

Final Environmental Impact Report



for

Tentative Tract Map 83232 Residential Project

SCH# 2021090009



City of
Lancaster

May 2022

Screencheck Final Environmental Impact Report

TTM 83232 Residential Project

Prepared for:

City of Lancaster
Community Development Division



Prepared by:



May 2022

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A. Introduction

After the publication, distribution, and public review of a Draft EIR, a Final Environmental Impact Report (Final EIR) must be prepared to address comments received on the draft document. Section 15132 of the CEQA Guidelines identifies the contents of the Final EIR as the following:

- Draft EIR or a revision of the draft;
- Comments and recommendations received on the Draft EIR either verbatim or in summary;
- A list of persons, organizations, and public agencies commenting on the Draft EIR;
- The responses of the Lead Agency to significant environmental points; and
- Any information added by the Lead Agency.

This Response Document has been prepared to document the comments and responses made on the Draft EIR for the proposed Tentative Tract Map 83232 Residential Project and to identify any revisions or additions needed to the EIR as a result of the comments received. This document provides supplementary information to the Draft EIR, and together with the draft document, constitutes the Final EIR for the proposed project.

A.1 Overview of the Proposed Project

The Tentative Tract Map 83232 Residential Project (proposed project), proposed by Royal Investors Group, LLC, would include the construction of 86 single-family detached homes on an undeveloped 20-acre parcel at the northwest corner of 60th Street West and West Avenue K-12 in the City of Lancaster, in northeastern Los Angeles County (Figure A-1). The project is located on Assessor's Parcel Number (APN) 3204-008-048, which is zoned R-7,000 (single-family residential, minimum lot size 7,000 square feet (sf)). The proposed project includes the subdivision of the 20-acre site into 86 single-family residential lots, variance for the reduction of lot width and lot depth standards, and the construction of 86 single-family detached homes. The single-family homes would be a combination of one-story and two-story American Traditional-style structures. The project also includes construction of the following roads to provide vehicle access to the new homes:

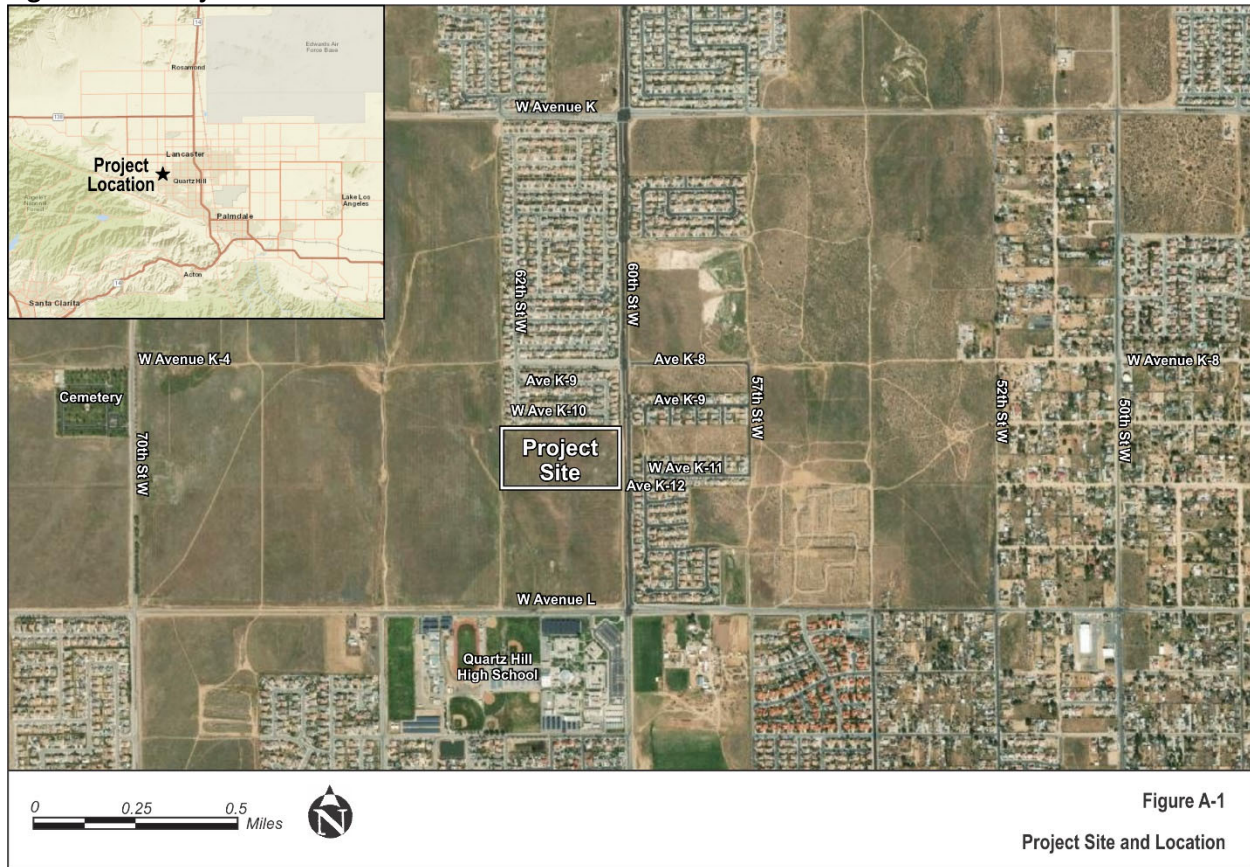
- Extending 62nd Street West and Hampton Street to the south.
- Constructing new Street "L," Street "M," Street "N," and a new Avenue K-12 cul-de-sac.

The proposed project would also extend the existing water and sewer lines that are available immediately north of the site to serve the development. These new utility lines would be buried underneath the new roadway segments.

The new buried utilities and new/extended roads would be built first. This would involve minor grading and trenching, followed by the installing new utility lines, backfilling, and paving the roads. Once utilities and roads are completed, multiple homes would be built simultaneously per phase, with a construction period lasting 2 to 3 years to complete all 86 homes.

As Lead Agency under the California Environmental Quality Act (CEQA), the City of Lancaster has prepared this EIR to evaluate the proposed project. CEQA requires the Lead Agency to consider the information contained in the EIR prior to taking any discretionary action on project-related applications. This EIR serves as a resource to the City and other permitting agencies during their respective permit processing of the proposed project.

Figure A-1 – Project Location



The project objectives are to:

- Make productive use of a vacant property by developing the site with residential uses consistent with the current City of Lancaster zoning designation.
- Increase the available single-family residential housing stock within the City of Lancaster.
- Build an integrated, high-quality development that has a range of single-family home sizes to offer home ownership opportunities attainable to a variety of household types and income levels.
- Expand the utilities and infrastructure necessary to support project site development, while reducing negative impacts to the greater community.

Section B (Project Description) of the Draft EIR provides a detailed description of the proposed project, including an overview of the project components, home details, and detailed descriptions of the project’s construction activities.

A.2 Summary of the Proposed Project’s Environmental Review Process

Following review and preliminary assessment of the application, and acting as the lead agency under CEQA, the City of Lancaster Development Services Department prepared and transmitted a Notice of Preparation (NOP) for this EIR on August 31, 2021. The NOP was circulated for a 30-day public review

period. In addition to distribution of the NOP, the City placed a newspaper notice in the Antelope Valley Press on August 31, 2021 and posted the NOP at the Los Angeles County Clerk.

No Responsible Agencies, Trustee Agencies, the Office of Planning and Research, or the project applicant requested a scoping meeting. Therefore, a public scoping meeting was not held. The City received a total of five comment letters during the 30-day scoping period. Appendix A of the Draft EIR contains a copy of the NOP, the newspaper notice, and copies of the letters received on the proposed project during scoping. A summary of the scoping process and comments received on the NOP is contained in Section A.4 of the Draft EIR.

The Draft EIR was released for public and agency review on February 25, 2022. The public and agency review and comment period on the Draft EIR was 45 days in length and ended at the close of the business day on April 11, 2022. During 45-day review period, the public had the opportunity to provide written comments on the contents and conclusions of the Draft EIR. Four public agencies provided written comments on the Draft EIR.

The NOA was distributed to agencies, organizations, and property owners within 500 feet of the project site. A newspaper advertisement was also published to announce the release of the draft document and to notice the public hearing held on the proposed project. The NOA was published in the Antelope Valley Press on February 25, 2022. Appendix 1 has been updated to include the NOA and newspaper notice announcing publication of the Draft EIR.

This Final EIR has been prepared to meet all of the substantive and procedural requirements of the CEQA (California Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 1500 et seq.). The City of Lancaster Development Services Department has designed this Final EIR to be used in conjunction with the content of the Draft EIR, consistent with State CEQA Guidelines Sections 15132 and 15088(d). It contains all written comments received on the Draft EIR, responses to the comments received on the Draft EIR, and all revisions to the text of the Draft EIR that were undertaken as a result of consideration of the comments received on the Draft EIR. In addition, a Mitigation Monitoring and Reporting Plan (MMRP) was prepared, consistent with CEQA Guidelines Section 15097. The proposed project and its related environmental review documentation (Draft and Final EIR) will be considered by the City of Lancaster Planning Commission at a noticed public hearing.

A.3 Availability, Organization, and Content of the Draft EIR

As noted in Section A.2 (Summary of the Proposed Project’s Environmental Review Process), this Final EIR is designed to be used in conjunction with its corresponding Draft EIR. The contents of the Draft EIR are incorporated by reference in this Final EIR and are not duplicated herein; only the Draft EIR text that has been revised as part of the finalization process is provided in this document, as further described in Final EIR Section C. A printed, bound copy of the Draft EIR is available for review at:

City of Lancaster
Attn: Cynthia Campana
Senior Planner
44933 Fern Avenue
Lancaster, California 93534
ccampana@cityoflanasterca.org

The Draft EIR was organized into an Executive Summary, eight chapters, and six technical appendices, as follows:

Executive Summary: Provides a description of the proposed project’s environmental review process, a summary of the proposed project attributes and its impacts, a brief description of the proposed project’s alternatives and identification of the environmentally superior alternative, and a summary of the proposed project’s areas of known controversy and issues in need of resolution.

Section A (Introduction): Contains a summary of the EIR’s purpose and the project objectives as well as comments received during project scoping.

Section B (Project Description): Provides details on the proposed project, including the general environmental setting, project background, construction plan, operation and maintenance, and required permits and approvals. Section B also includes the cumulative scenario, which provides a list of related projects and describes the methodology used in the cumulative assessment.

Section C (Environmental Setting, Analysis, and Mitigation Measures): Details environmental setting information, applicable regulations and standards, proposed project impacts, and proposed mitigation measures for specific resource areas. Section C.1 provides the approach to the environmental analysis, as well as a discussion of the resource areas for which the proposed project would result in no impacts or less-than-significant impacts. Detailed analyses for potential direct, indirect and cumulative environmental impacts of the proposed project are included in Section C.2, Transportation, and Appendix B, Initial Study, of the Draft EIR.

Section D (Alternatives): Provides a comparison of the proposed project’s impacts with those of project alternatives developed by the City of Lancaster.

Section E (Other CEQA Considerations): Addresses other applicable CEQA requirements, including an analysis of growth-inducing effects, significant irreversible commitment of resources, and significant effects that cannot be avoided.

Section F (References): Lists all of the information references cited in the Draft EIR.

Section G (Consultation and EIR Preparers): Lists the preparers of the Draft EIR.

Appendices: Includes the scoping materials, Initial Study Checklist, and the VMT Technical Study.

A.4 Availability, Organization, and Content of the Final EIR

Printed and electronic versions of this Final EIR can be accessed at the same locations as indicated for the Draft EIR in Section A.3 (Availability, Organization, and Content of the Draft EIR). The organization and content of this Final EIR is as follows:

Section A (Introduction): Provides the summary of the proposed project and its environmental documentation and review process.

Section B (Draft Environmental Impact Report Comments and Responses to Comments): Provides the written comments received on the Draft EIR and the City’s responses to these comments.

Section C (Revisions to the Draft Environmental Impact Report): Provides the revisions that have been made to the language of the Draft EIR for its finalization.

Appendices. This Final EIR adds the following new appendices.

- *Appendix D (Notice of Availability).* Updated to include the Notice of Availability of the Draft EIR and newspaper notice announcing the publication of the Draft EIR as well as the State Clearinghouse letter

acknowledging compliance with the State Clearinghouse review requirements for draft environmental documents.

- *Appendix E (Biological Resources Report, September 2005)*. Provides results of biological field survey of project site.
- *Appendix F (Biological Resources Report, September 2018)*. Provides results of biological field survey of project site.

B. Draft Environmental Impact Report Comments and Responses to Comments

B.1 Introduction

The Draft EIR for the Tentative Tract Map 83232 Residential Project was available for review and comment from February 25, 2022 through April 11, 2022 (45-day public review period). During this period, four written comment letters on the Draft EIR were submitted to the City of Lancaster Development Services Department.

As the lead agency under CEQA, and consistent with Section 15088 of the CEQA Guidelines, the City has reviewed each of the comments received on the Draft EIR and has prepared responses to these comments in this document. The commenters are listed in Table B-1, below, and comments letters are provided in full along with the responses in Section B.3 (Responses to Comments Received on the Draft Environmental Impact Report).

Consistent with Section 15088(b) of the CEQA Guidelines, the focus of the City’s responses to comments received on the Draft EIR is the disposition of environmental issues that are raised in the comments. CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the Draft EIR (CEQA Guidelines Section 15204(a)).

B.2 Responses to Comments Received on the Draft EIR

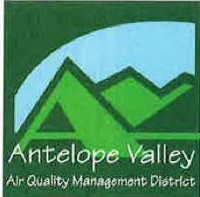
This section provides a copy of the comment letters and the City’s responses to the comments on the Draft EIR. Table B-1 lists the local and state agencies that provided written comments.

To facilitate review of specific comments and responses, each comment letter has been given a specific number designation (1, 2, etc.), as shown in Table B-1, and individual comments within each letter have been assigned a number (e.g., first comment in letter “1” would be assigned “1-1”, etc.). The responses to each numbered comment are included at the end of each letter.

Table B-1. Comment Letters Received on the Draft EIR

Number	Commenter	Agency/Organization	Date
1	Barbara Lods Operations Manager	Antelope Valley Air Quality Management District	March 21, 2022
2	Ronald M. Durbin Chief, Forestry Division Prevention Services Bureau	County of Los Angeles Fire Department	March 24, 2022
3	Miya Edmonson IGR/CEQA Branch Chief	California Department of Transportation	April 4, 2022
4	Erinn Wilson-Olgin Environmental Program Manager South Coast Region	California Department of Fish and Wildlife	April 11, 2022

Comment Letter 1: Antelope Valley AQMD



Antelope Valley Air Quality Management District
43301 Division St., Suite 206
Lancaster, CA 93535-4649

661.723.8070

In reply, please refer to AV0322/040

March 21, 2022

Cynthia Campana
City of Lancaster
44933 Fern Avenue
Lancaster, CA 93534

RE: NOA Draft Focused Environmental Impact Report for Tentative Tract Map 83232

Ms. Campana,

The Antelope Valley Air Quality Management District (District) has received the request to review NOA Draft Focused EIR for Tentative Tract Map 83232 located at the northwest corner of 60th Street West and Avenue K-12 (APN: 3204-008-048) on approximately 20 acres.

Prior to initiating any construction activity, the District requires that the proposed project comply with all requirements outlined in District Rule 403, Fugitive Dust, including submission and approval of a Dust Control Plan and installation of signage. During the construction phase, all disturbed areas should be stabilized so that no visible fugitive dust leaves the property line and does not impact traffic or neighboring residents. Upon completion of the project, all disturbed surface areas must meet the definition of a stabilized surface, as defined in Rule 403.

All construction equipment utilized on this project must comply with Air Resources Board In-Use Off-Road Diesel Vehicle Regulation.

Thank you for the opportunity to review this planning document. If you have any questions regarding the information presented in this letter please contact me at (661) 723-8070 ext. 23 or bbanks@avaqmd.ca.gov.

Sincerely,

Barbara Lods

Barbara Lods
Operations Manager

BJL/BSB

1-1

Response to Comment Letter 1: Antelope Valley AQMD

- 1-1 The comment requests compliance with District Rule 403. As discussed in Mitigation Measure 12 in Section VII, Geology and Soils, the project applicant shall submit a Dust Control Plan to the Antelope Valley Air Quality Management District in accordance with Rule 403, Fugitive Dust, prior to the issuance of any grading and/or construction permits. Additionally, as discussed in Section VI, Energy, State requirements specify that equipment not in use for more than five minutes be turned off. Therefore, Project construction equipment would comply with Air Resources Board In-Use Off-Road Diesel Vehicle Regulation; equipment not in use for more than five minutes would be turned off.

Comment Letter 2: County of LA Fire Department



DARYL L. OSBY
FIRE CHIEF
FORESTER & FIRE WARDEN

COUNTY OF LOS ANGELES FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294
(323) 881-2401
www.fire.lacounty.gov

"Proud Protectors of Life, Property, and the Environment"

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KATHRYN BARGER
FIFTH DISTRICT

March 24, 2022

Cynthia Campana, Senior Planner
City of Lancaster
Community Development Division
44933 Fern Avenue
Lancaster, CA 93534

Dear Ms. Campana:

**NOTICE OF AVAILABILITY OF DRAFT FOCUSED ENVIRONMENTAL IMPACT REPORT,
"TENTATIVE TRACT MAP NO. 83232" INCLUDES THE SUBDIVISION OF THE 20-ACRE
SITE INTO 86 SINGLE-FAMILY RESIDENTIAL LOTS, CITY OF LANCASTER,
FFER 2022002619**

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

The following are their comments:

PLANNING DIVISION:

We have no comments.

For any questions regarding this response, please contact Kien Chin, Planning Analyst, at (323) 881-2404 or Kien.Chin@fire.lacounty.gov.

LAND DEVELOPMENT UNIT:

When involved with subdivision in a city contracting fire protection with the County of Los Angeles Fire Department, Fire Department requirements for access, fire flows and hydrants are addressed during the subdivision tentative map stage.

2-1

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

AGOURA HILLS
ARTESIA
AZUSA
BALDWIN PARK
BELL
BELL GARDENS
BELLFLOWER
BRADBURY
CALABASAS

CARSON
CERRITOS
CLAREMONT
COMMERCE
COVINA
CUDAHY
DIAMOND BAR
DUARTE

EL MONTE
GARDENA
GLENDORA
HAWAIIAN GARDENS
HAWTHORNE
HERMOSA BEACH
HIDDEN HILLS
HUNTINGTON PARK
INDUSTRY

INGLEWOOD
IRVINDALE
LA CANADA-FLINTRIDGE
LA HABRA
LA MIRADA
LA PUENTE
LAKEWOOD
LANCASTER

LAWDALE
LOMITA
LYNWOOD
MALIBU
MAYWOOD
NORWALK
PALMDALE
PALOS VERDES ESTATES
PARAMOUNT

PICO RIVERA
POMONA
RANCHO PALOS VERDES
ROLLING HILLS
ROLLING HILLS ESTATES
ROSEMEAD
SAN DIMAS
SANTA CLARITA

SIGNAL HILL
SOUTH EL MONTE
SOUTH GATE
TEMPLE CITY
VERNON
WALNUT
WEST HOLLYWOOD
WESTLAKE VILLAGE
WHITTIER

Cynthia Campana, Senior Planner
March 24, 2022
Page 2

The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and fire hydrants. All applicable Fire Department fees are required to be paid.

2-1,
cont.

The Land Development Unit appreciates the opportunity to comment on this project. Should any questions arise, please contact Wally Collins at (323) 890-4243 or Wally.Collins@fire.lacounty.gov.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

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

Under the Los Angeles County Oak Tree Ordinance, a permit is required to cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any tree of the Oak genus which is 25 inches or more in circumference (eight inches in diameter), as measured 4 1/2 feet above mean natural grade.

2-2

If Oak trees are known to exist in the proposed project area further field studies should be conducted to determine the presence of this species on the project site.

The County of Los Angeles Fire Department's Forestry Division has no further comments regarding this project.

For any questions regarding this response, please contact Forestry Assistant, Nicholas Alegria at (818) 890-5719.

HEALTH HAZARDOUS MATERIALS DIVISION:

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

Please contact HHMD senior typist-clerk, Perla Garcia at (323) 890-4035 or Perla.garcia@fire.lacounty.gov if you have any questions.

Very truly yours,



RONALD M. DURBIN, CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

RMD:jl

Response to Comment Letter 2: County of LA Fire Department

- 2-1 The comment requests compliance with fire department access and other requirements. As described in Section 10 of the Initial Study (included in the Draft EIR), the project applicant would obtain the appropriate permits and approvals from the Los Angeles County Fire Department.
- 2-2 This comment identifies the statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division. Initial Study Sections IV, Biological Resources, V, Cultural Resources, VII, Geology and Soils, X, Hydrology and Water Quality, and XX, Wildfire address the potential impacts to rare and endangered species, archeological and cultural resources, erosion control, watershed management, and fire hazard severity zones, respectively. No oak trees would be removed, as none were found during the 2005 and 2018 vegetation surveys, as described in Tables 4 and 5 in Section IV, Biological Resources. Therefore, the project would not require a permit under the Los Angeles County Oak Tree Ordinance.

Comment Letter 3: Department of Transportation

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

GAVIN NEWSOM, Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 7
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 269-1124
FAX (213) 897-1337
TTY 711
www.dot.ca.gov



*Making Conservation
a California Way of Life*

April 4, 2022

Cynthia Campana
Community Development Division-Planning
City of Lancaster
44933 Fern Avenue
Lancaster, CA 93534

RE: Vesting Tentative Tract Map No. 83232
SCH # 2021090009
Vic. LA-14/PM R67.91
GTS # LA-2022-03874-MND

Dear Cynthia Campana:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced environmental document. The proposed project consists of the subdivision of the subject property into 86 single-family residential lots in the R-7,000 (single family residential, 7,000 square foot minimum lot size) zone.

The mission of Caltrans is to provide a safe and reliable transportation network that serves all people and respects the environment. Senate Bill 743 (2013) has codified into CEQA law and mandated that CEQA review of transportation impacts of proposed development be modified by using Vehicle Miles Traveled (VMT) as the primary metric in identifying transportation impacts for all future development projects. You may reference the Governor's Office of Planning and Research (OPR) for more information:

<http://opr.ca.gov/ceqa/updates/guidelines/>

As a reminder, VMT is the standard transportation analysis metric in CEQA for land use projects after July 1, 2020, which is the statewide implementation date.

Caltrans is aware of challenges that the region faces in identifying viable solutions to alleviating congestion on State and Local facilities. With limited room to expand vehicular capacity, all future developments should incorporate multi-modal and complete streets transportation elements that will actively promote alternatives to car use and better manage existing parking assets. Prioritizing and allocating space to efficient modes of travel such as bicycling and public transit can allow streets to transport more people in a fixed amount of right-of-way.

3-1

3-2

"Provide a safe and reliable transportation network that serves all people and respects the environment"

Cynthia Campana
April 4, 2022
Page 2 of 3

Caltrans supports the implementation of complete streets and pedestrian safety measures such as road diets and other traffic calming measures. Please note the Federal Highway Administration (FHWA) recognizes the road diet treatment as a proven safety countermeasure, and the cost of a road diet can be significantly reduced if implemented in tandem with routine street resurfacing. Overall, the environmental report should ensure all modes are served well by planning and development activities. This includes reducing single occupancy vehicle trips, ensuring safety, reducing vehicle miles traveled, supporting accessibility, and reducing greenhouse gas emissions.

3-2,
cont.

For this project, we encourage the Lead Agency to evaluate the potential of Transportation Demand Management (TDM) strategies and Intelligent Transportation System (ITS) applications in order to better manage the transportation network, as well as transit service and bicycle or pedestrian connectivity improvements. For additional TDM options, please refer to the Federal Highway Administration's *Integrating Demand Management into the Transportation Planning Process: A Desk Reference* (Chapter 8). This reference is available online at:

<http://www.ops.fhwa.dot.gov/publications/fhwahop12035/fhwahop12035.pdf>

You can also refer to the 2010 *Quantifying Greenhouse Gas Mitigation Measures* report by the California Air Pollution Control Officers Association (CAPCOA), which is available online at:

3-3

<http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

The proposed project is estimated to generate 21.6 home-based VMT per capita. In comparison to the City's threshold of 15% below Baseline VMT of the AVPA (20.1 home-based VMT per capita), the proposed project is 26% over the threshold (17.1 home-based VMT per capita). The higher VMT results is due to the location of the proposed project in the western area of Lancaster with lower development densities that can result in longer travel distance in comparison to the broader Antelope Valley area. The proposed project is unable to mitigate the VMT impact, resulting in a significant and unavoidable impact. Caltrans recommends to use the above TDM methods to mitigate the traffic significant impact as much as possible.

As a reminder, any transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways will need a Caltrans transportation permit. We recommend large size truck trips be limited to off-peak commute periods.

3-4

"Provide a safe and reliable transportation network that serves all people and respects the environment"

Cynthia Campana
April 4, 2022
Page 3 of 3

If you have any questions, please feel free to contact Mr. Alan Lin the project coordinator at (213) 269-1124 and refer to GTS # LA-2022-03874-MND.

Sincerely,



MIYA EDMONSON
IGR/CEQA Branch Chief

email: State Clearinghouse

"Provide a safe and reliable transportation network that serves all people and respects the environment"

Response to Comment Letter 3: Department of Transportation

3-1 This comment states that Senate Bill (SB) 743 has been codified into California Environmental Quality Act (CEQA) law and mandates that vehicle miles travelled (VMT) be used as the primary metric in identifying transportation impacts for all future development projects after July 1, 2020. The transportation analysis in the Draft Environmental Impact Report (EIR) uses VMT as the metric for identifying the project's transportation impacts under CEQA, in compliance with SB 743 and the Governor's Office of Planning and Research (OPR's) updated CEQA Guidelines. Because the transportation analysis in the Draft EIR meets the updated requirements, no changes to the Draft EIR are required to address this comment.

3-2 This comment states that future developments should incorporate multi-modal and complete streets transportation elements that will provide space for and actively promote alternatives to car use, such as bicycling and public transit, to reduce single occupancy vehicle trips, ensure safety, reduce VMT, support accessibility, and reduce greenhouse gas (GHG) emissions. In addition, this comment states that the California Department of Transportation (Caltrans) supports implementation of pedestrian safety measures, such as road diets and other traffic calming measures, which are also supported by the Federal Highway Administration (FHWA).

The proposed project incorporates street improvements that would promote other modes of transportation. As discussed in the Initial Study completed for the project (Draft EIR, Appendix B), street improvements are required as part of conditions of the approval for the project to ensure that traffic flows smoothly in the vicinity of the project site. In addition, as discussed in Section B.3 (Project Description) of the Draft EIR, the project includes the construction of roadways (extending existing streets and constructing new streets) to provide vehicle access to the new homes. The Draft EIR states that the roadway extensions would also include street lighting and sidewalks, which would provide for pedestrian access in the proposed development.

In addition to including adequate pedestrian facilities, the proposed development is directly adjacent to public transit services. Local bus transit in the project area is provided by the Antelope Valley Transit Authority (AVTA, 2022a). Route 9, Quartz Hill via Avenue H, runs along 60th Street West, adjacent to and east of the project area, with a local bus stop at 60th Street West and Avenue K-9, approximately 300 feet north of the project area. In addition, Route 9 includes local bus stops at Quartz Hill High School, George Lane Park, the Los Angeles County High Desert Hospital, the Antelope Valley Fairgrounds, various locations in the City's downtown area, and Lancaster City Park (AVTA, 2022b). The street improvements proposed as part of the project would provide pedestrian access to local bus stops and would also provide space for bicyclists, thereby allowing alternatives to car use. Additional information regarding other modes of transportation within and near the project site has been added to Section C.2.3 (Environmental Impacts and Mitigation Measures) of the EIR.

The City is committed to implementing pedestrian safety measures, such as road diets, throughout the City. On January 28, 2020, the Lancaster City Council adopted the Lancaster Safer Streets Action Plan (City of Lancaster, 2020). The plan outlines engineering countermeasures that the City will implement to address traffic safety concerns systemically across Lancaster's roadway network. The Lancaster Safer Streets Action Plan includes implementation of road diets on applicable roadways, such as Valley Central Way and Lancaster Boulevard, which includes reducing the number of travel lanes, lane widths, and adding bike lanes to help reduce speeds and the severity of collisions. The City will continue to apply the Lancaster Safer Streets Action

Plan across the City's roadway network. No other changes to the Draft EIR are required to address this comment.

- 3-3 In this comment, Caltrans acknowledges that the project is unable to mitigate significant VMT impacts. However, Caltrans recommends implementation of Transportation Demand Management (TDM) strategies and Intelligent Transportation System (ITS) applications to mitigate the significant transportation impact as much as possible. The purpose of TDM strategies and ITS applications is to better manage the transportation network, as well as provide transit service and bicycle or pedestrian connectivity improvements. More information is provided in FHWA's Integrating Demand Management into the Transportation Planning Process: A Desk Reference (Chapter 8); and the 2010 Quantifying Greenhouse Gas Mitigation Measures report by the California Air Pollution Control Officers Association (CAPCOA).

The City of Lancaster is currently in the process of conducting a CEQA review, including preparing a Program Level EIR, for its VMT Mitigation Program, which is a proposed program to reduce Citywide VMT. The VMT Mitigation program would identify relevant TDM strategies and VMT-reducing projects within the City to be funded by future developments that trigger potentially significant VMT impacts under CEQA. Potential VMT-reducing measures may include providing pedestrian/bicycle network improvements, traffic calming infrastructure, improved street connectivity, and City-run programs to incentivize use of alternative travel modes. A Notice of Preparation (NOP) for the Program Level EIR was released in September 2021, and the environmental analysis is currently underway. Through this program, the City is taking steps to implement TDM strategies and ITS applications to further mitigate significant VMT impacts.

As stated in the response to Comment 3-2, the project includes roadway improvements that provide for pedestrian and bicycle access to and from the proposed residential development and nearby local transit routes. These improvements would help to reduce VMT and decrease GHG emissions by providing multiple transportation options. Additional information about other modes of transportation within and near the project site has been added to Section C.2.3 (Environmental Impacts and Mitigation Measures) of the EIR (see Section C of this document).

- 3-4 This comment is a reminder that the use of oversized-transport vehicles on State highways requires a Caltrans transportation permit. In addition, Caltrans recommends that large size truck trips be limited to off-peak commute periods. The need for a Caltrans transportation permit is included in Section A.3 (Required Permits and Approvals) of the Draft EIR. Large size truck trips for the project will occur during off-peak commute periods to the extent feasible. No changes to the Draft EIR are required to address this comment.

References

- AVTA (Antelope Valley Transit Authority). 2022a. Local Transit Service. <https://www.avta.com/userfiles/files/System-Map-2021.pdf>.
- _____. 2022b. Route 9, Westbound Quartz Hill via Ave. H. <https://www.avta.com/userfiles/files/route-9-quartz-hill-via-avenue-H-map.pdf>.
- CAPCOA (California Air Pollution Control Officers Association). 2010. Quantifying Greenhouse Gas Mitigation Measures, A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures. August. <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>.

City of Lancaster. 2020. "Lancaster Safer Streets Action Plan." January. <https://www.cityoflanasterca.org/our-city/departments-services/development-services/city-engineering/traffic-engineering/lancaster-safer-streets-action-plan>. Accessed on April 18, 2022.

FHWA (Federal Highway Administration). 2012. Integrating Demand Management into the Transportation Planning Process: A Desk Reference. August. <https://ops.fhwa.dot.gov/publications/fhwahop12035/fhwahop12035.pdf>.

Comment Letter 4: California Department of Fish and Wildlife



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



Via Electronic Mail Only

April 11, 2022

Cynthia Campana
City of Lancaster
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**Subject: Draft Environmental Impact Report for Tentative Tract Map No. 83232,
SCH #2021090009, City of Lancaster, Los Angeles County**

Dear Ms. Campana:

The California Department of Fish and Wildlife (CDFW) has reviewed a Draft Environmental Impact Report (DEIR) from the City of Lancaster (City) for Tentative Tract Map No. 83232 (Project). CDFW appreciates the opportunity to provide comments regarding aspects of the Project that could affect fish and wildlife resources and be subject to CDFW's regulatory authority under the Fish and Game Code.

CDFW's Role

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

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

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Project Description and Summary

Objective: The Project proposes to develop a 20-acre undeveloped parcel. The Project would subdivide the undeveloped parcel into 86 single family residential lots. The Project would also include construction of the following roads to provide vehicle access to the new homes:

- Extend 62nd Street West and Hampton Street to the south, and
- Construct new Street L, Street M, Street N, and a new Avenue K-12 cul-de-sac.

Lastly, the Project would extend the existing water and sewer lines that are available immediately north of the Project site to serve the new homes. The new utility lines would be buried under the new roadway segments.

The proposed new buried utilities and new/extended roads would be built first. Once that is complete, multiple homes would be built simultaneously per phase. It is expected 10 to 15 homes would be constructed per phase, with the estimated timeframe for constructing each home being six months. Therefore, the total construction period would last two to three years to build all 86 homes (with estimated project completion by the end of 2024).

Location: The Project is located at the northwest corner of 60th Street West and Avenue K-12. The Project is located on Assessor's Parcel Number 3204-008-048.

Comments and Recommendations

CDFW offers the comments and recommendations below to assist the City in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions are also included to improve the environmental document. CDFW recommends the measures or revisions below be included in a science-based monitoring program that contains adaptive management strategies as part of the Project's CEQA mitigation, monitoring, and reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097).

Specific Comments

Comment #1: Impacts on Swainson's Hawk

Issue: The Project may have a significant impact on Swainson's hawk (*Buteo swainsoni*), a CESA-listed species, both during Project construction and as a result of habitat loss.

Specific Impacts: Project construction and activities may disrupt natural Swainson's hawk breeding and nesting behavior, resulting in reduced reproductive capacity and loss of eggs and/or nestlings. Also, the Project may result in the permanent loss of 20 acres of foraging habitat for Swainson's hawk.

Why impacts would occur: According to page 10 of the 2018 Biological Resources Report, "a row of locus trees along the western border of the site may provide nesting opportunities for Swainson hawk." In the Antelope Valley, Swainson's hawks nest primarily in nonnative ornamental trees or trees planted as windbreaks (ICF 2019). Project construction would require ground-disturbance (e.g., grading, trenching, paving) and vegetation removal, both using heavy

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equipment. These activities create elevated levels of noise, human activity, dust, ground vibrations, and vegetation disturbance. These activities occurring near potential Swainson's hawk nests could result in increased stress (needless energy expenditure), reduced reproductive capacity, and nest abandonment, all leading to potential loss of loss of fertile eggs or nestlings.

