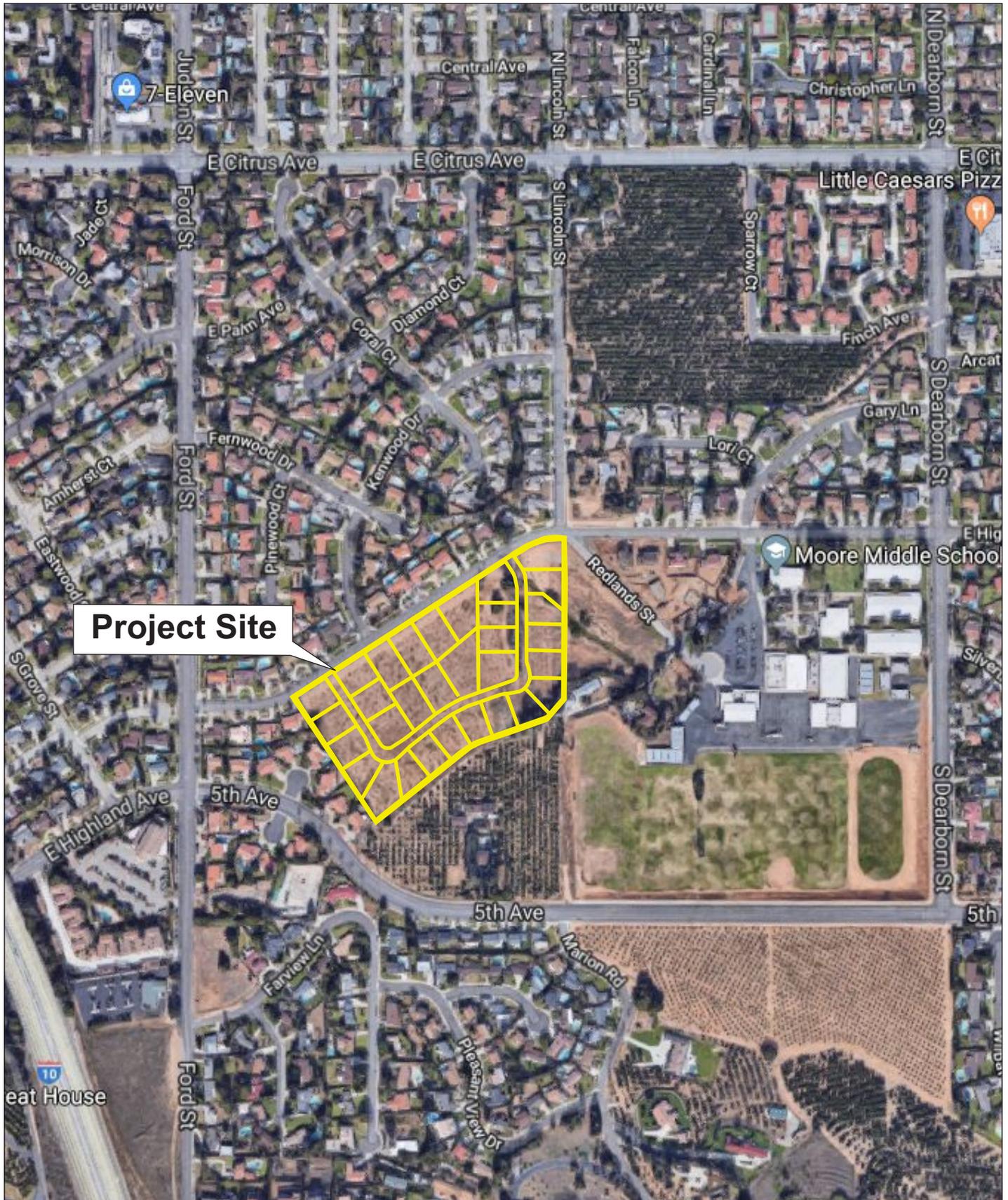
Lot: 34.050543
 Long: -117.153531



REGIONAL LOCATION

TTM 20065
 City of Redlands, California

FIGURE 1



Project Site

0 450
Feet
Source: Lilburn Corp., October, 2018.

LILBURN
CORPORATION

PROJECT VICINITY

TTM 20065

City of Redlands, California

FIGURE 2

The Project Site and surrounding parcels are located within the East Valley Planning subarea. The Project Site is designated as Low Density Residential in the City of Redlands General Plan Land Use Map. Surrounding properties to the north and west are also designated Low Density Residential, properties to the south are designated Agriculture and properties to the east have Low Density Residential and Public/Institutional land designations. As shown on the City's Zoning Map, the Project Site occurs within the Education (E) zone, and properties to the north, west and south of the Project Site are zoned Suburban Residential (R-S). The properties to the east are zoned Education (E) and Suburban Residential (R-S).

Vegetation on-site consists mainly of non-native weedy species with a border of ornamental landscaping (introduced trees, shrubs, etc.) along the eastern portion of the Project Site. Plant species found on-site include: black willow (*Salix gooddingii*), coast live oak (*Quercus agrifolia*), California fan palm (*Washingtonia filifera*), and a pine species (*Pinus sp.*). On-site soils are characterized as Ramona sandy loam.

In July 2018, Ecorp Consulting, Inc. prepared a Jurisdictional Delineation for an existing drainage feature that transverses the Project Site. The report describes potential Waters of the United States including wetlands that may be regulated by the United States Army Corp of Engineers (USACE) under Section 404 of the federal Clean Water Act (CWA).

As the Project is currently planned, jurisdictional features identified on-site would be filled or altered. Therefore, permits from the USACE, California Department of Fish & Wildlife (CDFW), and State Water Resources Control Board (SWRCB) will be required for impacts to federal and state jurisdictional waters. The application process includes submittal of a Pre-Construction Notification to the USACE, an application for Water Quality Certification with the SWRCB (submitted to the Santa Ana RWQCB), and a Notification of Lake or Streambed Alteration to be filed with the CDFW. Permits from each respective agency will need to be completed prior to disturbance of the jurisdictional waters present on the Project Site. Findings of the report are presented in this Initial Study.

10. Other public agencies whose approval is required:

United States Army Corp of Engineers
California Department of Fish & Wildlife
Regional Water Quality Control Board, Santa Ana Region

11. Related Technical Reports (incorporated by reference): The technical studies/reports referenced herein and listed in the References section at the end of this Initial Study have been used to analyze the project. All reports are available for review at City of Redlands Development Services Department.

12. Evaluation Format: This Initial Study is prepared in compliance with the California Environmental Quality Act (CEQA) Guidelines. This format of the study is presented as follows. The project is evaluated based upon its effect on eighteen (18) major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study Checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the project is categorized into one of the following four categories of possible determinations:

Potentially Significant
Impact

Less than Significant
with Mitigation

Less than Significant

No Impact

Substantiation is then provided to justify each determination. One of the four following conclusions is then provided as a summary of the analysis for each of the major environmental factors.

1. Therefore, no impacts are identified or anticipated and no mitigation measures are required.
2. Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.
3. Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are: (List mitigation measures).
4. Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts, which are: (List the impacts requiring analysis within the EIR).

At the end of the analysis the required mitigation measures are restated and categorized as being either self- monitoring or as requiring a Mitigation Monitoring and Reporting Program.

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" as indicated by the checklist on the following pages.

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

DETERMINATION

On the basis of this initial evaluation:

- () I find that the Proposed Project COULD NOT have a significant effect on the environment. 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 standard 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 1) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and 2) 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.

Prepared By: Natalie J. Latty

Date: 4/16/19

EVALUATION OF ENVIRONMENTAL IMPACTS

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. <i>Would the project:</i>				
a) Have a substantial affect on a scenic vista?	()	()	()	(✓)
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?	()	()	()	(✓)
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	()	()	(✓)	()
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	()	()	(✓)	()

Discussion:

- a/b) The Project Site is not within a scenic vista/scenic highway view corridor as identified by either the State, County of San Bernardino or City. The Proposed Project includes a Tentative Tract Map for future development of 28 single-family homes on a 10.44-acre site and a Zone Change from Education (E) to Suburban Residential (S-R). The Project Site does not contain any notable geological features. No historic buildings or State Scenic Highways occur within the vicinity of the Project Site. The Project Site is bounded on the north by East Highland Avenue, residential development to the east and west, and a mix of residential development and orange groves to the south. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

- c) The Project Site is currently vacant. The Proposed Project will subdivide the property into 29 lots for the future construction of 28 single-family homes. The Project will also change zoning designation from Education (E) to Suburban Residential (R-S) which would be consistent with the surrounding land uses (i.e., single-family residential to the north, east and west, and agriculture and single-family residential to the south). The Proposed Project would not degrade visual character or quality of the Site or its surroundings. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

- d) Although the Project Site is vacant, the future development of 28 single-family homes and Zone Change would not generate a significant amount of light and glare when compared to the surrounding area which include existing lighting from streetlights, residential homes, Moore Middle School, and vehicles. The design and placement of light fixtures within the future development would be reviewed for consistency with City standards and subject to City approval. City Standards require shielding, diffusing, or indirect lighting to avoid glare. Lighting would be selected and located to confine the area of illumination to on-site streets. Since lighting would be consistent with adjacent residential development to the north, east and west, no significant impacts would result. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>2. AGRICULTURE AND FORESTRY RESOURCES. <i>Would the project:</i></p> <p>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?</p>	()	()	()	(✓)
<p>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</p>	()	()	()	(✓)
<p>c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Gov't Code section 51104(g))?</p>	()	()	()	(✓)
<p>d) Result in the loss of forest land or conservation of forest land to non-forest use?</p>	()	()	()	(✓)
<p>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?</p>	()	()	()	(✓)

Discussion:

- a) The Project Site is identified in the Farmland Mapping and Monitoring Program of the California Resources Agency as “urban and built-up.” The Project Site is not identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.
- b) The location of the Project Site is mapped within the California Department of Conservation, Conservation Program Support map “San Bernardino County Williamson Act FY 2015/2016 Sheet 2 of 2.” As shown on this map, the Project Site is not enrolled in a Williamson Act contract and is designated “urban and built-up land.” Implementation of the Project would not interfere with such a contract. Therefore, no impacts are identified or anticipated and no mitigation measures are required.
- c) The Project Site has a land use designation of Low Density Residential by the City of Redlands General Plan and is currently zoned Education. The Proposed Project includes a Zone Change from Education (E) to Suburban Residential (S-R) to allow for the proposed development. The Site is surrounded by existing residential development to the east, west and north, and residential and orange groves to the south. The Project Site does not contain forestland and is within an area that is considered urban and built up as identified in California Department of Conservation, Conservation Program

Support map “San Bernardino County Williamson Act FY 2015/2016 Sheet 2 of 2.” 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 would not be impacted by the Proposed Project as no rezoning from timberland to a non-timberland designation would result. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

- d) No portion of the Project Site occurs within forest land, and the Project would not result in the loss of forest land or convert forest land to a non-forest use. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.
- e) The Proposed Project does not involve other changes in the existing environment, which due to its location or nature, would result in conversion of Prime Farmland, to a non-agricultural use. The Project Site is surrounded by existing residential development to the east, west and north, and residential and orange groves to the south. Property to the south of the Proposed Project is not identified as Prime Farmland and is used for residential uses and occurs within an area that is considered urban and built up. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3. AIR QUALITY. <i>Would the project:</i>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	()	()	(✓)	()
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	()	()	(✓)	()
c) 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 (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	()	()	()	(✓)
d) Expose sensitive receptors to substantial pollutant concentrations?	()	()	(✓)	()
e) Create objectionable odors affecting a substantial number of people?	()	()	(✓)	()

Discussion:

- a) The Project Site is located in the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD has divided the SCAB into 38 air-monitoring areas with a designated monitoring station for each area. Relative to the Project Site, the nearest long-term air

quality monitoring site for carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), particulate matter ≤ 10 microns (PM₁₀), and particulate matter ≤ 2.5 microns (PM_{2.5}) is the Redlands-Dearborn monitoring station (Redlands Station), located approximately half-mile northeast of the Project Site at 500 North Dearborn Street, Redlands.

The SCAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the basin is in nonattainment (i.e., O₃, PM₁₀, and PM_{2.5}). Criteria pollutants are common air pollutants that are known to be hazardous to human health. To reduce emissions, the SCAQMD adopted the 2016 Air Quality Management Plan (AQMP), which establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, California Air Resources Board (CARB), Southern California Association of Governments (SCAG), California Energy Commission, California Public Utilities Commission, California Department of Transportation (Caltrans), and US Environmental Protection Agency (EPA).

The Project Site is currently designated by the Redlands General Plan as Low Density Residential and is zoned Education. The proposed project includes a ZC which would change the site's zoning designation to Suburban-Residential (S-R). With approval of the proposed ZC, the proposed project would be a permitted use and consistent with the Low Density General Plan designation for planning purposes.

The SCAQMD CEQA Handbook states that "New or amended General Plan Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project is considered consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

- (1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- (2) Whether the project will exceed the assumptions in the AQMP in 2016 or increments based on the year of project buildout and phase.

Criterion 1 – Increase in the Frequency or Severity of Violations

Based on the air quality modeling analysis performed by Kunzman Associates, the short-term construction impacts will not result in significant impacts based on the SCAQMD regional and local thresholds of significance (refer to Table 1). Additionally, the air quality modeling analysis performed by Kunzman Associates found that long-term operations impacts will not result in significant impacts based on the SCAQMD local, regional, and toxic air contaminant thresholds of significance (refer to Table 2). Therefore, the proposed project is not projected to contribute to the exceedance of any air pollutant concentration standards and is found to be consistent with the AQMP for the first criterion.

Criterion 2 – Exceed Assumptions in the AQMP

Consistency with the AQMP assumptions is determined by performing an analysis of the proposed project with the assumptions in the AQMP. The emphasis of this criterion is to ensure that the analyses conducted for the proposed project are based on the same forecasts as the AQMP. The 2016-2040 Regional Transportation/Sustainable Communities Strategy prepared by SCAG (2016) includes chapters on: the challenges in a changing region creating a plan for our future, and the road to greater mobility and sustainable growth. These chapters currently respond directly to federal and state requirements placed on SCAG. Local governments are required to use these as the basis of their plans for purposes of consistency with applicable regional plans under CEQA. For the proposed project, the City of Redlands General Plan 2035 defines the assumptions that are represented in the AQMP.

The Project Site is currently designated as Low Density Residential in the City's General Plan. The proposed single-family residential uses would be consistent with the current General Plan designation. Therefore, the Proposed Project would not result in an inconsistency with the current land use designation in the City's General Plan. Therefore, the Proposed Project is not anticipated to exceed the AQMP assumptions for the Project Site and is found to be consistent with the AQMP for the second criterion. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

- b) The Proposed Project's construction and operation were screened by Kunzman Associates, Inc. using California Emissions Estimator Model (CalEEMod) version 2016.3.2 prepared by the SCAQMD. The criteria pollutants screened for included: nitrous oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), and particulates (PM₁₀ and PM_{2.5}). In addition, reactive organic gases (ROG) emissions are analyzed. Two of the analyzed pollutants, VOC and NO_x, are ozone precursors.

Construction Emissions

Construction activities associated with the Proposed Project would have the potential to generate air emissions, toxic air contaminant emissions, and odor impacts. Assumptions for the phasing, duration, and required equipment for the construction of the Proposed Project were obtained from the Applicant. The construction activities for the Proposed Project are anticipated to include: grading of approximately 10.44 acres, building construction of 28 single-family detached residential dwelling units, paving of approximately 1.02 acres of on-site roadways, and application of architectural coatings. The grading phase of the Proposed Project is anticipated to include 6,700 cubic yards of import. For purposes of CalEEMod modelling, Kunzman Associates, Inc. estimated that construction of the Proposed Project would begin no earlier than June 2019 and be completed by 2021. The construction-related criteria pollutant emissions for each phase are shown below in Table 1.

**Table 1
Construction-Related Regional Pollutant Emissions
(Pounds Per Day)**

Activity	VOC	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
Grading	5.00	59.91	35.14	0.08	5.43	3.67
Building Construction	2.57	22.34	18.84	0.03	1.69	1.33
Paving	1.43	12.97	15.27	0.02	0.85	0.67
Architectural Coating	13.29	1.55	2.07	0.00	0.16	0.11
Total for Overlapping Phases*	17.29	36.86	36.18	0.06	2.70	2.11
SCAQMD Thresholds	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

*Construction, paving, and painting phases may overlap.

Source: Kunzman Associate, Inc., Air Quality and Global Climate Change Impact Analysis (2018)

Table 1 shows that none of the Proposed Project's emissions will exceed regional thresholds. Therefore, a less than significant regional air quality impact would occur from construction of the Proposed Project.

Construction of the Proposed Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour (mph), sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. In addition, projects that disturb 50 acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of the project area (approximately 10.44 acres total) a Fugitive Dust Control Plan or Large Operation Notification would not be required.

SCAQMD's Rule 403 minimum requirements require that the application of the best available dust control measures is used for all grading operations and include the application of water or other soil stabilizers in sufficient quantity to prevent the generation of visible dust plumes. Compliance with Rule 403 would require the use of water trucks during all phases where earth moving operations would occur. Compliance with Rule 403 is required as a condition of project approval.

Operational Emissions

The operational emissions for the Proposed Project were based on the year 2021, which is the anticipated opening year. Mobile sources include emissions from the additional vehicle miles generated by the Proposed Project. The Trip Generation Analysis determined that the Proposed Project will generate approximately 274 total trips with a trip generation rate of 9.44 trips per dwelling unit per day. The CalEEMod default trip lengths were used in this analysis. The worst-case summer or winter VOC, NO_x, CO,

SO₂, PM₁₀, and PM_{2.5} emissions created from the Proposed Project's long-term operations have been calculated and are summarized below in Table 2.

Table 2
Regional Operational Pollutant Emissions
(Pounds Per Day)

Activity	VOC	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
Area Sources	1.27	0.46	2.58	0.00	0.05	0.05
Energy Usage	0.03	0.22	0.10	0.00	0.02	0.02
Mobile Sources	0.62	3.96	7.46	0.03	2.01	0.55
Total Emissions	1.91	4.65	10.13	0.03	2.08	0.62
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: Kunzman Associates, Inc., Air Quality and Global Climate Change Impact Analysis (2018)

Table 2 shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds. Therefore, a less than significant regional air quality impact would occur from operation of the Proposed Project.

As shown in Table 1 and Table 2, the Proposed Project would not emit criteria pollutants in excess of the regional emissions thresholds. The Proposed Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

- c) The Proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). Cumulative projects include local development as well as general growth within the project area.

However, as with most development, the greatest source of emissions is from mobile sources, which travel throughout the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered would cover an even larger area. Accordingly, the cumulative analysis for the project's air quality must be generic by nature. The project area is in non-attainment for ozone and PM₁₀ and PM_{2.5} particulate matter. In accordance with CEQA Guidelines Section 15130(b), this analysis of cumulative impacts incorporates a three-tiered approach to assess cumulative air quality impacts.

- Consistency with the SCAQMD project specific thresholds for construction and operations;
- Project consistency with existing air quality plans; and
- Assessment of the cumulative health effects of the pollutants.

Consistency with Project Specific Thresholds

Construction-Related Impacts - The project site is located in the South Coast Air Basin, which is currently designated by the EPA for federal standards as a non-attainment area

for ozone and $PM_{2.5}$ and by CARB for the state standards as a non-attainment area for ozone, PM_{10} , and $PM_{2.5}$. The regional ozone, PM_{10} , and $PM_{2.5}$ emissions associated with construction of the Proposed Project have been calculated and found to be less than significant during construction for regional emissions of VOC and NO_x (ozone precursors), PM_{10} , and $PM_{2.5}$. Therefore, a less than significant cumulative impact would occur from construction of the Proposed Project.

Operational-Related Impacts - The greatest cumulative operational impact on the air quality to the Air Basin will be the incremental addition of pollutants mainly from increased traffic from residential, commercial, and industrial development. In accordance with SCAQMD methodology, projects that do not exceed SCAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact. The regional ozone, PM_{10} , and $PM_{2.5}$ emissions created from the on-going operations of the Proposed Project were calculated and found to be less than significant during operation of the Proposed Project for regional emissions of VOC and NO_x (ozone precursors), PM_{10} , and $PM_{2.5}$. Therefore, with respect to long-term emissions, this project would create a less than significant cumulative impact and no mitigation measures are required.

- d) SCAQMD has developed a methodology to assess the localized impacts of emissions from a proposed project as outlined within the Final Localized Significance Threshold (LST) Methodology report completed in June 2003 and revised in July 2008. The use of LSTs is voluntary, to be implemented at the discretion of local public agencies acting as a CEQA lead agency. LSTs apply to projects that must undergo CEQA or the National Environmental Policy Act (NEPA) review and are five acres or less. The LSTs were developed to analyze the significance of potential air quality impacts of proposed projects to sensitive receptors (i.e. schools, single family residences, etc.) and provide screening tables for small projects (one, two, or five acres). Projects are evaluated based on geographic location and distance from sensitive receptors (25, 50, 100, 200, or 500 meters from the site).

For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, convalescent facility or anywhere that it is possible for an individual to remain for 24 hours. Additionally, schools, playgrounds, child care centers, and athletic facilities can also be considered as sensitive receptors. Commercial and industrial facilities are not included in the definition of sensitive receptor because employees do not typically remain on-site for a full 24 hours, but are usually present for shorter periods of time, such as eight hours.

Construction Emissions

The local air quality emissions from construction were analyzed using the SCAQMD's Mass Rate Look-Up Tables and the methodology described by the Final LST Methodology. The Mass Rate Look-Up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NO_x , PM_{10} , and $PM_{2.5}$ from the Proposed Project could result in a significant impact to the local air quality. The emission thresholds were calculated based on the East San Bernardino Valley source receptor area (SRA) 35 and compared against the thresholds for five acres. The nearest sensitive receptors are the single-family detached residential dwelling units located approximately 40 feet north (across Highland Avenue) and 40 feet east (across Redlands Street), and Moore Middle School located as close as approximately 60 feet southeast of the Project

Site; therefore, the SCAQMD Look-up Tables for 25 meters were used. Table 9 shows the on-site emissions from the CalEEMod model for the different construction phases and the calculated emissions thresholds.