In addition, build out of the Project would result in permanent loss of 20 acres of potential foraging habitat for Swainson's hawk. The Project site is a former agricultural field that currently supports small mammals. The 2005 Biological Resources Report for the Project states "sign of seven species of mammal was found, including valley pocket gopher, California ground squirrel, and Merriam's kangaroo rat." Nesting pairs in the Antelope Valley primarily forage in the alfalfa fields and other agricultural areas in the region, as well as other desert scrub habitats that support a suitable prey base of small rodents (ICF 2019). Swainson's hawk is threatened by loss of nesting and foraging habitat as a result of agricultural shifts to crops that provide less suitable foraging habitat, urban development, environmental contaminants, and climate change (CDFW 2016; ICF 2019). The Project developing 20 acres of suitable Swainson's hawk foraging habitat would contribute to the cumulative and ongoing loss of habitat in the Antelope Valley.

Evidence impacts would be significant: Consistent with CEQA Guidelines section 15380, the status of Swainson's hawk as a threatened species under CESA qualifies it as an endangered, rare, or threatened species under CEQA. The Project would potentially contribute to the abandonment of an active nest and/or loss of significant foraging habitat for a given nest territory. This would result in take as defined under CESA. As to CESA, take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9). However, the DEIR does not provide Swainson's hawk specific mitigation measures to avoid impacts on potential nests nor to offset the loss of 20 acres of habitat. Accordingly, the Project continues to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species by CDFW.

4-2,
cont.

Recommended Potentially Feasible Mitigation Measure(s):

Recommendation #1: Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an Incidental Take Permit for the Project unless the Project's CEQA document addresses all the Project's impact on CESA endangered, threatened, and/or candidate species. The Project's CEQA document should also specify a mitigation monitoring and reporting program that will meet the requirements of an Incidental Take Permit. It is important that the take proposed to be authorized by CDFW's Incidental Take Permit be described in detail in the Project's CEQA document. Also, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for an Incidental Take Permit. However, it is worth noting that mitigation for the Project's impact on a CESA endangered, threatened, and/or candidate species proposed in the Project's CEQA document may not necessarily satisfy mitigation required to obtain an Incidental Take Permit.

Mitigation Measure #1: The Project Applicant should retain a qualified botanist to survey the Project site and adjacent area for Swainson's hawks according to the [Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the](#)

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[Antelope Valley of Los Angeles and Kern Counties, California](#) (CDFW 2010). The Project Applicant should submit a survey report, including negative findings, to the City and CDFW before the City issues a grading permit for the Project and any ground-disturbing activities and vegetation removal.

Mitigation Measure #2: If surveys locate a Swainson's hawk nest, nests should be fully avoided and no Project construction and activities should occur within ½ mile of an active nest between March 1 and September 15. No trees or vegetation should be removed between March 1 and September 15.

Mitigation Measure #3: If take or adverse impacts to Swainson's hawk cannot be avoided, the Project Applicant should consult with CDFW and obtain appropriate take authorization from CDFW (pursuant to Fish & Game Code, § 2080 et seq). The Project Applicant should provide a copy of a fully executed take authorization before the City issues a grading permit for the Project and before any ground disturbance and vegetation removal.

Mitigation Measure #4: Permanent impacts to foraging habitat for Swainson's hawk should be offset by the Project Applicant. The Project Applicant should purchase 60 acres of preservation credits at mitigation bank offering credits for Swainson's hawk and whose service area contains the Project site. The Project Applicant should submit the credit amount, bank sponsor, habitat types(s), and map of the mitigation site to the City before the City issues a grading permit for the Project and before any ground-disturbing activities or vegetation removal.

Mitigation Measure #5: If credits at a mitigation bank are not available, the Project Applicant should acquire 60 acres of land to protect habitat for Swainson's hawk in perpetuity. Lands to be conserved should be selected in consistency with Conservation Actions for Swainson's hawk described in the Antelope Valley Regional Conservation Investment Strategy (ICF 2019).

The Project Applicant should protect replacement habitat in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012). The Project Applicant should record the conservation easement before the City issues a grading permit for the Project.

Assembly Bill 1094 amended Government Code sections 65965-65968. Under Government Code section 65967(c), the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A mitigation plan should include measures to protect the targeted habitat values in perpetuity from direct and indirect negative impacts. Issues that should be addressed include but are not limited to the following: protection from any future development and zone changes; restrictions on access; proposed land dedications; control of illegal dumping; water pollution; and increased human intrusion.

Comment #2: Impacts on Burrowing Owl

Issue: The Project may continue to have a significant impact on burrowing owl (*Athene cunicularia*), a California Species of Special Concern (SSC), both during Project construction

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and as a result of habitat loss.

Specific impacts: Project construction and activities may result in injury or mortality of burrowing owls, disrupt natural burrowing owl breeding behavior, and reduce reproductive capacity. Also, the Project may result in the permanent loss of 20 acres of breeding, wintering, and foraging habitat for the species. Habitat loss could result in local extirpation of the species and contribute to local, regional, and State-wide declines of the species.

Why impacts would occur: The Project site provides habitat for burrowing owl. According to page 9 of the Project's 2018 Biological Resources Report, "several regurgitated pellets of burrowing owl were found on a concrete cylinder along the southern property line". Project construction would require ground-disturbance (e.g., grading, trenching, paving) and vegetation removal, both using heavy equipment. These activities create elevated levels of noise, human activity, dust, ground vibrations, and vegetation disturbance. These activities occurring near potential wintering sites could flush burrowing owls, cause burrowing owls to abandon their burrow, and reduce the likelihood of winter survival. In addition, these activities occurring near potential nests could result in reduced reproductive capacity and cause burrowing owls to abandon their nests, resulting in the loss of fertile eggs or nestlings. Project-related impacts on burrowing owl during the wintering and breeding seasons, which includes potential populations in undeveloped land adjacent to the Project site, could cause local burrowing owl declines because of increased burrowing owl mortalities due to increased stress and injury, reproductive suppression, and loss of young.

Furthermore, build out of the Project would result permanent loss and degradation of 20 acres of breeding, wintering, and foraging habitat for burrowing owl. In the Antelope Valley burrowing owl populations have experienced dramatic declines due to widespread habitat loss and habitat fragmentation, resulting from the conversion of grassland and desert scrub habitat to urban and suburban areas (e.g., expanding residential grown, solar) (ICF 2019). Habitat loss can result in the elimination of individuals or populations of burrowing owls from the area that is converted, and burrowing owl can also be affected by proximity to converted lands from pollution and trampling (ICF 2019). Loss of 20 acres of potential habitat for burrowing owl could result in local extirpation of the species and contribute to local, regional, and State-wide declines of the species.

The DEIR provides mitigation for the Project's impact on burrowing owl, which states the following:

2. Burrowing Owl Protocol Surveys
3. Passive Relocation Program by Qualified Biologist
4. Burrowing Owl Exclusion and Mitigation Plan and Mitigation Land Management Plan
5. Nesting Bird Survey"

These mitigation measures as they are currently written are not sufficiently detailed for CDFW to make an informed decision whether these mitigation measures would be effective. These mitigation measures do not provide any information for CDFW to determine what actions would be taken and how those actions would mitigate for the Project's impact on burrowing owls. These mitigation measures do not demonstrate how mitigation would be carried out by the Project Applicant and enforced by the City. The DEIR does not provide specific information for any of these mitigation measures, such as when each mitigation measure would be

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implemented, who would conduct the surveys and relocation, where and how burrowing owls would be relocated, where mitigation would occur, and why mitigation lands would be appropriate for burrowing owl. Without identifying and disclosing mitigation measures for burrowing owl, the DEIR does not provide any findings nor substantial evidence that the Project's impact on burrowing owl has been mitigated to a less than significant level.

Evidence impacts would be significant: A [California Species of Special Concern](#) is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, is extirpated in its primary season or breeding role;
- is listed as Endangered Species Act, but not CESA, threatened, or endangered; meets the State definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; and/or,
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for CESA threatened or endangered status (CDFW 2022a).

CEQA provides protection not only for CESA-listed species, but for any species including but not limited to SSC which can be shown to meet the criteria for State listing. These SSC meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). Therefore, take of SSC could require a mandatory finding of significance (CEQA Guidelines, § 15065). Impacts to any sensitive or special status species should be considered significant under CEQA unless they are clearly mitigated, through appropriate disclosure of the proposed mitigation measures, below a level of significance.

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cont.

Recommended Potentially Feasible Mitigation Measure(s):

Recommendation #2: The City should revise the Project's CEQA document to provide information that mitigation measures for burrowing owls would be effective to reduce impacts on burrowing owl to less than significant. In addition, the City should provide information on performance standards and potential action(s) associated with each mitigation measure for burrowing owl.

Mitigation Measure #6: CDFW recommends the City expand on Mitigation Measure #2 by incorporating the following language:

"Updated burrowing owl protocol surveys shall be conducted on the Project site and within 150 meters from the Project site in accordance with the procedures established by the California Department of Fish and Wildlife March 7, 2012, Staff Report on Burrowing Owl Mitigation. Survey protocol for breeding season owl surveys states to conduct 4 survey visits: 1) at least one site visit between February 15 to April 15, and 2) a minimum of three survey visits, at least three weeks apart, between April 15 and July 15, with at least one visit after 15 June. Protocol-level surveys and a report of findings, including

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negative findings, shall be provided to the City before the City issues a grading permit for the Project and before the start of construction/ground disturbing activities.

If burrowing owls are identified using the project site, the Project Applicant shall contact the California Department of Fish and Wildlife (CDFW) to determine the appropriate mitigation/management requirements. The Project Applicant shall develop a Burrowing Owl Mitigation Plan in accordance with the 2012 Staff Report on Burrowing Owl Mitigation. At a minimum, the following shall be followed: If burrowing owls are detected on site, no ground-disturbing activities, such as vegetation clearance or grading, shall be permitted within a buffer of no fewer than 500 meters from an occupied burrow during the breeding season (February 1 to August 31), unless otherwise authorized by CDFW. During the non-breeding (winter) season (September 1 to January 31), ground-disturbing work can proceed as long as the work occurs no closer than 165 feet from the burrow. Depending on the level disturbance, a smaller buffer may be established in consultation with CDFW.

The Project Applicant shall submit a final Burrowing Owl Mitigation Plan to CDFW and the City before the City issues a grading permit for the Project. The Project Applicant shall implement all measures identified in the Burrowing Owl Mitigation Plan.”

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cont.

Mitigation Measure #7: The Project Applicant should acquire 40 acres of land to protect habitat for burrowing owl in perpetuity. To be consistent with Conservation Actions for Burrowing Owl described in the Antelope Valley Regional Conservation Investment Strategy (ICF 2019), the Project Applicant should acquire mitigation lands that (1) support documented burrowing owl nests, (2) are contiguous with existing protected habitat, and (3) are within the Antelope Valley.

The Project Applicant should protect replacement habitat in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands. The Project Applicant should record the conservation easement before the City issues a grading permit for the Project and before any ground-disturbing activities or vegetation removal.

Mitigation Measure #8: No rodenticides and second-generation anticoagulant rodenticides should be used during Project construction and for the lifetime of the Project.

Comment #3: Impacts on Streams

Issue: The Project may impact a stream and a freshwater pond.

Specific impacts: A stream and a freshwater pond could be impacted by soil erosion and vegetation removal during Project construction. In addition, new homes, roads, and impervious surfaces proposed by the Project could have a permanent impact on the adjacent stream. Finally, the Project would result in complete loss of the freshwater pond because the freshwater pond would be developed with single family homes.

4-4

Why impacts would occur: According to U.S. Fish and Wildlife Service’s (USFWS) National Wetland Inventory, there is a stream on the Project’s west boundary and a freshwater pond on the Project’s southeast corner (USFWS 2022). The presence of the stream is confirmed in the Project’s 2018 Biological Resources Report which states, “a small drainage runs along 60th

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Street West; this feature supports mostly exotic herbaceous vegetation." Moreover, the presence of salt cedar (*Tamarix ramosissima*), a species that quickly invades riparian areas, could be indicative of shallow water table. The 2018 Biological Resources Report states that "no other surface water is found on the site." Since the Biological Resources Report was based on field surveys in September 2018, which was during the dry season, standing water would have been unlikely. Therefore, a freshwater pond could still be present on the Project site based on the National Wetland Inventory and the topography of the Project's southeastern corner, which is consistent with a feature that could hold surface water.

The stream and freshwater pond could be impacted both during the Project and after the Project is completed. First, the Project would result in complete loss of the freshwater pond. The freshwater pond would be developed with single family homes as shown in Figure 2 on page 4 of Appendix A of the DEIR. Development of the freshwater pond would also result in loss of vegetation. The DEIR does not disclose or discuss what type of vegetation (i.e., natural community) would be permanently loss.

Project construction may include site preparation, which may require ground disturbance and vegetation removal with heavy equipment. Page B-3 of the DEIR states, "the proposed new buried utilities and new/extended roads would be built first. This would involve minor grading and trenching, followed by installing new utility lines, backfilling, and paving the roads." These ground-disturbing activities could result in soil erosion and earth movement. As a result, the Project could deposit materials, such as sediment and fine particles, into a stream. In addition, ground-disturbing activities adjacent to the stream could impact the bed, bank, and channel. Furthermore, the Project would require concrete pouring and paving for the foundation of the new development. Where this occurs adjacent to the stream, concrete entering the stream would result in the Project depositing materials into a stream. The Project's potential to cause the impacts discussed are likely to occur because the DEIR does not provide any measures to avoid impacting the stream during Project construction.

Even after Project construction, the Project could continue to have an impact on the stream as a result of new homes, roads, and impervious surfaces. New homes on the Project's west boundary would be approximately less than 30 feet from the stream. 62nd Street West would be approximately less than 200 feet from the stream. New homes and a block wall adjacent to the stream could alter water conveyance and sediment transport. As a result, the Project could alter the stream's course of flow compared to baseline conditions (i.e., pre-Project). Page 38 of the Initial Study in Appendix B of the DEIR states, "development of the proposed project would increase the amount of surface runoff as a result of impervious surfaces associated with grading of the site." Roads and impervious surfaces could also impact the adjacent stream by altering how surface flows, sediment, and debris is transported across the Project site and potentially into the stream.

Evidence impacts would be significant: CDFW exercises its regulatory authority as provided by Fish and Game Code section 1600 et seq. to conserve fish and wildlife resources which includes rivers, streams, or lakes and associated natural communities. Fish and Game Code section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW prior to beginning any activity that may do one or more of the following:

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- Divert or obstruct the natural flow of any river, stream, or lake¹;
- Change the bed, channel, or bank of any river, stream, or lake;
- Use material from any river, stream, or lake; or,
- Deposit or dispose of material into any river, stream, or lake.

CDFW requires a Lake and Streambed Alteration (LSA) Agreement when a project activity may substantially adversely affect fish and wildlife resources.

The Project may result in significant impacts on streams both during Project construction and for the Project's lifetime. The DEIR does not provide measures to mitigate for potentially significant impacts on streams. Accordingly, the Project has a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on fish and wildlife resources, including rivers, streams, or lakes and associated natural communities identified by CDFW.

Recommended Potentially Feasible Mitigation Measure(s):

Recommendation #3: CDFW's issuance of an LSA Agreement for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document from the lead agency/project applicant for the project. To minimize additional requirements by CDFW pursuant to Fish and Game Code section 1600 et seq. and/or under CEQA, a project's CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement. To compensate for any on- and off-site impacts to aquatic and riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: erosion and pollution control measures; avoidance of resources; protective measures for downstream resources; on- and/or off-site habitat creation; enhancement or restoration; and/or protection and management of mitigation lands in perpetuity.

Mitigation Measure #9: The Project Applicant should notify CDFW pursuant to Fish and Game Code 1602. The Project Applicant should submit proof that CDFW was notified before the City issues a grading permit for the Project. If a LSA Agreement is needed for the Project, the Project Applicant should obtain a LSA Agreement from CDFW and provide a copy of the LSA Agreement before the City issues a grading permit for the Project and before any ground disturbance and vegetation removal.

Please visit CDFW's [Lake and Streambed Alteration Program](#) webpage for more information (CDFW 2022b).

Mitigation Measure #10: The Project Applicant's notification to CDFW should provide the following information:

¹ "Any river, stream, or lake" includes those that are dry for periods of time (ephemeral/episodic) as well as those that flow year-round (perennial). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a water body.

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- 1) A stream delineation in accordant with the USFWS wetland definition adopted by CDFW² (Cowardin et al. 1979);
- 2) Linear feet and/or acreage of streams and associated plant communities that would be permanently and/or temporarily impacted by the Project. Plant community names should be provided based on vegetation association and/or alliance per the [Manual of California Vegetation](#), second edition (Sawyer et al. 2009);
- 3) A discussion as to whether impacts on streams within the Project site would impact those streams immediately outside of the Project site where there is hydrologic connectivity. Potential impacts such as changes to drainage pattern, runoff, and sedimentation should be discussed; and,
- 4) A hydrological evaluation of the 100-year storm event to provide information on how water and sediment is conveyed through the Project site. Additionally, the hydrological evaluation should assess a sufficient range of storm events (e.g., 100, 50, 25, 10, 5, and 2-year frequency storm events) to evaluate water and sediment transport under pre-Project and post-Project conditions.

4-4,
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Mitigation Measure #11: If a LSA Agreement is needed for the Project, the Project Applicant should comply with the mitigation measures detailed in the LSA Agreement issued by CDFW. The Project Applicant should also provide compensatory mitigation for impacts on streams at no less than 2:1 for the impacted stream and habitat acreage, or at a ratio acceptable to CDFW.

Comment #4: Impacts on Rare Plants

Issue: The Project may impact rare plants.

Specific Impacts: The Project could result in loss of individuals and populations of rare plants including (but not limited to) the following species:

- white pygmy poppy (*Canbya candida*) – California Rare Plant Rank (CRPR) 4.2
- Parry's spineflower (*Chorizanthe parryi* var. *parryi*) – CRPR 1B.1
- desert cymopterus (*Cymopterus deserticola*) - CRPR 1B.2

Why impacts would occur: The Project's 2018 Biological Resources Report summarizes findings of field surveys conducted on September 19 and 20. The Biological Resources Report concluded that there is suitable habitat to support white pygmy poppy, Parry's spineflower, and desert cymopterus. These species would only be detectable in the spring through early summer. The field surveys were not conducted at the times of year when plants will be both evident and identifiable. Usually this is during flowering or fruiting (Table 1, CDFW 2018). The field surveys would likely have been too late in the growing season to observe rare plant flowers and fruits if they occur in the Project site (Table 1). Therefore, the field surveys are insufficient evidence for the City to conclude that rare plants are not present and therefore no mitigation is required.

4-5

² Be advised that some wetland and riparian habitats subject to CDFW's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers' Section 404 permit and Regional Water Quality Control Board Section 401 Certification.

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Table 1. Bloom period (highlighted in grey) for rare plant species that could occur in the Project site (Calflora 2022).

Scientific name	Common name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
<i>Canbya candida</i>	white pygmy poppy												
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower												
<i>Cymopterus deserticola</i>	desert cymopterus												

Field surveys conducted in a time of year inadequate to detect rare plants could be erroneous or inaccurate evidence for the City to conclude that the Project would not have a significant impact on rare plants and habitat supporting rare plants. The DEIR does not require the Project Applicant to perform a spring-time rare plant survey before Project activities even though this was recommended in the 2018 Biological Resources Report. Botanical field surveys are necessary to provide information on the Project's potential impacts on rare, sensitive, and special status plants. Project construction and activities proceeding based on false-negative surveys may result in the Project having an impact on rare plants. Rare plants and seedbank could be buried, crushed, and trampled. The Project may result in permanent loss of rare plants and its seedbank by developing 20 acres of habitat. The Project's potential impact on rare plants may result in local population declines or extirpation of a species.

Evidence impacts would be significant: Impacts on rare flora could be considered a significant effect on the environment. Plants with a CRPR of 1B are rare throughout their range, endemic to California, and are seriously or fairly threatened. Most of the plants that are ranked 1B have declined significantly over the last century (CNPS 2022). The additional threat rank of 0.1 indicates a species with over 80 percent of its occurrences threatened in California. The additional threat rank of 0.2 indicates a species with 20 to 80 percent of its occurrences threatened (CNPS 2022). Impacts to CRPR 1B plant species and their habitat meet the definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Some CRPR 3 and 4 species meet the definitions of endangered, rare, or threatened under CEQA. Impacts to CRPR 1B plant species and their habitat may result in a mandatory finding of significance because the Project would have the potential to threaten to eliminate a plant community and substantially reduce the number or restrict the range of an endangered, rare, or threatened species (CEQA Guidelines, § 15065).

The DEIR does not provide mitigation for the Project's potential impact on rare plants. Insufficient mitigation may result in unmitigated temporal or permanent impacts to a rare plant species. Subsequently, the Project continues to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species by CDFW.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #12: The Project Applicant should retain a qualified botanist with experience surveying for southern California rare plants to survey the Project site and adjacent areas for rare plants. Surveys should be conducted according to CDFW's [Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities](#) (CDFW 2018). The Project Applicant should submit a survey report, including negative findings, to the City before the City issues a grading permit for the Project

4-5,
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and any ground-disturbing activities and vegetation removal. At a minimum, the survey report should provide the following information:

- 1) A description and map of the survey area;
- 2) Field survey conditions that should include name(s) of qualified botanists(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched;
- 3) If rare plants are found, a map(s) showing the location of individual plants or populations, and number of plants or density of plants per square feet occurring at each location. The map should distinguish between species found and which plants/populations will be avoided versus impacted by Project construction and activities that would require mitigation;
- 4) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each rare plant or population is found. A sufficient description of biological conditions, primarily impacted habitat, should include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class, density, cover, and abundance of each species); and,
- 5) If rare plants are found, species-specific measures to mitigate for impacts to rare plants and habitat (see Mitigation Measure #13).

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cont.

Mitigation Measure #13: If impacts on CRPR 1 species and habitat cannot be avoided, the Project Applicant should provide compensatory mitigation at no less than 2:1. The abundance of a rare plant species and total habitat acreage within the mitigation lands should be no less than 2:1. Mitigation lands should be in the same watershed as the Project site and support habitat that contains the rare plant species impacted. The Project Applicant should protect replacement habitat in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity. The Project Applicant should submit proposed replacement habitat for CDFW review prior to purchasing and recording the conservation easement. The Project Applicant should record the conservation easement before the City issues the Project Applicant grading permit.

Comment #5: Impacts on Nesting Birds

Issue: The Project may continue to have a significant impact on nesting birds.

Specific impacts: Project construction during the nesting bird season could cause nesting birds to abandon their nests and decrease in feeding frequency. This could result in loss of fertile eggs and nestlings. In addition, the Project could result in loss of nesting habitat.

Why impacts would occur: According to the Project's 2018 Biological Resources Report, trees along the western border of the Provide site may provide nesting habitat for birds and raptors. Birds and raptors that may use these trees include loggerhead shrike (*Lanius ludovicianus*) and Cooper's hawk (*Accipiter cooperii*), the latter of which was "flushed from trees on the western border of the project site [during field surveys]." Project construction would create elevated levels of noise, human activity, dust, ground vibrations, and vegetation disturbance. These activities occurring near potential nests could cause birds to abandon their nests and a decrease in feeding frequency, both resulting in the loss of fertile eggs or nestlings. Accordingly,

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nesting birds and raptors would be impacted. In addition, removing those trees would eliminate potential nesting habitat for birds and raptors.

The DEIR provides mitigation for nesting birds. However, the Project's mitigation measure for nesting birds may be inadequate to reduce the Project's impact on nesting birds to less than significant. The Project's mitigation measure for nesting bird states "5. Nesting Bird Survey." The purpose of a nesting bird survey is to determine the presence or absence of nesting birds. A survey alone is not any action that would physically protect nests, eggs, and nestlings. The DEIR does not discuss why a "Nesting Bird Survey" is adequate to reduce the Project's impact on nesting birds to less than significant. The DEIR does not provide information on the specifics of a "Nesting Bird Survey" such as timing, who would conduct the nesting bird survey, and the survey area. The mitigation measure as it is currently written, as well as the DEIR, do not provide any information for CDFW to determine what effective actions would be required of the Project Applicant to protect nesting birds and avoid impacts on nests, eggs, and nestlings if a nesting bird(s) is found on site. For these reasons, the mitigation measure as proposed may continue to result in significant impacts to nesting birds.

Evidence impact would be significant: The Project could impact nesting birds and raptors, including birds that are SSC. Nests of all birds and raptors are protected under State laws and regulations, including Fish and Game Code, sections 3503 and 3503.5. Fish and Game Code section 3503 states, "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird." Fish and Game code section 3503.5 prohibits the take, possession, or destruction of birds-of-prey and their nests or eggs. Also, take or possession of migratory nongame birds designated in the Federal Migratory Bird Treaty Act of 1918 is prohibited under Fish and Game Code section 3513. Finally, please be advised that CDFW does not issue permits for take of bird and raptor nests, eggs, or nestlings.

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Recommended Potentially Feasible Mitigation Measure(s): CDFW recommends the City expand on Mitigation Measure #5 by incorporating the following four mitigation measures:

Mitigation Measure #14: To protect nesting birds that may occur within and in areas adjacent to the Project site, Project construction should occur between September 1 through January 31, outside of the nesting bird season the greatest extent possible. The Project Applicant should not remove or disturb trees or vegetation during the bird nesting season, which generally runs from February 15 through September 15 (as early as January 1 for some raptors) to avoid take of birds, raptors, or their nests, eggs, or nestlings.

Mitigation Measure #15: If Project construction and activities must occur during the bird nesting season, the Project Applicant should retain a qualified biologist to conduct a nesting bird survey. The qualified biologist should conduct a nesting bird survey no more than 7 days prior to the beginning of any ground-disturbance and vegetation removal. The qualified biologist should survey all potential nesting, roosting, and perching sites within a minimum 500-foot radius from the Project site. If Project construction and activities are delayed or suspended for more than 7 days during the nesting bird season, a qualified biologist should repeat nesting bird surveys before any activities can recommence.

A qualified biologist should conduct nesting bird surveys before starting Project construction and activities each year over the Project's anticipated construction period of 2 to 3 years.

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Mitigation Measure #16: If nesting birds are identified, the qualified biologist should establish a no-disturbance buffer of a minimum of 500 feet around active nests. No-disturbance buffers should be increased, if necessary, to protect the nesting birds. No-disturbance buffers should be maintained until the breeding season has ended or until a qualified biologist determines that the birds have fledged and are no longer reliant upon the nest or parental care for survival.

Mitigation Measure #17: The Project Applicant should protect all vegetation and established trees on the Project's west boundary in order to retain these vegetation and trees for nesting birds and raptors. Impacts on the critical root zone of trees should be avoided. The Project Applicant should submit a Tree Protection Plan to the City before the City issues a grading permit for the Project and before any ground disturbance and vegetation removal.

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Comment #6: Inadequate Disclosure of Adequacy of Biological Impact Fee

Issue: The City consistently relies on a \$770/acre Biological Impact Fee to offset the cumulative loss of biological resources in the Antelope Valley as a result of development projects. It is unclear if the City would require the Project Applicant to pay a Biological Impact Fee because this was not discussed in the DEIR.

Specific Impacts: The Project would develop approximately 20 acres of undeveloped land. This would result in permanent loss of habitat supporting burrowing owls, Swainson's hawk, and nesting birds, and potentially supporting rare plants.

Why impacts would occur: According to page 23 in the Initial Study in Appendix B, the Project's cumulative impacts on biological resources in the Antelope Valley would be mitigated through payment of a \$770/acre Biological Impact Fee. The Biological Impact Fee would "offset the cumulative loss of biological resources in the Antelope Valley as a result of development." The Initial Study concludes that "no impacts would occur" with payment of the Biological Impact Fee. Neither the Initial Study nor DEIR explains why payment of the Biological Impact Fee is adequate to offset Project impacts so that the Project would not have a cumulative impact on biological resources in the Antelope Valley. The DEIR does not discuss or provide the following information:

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- 1) Whether the Biological Impact Fee is going towards an established program;
- 2) How that program is designed to (and will) mitigate the effects at issue at a level meaningful for purposes of CEQA;
- 3) What the Biological Impact Fee would acquire. It is unclear if the Biological Impact Fee would be used to acquire land for preservation, enhancement, and/or restoration purposes, or if the Biological Impact Fee would be used to purchase credits at a mitigation bank, or none of the above;
- 4) What biological resources would the Biological Impact Fee protect/conserves;
- 5) Why the Biological Impact Fee is appropriate for mitigating cumulative loss of biological resources in the Antelope Valley;
- 6) How \$770/acre is sufficient to purchase land or credits at a mitigation bank;
- 7) Where the City may acquire land or purchase credits at a mitigation bank so that the Biological Impact Fee would offset Project impacts on biological resources in the Antelope Valley;
- 8) When the City would use the Biological Impact Fee. Mitigation payment does not equate to mitigation if the funds are not being used. Also, temporal impacts on biological

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- resources may occur as long as the City fails to implement its proposed mitigation;
- 9) How the City would commit the Project to paying the Biological Impact Fee. For example, when would the City require payment from the Project Applicant, how long would the Project Applicant have to pay the fee, and what mechanisms would the City implement to ensure the fee is paid? Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally binding instruments (CEQA Guidelines, § 15126.4);
 - 10) What performance measures the proposed mitigation would achieve (CEQA Guidelines, § 15126.4);
 - 11) What type(s) of potential action(s) that can feasibly achieve those performance standards (CEQA Guidelines, § 15126.4); and,
 - 12) How the Biological Impact Fee would be adequate such that the Project would not have a cumulative impact on biological resources in the Antelope Valley.

Evidence impacts would be significant: The basic purpose of an environmental document is to provide public agencies and the public in general with detailed information about the effect a proposed project is likely to have on the environment, and ways and manners in which the significant effects of such a project might be minimized (Pub. Resources Code, §§ 21002.1, 21061). The DEIR is insufficient as an informational document because it fails to discuss the ways and manners in which the Biological Impact Fee would mitigate for the Project's cumulative impacts on biological resources in the Antelope Valley. Mitigation measures should be adequately discussed and the basis for setting a particular measure should be identified [CEQA Guidelines, § 15126.4(a)(1)(B)]. The DEIR does not provide enough information to facilitate meaningful public review and comment on the appropriateness of the Biological Impact Fee at mitigating for impacts on biological resources.

This Project may have a significant effect on the environment because the Project may reduce habitat for rare plants or wildlife; cause rare plants or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; and substantially reduce the number or restrict the range of an endangered, rare, or threatened species [CEQA Guidelines, § 15065(a)(1)]. Furthermore, the Project may contribute to the ongoing loss of sensitive, special status, threatened, and/or endangered plants, wildlife, and natural communities in the Antelope Valley. The Project may have possible environmental effects that are cumulatively considerable [CEQA Guidelines, § 15065(a)(3)]. The City is acknowledging that the Project would contribute to the cumulative loss of biological resource in the Antelope Valley because the City is proposing a Biological Impact Fee as compensatory mitigation. The Biological Impact Fee may be inadequate mitigation absent commitment, specific performance standards, and actions to achieve performance standards. Mitigation through payment of the Biological Impact Fee may not comply with the rules for acceptable deferred mitigation because the mitigation measure would not (1) adopt specific performance standards the mitigation will achieve, (2) identify the type(s) of potential action(s) that can feasibly achieve that performance standard that will be considered, analyzed, and potentially incorporated in the mitigation measures, and (3) be fully enforceable through permit conditions, agreements, or other legally-binding instruments (CEQA Guidelines, § 15126.4).

Inadequate avoidance and mitigation measures will result in the Project continuing to have a substantial adverse direct and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by CDFW or USFWS.

4-7,
cont.

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Recommended Potentially Feasible Mitigation Measure(s):

Recommendation #4: The City should revise the Project's CEQA document to clarify whether the Biological Impact Fee is being proposed as mitigation for the Project's significant impacts on biological resources. In addition, the Project's CEQA document should address the following in relation to the Project:

- 1) Whether the Biological Impact Fee is going towards an established program;
- 2) How that program is designed to (and will) mitigate the effects at issue at a level meaningful for purposes of CEQA;
- 3) What the Biological Impact Fee would acquire;
- 4) What biological resources would the Biological Impact Fee protect/conservate;
- 5) Why the Biological Impact Fee is appropriate for mitigating cumulative loss of biological resources in the Antelope Valley;
- 6) Why \$770/acre is sufficient to purchase land or credits at a mitigation bank;
- 7) Where the City may acquire land or purchase credits at a mitigation bank so that the Biological Impact Fee would offset Project impacts on biological resources in the Antelope Valley;
- 8) When the City would use the Biological Impact Fee;
- 9) How the City would commit the Project to paying the Biological Impact Fee;
- 10) What performance measures the proposed mitigation would achieve;
- 11) What type(s) of potential action(s) that can feasibly achieve those performance standards; and,
- 12) How the Biological Impact Fee would be adequate such that the Project would not have a cumulative impact on biological resources in the Antelope Valley.

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cont.

Additional Recommendations

Recommendation #5: An EIR "shall identify and focus on the significant effects of the proposed project on the environment." "Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects." (CEQA Guidelines, § 15126.2). Finally, the City in approving the Project, "must make findings on whether the adverse environmental effects have been substantially reduced or if not, why not" (CEQA Guidelines, § 15002(g)).

CDFW recommends the City revise the Project's CEQA document to provide a discussion (i.e., Biological Resources chapter) of the Project's impact on biological resources and the adequacy of mitigation measures to reduce the Project's impact to less than significant. In addition, the City should provide a thorough cumulative impact discussion of the Project's effects on similar plant and wildlife species, habitat, and natural communities at a local level (City of Lancaster) and regional level (Antelope Valley). If the City determines that the Project would not have a cumulative impact, the Project's CEQA document should indicate why the cumulative impact is not significant. The City's determination should be supported by facts and analyses [CEQA Guidelines, § 15130(a)(2)].

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Recommendation #6: Natural communities, alliances, and associations with a State-wide ranking of S1, S2, and S3 should be considered Sensitive Natural Communities and declining at the local, regional, or State level. These ranks can be obtained by visiting [Vegetation Classification and Mapping Program - Natural Communities](#) webpage (CDFW 2022c). CDFW

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considers Sensitive Natural Communities to meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). The presence of and the Project's impact on Sensitive Natural Communities should be addressed during CEQA. Furthermore, an EIR should evaluate a project's potential impact on plant communities [CEQA Guidelines, § 15065(a)(1)]. Finally, an EIR "must include a description of the physical environmental conditions in the vicinity of the project...Special emphasis should be placed on environmental resources that are rare or unique to the region that would be affected by the project" (CEQA Guidelines, § 15125).

CDFW recommends the City revise the Project's CEQA document and provide a discussion of the Project's potential impact on natural communities and Sensitive Natural Communities. The City should provide a map of natural communities and Sensitive Natural Communities within and adjacent to the Project site. A map should show natural community alliances and/or associates according to the [Manual of California Vegetation](#) (MCV), second edition (Sawyer et al. 2009). The map should also be prepared in accordance with CDFW's [Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities](#) (CDFW 2018). The CEQA document should provide the State-wide ranking of each natural community identified.