Table 3
Local Construction Emission at Nearest Sensitive Receptors
(Pounds per Day)

Phase	NO_x	CO	PM₁₀	PM_{2.5}
Grading	54.42	33.38	4.84	3.50
Building Construction	21.08	17.16	1.29	1.21
Paving	12.92	14.65	0.68	0.62
Architectural Coating	1.53	1.82	0.09	0.09
SCAQMD Thresholds	270	2,075	14	9
Exceeds Threshold?	No	No	No	No

Source: Kunzman Associates, Inc. Air Quality and Global Climate Change Analysis (2018)

The data provided in Table 3 shows that none of the analyzed criteria pollutants would exceed the calculated local emissions thresholds at the nearest sensitive receptors. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

- e) As stated in the Air Quality and Global Climate Change Impact Analysis prepared by Kunzman Associates, Inc., potential sources that may emit odors during construction activities include the application of materials such as asphalt pavement and diesel exhaust emissions. The objectionable odors that may be produced during the construction process are short-term in nature and the odor emissions are expected to cease upon the drying or hardening of the odor producing materials. Diesel exhaust and volatile organic compounds (VOCs) would be emitted during construction of the Proposed Project, which are objectionable to some; however, emissions would disperse rapidly from the Project Site and therefore are not anticipated to reach an objectionable level at the nearest sensitive receptors. Standard construction requirements would minimize odor impacts resulting from construction activity. It should be noted that any construction odor emissions generated would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction activity. Due to the distance of the nearest sensitive receptors from the Project Site and through compliance with SCAQMD's Rule 402, no significant impact related to odors would occur during the on-going operations of the Proposed Project. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>4. BIOLOGICAL RESOURCES. <i>Would the project:</i></p> <p>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?</p>	()	(✓)	()	()
<p>b) Have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?</p>	()	(✓)	()	()
<p>c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</p>	()	(✓)	()	()
<p>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?</p>	()	(✓)	()	()
<p>e) Conflict with any local policies or ordinances protecting logical resources, such as a tree preservation policy or ordinance?</p>	()	()	(✓)	()
<p>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?</p>	()	()	()	(✓)

Discussion:

- a) A General Biological Resource Assessment was completed by the ECORP Consulting, Inc. on November 11, 2016 and updated on July 19, 2017 and is available for review at the City's Development Services Department. As part of the Biological Assessment, a literature review and background data search was performed to gather information on local plant and wildlife species and potential occurrences within the Project area. The data review included biological text on general and specific biological resources, and resources considered to be sensitive by various wildlife agencies, and local government agencies. A biological survey was subsequently conducted and included an evaluation of the surrounding habitats and focused habitat assessment for species identified in the background data search. Results of the survey are summarized herein.

The Project Site was formerly an orange grove that has since been cleared and is mostly non-herbaceous, disturbed, and ruderal. The Project Site also contains native trees including: the black willow (*Salix gooddingii*), coast live oak (*Quercus agrifolia*), California fan palm (*Washingtonia filifera*), and a pine species (*Pinus sp.*) etc. Near the drainage area that occurs within the northeast portion of the Site, there is riparian vegetation including mulefat (*Baccharis salicifolia*), common reed (*Phragmites australis*), nutsedge (*Cyperus sp.*), and rush (*Juncus sp.*).

A record of observation for sensitive species was retrieved from the California Natural Diversity Data Base (CNDDDB). The assessment included a review of a 10-mile area surrounding the Project Site. No special-status plants or animals were previously recorded on-site; however a total of 81 sensitive plant species and 29 special status animals, both federally and/or State listed as endangered or threatened species, were found to potentially occur within the area.

The Project Site has the potential to contain two special status species including: burrowing owl (*Athene cunicularia*) and the San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*). Suitable habitat for the burrowing owl was inspected for potential presence or sign (burrows, pellets, tracks, whitewash, bones, and feathers) of the species. Old agricultural and disked portions of the Site and dirt berms along the southern perimeter of the Project Site may provide suitable habitat for the burrowing owl; however, neither burrowing owls nor sign of the species were observed. Burrowing owls are known to occupy abandoned California ground squirrel burrows. One burrow was documented along the southern perimeter of the Site; however no pellets, tracks, whitewash, bones, or feathers were observed at the burrow or in the vicinity. The Project is dominated entirely by disturbed ruderal habitat and a jurisdictional feature, which does not support potential habitat for the San Bernardino kangaroo rat. The nearest recorded locations for the kangaroo rat are near Mill Creek over 1.5 miles to the north across heavily urbanized areas. Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measure is:

BIO-1: Pre-construction surveys for burrowing owl shall be conducted prior to the start of ground disturbing activities (grading, grubbing, and construction) at the Project Site. The surveys shall follow the methods described in the CDFW's Staff Report on Burrowing Owl Mitigation (CDFW 2012). Two surveys shall be conducted, with the first survey being conducted between 30 and 14 days before initial ground disturbance, and the second survey being conducted no more than 24 hours prior to initial ground disturbance. If burrowing owls and/or suitable burrowing owl burrows with sign (e.g., whitewash, pellets, feathers, prey remains) are identified on the Project Site during the survey and impacts to those features are unavoidable, consultation with the CDFW shall be conducted and the methods described in the CDFW's Staff Report on Burrowing Owl Mitigation (CDFW 2012) for avoidance and/or passive relocation shall be followed.

- b,c) In July 2018, a Jurisdictional Delineation was completed by ECORP Consulting, Inc. to determine potential impacts to jurisdictional areas as a result of the Proposed Project. This report describes potential Waters of the U.S., including wetlands that may be regulated by the USACE under Section 404 of the federal CWA. The report is

summarized herein and is available for review at the City's Development Services Department.

An ephemeral drainage occurs on the Project Site and runs from south to north along the eastern boundary of the property and is not identified on the USGS topographic 7.5-minute Redlands quadrangle (1981). The drainage contains a headwall and earthen berm that directs water flow into a three-foot culvert that runs beneath Highland Avenue north of the Project Site. The jurisdictional feature originates from alongside a private driveway near the southeastern terminus of Redlands Street. A well-defined bed and bank is present throughout most of the jurisdictional feature.

A field visit was conducted along with a search of available databases and documentation relevant to the Project Site. Data collected on-site was incorporated in a Geographic Information System (GIS) into a base map to quantify the extent of jurisdictional waters and associated riverine/riparian/wetland habitats. Suspected jurisdictional areas were checked for the presence of definable channels and/or wetland vegetation, riparian habitat, soils, and hydrology. The Ordinary High Watermark (OHWM) was used to calculate the creeks lateral extent of USACE jurisdiction. Waters of the U.S. (WoUS) as regulated by the USACE and RWQCB, and/or jurisdictional lake or streambed are associated with riparian habitat as regulated by the CDFW. The ephemeral drainage meets the criteria of a streambed subject to CDFW jurisdiction due to characteristics such as defined channel bed and banks with associated riparian vegetation. The drainage is also considered to be Traditional Navigable Waters due to what is considered to be a "significant nexus" with the Santa Ana River.

The ephemeral drainage conveys runoff for short periods of time, during and immediately following rain events. A total of 0.066 acres of ephemeral drainage, measuring 250 feet in length, was mapped. The ephemeral drainage flows downstream in the northwest direction into Mill Creek Zanja that is a tributary to the Santa Ana River.

For an area to be considered jurisdictional wetlands under the Clean Water Act Section 404, it must contain three (3) wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Wetlands were not suspected within the Project Area. Wetland determination forms were not deemed necessary and no wetlands were identified within the Project Site.

The ephemeral drainage meets the criteria of streambed subject to CDFW jurisdiction. The drainage has a defined channel bed and banks and associated riparian vegetation (i.e. black willow, mulefat (*Baccharis salicifolia*), common reed (*Phragmites australis*), nutsedge (*Cyperus* sp.), and rush (*Juncus* sp.) and habitat. The Proposed Project of TTM 20065 would have impacts on the ephemeral drainage. Table 4 and 5 provide a summary of potential impacts to the jurisdictional areas identified on-site.

Table 4
Potential CDFW Jurisdiction

Type	Acreage
Black Willow Thickets	0.065
Streambed-ephemeral drainage	0.066
Total	0.131

**Table 5
Potential Waters of the U.S.**

Type	Acreage
Wetlands	0
Streambed-ephemeral drainage	0.029
Total	0.029

Approximately 0.131 acres of CDFW jurisdictional streambed and .029 acres of Waters of the U.S. will be impacted by the Proposed Project. Impacts to surrounding areas near the ephemeral drainage are subject to the Clean Water Act (CWA) and Fish and Game Code (FGC) under the jurisdictions of U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW. The USACE has authority to permit the discharge of dredged or fill material in waters of the United States under Section 404 CWA. Any proposed permanent or temporary impacts to the drainage will likely require a Streambed Alteration Agreement from the CDFW, and CWA Sections 401/404 permits from the RWQCB and USACE.

The two most common types of permits issued by USACE under Section 404 of the CWA to authorize the discharge of dredged or fill material into WoUS are: a nation-wide permit (NWP) or an individual permit (IP). NWPs are general permits for specific categories of activities that result in a greater than ½ acre to WoUS, including the loss of no more than 300 linear feet of streambed. The Project area also occurs within the jurisdiction of the RWQCB, Santa Ana Region which Under Section 401 of the CWA must certify that the discharge of dredged or fill material into WUS would not violate state water quality standards. The proposed future development of TTM 20065 would have significant impact on the jurisdictional drainage and therefore, the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant.

- BIO-2: Prior to any construction or grading activities the Project Proponent shall obtain a Section 404 permit from the US Army Corp of Engineers.**
- BIO-3: The Project Proponent shall submit a formal application and fees to the Regional Water Quality Control Board – Santa Ana region prior to construction activities.**
- BIO-4: Prior to any construction or grading related activities the Project Proponent shall obtain a permit pursuant to Section 1600 of the California Fish and Game Code.**
- BIO-5: Prior to any alterations to the ephemeral drainage, the Project Proponent shall obtain a 1602 Streambed Alteration Agreement.**

- d) The Project Site is currently vacant and is primarily surrounded by single-family residential homes to the north, east, and west and agricultural and residential to the south; Moore Middle School occurs approximately 0.15 miles east of the site. Native tree species, including black willow (*Salix gooddingii*), coast live oak (*Quercus agrifolia*), and a pine species (*Pinus sp.*) are present on-site along with California palm trees occurring along the north perimeter of the Project Site. The trees on-site provide potential suitable habitat for nesting birds. Possible significant adverse impacts have been identified or

anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are:

- BIO-6:** In the event construction of the Project occurs during the nesting season (February 15th to August 31th), the Project Proponent shall have a pre-construction nesting bird survey within the Project boundary and buffer area by a qualified biologist. All active bird nests shall be flagged, and an appropriate avoidance buffer shall be established. This buffer shall not be disturbed by construction activities until the nest becomes either: inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, and the young are no longer expected to be impacted by the project.
- BIO-7:** The Project Proponent shall ensure that no work is initiated within 72 hours of the nesting bird survey.
- BIO-8:** If, during the nesting season, 10 days have passed since an area was surveyed, and construction work has not been continuous in that area, then the Project Proponent shall have a qualified biologist perform a new nesting bird survey prior to the commencement of work within the area.
- BIO-9:** In the event active nests are observed adjacent to the Project Site and an avoidance buffer has been established, a biological monitor shall be present to monitor nesting behaviors in order to assess if the nest buffer is appropriate. If the birds show any signs of stress, the buffer shall be increased; and work shall be conducted elsewhere until fledging occurs. If necessary, the size of the buffer area shall be reduced if the biologist determines that the construction activity would not have an adverse effect on the particular species in question.
- e) The Project Site contains several native tree species, including black willow (*Salix gooddingii*), coast live oak (*Quercus agrifolia*), California fan palm (*Washingtonia filifera*), and a pine species (*Pinus sp.*). If trees located on-site are to be removed, the Proposed Project shall comply with the City of Redlands Landmark Tree protection criteria established in Sections 12.52.20 and 12.52.30 of the Redlands Municipal Code. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.
- f) The Proposed Project would not conflict with any adopted Habitat Conservation Plan, Natural Community conservation Plan, or other approved local, regional, or State habitat conservation plan. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
5. CULTURAL RESOURCES. <i>Would the project:</i> a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	()	(✓)	()	()
b) Cause a substantial adverse change in the significance of an archeological resource pursuant to § 15064.5?	()	(✓)	()	()
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	()	(✓)	()	()
d) Disturb any human remains, including those interred outside of formal cemeteries?	()	(✓)	()	()

Discussion:

a,b) In April 2017, ECORP Consulting, Inc., Inc. performed a Cultural Resources Records Search for the Project Site; the report is available for review at the City Redlands Planning Division. The study included a cultural resources records search, and a review of archaeological site records, historical maps, and listings of resources on the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Points of Historical Interest, California Landmarks, and National Historic Landmarks. The cultural resource records search performed at the California State University, Fullerton, South Central Coastal Information Center, identified 18 previous cultural resource searches completed within a one-mile radius of the Project Site. None of the studies overlapped the Project area. The records search also identified a total of 19 cultural resources that have been previously recorded within a one-mile radius of the Project Site, none of which are located within the Project area. Of the 19 resources, 17 are historic in age and two are considered to be prehistoric. Resources include nine sites with standing structures, two irrigation feature sites, two historic-period refuse deposits, the Redlands canal, the Mill Creek Zanja, two historic-period streets, a prehistoric temporary camp, and a prehistoric food processing site.

Aerial photographs identified the Project area as having one building and three silos on-site with the remaining property used as an orchard from 1938 to 1959. An irrigation reservoir was also noted at the southern boundary of the Project Site. A photograph from 1980 revealed the Project Site had been cleared and disked with no remaining buildings on the property. At present date, the Project Site remains clear with no buildings on-site. The irrigation reservoir is no longer visible; a pile of rubble was visible in the location.

Due to a low number of prehistoric resources recorded within a one-mile radius of the Project Site, it was determined that prehistoric sensitivity of the area is considered to be low. The Project Site has some potential to contain buried archaeological resources of historic age, however no known resources were identified during the cultural resources search. Although no known resources were identified within the Project area during the study, 17 historic-period resources are located within a one-mile radius of the Project area. Additionally, built structures were identified within the Project area and could be

considered to be historically significant. Therefore, the potential for historical resources within the Project Site is considered to be moderate and intact cultural material could be buried. Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are:

- CR-1: If any prehistoric or historic resources over 50 years of age are encountered during land modification, then activities in the immediate area of the finds (i.e., within 50 feet) shall be halted so that a qualified archaeologist can assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality.**

- CR-2: In the event cultural resources are discovered on-site, the Project Proponent shall allow for monitoring by a qualified archaeologist who meets the Secretary of the Interior's guidelines and is listed in the Register of Professional Archaeologists. Monitoring shall be required for all soil disturbances including grading (cut and fill). Should movement of soils for grading for re-compaction activities show no evidence of an archaeological site or artifacts, and with the agreement of the City of Redlands Planning Division and the on-site archaeological monitor, further monitoring at this location shall no longer be required. In the event that a prehistoric site or historic remains older than 50 years is identified during monitoring, the Project Archaeologist monitor shall be empowered to stop all construction activities in the vicinity of the find (e.g., 50 feet radius).**

- CR-3: If the discovered archaeological/cultural materials are prehistoric in nature, the Project Archaeologist shall notify the City of Redlands Planning Division and assess the discovered material(s) and prepare a survey, study, or report evaluating the impact. The Archaeologist's survey, study, or report shall contain a recommendation(s), if necessary, for the preservation, conservation, or relocation of the resource. The Developer shall comply with the recommendations of the evaluating Archaeologist, as contained in the survey, study, or report. Project development activities may resume once copies of the archaeological survey, study, or report are submitted to the City of Redlands Planning Division and to the South Central Coastal Information Center Department of Anthropology, C.S.U. Fullerton.**

Implementation of the above mitigation measures would reduce impacts to any potential archeological resources to a less than significant level.

- c) Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. According to the City of Redlands General Plan EIR, paleontological resources are known to be found in San Timoteo Canyon, located 5.20 miles southwest of the Project Site. Although fossil remains are known to be found in a specific area of the City, the City's General Plan provides polices for protecting known and unknown paleontological and archeological resources in the event they are incidentally discovered during construction. Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a

condition of project approval to reduce these impacts to a level below significant. The required mitigation measure is:

CR-4: In the event paleontological resources are uncovered during grading, the Project Proponent shall notify the City Planning Division of the discovery and contact a qualified vertebrate paleontologist to perform a field survey to determine and record any non-renewable paleontological resources found on-site. The paleontologist shall determine the significance and make recommendations to the City of Redlands for appropriate mitigation measures in compliance with the guidelines of the California Environmental Quality Act.

Implementation of the above mitigation measure would reduce impacts to potential paleontological resources to a less than significant level.

- d) Construction activities, particularly grading, could adversely affect or eliminate unknown human remains. Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation is:

CR-5: If human remains of any kind are found during earthwork activities, all activities shall cease immediately, the Redlands Police Department and the San Bernardino County Coroner and a qualified archaeologist shall be notified. The Coroner shall examine the remains and determine the next appropriate action based on the findings. If the Coroner determines the remains to be of Native American origin, they shall notify the Native American Heritage Commission. The Native American Heritage Commission shall then identify the most likely descendants to be consulted regarding treatment and/or reburial of the remains. If a most likely descendant cannot be identified, or the most likely descendant fails to make a recommendation regarding the treatment of the remains within 48 hours after gaining access to them, the contractor shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
6. GEOLOGY AND SOILS. <i>Would the project:</i> a) Expose people or structures to 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.	()	()	(✓)	()
ii) Strong seismic ground shaking?	()	()	(✓)	()
iii) Seismic-related ground failure, including liquefaction?	()	()	(✓)	()
iv) Landslides?	()	()	(✓)	()
b) Result in substantial soil erosion or the loss of topsoil?	()	()	(✓)	()
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- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	()	()	(✓)	()
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	()	(✓)	()	()
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?	()	()	()	(✓)

Discussion:

a,c) In November 2017, a Geotechnical/Geologic Study and Percolation Testing was conducted on the Project Site by Hilltop Geotechnical, Inc.; a copy of the report is available for review at the City of Redlands Planning Division. The results of the study are summarized herein.

i) According to the study and the City of Redlands General Plan Figure 8.3 Geotechnical Hazards, the Project Site does not occur within an Alquist-Priolo Earthquake Fault Zone or special study zone. The nearest fault is the San Jacinto Valley Fault zone, located about 4.1 miles east of the Project Site. The San Jacinto Valley Fault is a right-lateral strike-slip fault zone that runs through San Bernardino, San Diego and Imperial counties in Southern California. The last major earthquake

on the San Jacinto was on April 9, 1968 when a 6.5 M_w occurred on the Coyote Creek segment. An earthquake occurring on the San Jacinto Fault could be as large as a magnitude 7.5 M_w . The potential occurrence of ground rupture on the site is considered to be low since no fault traverses the site. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

- ii) The site is situated in an area of active and potentially active faults, as is most of metropolitan southern California. Active faults present a variety of potential risks to structures, the most common of which are strong ground shaking, dynamic densification, liquefaction, mass wasting, and surface rupture at the fault plane. Generally, the following four factors are the principal determinants of seismic risk at a given location including: 1) distance to capable faults; 2) the maximum magnitude earthquake for a capable fault; 3) seismic recurrence interval, in turn related to tectonic slip rates; and 4) nature of earth materials underlying the site.

The San Jacinto fault zone (San Jacinto Valley Segment) is a system of northwest-trending, right-lateral, strike-slip faults, and is the closest known active fault to the Project Site (occurring approximately 8 miles southwest of the Project Site) and is considered the most important fault to the Project Site with respect to the hazard of seismic shaking and ground rupture. More large historic earthquakes have occurred on the San Jacinto fault than any other fault in Southern California. Severe seismic shaking can be expected during the lifetime of the Proposed Project. Construction of residences in accordance with applicable requirements of the Uniform Building Code would ensure that potential impacts are reduced to the maximum extent possible. Therefore, no significant adverse impact is identified or anticipated, and no mitigation measures are required.

- iii) Liquefaction occurs primarily in saturated, loose, fine to medium grained soils in areas where the groundwater table is within 50 feet of the surface. As concluded in the Geotechnical report prepared for the Project, per San Bernardino County Land Use Plan, General Plan, Geologic Hazard Overlays, Sheet FH31 C, the Project Site does not occur within an area known for liquefaction, lateral spreading potential or landslide susceptibility. In addition, liquefaction potential at the Project Site is very low due to an estimated depth to groundwater of 50 feet or greater beneath the existing ground surface.

Seismically induced subsidence is the result of loose sand soils subject to moderate to strong ground shaking. Based on the results of the Geotechnical/Geologic Study, the site is underlain at depth by dense to very dense or hard, consolidated deposits that are not anticipated to be prone to significant seismic settlement. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

- iv) According to the Geotechnical/Geologic Study prepared for the Project, the potential for occurrence of landslides is considered none as the Project Site is relatively flat with a gentle slope of approximately four percent toward the north. Landslides due to seismic shaking would not occur. Therefore, less than significant impacts are identified or anticipated, and no mitigation measures are required.

- b) During the development of the Project Site, which would include disturbance of approximate 10.44 acres, project-related dust may be generated due to the operation of machinery on-site or due to high winds. Additionally, erosion of soils could occur due to a storm event. Development of the Proposed Project would disturb more than one acre of soil; therefore, the Proposed Project is subject to the requirements of the State Water Resources Control Board General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-2009-DWQ). Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling or excavation. The Construction General Permit requires the development and implementation of a Storm Water Pollution and Prevention Plan (SWPPP). The Proposed Project Contractor will be required to prepare a SWPPP that includes Best Management Practices (BMPs) to avoid and minimize soil erosion. Adherence to BMPs is anticipated to ensure that the Proposed Project does not result in substantial soil erosion or the loss of topsoil. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required. Therefore, no significant adverse impact is identified or anticipated, and no mitigation measures are required.
- d) Based on exploratory borings performed as part of the Geotechnical/Geologic Study, the surface soils present at the Project Site exhibit an expansion potential based on criteria presented in the 2016 California Building Code, Section 1803.5.3, Expansive Soil. As concluded in the Geotechnical/Geologic Study, if precautions are not taken during the design and construction of the Proposed Project, the expansive soils present at the Project Site could cause heaving and distress to the proposed structures, hardscape and pavement if they become saturated in the future. Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measure is:
- GEO-1: Specific recommendations for site grading, foundations, slab support, pavement design, slope maintenance, etc. as provided in the November 17, 2017, Report of Geotechnical/ Geologic Study and Percolation Testing prepared for the Project by Hilltop Geotechnical, Inc. shall be reviewed by the City Engineer for approval.**
- e) The Proposed Project would connect to the City's sewer collection system that currently serves the Project Site and vicinity. No septic tanks or alternative wastewater disposal is proposed. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
7. GREENHOUSE GAS EMISSIONS. <i>Would the project:</i>	()	()	(✓)	()
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	()	()	(✓)	()
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	()	()	(✓)	()

- a) According to the Air Quality and Global Climate Change Impact Analysis prepared by Kunzman Associates, Inc., the Proposed Project is anticipated to generate greenhouse gas (GHG) emissions from area sources, energy usage, mobile sources, waste, water, and construction equipment. CalEEMod Version 2016.3.2 was used to calculate the GHG emissions from the Proposed Project. The Proposed Project's emissions were compared to the Tier 3 SCAQMD draft screening threshold of 3,000 metric tons CO₂e per year for all land uses. A summary of the results is shown below in Table 6.

**Table 6
Project-related Greenhouse Gas Emissions
(Metric Tons per Year)**

Category	CO ₂	CH ₄	N ₂ O
Area Sources	6.76	0.00	0.00
Energy Usage	127.89	0.00	0.00
Mobile Sources	438.91	0.02	0.00
Waste	6.91	0.41	0.00
Water	12.66	0.06	0.00
Construction	12.42	0.00	0.00
Sequestration*	-7.08		
Total Emissions (CO ₂ e)	611.94		
SCAQMD Screening Threshold	3,000		
Exceeds Threshold?	No		

Source: Kunzman Associates, Inc. Air Quality and Global Climate Change Analysis (2018).

*CO₂ sequestration from the planting of ~200 new trees (141.6/20 years [trees' lifetime])

As shown in Table 6, the Proposed Project's GHG emissions are below the SCAQMD screening threshold and therefore the impacts from GHGs are considered to be less than significant. Operation of the Proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

- b) As stated in the Air Quality and Global Climate Change Impact Analysis, the applicable plan for the Proposed Project is the San Bernardino Associated Governments (SANBAG) San Bernardino County Regional GHG Reduction Plan, March 2014. The Regional GHG Reduction Plan was developed in order to meet the requirements of AB 32 and SB 375 and includes regional GHG emissions inventory, summarizes actions

that participating jurisdictions have selected to reduce GHG emissions to 1990 levels by 2020, and provides specific reduction goals for each participating jurisdiction. For the City of Redlands, the reduction target is a 15 percent reduction of GHG emissions by year 2020 over year 2020 business-as-usual GHG emission rates, which are based on the year 2008 baseline.