Recommendation #7: The Project would require significant ground and soil disturbance. Wildlife may be trapped or crushed by large equipment during Project construction. Accordingly, the Project Applicant should have a qualified biologist on site to prevent injury and mortality of wildlife of low mobility. Wildlife should be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to suitable habitat adjacent to the Project site (at least 200 feet off site). A qualified biologist should be on site daily during initial ground and habitat disturbing activities and vegetation removal.

Recommendation #8: CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database [i.e., CNDDDB] which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Information on special status species should be submitted to the CNDDDB by completing and submitting [CNDDDB Field Survey Forms](#) (CDFW 2022d). Information on special status native plant populations and sensitive natural communities, the [Combined Rapid Assessment and Relevé Form](#) should be completed and submitted to CDFW's Vegetation Classification and Mapping Program (CDFW 2021e).

Recommendation #9: CDFW recommends the City update the Project's proposed Biological Resources Mitigation Measures and condition the environmental document to include mitigation measures recommended in this letter. CDFW provides comments to assist the City in developing mitigation measures that are specific, detailed (i.e., responsible party, timing, specific actions, location), and clear for a measure to be fully enforceable and implemented successfully via a mitigation monitoring and/or reporting program (CEQA Guidelines, § 15097; Pub. Resources Code, § 21081.6). The City is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. Per Public Resources Code section 21081.6(a)(1), CDFW has provided the City with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment A).

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cont.

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Filing Fees

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

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Conclusion

We appreciate the opportunity to comment on the Project to assist the City of Lancaster in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the City of Lancaster has to our comments and to receive notification of any forthcoming hearing date(s) for the Project [CEQA Guidelines, § 15073(e)]. If you have any questions or comments regarding this letter, please contact Ruby Kwan-Davis, Senior Environmental Scientist (Specialist), at Ruby.Kwan-Davis@wildlife.ca.gov or (562) 619-2230.

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Sincerely,

DocuSigned by:

Steve Gibson

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Steve Gibson signing for

Erinn Wilson-Olgin
Environmental Program Manager I
South Coast Region

cc: CDFW

Erinn Wilson-Olgin, Los Alamitos – Erinn.Wilson-Olgin@wildlife.ca.gov

Victoria Tang, Los Alamitos – Victoria.Tang@wildlife.ca.gov

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CEQA Program Coordinator, Sacramento – CEQACommentLetters@wildlife.ca.gov

State Clearinghouse, Office of Planning and Research – State.Clearinghouse@opr.ca.gov

References:

[CDFWa] California Department of Fish and Wildlife. 2022. Species of Special Concern. Available from: <https://wildlife.ca.gov/Conservation/SSC>

[CDFWb] California Department of Fish and Wildlife. 2022. Lake and Streambed Alteration Program. Available from: <https://wildlife.ca.gov/Conservation/LSA>.

[CDFWc] California Department of Fish and Wildlife. 2022. Natural Communities. Available from: <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities>.

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- [CDFWd] California Department of Fish and Wildlife. 2022. Submitting Data to the CNDDDB. Available from: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>
- [CDFWe] California Department of Fish and Wildlife. 2022. Natural Communities — Submitting Information. Available from: <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Submit>
- [CDFW] California Department of Fish and Wildlife. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959>
- [CDFW] California Department of Fish and Wildlife. 2016. Status review: Swainson's hawk (*Buteo swainsoni*) in California. Report to the California Fish and Game Commission, Sacramento, CA, USA.
- [CDFW] California Department of Fish and Wildlife. 2010. Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California. Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83991&inline>
- [CNPS] California Native Plant Society. 2022. CNPS Rare Plant Ranks. Available from: <https://www.cnps.org/rare-plants/cnps-rare-plant-ranks>
- Calflora. 2022. Information on wild California plants. [Accessed 2022 March 9]. Available from: <https://www.calflora.org/>
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Fish and Wildlife Service. FWS/OBS-79/31. Washington, DC.
- ICF. 2019. Public Draft Antelope Valley Regional Conservation Investment Strategy. October. (ICF 462.16.) San Diego, California. Prepared for Desert Mountains Conservation Authority, Lancaster, California. Available from: <https://wildlife.ca.gov/Conservation/Planning/Regional-Conservation/Documents>
- Sawyer, J. O., Keeler-Wolf, T., and Evens J.M. 2009. A Manual of California Vegetation, 2nd ed. ISBN 978-0-943460-49-9.
- [USFWS] United States Fish and Wildlife Service. 2021. Wetlands Mapper. [Accessed 2022 March 9]. Available from: <https://www.fws.gov/wetlands/data/mapper.html>



State of California – Natural Resources Agency
 DEPARTMENT OF FISH AND WILDLIFE
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GAVIN NEWSOM, Governor
 CHARLTON H. BONHAM, Director



Attachment A: Draft Mitigation and Monitoring Reporting Plan

Biological Resources (BIO)			
Mitigation Measure (MM) or Recommendation (REC)	Timing	Responsible Party	
REC-1- Swainson's Hawk	Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an Incidental Take Permit for the Project unless the Project's CEQA document addresses all the Project's impact on CESA endangered, threatened, and/or candidate species. The Project's CEQA document should also specify a mitigation monitoring and reporting program that will meet the requirements of an Incidental Take Permit. It is important that the take proposed to be authorized by CDFW's Incidental Take Permit be described in detail in the Project's CEQA document. Also, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for an Incidental Take Permit. However, it is worth noting that mitigation for the Project's impact on a CESA endangered, threatened, and/or candidate species proposed in the Project's CEQA document may not necessarily satisfy mitigation required to obtain an Incidental Take Permit.	Prior to finalizing CEQA document	City of Lancaster (City)
REC-2- Burrowing Owl	The City should revise the Project's CEQA document to provide information that mitigation measures for burrowing owls would be effective to reduce impacts on burrowing owl to less than significant. In addition, the City should provide information on performance standards and potential action(s) associated with each mitigation measure for burrowing owl.	Prior to finalizing CEQA document	City
REC-3-Lake and Streambed	CDFW's issuance of an LSA Agreement for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may	Prior to finalizing	City

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Alteration Agreement	consider the CEQA document from the lead agency/project applicant for the project. To minimize additional requirements by CDFW pursuant to Fish and Game Code section 1600 et seq. and/or under CEQA, a project's CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement.	CEQA document	
REC-4- Biological Impact Fee	<p>The City should revise the Project's CEQA document to clarify whether the Biological Impact Fee is being proposed as mitigation for the Project's significant impacts on biological resources described. In addition, the Project's CEQA document should address the following in relation to the Project:</p> <ol style="list-style-type: none"> 1) Whether the Biological Impact Fee is going towards an established program; 2) How that program is designed to (and will) mitigate the effects at issue at a level meaningful for purposes of CEQA; 3) What the Biological Impact Fee would acquire; 4) What biological resources would the Biological Impact Fee protect/conserve; 5) Why the Biological Impact Fee is appropriate for mitigating cumulative loss of biological resources in the Antelope Valley; 6) Why \$770/acre is sufficient to purchase land or credits at a mitigation bank; 7) Where the City may acquire land or purchase credits at a mitigation bank so that the Biological Impact Fee would offset Project impacts on biological resources in the Antelope Valley; 8) When the City would use the Biological Impact Fee; 9) How the City would commit the Project to paying the Biological Impact Fee; 10) What performance measures the proposed mitigation would achieve; 11) What type(s) of potential action(s) that can feasibly achieve those performance standards; and, 	Prior to finalizing CEQA document	City

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	12) How the Biological Impact Fee would be adequate such that the Project would not have a cumulative impact on biological resources in the Antelope Valley.		
REC-5-Discuss the Project's Significant Impacts on Biological Resources	The City should revise the Project's CEQA document to provide a discussion (i.e., Biological Resources chapter) of the Project's impact on biological resources and the adequacy of mitigation measures to reduce the Project's impact to less than significant. In addition, the City should provide a thorough cumulative impact discussion of the Project's effects on similar plant and wildlife species, habitat, and natural communities at a local level (City of Lancaster) and regional level (Antelope Valley). If the City determines that the Project would not have a cumulative impact, the Project's CEQA document should indicate why the cumulative impact is not significant. The City's determination should be supported by facts and analyses.	Prior to finalizing CEQA document	City
REC-6-Discuss the Project's Significant Impacts on Natural Communities	The City should revise the Project's CEQA document and provide a discussion of the Project's potential impact on natural communities and Sensitive Natural Communities. The City should provide a map of natural communities and Sensitive Natural Communities within and adjacent to the Project site. A map should show natural community alliances and/or associates according to the Manual of California Vegetation (MCV) , second edition. The map should also be prepared in accordance with CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities . The CEQA document should provide the State-wide ranking of each natural community identified.	Prior to finalizing CEQA document	City
REC-7-Qualified Biologist On Site	The Project Applicant should have a qualified biologist on site to prevent injury and mortality of wildlife of low mobility. Wildlife should be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to suitable habitat adjacent to the Project site (at least 200 feet off site). A qualified biologist should be on site daily during initial ground and habitat disturbing activities and vegetation removal.	During initial ground and habitat disturbing activities and vegetation removal	Royal Investors Group, LLC

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REC-8- Submitting Data for Sensitive and Special Status Species and Natural Communities	CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database [i.e., CNDDDB] which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Information on special status species should be submitted to the CNDDDB by completing and submitting CNDDDB Field Survey Forms . Information on special status native plant populations and sensitive natural communities, the Combined Rapid Assessment and Relevé Form should be completed and submitted to CDFW's Vegetation Classification and Mapping Program.	Prior to finalizing CEQA document	City
REC-9- Mitigation and Monitoring Reporting Plan	The City should update the Project's proposed Biological Resources Mitigation Measures and condition the environmental document to include mitigation measures recommended in this letter.	Prior to finalizing CEQA document	City
MM-BIO-1- Impacts on Swainson's Hawk-Surveys	The Project Applicant shall retain a qualified botanist to survey the Project site and adjacent area for Swainson's hawks according to the Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California . The Project Applicant shall submit a survey report, including negative findings, to the City and CDFW before the City issues a grading permit for the Project and any ground-disturbing activities and vegetation removal.	Before the City issues a grading permit for the Project and any ground-disturbing activities and vegetation removal	Royal Investors Group, LLC/City
MM-BIO-2- Impacts on Swainson's Hawk-Fully Avoid Nests	If surveys locate a Swainson's hawk nest, nests shall be fully avoided and no Project construction and activities shall occur within ½ mile of an active nest between March 1 and September 15. No trees or vegetation shall be removed between March 1 and September 15.	During Project construction and activities	Royal Investors Group, LLC/City
MM-BIO-3- Impacts on Swainson's	If take or adverse impacts to Swainson's hawk cannot be avoided, the Project Applicant shall consult with CDFW and obtain appropriate take authorization from CDFW. The Project Applicant shall provide a copy of a fully executed take authorization before	Before the City issues a grading permit for the Project	Royal Investors Group, LLC/City

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Hawk-Incidental Take Permit	the City issues a grading permit for the Project and before any ground disturbance and vegetation removal.	and any ground-disturbing activities and vegetation removal	
MM-BIO-4- Impacts on Swainson's Hawk- Replacement Habitat- Mitigation Bank	Permanent impacts to foraging habitat for Swainson's hawk shall be offset by the Project Applicant. The Project Applicant shall purchase 60 acres of preservation credits at mitigation bank offering credits for Swainson's hawk and whose service area contains the Project site. The Project Applicant shall submit the credit amount, bank sponsor, habitat types(s), and map of the mitigation site to the City before the City issues a grading permit for the Project and before any ground-disturbing activities or vegetation removal.	Before the City issues a grading permit for the Project and any ground-disturbing activities and vegetation removal	Royal Investors Group, LLC/City
MM-BIO-5- Impacts on Swainson's Hawk- Replacement Habitat-Land Acquisition	If credits at a mitigation bank are not available, the Project Applicant shall acquire 60 acres of land to protect habitat for Swainson's hawk in perpetuity. Lands to be conserved shall be selected in consistency with Conservation Actions for Swainson's hawk described in the Antelope Valley Regional Conservation Investment Strategy. The Project Applicant shall protect replacement habitat in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands. The Project Applicant shall record the conservation easement before the City issues a grading permit for the Project and any ground-disturbing activities and vegetation removal.	Before the City issues a grading permit for the Project and any ground-disturbing activities and vegetation removal	Royal Investors Group, LLC/City
MM-BIO-6- Impacts on Burrowing Owl- Protocol Surveys	Updated burrowing owl protocol surveys shall be conducted on the Project site and within 150 meters from the Project site in accordance with the procedures established by the California Department of Fish and Wildlife March 7, 2012, Staff Report on Burrowing Owl Mitigation. Survey protocol for breeding season owl surveys states to conduct 4 survey visits: 1) at least one site visit	Before the City issues a grading permit for the Project and before the start of	Royal Investors Group, LLC/City

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	<p>between February 15 to April 15, and 2) a minimum of three survey visits, at least three weeks apart, between April 15 and July 15, with at least one visit after 15 June. Protocol-level surveys and a report of findings, including negative findings, shall be provided to the City before the City a grading permit for the Project and before the start of construction/ground disturbing activities.</p> <p>If burrowing owls are identified using the project site, the Project Applicant shall contact the California Department of Fish and Wildlife (CDFW) to determine the appropriate mitigation/management requirements. The Project Applicant shall develop a Burrowing Owl Mitigation Plan in accordance with the 2012 Staff Report on Burrowing Owl Mitigation. At a minimum, the following shall be followed: If burrowing owls are detected on site, no ground-disturbing activities, such as vegetation clearance or grading, shall be permitted within a buffer of no fewer than 500 meters from an occupied burrow during the breeding season (February 1 to August 31), unless otherwise authorized by CDFW. During the non-breeding (winter) season (September 1 to January 31), ground-disturbing work can proceed as long as the work occurs no closer than 165 feet from the burrow. Depending on the level disturbance, a smaller buffer may be established in consultation with CDFW.</p> <p>The Project Applicant shall submit a final Burrowing Owl Mitigation Plan to CDFW and the City before the City issues a grading permit for the Project. The Project Applicant shall implement all measures identified in the Burrowing Owl Mitigation Plan.</p>	<p>construction/ ground disturbing activities</p>	
<p>MM-BIO-7- Impacts on Burrowing Owl- Replacement Habitat – Land Acquisition</p>	<p>The Project Applicant shall acquire 40 acres of land to protect habitat for burrowing owl in perpetuity. To be consistent with Conservation Actions for Burrowing Owl described in the Antelope Valley Regional Conservation Investment Strategy (ICF 2019), the Project Applicant shall acquire mitigation lands that (1) support documented burrowing owl nests, (2) are contiguous with existing protected habitat, and (3) are within the Antelope Valley.</p>	<p>Record the conservation easement before the City issues a grading permit for the Project</p>	<p>Royal Investors Group, LLC/City</p>

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	<p>The Project Applicant shall protect replacement habitat in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands. The Project Applicant shall record the conservation easement before the City issues the Project a grading permit.</p> <p>An appropriate non-wasting endowment shall be provided for the long-term management of mitigation lands. A mitigation plan shall include measures to protect the targeted habitat values in perpetuity from direct and indirect negative impacts. Issues that shall be addressed include but are not limited to the following: protection from any future development and zone changes; restrictions on access; proposed land dedications; control of illegal dumping; water pollution; and increased human intrusion.</p>		
MM-BIO-8- Impacts on Burrowing Owl-Rodenticides	No rodenticides and second-generation anticoagulant rodenticides shall be used during Project construction and for the lifetime of the Project.	During Project construction and for the lifetime of the Project	Royal Investors Group, LLC
MM-BIO-9- Impacts on Streams- Notify CDFW/Lake and Streambed Alteration Agreement	The Project Applicant shall notify CDFW pursuant to Fish and Game Code 1602. The Project Applicant shall proof that CDFW was notified before the City issues a grading permit for the Project. If a Lake and Streambed Alteration (LSA) Agreement is needed for the Project, the Project Applicant shall obtain a LSA Agreement from CDFW and provide a copy of the LSA Agreement before the City issues a grading permit for the Project and before any ground disturbance and vegetation removal.	Before the City issues a grading permit for the Project and before any ground disturbance and vegetation removal	Royal Investors Group, LLC/City
MM-BIO-10- Impacts on	The Project Applicant's notification to CDFW shall provide the following information: 1) A stream delineation in accordance with the U.S Fish and	Before the City issues a grading permit	Royal Investors Group, LLC

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<p>Streams- Notify CDFW</p>	<p>Wildlife Service wetland definition adopted by CDFW;</p> <p>2) Linear feet and/or acreage of streams and associated plant communities that would be permanently and/or temporarily impacted by the Project;</p> <p>3) A discussion as to whether impacts on streams within the Project site would impact those streams immediately outside of the Project site where there is hydrologic connectivity. Potential impacts such as changes to drainage pattern, runoff, and sedimentation shall be discussed; and,</p> <p>4) A hydrological evaluation of the 100-year storm event to provide information on how water and sediment is conveyed through the Project site. Additionally, the hydrological evaluation shall assess a sufficient range of storm events (e.g., 100, 50, 25, 10, 5, and 2-year frequency storm events) to evaluate water and sediment transport under pre-Project and post-Project conditions.</p>	<p>for the Project and before any ground disturbance and vegetation removal</p>	
<p>MM-BIO-11- Impacts on Streams- Lake and Streambed Alteration Agreement</p>	<p>If a LSA Agreement is needed for the Project, the Project Applicant shall comply with the mitigation measures detailed in the LSA Agreement issued by CDFW. The Project Applicant shall also provide compensatory mitigation for impacts on streams at no less than 2:1 for the impacted stream and habitat acreage, or at a ratio acceptable to CDFW.</p>	<p>Before any ground disturbance and vegetation removal</p>	<p>Royal Investors Group, LLC</p>
<p>MM-BIO-12- Impacts on Rare Plants- Survey</p>	<p>The Project Applicant shall retain a qualified botanist with experience surveying for southern California rare plants to survey the Project site and adjacent areas for rare plants. Surveys shall be conducted according to CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. The Project Applicant shall submit a survey report, including negative findings, to the City before the City issues a grading permit for the Project and any ground-disturbing activities and vegetation removal. At a minimum, the survey report shall provide the following information:</p>	<p>Before the City issues a grading permit for the Project and before any ground disturbance and vegetation removal</p>	<p>Royal Investors Group, LLC</p>

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	<ol style="list-style-type: none"> 1) A description and map of the survey area; 2) Field survey conditions that shall include name(s) of qualified botanists(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched; 3) If rare plants are found, a map(s) showing the location of individual plants or populations, and number of plants or density of plants per square feet occurring at each location. The map shall distinguish between species found and which plants/populations will be avoided versus impacted by Project construction and activities that would require mitigation; 4) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each rare plant or population is found. A sufficient description of biological conditions, primarily impacted habitat, shall include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class, density, cover, and abundance of each species); and, 5) If rare plants are found, species-specific measures to mitigate for impacts to rare plants and habitat (see Mitigation Measure #13). 		
<p>MM-BIO-13- Impacts on Rare Plants- Replacement Habitat – Land Acquisition</p>	<p>If impacts on CRPR 1 species and habitat cannot be avoided, the Project Applicant shall provide compensatory mitigation at no less than 2:1. The abundance of a rare plant species and total habitat acreage within the mitigation lands shall be no less than 2:1. Mitigation lands shall be in the same watershed as the Project site and support habitat that contains the rare plant species impacted. The Project Applicant shall protect replacement habitat in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity. The Project Applicant shall submit proposed replacement habitat for CDFW review prior to purchasing and recording the conservation easement. The</p>	<p>Submit proposed replacement habitat for CDFW review prior to purchasing and recording the conservation easement</p>	<p>Royal Investors Group, LLC/City</p>

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	Project Applicant shall record the conservation easement before the City issues a grading permit for the Project.	Before the City issues a grading permit for the Project	
MM-BIO-14- Impacts on Nesting Birds- Construction outside bird nesting season	To protect nesting birds that may occur within and in areas adjacent to the Project site, Project construction shall occur between September 1 through January 31, outside of the nesting bird season the greatest extent possible. The Project Applicant shall not remove or disturb trees or vegetation during the bird nesting season, which generally runs from February 15 through September 15 (as early as January 1 for some raptors) to avoid take of birds, raptors, or their nests, eggs, or nestlings.	During Project construction and activities	Royal Investors Group, LLC
MM-BIO-15- Impacts on Nesting Birds- Nesting bird survey	<p>If Project construction and activities must occur during the bird nesting season, the Project Applicant shall retain a qualified biologist to conduct a nesting bird survey. The qualified biologist shall conduct a nesting bird survey no more than 7 days prior to the beginning of any ground-disturbance and vegetation removal. The qualified biologist shall survey all potential nesting, roosting, and perching sites within a minimum 500-foot radius from the Project site. If Project construction and activities are delayed or suspended for more than 7 days during the nesting bird season, a qualified biologist shall repeat nesting bird surveys before any activities can recommence.</p> <p>A qualified biologist shall conduct nesting bird surveys before starting Project construction and activities each year over the Project's anticipated construction period of 2 to 3 years.</p>	<p>No more than 7 days prior to the beginning of any ground-disturbance and vegetation removal</p> <p>Before starting Project construction and activities each year</p>	Royal Investors Group, LLC
MM-BIO-16- Impacts on Nesting Birds- Buffers	If nesting birds are identified, the qualified biologist shall establish a no-disturbance buffer of a minimum of 500 feet around active nests. No-disturbance buffers shall be increased, if necessary, to protect the nesting birds. No-disturbance buffers shall be maintained until the breeding season has ended or until a qualified biologist determines that the birds have fledged and are no longer	Establish buffers before starting Project construction	Royal Investors Group, LLC

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	reliant upon the nest or parental care for survival.	and activities each year Maintain buffers during Project construction and activities	
MM-BIO-17- Impacts on Nesting Birds- Protect trees in place	The Project Applicant shall protect all vegetation and established trees on the Project's west boundary in order to retain these vegetation and trees for nesting birds and raptors. Impacts on the critical root zone of trees shall be avoided. The Project Applicant shall submit a Tree Protection Plan to the City before the City issues a grading permit for the Project and before any ground disturbance and vegetation removal.	Before the City issues a grading permit for the Project and before any ground disturbance and vegetation removal	Royal Investors Group, LLC/City

Response to Comment Letter 4: California Department of Fish and Wildlife

- 4-1 Comments noted. The comment provides background information on CDFW's role with regard to biological resources and a brief project summary.
- 4-2 The comment identifies the need to address Swainson's hawk, a state listed species. The comment includes proposed mitigation measures to adequately analyze impacts and to mitigate potential impacts. Based on this comment, Aspen biologists conducted an additional reconnaissance survey on April 21, 2022, to conduct a focused botanical survey, reconnaissance-level wildlife survey and assess the site for jurisdictional resources. Information regarding the results of this additional survey has been added to Section IV Biological Resources, Appendix B of the Draft EIR. In addition, Mitigation Measure 3 has been revised to address Swainson's hawk if found during project construction. With the revision to the existing mitigation measure, no additional measures are needed. The changes do not result in significant new information or change the conclusions in the Draft EIR. See Section C of this document for these revisions to the EIR.
- 4-3 The comment identifies the need to address burrowing owl and potential habitat loss. The comment includes recommended mitigation mitigations and states the Draft EIR measures are not written in sufficient detail to make an informed decision.

As noted in response to Comment 4-2, Aspen biologists conducted a survey on April 12, 2022. Information regarding the results of this additional survey has been added to Section IV Biological Resources, Appendix B of the Draft EIR. Mitigation Measure 2 has been revised to add additional clarification to reduce any potential impacts to nesting burrowing owl; the existing measure requires passive relocation of burrowing owl outside of the nesting season, by a qualified biologist, and according to a plan that will be prepared and approved by CDFW. The changes do not result in significant new information or change the conclusions in the Draft EIR. See Section C of this document for these revisions to the EIR.

In addition, the City has a program in place to offset the cumulative loss of habitat from development; this program requires the payment of biological impact fees that the City uses to acquire conservation lands. The proposed project and all other developments in the City that would impact undeveloped land are subject to the \$770 per acre fee. The City works with other agencies to identify lands that can be acquired and conserved to protect resources including burrowing owl.

- 4-4 The comment addresses potential impact to a stream and a freshwater pond; comment references the potential for a stream based on the 2018 Biological Resources Report that identified a small drainage along 60th Street West.

A site visit was completed on April 12, 2022, as described in response to Comment 4-2. Two drainages were observed on or near the project site in 2022. The western drainage is approximately 100 feet beyond the limits of the project site and is fed by runoff to the south along West Avenue L. Wetland vegetation is present, but this drainage is well beyond the limits of project activities. A second drainage is present along the eastern edge of the project site along 60th Street West. This drainage is for roadway runoff, is maintained/graded by City maintenance crews, and is not subject to CDFW or Regional Water Quality Control Board. A historic irrigation pond is present in the southeastern corner of the project site. This pond has not held water for more than 20 years and supports no aquatic resource value or wildlife habitat. The soil and vegetation are entirely upland, and the western berm of the pond was breached in the past. This historic structure is not a jurisdictional resource.

4-5 The comment states that the timing of the rare plant surveys in 2005 and 2018 were too late in the season to be able to identify certain rare plants. In addition, the comment expresses concern that the DEIR has no requirement to perform a spring-time rare plant survey before project activities even though this was recommended in the 2018 Biological Resources Report. Based on this comment, a site visit that was conducted on April 12, 2022, and a focused botanical survey was completed. No special-status plants were observed on the project site, and none have a potential to be present based on the poor-quality habitat and past land uses of the property. No impacts to special-status plants are expected to occur. However, to address this comment, more detail regarding on the survey timing, methods, and results have been added to the Section IV Biological Resources, Appendix B of the Draft EIR.

4-6 The comment notes that the Project could impact nesting birds. Based on the comment, Mitigation Measure 3 has been revised in Section IV Biological Resources, Appendix B of the Draft EIR. Additional details on the survey requirements, timing, and buffer distances have been added to the mitigation measure. The changes do not result in significant new information or change the conclusions in the Draft EIR. See Section C of this document for these revisions to the EIR.

4-7 The comment notes that the EIR does not adequately explain how the \$770/acre Biological Impact Fee would offset the cumulative loss of biological resources in the Antelope Valley as a result of the project.

The City will include the requirement for payment of the fee as a condition of approval for the project; it is one of the City's permit conditions (City Ordinance No. 848). Section IV Biological Resources, Appendix B of the Draft EIR (see updated text in Section C), describes the habitat of the project site. Because of the poor quality of habitat on the project site, further mitigation for this loss of habitat is not required. Also, see response to Comment 4-3.

4-8 The comment identifies concerns with the CEQA evaluation of impacts to biological resources. Based on CDFW comments, an additional survey was conducted on April 12, 2022, see responses to Comments 4- 2 to 4-5. The results of this recent survey have been added to Section IV Biological Resources, Appendix B of the Draft EIR (Section C of this document). In addition, several of the mitigation measures have been revised to make them more detailed and implementable to address CDFW comments. The recent survey reinforced the original determination of the poor quality of biological resources on the project site. With the results of this survey and the revisions to the mitigation measures along with the City's required Biological Impact Fee, the City can make the required CEQA Findings.

The comment also identifies other required measures that should be included in mitigation measures including a biological monitor, completion of CNDDDB forms, updating of mitigation measures, and better description of resources on the project site. As noted earlier, additional text has been added in Section C (to amend Appendix B of the Draft EIR) that address some of these comments. No additional mitigation measures are needed to address the comments.

4-9 Comments noted. The CEQA Environmental Document filing fee will be provided when the Notice of Determination is filed/posted.

- 4-10 Comments noted. As required in Section 15088 of the CEQA Guidelines, the City will provide copies of the responses to comments to the commenting agencies (10 days prior to decision on the environmental document). In addition, advance notice will be provided on the date of the public hearing for the project.

C. Revisions to the Draft EIR

Consistent with CEQA Guidelines Section 15132, this section identifies revisions made to the Draft EIR that resulted from comments submitted during the public comment period and associated responses. The changes include revisions to the EIR sections identified below and specific appendices included in the Draft EIR. Where revisions to the language of the Draft EIR have been made, the text in this section has been marked in strike-through (~~strike-through~~) for deletions and underline (underline) for additions. Each revision is identified by the Draft EIR page number, section number, and mitigation measure number as identified in the Draft EIR.

In evaluating the comments made on the Draft EIR, the City of Lancaster considered whether changes made in the response to comments would warrant recirculation of the EIR. The need for recirculation hinges on the extent of new information presented in the Final EIR. Section 15088.5 of the CEQA Guidelines states:

“information can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not significant unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of a project or a feasible way to mitigate or avoid such effect...”

CEQA provides an opportunity for a lead agency to refine the environmental analysis and incorporate revisions that do not change the impact determinations of the EIR or that reduce impacts from the proposed project. CEQA also identifies what would be considered significant new information, which the City of Lancaster considered in its evaluation. The revisions introduced in this Final EIR do not present any new significant environmental impacts or significantly increase the severity of environmental impacts. The changes identified herein clarify and amplify the information and analysis included in the Draft EIR. As such, recirculation is not necessary.

C.1 Revisions Based on Comments Received

C.1.1 Revisions to the Executive Summary

Page ES-5, Table ES-1, Biological Resources, Item C

Level of significance changes from No Impact to Less than Significant impact. See explanation under the discussion in item C in Section C.1.3 below.

C.1.2 Revisions to Section C: Environmental Setting, Analysis, and Mitigation Measures

Section C.2.3 Environmental Impact Analysis

Page C.2-5, After Paragraph 3

While the project’s VMT impacts would remain significant and unavoidable, the project allows for alternative modes of transportation to reduce VMT as much as possible. The project includes new roadways with streetlights and sidewalks to allow for pedestrian access. Local bus transit in the project area is provided by the Antelope Valley Transit Authority. Route 9, Quartz Hill via Avenue H, runs along 60th Street West, adjacent to and east of the project area, with a local bus stop at 60th Street West and Avenue K-9, approximately 300 feet north of the project area. The street improvements proposed as part

of the project would provide pedestrian access to this local bus stop and would also provide space for bicyclists, thereby allowing alternatives to car use.

C.1.3 Revisions to Appendices

Appendix B Initial Study Checklist

Page 15, Paragraph 1, line 5

“However, implementation of Mitigation Measure Number ~~11~~12, under Geology and Soils...”

Page 18, IV. Biological Resources

(Note: The complete section is included here to avoid confusion on what was revised or updated.)

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
IV. <u>BIOLOGICAL RESOURCES</u> . Would the project:				
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?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
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?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
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?				X

a. A biological resources survey was conducted for the project site by Callyn D. Yorke and documented in a report titled, “Biological Resources Report on APN: 3204-008-031, Twenty Acres, 60th Street West, North of Avenue L, Lancaster, California” date September 2005. This report documented the

findings of both a database search and a field survey. The field survey was conducted on September 16 and September 22, 2005 using pedestrian transects.

An update to the 2005 report was conducted by Callyn D. Yorke and documented in a report titled, “Biological Resources Report on APN: 3204-008-031, 19 Acres, 60th Street West, North of Avenue L, Lancaster, California” dated September 2018. The field survey was conducted on September 19 and September 20, 2018 using pedestrian transects.

In 2005, the site was disturbed due to clearing of vegetation, farming, grazing, refuse disposal and local traffic. In 2018, the site was cleared and majority of the site was disturbed by grading, fire, trash disposal, OHV, and foot traffic.

On April 21, 2022, Aspen biologists visited the project site to conduct a focused botanical survey, reconnaissance-level wildlife survey, assess the site for jurisdictional resources, and map vegetation on the project site. The survey included assessing all trees on the project site and assessing the surrounding habitat for Swainson’s hawk nests. All plant and animal species were recorded, and the survey results are discussed below.

Plants

The existing vegetation in 2005 was in various stages of re-growth and included mostly exotic weeds and native vegetation. A total of 46 species of plants ~~were~~ were found on the site (See Appendix E and Table 4). There ~~was~~ were relatively moist soils along the western boundary of the project site that supported several species of riparian trees and shrubs, but no ~~State or Federally~~ listed or ~~endangered, rare,~~ sensitive plants were found on site in 2005.

Chinese Elm (<i>Ulma Parviflora</i>)	Salt Cedar (<i>Tamarix Ramosissima</i>)	Jimson Weed (<i>Datura Meteloides</i>)	Fremont Cottonwood (<i>Populus Fremontii</i>)
Black Willow (<i>Salix Lasiandra</i>)	Narrow-Leaf Willow (<i>Salix Exigua</i>)	Peach (<i>Prunus Sp.</i>)	Parry Gilia (<i>Gilia Parraye</i>)
Rabbitfoot Polypogon (<i>Polypogon Monspeliensis</i>)	Wild Oat (<i>Avena Fatua</i>)	Cheat Grass (<i>Bromus Secalinus</i>)	Carinate Brome (<i>Bromus Carinatus</i>)
Red-stemmed Filaree (<i>Erodium Cicutarum</i>)	Locust (<i>Robinia Pseudo-Acacia</i>)	Rattlesnake Weed (<i>Euphorbia Albomarginata</i>)	Turkey Mullein (<i>Eremocarpus Setigerus</i>)
Black Mustard (<i>Brassica Nigra</i>)	Pepperweed (<i>Lepidium Latifolium</i>)	Brassicaceae (<i>Alyssim Sp.</i>)	Tumble Mustard (<i>Sisymbirum Allissimum</i>)
Common Burdock (<i>Arctium Minus</i>)	Mulefat (<i>Bacchari Glutinosa</i>)	Poverty Sumpweed (<i>Iva Axillaris</i>)	Common Sunflower (<i>Helianthus Annuus</i>)
Knapweed (<i>Centaurea Sp.</i>)	Wire Lettuce (<i>Stephanomeria exigua</i>)	Telegraph Weed (<i>Heterotheca Graniflora</i>)	Cudweed Aster (<i>Corethrogyne Filaginifolia</i>)

Rabbitbush (<i>Chrysothamnus Nauseosus</i>)	Bursage (<i>Ambrosia Tomentosa</i>)	Annual Bursage (<i>Amrosia Acanthocarpa</i>)	Horseweed (<i>Conzya Canadensis</i>)
Vingear Weed (<i>Trichostemma Lanceolata</i>)	Four-Winged Saltbush (<i>Atriplex Canescens</i>)	Fiddleneck (<i>Amsinkia Tessellata</i>)	Autumn Vinegar Weed (<i>Lessingia Lemmoni</i>)
Russian Knapweek (<i>Acroptilon Reprens</i>)	Foxtail Chess (<i>Bromus Rubens</i>)	Soft Chess (<i>Bromus Mollis</i>)	Downy Brome (<i>Bromus Tectorum</i>)
Broadleaf Plantain (<i>Plantago Major</i>)	Russian Thistle (<i>Salsola Iberica</i>)	Hydrophyllacea (<i>Phacelia Sp.</i>)	Wild Alder (<i>Alnus Rhombifolia</i>)
Hairy Fleabane (<i>Conzya Bonariensis</i>)			

In 2018, a total of 48 species of plant were found on site (See Appendix F and Table 5) and the results of the plant survey were essentially the same as the September, 2005 study report. With the exception of variation in species abundance and disappearance of adventitious riparian element due to drought, there had been no significant vegetation change on the property. The 2018 survey report specifically stated that no western Joshua trees were present on the project site.