The SCAQMD's thresholds used the California Governor Executive Order S-3-05 goals as the basis for deriving the screening level. The Proposed Project's emissions meet the threshold for compliance with Executive Order S-3-05, the Proposed Project's emissions also comply with the goals of AB 32. Additionally, as the Proposed Project meets the current interim emissions targets/thresholds established by the SCAQMD (as described in Section III. Air Quality of this Initial Study), the Proposed Project would also be on track to meet the reduction target of 40 percent below 1990 levels by 2030 as mandated by SB 32. Furthermore, all of the post-2020 reductions in GHG emissions are addressed via regulatory requirements at the State level and the Proposed Project will be required to comply with these regulations as they come into effect.

As discussed in Section III. Air Quality of this Initial Study, the Proposed Project's GHG emissions fall below the Tier 3 SCAQMD draft screening threshold of 3,000 metric tons of CO₂ equivalent per year and the Proposed Project is in compliance with the reduction goals AB 32 and SB 32. Furthermore, the Proposed Project will comply with applicable Green Building Standards and City of Redlands policies regarding sustainability, as dictated by the City's General Plan and Redlands Community Sustainability Plan. The Proposed Project will not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
8. HAZARDS AND HAZARDOUS MATERIALS. <i>Would the project:</i>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	()	()	(✓)	()
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident considerations involving the release of hazardous materials into the environment?	()	()	(✓)	()
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 1/4 mile of an existing or proposed school?	()	()	()	(✓)

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	()	()	()	(✓)
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	()	()	()	(✓)
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	()	()	()	(✓)
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	()	()	()	(✓)
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	()	()	()	(✓)

Discussion:

- a) Post construction activities of the proposed residential development and zone change would not require the routine transport or use of hazardous materials. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.
- b) Hazardous or toxic materials transported in association with construction of the Proposed Project may include items such as oils, paints, and fuels. All materials required during construction would be kept in compliance with State and local regulations and the Contractor would be required to implement Best Management Practices (BMPs). Post-construction activities would include standard maintenance (i.e., landscape upkeep, exterior painting and similar activities) involving the use of commercially available products (e.g., pesticides, herbicides, gas, oil, paint, etc.) the use of which would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accidental release of hazardous materials into the environment. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.
- c) Although the residential development occurs within ¼-mile of a school, no hazardous materials would be emitted as a result of the construction of the residential units. The

storage and use of hazardous materials is not associated with single-family homes; therefore no impacts associated with emission of hazardous or acutely hazardous materials, substances, or waste within ¼-mile of a school are anticipated. No impacts are identified or anticipated, and no mitigation measures are required.

- d) Pursuant to California Government Code Section 65962.5, the California Department of Toxic Substances Control (DTSC) compiles the Cortese List and updates it at least annually. The Cortese List includes hazardous waste facilities subject to corrective action, land designated as hazardous waste property or border zone property, sites included in the abandoned site assessment program, and qualifying sites pursuant to Section 25356 of the Health and Safety Code. A copy of the most recent Cortese List was retrieved from DTSC EnviroStor online database on May 23, 2018; the Project Site is not identified on the list. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.
- e/f) The Project Site is not located within an airport land use plan and is not within two miles of a public airport. The Project Site is located outside of Redlands Municipal Airport Compatibility Map (Figure 2A) and outside the Airport Compatibility Zones in the City of Redlands General Plan Figure 7.7: Airport Hazards. The Project Site is located 2.25 miles south of Redlands Municipal Airport, is not within an airport safety review area as identified in the San Bernardino County General Plan (Hazard Overlay Map FH31 B) and is not located in the vicinity of a private airstrip. The Proposed Project would not change air traffic patterns or create a safety hazard to people or aircraft. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.
- g) The Project Site does not contain any emergency facilities, nor does it serve as an emergency evacuation route. During construction the contractor would be required to maintain adequate emergency access for emergency vehicles as required by the City. Development of the site with single-family residential homes would not interfere with an adopted emergency response or evacuation plan. Access to the future residential development would be provided via East Highland Avenue and would be maintained for ingress/egress.

Additionally, the California Emergency Services Act requires the City to manage and coordinate the overall emergency and recovery activities within its jurisdictional boundaries. The City's Emergency Operations Plan includes policies and procedures to be administered by the City in the event of a disaster. During disasters, the City of Redlands is required to coordinate emergency operations with the County of San Bernardino. Policies within the City's General Plan and updates to the City's Emergency Plan, as required by State law, would ensure the Proposed Project would not interfere with adopted policies and procedures. Therefore, no impacts identified or anticipated, and no mitigation measures are required.

- h) The City of Redlands General Plan references San Bernardino County Fire Safety Overlay maps for areas within the City that could potentially be impacted by wildland fires. According to County of San Bernardino Fire Safety Overlay Map FH31B, the Project Site does not occur within a fire safety area. The Proposed Project is located 1.40 miles northwest of the nearest identified hazardous fire area within City boundaries. The Project Site is located within an urban area of the City and would not expose people or structures to a significant risk of loss, injury or death involving wildland fires.

Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
9. HYDROLOGY AND WATER QUALITY. <i>Would the project:</i>	()	()	(✓)	()
a) Violate any water quality standards or waste discharge requirements?	()	()	(✓)	()
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	()	()	()	(✓)
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	()	()	(✓)	()
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	()	()	(✓)	()
e) 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?	()	()	(✓)	()
f) Otherwise substantially degrade water quality?	()	()	()	(✓)
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	()	()	()	(✓)
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	()	()	()	(✓)
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	()	()	()	(✓)

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
j) Inundation by seiche, tsunami, or mudflow?	()	()	()	(✓)

Discussion:

a) The Proposed Tentative Tract Map 20065 would disturb approximately 10.44 acres and is therefore subject to the National Pollution Discharge Elimination System (NPDES) permit requirements. The Proposed Project Contractor will be required to prepare a SWPPP to: 1) identify pollutant sources that may affect the quality of discharges of storm water associated with construction activities; and 2) identify, construct and implement storm water pollution control measures to reduce pollutants in storm water discharges from the construction site during and after construction. A SWPPP is based on the principles of Best Management Practices (BMPs) to control and abate pollutants. The SWPPP must include BMPs to prevent project-related pollutants from impacting surface waters. These would include but are not limited to street sweeping of paved roads around the site during construction, and the use of hay bales or sand bags to control erosion during the rainy season. BMPs may also include or require:

- The Project Proponent shall avoid applying materials during periods of rainfall and protect freshly applied materials from runoff until dry.
- All waste to be disposed of in accordance with local, state and federal regulations. The Project Proponent shall contract with a local waste hauler or ensure that waste containers are emptied weekly. Waste containers cannot be washed out on-site.
- All equipment and vehicles to be serviced off-site.

In addition to complying with NPDES requirements, the City also requires the preparation of a Water Quality Management Plan (WQMP) for development projects that fall within one of eight project categories established by the RWQCB. In September 2017 Hicks & Hartwick, Inc. completed a Preliminary Water Quality Management Plan for the Proposed Project (available at the City for review) to comply with the requirements of the City of Redlands and the NPDES Area Wide Stormwater Program. Mandatory compliance with the Proposed Project's WQMP, in addition to compliance with NPDES Permit requirements, would ensure that all potential pollutants of concern are minimized or otherwise appropriately treated prior to being discharged from the Project Site. Implementation of the Proposed Project would not violate any water quality standards or waste discharge requirements. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

b) The Project Site is within the service area of the City of Redlands Municipal Utilities Department for water service. The City currently utilizes water from local groundwater basins, local surface water, and imported water from the San Bernardino Valley Municipal Water District. Redlands operates two surface water treatment plants and operates 15 wells, 37 booster pumps, 18 reservoirs, and 400 miles of transmission and distribution lines to provide water to its customers. The capacity of the City's 18 reservoirs is a total of 54.45 million gallons.

As identified in the City of Redlands General Plan, the Project Site is not used for groundwater recharge. The Proposed Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

- c/d) The Project Site was surveyed for potentially jurisdictional drainages by ECORP in July 2018 (ECORP Consulting, Inc. July 2018. Jurisdictional Delineation) The Delineation Area was described as being primarily composed of undisturbed land within private property. The northern end of the Delineation Area contains a headwall and earthen berm that directs water flow into a three-foot culvert that runs beneath Highland Avenue north of the Project site. Upstream and at the southern end of the Delineation Area, the jurisdictional feature originates from alongside a private driveway near the southeastern terminus of Redlands Street. The ephemeral drainage enters into an underground culvert beneath Highland Avenue. This culvert conveys water downstream in a northwest direction and eventually enters the Mill Creek Zanja, which is a tributary to the Santa Ana River. Overland flow or flow via smaller drainages reach main drainages that are ultimately tributary to the Santa Ana River. A total of 0.029 acre of potential Waters of the U.S were mapped within the Delineation Area which would require a permit pursuant to Section 404 of the California Water Act (CWA) and certification or waiver in compliance with Section 401 of the CWA. A total of 0.066 acres of ephemeral drainage measuring 250 feet in length was mapped within the Delineation Area and considered state jurisdiction under California Fish and Game Code Section 1600. The alteration of these features would require a permit pursuant to Section 1600 of the California Fish and Game Code. A total of 0.131 acre of potential CDFW jurisdiction was also mapped within the Delineation Area. No wetlands were suspected.

As the project is currently planned, jurisdictional features would be filled or altered. Because of this, permits from the USACE, CDFW, and SWRCB will be required for impacts to federal and state jurisdictional waters. The application process will entail submittal of a Pre-Construction Notification to the USACE, an application for Water Quality Certification with the SWRCB (submitted to the Santa Ana RWQCB), and a Notification of Lake or Streambed Alteration to be filed with the local office of the CDFW. Permits from each respective agency will need to be completed prior to disturbance of the jurisdictional waters present on the Project site.

The Proposed Project includes two bioinfiltration trenches on the northwestern edge of the Project Site adjacent to Highland Avenue and one infiltration basin on Lot A at the northeastern portion of the Project Site near the intersection of Highland Avenue/Redlands Street/Lincoln Avenue. The bioinfiltration trenches include two catch basins and storm drains with a combined design capture volume of 11,496 ft³. The infiltration basin has a design capture volume of 7,076 ft³. With implementation of the Proposed Project's on-site storm water infiltration and bioinfiltration basin system as described in the Preliminary WQMP and shown on Figure 3, no alteration of the course of on-site drainages would substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site and there would be no substantial erosion or siltation on- or off-site. No further significant adverse impact is identified or anticipated, and no mitigation measures are required.

- e) Prior to issuance of grading permits, the Project Proponent shall coordinate the design of the infiltration basin and the bioinfiltration trenches and obtain approval of all flood control and storm drain structures. The Project Proponent shall provide evidence of approval to the City Public Works Department. Flood control and storm drain improvements must be consistent with any master planning efforts of San Bernardino County to the satisfaction of the City Engineer. Consistency with these requirements would be ensured by the City of Redlands project review, approval, and permitting process.

As stated in the Preliminary WQMP, any potential increase in post-development volume from pre-development conditions on-site would be mitigated through the use of the infiltration basin in the northeast corner and the bioinfiltration trenches in the northwest corner. Flows from large storms and sheet flows that are transmitted from the north will be allowed to leave the Project Site via proposed drain pipes and concrete channels. The Proposed Project would not create or contribute runoff water which would exceed the capacity of the City's existing or planned storm water drainage system or provide substantial additional sources of polluted runoff. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

- f) The Proposed Project does not present any other conditions that could result in the substantial degradation of water quality. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.
- g,h) Review of the San Bernardino County Land Use Plan, General Plan Hazard Overlays, Sheet FH31 B Redlands, and FEMA Flood Hazard Map, Figure 3a indicates that the Project Site is located within Zone X (an area of 0.2 percent annual change flood; and one percent annual change flood (100 year flood) with average depths of less than 1.0 foot or with drainage areas less than 1.0 square mile). Therefore, no impacts are identified or anticipated, and no mitigation measures are required.
- i) The Project Site is not located within a dam inundation area as identified in the City of Redlands General Plan Figure 7-3 Flood Hazards. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.
- j) The Project Site is not located in a coastal area. There are no large bodies of water or water storage facilities that exist within the area; therefore, impacts from a seiche and tsunami are not anticipated. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
10. LAND USE AND PLANNING. <i>Would the project:</i>				
a) Physically divide an established community?	()	()	()	(✓)
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	()	()	()	(✓)
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	()	()	()	(✓)

Discussion:

a-b) The Project Site and surrounding parcels are located within the East Valley Corridor Planning subarea. The Project Site is designated in the City's General Plan as Low Density Residential. Surrounding properties to the north and west are also designated Low Density Residential, properties to the south are designated Agriculture and properties to the east are designated Low Density Residential and Public/Institutional. As shown on the City's Zoning Map, the Project Site occurs within the Education (E) zone, and properties to the north, west and south of the Project Site are zoned Suburban Residential (R-S). The properties to the east are zoned Education (E) and Suburban Residential (R-S).

The Applicant is requesting approval of a Zone Change from E to R-S which would provide consistency with the General Plan that currently designates the Project Site as Low Density Residential as well as surrounding properties. Approval of the Project would not physically divide an established community as surrounding land uses include single-family residential. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

c) There is no habitat conservation plan or natural community conservation plan within the area surrounding the Project Site and therefore, no applicable habitat conservation plan or natural community conservation plan. No habitat conservation lands are required to be purchased as mitigation for the Proposed Project. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
11. MINERAL RESOURCES. <i>Would the project:</i> 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?	()	()	(✓)	()
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?	()	()	(✓)	()

Discussion:

- a) According to the City of Redlands General Plan Figure 6-4: Mineral Resources, the Project Site and surrounding area are designated Mineral Resource Zone 3 (MRZ-3). This designation is given to areas containing known or inferred mineral occurrences of undetermined mineral resource significance. The Project Site is 10.44 acres and has a land use designation of Low Density Residential in the City of Redlands General Plan. Based on the surrounding residential and educational uses, the Project Site's land use designation, its size and accessibility, the Project Site would not be suitable or financially feasible for a mine operation. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.
- b) The Project Site is located 3.75 miles southeast of two mine sites that occur in the City of Redlands and mine locally important mineral resources. The Project Site has a land use designation of Low Density Residential and is not designated for the activities associated with mining, nor is the surrounding area that is currently developed with single-family residences, a school, and citrus groves. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
12. NOISE. <i>Would the project result in:</i> a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	()	()	(✓)	()
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	()	()	(✓)	()
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	()	()	(✓)	()

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	()	()	(✓)	()
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	()	()	()	(✓)
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	()	()	()	(✓)

Discussion:

- a) Noise can be measured in the form of a decibel (dB), which is a unit for describing the amplitude of sound. The predominant rating scales for noise in the State of California are the Equivalent-Continuous Sound Level (L_{eq}), and the Community Noise Equivalent Level (CNEL), which are both based on the A-weighted decibel (dBA). L_{eq} is defined as the total sound energy of time-varying noise over a sample period. CNEL is defined as the time-varying noise over a 24-hour period, with a weighting factor of 5 dBA applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and 10 dBA applied to events occurring between 10:00 p.m. and 7:00 a.m. defined as sleeping hours). The State of California’s Office of Noise Control has established standards and guidelines for acceptable community noise levels based on the CNEL and L_{dn} rating scales. The purpose of these standards and guidelines is to provide a framework for setting local standards for human exposure to noise. Redlands Municipal Code Section 8.06.080 limits interior noise levels of residential development to 45 dBA at all times; and Section 8.06.070 for exterior noise levels for a single-family residential zone are limited to 60 dBA between 7:00 a.m. and 10:00 p.m., and 50 dBA between 10:00 p.m. and 7:00 a.m. The noise issues related to the proposed land use and development have been evaluated based on analysis that was performed as part of the City of Redlands General Plan Update and are summarized herein.

Major noise sources within the vicinity of the Project Site include traffic noise from Ford Street and from 5th Avenue. As shown in the City of Redlands 2017 General Plan Update and Climate Action Plan Environmental Impact Report Table 3.12-4 - Existing Traffic Noise Levels, traffic noise as measured from the roadway segment of Ford Street between Citrus Avenue and Highland Avenue, at a distance of 101 feet from the centerline of Ford Street a measurement of 60 dBA was recorded. The Project Site occurs approximately 500 feet from the centerline of Ford Street and therefore exposure of persons to traffic noise above 60 dBA is not anticipated. Moore Middle School occurs east of the Project Site. Noise associated with school bells, buses and drop-off/pick-up of students would not result in excessive noise at the Project Site as noise levels associated with schools generally occurs during day-light hours and is not constant (i.e. bells ring twice within an hour and are not constant). Exposure of persons to or

generation of noise levels in excess of standards established for the residential development is not anticipated. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

- b) Construction activities associated with single-family homes would not require the use of equipment which would generate excessive ground borne vibration or ground-borne noise levels. Construction activities can produce vibration that may be felt by adjacent uses. Although the primary sources of vibration during construction would be from bulldozers and vibratory rollers, other vibratory equipment could be used during installation of pavement over the entire site. The vibration intensity (peak particle velocity (ppv) in inches/second) is on the vertical scale and the vibration frequency is on the horizontal scale. A bulldozer could produce a ppv of up to 0.089 inch per second at 25 feet. Sensitive receptors in excess of 25 feet from the project boundary include a school, and single-family residents. A few heavy duty trucks can be expected to visit the Project Site to deliver supplies during construction. These trucks would not be anticipated to exceed 0.10 in/sec ppv at 10 feet (Caltrans 2002). Predicted operational-related vibration levels at the nearest off-site structures (i.e., single-family residences along roadways within the vicinity), which are located in excess of 10 feet from the traveled roadway segments (i.e., Ford Street, East Highland Avenue), would not be anticipated to exceed even the most conservative threshold of 0.2 inch/second ppv. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.
- c,d) The Proposed Project is projected to generate approximately 274 daily vehicle trips, 21 of which are anticipated to occur during the morning peak hour and 29 of which are anticipated to occur during the evening peak hour (Kunzman Associates, Inc. May 2018. Focused Traffic Analysis). The study analyzed Highland Avenue and two intersections including: 1) Highland Avenue/Street "A" 2.) Highland Avenue/Street "C." Highland Avenue runs east-west and is an undivided, two lane roadway that is classified as a Collector street in the City of Redlands General Plan Circulation Element. Existing average daily traffic volume on Highland Avenue adjacent to the Project Site is currently operating at Level of Service A.

Post-construction noise associated with the Proposed Project would be project-generated traffic. Existing and future traffic noise along the Proposed Project streets is not considered significant. The proposed use is consistent with the General Plan and existing surrounding land uses (i.e. existing residential development to the north, east, and west, and agriculture and residential to the south). The Project Proponent would be required to comply with the City Municipal Code Section 8.06.090 during construction. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

- e) The Project Site is not located within an airport land use plan and is not within two miles of a public airport. The Project Site is located outside of Redlands Municipal Airport Compatibility Map and outside the Airport Compatibility Zones in the City of Redlands General Plan Figure 7.7: Airport Hazards. The Site is located 2.25 miles south of Redlands Municipal Airport and is not within an airport safety review area as identified in the San Bernardino County General Plan (Hazard Overlay Map FH31 B). The Proposed Project would not expose people residing or working in the project area to excessive noise levels. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

- f) There are no private airstrips within the vicinity of the Project Site. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
13. POPULATION AND HOUSING. <i>Would the project:</i> a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	()	()	(✓)	()
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	()	()	()	(✓)
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	()	()	()	(✓)

Discussion:

- a) Construction activities at the site would be short-term and are anticipated to draw employees from the existing pool of construction labor in the region. The Proposed Project is the subdivision of 10.44 acres for future development of 28 single-family residences and a ZC from Education to Suburban Residential. The development is anticipated to generate a ratio of 2.65 persons per unit or approximately 75 additional residents. According to the U.S. Census Bureau, the City of Redlands population in 2017 was 71,554. The direct increase in population due to the Proposed Project would be .001 percent of the 2017 population. The Proposed Project would be developed in accordance with the City's General Plan and Development Code and the associated population growth would be minimal. There are no public services or utilities that would require extension to serve the Proposed Project. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.
- b) The Project Site is currently vacant. The Proposed Project is residential development on a currently vacant 10.44-acre property. The Proposed Project therefore would not reduce the number of existing housing units, displace people, or necessitate the construction of replacement housing elsewhere. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.
- c) The Proposed Project would not displace any people as the Project Site is currently vacant and housing would not be required elsewhere. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>14. PUBLIC SERVICES. <i>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:</i></p>				
a) Fire protection?	()	()	(✓)	()
b) Police protection?	()	()	(✓)	()
c) Schools?	()	()	(✓)	()
d) Parks?	()	()	(✓)	()
e) Other public facilities?	()	()	(✓)	()

Discussion:

- a) Fire Protection – Fire protection is provided by the City of Redlands Fire Department (emergency operations, fire prevention services, and emergency medical services). The Fire Department consists of approximately 55 total sworn personnel, including 18 firefighter/paramedics and 37 firefighter/EMTs and covers an area of 37 square miles. At project buildout, city-wide level of service is expected to be 0.76 firefighters per 1,000 residents. Fire Station 261 serves the Project Site and is located at 525 East Citrus Avenue, approximately 1.4 miles northwest of the Project Site. The Proposed Project is required to provide a minimum of fire safety and support fire suppression activities, including type and building construction, fire sprinklers, and paved fire access. The Fire Department and the Building Division (part of the Development Services Department) enforce fire safety standards during review of building plans and inspections. The City maintains a joint response/automatic aid agreement with the fire departments in neighboring cities including Colton, Loma Linda, and San Bernardino. Following receipt of required development fees (including permit and inspection fees) would ensure impacts to fire protection services are lessened. Therefore, less than significant adverse impacts are identified or anticipated, and no mitigation are required.
- b) Police Protection –The City of Redlands Police Department provides police protection for the Project Site and vicinity. The Redlands Police Department personnel is made up of approximately 100 volunteers, 80 sworn officers and 58 full and part-time civilians, resulting in a service level of 1.12 officers per 1,000 residents. The Police Department contains an Operations Division and an Investigations and Support Services Division. In addition to sworn patrol officers, the Department has several sub-units, including Investigations, the Multiple Enforcement Team, Narcotics, and volunteers. Police services are generally financed through the General Fund. The Project Developer will pay Development Impact Fees, which have been established by the City to fund public facilities, including police. The project and its future residents will also provide additional revenue to the City resulting from increased property tax assessment revenue which will

assist in funding police operations. Additionally, the Project will be required to provide and implement a site security plan during construction to ensure that impacts from construction site theft are kept at a less than significant level. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

- c) Schools – School services within the City of Redlands are provided by the Redlands Unified School District. The Proposed Project is anticipated to generate approximately 18 students; based on the RUSD student generation factors the project would generate approximately eight (8) elementary school students, four (4) middle school students, and six (6) high school students. The following schools provide educational services to the project area: Franklin Elementary School (850 E. Colton Avenue), Moore Middle School (1500 E. Highland Avenue), and Redlands High School (840 E. Citrus Avenue).