Table 5: 2018 Observed Plants

Puncture Weed (<i>Tribulus Terrestris</i>)	Salt Cedar (<i>Tamarix Ramosissim</i>)	Jimson Weed (<i>Datura Meteloides</i>)	Skeleton Weed (<i>Eriogonum Deflexium</i>)	Soft Chess (<i>Bromus Mollis</i>)	Mediterranean Schismus (<i>Schismus Barbatus</i>)
Six Weeks Fescue (<i>Festuca octofolora</i>)	Indian Rice Grass (<i>Orzopsis</i>)	Creeping Bentgrass (<i>Agrostis Stolonifera</i>)	Rye Brome (<i>Bromus Secalinus</i>)	Foxtail Chess (<i>Bromus Rubens</i>)	Broadleaf Plantain (<i>Plantago Major</i>)
Rabbitfoot Polypogon (<i>Polypogon Monspeliensis</i>)	Wild Oat (<i>Avena Fatua</i>)	Cheat Grass (<i>Bromus Secalinus</i>)	Carinate Brome (<i>Bromus Carinatus</i>)	Vingear Weed (<i>Trichostemma Lanceolata</i>)	Foxtail Chess (<i>Bromus Mafritensis</i>)
Red-stemmed Filaree (<i>Erodium Cicutarium</i>)	Locust (<i>Robinia Pseudo-Acacia</i>)	Rattlesnake Weed (<i>Euphorbia Albomarginata</i>)	Turkey Mullein (<i>Eremocarpus Setigerus</i>)	Four-Winged Saltbush (<i>Atriplex Canescens</i>)	Russian Thistle (<i>Salsola Iberica</i>)
Cheat Brome (<i>Bromus Tectorum</i>)	Pepperweed (<i>Lepidium Latifolium</i>)	Brassicaceae (<i>Alyssim Sp.</i>)	Tumble Mustard (<i>Sisymbirum Allissimum</i>)	Fiddleneck (<i>Amsinkia Tessellata</i>)	White Alder (<i>Alnus Rhombifolia</i>)

Black Mustard (<i>Brassica Nigra</i>)	Dove Weed (<i>Eremocarpus Setigerus</i>)	Poverty Sumpweed (<i>Iva Axillaris</i>)	Common Sunflower (<i>Helianthus Annuus</i>)	Horseweed (<i>Conzya Canadensis</i>)	Hairy Fleabane (<i>Conzya Bonariensis</i>)
Knapweed (<i>Centaurea Sp.</i>)	Winterfat (<i>Krascheninnikovia Lanata</i>)	Telegraph Weed (<i>Heterotheca Graniflora</i>)	Cudweed Aster (<i>Corethrogyne Filaginifolia</i>)	Autumn Vinegar Weed (<i>Lessingia Lemmoni</i>)	Russian Knapweed (<i>Acroptilon Reprens</i>)
Rabbitbush (<i>Chrysothamnus Nauseosus</i>)	Spiny Saltbush (<i>Atriplex Spinifer</i>)	Annual Bursage (<i>Amrosia Acanthocarpa</i>)	Burrow-weed (<i>Ambrosia Dumosa</i>)	Cheesebush (<i>Hymenoclea</i>)	Danelion (<i>Teraxacum</i>)

During the 2022 field survey, a full rare plant survey was conducted including transects spaced approximately 110 meters apart. During this most recent survey, no special status species were identified. No rare plants were observed, and none are expected to be present because of the existing condition of the project site. Several new plants were recorded on the project site during the survey including native species including sagebrush combseed (*Pectocarya linearis*), needle goldfields (*Lasthenia gracilis*), desert dandelion (*Malacothrix californica*), Chinese parsley (*Heliotropium curassavicum*), and Arizona popcorn flower (*Plagiobothrys arizonicus*). Non-native species observed included foxtail barley (*Hordeum murinum*), giant reed (*Arundo donax*), riggut brome (*Bromus diandrus*), herb sophia (*Descurainia Sophia*), Bermuda grass (*Cynodon dactylon*), and Indian hedge mustard (*Sisymbrium orientale*).

Animals

In 2005, there were two species of butterfly, a side-blotched lizard, loggerhead shrike, ten species of bird that were found on the site during the survey and can be found in Table 6. There were sign of seven species of mammal that was found including valley pocket gopher, California ground squirrel and Merriam’s kangaroo rat.

Common Buckeye (<i>Junonia Coenia</i>)	Common White (<i>P. Prtodice</i>)	Side-blotched Lizard (<i>Uta Stansburiana</i>)	Red-Tailed Hawk (<i>Buteo Jamaicensis</i>)
Mourning Dove (<i>Zenaida Macroura</i>)	Say’s Phoebe (<i>Sayornis Saya</i>)	Common Raven (<i>Corvus Corax</i>)	Loggerhead Shrike (<i>Lanius Ludovicianus</i>)
Orange-Crowned Wabler (<i>Vermivora Celata</i>)	Western Meadowlark (<i>Stutrnella Neglecta</i>)	Red-Winged Blackbird (<i>Agelaius Phoeniceus</i>)	Savannah Sparrow (<i>Passerculus Sandwichensis</i>)
House Finch (<i>Carpodacus mexicanus</i>)			

In 2018, no butterflies or amphibians were found on the site. Four side-blotched lizards were found on the site. In addition to the same bird species found in 2005 (see table 6), several new species of

birds were found during the 2018 survey. Those species are found in Table 7. No desert tortoises, desert kit foxes or their sign were observed within the study site. No suitable Mohave ground squirrel habitat was present within the project site.

Turkey Vulture (<i>Cathartes Aura</i>)	Cooper’s Hawk (<i>Accipiter Cooperi</i>)	Common Barn Owl (<i>Tyto Alba</i>)	Mourning Dove (<i>Zenaida Macroura</i>)
Anna’s Hummingbird (<i>Calypte Anna</i>)	American Kestrel (<i>Falco Sparverius</i>)	Common Raven (<i>Corvus Corax</i>)	Barn Swallow (<i>Birundo Rustica</i>)
House Wren (<i>Troglodytes Aedon</i>)	Northern Mockingbird (<i>Mimus Polyglottos</i>)	Lincoln Sparrow (<i>Melospiza Lincolnii</i>)	House Finch (<i>Carpodacus Mexicanus</i>)
American Goldfinch (<i>Spinus Tristis</i>)	Lesser Goldfinch (<i>Spinus Psaltria</i>)	Common Side-Blotched Lizard (<i>Uta Stansburiana</i>)	

A Phase I protocol survey for Burrowing Owl was completed on the site during the 2018 survey and several pellets were found on a concrete cylinder along the southern property line indicating that a burrowing owl is present, but no burrows were identified on the site. In addition, a Cooper’s Hawk was flushed from the trees on the western border of the project site and nesting bird species could be present at the time that construction is anticipated to start. Therefore, mitigation measures have been identified below requiring preconstruction surveys to ensure that potential impacts to burrowing owls and nesting bird remain less than significant.

In 2022, four new species of wildlife were observed on the project site and included horned lark (*Eremophila alpestris*), rock dove (*Columba livia*), desert night lizard (*Xantusia vigilis*), and deer mouse (*Peromyscus maniculatus*). Overall, the species of wildlife observed in 2022 were similar to what was observed in 2005 and 2018. In addition, approximately 20 suitable burrowing owl burrows were observed within the project site during the latest survey but none of these showed signs of use by burrowing owl or burrowing owl sign. No Swainson’s hawk nests were observed in the row of small trees along the western edge of the project site or in any of the trees within 1 mile of the project site. Poor quality foraging habitat for Swainson’s hawk is present but the nearest known nest site is more than 6 miles to the northwest (CDFW, 2022).

Vegetation

Vegetation on the project site is best classified as Fiddleneck - Phacelia Fields (*Amsinckia (menziesii, tessellata)* - Phacelia spp. Herbaceous Alliance) as described in A Manual of California Vegetation (Sawyer et al 2009). Fiddleneck - Phacelia Fields has a State Rank of S5 (CDFW 2021). The dominant species on the project site include Devil’s lettuce (*Amsinckia tessellata*), red stemmed filaree (*Erodium cicutarium*), and annual brome grasses (*Bromus spp.*). A small narrow strip of non-native black locust (*Robinia pseudoacacia*) is also present along the western edge of the property and is best classified as Eucalyptus - tree of heaven - black locust groves (*Eucalyptus spp. - Ailanthus altissima - Robinia pseudoacacia* Woodland Semi-Natural Alliance) in A Manual of California Vegetation. This vegetation has no State Rank because it is dominated by non-native species. All of the vegetation on the project site would be removed during project construction. Impacts to the vegetation on the project site would be less than significant and would not require compensation because these vegetation types are abundant in the region and provide limited biological resource value.

Mitigation Measures

2. Prior to the start of project activities, a qualified biologist will conduct pre-construction surveys for burrowing owls. This pre-construction survey will be conducted ~~Updated burrowing owl protocol surveys shall be conducted on the project site~~ in accordance with the procedures established by the California Department of Fish and Wildlife, ~~prior to the start of construction/ground disturbing activities.~~ If burrowing owls are identified using the project site, the applicant shall contact the California Department of Fish and Wildlife (CDFW) to determine the appropriate mitigation/management requirements. At a minimum, the following shall be followed: If burrowing owls are detected on site, no ground-disturbing activities, such as vegetation clearance or grading, shall be permitted within a buffer of no fewer than 650 feet from an occupied burrow during the breeding season (February 1 to August 31), unless otherwise authorized by CDFW. During the non-breeding (winter) season (September 1 to January 31), ground-disturbing work can proceed as long as the work occurs no closer than 165 feet from the burrow. Depending on the level disturbance, a smaller buffer may be established in consultation with CDFW.
3. ~~If burrow avoidance is infeasible during the non-breeding season or during the breeding season (February 1 through August 31), where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival,~~ a qualified biologist shall implement a passive relocation program in accordance with Appendix E1 (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the 2012 CDFW Staff Report on Burrowing Owl Mitigation. The Burrowing Owl Exclusion and Mitigation Plan shall include all necessary measures to minimize impacts to burrowing owls during passive relocation, including all necessary monitoring of owls and burrows during passive relocation efforts.
4. If passive relocation is required, a qualified biologist shall prepare a Burrowing Owl Exclusion and Mitigation Plan and Mitigation Land Management Plan in accordance with CDFW's 2012 Staff Report on Burrowing Owl Mitigation and for review by CDFW prior to passive relocation activities. The Burrowing Owl Exclusion and Mitigation Plan shall include all necessary measures to minimize impacts to burrowing owls during passive relocation, including all necessary monitoring of owls and burrows during passive relocation efforts.
5. A nesting bird survey shall be conducted within 30 days prior to the start of construction/ground disturbing activities. If nesting birds are encountered, all work shall cease until either the young birds have fledged, or the appropriate permits are obtained from the California Department of Fish and Wildlife (CDFW). If active bird nests are identified using the project site during the survey, the applicant shall contact the California Department of Fish and Wildlife to determine the appropriate mitigation/management requirements. Impact to nests will be avoided by delay of work or establishing a buffer of 500 feet around active raptor nests and 50 feet around other migratory bird species nests.

To ensure avoidance of impacts to nesting birds, including buffer establishment and nest monitoring, a qualified biologist will monitor initial site clearing and ground disturbing activities. In addition to monitoring nesting activity, the biological monitor will also search the project site for common wildlife species as will relocate these species out of harm's way to the adjacent properties. The biological monitor will also submit California Natural

Diversity Database (CNDDDB) forms to CDFW is any special-status species are observed during monitoring. The biological monitor will be present on-site daily during initial activities and once per week once the project site has been cleared and initial ground disturbance is complete.

- b. The project site does not contain any riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service. Therefore, no impact would occur.
- c. There are no State or federally protected wetlands on the project site as defined by Section 404 of the Clean Water Act. Therefore, no impacts would occur.
- d. The project site is not part of an established migratory wildlife corridor. Therefore, no impacts would occur.
- e. The proposed project would not conflict with any local policies or ordinances, such as a tree preservation policy, protecting biological resources. The proposed project would be subject to the requirements of Ordinance No. 848, Biological Impact Fee, which requires the payment of \$770/acre to offset the loss of biological resources in the Antelope Valley as a result of development. Therefore, no impacts would occur.
- f. There are no Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or State habitat conservation plans which are applicable to the project site. The West Mojave Coordinated Habitat Conservation Plan only applies to federal land, specifically land owned by the Bureau of Land Management. In conjunction with the Coordinated Management Plan, a Habitat Conservation Plan (HCP) was proposed which would have applied to all private properties within the Plan Area. However, this HCP was never approved by the California Department of Fish and Wildlife nor was it adopted by the local agencies (counties and cities) within the Plan Area. As such, there is no HCP that is applicable to the project site and no impacts would occur.

Page 54, List of Referenced Documents and Available Locations

BRR1	Biological Resources Report on APN 3204-008-031, Twenty Acres, 60 th Street West, North of Avenue L, Lancaster, CA, September 2005, Callyn D. Yorke, PhD	DSD
BRR2	Biological Resources report on APN 3204-008-048, 19 Acres, 60 th Street West, North of Avenue L, Lancaster, CA, September 2018	DSD
<u>CDFW</u>	<u>California Natural Community List. August 18, 2021</u>	<u>DSD</u>
CRA	Phase I Cultural Resource Investigation for 20 Acres at the Intersection of 60 th Street West and West Avenue K-12, Lancaster Los Angeles County, California, October 2018, RT Factfinders Cultural Resources	DSD
ESA	Environmental Site Assessment - Phase I, Undeveloped Property, 60 th Street West between Avenue K-10 and West Avenue L, APN 3204-008-048, Lancaster, California 93536, October 2018, California Environmental	DSD
FIRM:	Flood Insurance Rate Map	DSD
GPEIR:	Lancaster General Plan Environmental Impact Report	DSD
LACPW:	Los Angeles County Public Works email regarding water, November 3, 2020	DSD
LACSD:	Los Angeles County Sanitation Districts email, November 2, 2020	DSD
LGP:	Lancaster General Plan	DSD
LMC:	Lancaster Municipal Code	DSD
LMEA:	Lancaster Master Environmental Assessment	DSD
<u>SAWYER</u>	<u>A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento. 1300 pp. Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009.</u>	<u>DSD</u>
SSHZ:	State Seismic Hazard Zone Maps	DSD
TRA	Traffic CEQA Form, August 20, 2021	DSD
USDA SCS:	United States Department of Agriculture Soil Conservation Service Maps	DSD
USGS:	United States Geological Survey Maps	DSD
VMT:	Lancaster TTM 83232 VMT Analysis Study, August 20, 2021, Fehr & Peers	DSD

Appendix D

Notice of Availability

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DEAN C. LOGAN
REGISTRAR-RECORDER/COUNTY CLERK

DEPUTY



COOPY

**NOTICE OF AVAILABILITY (SCH#2021090009)
TENTATIVE TRACT MAP NO. 83232**

DATE: FEBRUARY 25, 2022
TO: STATE CLEARINGHOUSE AND INTERESTED PARTIES
FROM: CITY OF LANCASTER DEVELOPMENT SERVICES
DEPARTMENT, COMMUNITY DEVELOPMENT DIVISION
SUBJECT: NOTICE OF AVAILABILITY OF DRAFT FOCUSED
ENVIRONMENTAL IMPACT REPORT FOR TENTATIVE TRACT
MAP NO. 83232

Notice is hereby given that pursuant to the requirements of the California Environmental Quality Act (CEQA), the City of Lancaster has completed a Draft Focused Environmental Impact Report (EIR) for Tentative Tract Map No. 83232.

Project Location and Description: The project site is an approximately 20-acre, undeveloped parcel located at the northwest corner of 60th Street West and Avenue K-12 within the City of Lancaster. Specifically, the project site is located on Assessor's Parcel Number (APN) 3204-008-048. The proposed project includes the subdivision of the 20-acre site into 86 single-family residential lots, variance for the reduction of lot width and lot depth standards and the construction of 86 single-family detached homes in the R-7,000 (single family residential, 7,000 square foot minimum lot size) zone.

Anticipated Environmental Effects: Based on the analysis presented in the Draft Focused EIR, the proposed project would not result in significant and unavoidable adverse impacts to any environmental resource areas with the exception of transportation. All other environmental effects evaluated in the Draft Focused EIR are determined to be less than significant, or can be feasible reduced to less-than-significant levels with incorporation of the mitigation measures provided in the Draft Focused EIR.

Public Review and Comment: The public review and comment period for the Draft Focused EIR will be from February 25, 2022 through April 11, 2022. The Draft Focused EIR is available for review at the following locations:

City of Lancaster Community Development Division- Planning 44933 Fern Avenue Lancaster, CA 93534	Lancaster Library 601 W Lancaster Blvd, Lancaster, CA 93534
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The Draft Focused EIR is also available for public review online at the following website: <https://www.cityoflanasterca.org/our-city/departments-services/development-services/planning/environmental-review>

A public hearing has not yet been scheduled for the proposed project. A subsequent notice of public hearing will be provided when the public hearing is scheduled.

An opportunity will be provided to give oral comments on the Draft Focused EIR at the City of Lancaster Planning Commission meeting that will be held on March 21, 2022 at 5:00 p.m. The meeting will be held at City Hall Council Chambers. Written comment and inquiries regarding the project and/or the Draft Focused EIR should be directed to the contact person below:

City of Lancaster Community Development Division-Planning
Cynthia Campaña, Senior Planner
44933 Fern Avenue
Lancaster, CA 93534

Comments may also be submitted via email to ccampana@cityoflanasterca.org

COPY

AFFIDAVIT OF PUBLICATION

(2015.5 C.C.P.)

STATE OF CALIFORNIA }
County of Los Angeles } ss

The space above for file stamp only

NOTICE OF AVAILABILITY TTM 83232

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of the printer of the **Antelope Valley Press**, a newspaper of general circulation, printed and published **daily** in the city of **Palmdale**, County of Los Angeles, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Los Angeles, State of California, under date of October 24, 1931, Case Number 328601; Modified Case Number 657770 April 11, 1956; also operating as the Ledger-Gazette, adjudicated a legal newspaper June 15, 1927, by Superior Court decree No. 224545; also operating as the Desert Mailer News, formerly known as the South Antelope Valley Foothill News, adjudicated a newspaper of general circulation by the Superior Court of the County of Los Angeles, State of California on May 29, 1967, Case Number NOC564 and adjudicated a newspaper of general circulation for the **City of Lancaster**, State of California on January 26, 1990, Case Number NOC10714, Modified October 22, 1990; that the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

February 25, 2022

I certify (or declare) under penalty of perjury that the fore-going is true and correct.



Signature

Dated **February 25, 2022**
Executed at Palmdale, California



37404 SIERRA HWY., PALMDALE CA 93550
Telephone (661)267-4112/Fax (661)947-4870

Notice of availability (SCH#2021090009)
Tentative tract map no. 83232

DATE: February 25, 2022
TO: STATE CLEARINGHOUSE AND INTERESTED PARTIES
FROM: CITY OF LANCASTER DEVELOPMENT SERVICES DEPARTMENT, COMMUNITY DEVELOPMENT DIVISION
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Lancaster, CA 93534

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Lancaster, CA 93534

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Published: February 25, 2022
CAPN / CA111

AFFIDAVIT OF PUBLICATION

(2015.5 C.C.P.)

STATE OF CALIFORNIA }
County of Los Angeles } ss

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Cynthia Campaña, Senior Planner
44933 Fern Avenue
Lancaster, CA 93534

Comments may also be submitted via email to ccampana@cityoflancasterca.org

Appendix E

Biological Resources Report on APN 3204-008-031,
Twenty Acres, 60th Street West, North of Avenue L,
Lancaster, California

CALLYN D. YORKE Ph.D.
Biological Resources Reports
15438 Ensenada Road
Green Valley, CA 91390
Tel. 661 270-0222
Fax 661 270-9564

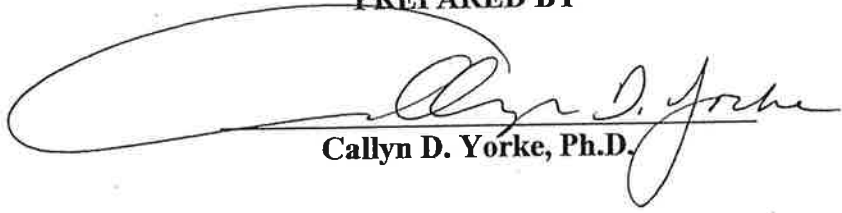
BIOLOGICAL RESOURCES REPORT

ON
APN 3204-008-031
Twenty Acres, 60th Street West, North of Avenue L,
Lancaster, California

PREPARED FOR

Andrew Park
3453 West 8th Street
Los Angeles, CA 90005

PREPARED BY


Callyn D. Yorke, Ph.D.

September, 2005

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Materials and Methods	2
Results	2
Corridors of Dispersal	3
Project Impacts to Sensitive Species	4-10
General Cumulative Impacts	10
Mitigation Measures	11

Figure 1: USGS Topographical Map Showing Location of the Project Site.

Figure 2 : Assessor's Parcel Map Showing Location of Project Site.

Figures 3-5: Ground-level Photographs of Project Site.

Figure 6: Aerial Photo of the Site Showing Surrounding Land Use.

References

Appendices: Floral Compendium
Faunal Compendium
Resume of Project Biologist
Copy of Letters from CNDDB

INTRODUCTION

A biological resources study was made on a ca. twenty-acre parcel (hereafter referred to as the "project site" or "site") in west Lancaster, California, following the request of Andrew Park, Los Angeles, CA. This report summarizes results of our biotic survey and discusses project impacts to the biota. Mitigation measures are included.

DESCRIPTION OF THE PROJECT SITE

The project site consists of approximately twenty acres of abandoned farmland located on the west side of 60th Street West, near Avenue K-14, in the city of Lancaster, CA, APN 3204-008-031 (Figures 1 & 2). The land is part of a gentle north-sloping alluvial plain with sand and alkali clay soils, at a maximum elevation of about 2,400 feet above sea level.

The site has experienced considerable disturbance due to clearing of vegetation, farming, grazing, refuse disposal and local traffic (Figures 3-6). Much of the existing vegetation is in various stages of re-growth and includes mostly exotic weeds (e.g. *Erodium*, *Bromus*, *Sysimbrium*, *Salsola*). Native vegetation is limited largely to herbaceous annuals (e.g. *Amsinkia tessellata*) and a few hardy shrubs (e.g. *Atriplex canescens*). There are no Joshua trees and no California junipers on the site. The land to the east and north of the project site is currently being developed and has been cleared of native vegetation. The southern and western boundaries of the site are adjacent with open fields of similar nature to the study site (Figure 6). Drainage across the site appears to be largely by sheet flow to the north, in addition to eroded ditches paralleling the western and eastern boundaries (Figure 6). The latter two drainages support small clusters of adventitious riparian vegetation.

MATERIALS AND METHODS

Field surveys of the site were made on 16 and 22 September, 2005, by Callyn D. Yorke, Principal Biologist. The entire site was covered on foot, first along the perimeter, then through the center section. Binoculars (10 x 40), a 35 mm camera, and field notebook were used. Field surveys were made between 1000 and 1600 hrs. under fair skies, with WNW winds reaching 7 mph. Air temperatures during the surveys ranged from 70-80F. Ground-level and aerial photos were made of the site.

Attention was given to detection of sensitive plant and animal species known to occur in this region. A focused study was made for signs of occupation by loggerhead shrike burrowing owl, coast horned lizard, California legless lizard, and alkali mariposa lily. The California Department of Fish & Game (CDFG) Natural Diversity Data Base (CNDDB) was contacted for print-outs describing locations of sensitive species in the Palmdale-Lancaster area.

RESULTS

Flora

A total of forty-six species of plant, representing eighteen families, was found on the site (see Floral Compendium). There is extensive coverage by exotic grasses (e.g. *Bromus* spp.) and herbs (e.g. *Erodium cicutarium*, *Sysimbrium altissimum*, and *Salsola iberica*). With few exceptions (e.g. *Chrysothamnus nauseosus*, *Trichostemma lanceolata*, *Amsinkia tessellata*, and *Atriplex canescens*) very little native desert vegetation occurs on the site. The relatively moist soils along the western boundary of the site support several species of riparian trees and shrubs (e.g. *Populus fremontii*, *Salix* spp. *Baccharis glutinosa*). No State or Federally listed endangered, rare or sensitive plant species was found on the site.

Fauna

Two species of butterfly (common white and buckeye) were found on the site. One species of lizard (side-blotched) and ten species of bird were found during the survey. One CDFG Species of Special Concern, **loggerhead shrike**, was found on the site (see *Impacts to Sensitive Animals*). Sign of seven species of mammal was found, including valley pocket gopher, California ground squirrel, and Merriam's kangaroo rat.

Corridors of Dispersal

The project site is no longer a significant part of the regional corridor of wildlife dispersal in the Western Antelope Valley. This is due to developments currently in progress to the north and east of the site (Figure 6). The low diversity and density of small animal sign (e.g. reptiles and mammals) found on the site suggests that it is becoming a "habitat island" with decreased value to native wildlife; small birds of prey (e.g. loggerhead shrike, American kestrel, burrowing owl) and seed-eating birds (e.g. meadowlark, savanna sparrow) being possible exceptions. For large raptors in particular, and depending on annual rainfall, (see *Sensitive Species*), the project site together with adjacent fields to the west, may still offer significant forage and shelter opportunities. One unoccupied raptor nest, possibly red-tailed hawk, was seen in a dead tree bordering the site to the northwest.

KEY TO ABBREVIATIONS

CDFG = California Department of Fish & Game
USFWS = United States Fish & Wildlife Service
CNPS = California Native Plant Society
SSC = CDFG Species of Special Concern
FSC = USFWS Species of Special Concern

Project Impacts to Sensitive Species

FLORA

No CNPS, State or Federal listed plant was found on the site. Several listed species are known to occur in this area and are detectable in Spring through early Summer. Potential impacts to these species are considered below.

Kern County Evening Primrose (*Camissonia kernensis*) is listed as a rare species by the CNPS, but unlisted by State and Federal agencies. This plant is found in desert washes and canyons from 2500 to 6000 feet in elevation, and in Joshua Tree woodland. Flowering occurs in May. No individuals or remains of this species were found. Habitat on the site is largely degraded and inappropriate. Project impacts are unlikely.

Alkali Mariposa Lily (*Calochortus striatus*) is listed a Category 1B (locally endangered) species by the CNPS and as a Level 2 Candidate species by the USFWS. This attractive, relatively rare annual plant is found locally in this vicinity (Yorke, pers. observation) in alkali depressions supporting chenopod scrub vegetation (CNDDDB; Yorke pers. observ.). Flowering occurs from April to June, depending on adequate seasonal rainfall. No individuals of this species of plant were found on the site; habitat on the site is largely inappropriate; project impacts are unlikely.

Desert Cymopterus (*Cymopterus deserticola*) is listed as a rare and highly restricted species by the CNPS and Level 2 Candidate species by USFWS. This plant occurs on Edwards AFB in creosote scrub. Flowering occurs in April. No evidence of this species was found in the surveyed areas. Potential for this species occurring on the site is low; negative impacts are unlikely.

Short-joint beavertail cactus (*Opuntia basilaris brachyclada*) is a FSC and CNPS Category 1B plant occurring in Joshua tree woodland and upland desert-chaparral. No individuals of this species were found on the site; project impacts are unlikely.

cy-5

Peirson's lupine (*Lupinus peirsonii*) is a CNPS Category 4 plant that occurs in Joshua tree woodland and pinyon-juniper woodland. No individuals of this plant were found on the site. Project impacts are unlikely.

Pigmy poppy (*Canbya candida*) is a CNPS Category 1B plant found in Joshua tree woodland and desert scrub, in sandy places. The disturbed soils on the site are largely inappropriate for this plant. Project impacts are unlikely.

Mojave spineflower (*Chorizanthe spinosa*) is a CNPS Category 4 species found in chenopod scrub and creosote desert scrub. Flowering occurs from April to July. No evidence of this plant was found on the site; project impacts are unlikely.

Crowned Muilla (*Muilla coronata*) is listed by the CNPS as a rare species that is endangered in part of its range, but as a taxonomically invalid species by USFWS. This plant is found in heavy soils in Joshua Tree woodland, between 3000 and 5000 feet in elevation. Flowering occurs from March through April. No sign of this plant was found on the site; project impacts are unlikely.

Barstow woolly sunflower (*Eriophyllum mohavense*) is a Federal Special Concern Species (FSC) and California Native Plant Society (CNPS) category 1B (rare, threatened or endangered throughout their range) species. It occurs in rises between sinks in xerophytic saltbush scrub. No evidence of this plant was found on the site; project impacts are unlikely due to largely inappropriate habitat.

Mason's neststraw (*Stylocline masonii*) is a FSC and CNPS 1B species that occurs in chenopod (e.g. saltbush) scrub. No sign of this plant was found on the site; project impacts are unlikely.

Palmer's grappling hook (*Harpagonella palmeri*) is a FSC and CNPS category 2 species (rare, threatened, or endangered in California, but more common in other states). It occurs in sage scrub and clay soils below 2,500 feet. No sign of this plant was found in the study area; project impacts are unlikely.

Lancaster milkvetch (*Astragalus preussi* var. *laxiflorus*) is a CNPS 1B species that occurs in chenopod scrub, alkaline clay flats or gravelly or sandy washes and along draws in gullied badlands. No sign of this plant species was found in the surveyed area; habitat appears largely inappropriate. Impacts to Lancaster Milkvetch as a result of implementation of the proposed project are unlikely.

cy-6

Parish's alkali grass (*Puccinellia parishii*) is a CNPS Category 1B and CDFG S1.1 plant found in alkali springs and seeps in deserts. Habitat on the site is inappropriate. Impacts to this species as a result of implementation of the proposed development are unlikely.

Lemmon's syntrichopappus (*Syntrichopappus lemmonii*) is a FSC and CNPS Category 4 species (species of limited distribution in California but whose existence does not appear to be susceptible to threat). This plant occurs in Joshua tree woodland with sandy or gravelly soil. No sign of this plant was found on the site. Habitat is largely degraded and unsuitable; impacts are unlikely.

FAUNA

No listed species were found on the subject property. Several sensitive animal species are known to occur in this region; potential impacts to these are addressed below.

Mojave Desert Tortoise (*Gopherus agassizi*) is a CDFG and USFWS Endangered Species known to occur in this region, principally east of Highway 14. Absolutely no sign (e.g. burrows, scat, shell fragments) of desert tortoise was found on the subject property or adjacent parcels during our surveys. Nor was there any evidence found of historical occupation by tortoises. We recommend a DECLARATION OF NO SIGNIFICANT IMPACT on the Mojave desert tortoise.

Coast horned lizard (*Phrynosoma coronatum*) is a CDFG Species of Special Concern (SSC) known to occur on Avenue M-12, near 45th Street West in Quartz Hill (CNDDDB; Yorke, pers. observation). These lizards prefer loose sandy to gravelly soils around the perimeter of the western Antelope Valley (Yorke, pers. observ.). A focused search for this species on the site were concentrated in open areas with ant nests. No individuals of this lizard were found. Impacts to this species as a result of the proposed development are unlikely.

Burrowing owl (*Athene cunicularia*) is a CDFG "Species of Special Concern" (SSC) in California. Several family groups of burrowing owls are still found in the open fields of the western Antelope Valley (e.g. along 110th Street West near Avenue I, and near 40th Street West and Avenue K) though the population of this species in the Antelope Valley today is only a small fraction of its size fifteen years ago (Yorke, unpublished field notes). These birds may be declining for a number of reasons, e.g., habitat loss, pesticides, and hunting. No sign (e.g. feathers, insect remains, pellets) of burrowing owl was found. Direct impacts to nesting burrowing owls as a result of the project are unlikely, however a pre-construction survey is recommended (see *Mitigation Measures*).

California legless lizard (*Aniella pulchra*) is a CDFG SSC known to occur in sandy soils near seepages in the Western Antelope Valley (e.g. in the vicinity of 40th Street West and Avenue K). Habitat on the site appears marginally appropriate; no individuals of this species were found during our surveys. Project impacts are possible and a pre-construction Spring-time survey is recommended (see *Mitigation Measures*).

Long-eared owl (*Asio otus*) is a CDFG SSC occasionally found in fall and winter months, in small groups. These owls prefer relatively isolated clusters of trees and shrubs in this vicinity (Yorke, pers. observ.). The number of sightings of this species has

decreased over the past 20 years in the Antelope Valley. Reasons for the apparent decline of long-eared owls in this region may include habitat loss and encroachment. These owls are extremely shy and tend to avoid areas with human activity. No sign of long-eared owls was found on the site; project impacts are unlikely.

Short-eared owl (*Asio flammeus*) is a CDFG and USFWS SSC occasionally found during migration in fall and spring in the Antelope Valley; there are no documented nesting records of this species in Leona Valley (Yorke, pers. observation). Significant adverse impacts to short-eared owls as a result of implementation of the proposed project are unlikely.

Prairie falcon (*Falco mexicanus*) is another CDFG SSC that appears to be declining in portions of its range. No individuals of this species were seen on the project site during the surveys. This is a wide ranging species that usually nests in remote canyons and forages throughout the region. It may be declining in response to cumulative impacts from loss of open fields for foraging. Direct project impacts to nesting prairie falcons are unlikely; relatively insignificant project impacts to wintering falcons may result from an incremental loss of foraging opportunities.

Golden eagle (*Aquila chrysaetos*) is a CDFG SSC that may also nest in the mountains and foothills bordering the Antelope Valley, foraging widely elsewhere. In winter months (November-February) the local population of golden eagles is augmented by visitors from other regions. At such times, individuals, particularly immature birds, commonly perch on power poles along roadways and may be struck by cars when they attempt to feed on roadkill. No eagles were found on or near the subject property; impacts to nesting eagles are unlikely. Significant project impacts on wintering golden eagles are also unlikely.

Ferruginous hawk (*Buteo regalis*) is a CDFG SSC that winters in the Antelope Valley in relatively high numbers. Birds forage in open fields, often using power poles for lookouts. They rarely take roadkill and thus are seldom hit by automobiles. The cumulative loss of foraging habitat may be the greatest threat to this species in the region. Significant project impacts on wintering ferruginous hawks are unlikely.

Swainson's Hawk (*Buteo swainsoni*) is a State Threatened species known to have nested in the eastern Antelope Valley. A CNDDDB record indicates a pair of Swainson's hawks nested in a locust tree surrounded by agricultural fields near Avenue I and 50th Street East, in 1996 and 1999. Most records of nesting Swainson's Hawk in this region are from the eastern Antelope Valley. However, clusters of trees along the western boundary of the subject property may be suitable for Swainson's hawks; project impacts are possible and a pre-construction, Spring-time survey is recommended (see Mitigation Measures).