The proposed development would not generate a significant number of students requiring new school facilities; K-12 students would attend RUSD schools, a local charter school, or be home schooled. According to the National Center for Education Statistics website, in 2014 approximately 5-9.9 percent of total public-school students in California were enrolled in charter schools. Nationally, according to the website, approximately five (5) percent of public-school students were homeschooled in 2014. With the collection of development impact fees, impacts to schools would be lessened. Therefore, less than significant adverse impacts are identified or anticipated, and no mitigation measures are required.

- d) Parks – The City of Redlands has a total of 17 developed parks and 10 undeveloped planned parks. Redlands Unified School District has 20 locations that are designated open space due to their recreational uses for the public (i.e. tennis courts, playgrounds, recreational amenities) within the City. These facilities are included in the park inventory due to the joint-use agreement between the City and Redlands Unified School District. The City has a total of 424 acres of existing parks and recreational areas. The City's General Plan adopted the park standard of five acres per 1,000 residents; build-out of the City would result in a need for approximately 55 acres of new parkland.

The Proposed Project would increase the City of Redland's population by 75 residents and need for park space by 0.375 acres. The City of Redlands General Plan implements goals and policies provided in the General Plan to mitigate the shortage of park space by means of allowing access to trails, and recreational areas such as community centers, fitness centers, and senior centers throughout the City. Continued implementation of policies and goals provided in the General Plan, and collection of developer impact fees would also ensure impacts to parks are lessened. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

- e) Maintenance of Public Facilities: The Proposed Project's relatively low generation of peak hour vehicle trips would not result in a significant amount of deterioration to roadways within the vicinity. The Proposed Project is projected to generate approximately 274 daily vehicle trips, 21 of which are anticipated to occur during the morning peak hour and 29 of which are anticipated to occur during the evening peak hour. The Project Proponent would be required to pay fees established by the Municipal Utilities & Engineering Department to minimize impacts to public roads (refer to Section 17 Traffic and Circulation of this Initial Study). Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

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

Discussion:

a-b) The Proposed Project is anticipated to generate 75 residents. According to the City of Redlands General Plan (Figure 7-1 Existing and Planned Parks), Moore Middle School is located 0.15 miles east of the Project Site and Ford Park is located 0.55 miles southwest of the Project Site. Implementation of policies listed in Parks and Recreational Open Space Section under goals and policies in the General Plan, and collection of developer impact fees would ensure impacts to recreational facilities are less than significant. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
16. TRANSPORTATION/TRAFFIC. <i>Would the project:</i> a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	()	()	(✓)	()
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	()	()	(✓)	()
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	()	()	()	(✓)
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	()	(✓)	()	()

Issues and Supporting Information Sources:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e)	Result in inadequate emergency access?	()	()	()	(✓)
f)	Result in inadequate parking capacity?	()	()	()	(✓)
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	()	()	()	(✓)

Discussion:

- a, b) On May 24, 2018, a Focused Traffic Analysis was prepared for the Proposed Project by Kunzman Associates, Inc., and is available for review at the City’s Development Services Department. The Focused Traffic Analysis provides an assessment of the traffic impacts that may result from the approval and development of the Proposed Project. The report identifies traffic recommendations that are necessary to maintain the established level of service standard.

Trip generation estimates were based on the Institute of Transportation, Trip Generation, 10th Edition, 2017. Trip generation rates were determined for daily traffic and morning peak hour inbound and outbound traffic, and evening peak hour inbound and outbound traffic for the proposed land use. The Proposed Project is projected to generate approximately 274 daily vehicle trips, 21 of which are anticipated to occur during the morning peak hour and 29 of which are anticipated to occur during the evening peak hour. The study analyzed Highland Avenue and two intersections including: 1) Highland Avenue/Street “A” 2.) Highland Avenue/Street “C.” Highland Avenue runs east-west and is an undivided, two lane roadway that is classified as a Collector street in the City of Redlands General Plan Circulation Element. Existing average daily traffic volume on Highland Avenue adjacent to the Project Site is currently operating at Level of Service A.

The Project Site is proposed to be developed with 28 single-family residences. Four external residences will have direct access via a driveway to Highland Avenue and the remaining 25 internal residences will have access to Highland Avenue via internal roadways Street “A” and Street “B.” Analysis was conducted for a vehicle’s ability to turn left into the Proposed Project via Highland Avenue during morning peak hours and evening peak hours. Based on the trip generation, the proposed 25 internal dwelling residences are projected to generate approximately five inbound trips during the morning peak hour and 16 inbound trips during the evening peak hour. A conservative estimate of 50 percent of projected trips returning to the Proposed Project was assumed to take Highland Avenue. Those estimates calculate into three westbound left turning vehicles during morning peak hours (approximately one westbound left turning vehicle every 20 minutes) and eight westbound left turning vehicles during the evening peak hour (approximately one westbound left turning vehicle every seven minutes). Westbound left turns could be further reduced by half if the number of vehicles inbound turning left are divided by Street “A” and Street “C”. Sufficient gaps during the morning and evening peak hours are projected to be provided by existing eastbound vehicles to allow vehicles desiring to turn left into the Proposed Project at Street “C” and Street “A” from Highland Avenue and therefore will not interrupt traffic flow. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

- c) The Project Site is not located within an airport land use plan and is not within two miles of a public airport. The Project Site is located outside of Redlands Municipal Airport Compatibility Map and is located 2.25 miles south of Redlands Municipal Airport. The Project Site is not within an airport safety review area as identified in the San Bernardino County General Plan (Hazard Overlay Map FH31 B) and is not located in the vicinity of a private airstrip. The proposed Tentative Tract Map would not change air traffic patterns or create a safety hazard to people or aircraft. Therefore, no impact is identified or anticipated, and no mitigation measures are required.
- d) A sight analysis was conducted for Highland Avenue at proposed Street "A" and Street "C." Stopping sight distance is defined as the distance required by the driver of a vehicle, traveling at a given speed, to bring the vehicle to a stop after an object on the road becomes visible. Corner sight distance provides 7-1/2 seconds for the driver exiting the Project driveway to complete the necessary maneuver while the approaching vehicle travels at the assumed design speed of the main roadway. According to the Highway Design Manual, the minimal stopping sight distance for a car traveling on Highland Avenue is 150 feet and a minimum corner sight distance of 275 feet.

A driver's eye for a vehicle located at the project driveway exiting onto Highland Avenue is situated at 42 inches above pavement and 15 feet back from the edge of the travel way. A driver traveling along Highland Avenue would require a minimum unobstructed sight line of 150 feet for stopping sight distance and 275 feet for corner sight distance. To have adequate visibility, an area between the line of sight and the centerline of the nearest approaching lane is created and is defined at the restricted use area. Analysis concluded that the Proposed Project access via Street "A" and Street "C" to Highland Avenue would provide sufficient stopping distances and corner sight distances at the posted 25 miles per hour speed limit. Sight distances at the Project accesses shall comply with standard California Department of Transportation and City of Redlands sight distance standards. A restricted use area, originating at the intersection of Highland Avenue and Redlands Street and extending approximately 375 feet west, shall be implemented to ensure proper visibility for vehicles traveling along Highland Avenue. Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are:

- TR-1: The Project Proponent shall ensure that the restricted use area shall be kept clear of obstructions including but not limited to trees, light poles, monument signing, etc. including landscaping over 18 inches in height.**
- TR-2: The Project Proponent shall ensure that curbs along the restricted use area are painted red to not allow on-street parking.**

- e) The Proposed Project borders Highland Avenue and provides access to the Site via Street "A" and Street "C." The City of Redlands Fire Department has reviewed the site plan for emergency access and determined that the proposed drive aisle and width would be sufficient. Therefore, no impacts are identified or anticipated, and no mitigation measures would be required.
- f) The Proposed Project will comply with Section 18.164.080 Single-Family Residential Dwellings, of the City Municipal Code requiring the Proposed Project to provide two covered parking spaces in a garage or carport for every dwelling unit. No impacts from

inadequate parking spaces would result. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

- g) The Proposed Project would not conflict with existing policies regarding alternative transportation. Currently, there are no designated bike lanes or bus stops along Highland Avenue. The nearest bicycle lanes are located on Ford Street, west of the Project Site. Sidewalks would be constructed as part of the Proposed Project's improvements. No impediment on public transit facilities would occur. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>17. TRIBAL CULTURAL RESOURCES. <i>Would the project:</i></p> <p>a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?</p>	()	(✓)	()	()

Discussion:

- a) California Assembly Bill 52 (AB 52) was approved by Governor Brown on September 25, 2014. AB52 specifies that CEQA projects with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource may have a significant effect on the environment. As such, the bill requires lead agency consultation with California Native American tribes traditionally and culturally affiliated with the geographic area of a proposed project, if the tribe requested to the lead agency in writing to be informed of proposed projects in that geographic area. The legislation further requires that the tribe requests consultation, prior to determining whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. The bill applies to CEQA projects that have a Notice of Preparation or a Notice of Negative Declaration or Mitigated Negative Declaration filed on or after July 1, 2015.

In accordance with AB 52, tribes must first request to be on the Lead Agency's notification list to receive information about a known project and a requested consultation. Tribes that have expressed interest in receiving information from the City of Redlands include: the Gabrieleno Band of Mission Indians – Kizh Nation, Morongo Band of Mission Indians, Soboba Band of Luiseno Indians, San Manuel Band of Mission Indians, and the Torres Martinez Desert Cahuilla Indians.

City of Redlands Planning Division mailed a notice of tribal consultation to the interested tribes on May 21 2018. Request to consult were received from the Gabrieleno Band of Mission Indians – Kizh Nation, Morongo Band of Mission Indians, Soboba Band of Luiseno Indians, and San Manuel Band of Mission Indians. A consultation conference call was held on September 20, 2018, with all four consulting tribes. Draft Tribal Cultural Resources mitigation measures as well as revisions were sent to all consulting tribes along the process of refining mitigation measures that meets the needs of all consulting tribes. Upon all consulting tribes agreeing on the final Tribal and Cultural Mitigation Measures, a closure letter was sent to all consulting tribes on April 4th informing the

tribes of the final Tribal and Cultural Mitigation Measures. The final Tribal and Cultural Mitigation Measures have been incorporated in this document as TCR-1 through TCR-9.

However, in the event tribal cultural are unearthed, possible significant adverse impacts may result, and the following mitigation measure is required as a condition of project approval to reduce these impacts to a level below significant.

TCR-1: Native American monitor from the consulting tribe(s), alongside an archaeological monitor with at least 3 years of regional experience, shall be present during all ground disturbing proceedings, on a rotating basis, including but not limited to, all site preparation/construction/demolition based activities, as well as archaeological surveys, testing and data recovery. Proof of monitor obtainment, such as contracting agreements and monitor hires, shall be provided to the City prior to the issuance of any ground disturbance-related permits.

TCR-2: Prior to the issuance of any ground disturbance-related permits, the City shall contact interested tribes to facilitate and coordinate communications with the contractor to develop a mutually-acceptable Monitoring and Treatment Plan (MTP). The MTP shall be reflective of the Mitigation Measures/Conditions of Approval adopted for the project, and include additional details regarding the monitoring process and schedule. The MTP shall be enforced by the City throughout the life of the project.

TCR-3: If a cultural resource is discovered within the project area, ground disturbing activities shall be suspended 100 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier shall be constructed by the developer. Work on other portions of the project outside of the buffer area may continue during this assessment period, provided an archaeological and Native American monitoring team are present during the effort. Representatives from consulting tribes, the contractor, and the City Development Services Department shall confer regarding appropriate treatment of the discovered resource(s). A research design shall be developed and will include a plan to evaluate the resource for significance under CEQA and NRHP criteria. Additionally, the consulting Tribes will provide input regarding the significance of the find and its potential as a Tribal Cultural Resource (TCR). Should all Parties agree that a resource is not significant, avoidance or mitigation is not warranted, and therefore the project may resume. However, should any consulting Tribe wish to obtain this material for any reason, they may do so with the approval of all Parties.