Cooper's Hawk (*Accipiter cooperii*) is a CDFG SSC that nests locally in the Antelope Valley and is a passage migrant and winter visitor. No individuals of this species were seen on the project site. However, I have found Cooper's hawk to be one of the more common raptors in the Lancaster-Palmdale area; it is frequently found in and around suburban parks and yards with mature trees (Yorke, pers. observ.). Direct impacts to nesting Cooper's hawks on the site are possible; a pre-construction Spring-time survey is recommended (see *Mitigation Measures*).

LeConte's thrasher (*Toxostoma lecontei*) is a Federal Candidate for listing, and is known from several scattered localities in the Antelope Valley (e.g. east Palmdale and Edwards AFB). A small population also occurs in Jawbone Canyon north of Mojave and also in east Palmdale. No thrashers were found during the surveys of the study site. Project impacts are unlikely.

Loggerhead shrike (*Lanius ludovicianus*) is another Federal Candidate for listing and a CDFG SSC. Habitat loss and pesticide poisoning are blamed for the decline of this bird. One adult shrike was found perched on an exposed dead limb of a Chinese elm on the southwestern edge of the site. No evidence of nesting on the site was found, however a pre-construction, Spring-time survey is recommended (see *Mitigation Measures*).

Horned lark (*Eremophila alpestris actia*) is a CDFG SSC. No horned larks were found on the site during the survey. Horned larks nest in the western Antelope Valley and appear to have a relatively large, viable population (Yorke, unpublished field notes). Presently it is not known if this species nests on or adjacent to the study site. Since this subspecies is probably not the form currently considered by CDFG as a SSC, implementation of the proposed project will have no significant impacts on the "California" horned lark (*Eremophila alpestris actia*).

Tricolored blackbird (*Agelaius tricolor*) is a CDFG SSC occurring at scattered localities in desert wetlands (e.g. Rosamond and Lancaster, Yorke, pers.observ.). Habitat on the present site is unsuitable for this species due to the absence of riparian vegetation. No individuals of this species were seen on or near the site during the surveys; project impacts are unlikely.

Virtually all **Bats** in California are CDFG SSC. Consequently, any loss of foraging, roosting or breeding habitat caused by residential development could have impacts on these nocturnal insectivores. No bat roosts were found on or adjacent to the subject property during our surveys. If bats are using the site for feeding, implementation of the proposed project will result in an insignificantly small loss of foraging habitat; adjacent open land should provide adequate foraging opportunities, in addition to increased insect availability in well-watered developments with outdoor lighting.

Mojave ground squirrel (*Spermophilus mohavensis*) is a CDFG threatened species that occurs at scattered localities in the Mojave Desert, principally east of Highway 14, including nearby Edwards AFB. There are also records of MGS from east Palmdale. No sign of this species was found (or expected to be found) on the subject property. Habitat on the site (i.e. Mojavean desert scrub) is isolated, largely degraded and inappropriate for MGS. We recommend a DECLARATION OF NO SIGNIFICANT IMPACT ON MGS.

American badger (*Taxidea taxus*) is a CDFG SCC that may occasionally be attracted to resources on the subject property. However, no sign of badger was found during the surveys. Badgers have occurred in this area, as one was reportedly seen crossing Highway 14 near Rosamond in 1993 (L. Uhazy, pers. communication). Another road-killed badger was found in western Leona Valley on Elizabeth Lake Road in '01 (Yorke, pers. observ.) A badger's territory is seldom less than 100 acres, indicating that the present site contains inadequate spatial resources for one breeding pair. Project impacts to badgers are unlikely.

General Cumulative Impacts

Whenever wilderness is taken for development few native organisms benefit. This is because in the complex web of life everything is interconnected and dependent. Removing vegetation destroys habitat for countless microscopic organisms with larger species dependent on them for food. For example, the tiny moth *Tegeticula paradoxa* is the only known pollinator of the Joshua Tree; disappearance of either species results in extinction of both. And the overall result of loss of Joshua Trees, an ecological keystone species, is simplification of the food web to include a new assemblage of relatively few, hardy species. Consequently, exotic pests like Russian thistle, tumble mustard, stork's bill, brome grasses, fire ants, aphids, snails, rock doves and starlings become established.

Due to its highly modified nature and ecological isolation, the subject property appears to be a relatively good choice for development. The majority of the site (90%) has been cleared and significantly modified, and is discontinuous with ecologically intact Joshua Tree Woodland-Saltbush Scrub communities in the area (Figure 6). Pre-construction surveys for sensitive species (e.g raptors, legless lizard) are recommended to reduce project impacts to a level of insignificance (see *Mitigation Measures*)

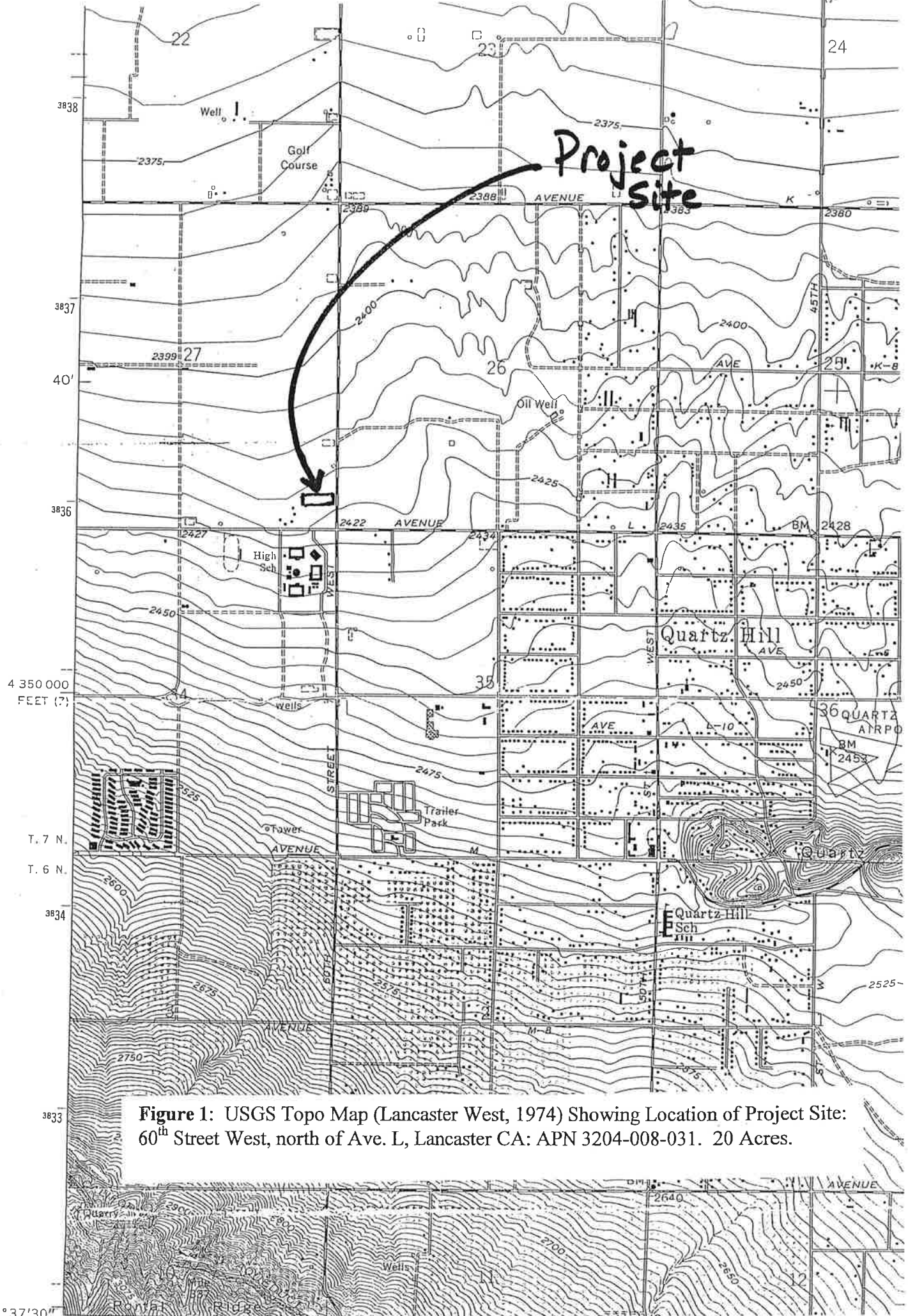


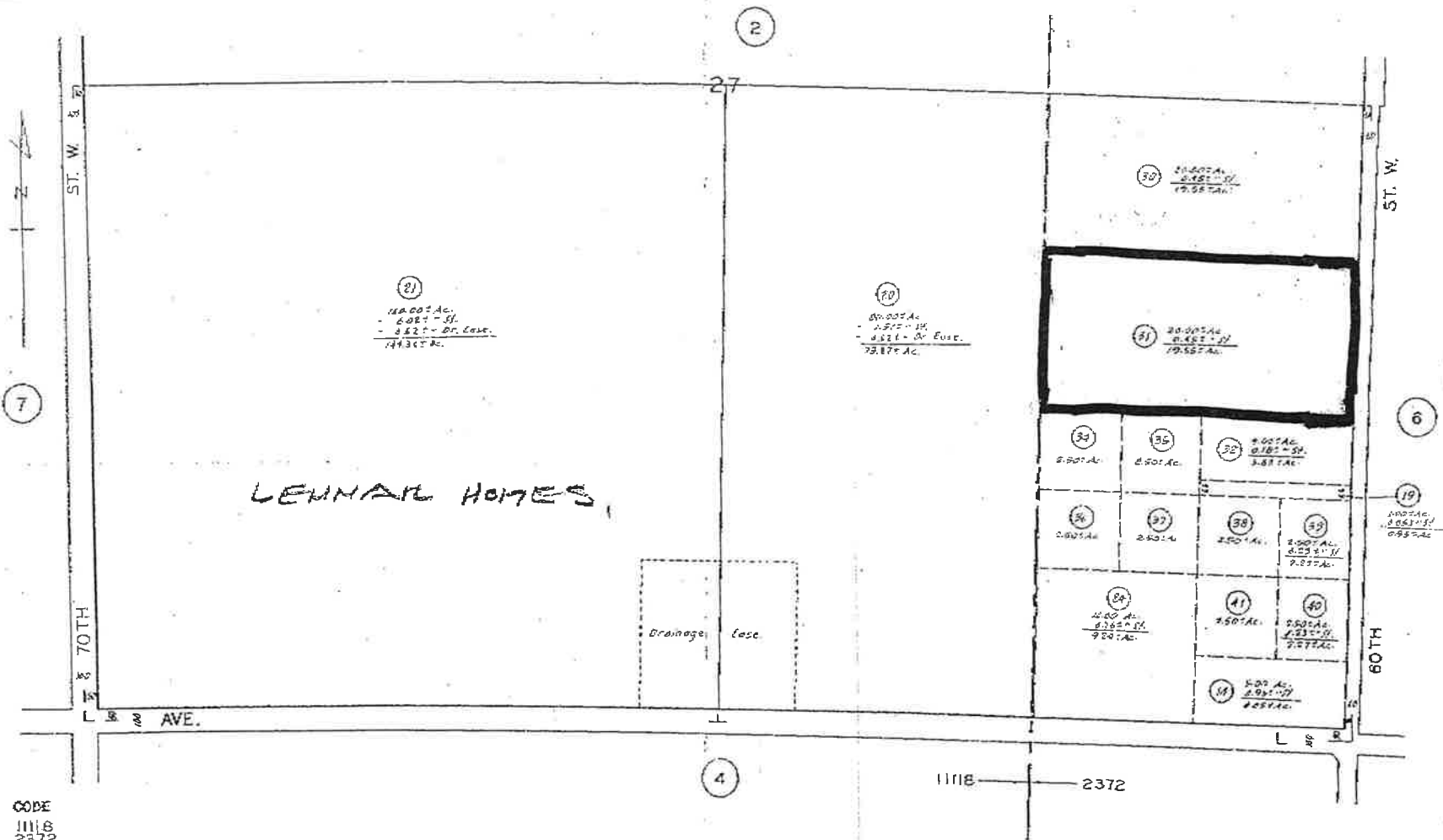
Figure 1: USGS Topo Map (Lancaster West, 1974) Showing Location of Project Site: 60th Street West, north of Ave. L, Lancaster CA: APN 3204-008-031. 20 Acres.

3204 8

1992

SCALE 1" = 400'

3204-8
1992



LENNAR HOMES

Drainage Easement

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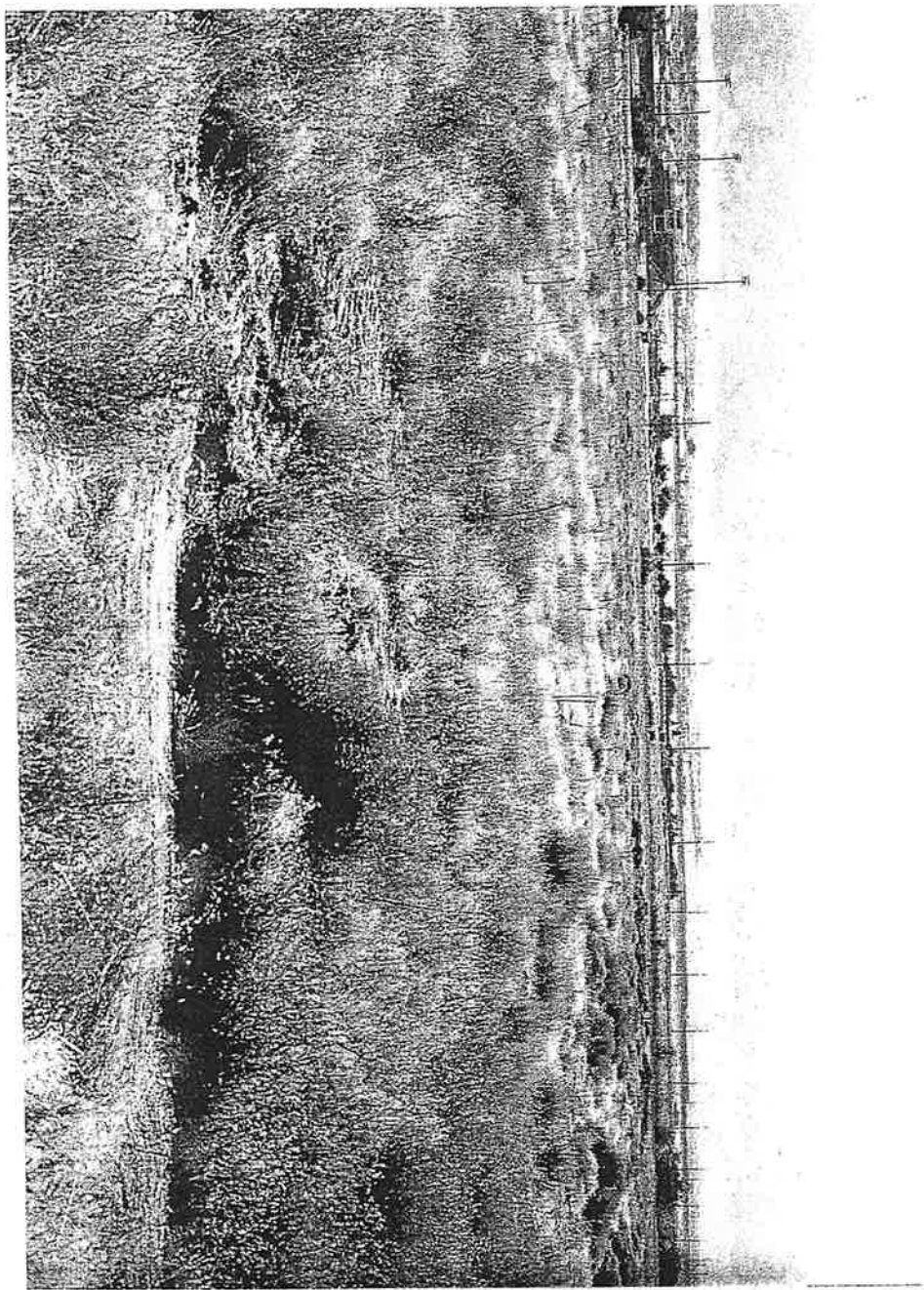
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FOR PREV. ASSMT SEE:
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ASSESSOR'S MAP
COUNTY OF LOS ANGELES, CALIF.

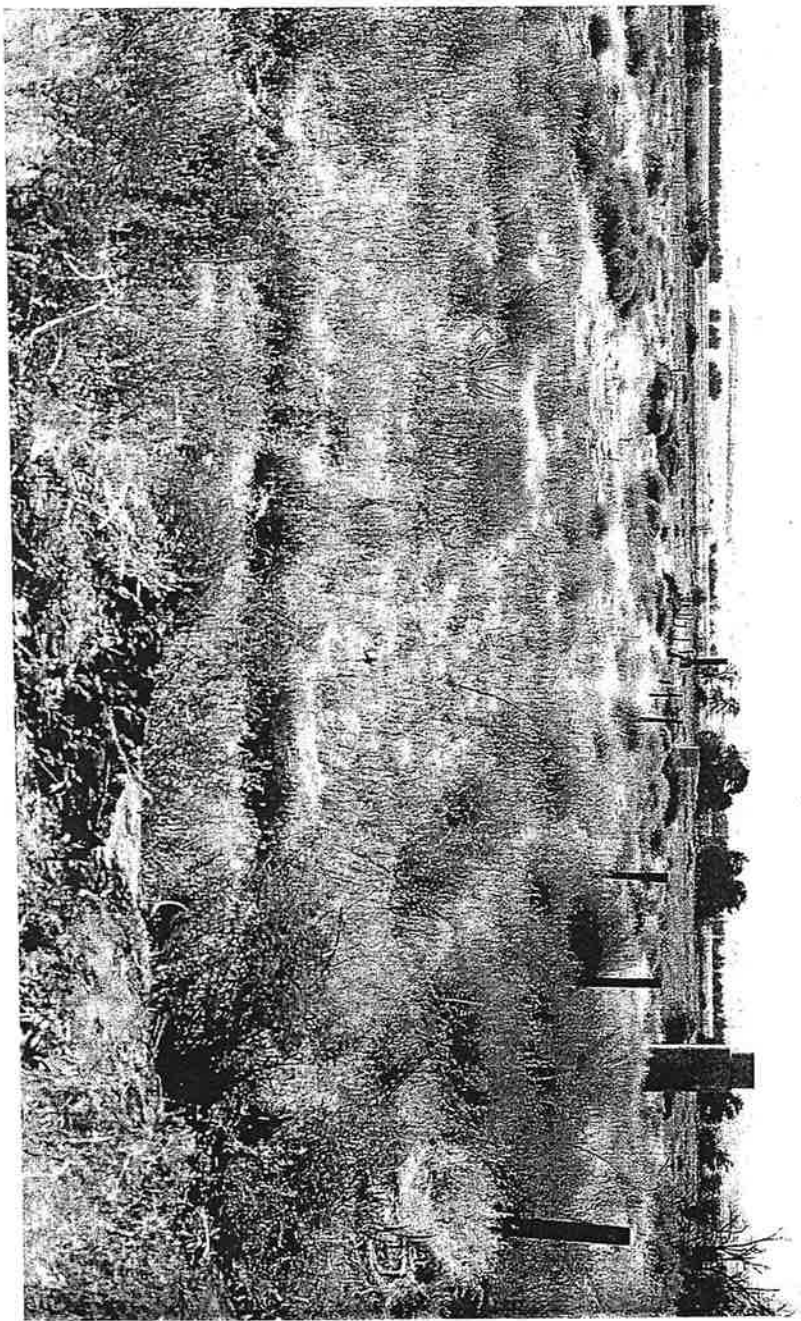
Figure 2. L.A. County Assessor's Parcel Map Showing Location of Project Site: 60th Street West, north of Ave. I, Lancaster, CA: APN 3204-008-031. 20 Acres.



9-16-05

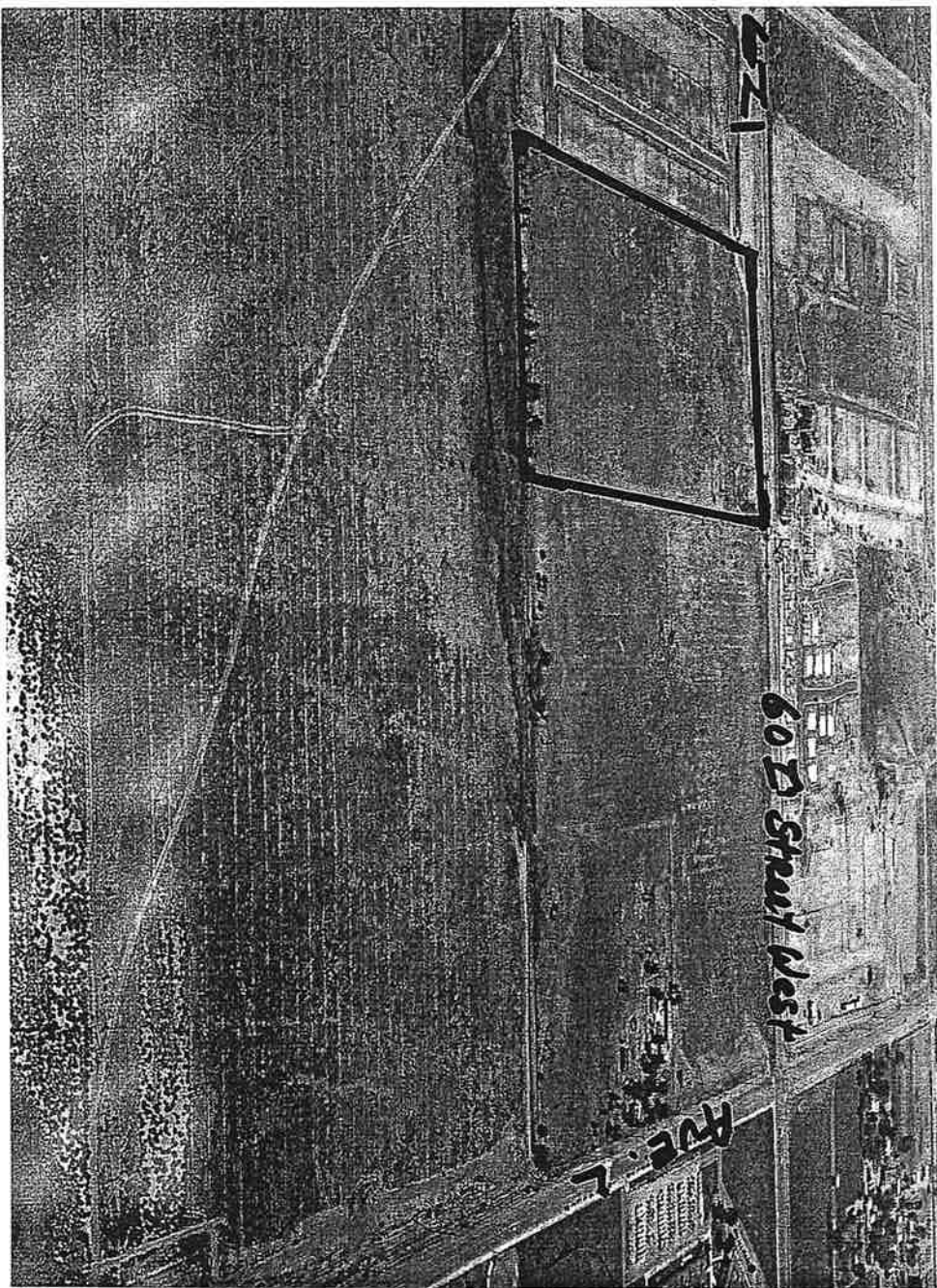
Figure 4: Viewing sw across site from
60th Street West.

APPN 3204-008-031



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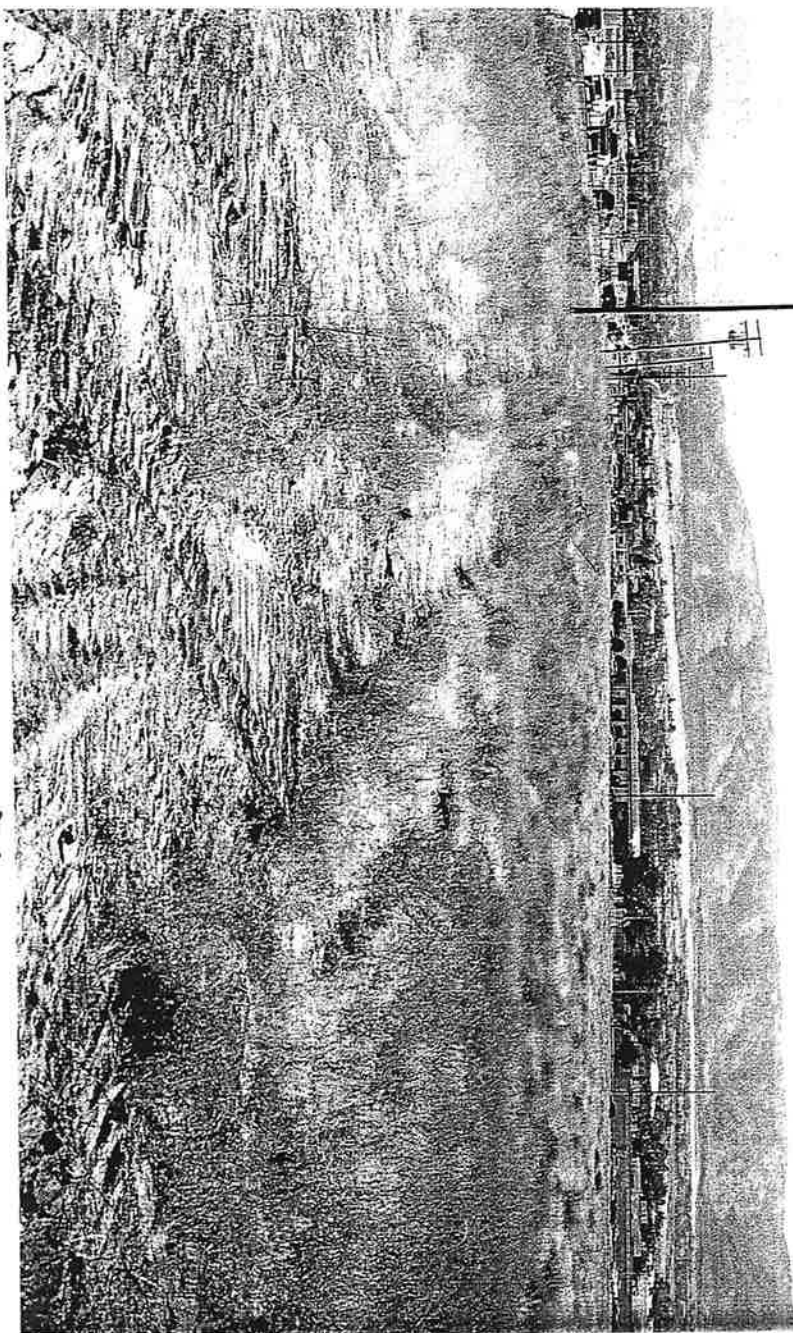
Figure 3: Viewing west across site along
northern property line, at 60th St. West.



9-16-05

Figure 6: Aerial view of project site showing surrounding land use.

APN 3204-008-031



9-16-05

Figure 5: Viewing south across site along 60th Street West.

REFERENCES

Abrams, L. 1923. Illustrated Flora of the Pacific States, Vols. 1,2. Stanford: Stanford University Press.

Abrams, L. and R.S. Ferris 1951. Illustrated Flora of the Pacific States, Vol. III. Stanford University Press.

_____ 1960. Illustrated Flora of the Pacific States, Vol. IV. Stanford University Press.

Adest, G.A. 1972. Intraspecific and interspecific behavior of *Ammospermophilus leucurus* and *Citellus mohavensis*. Unpubl. M.S. Thesis. California State University, Los Angeles. 83 pp.

American Ornithologist's Union 1983. Checklist of North American Birds Including 35th (1985), 36th (1987) and 37th (1989) supplements. American Ornithologists Union, Washington D.C.

Baldwin, Bruce G. et. al (editors), 2002. The Jepson Desert Manual. Vascular Plants of Southeastern California. University of California Press, Berkeley. 624 pp.

Bartholomew, G. A. and J.W. Hudson 1960. Aestivation in the Mojave ground squirrel *Citellus mohavensis*. Bull. Mus. Comp. Zool. 129:193-208.

Bent, A.C. 1937. Life histories of North American Birds of Prey (Parts 1&2). Dover, New York. 891 pp.

_____ 1942. Life Histories of North American Flycatchers, Larks, Swallows and their Allies. (PP. 364-371). Dover, New York. 555 pp.

_____ 1948. Life Histories of North American Nuthatches, Wrens, thrashers, and their Allies. (pp. 411-419). Dover, New York. 475 pp.

_____. 1950. Life Histories of North American Wagtails, Shrikes, Vireos, and their Allies (pp. 131-180). Dover, New York. 411 pp.

Brittingham, Steve and L.W. Walker. '00. Facilitation of *Yucca brevifolia* recruitment by Mojave Desert shrubs. Western North American Naturalist 60(4): 374-383.

Bureau of Land Management (BLM) 1989. Desert Tortoise Habitat: Interim Map. U.S. Department of the Interior, Bureau of Land Management, Desert District. Riverside, California.

Burt, W.H. 1936. Notes on the habits of the Mohave ground squirrel. Journal of Mammalogy 17: 221-224.

California Department of Fish & Game, Natural Diversity Data Base, (CNDDDB). '03 Computer printouts for Ritter Ridge, Lancaster & Palmdale quadrangles. '04 Computer printouts for Bissell, Rosamond, Rosamond Dry Lake, Victorville and adjacent quadrangles.

_____. '04 State and Federally Listed Endangered, Threatened, and Rare Plants of California. CDFG: CNDDDB.

_____. '04. Additions to standard exceptions on scientific collecting permits. CDFG, Sacramento, CA.

_____. '04. Bird Species of Special Concern. the Resources Agency CDFG Wildlife and Habitat Data Analysis Branch. Special Animals.

_____. '04. Mammal Species of Special Concern. The Resources Agency CDFG Wildlife and Habitat Data Analysis Branch. Special Animals.

_____. 1992. Designated areas of crucial Desert Tortoise Habitat. Three maps published in: Third Annual Desert Tortoise Survey Techniques, Report Writing, and Handling Procedures Workshop. Presented by the Desert Tortoise Council, June, 1992.

_____. 1987. Five year status report for Mohave ground squirrel. CDFG Nongame Bird & Mammal Section, Sacramento, CA. 6 pp.

California Environmental Quality Act (CEQA) 1986; 1992 ed. Office of Planning and Research, State of California. 336 pp.

California Native Plant Society, 2001. Inventory of Rare and Endangered Plants of California. California Native Plant Society, Special Publication #1 6th edition. 387 pp.

Carlson, J. and C. D. Yorke, 2004. Suburban water retention basins as significant habitat for migratory waterbirds in the Antelope Valley, Ca. ms. in prep.

Cheesemore, D.L. and D. Carroll 1976. First record of the Mohave ground squirrel (*Citellus mohavensis*) in Kern County, California. CDFG 62(2) 158-59.

Clements, R. F. & C. R. Feldmeth 1989. Joshua Tree Preservation Plan: The distribution and condition of Joshua trees (*Yucca brevifolia*) on a 5-acre parcel (TT Map No. 48156) in the City of Palmdale, Los Angeles County, CA. Ecological Research Services. 12 pp.

Elton, C. 1927. Animal Ecology (pp. 146-161). Sidgwick & Jackson, Ltd. London, 209 pp.

Emmel, T.C. and J.F. Emmel 1973. The Butterflies of Southern California. Natural History Museum of Los Angeles County.

Fishman, R.H. 1989. Biota Survey and Impact Assessment for Tentative Tract #48032, City of Palmdale, Los Angeles County, California. 26 pp.

Garrett, K. and J. Dunn 1981. Birds of Southern California, Status and Distribution. Los Angeles Audubon Society. 408 pp.

Garth, J.S. and J.W. Tilden 1986. California Butterflies. University of California Press, Berkeley, 246 pp.

Grinnell, J. and J. Dixon 1918. Natural history of the ground squirrels of California. The Monthly Bulletin. California State Commission of Horticulture &: 666-68.

Hafner, D.J. and T.L. Yates 1983. Systematic status of the Mohave ground squirrel *Spermophilus mohavensis* (Subgenus *Xerospermophilus*).
Journal of Mammalogy 64: 397-404.

Hall, E.R. 1981. the Mammals of North America. John Wiley & Sons, N.Y.
(2 vols.) 1181 pp.

Hohman, J.P., R.D. Ohmart, and J. Schwartzmann 1980. An annotated bibliography of the Desert Tortoise (*Gopherus agassizi*). Desert Tortoise Council Special Publication No. 1, Long Beach, CA.

Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. CDFG, 156 pp.

_____ and D.J. Keil 1990. California Vegetation (4th Ed.) Biological Sciences Department, California Polytechnic State University San Luis Obispo, 318 pp.

Hoyt, D.F. 1972. Mohave ground squirrel survey. CDFG Special Wildlife Investigation Project #W-54-R-4, 10 pp.

Jameson, E.W. Jr. and H.J. Peeters, 1988. California Mammals. Calif. Natural History Guides, 52, University of California Press, 402 pp.

Jennings, M.R. and M.P. Hayes, 1994. Amphibian and Reptile Species of Special Concern in California. Final report submitted to the Dept. of Fish & Game Inland Fisheries Division under contract No. 8023. 255 pp.

Leitner, P. and B.M. Leitner 1991. Third year (MGS) Baseline Report, Coso grazing exclosure monitoring study, Inyo County, California.
Unpubl. Biota Report Prepared for McClenahan & Hopkins Assoc.
5010 Hapden Lane, Bethesda, MD 20814.

Long, C.A. and C.A. Killingley 1983. The Badgers of the World.
C. Thomas Publ. Springfield, Illinois. (pp. 84-170).

Los Angeles County Department of Regional Planning 1992. Workshop proceedings on Significant Ecological Areas and environmentally sensitive resources in Los Angeles County. Impact Analysis Section: (6-18-92). 10 pp.

_____, 2000 Biological Resources Assessment of the Proposed Antelope Valley Significant Ecological Area. PCR Services et. al. 35 pp.

Munz, P.A. 1974. A Flora of Southern California. University of California Press. 1086 pp.

Pengelley, E.T. 1969. Influence of light on hibernation in the Mohave ground squirrel *Citellus mohavensis*. pp. 11-16 IN: Physiological systems in semiarid environments. (C.C. Hoff and M.C. Riesdesel eds.) University of New Mexico Press. Albuquerque, N.M. 42 pp.

Phillips, Edwin A., K.K. Page, and S.D. Knapp, 1980. Vegetational characteristics of two stands of Joshua Tree Woodland. *Madrono* 27(1): 43-47.

Rasmuson, Kaylie E., J.E. Anderson and N. Huntly, 1994. Coordination of branch orientation and photosynthetic physiology in the Joshua Tree (*Yucca brevifolia*). *Great Basin Naturalist* 54(3): 204-211.

Recht, M.A. 1977. The Biology of the Mohave Ground Squirrel, *Spermophilus mohavensis*; home range, daily activity, foraging and weight gain, and thermoregulatory behavior. University of California, Los Angeles, Ph.D. Dissertation. 117 pp.

Riley, C.V. 1892. The yucca moth and yucca pollination. *Missouri Botanical Garden Annual Report*: pp. 99-158.

Rowlands, Peter G. 1978. The vegetation dynamics of the Joshua Tree (*Yucca brevifolia* Engelm.) in the Southwestern United States of America. Ph.D. Dissertation, University of California, Riverside. 190 pp.

Sawyer, J.O. and T. Keeler-Wolf, 1995. A Manual of California Vegetation. California Native Plant Society. 471 pp.

Scott, S.L. (ed.) 1998. National Geographic Society Field Guide to the Birds of North America (3 rd ed.). 465 pp.

Smith, J.P. Jr. and K. Berg 1988. Inventory of rare and endangered vascular plants of California. Calif. Native Plant Society Special Publication No.1 (4th ed.) 168 pp.

Smith, Stanley B., T.L. Hartsock, and P.S. Nobel, 1983. Ecophysiology of *Yucca brevifolia*, an arborescent monocot of the Mojave Desert. *Oecologia* 60: 10-17.

Stall, Chris 1990. Animal tracks of Southern California. The Mountaineer's Press, Seattle. 124 pp.

Stebbins, R.C. 1985. A Field Guide to Western Reptiles and Amphibians (3 rd edition). Houghton Mifflin Co. 336 pp.

U.S. Fish & Wildlife Service 1999. Federal Register of Endangered and Threatened Wildlife and Plants. Dept. of the Interior. 50 CFR Part 17. Washington, D.C.

_____ 1991. Set of maps of categorized Desert Tortoise Habitat for the Mojave Desert..

_____ 1992. Procedures for Endangered Species Act Compliance for the Mojave Desert Tortoise. USDI and USFWS Region 1,2,6. October, 1992.

Went, F. W. 1948. Ecology of desert plants. I. Observations on germination in the Joshua Tree National Monument. *Ecology* 29(3): 242-253.

Wessman, E.V. 1977. The distribution and habitat preference of the Mohave ground squirrel in the southeastern portion of its range. Administrative Report for the Wildlife Management Branch, U.S. Bureau of Land Management, 77-5: 11-15.

Whitson, Tom D. (editor), 2001. Weeds of the West. University of Wyoming. 9th edition. 627 pp.

Williams, D.F. 1986. Mammalian Species of Special Concern in California.

California Dept. of Fish & Game, Wildlife Management Division.
Administrative Report No. 86-1, 112 pp.

Yorke, C.D. Unpublished field notes, Los Angeles & Kern County: 1984-2005.

Zemba, R. and C. Gall 1980. Observations on Mohave ground squirrels, *Spermophilus mohavensis*, in Inyo County, California. *Journal of Mammalogy* 61:347-350.

Floral Compendium

The following is a list of vascular plants found in the study area during the surveys. Relative abundances were estimated visually. Nomenclature largely follows Munz (1974).

LEGEND

Frequency

A = more than 50 individuals

B = 25-50 individuals

C = 10-20 individuals

D = 1-10 individuals

Latin binomial names are italicized, followed by common names and frequencies.

ASTERACEAE

- Ambrosia acanthocarpa* annual bursage A
Ambrosia tomentosa bursage B
Chrysothamnus nauseosus rabbitbush C
Acroptilon repens Russian knapweed A (exotic)
Lessingia lemmoni autumn vinegar weed A
Corethrogyne filaginifolia cudweed aster B
Heterotheca grandiflora telegraph weed A
Stephanomeria exigua wire lettuce A
Centaurea sp. knapweed (exotic) C
Conzya bonariensis hairy fleabane C (exotic)
Conzya canadensis horseweed A
Helianthus annuus common sunflower B
Iva axillaris poverty sumpweed C
Baccharis glutinosa mulefat C
Arctium minus common burdock D

BETULACEAE

- Alnus rhombifolia* white alder D

BORAGINACEAE

- Amsinkia tessellata* fiddleneck A

BRASSICACEAE

- Sisymbrium alissimum* tumble mustard A (exotic)
Alyssum sp. D (exotic)

Brassica nigra black mustard D (exotic)
Lepidium latifolium pepperweed D (exotic)

CHENOPODIACEAE

Salsola iberica Russian thistle A (exotic)
Atriplex canescens four-winged saltbush A

EUPHORBIACEAE

Eremocarpus setigerus turkey mullein A
Euphorbia albomarginata rattlesnake weed A

FABACEAE

Robinia pseudo-acacia locust D (exotic)

GERANIACEAE

Erodium cicutarium red-stemmed filaree A (exotic)

HYDROPHYLLACEAE

Phacelia sp. A

LAMIACEAE

Trichostemma lanceolata vinegar weed A

PLANTAGINACEAE

Plantago major broadleaf plantain C (exotic)

POACEAE

- Bromus rubens* foxtail chess A (exotic)
- Bromus tectorum* downy brome A (exotic)
- Bromus mollis* soft chess A (exotic)
- Bromus carinatus* carinate brome A
- Bromus secalinus* cheat grass A (exotic)
- Agrostis stolonifera* creeping bentgrass A
- Avena fatua* wild oat B (exotic)
- Polypogon monspeliensis* rabbitfoot polypogon C

POLEMONIACEAE

- Gilia parrayae* Parry gilia B

ROSACEAE

- Prunus sp.* peach (exotic) D

SALICACEAE

- Salix exigua* narrow-leaf willow D
- Salix lasiandra* black willow D
- Populus fremontii* Fremont cottonwood D

SOLANACEAE

- Datura meteloides* Jimson weed C

TAMARICACEAE

- Tamarix ramosissima* salt cedar D

ULMACEAE

- Ulma parviflora* Chinese elm C (exotic)

FAUNAL COMPENDIUM

Explanation of Symbols

Relative Frequency and Abundance

- c** -- common: observed or expected throughout the site in high numbers.
- f** -- fairly common: observed or expected in moderate numbers.
- u** -- uncommon: observed or expected in low numbers.
- o** -- occasional: observed or expected with low frequency.
- s** -- scarce: rarely observed or expected on the site.

Local Status

* Presence noted visually, vocally, or other sign. (1,2, etc. = maximum number of individuals found during a survey).

Museum/University Record: One or more records of this species in institutional collections from this region.

Note: This faunal species list includes animals observed or expected to occur on or in the immediate vicinity of the study site.

Butterflies

DANIDAE

- Monarch (*Danaus plexippus*) s
- Striated Queen (*D. gilippus strigosus*) u

NYMPHALIDAE

- Neumogen's checkerspot (*Charidryas neumoengeni*) u
- Mylitta crescent (*Phycoides mylitta*) s
- Cerrita checkerspot (*Thessalia leanira cerrita*) s
- painted lady (*Vanessa cardui*) o
- common buckeye (*Junonia coenia*) 2

PIERIDAE

- Becker's white (*Pontia beckeri*) s
- California white (*P. sisymbrii*) u
- Common white (*P. protodice*) 1
- Southern dogface (*Zerene cesonia*) o
- Nicippe yellow (*Eurema nicippe*) s
- Dwarf yellow (*Nathalis iole*) s
- Felder's orange tip (*Anthocharis cethura cethura*) u
- Grinell's marble (*Falcapica lanceolata australis*) u
- Southern marble (*Eucloe hyantis lotta*) u

LIBYTHEIDAE

- Snout butterfly (*Libythaena bachmanii larvata*) s

RIODINIDAE

- Mormon metalmark (*Apodemia mormo mormo*) u
- Behr's metalmark (*A. mormo virgulti*) u
- Cythera metalmark (*A. mormo cythera*) u

LYCAENIDAE

- common hairstreak (*Strymon melinus*) s
- Marine blue (*Leptotes marina*) s
- Pygmy blue (*Brephidium exilis*) s
- Acmon Blue (*Plebejus acmon acmon*) u
- Bernardino blue (*Euphilotes battoides bernardino*) u
- Elvira's blue (*E. pallescens elvira*) u
- Mojave blue (*E. mojave*) u
- Small blue (*Philotiella speciosa*) s

MEGATHYMIDAE

- Martin's giant skipper (*Megathymus coloradensis martini*) u

HESPERIIDAE

- Chusca skipper (*Polites sabuleti*) s
- Juba skipper (*Hesperia juba*) u
- Sootywing (*Pholisora catullus*) o

Amphibians and Reptiles

BUFONIDAE

Western toad (*Bufo boreas halophilus*) c

HYLIDAE

Pacific chorus frog (*Hyla regilla*) c

GEKKONIDAE

Banded gecko (*Coleonyx variegatus*) s

PHRYNOSOMATIDAE

Zebra tailed lizard (*Callisaurus draconoides*) s

Long-nosed leopard lizard (*Gambelia wislizenii*) o

Coast horned lizard (*Phrynosoma coronatum*) o (see text)

Desert horned lizard (*Phrynosoma platyrhinos*) s

Desert Spiny lizard (*Sceloporus magister*) c

Western fence lizard (*Sceloporus occidentalis*) c

Side-blotched lizard (*Uta stansburiana*) 1

XANTUSIDAE

Desert night lizard (*Xantusia vigilis*) c

TEIIDAE

California whiptail (*Cnemidophorus tigris*) c

ANNIELLIDAE

California legless lizard (*Anniella pulchra*) (see text)

LEPTOTYPHLOPIDAE

Western blind snake (*Leptotyphlops humilis*) s

COLUBRIDAE

Glossy snake (*Arizona elegans*) u

Western shovel-nosed snake (*Chionactis occipitalis*) s

Night snake (*Hypsiglena torquata*) u

Common kingsnake (*Lampropeltus getulus*) u

Coachwhip (*Masticophis flagellum*) o

Gopher snake (*Pituophis melanoleucus*) o

Long-nosed snake (*Rhinccheilus lecontei*) u

California black-headed snake (*Tantilla planiceps*) s

Lyre snake (*Trimorphodon biscutatus*) s

VIPERIDAE

Mojave rattlesnake (*Crotalus scutellatus*) o

TESTUDINIDAE

Desert tortoise (*Gopherus agassizii*) (see text)

Birds

Note

Numbers in parentheses following a species indicate the maximum number of individuals seen or heard during a survey.

CATHARTIDAE

Turkey vulture (*Cathartes aura*) f

ACCIPITRIDAE

Northern harrier (*Circus cyaneus*) u

Ferruginous hawk (*Buteo regalis*) u (see text)

Red-tailed hawk (*Buteo jamaicensis*) 1

Swainson's hawk (*Buteo swainsoni*) u (see text)

Golden eagle (*Aquila chrysaetos*) u (see text)

Cooper's hawk (*Accipiter cooperi*) u (see text)

FALCONIDAE

American kestrel (*Falco sparverius*) u

Prairie falcon (*Falco mexicanus*) u (see text)

PHASIANIDAE

California quail (*Callipepla californica*) c

CHARADRIIDAE

Killdeer (*Charadrius vociferus*) o

COLUMBIDAE

Rock dove (*Columba livia*) c

Mourning dove (*Zenaida macroura*) 30

CUCULIDAE

Greater roadrunner (*Geococcyx californianus*) o

STRIGIDAE

Great horned owl (*Bubo virginianus*) u

Burrowing owl (*Athene cunicularia*) s (see text)

Long-eared owl (*Asio otus*) u (see text)

TYTONIDAE

Common barn owl (*Tyto alba*) u

CAPRIMULGIDAE

Lesser nighthawk (*Chordeiles acutipennis*) f

Common poorwill (*Phalaenoptilus nuttallii*) s

APODIDAE

Vaux's swift (*Chaetura vauxi*) s

TROCHILIDAE

Anna's hummingbird (*Calypte anna*) c

Costa's hummingbird (*C. costae*) u

Black-chinned hummingbird (*Archilochus alexandri*) f

Rufous hummingbird (*Selasphorus rufus*) s

PICIDAE

Ladder-backed woodpecker (*Picoides scalaris*) o

Northern flicker (*Colaptes auratus*) u

TYRRANIDAE

Say's phoebe (*Sayornis saya*) 1

Ash-throated flycatcher (*Myarchis cinerascens*) f

Western Kingbird (*Tyrannus verticalis*) f

CORVIDAE

Western scrub jay (*Aphelocoma californica*) u

Common raven (*Corvus corax*) 2

REMIZIDAE

Verdin (*Auriparus flaviceps*) c

AEGITHALIDAE

Bushtit (*Psaltriparus minimus*) s

TROGLODYTIDAE

Cactus wren (*Campylorhynchus brunneicapillus*) o

Rock wren (*Salpinctes obsoletus*) o

Bewick's wren (*Thryomanes bewickii*) o

MUSCICAPIDAE

Ruby-crowned kinglet (*Regulus calendula*) u

Hermit thrush (*Catharus guttatus*) s

Swainson's thrush (*C. swainsoni*) s

American robin (*Turdus migratorius*) u

MIMIDAE

- Northern mockingbird (*Mimus polyglottos*) c
- Le Conte's thrasher (*Toxostoma lecontei*) s (see text)

LANIIDAE

- Loggerhead shrike (*Lanius ludovicianus*) 1 (see text)

STURNIDAE

- European Starling (*Sturnus vulgaris*) c

ALAUDIDAE

- Horned lark (*Eremophila alpestris*) c (see text)

HIRUNDINIDAE

- Cliff swallow (*Petrochelidon pyrrhonota*)
- Violet green swallow (*Tachycineta thalassina*) s
- Barn swallow (*Hirundo rustica*)
- Rough-winged swallow (*Stelgidopteryx ruficollis*) s
- Tree swallow (*Iridoprocne bicolor*) s

EMBERIZIDAE

- Yellow-rumped warbler (*Dendroica coronata*) c
- Orange-crowned warbler (*Vermivora celata*) 1
- Common yellowthroat (*Geothlypis trichas*) s
- Nashville warbler (*Vermivora ruficapilla*) s
- MacGillivray's warbler (*Oporonis tolmiei*) s
- Wilson's warbler (*Wilsonia pusilla*) s
- Western meadowlark (*Sturnella neglecta*) 2
- Brewer's blackbird (*Euphagus cyanocephalus*) c
- Great-tailed grackle (*Quiscalus mexicanus*) u
- Tricolored blackbird (*Agelaius tricolor*) u (see text)
- Red-winged blackbird (*Agelaius phoeniceus*) 1

Scott's oriole (*Icterus parisorum*) s
Bullock's Oriole (*Icterus bullockii*) o
Black-throated sparrow (*Amphispiza bilineata*) s
White-crowned sparrow (*Zonotrichia leucophrys*) c
Sage sparrow (*Amphispiza belli*) u
Lark sparrow (*Chondestes grammacus*) c
Savannah sparrow (*Passerculus sandwichensis*) 1
Vesper sparrow (*Pooecetes gramineus*) u
Golden-crowned sparrow (*Zonotrichia atricapilla*) u
Song sparrow (*Melospiza melodia*) c

FRINGILLIDAE

House finch (*Carpodacus mexicanus*) 10
American goldfinch (*Carduelis tristis*) u
Lesser goldfinch (*C. psaltria*) u

PLOCEIDAE

House sparrow (*Passer domesticus*) c

Mammals

Note

This is a largely hypothetical list of species based on very broad range boundaries which may include the present site. No attempt is made here to assess relative abundance.

GEOMYIDAE

Valley pocket gopher (*Thomomys bottae*) sign

SORICIDAE

Desert shrew (*Notiosorex crawfordi*)

PHYLLOSTOMIDAE

California leaf-nosed bat (*Macrotus californicus*)

VESPERTILIONIDAE

Little brown myotis (*Myotis lucifugus*)

Yuma myotis (*M. yumanensis*)

Long-eared myotis (*M. evotis*)

Fringed myotis (*M. thysanodes*)

Long-legged myotis (*M. volans*)

California myotis (*M. californicus*)

Small-footed myotis (*M. leibii*)

Western pipistrelle (*Pipistrellus hesperus*)

Big brown bat (*Eptesicus fuscus*)

Red bat (*Lasiurus borealis*)

Hoary bat (*Lasiurus cinereus*)
Townsend's big-eared bat (*Plecotus townsendii*)
Pallid bat (*Antrozous pallidus*)

MOLOSSIDAE

Brazilian free-tailed bat (*Tadarida brasiliensis*)
Pocketed free-tailed bat (*Tadarida femorosacca*)
Western mastiff bat (*Eumops perotis*)

LEPORIDAE

Desert cottontail (*Sylvilagus auduboni*) sign
Black-tailed jack rabbit (*Lepus californicus mohavensis*) sign

SCIURIDAE

White-tailed antelope squirrel (*Ammospermophilus leucurus*)
California ground squirrel (*Spermophilus beecheyi*) sign

HETEROMYIDAE

Agile kangaroo rat (*Dipodomys agilis*)
Merriam's kangaroo rat (*Dipodomys merriami*) sign
Panamint kangaroo rat (*D. panamintinus mohavensis*)

CRICETIDAE

Deer mouse (*Peromyscus maniculatus*) sign
Desert woodrat (*Neotoma lepida*)

CANIDAE

Coyote (*Canis latrans*) sign
Feral domestic dog (*Canis familiaris*) sign
Desert kit fox (*Vulpes macrotis*)

PROCYONIDAE

Ringtail (*Bassariscus astutus*)

Raccoon (*Procyon lotor*)

MUSTELIDAE

Badger (*Taxidea taxus*) (see text)

Western spotted skunk (*Spilogale gracilis*)

Striped skunk (*Mephitis mephitis*)

FELIDAE

Mountain lion (*Felis concolor*)

Bobcat (*Felis rufus*)

Domestic cat (*Felis catus*)

CERVIDAE

Black-tailed deer (*Odocoileus hemionus*)

EQUIDAE

Domestic horse (*Equus caballus*)

BOVIIDAE

Domestic cattle (*Bos taurus*)

HOMINIDAE

Human (*Homo sapiens*)

Callyn D. Yorke

Project Manager/Principal Biologist

Dr. Callyn Yorke is a zoologist with extensive field research and teaching experience in Ornithology, Herpetology and Mammalogy. In addition to having completed several research projects overseas, he has been active in the study of the distribution of birds in Southern California for twenty years. Dr. Yorke has authored over twenty-five scientific papers and reports in Environmental Biology. He continues to hold a full-time, tenured position as Professor of Zoology at Antelope Valley College, Lancaster, California.

EDUCATION

B.Sc. 1975. Biological Science. California State University, Hayward.

M.A. 1976. Biological Science. California State University, Hayward.

Ph.D. 1983. Zoology. University of Arkansas, Fayetteville.

PROFESSIONAL HISTORY

- Ornithology Instructor 1976. University of California, Berkeley
- Visiting Assistant Professor 1977-80. National University of Malaysia.
- Post-Doctoral Research 1983-84. Smithsonian Institution, Washington, D.C..
- Visiting Assistant Professor 1984. Monterey Peninsula College, CA.
- Professor of Zoology 1984 - Antelope Valley College, Biology Dept, CA.
- Post-Doctoral Research 1990. Point Reyes Bird Observatory, CA.
- Research Associate 1987- Los Angeles County Museum of Natural History, CA.
- Owner and Project Manager 1987-Callyn D. Yorke, Biological Resources Reports.

Callyn D. Yorke, Ph.D. Biological Resources Reports
Professional Work Experience

Biological Resources Reports completed in Southern California
1989 - 2004

- 1) APN 3029-12-08: 80 Acres, L.A. County.
- 2) APN 3209-14-21: 10 Acres, L.A. County.
- 3) APN 3010 -002-003 8: 23 Acres, Palmdale.
- 4) APN 3022-25-10: ~~5~~ Acres, Palmdale.
- 5) APN 3056-12-31: 20 Acres, Palmdale.
- 6) APN 3053-009-004: 35 Acres, Palmdale.
- 7) APN 3053-009-007: 20 Acres, Palmdale.
- 8) APN 302-26-9;57: California City, Kern County.
- 9) APN 3114-13-001: 80 Acres, Lancaster.
- 10) APN 3126-19-024: 4 Acres, Lancaster.
- 11) APN 3176-002-021: 10 Acres, Lancaster.
- 12) APN 3128-003-036: 9.6 Acres, Lancaster.
- 13) APN 3001-001-035: 10 Acres, Palmdale.
- 14) APN 3109-002-099: 2.5 Acres, Lancaster.
- 15) APN 3109-001-36,37,38,39: 10 Acres, Lancaster
- 16) APN 3053-06-05;20: 20 Acres, Palmdale.
- 17) APN 3114-13-29: 3 Acres, Lancaster.
- 18) APN 3004-15-42,43: 12 Acres, Palmdale.
- 19) Sections 2,3,25,26,27, 35: 1500 Acres, Palmdale.
- 20) APN 359-03-002: 20 Acres: Kern County (Rasmussen: default)

- 21) APN 3064-16-10,22: 240 Acres, Llano, Los Angeles County.
- 22) APN 0419-091-10;12: 319 Acres, San Bernardino County.
- 23) APN 345-100-02-00-9: 100 Acres, Willow Springs, Kern County.
- 24) Proposed Fairmont and Antelope Buttes Reservoir, 1600 acres, Los Angeles County.
- 25) APN 3003-003-025,28,29: 15 acres, Palmdale, CA.
- 26) SE corner of L-8 and 45th Street West, 6 acres, Quartz Hill, Los Angeles County.
- 27) APN 3114-013-087,88,89: 35 acres, Lancaster, Los Angeles County.
- 28) 45th Street W and L-8: 6 acres, Quartz Hill, CA
- 29) MB 31-13, TR 2916, L 16: 20 Acres, Palmdale, CA
- 30) Fort Tejon Road and Union Pacific Railway: 59 Acres, Palmdale, CA
- 31) APN 3114-103-087,88,89: Avenue H-8 and 20th street West, 35 Acres, Lancaster, CA
- 32) TTM 60058, Rancho Vista Blvd., west of O-8: 30.6 Acres, Palmdale, CA
- 33) TTM 53869, 55th Street West and the California Aqueduct: 30 Acres, Palmdale, CA
- 34) TTM 60053, 40th Street East and Avenue R: 20 Acres, Palmdale, CA
- 35) APN 3057-012-003,014 and 033; 289 Acres, Acton, CA
- 36) TTM 60162, 60th Street East and Avenue R-8: 5 Acres, Palmdale, CA
- 37) TTM 060431, 70th Street West and Avenue M-8. 77 Acres, Palmdale, CA
- 38) NE corner of 47th Street East and Avenue R, 8 Acres, Palmdale, CA
- 39) APN 3003-004-012, 20th Street West and Avenue P-10, 8.8 acres, Palmdale, CA
- 40) TTM 27081, Davenport Road, 8.5 Acres, Agua Dulce, CA
- 41) APN 3003 080 007, 1.17 Acres, Auto Center Drive, Palmdale, CA
- 42) TTM Quail Valley Road, 40 Acres, Castaic, CA

- 43) APN 3111-012-056, 10 Acres, east of 45th Street West, Lancaster, CA
- 44) APN 3109-001-065;066, 20 Acres, west of 35th Street West and L-4-L-6, Lancaster, CA.
- 45) Five acres, Avenue O and 10th Street West, Palmdale, CA
- 46) APN 3170-002-028,029;900,901;043;017-019, 24 acres, Lancaster, CA
- 47) Sixteen acres, Lancaster Blvd, and 35th Street East, Lancaster, CA
- 48) APN 3203-015-069;143;059-060, 13 Acres 52nd Street West and Avenue J, Lancaster, CA.
- 49) Twelve acres, Avenue I and 20th Street West, Lancaster CA
- 50) APN 3204-006-049-051, 8 Acres, Avenue K-12 and 57th Street West, Lancaster, CA.
- 51) Five acres, Avenue L and 10th Street West, Lancaster, CA
- 52) Two acres, Avenue J and 32nd Street West, Lancaster, CA.
- 53) Nineteen acres, Avenue I and 12th Street East, Lancaster, CA
- 54) APN 3204-023-182, 10 acres, Avenue M-8 and 70th Street West, Lancaster, CA.
- 55) APN 0394-031-023&028, 17 Acres, Mojave Drive, Victorville, CA
- 56) APN 3150-014-006, 47 acres, Avenue K and 30th Street East, Lancaster, CA.
- 57) 4.5 acres, Avenue J-6 and 22nd Street East, Lancaster, CA.
- 58) 10.5 acres, Avenue J-4 and 22nd Street East, Lancaster, CA.
- 59) APN 3150-022-009, 5 acres, Lancaster Blvd. and 30th Street East, Lancaster, CA.
- 60) APN 3150-030-006;013, 8 acres, Avenue J-2 to J-4 and 26th Street East, Lancaster, CA.
- 61) Thirty acres, Avenue J and 35th Street East, Lancaster, CA.

THESES AND PUBLICATIONS

Yorke, C.D. 1976. Reproductive strategies in the Hylidae (New World treefrogs). Biology Dept., California State University, Hayward. 45 pp.

Yorke, C.D. 1978. Reptiles of Pulau Tenggol (Malaysia): A new record of the Green Mangrove Snake (*Boiga cyanea*) and two new geckoes (*Gymnodactylus* spp.). *Nature Malaysiana* 3: 45-50.

Yorke, C.D. 1979. The Biology of the Frog *Polypedates leucomystax* (Anura: Rhacophoridae) in Peninsular Malaysia. *Nature Malaysiana* 4: 22-25.

Smits, A.W. and C.D. Yorke 1980. Winter activity and mortality in juvenile chuckwallas (*Sauromalus obesus*). *Journal of Herpetology* 14: 100-101.

Yorke, C.D. 1983a. Survival of embryos and larvae of the frog *Polypedates leucomystax* (Anura: Rhacophoridae) in Malaysia. *Journal of Herpetology* 17: 235-41.

Yorke, C.D. 1983b. Avian ecology in a Malaysian rubber tree plantation. Ph.D. Dissertation. Dept. of Zoology, University of Arkansas, Fayetteville. 213 pp.

Yorke, 1984. Avian Community Structure in Two Modified Malaysian Habitats. *Biological Conservation* 29: 345-362.



(916) 324-3812

April 6, 2005

Mr. Callyn Yorke
15438 Ensenada Road
Green Valley, California 91350

Dear Mr. Yorke:

In response to your request on April 6, 2005, a search for occurrences of rare, threatened, endangered, and sensitive animals, plants, and natural communities has been completed by the California Natural Diversity Database (CNDDDB) for the following quadrangle(s): **Palmdale, Lancaster East, Lancaster West, Rosamond, Rosamond Lake, Bissell, Soledad, Green Valley, Sleepy Valley, Del Sur & Ritter Ridge - Text Report.**

Please refer to the enclosed documents for an explanation of the terms and information contained in this computerized report. You will be billed shortly for your order. All of our current CNDDDB lists are now available online at <http://www.dfg.ca.gov/whdab>.

NOTICE TO ALL USERS OF NATURAL DIVERSITY DATABASE INFORMATION

This report does not constitute official Department of Fish and Game environmental impact review of a project under the California Environmental Quality Act, National Environmental Policy Act, or other statutory or regulatory authority. Environmental impact review is carried out by other units in the Department. Even if the CNDDDB does not report an occurrence of special animals, plants, or natural communities in your project area, the Department may recommend that you conduct studies to determine or confirm their presence or absence, or to determine the impact of your proposed activity on these and other organisms and their habitats.

Although the CNDDDB inventory does not include other more common animals and plants, such as those that may be important for game, commercial, or aesthetic reasons, such species are of concern, and the law requires that they also be considered in an environmental assessment of any nonexempt project.

The CNDDDB also inventories both terrestrial and aquatic natural communities that are of extremely high quality, very limited distribution or threatened. These natural communities contain a rich heritage of native animals and plants that contribute significantly to the State's natural biotic diversity.





(916) 324-3812

September 22, 2005

Callyn Yorke
Callyn Yorke Biological
15438 Ensenada Road
Green Valley CA 91390

Dear Callyn Yorke:

In response to your request on september 22, 2005, a search for occurrences of rare, threatened, endangered, and sensitive animals, plants, and natural communities has been completed by the California Natural Diversity Database (CNDDDB) for the following quadrangle(s): **Lancaster East, Lancaster West, Palmdale & Ritter Ridge - (text only).**

Please refer to the enclosed documents for an explanation of the terms and information contained in this computerized report. You will be billed shortly for your order. All of our current CNDDDB lists are now available online at <http://www.dfg.ca.gov/whdab>.

NOTICE TO ALL USERS OF NATURAL DIVERSITY DATABASE INFORMATION

This report does not constitute official Department of Fish and Game environmental impact review of a project under the California Environmental Quality Act, National Environmental Policy Act, or other statutory or regulatory authority. Environmental impact review is carried out by other units in the Department. Even if the CNDDDB does not report an occurrence of special animals, plants, or natural communities in your project area, the Department may recommend that you conduct studies to determine or confirm their presence or absence, or to determine the impact of your proposed activity on these and other organisms and their habitats.

Although the CNDDDB inventory does not include other more common animals and plants, such as those that may be important for game, commercial, or aesthetic reasons, such species are of concern, and the law requires that they also be considered in an environmental assessment of any nonexempt project.

The CNDDDB also inventories both terrestrial and aquatic natural communities that are of extremely high quality, very limited distribution or threatened. These natural communities contain a rich heritage of native animals and plants that contribute significantly to the State's natural biotic diversity.

The absence of a special animal, plant, or natural community from the report does not necessarily mean that they are absent from the area in question, only that no

Appendix F

Biological Resources Report on APN 3204-008-048,
19 Acres, 60th Street West, North of Avenue L,
Lancaster, CA

CALLYN D. YORKE Ph.D.
Biological Resources Reports
15438 Ensenada Road
Green Valley, CA 91390
Tel. 661 270-0222

BIOLOGICAL RESOURCES REPORT

ON
APN 3204-008-048

19 Acres

60th Street West, North of Avenue L
Lancaster, CA

PREPARED FOR

Andrew Park
3453 West 8th Street
Los Angeles, CA 90005
Tel. (323) 376-3642

PREPARED BY


Callyn D. Yorke, Ph.D.

September, 2018

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Figure 1 USGS Map (Lancaster West 1974) Showing Project Site.

Figure 2 Assessor's Parcel Map showing Project Site.

Figures 3, 4 Ground-level Photos of the Project Site.

Figure 5 Photo of Burrowing Owl pellets from the Project Site

References

Appendices:

- Floral Compendium
- Faunal Compendium
- Resume of Project Biologist

INTRODUCTION

An updated biological resources study and report was made on a ca. 19-acre parcel (hereafter referred to as the "study area," "project site," or "site.") in Lancaster, CA, following the request of Mr. Andrew Park. This report summarizes the biotic resources found on the site in comparison with our September, 2005 biological resources report on the same site (Yorke, Callyn D. 2005).

DESCRIPTION OF THE PROJECT SITE

The project site, at an elevation of about 2,400 ft., consists of approximately twenty acres of disturbed desert scrub, located on the west side of 60th Street West, approximately in alignment with Avenue K-11, Lancaster, CA, APN 3204-008-048 (Figures 1 & 2). The land is part of a gentle north sloping alluvial plain with coarse sandy-clay soils.

As described in our September, 2005 report, the subject property has been cleared and nearly everywhere disturbed by grading, fire, trash disposal, OHV and foot traffic (Figures 3 & 4). Much of the vegetation is in various stages of second-growth and includes numerous species of exotic weeds. Scattered patches of native vegetation, e.g. Four-winged Saltbush and Rabbitbrush remain on the site. A well-developed stand of exotic locust trees forms part of the western property boundary.

There are no Joshua Trees or California Juniper on the property. A small drainage runs along 60th Street West; this feature supports mostly exotic herbaceous vegetation (Figure 3). No other surface water is found on the site. Presently, there is no established desert riparian community on the property.

Adjacent land east of the site is similar but with patches of Joshua Tree. The land immediately south and west of the site is largely ruderal pastureland. The only significant change to land in this vicinity since 2005, has been the addition of a suburban housing tract adjoining the northern boundary of the property (Figure 2).

MATERIALS AND METHODS

Field surveys of the site were made on September 19 & 20, 2018 by Callyn D. Yorke, Principal Biologist. The entire site was covered on foot, first along the perimeter, then through the center sections. A binocular (10 x 40), camera and field notebook were used. Surveys were made between 0800- 1330 hrs. with clear skies. Air temperatures during the surveys ranged from 59F to 91F; winds were light out of the NW. Ground-level images of the site were obtained at this time (Figures 3-5).

Attention was given to detection of sensitive plant and animal species known to occur in this region. A focused study was made for signs of occupation by Long-eared Owl, Cooper's Hawk, LeConte's Thrasher, Loggerhead Shrike, Mojave Ground Squirrel and Silvery Legless Lizard.

A **CDFG-UCSC Phase I Burrowing Owl Survey** was completed by walking north-south transects spaced about 10 m apart across the entire site and adjacent property. Habitat potential for the Coast Horned Lizard and sensitive plants (e.g. Alkali Mariposa Lily) was evaluated. Due to a regional drought, only the unidentifiable remains of annual plants were present on the site. The California Department of Fish & Wildlife (CDFW) Natural Diversity Data Base (CNDDDB Rare Find) was reviewed for locations of sensitive species in the Lancaster-Palmdale region.

RESULTS

Flora

A total of 48 species of plant was found on the site (see Floral Compendium). Although some native desert annuals probably occur on the site seasonally, there is significant competitive coverage by invasive exotic herbs (e.g. *Salsola iberica*).

The results of this plant survey were essentially the same as the September, 2005 study and report. With exception of variation in species abundance, and disappearance of adventitious riparian elements due to drought, there has been no significant vegetation change on the property. No State or Federally listed endangered, rare or sensitive plant species was found on the site (see *Impacts to Sensitive Plants*). Native flora on the site is relatively impoverished due to brush clearance, grading and soil compaction.

Fauna

Four Side-blotched lizards (*Uta stansburiana*) were found on the site. No butterflies, amphibians were found on or adjacent to the site. In addition to the same bird species found in 2005, several new species of bird were found during the present surveys. Those species were, **Cooper's Hawk** (see *Impacts to Sensitive Species*), Barn Owl, **Burrowing Owl** (sign –see *Impacts to Sensitive Species*), Anna's Hummingbird, American Kestrel, Barn Swallow, House Wren, and Lincoln's Sparrow. Significantly, most of the newly documented bird species found on the site were in or near the trees on the western boundary of the property. Mammals found on the site (primarily by their sign) were similar in abundance and type to those found in 2005.

Corridors of Dispersal

The subject property is near the western end of what once was an east-west corridor of dispersal in this region. There remain large, open tracts of land to the west, and to a lesser extent, southward of the site. Thus, the site may attract dispersing animals from adjacent open land and foothills.