TCR-4: Should the resource be deemed archaeologically significant and/or constitute a TCR, then the applicant and City shall make a good faith effort to avoid the resource (i.e. project redesign, capping, etc.). Should avoidance of the resource not be feasible, and the removal of the resource(s) is necessary to mitigate impacts, the research design shall be updated to include a Data Recovery Plan that contains a comprehensive discussion of sampling strategies, resource processing, analysis, temporary curation, reporting protocols/obligations, and final disposition

of the resource(s). The proposed efforts outlined within the Data Recovery Plan shall be reviewed and approved by all parties prior to implementation. Any analysis performed on the resources shall be completed within one hundred and twenty (120) days from the initial recovery of the items from the field.

- TCR-5:** Significant resources collected from the project area shall be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by the consulting tribes, the landowner, and the City, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the project have been completed, all monitoring has ceased, and all required recordation of resources have been completed. All reburials are subject to a reburial agreement that shall be developed between the landowner and the consulting tribes outlining the determined reburial process/location, and shall include measures and provisions to protect the reburial area from any future impacts (vis a vis project plans, conservation/preservation easements, etc.).
- TCR-6:** Should avoidance and on-site reburial be deemed infeasible with regards to final disposition of the resource(s), or should the consulting tribes be unable to come to a consensus as to the appropriate treatment of the resource(s) within one hundred and twenty (120) days from the initial recovery of the items, the materials shall be curated. The landowner shall relinquish all ownership and rights to this material and confer with the consulting tribes to identify an American Association of Museums (AAM)-accredited facility within the 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.
- TCR-7:** Within sixty (60) days following the completion of the project all ground disturbing activities including but not limited to all site preparation/construction/demolition, or within thirty (30) days following the final disposition of resource(s), a Monitoring Report shall be completed which outlines any discoveries made during project implementation, as well as the protocol that was followed with regards to assessment, treatment, and disposition of the discovery. The draft of this document, as well as the drafts of any other documents discussing significance, treatment, and disposition of findings, as well as any site records, shall be prepared by the archaeologist and submitted to the City of Redlands Development Services Department and the consulting tribes for their review and approval. All final reports and site records are to be

submitted to the local CHRIS Information Center, the City of Redlands, and the consulting tribes.

- TCR-8:** In the event that any human remains are discovered during implementation of the Project, ground disturbing activities shall be suspended 100 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier shall be constructed by the developer. The on-site lead/foreman shall then immediately who shall notify the consulting tribes, the applicant/developer, and the City. The City and/or the applicant/developer shall then immediately contact the County Coroner regarding the discovery. 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 NAHC within twenty-four (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, City, 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 forty-eight (48) hours of the site visit, as required by California Public Resources Code § 5097.98.
- TCR-9:** 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).

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
18. UTILITIES AND SERVICE SYSTEMS. <i>Would the project:</i> a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	()	()	(✓)	()
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	()	()	(✓)	()
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	()	()	()	(✓)
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	()	()	(✓)	()
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	()	()	(✓)	()
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	()	()	(✓)	()
g) Comply with Federal, State, and local statutes and regulations related to solid waste?	()	()	()	(✓)

Discussion:

a, b, e) The City of Redlands wastewater is treated at a City-owned wastewater treatment plant located on the south side of the Santa Ana River, at the north end of California Street. It is a secondary plant which disposes solids off-site and includes basins for effluent to percolate into the underlying aquifer after treatment. The Proposed Project would be served by the City of Redlands sewer collection system. The Proposed Project would generate wastewater that can be discharged to a municipal system with sufficient capacity. The existing flow at the Redlands Wastewater Treatment Facility is approximately 6 million gallons per day (MGD) and the plant's current design capacity is 9.5 million gallons per day (MGD).

The Proposed Project's water demand would be approximately 16,650 gallons per day (74 residents times 265 gallons per day). A conservative estimate of 65% of the total water use returning to wastewater flow results in 0.0166 MGD in additional flow to the City of Redlands Wastewater Treatment Facility. The Proposed Project is consistent with the General Plan for purposes of long-term facilities planning and would be

required to meet the requisites of the City of Redlands and the Santa Ana Regional Water Quality Control Board regarding wastewater quality. The Proposed Project would not require the construction of new wastewater facilities, exceed wastewater treatment requirements, or exceed wastewater treatment capacities.

The production and distribution of water in the Project area is serviced by the City of Redlands. The City provides water services to Redlands and areas in Mentone, and operates and maintains approximately 400 miles of pipeline, seven (7) pressure zones and has a maximum storage capacity of 54.5 million gallons per day. 2015 San Bernardino Valley Regional Urban Water Management Plan shows that water supplies will exceed the projected demands for the period of 2020 through 2040 in average year scenarios and multiple-dry year cases. Therefore, no significant adverse impacts are identified or anticipated related to wastewater and water facilities, and no mitigation measures are required.

- c) Drainage plans for the Project Site will be reviewed by the City's Engineer to ensure that the two bioinfiltration trenches and the infiltration basin would have sufficient carrying capacity for storm flows. No impacts are identified or anticipated, and no mitigation measures are required.
- d) It is estimated that the Proposed Project would have a water demand of approximately 16,650 gallons per day, or 18.65 acre-feet per year (af/year). The Proposed Project's water supply requirements would be met by the City's municipal water supply system. The Project Proponent would be required to pay new service fees, monthly meter charges, and monthly service fees for domestic water service, which would be calculated by the City. In the 2015 San Bernardino Valley Regional Urban Water Management Plan shows the City of Redlands projected water demand for 2020 to be 33,138 af/year and 35,715 af/year for the year 2040. In a multiple dry year scenario for 2020 demand would be 30,142 af/year and 32,649 af/year in 2040. Availability of supplies in a Multiple-Dry Year 3rd Year scenario is forecasted at 90% of average supply. Based on the City's available supplies, the City can continue to meet multiple and single dry year demands. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.
- f) The City of Redlands provides solid waste collection services. Solid waste not diverted to recycling or composting facilities is transported to the City Landfill located on California Street in the City of Redlands. The City Landfill is permitted to receive up to 350 tons per day. According to the California Integrated Waste Management Board's estimated solid waste generation rates for single-family residential, the Proposed Project is expected to generate approximately 218 pounds per day (28 homes times 7.8 pounds per home per day) or 0.109 tons per day. The landfill currently receives approximately 175 tons per day; therefore, there is sufficient airspace available at the landfill to accommodate the proposed residential use. Estimated project-generated waste represents approximately 0.01 percent of the total permitted waste received at the landfill. The solid waste collection system would not be affected by the development of the Project Site. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.
- g) The Proposed Project would be required to comply with City of Redlands Municipal Chapter 13.66 (Recycling Requirements for Specified Developmental Activity). Chapter 13.66 establishes requirements for recycling by specified development activities to

facilitate the City's compliance with state recycling mandates, remove architectural barriers to recycling and ensure the recycling of construction and demolition. The Proposed Project would comply with all applicable solid waste statutes and regulations. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

Issues and Supporting Information Sources:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
19. MANDATORY FINDINGS OF SIGNIFICANCE a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	()	(✓)	()	()
b) Does the project have 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)?	()	()	()	(✓)
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	()	()	()	(✓)

Discussion:

- a) A General Biological Resource Assessment was completed by ECORP Consulting, Inc. on November 11, 2016 and updated on July 19, 2017. The assessment included a biological survey of the Project Site and evaluation of the surrounding habitats and focused habitat assessment for species identified in the background data search.

The Project Site was formerly an orange grove that has since been cleared and is mostly non-herbaceous, disturbed, and ruderal. The Project Site also contains native trees including: the black willow (*Salix gooddingii*), coast live oak (*Quercus agrifolia*), California fan palm (*Washingtonia filifera*), and a pine species (*Pinus sp.*) etc. Near the drainage area that occurs within the northeast portion of the Site, there is riparian vegetation including mulefat (*Baccharis salicifolia*), common reed (*Phragmites australis*), nutsedge (*Cyperus sp.*), and rush (*Juncus sp.*).

The Project Site has the potential to contain two special status species including: burrowing owl (*Athene cunicularia*) and the San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*). Suitable habitat for the burrowing owl was inspected for potential presence or sign (burrows, pellets, tracks, whitewash, bones, and feathers) of the

species. Old agricultural and disked portions of the Site and dirt berms along the southern perimeter of the Project Site may provide suitable habitat for the burrowing owl; however, neither burrowing owls nor sign of the species were observed. Possible significant adverse impacts have been identified or anticipated and appropriate mitigation is included in this Initial Study.

In July 2018, a Jurisdictional Delineation was completed by ECORP Consulting, Inc. to determine potential impacts to jurisdictional areas as a result of the Proposed Project. An ephemeral drainage occurs on the Project Site and runs from south to north along the eastern boundary of the property. A field visit was conducted along with a search of available databases and documentation relevant to the Project Site. Suspected jurisdictional areas were checked for the presence of definable channels and/or wetland vegetation, riparian habitat, soils, and hydrology. The Ordinary High Watermark (OHWM) was used to calculate the creeks lateral extent of USACE jurisdiction. The ephemeral drainage meets the criteria of a streambed subject to CDFW jurisdiction due to characteristics such as defined channel bed and banks with associated riparian vegetation. The drainage is also considered to be Traditional Navigable Water due to what is considered to be a "significant nexus" with the Santa Ana River.

The ephemeral drainage meets the criteria of streambed subject to CDFW jurisdiction. The drainage has a defined channel bed and banks and associated riparian vegetation (i.e. black willow, mulefat (*Baccharis salicifolia*), common reed (*Phragmites australis*), nutsedge (*Cyperus* sp.), and rush (*Juncus* sp.) and habitat. Approximately 0.131 acres of CDFW jurisdictional streambed and .029 of Waters of the U.S. will be impacted by the Proposed Project. Impacts to surrounding areas near the ephemeral drainage are subject to the Clean Water Act (CWA) and Fish and Game Code (FGC) under the jurisdictions of U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW. The USACE has authority to permit the discharge of dredged or fill material in waters of the United States under Section 404 CWA. Any proposed permanent or temporary impacts to the drainage will likely require a Streambed Alteration Agreement from the CDFW, and CWA Sections 401/404 permits from the RWQCB and USACE. The proposed future development of TTM 20065 would have an impact on the jurisdictional drainage and permits will be required.

In April 2017, ECORP Consulting, Inc., Inc. performed a Cultural Resources Records Search for the Project Site. The cultural resource records search performed at the California State University, Fullerton, South Central Coastal Information Center, identified 18 previous cultural resource searches completed within a one-mile radius of the Project Site. None of the studies overlapped the Project area. The records search also identified a total of 19 cultural resources that have been previously recorded within a one-mile radius of the Project Site, none of which are located within the Project area. Of the 19 resources, 17 are historic in age and two are considered to be prehistoric. Resources include nine sites with standing structures, two irrigation feature sites, two historic-period refuse deposits, the Redlands canal, the Mill Creek Zanja, two historic-period streets, a prehistoric temporary camp, and a prehistoric food processing site.

Due to a low number of prehistoric resources recorded within a one-mile radius of the Project Site, it was determined that prehistoric sensitivity of the area is considered to be low. Possible significant adverse impacts have been identified or anticipated and appropriate mitigation measures are included in this Initial Study. No additional measures are warranted.

- b) Impacts associated with the Proposed Project would not be considered adverse or unfavorable. The Project is not anticipated to generate significant amounts of air pollutants, traffic or noise. No significant cumulative adverse impacts are expected with implementation of the proposed development, as the majority of the area is developed.

- c) Development of the site as proposed would not cause adverse impacts on humans, either directly or indirectly. Existing exterior noise levels from traffic as measured from the centerline of Ford Street between Citrus Avenue and Highland Avenue would not result in a noise impact at the Project Site. No significant cumulative adverse impacts are expected with implementation of the proposed development, as the majority of the area is developed.

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