However, significant barriers to animal dispersal occur immediately to the north (a housing subdivision) and east (60th Street West). It appears unlikely that regular movement and colonization of animals occurs on the subject property. Most likely, wildlife would have difficulty becoming established on the site and/or may experience a sudden impact on 60th Street West.

Non-native trees on the site appear to be attractive to several species of bird. These trees may provide nesting opportunities and encourage local wildlife dispersal. For that reason, we recommend saving the trees on the western boundary of the property (see *Mitigation Measures*).

Impacts to Sensitive Species - Overview

KEY TO ABBREVIATIONS

CDFW (CDFG) = California Department of Fish & Wildlife

USFWS = United States Fish & Wildlife Service

CNPS = California Native Plant Society

SSC = CDFW Species of Special Concern

FSC = USFWS Species of Special Concern

Special Status Species

Special status species include plants and animals that are either listed as endangered or threatened under the Federal Endangered Species Act (ESA) or California Endangered Species Act (CESA), listed as rare under the California Native Plant Protection Act (Lists 1 & 2), or considered to be rare but not formally listed by resource agencies, professional organizations (e.g. California Native Plant Society [CNPS], and the scientific community. For the purposes of this Biological Resources Report, the term *sensitive species* refers to any of the following:

- Species listed as Endangered or Threatened under the Federal ESA (Title 50, Code of Federal Regulations [CFR] Parts 17.11 and 17.12);
- Species listed as Endangered, Threatened or Rare under the CESA (Sections 670.2 and 670.5, Title 14, California Code of Regulations [CCR]);
- Species without a formal listing status that meet definitions of *Endangered* or *Rare* under CEQA Guidelines, Section 15380, including CDFW *Species of Special Concern, Candidate, or Proposed* species for listing under the Federal Endangered Species Act;
- CDFW *Species of Special Concern* or *Fully Protected* by CDFW; or
- CNPS rare plant ranks:
 - List 1A: Species presumed extinct in California;
 - List 1B: Species considered rare or endangered in California and elsewhere;
 - List 2: Species considered rare or endangered in California but are more common elsewhere.

Literature Review

A literature review was conducted to determine the potential for occurrence of special status plant and wildlife species in the Antelope Valley region. An online California Natural Diversity Database (CNDDDB) was consulted for locations of sensitive species. USGS 7.5- minute quadrangles: Lancaster West, Ritter Ridge, Palmdale and adjacent quadrangles were reviewed. Additionally, the following sources used:

- United States Fish and Wildlife Service (USFWS) list of endangered, threatened and proposed species.
- California Native Plant Society's (CNPS) online Inventory of Rare and Endangered Plants of California.
- Special Animals List (CDFW)
- Field Guides and other publications relevant to the distribution of plants and animals in the region.
- My field notes from hundreds of biological resources reports and field surveys conducted in this region (Yorke, C. 1984-2018: <http://avconline.avc.edu/cyorke/fieldnotes/>).

Impacts to Sensitive Species - Discussion

FLORA

No CNPS, State or Federal listed plant was found on the site. Several listed species are known to occur in this region and are detectable in spring through early summer. Potential impacts to these species are considered below.

Kern County Evening Primrose (*Camissonia kernensis*) is listed as a rare species by the CNPS, but unlisted by State and Federal agencies. This plant is found in desert washes and canyons from 2500 to 6000 feet in elevation, and in Joshua Tree woodland. Flowering occurs in May. No individuals or remains of this species were found. Habitat on the site is largely inappropriate; adverse impacts are unlikely.

Alkali Mariposa Lily (*Calochortus striatus*) is listed a Category 1B (locally endangered) species by the CNPS and as a Level 2 Candidate species by the USFWS. This attractive, relatively rare annual plant is found locally in this vicinity (Yorke, pers. observation) in alkali depressions supporting chenopod scrub vegetation (CNDDDB; Yorke pers. observ.). Flowering occurs from April to June, depending on adequate seasonal rainfall. Soils on the site are coarse and largely inappropriate for Alkali Mariposa Lily; project impacts are unlikely.

Desert Cymopterus (*Cymopterus deserticola*) is listed as a rare and highly restricted species by the CNPS and Level 2 Candidate species by USFWS. This plant occurs on Edwards AFB in creosote scrub. Flowering occurs in April. No evidence of this species was found in the surveyed areas. Potential for this species occurring on the site is moderate at the appropriate season. A spring-time survey is recommended.

Sagebrush loeflingia (*Loeflingia squarrosa* var. *artemisiarum*) is CDFW SSC and CNPS Category 2.2 (rare) species found in Great Basin scrub in sand dunes with clay slicks. No individuals of this plant were found on the site. Habitat on the site appears inappropriate; project impacts are unlikely.

Short-joint beavertail cactus (*Opuntia basilaris brachyclada*) is a FSC and CNPS Category 1B plant occurring in Joshua tree woodland and upland desert-chaparral. No individuals of this conspicuous species were found on the site; project impacts are unlikely.

Peirson's morning-glory (*Calystegia peirsonii*) is a CNPS Category 4 plant species found in chenopod scrub and foothill chaparral. This is a rhizomatous perennial with conspicuous white flowers that has been found in the foothills immediately south of the site. Habitat on the site appears largely inappropriate; project impacts are unlikely.

Peirson's lupine (*Lupinus peirsonii*) is a CNPS Category 4 plant that occurs in Joshua tree woodland and pinyon-juniper woodland. No individuals of this plant were found on the site. Habitat on the site is inappropriate. Project impacts are unlikely.

Pigmy poppy (*Canbya candida*) is a CNPS Category 1B plant found in Joshua tree woodland and desert scrub, in sandy places. No individuals of this plant were found on the site. Potential habitat occurs for this species; a spring-time survey is recommended.

Parry's spineflower (*Chorizanthe parryi* var. *parryi*) is a CNPS Category 4 species found in chenopod scrub and creosote desert scrub. Flowering occurs from April to July. No individuals of this plant were found on the site. Habitat on the site appears appropriate; a spring-time survey is recommended.

cy/7

Clokey's cryptantha (*Cryptantha clokeyi*) is a CNPS Category 1B annual found in upland desert scrub on rocky soils. Habitat on the site appears inappropriate for this species; project impacts are unlikely.

Crowned Muilla (*Muilla coronata*) is listed by the CNPS as a rare species that is endangered in part of its range, but as a taxonomically invalid species by USFWS. This plant is found in heavy soils in Joshua Tree woodland, between 3,000 and 5,000 feet in elevation. Flowering occurs from March through April. No sign of this plant was found on the site. Habitat for this species is largely inappropriate; project impacts are unlikely.

Barstow woolly sunflower (*Eriophyllum mohavense*) is a Federal Special Concern Species (FSC) and California Native Plant Society (CNPS) category 1B (rare, threatened or endangered throughout their range) species. It occurs in rises between sinks in xerophytic saltbush scrub. No evidence of this plant was found on the site. Habitat is largely inappropriate; project impacts are unlikely.

Mason's neststraw (*Stylocline masonii*) is a FSC and CNPS 1B species that occurs in chenopod (e.g. saltbush) scrub. No sign of this plant was found on the site. Habitat is largely inappropriate; project impacts are unlikely.

Palmer's grappling hook (*Harpagonella palmeri*) is a FSC and CNPS category 2 species (rare, threatened, or endangered in California, but more common in other states). It occurs in sage scrub and clay soils below 2,500 feet. No sign of this plant was found in the study area. Habitat on the site is inappropriate. Project impacts are unlikely.

Pale-yellow layia (*Layia heterotricha*) is a CNPS Category 1B annual herb found in valley grassland and riparian habitat, from 0-5,000 ft. in elevation. Habitat on the site appears inappropriate; project impacts to this species are unlikely.

Lancaster milkvetch (*Astragalus preussi* var. *laxiflorus*) is a CNPS 1B species that occurs in chenopod scrub, alkaline clay flats or gravelly or sandy washes and along draws in gullied badlands. No sign of this conspicuous plant species was found in the surveyed area; habitat appears inappropriate and project impacts are unlikely.

Parish's alkali grass (*Puccinellia parishii*) is a CNPS Category 1B and CDFG S1.1 plant found in alkali springs and seeps in deserts. Habitat on the site is inappropriate. Impacts to this species are unlikely.

cy/8

Lemmon's syntrichopappus (*Syntrichopappus lemmonii*) is a FSC and CNPS Category 4 species (species of limited distribution in California but whose existence does not appear to be susceptible to threat). This plant occurs in Joshua tree woodland with sandy or gravelly soil. No sign of this plant was found on the site. The habitat on the site is largely unsuitable; impacts are unlikely.

Red rock poppy (*Eschscholzia minutiflora* ssp. *twisselmannii*) is a CDFW S2.2 and CNPS Category 1B.2 species found in Mojavean desert scrub, especially on volcanic tuff soils. Nearby records of this plant are from Edwards Air Force Base. No individuals of this plant were found on the site. Habitat on the site is inappropriate and project impacts are unlikely.

FAUNA

Evidence of two sensitive species were found on the subject property, Burrowing owl Cooper's hawk. Several sensitive animal species are known to occur in this region; potential impacts to these are addressed below.

Mojave Desert Tortoise (*Gopherus agassizii*) is a CDFW and USFWS Endangered Species known to occur in this region, principally east of Highway 14. Absolutely no sign (e.g. burrows, scat, shell fragments) of desert tortoise was found on the subject property or adjacent parcels during our surveys. Nor was there any evidence found of historical occupation by tortoises. We recommend a DECLARATION OF NO SIGNIFICANT IMPACT on the Mojave desert tortoise.

Coast horned lizard (*Phrynosoma coronatum*) is a CDFW Species of Special Concern (SSC) known to occur on Avenue M-12, near 45th Street West in Quartz Hill (CNDDDB; Yorke, pers. observation). These lizards prefer loose sandy to gravelly soils around the perimeter of the western Antelope Valley (Yorke, pers. observ.). Habitat on the site is marginally appropriate; a spring-time survey is recommended (see *Mitigation Measures*).

Silvery Legless Lizard (*Aniella pulchra*) is a CDFW SSC that occurs in sandy to loamy soil in the vicinity of ground moisture and leaf-litter. Fallen branches, leaf-litter and other debris was overturned in search of these lizards. No legless lizards were found. Habitat on the property is marginally appropriate; a spring-time survey is recommended (see *Mitigation Measures*).

Burrowing owl (*Athene cunicularia*) is a CDFW “Species of Special Concern” (SSC) in California. Several family groups of burrowing owls were evidently displaced by solar farm installations in fields of the western Antelope Valley (e.g. along 110th Street West near Avenue I) Other small groups of Burrowing owl have been recorded historically near 40th Street West and Avenue K; Avenue I to Avenue K, east of Challenger Way).

The population of Burrowing owl in the Antelope Valley today is only a small fraction of its size fifteen years ago (Yorke, unpublished field notes). Abandoned farmland in the eastern Antelope Valley (i.e. between 60th Street East and 30th Street East, Avenues H-K) may still support burrowing owls (Yorke, pers. observation). Burrowing owls are declining for a number of reasons, e.g., habitat loss (e.g. solar farms), human encroachment, pesticides, and illegal hunting.

A Phase I (clearance) survey protocol for Burrowing owl was completed on the site during the September 2018 surveys. Several regurgitated pellets of Burrowing owl were found on a concrete cylinder along the southern property line (Figure 5). No other sign of this species was found on the property during the most recent two surveys (September 2018). A pre-construction survey (Phase I & II) for Burrowing owl is recommended (see *Mitigation Measures*).

Long-eared owl (*Asio otus*) is a CDFW SSC occasionally found in fall and winter months, in small groups. These owls prefer relatively isolated clusters of trees and shrubs in this vicinity (Yorke, pers. observ.). The number of sightings of this species has decreased over the past 20 years in the Antelope Valley. Reasons for the apparent decline of long-eared owls in this region may include habitat loss and encroachment. These owls are extremely shy and tend to avoid areas with human activity. No sign of long-eared owl was found on the site; the trees on the western boundary of the site may attract this species during winter and migration; otherwise, project impacts are unlikely (see *Mitigation Measures*).

Short-eared owl (*Asio flammeus*) is a CDFW and USFWS SSC occasionally found during migration in fall and spring in the Antelope Valley; there are no documented nesting records of this species in this area (Yorke, pers. observation). Berms on the southern boundary of the site may occasionally attract this species during migration. Otherwise, project impacts are unlikely.

Prairie falcon (*Falco mexicanus*) is another CDFW SSC that appears to be declining in portions of its range. No individuals of this species were seen on the project site during the surveys. This is a wide ranging species that usually nests in remote canyons and forages throughout the region. It may be declining in response to cumulative impacts from loss of open fields for foraging. Direct project impacts to nesting prairie falcons are unlikely; relatively insignificant project impacts to wintering falcons may result from a small, incremental loss of foraging opportunities.

Golden eagle (*Aquila chrysaetos*) is a CDFW SSC that may also nest in the mountains and foothills bordering the Antelope Valley, foraging widely elsewhere. In winter months (November-February) the local population of golden eagles is augmented by migrants from other regions. At such times, individuals, particularly immature birds, commonly perch on power poles along roadways and may be struck by cars when they attempt to feed on roadkill. No eagles were found on or near the subject property; impacts to nesting eagles are unlikely. Direct project impacts on wintering golden eagles are also unlikely.

Ferruginous hawk (*Buteo regalis*) is a CDFW SSC that winters in the Antelope Valley in relatively high numbers. Birds forage in open fields, often using power poles for lookouts. They rarely take roadkill and thus are seldom hit by automobiles. The cumulative loss of foraging habitat in the large open spaces of the western Antelope Valley may be the greatest threat to this species in the region. Direct project impacts on wintering ferruginous hawks in the vicinity of the subject property are unlikely.

Swainson's hawk (*Buteo swainsoni*) is a State Threatened species known to have nested in the eastern Antelope Valley. A CNDDDB record indicates a pair of Swainson's hawks nested in a locust tree surrounded by agricultural fields near Avenue I and 50th Street East, in 1996 and 1999. Similar nesting sites have been more recently found in the western Antelope Valley, north of Avenue I (Yorke, pers. Observ.). A row of locust trees along the western border of the site may provide nesting opportunities for Swainson hawk. A spring-time survey is recommended (see *Mitigation Measures*).

Cooper's hawk (*Accipiter cooperii*) is a CDFW SSC that nests locally in the Antelope Valley and is a passage migrant and winter visitor. One individual of this species was flushed from trees on the western border of the project site. Habitat on the site is appropriate for nesting Cooper's hawk; a spring-time survey is recommended (see *Mitigation Measures*).

LeConte's thrasher (*Toxostoma lecontei*) is a Federal Candidate for listing, and has been found at several scattered localities in the Antelope Valley (e.g. east Palmdale and Edwards AFB). A small population possibly occurs in Jawbone Canyon north of Mojave and also (though not in recent years) in east Palmdale, near 40th Street East and Avenue No thrashers were found during the surveys of the study site; habitat on the site is largely inappropriate and project impacts are unlikely.

cy/11

Loggerhead shrike (*Lanius ludovicianus*) is another Federal Candidate for listing and a CDFW SSC. Habitat loss and pesticide poisoning are blamed for the decline of this bird. No individuals of this species were found on the subject property during the two most recent surveys (September 2018). Habitat on the site is appropriate; a spring-time survey is recommended (see *Mitigation Measures*).

Horned lark (*Eremophila alpestris actia*) is a CDFW SSC. No horned larks were found on the site during the survey. Horned larks nest in the western Antelope Valley and appear to have a relatively large, viable population (Yorke, unpublished field notes). Presently it is not known if this species nests on or adjacent to the study site. Since this subspecies is probably not the form currently considered by CDFW as a SSC, implementation of the proposed project will have no significant impacts on the "California" horned lark (*Eremophila alpestris actia*).

Bell's Sparrow (*Artemisiospiza belli belli*) is a CDFW SSC resident in Big Sage and alkaline sink areas of the Antelope Valley. No sign of this subspecies species was found on the site. Habitat on the site is marginal; project impacts are unlikely.

Virtually all **Bats** in California are CDFW SSC. Consequently, any loss of foraging, roosting or breeding habitat caused by this project could have impacts on these nocturnal insectivores. If bats are using the subject property for feeding, implementation of the proposed development will result in minimal loss of foraging habitat; nearby open land should also provide adequate foraging opportunities, in addition to increased insect availability in adjacent, well-watered developments with outdoor lighting.

Mojave ground squirrel (*Xerospermophilus mohavensis*) is a CDFW threatened species that occurs at scattered localities in the Mojave Desert, principally east of Highway 14, including nearby Edwards AFB. There are also records of MGS from east Palmdale. No sign of this species was found (or expected to be found without a trapping study) on the subject property. Habitat on the site is inappropriate. We recommend a DECLARATION OF NO SIGNIFICANT IMPACT ON MGS.

American badger (*Taxidea taxus*) is a CDFW SCC that may occasionally be attracted to resources on the subject property. However, no sign of badger was found during the surveys. Badgers have occurred in this area, as one was reportedly seen crossing Highway 14 near Rosamond in 1993 (L. Uhazy, pers. communication). Another road-killed badger was found in western Leona Valley on Elizabeth Lake Road in '01 (Yorke, pers. observ.) A badger's territory is seldom less than 100 acres, indicating that the present site contains inadequate spatial resources for one breeding pair. Project impacts to badgers are unlikely.

General Cumulative Impacts

Whenever wilderness is taken for development few native organisms benefit. This is because in the complex web of life everything is interconnected and dependent. Removing vegetation destroys habitat for countless microscopic organisms with larger species dependent on them for food. For example, the tiny moth *Tegeticula paradoxa* is the only known pollinator of the Joshua Tree; disappearance of either species results in extinction of both. And the overall result of loss of Joshua Trees, an ecological keystone species, is simplification of the food web to include a new assemblage of relatively few, hardy species. Consequently, exotic pests like Russian thistle, tumble mustard, stork's bill, brome grasses, Argentine fire ants, aphids, snails, Asian rock doves and European starlings become established.

Mitigation Measures

The following mitigation measures are recommended if and when further developments are proposed for the subject property that involve modifications, e.g. grading, vegetation removal, paving, construction or alteration of the existing community of plants and animals in any way.

- 1) A Spring-time survey (April-May) for sensitive plants and animals (see Impacts to Sensitive Plants and Animals).
- 2) A pre-construction, clearance survey for Burrowing owl shall be completed. If Burrowing owl is found using the site, development shall be halted until the owls can be safely evicted by a qualified biologist.
- 3) All fencing shall include openings for the movement of wildlife across the site.
- 4) Outdoor lighting on the site shall be kept to a minimum.
- 5) All pets shall be kept indoors or in fenced enclosures.
- 6) Native vegetation and established trees shall be protected from disturbance outside the development footprint(s) of the site.

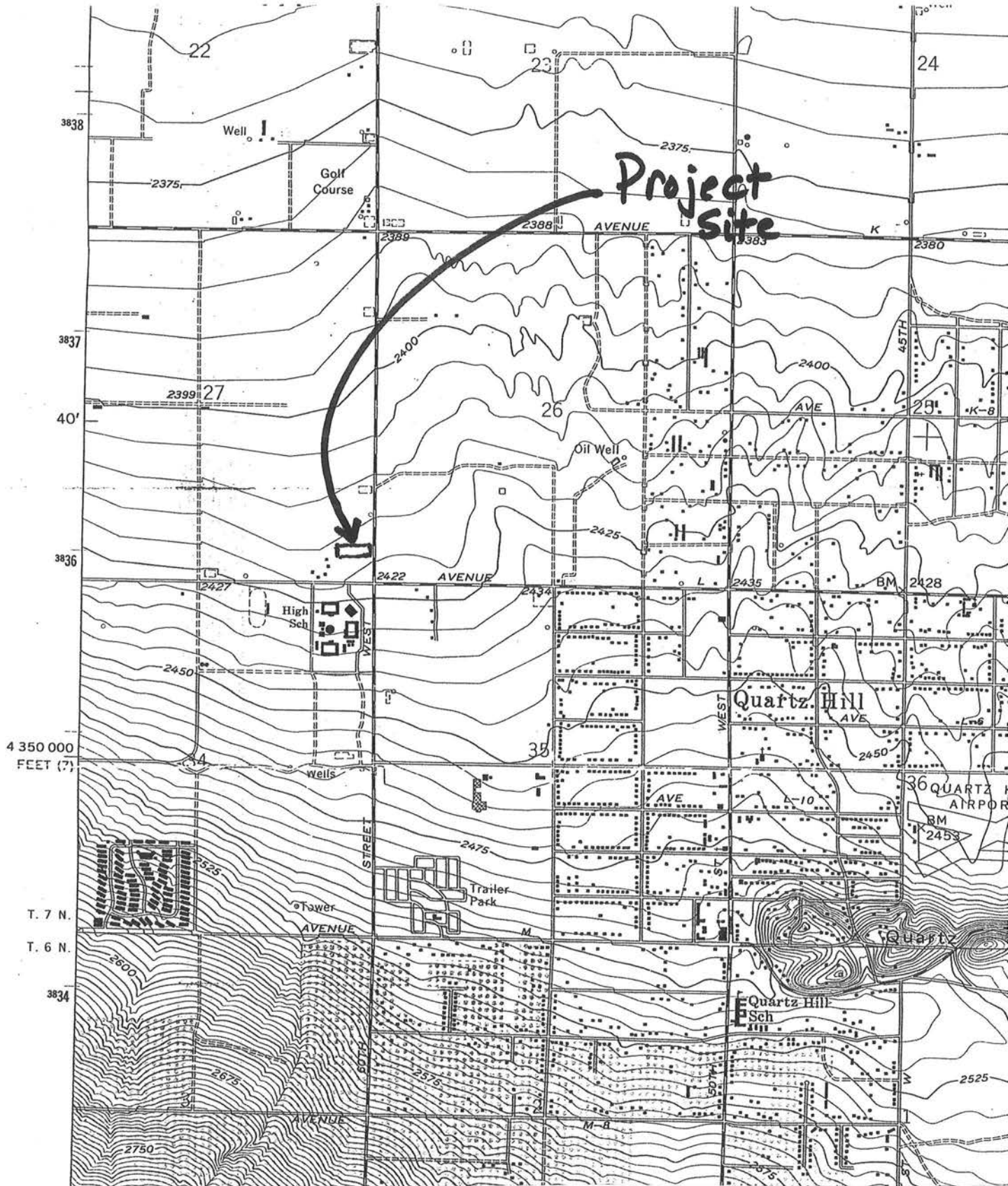
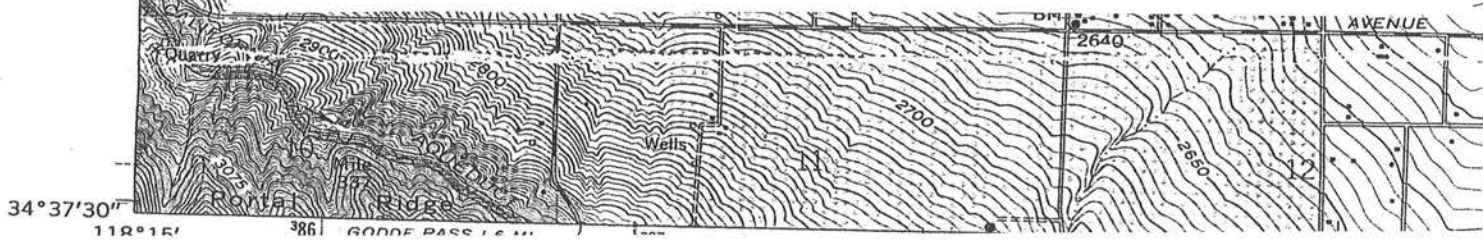


Figure 1: USGS 7.5 minute Quadrangle Lancaster West showing the location of the subject property: APN 3204-008-048: 20 Acres.



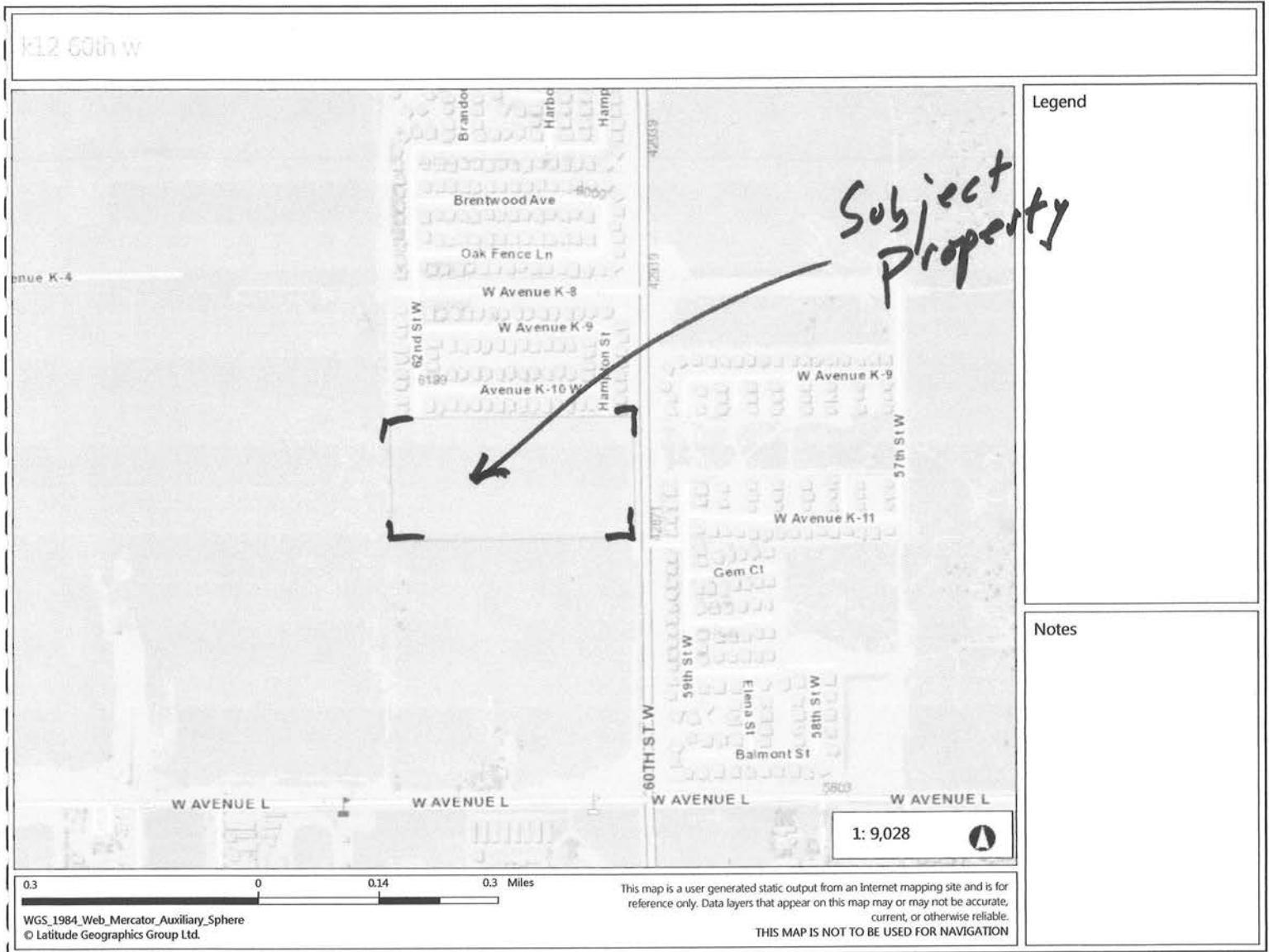


Figure 2: Los Angeles County Assessor's Parcel Map showing the location of the subject property: APN 3204-008-048: 20 Acres.



Figure 4: From HEC, Viewing SW across subject property
APN 3204-008-048 Sept. 19, 2018



Figure 3: From NEC, Viewing S along 60th Street west
APN 3204-008-048 Sept. 19, 2018



Figure 5: Burrowing Owl Pellets Recovered
from the subject property.
APN 3204-008-048
Sept. 19, 2018

REFERENCES

ONLINE

Calflora

California Natural Diversity Data Base

Birds of North America Online

Birds of Southern California

Abrams, L. 1923. Illustrated Flora of the Pacific States, Vols. 1,2. Stanford: Stanford University Press.

Abrams, L. and R.S. Ferris 1951. Illustrated Flora of the Pacific States, Vol. III. Stanford University Press.

_____ 1960. Illustrated Flora of the Pacific States, Vol. IV. Stanford University Press.

Adest, G.A. 1972. Intraspecific and interspecific behavior of *Ammospermophilus leucurus* and *Citellus mohavensis*. Unpubl. M.S. Thesis. California State University, Los Angeles. 83 pp.

American Ornithologist's Union 1983. Checklist of North American Birds Including latest supplements (2014). American Ornithologists Union, Washington D.C.

Baldwin, Bruce G. et. al (editors), 2002. *The Jepson Desert Manual. Vascular Plants of Southeastern California*. University of California Press, Berkeley. 624 pp.

Baldwin, B.G., D.H. Goldman, et. Al. 2012. *The Jepson Manual: Vascular plants of California, second edition*. University of California Press, Berkeley, California.

Bartholomew, G. A. and J.W. Hudson 1960. Aestivation in the Mojave ground squirrel *Citellus mohavensis*. Bull. Mus. Comp. Zool. 129:193-208.

Belthoff, James R. and B.W. Smith , 2003. Patterns of artificial burrow occupancy and reuse by burrowing owls in Idaho. Wildlife Soc. Bull. 31 (1): 138-145.

Bent, A.C. 1937. Life histories of North American Birds of Prey (Parts 1&2). Dover, New York. 891 pp.

____ 1942. Life Histories of North American Flycatchers, Larks, Swallows and their Allies. (PP. 364-371). Dover, New York. 555 pp.

____ 1948. Life Histories of North American Nuthatches, Wrens, thrashers, and their Allies. (pp. 411-419). Dover, New York. 475 pp.

____ 1950. Life Histories of North American Wagtails, Shrikes, Vireos, and their Allies(pp. 131-180). Dover, New York. 411 pp.

Brooks, M.L. and J.R. Matchett, 2002. Sampling methods and trapping success trends for the Mojave ground squirrel *Spermophilus mohavensis*. California Department of Fish & Game 88(4) 165-177.

Brittingham, Steve and L.W. Walker. '00. Facilitation of *Yucca brevifolia* recruitment by Mojave Desert shrubs. Western North American Naturalist 60(4): 374-383.

Bureau of Land Management (BLM) 1989. Desert Tortoise Habitat: Interim Map. U.S. Department of the Interior, Bureau of Land Management, Desert District. Riverside, California.

Burt, W.H. 1936. Notes on the habits of the Mohave ground squirrel. *Journal of Mammalogy* 17: 221-224.

California Department of Fish & Wildlife, Natural Diversity Data Base, (CNDDDB RARE FIND): 2018. Printouts for Lancaster West, Palmdale and adjacent quadrangles.

_____'04. State and Federally Listed Endangered, Threatened, and Rare Plants of California. CDFG: CNNDDB.

_____'04. Additions to standard exceptions on scientific collecting permits. CDFG, Sacramento, CA.

_____'04. Bird Species of Special Concern. the Resources Agency CDFG Wildlife and Habitat Data Analysis Branch. Special Animals.

_____'04. Mammal Species of Special Concern. The Resources Agency CDFG Wildlife and Habitat Data Analysis Branch. Special Animals.

_____. 1992. Designated areas of crucial Desert Tortoise Habitat. Three maps published in: Third Annual Desert Tortoise Survey Techniques, Report Writing, and Handling Procedures Workshop. Presented by the Desert Tortoise Council, June, 1992.

_____. 1987. Five year status report for Mohave ground squirrel. CDFG Nongame Bird & Mammal Section, Sacramento, CA. 6 pp.

Butts, K.O. 1973. Life history and habitat requirements of burrowing owls in western Oklahoma. M.S. Thesis, Oklahoma State University, Stillwater. 188 pp.

California Burrowing Owl Consortium 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. 13 pp.

California Environmental Quality Act (CEQA) 1986; 1992 ed. Office of Planning and Research, State of California. 336 pp.

California Native Plant Society, 2001. Inventory of Rare and Endangered Plants of California. California Native Plant Society, Special Publication #1 6th edition. 387 pp.

Carlson, J. and C. D. Yorke, 2004. Suburban water retention basins as significant habitat for migratory waterbirds in the Antelope Valley, Ca. ms. in prep.

Cheesemore, D.L. and D. Caroll 1976. First record of the Mohave ground squirrel (*Citellus mohavensis*) in Kern County, California. CDFG 62(2) 158-59.

Clements, R. F. & C. R. Feldmeth 1989. Joshua Tree Preservation Plan: The distribution and condition of Joshua trees (*Yucca brevifolia*) on a 5-acre parcel (TT Map No. 48156) in the City of Palmdale, Los Angeles County, CA. Ecological Research Services. 12 pp.

Columbe, H.N. 1971. Behavior and population ecology of the burrowing owl, *Speotyto cunicularia* in the Imperial Valley of California. Condor: 73: 162-176.

Desmond, M.J. 199. Ecological aspects of burrowing owl nesting strategies. M.S. Thesis, university of Nebraska, Lincoln. 114 pp.

___ J.A. Savidge and T.E. Seibert, 1995. Spatial patterns of burrowing owls (*Speotyto cunicularia*) nests in black-tailed prairie dog (*Cynomys ludovicianus*) towns. Canadian Journal of Zoology 73: 1375-1379.

Dunn, Jon L. and J. Alderfer, 2017. Field Guide to the Birds of North America. National Geographic, Washington D.C. 7th ed. 591 pp.

Elton, C. 1927. Animal Ecology (pp. 146-161). Sidgwick & Jackson, Ltd. London, 209 pp.

Emmel, T.C. and J.F. Emmel 1973. The Butterflies of Southern California. Natural History Museum of Los Angeles County.

Fishman, R.H. 1989. Biota Survey and Impact Assessment for Tentative Tract #48032, City of Palmdale, Los Angeles County, California. 26 pp.

Garrett, K. and J. Dunn 1981. Birds of Southern California, Status and Distribution. Los Angeles Audubon Society. 408 pp.

Garth, J.S. and J.W. Tilden 1986. California Butterflies. University of California Press, Berkeley, 246 pp.

Grinnell, J. and J. Dixon 1918. Natural history of the ground squirrels of California. The Monthly Bulletin. California State Commission of Horticulture &: 666-68.

Hafner, D.J. and T.L. Yates 1983. Systematic status of the Mohave ground squirrel *Spermophilus mohavensis* (Subgenus *Xerospermophilus*). Journal of Mammalogy 64: 397-404.

Hall, E.R. 1981. the Mammals of North America. John Wiley & Sons, N.Y. (2 vols.) 1181 pp.

Henry, C. J. and L.J. Blus, 1981. Artificial burrows provide new insights into burrowing owl nesting biology. Raptor Research 15: 82-85.

Hohman, J.P., R.D. Ohmart, and J. Schwartzmann 1980. An annotated bibliography of the Desert Tortoise (*Gopherus agassizi*). Desert Tortoise Council Special Publication No. 1, Long Beach, CA.

Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. CDFG, 156 pp.

_____ and D.J. Keil 1990. California Vegetation (4th Ed.) Biological Sciences Department, California Polytechnic State University San Luis Obispo, 318 pp.

Hoyt, D.F. 1972. Mohave ground squirrel survey. CDFG Special Wildlife Investigation Project #W-54-R-4, 10 pp.

Jameson, E.W. Jr. and H.J. Peeters, 1988. California Mammals. Calif. Natural History Guides, 52, University of California Press, 402 pp.

Jennings, M.R. and M.P. Hayes, 1994. Amphibian and Reptile Species of Special Concern in California. Final report submitted to the Dept. of Fish & Game Inland Fisheries Division under contract No. 8023. 255 pp.

Leitner, P. and B.M. Leitner 1991. Third year (MGS) Baseline Report, Coso grazing exclosure monitoring study, Inyo County, California. Unpubl. Biota Report Prepared for McClenahan & Hopkins Assoc. 5010 Hapden Lane, Bethesda, MD 20814.

Lightner, J. 2011. San Diego County Native Plants. San Diego Flora, San Diego, CA 428 pp.

Long, C.A. and C.A. Killingley 1983. The Badgers of the World. C. Thomas Publ. Springfield, Illinois. (pp. 84-170).

Los Angeles County Department of Regional Planning 1992. Workshop proceedings on Significant Ecological Areas and environmentally sensitive resources in Los Angeles County. Impact Analysis Section: (6-18-92). 10 pp.

_____, 2000 Biological Resources Assessment of the Proposed Antelope Valley Significant Ecological Area. PCR Services et. al. 35 pp.

MacKay, P. 2003. Mojave Desert Wildflowers. Globe Pequot Press, Guilford, Conn. 338 pp.

Martin, D.J., 1973. Selected aspects of burrowing owl ecology and behavior. Condor 75: 446-456.

Munz, P.A. 1974. A Flora of Southern California. University of California Press. 1086 pp.

Pengelley, E.T. 1969. Influence of light on hibernation in the Mohave ground squirrel *Citellus mohavensis*. pp. 11-16 IN: Physiological systems in semiarid environments. (C.C. Hoff and M.C. Riesdesel eds.) University of New Mexico Press. Albuquerque, N.M. 42 pp.

Phillips, Edwin A., K.K. Page, and S.D. Knapp, 1980. Vegetational characteristics of two stands of Joshua Tree Woodland. *Madrono* 27(1): 43-47.

Rasmuson, Kaylie E., J.E. Anderson and N. Huntly, 1994. Coordination of branch orientation and photosynthetic physiology in the Joshua Tree (*Yucca brevifolia*). *Great Basin Naturalist* 54(3): 204-211.

Recht, M.A. 1977. The Biology of the Mohave Ground Squirrel, *Spermophilus mohavensis*; home range, daily activity, foraging and weight gain, and thermoregulatory behavior. University of California, Los Angeles, Ph.D. Dissertation. 117 pp.

Rich, T. 1984. Monitoring Burrowing Owl populations; Implications of burrow reuse. *Wildlife Society Bulletin* 12: 178-180.

Riley, C.V. 1892. The yucca moth and yucca pollination. *Missouri Botanical Garden Annual Report*: pp. 99-158.

Rowlands, Peter G. 1978. The vegetation dynamics of the Joshua Tree (*Yucca brevifolia* Engelm.) in the Southwestern United States of America. Ph.D. Dissertation, University of California, Riverside. 190 pp.

Sawyer, J.O. and T. Keeler-Wolf, 1995. *A Manual of California Vegetation*. California Native Plant Society. 471 pp.

Smith, J.P. Jr. and K. Berg 1988. Inventory of rare and endangered vascular plants of California. *Calif. Native Plant Society Special Publication No. 1* (4th ed.) 168 pp.

Smith, Stanley B., T.L. Hartsock, and P.S. Nobel, 1983. Ecophysiology of *Yucca brevifolia*, an arborescent monocot of the Mojave Desert. *Oecologia* 60: 10-17.

Stall, Chris 1990. Animal tracks of Southern California. The Mountaineer's Press, Seattle. 124 pp.

Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians (Third Edition). Houghton Mifflin Co. 533 pp.

Thompson, L. 1971. Behavior and ecology of burrowing owls on the Oakland Municipal Airport. *Condor* 73: 177-192.

U.S. Fish & Wildlife Service 2017. Federal Register of Endangered and Threatened Wildlife and Plants. Dept. of the Interior. 50 CFR Part 17. Washington, D.C.

_____. 1991. Set of maps of categorized Desert Tortoise Habitat for the Mojave Desert.

_____. 1992. Procedures for Endangered Species Act Compliance for the Mojave Desert Tortoise. USDI and USFWS Region 1,2,6. October, 1992.

Went, F. W. 1948. Ecology of desert plants. I. Observations on germination in the Joshua Tree National Monument. *Ecology* 29(3): 242-253.

Wessman, E.V. 1977. The distribution and habitat preference of the Mojave Ground Squirrel in the southeastern portion of its range. Administrative Report for the Wildlife Management Branch, U.S. Bureau of Land Management, 77-5: 11-15.

Whitson, Tom D. (editor), 2001. Weeds of the West. University of Wyoming. 9th edition. 627 pp.

Williams, D.F. 1986. Mammalian Species of Special Concern in California. California Dept. of Fish & Game, Wildlife Management Division. Administrative Report No. 86-1, 112 pp.

Zemal, R. and C. Gall 1980. Observations on Mohave ground squirrels, *Spermophilus mohavensis*, in Inyo County, California. *Journal of Mammalogy* 61:347-350.

Appendices

Floral Compendium

The following is a list of vascular plants found in the study area during the surveys. Relative abundances were estimated visually. Nomenclature generally follows Baldwin et. al. (2012) and Calflora (2013).

LEGEND

Frequency

A = more than 50 individuals

B = 25-50 individuals

C = 10-20 individuals

D = 1-10 individuals

Latin binomial names are italicized, followed by common names and frequencies.

ASTERACEAE

- Ambrosia dumosa* Burro-weed D
Ambrosia acanthocarpa Annual Bursage A
Ericameria nauseosa Rabbitbush A
Acroptilon repens Russian Knapweed (exotic) D
Lessingia lemmoni Autumn Vinegar Weed A
Corethrogyne filaginifolia Cudweed Aster C
Heterotheca grandifolia Telegraph Weed A
Centaurea sp. Knapweed (exotic) C
Conzya bonariensis Hairy Fleabane (exotic) D

Conzya canadensis Horseweed C
Hymenoclea salsola Cheesebush D
Teraxacum sp. Dandelion D
Helianthus annus Common Sunflower A
Iva axillaris Poverty Sumpweed C

BETULACEAE

Alnus rhombifolia White Alder D

BORAGINACEAE

Amsinckia tessellata Fiddleneck B

BRASSICACEAE

Sisymbrium altissimum Tumble Mustard A (exotic)
Alyssum sp. D (exotic)
Brassica nigra Black Mustard D (exotic)
Lepidium latifolium Pepperweed D (exotic)

CHENOPODIACEAE

Salsola iberica Russian Thistle A (exotic)
Atriplex canescens Four-winged Saltbush B
Atriplex spinifera Spiny Saltbush D
Krascheninnikovia lanata Winterfat D

EUPHORBIACEAE

Eremocarpus setigerus Dove weed A
Euphorbia albomarginata Rattlesnake Weed B

GERANIACEAE

Erodium cicutarium Red-stemmed Filaree A (exotic)

FABACEAE

Robinia pseudo-acacia Locust C (exotic)

GERANIACEAE

Erodium cicutarium Red-stemmed Filaree A (exotic)

HYDROPHYLLACEAE

Phacelia sp. C

LAMIACEAE

Trichostemma lanceolata Vinegar Weed A

PLANTAGINACEAE

Plantago major Broadleaf Plantain D (exotic)

POACEAE

Bromus madritensis ssp. *rubens* Foxtail Chess A (exotic)

Bromus tectorum Cheat Brome A (exotic)

Bromus rubens Foxtail Chess A (exotic)

Bromus carinatus Carinate Brome B

Bromus mollis Soft Chess A (exotic)

Bromus secalinus Rye Brome A (exotic)

Agrostis stolonifera Creeping Bentgrass D (exotic)

Oryzopsis hymenoides Indian Rice Grass D

Polypogon monspeliensis Rabbitfoot Polypogon C

Festuca octoflora Six Weeks Fescue D (exotic)

Schismus barbatus Mediterranean Schismus A (exotic)

Avena fatua Wild Oat B (exotic)

POLYGONACEAE

Eriogonum deflexum Skeleton Weed D

SOLANACEA

Datura meteloides Jimson Weed C

TAMARICACEAE

Tamarix ramosissima Salt Cedar D (exotic)

ZYGOPHYLLACEAE

Tribulus terrestris Puncture Weed D (exotic)

Appendices

FAUNAL COMPENDIUM

Explanation of Symbols

Relative Frequency and Abundance

- c** -- common: observed or expected throughout the site in high numbers.
- f** -- fairly common: observed or expected in moderate numbers.
- u** -- uncommon: observed or expected in low numbers.
- o** -- occasional: observed or expected with low frequency.
- s** -- scarce: rarely observed or expected on the site.

Local Status

* Presence noted visually, vocally, or other sign. (1,2, etc. = maximum number of individuals found during a survey).

Museum/University Record: One or more records of this species in institutional collections from this region.

Note: This faunal species list includes animals observed or expected to occur on or in the immediate vicinity of the study site.

Butterflies

DANIDAE

- Monarch (*Danaus plexippus*) s
- Striated Queen (*D. gilippus strigosus*) u

NYMPHALIDAE

- Neumogen's Checkerspot (*Chlosyne acastus*) u
- Leanira Checkerspot (*Chlosyne leanira cerrita*) s
- Mylitta Crescent (*Phycoides mylitta*) s
- Painted Lady (*Vanessa cardui*) o

PIERIDAE

- Becker's White (*Pontia beckerii*) s
- California White (*P. sisymbrii*) u
- Checkered White (*P. protodice*) u
- Southern Dogface (*Zerene cesonia*) o
- Nicippe Yellow (*Eurema nicippe*) s
- Dainty Sulphur (*Nathalis iole*) s
- Desert Orange-tip (*Anthocharis cethura cethura*) u
- Grinnell's Marble (*Anthocharis lanceolata australis*) u
- Desert Marble (*Euchloe hyantis lotta*) u

LIBYTHEIDAE

- Snout Butterfly (*Libytheana bachmanii larvata*) s

RIODINIDAE

- Mormon Metalmark (*Apodemia mormo mormo*) u
- Cythera Metalmark (*A. mormo cythera*) u
- Behr's Metalmark (*A. virgulti*) u

LYCAENIDAE

- Grey hairstreak (*Strymon melinus*) s
- Marine Blue (*Leptotes marina*) s
- Pygmy Blue (*Brephidium exilis*) s
- Acmon Blue (*Plebejus acmon acmon*) u
- Bernardino Blue (*Euphilotes battoides bernardino*) u
- Elvira's Blue (*E. pallescens elvira*) u
- Mojave Blue (*E. mojave*) u
- Small Blue (*Philotiella speciosa*) s

MEGATHYMIDAE

- Martin's Giant Skipper (*Megathymus coloradensis martini*) u

HESPERIIDAE

- Saltgrass Skipper (*Polites sabuleti*) s
- Juba Skipper (*Hesperia juba*) u
- Sootywing (*Pholisora catullus*) o

Amphibians and Reptiles

BUFONIDAE

Western Toad (*Anaxyrus boreas halophilus*) s

HYLIDAE

Pacific Chorus Frog (*Hyla regilla*) u

GEKKONIDAE

Western Banded Gecko (*Coleonyx variegatus*) s

PHRYNOSOMATIDAE

Zebra-tailed Lizard (*Callisaurus draconoides*) s
Long-nosed Leopard Lizard (*Gambelia wislizenii*) o
Coast Horned Lizard (*Phrynosoma blainvillii*) o (see text)
Desert Horned Lizard (*Phrynosoma platyrhinos*) s
Desert Spiny Lizard (*Sceloporus magister*) c
Western Fence Lizard (*Sceloporus occidentalis*) u
Common Side-blotched Lizard (*Uta stansburiana*) 4

XANTUSIDAE

Desert Night Lizard (*Xantusia vigilis*) u

TEIIDAE

Western Whiptail (*Aspidoscelis tigris*) c

LEPTOTYPHLOPIDAE

Western Blind Snake (*Leptotyphlops humilis*) s

COLUBRIDAE

- Glossy Snake (*Arizona elegans*) u
- Western Shovel-nosed Snake (*Chionactis occipitalis*) s
- Night Snake (*Hypsiglena torquata*) u
- Common Kingsnake (*Lampropeltus getulus*) u
- Coachwhip (*Masticophis flagellum*) c
- Gopher Snake (*Pituophis melanoleucus*) u
- Long-nosed Snake (*Rhinccheilus lecontei*) u
- California Black-headed Snake (*Tantilla planiceps*) s
- Lyre Snake (*Trimorphodon biscutatus*) s

ANNIELLIDAE

- Silvery Legless Lizard (*Aniella pulchra*) s (see text)

VIPERIDAE

- Mojave Rattlesnake (*Crotalus scutulatus*) o

TESTUDINIDAE

- Desert Tortoise (*Gopherus agassizii*) (see text)

Birds

Note

Numbers in parentheses following a species indicate the maximum number of individuals seen or heard during a survey. Taxonomy follows the 2013 AOU Checklist of Birds of North America, including the 54th Supplement.

ODONTOPHORIDAE

California Quail (*Callipepla californica*) f

CATHARTIDAE

Turkey Vulture (*Cathartes aura*) 1

ACCIPITRIDAE

Northern Harrier (*Circus cyaneus*) u
Ferruginous Hawk (*Buteo regalis*) u (see text)
Red-tailed Hawk (*Buteo jamaicensis*) c
Swainson's Hawk (*Buteo swainsoni*) u (see text)
Golden Eagle (*Aquila chrysaetos*) u (see text)
Cooper's Hawk (*Accipiter cooperi*) 1 (see text)

CHARADRIIDAE

Killdeer (*Charadrius vociferus*) u

COLUMBIDAE

Feral Rock Dove (*Columba livia*) c (adjacent developments)
Mourning Dove (*Zenaida macroura*) 8
Eurasian Collared Dove (*Streptopelia decaocto*) 3 (adjacent property).

CUCULIDAE

Greater Roadrunner (*Geococcyx californianus*) o

TYTONIDAE

Common Barn Owl (*Tyto alba*) 1

STRIGIDAE

Great horned Owl (*Bubo virginianus*) o
Burrowing Owl (*Athene cunicularia*) sign (see text)
Long-eared Owl (*Asio otus*) s

CAPRIMULGIDAE

Lesser Nighthawk (*Chordeiles acutipennis*) u
Common Poorwill (*Phalaenoptilus nuttallii*) s

APODIDAE

Vaux's Swift (*Chaetura vauxi*) s

TROCHILIDAE

Anna's Hummingbird (*Calypte anna*) 1
Costa's Hummingbird (*C. costae*) u
Black-chinned Hummingbird (*Archilochus alexandri*) u
Rufous Hummingbird (*Selasphorus rufus*) s

PICIDAE

Ladder-backed Woodpecker (*Picoides scalaris*) s
Northern Flicker (*Colaptes auratus*) u

FALCONIDAE

American Kestrel (*Falco sparverius*) 2
Prairie Falcon (*Falco mexicanus*) u (see text)

TYRANNIDAE

Black phoebe (*Sayornis nigricans*) u
Say's phoebe (*Sayornis saya*) c (adjacent property)
Ash-throated flycatcher (*Myiarchus cinerascens*) u
Western Kingbird (*Tyrannus verticalis*) f

LANIIDAE

Loggerhead Shrike (*Lanius ludovicianus*) s (see text)

CORVIDAE

Western Scrub-jay (*Aphelocoma californica*) u
Common Raven (*Corvus corax*) 2

ALAUDIDAE

Horned Lark (*Eremophila alpestris*) c (see text)

HIRUNDINIDAE

Cliff swallow (*Petrochelidon pyrrhonota*) u
Violet green swallow (*Tachycineta thalassina*) s
Tree swallow (*Tachycineta bicolor*) s
Barn swallow (*Hirundo rustica*) 1
Rough-winged swallow (*Stelgidopteryx ruficollis*) s

REMIZIDAE

Verdin (*Auriparus flaviceps*) u

AEGITHALIDAE

Bushtit (*Psaltriparus minimus*) s

TROGLODYTIDAE

Cactus Wren (*Campylorhynchus brunneicapillus*) u

Rock Wren (*Salpinctes obsoletus*) u

Bewick's Wren (*Thryomanes bewickii*) f

House Wren (*Troglodytes aedon*) 1

REGULIDAE

Ruby-crowned Kinglet (*Regulus calendula*) u

TURDIDAE

Hermit Thrush (*Catharus guttatus*) s

Swainson's Thrush (*C. swainsoni*) s

American Robin (*Turdus migratorius*) u

MIMIDAE

Northern Mockingbird (*Mimus polyglottos*) 1

Le Conte's Thrasher (*Toxostoma lecontei*) s (see text)

California Thrasher (*Toxostoma redivivum*) u

STURNIDAE

European Starling (*Sturnus vulgaris*) c (adjacent property)

PARULIDAE

Orange-crowned Warbler (*Oreothlypis celata*) f
Nashville Warbler (*Oreothlypis ruficapilla*) s
Common Yellowthroat (*Geothlypis trichas*) u
MacGillivray's Warbler (*Geothlypis tolmiei*) s
Wilson's Warbler (*Cardellina pusilla*) s
Yellow-rumped Warbler (*Setophaga coronata*) c

ICTERIDAE

Western Meadowlark (*Sturnella neglecta*) s
Scott's Oriole (*Icterus parisorum*) s
Bullock's Oriole (*Icterus bullockii*) u
Black-throated Sparrow (*Amphispiza bilineata*) u
White-crowned Sparrow (*Zonotrichia leucophrys*) c
Bell's Sparrow (*Artemisospiza belli*) u
Lark Sparrow (*Chondestes grammacus*) u
Savannah Sparrow (*Passerculus sandwichensis*) u
Vesper Sparrow (*Pooecetes gramineus*) u
Golden-crowned Sparrow (*Zonotrichia atricapilla*) s
Song Sparrow (*Melospiza melodia*) s
Lincoln's Sparrow (*Melospiza lincolni*) 1

FRINGILLIDAE

House finch (*Carpodacus mexicanus*) 4
American Goldfinch (*Spinus tristis*) s
Lesser Goldfinch (*Spinus psaltria*) 2

PASSERIDAE

House sparrow (*Passer domesticus*) c (adjacent site)

Mammals

Note

This is a largely hypothetical list of species based on very broad range boundaries which may include the present site. No attempt is made here to assess relative abundance.

GEOMYIDAE

Botta's Pocket Gopher (*Thomomys bottae*) sign

SORICIDAE

Crawford's Shrew (*Notiosorex crawfordi*)

PHYLLOSTOMIDAE

California Leaf-nosed Bat (*Macrotus californicus*)

VESPERTILIONIDAE

Little Brown Myotis (*Myotis lucifugus*)
Yuma Myotis (*M. yumanensis*)
Long-eared Myotis (*M. evotis*)
Fringed Myotis (*M. thysanodes*)
Long-legged Myotis (*M. volans*)
California Myotis (*M. californicus*)
Western Small-footed Myotis (*M. ciliolabrum*)
Western Pipistrelle (*Parastrellus hesperus*)
Big Brown Bat (*Eptesicus fuscus*)
Western Red Bat (*Lasiurus blossevillii*)
Hoary Bat (*Lasiurus cinereus*)
Townsend's Big-eared Bat (*Corynorhinus townsendii*)
Pallid bat (*Antrozous pallidus*)

MOLOSSIDAE

Brazilian Free-tailed Bat (*Tadarida brasiliensis*)
Pocketed Free-tailed Bat (*Nyctinomops femorosacca*)
Western Mastiff Bat (*Eumops perotis*)

LEPORIDAE

Desert Cottontail (*Sylvilagus audubonii*) sign
Black-tailed Jack Rabbit (*Lepus californicus*)

SCIURIDAE

White-tailed Antelope Squirrel (*Ammospermophilus leucurus*)
California Ground Squirrel (*Otospermophilus beecheyi*) 1

HETEROMYIDAE

Agile Kangaroo Rat (*Dipodomys agilis*)
Merriam's Kangaroo Rat (*Dipodomys merriami*) sign
Panamint Kangaroo Rat (*D. panamintinus mohavensis*)

CRICETIDAE

Deer Mouse (*Peromyscus maniculatus*) sign
Desert Woodrat (*Neotoma lepida*) sign

CANIDAE

Coyote (*Canis latrans*) sign
Feral Domestic Dog (*Canis familiaris*) sign
Desert Kit Fox (*Vulpes macrotis*)

PROCYONIDAE

Ringtail (*Bassariscus astutus*)
Raccoon (*Procyon lotor*)

MUSTELIDAE

Badger (*Taxidea taxus*) (see text)
Western Spotted Skunk (*Spilogale gracilis*)
Striped Skunk (*Mephitis mephitis*)

FELIDAE

Mountain Lion (*Puma concolor*)
Bobcat (*Lynx rufus*)
Domestic Cat (*Felis catus*)

CERVIDAE

Black-tailed Deer (*Odocoileus hemionus*)

EQUIDAE

Domestic Horse (*Equus caballus*)

HOMINIDAE

Human (*Homo sapiens*) sign

Callyn D. Yorke

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Dr. Callyn Yorke is a zoologist with international field research and teaching experience in Ornithology, Herpetology and Ecology. In addition to having completed several research projects overseas, he has been active in the study of the distribution of birds in Southern California for thirty-one years. Dr. Yorke has authored over 125 scientific professional biological resources reports and several peer-reviewed scientific journal articles. He holds a full-time, tenured position as Professor of Zoology at Antelope Valley College, Lancaster, California, and a part-time position as an instructor at UCLA Extension, Dept. of Social and Biological Sciences.

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Ornithology Instructor 1976. University of California, Berkeley

Visiting Assistant Professor of Zoology 1977-80. National University of Malaysia, Kuala Lumpur.

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Visiting Assistant Professor of Behavioral Biology 1984. Monterey Pen. College.
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Post-Doctoral Research 1990. Point Reyes Bird Observatory, CA.

Research Associate, Vertebrate Paleontology 1987- present Los Angeles County Museum of Natural History, CA.

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THESES AND PUBLICATIONS

Yorke, C.D. 1976. Reproductive strategies in the Hylidae (New World treefrogs). Biology Dept., California State University, Hayward. 45 pp.

Yorke, C.D. 1978. Reptiles of Pulau Tenggol (Malaysia): A new record of the Green Mangrove Snake (*Boiga cyanea*) and two new geckoes (*Gymnodactylus* spp.). *Nature Malaysiana* 3: 45-50.

Yorke, C.D. 1979. The Biology of the Frog *Polypedates leucomystax* (Anura: Rhacophoridae) in Peninsular Malaysia. *Nature Malaysiana* 4: 22-25.

Smits, A.W. and C.D. Yorke 1980. Winter activity and mortality in juvenile chuckwallas (*Sauromalus obesus*) *Journal of Herpetology* 14: 100-101.

Yorke, C.D. 1983a. Survival of embryos and larvae of the frog *Polypedates leucomystax* (Anura: Rhacophoridae) in Malaysia. *Journal of Herpetology* 17: 235-41.

Yorke, C.D. 1983b. Avian ecology in a Malaysian rubber tree plantation.
Ph.D. Dissertation. Dept. of Zoology, University of Arkansas, Fayetteville. 213 pp.

Yorke, C.D. 1984. Avian Community Structure in Two Modified Malaysian Habitats. *Biological Conservation* 29: 345-362.

Yorke, C.D. 2016 Unpublished field notes, Tropical Biology Scouting Reports.
etc. Website: <http://avconline.avc.edu/cyorke/>

Callyn D. Yorke, Ph.D. Biological Resources Reports
Professional Work Experience
A Partial List of
Biological Resources Reports completed in the Antelope Valley Region
1989 - 2018

- 1) APN 3029-12-08: 80 Acres, L.A. County.
- 2) APN 3209-14-21: 10 Acres, L.A. County.
- 3) APN 3010 -002-003-8: 23 Acres, Palmdale.
- 4) APN 3022-25-10: 5 Acres, Palmdale.
- 5) APN 3056-12-31: 20 Acres, Palmdale.
- 6) APN 3053-009-004: 35 Acres, Palmdale.
- 7) APN 3053-009-007: 20 Acres, Palmdale.
- 8) APN 302-26-9;57: California City, Kern County.
- 9) APN 3114-13-001: 80 Acres, Lancaster.
- 10) APN 3126-19-024: 4 Acres, Lancaster.
- 11) APN 3176-002-021: 10 Acres, Lancaster.
- 12) APN 3128-003-036: 9.6 Acres, Lancaster.
- 13) APN 3001-001-035: 10 Acres, Palmdale.
- 14) APN 3109-002-099: 2.5 Acres, Lancaster.
- 15) APN 3109-001-36,37,38,39: 10 Acres, Lancaster
- 16) APN 3053-06-05;20: 20 Acres, Palmdale.
- 17) APN 3114-13-29: 3 Acres, Lancaster.
- 18) APN 3004-15-42,43: 12 Acres, Palmdale.
- 19) Sections 2,3,25,26,27, 35: 1500 Acres, Palmdale.
- 20) APN 359-03-002: 20 Acres: Kern County (Rasmussen: default)

- 21) APN 3064-16-10,22: 240 Acres, Llano, Los Angeles County.
- 22) APN 0419-091-10;12: 319 Acres, San Bernardino County.
- 23) APN 345-100-02-00-9: 100 Acres, Willow Springs, Kern County.
- 24) Proposed Fairmont and Antelope Buttes Reservoir, 1600 acres, Los Angeles County.
- 25) APN 3003-003-025,28,29: 15 acres, Palmdale, CA.
- 26) SE corner of L-8 and 45th Street West, 6 acres, Quartz Hill, Los Angeles County.
- 27) APN 3114-013-087,88,89: 35 acres, Lancaster, Los Angeles County.
- 28) 45th Street W and L-8: 6 acres, Quartz Hill, CA
- 29) MB 31-13, TR 2916, L 16: 20 Acres, Palmdale, CA
- 30) Fort Tejon Road and Union Pacific Railway: 59 Acres, Palmdale, CA
- 31) APN 3114-103-087,88,89: Avenue H-8 and 20th street West, 35 Acres, Lancaster, CA
- 32) APN 3150-014-006: 47 Acres, Avenue K and 30th Street East, Lancaster, CA
- 33) APN 3109-013-079,031 & 032, 8.2 Acres, 25th Street West & Ave M, Lancaster, CA
- 34) TTM 53869, 30 Acres, 55th Street West and California Aqueduct, Palmdale, CA
- 35) 80th Street West, between Ave. L and M, 800 Acres, Lancaster, CA
- 36) APN 3147-002-046, 10 Acres, NWC Lancaster Blvd. and 20th St. E. Lancaster, CA
- 37) APN 251-120-06, 32 Acres, SEC Orange St. and 25th St. W, Rosamond, CA
- 38) APN 3001-090-001 & 002, 9 Acres, SWC Entrar Drive and Ave. N-8, Palmdale, CA
- 39) TTM 61490, 80 Acres, NEC Ave J-8 and 50th Street West, Lancaster, CA
- 40) 12 Acres, Ave I and 20th Street West, Lancaster, CA
- 41) APN 3150-022-009, 5 Acres, Lancaster Blvd. and 30th Street East, Lancaster, CA

- 42) APN 386-100-034-9, 72 Acres, Grandview Drive, Lake Elsinore, Riverside Co. CA
- 43) APN 3203-018-086 & 087, 10 Acres, Avenue K and 65th Street West, Lancaster, CA
- 44) APN 3154-001-021 & 022, 10 Acres, NEC Ave. I and 37th Street East, Lancaster, CA
- 45) APN 3170-007-007, 29 Acres, Avenue K and 27th Street East, Lancaster, CA
- 46) APN 3109-001-061, 063 & 064, 15 Acres, 40th Street West and L-4, Lancaster, CA
- 47) APN 3204-16-56; 57;49, 15 Acres, SEC 70th Street W and Ave. L-12, Lancaster, CA
- 48) APN 3203-001-003 & 004; 3219-024-020, 120 Ac. Ave. I and 90th St. W, Lancaster
- 49) APN 3203-015-143 & 069, 13 Acres, Ave. J and 52nd St. West, Lancaster, CA
- 50) Avenue L and M, between 100th St W and 110th St. W, 768 Ac. Lancaster, CA
- 51) APN 3111-001-063, 10 Ac. NWC Ave. m-8 and 35th Street West, Lancaster, CA
- 52) APN 3150-029-003 & 004, 20 Acres, Ave. J and 37th Street East, Lancaster, CA
- 53) APN 394-031-011, 5 Acres, Amethyst Road and Tawny Ridge Lane, Victorville, CA
- 54) APN 3176-021-004, 005 & 062, 20 Acres, Ave I and 10th St. E, Lancaster, CA
- 55) APN 3150-003-001 & 002, 20 Acres, Ave I and 35th St. East, Lancaster, CA
- 56) Avenue J and 35th Street East, 30 Acres, Lancaster, CA
- 57) Avenue I and 12th Street East, 19 Acres, Lancaster, CA
- 58) APN 375-240-49, 2.3 Acres, 60th Street West and Willow Ave., Rosamond, CA
- 59) APN 3147-002-046, 10 Acres, Lancaster Blvd. and 20th Street East, Lancaster, CA
- 60) APN 3205-4-8; 3 & 0, 5 Acres, SWC 80th St, W and Elizabeth Lake Rd. L.A. Co.
- 61) APN 375-113-19, 2.5 Ac., Gaskell Road, 60th Street W, Rosamond, CA
- 62) Avenue J and 32nd St. West, 2 Acres, Lancaster, CA
- 63) APN 3024-8-14, 10 Acres, 60th Street East and Ave. R, Palmdale, CA
- 64) APN 3124- 013-010, 4.7 Acres, Ave J-8 and 20th St. West, Lancaster, CA

- 65) Lancaster Blvd. and 35th Street East, 16 Acres, Lancaster, CA
- 66) APN 3109-002-031; 032, 025 & 026, 34 Ac. Ave. M and 32nd St. W, Lancaster
- 67) APN 3150-010-030, 4.5 Acres, Ave J-6 and 22nd St. East, Lancaster, CA
- 68) APN 3111-012-056, 10 Acres, Ave M-12 and 45th St. West, Lancaster, CA
- 69) APN 3147-001-043,044,049, 050, 10 Acres, Ave. I and 15th St. E, Lancaster, CA
- 70) APN 3024-002-021;002-022, 20 Acres, Palmdale Blvd. and 75th St. E, Palmdale, CA
- 71) APN 3204-006-049,050,051, 8 Acres, Ave. K-12 and 57th St. West, Lancaster, CA
- 72) APN 472-10-025, 20 Acres, NEC Brabham and 35th St West, Rosamond, CA
- 73) APN 3133-016-011, 3.2 Acres, Genoa Ave. and Ave. J, Lancaster, CA
- 74) APN 3052-015-007;25;36;59;50;78, 106 Acres, Barrel Springs Road, Palmdale, CA
- 75) APN 3150-009-054, 10.5 Acres, Ave. J-4 and 22nd St. East, Lancaster, CA
- 76) APN 3150-012-025 & 026, 10 Acres, NWC Ave J-8 and 30th St. E, Lancaster, CA
- 77) APN 3153-012-014, 4 Acres, 32nd St. West And Ave J, Lancaster, CA
- 78) APN 3204-003-062 & 063, 157 Acres, SWC 72nd St West and Ave. L, Lancaster, CA
- 79) APN 3124-012-010, 3.25 Acres, NEC Ave. J-4 and 22nd St. West, Lancaster, CA
- 80) APN 3114-013-087,88,89, 35 Acres, 20th St. W and Ave. H-8, Lancaster, CA
- 81) APN 0394- 031-023 & 028, 17 Acres, Mojave Drive, Victorville, CA
- 82) APN 3203-003-006, 025 & 028, 15 Acres, SEC 40th St. E and Ave. Q, Palmdale, CA
- 83) APN 3153-025-003, 20 Acres, NEC Ave K and 50th Street West, Lancaster, CA
- 84) APN 3109-027-003, 004, 13 Acres, 40th St. West, Ave. L-6, Lancaster, CA
- 85) APN 3150-024-001; 008, 9,11 & 12, 20 Acres, Lancaster Blvd. and 25th St. E

- 86) APN 3109-020-023, 5 Acres, Ave. L-8 and 20th Street West, Lancaster, CA
- 87) APN 3204-008-031, 20 Acres, 60th Street West and Ave. L, Lancaster, CA
- 88) APN 3105-017-001 & 017, 20 Acres, Ave. H and 42nd St. West, Lancaster, CA
- 89) APN 3150-030-006;016 & 013, 8 Acres, Ave J-2 and 26th St East, Lancaster, CA
- 90) Challenger Way and Avenue K-6, 24 Acres, Lancaster, CA
- 91) APN 3204-023-182, 10 Acres, Ave. M-8 and 70th Street West, Lancaster, CA
- 92) APN 3109-012-024, 5 Acres, 28th St. West and Ave. L-10, Lancaster, CA
- 93) APN 3110-007-007, 10 Acres, 40th St. West and Ave. K-12, Lancaster, CA
- 94) TTM 060198, 40 Acres, 45th St. East and Avenue M-8, Lancaster, CA
- 95) APN 3123-005-042, 2 Acres, Ave. J and 20th St. West, Lancaster, CA
- 96) APN 3109-025-020, 2.5 Acres, Ave. L-8 and 10th St. West, Lancaster, CA
- 97) Avenue L and 10th St. West, 5 Acres, Lancaster, CA
- 98) APN 3111-002-001;2,24-26;16;17;62, 80 Acres, 40th St. W and Ave. N, Lancaster
- 99) APN 3150-012-033, 10 Acres, Ave. J-8 and 25th Street East, Lancaster, CA
- 100) APN 3109-001-065;066, 20 Acres, 35th St. West and Ave. L-4, Lancaster, CA
- 101) Avenue O and 10th Street West, 5 Acres, Palmdale, CA
- 102) APN 3111-002-050;052-054, 13 Acres, 45th Street West and Ave. M-14, Lancaster
- 103) APN 3023-040-018 & 062, 4 Acres, SEC 45th Street East and Ave. R., Palmdale
- 104) APN 3203-015-077, 5 Acres, SEC 55th Street West and Avenue J, Lancaster, CA
- 105) APN 3150-010-036, 2.4 Acres, Ave. J-6 and 22nd Street East, Lancaster, CA